Towards a suitable health insurance system in Syria: Options and the necessary procedures before implementation, based on qualitative analysis and international experiences

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Zussamenfassung


Gegenstand des zweiten Teils der Arbeit ist das gegenwärtige syrische Gesundheitssystem, mit einer Darstellung seiner Organisationsstrukturen und seiner Verwaltung: die Funktionen der Gesundheitsfinanzierung, das neue Krankenversicherungsgesetz, die Rolle der privaten Krankenversicherung und die Krankenversicherungen in Syrien allgemein.


Kriterium war, dass die meisten dieser Länder, obwohl diese heute zu verschiedensten Einkommenskategorien zählen, zum Zeitpunkt der Einführung ihrer Gesundheitssysteme Niedriglohnländer waren. Drittens finden sich alle Länder auf verschiedenen Kontinenten und haben einen unterschiedlichen kulturellen Hintergrund. Viertens wurde – als wichtigstes Kriterium - die Auswahl von den spezifischen Erfahrungen, die die ausgewählten Länder bei der Einführung oder Reformierung ihrer Gesundheitssysteme gemacht hatten, bestimmt:

- Deutschland gilt als Pionier des Sozialversicherungssystems. Es ist ein gutes Beispiel für ein Land, das eine universelle Versicherung schrittweise für alle Einkommensklassen erreicht hat.
- Rumänien ist ein gutes Modell für Länder, die von einem zentralisierten Gesundheitssystem zu einem Sozialversicherungssystem wechseln.
- Südkorea ist ein gutes Beispiel für ein Land, das in wenigen Jahren nach der Einführung eines Sozialversicherungssystems eine universelle Versicherung erreicht hat.
- Spanien ist das besondere Beispiel eines Landes, das ein bestehendes Sozialversicherungssystem in ein steuerfinanziertes System umgewandelt hat. Zudem wurde die zentrale Verwaltung vollständig zugunsten einer regionalen Autonomie aufgegeben.


- Zwei Drittel der Befragten sind nicht der Meinung, dass die öffentliche Gesundheitsversorgung sie im Falle einer schweren Erkrankung schützen kann.
- Nahezu zwei Drittel der Befragten gaben an, mit der öffentlichen Gesundheitsversorgung zufrieden zu sein, wobei das Ausmaß der Zufriedenheit sehr unterschiedlich war und die Bewertung von „niedrig“ bis zu „außerordentlich“ reichte.
- Über die Hälfte der Befragten gab an, dass ihr Einkommen nicht ausreichend sei. Daraus ergebe sich, dass sie medizinische Maßnahmen aufschieben müssen oder für die Bezahlung der Gesundheitsversorgung Geld leihen müssen.
- Mehr als ein Drittel der Befragten waren mit dem Konzept der Krankenversicherung nicht vertraut. Dies ging so weit, dass sie nicht wussten, was der Begriff „Krankenversicherung“ bedeutet, da sie niemals davon gehört hatten.
- Generell war die Mehrheit der Befragten bereit einer nationalen Krankenversicherung beizutreten.
Die Mehrheit der Befragten befürwortete das Solidaritätsprinzip, indem sie grundsätzlich damit einverstanden waren, im Vergleich mit Einkommensschwächeren mehr für eine nationale Krankenversicherung zu bezahlen.

Mehr als die Hälfte der Befragten dachte, dass der private Sektor ein gesetzliches Krankenversicherungsprojekt besser als der öffentliche Sektor betreiben könne.

Nahezu ein Drittel der Befragten sagte, dass sie trotz großer Begeisterung für eine Krankenversicherung wegen ihres niedrigen Einkommens keinerlei finanzielle Mittel für diese Versicherung aufbringen könnten.

Mehr als zwei Drittel der Befragten waren der Meinung, dass der öffentliche Sektor eher in Lage wäre, die Beiträge zur Krankenkasse zu erheben, als der private Sektor.

Die Mehrheit der Befragten befürwortete eine Streuung von Risiken auf nationaler Ebene.

Mehr als die Hälfte der Befragten war der Meinung, dass der öffentliche Sektor eher qualifiziert ist, Gesundheitsleistungen einzukaufen, als der private.

Mehr als die Hälfte der Befragten war der Meinung, dass die Mitgliedschaft in einer nationalen Krankenversicherung freiwillig sein solle.

Im vierten Teil „designing the health insurance system models for Syria“[„Gesundheitssystemmodelle für Syrien entwerfen“] wird erörtert, welche Finanzierungsmethode die realistischste und geeignetste für das syrische Gesundheitssystem ist, wenn universelle Versicherung und die drei Hauptziele des Gesundheitssystems in effizienter Weise erreicht werden sollen. Diese können wie folgt zusammengefasst werden: das System dient dazu, die Gesundheit der Bevölkerung zu verbessern, gesundheitliche Ungleichheiten zu verringern -wie es den berechtigten Erwartungen der Bevölkerung entspricht-, und die Bevölkerung mit einem finanziellen Schutz gegen die hohen Behandlungskosten auszustatten. Unter Auswertung der zuvor gewonnenen Informationen werden drei Modelle der Gesundheitsfinanzierung entworfen. Die Modelle sind folgende:

- Der erste Modellentwurf zielt darauf ab, die Effizienz der gegenwärtigen Gesundheitsfinanzierung zu steigern und die bestehenden
Krankenversicherungen als parallele Systeme neben dem gegenwärtigen bestehen zu lassen. Das erste Modell basiert auf folgenden Ansätzen:

- Die Verbesserung der Effizienz der öffentlichen Ausgaben für das Gesundheitssystem
- Die staatlichen Krankenhäuser werden zu hinsichtlich ihrer Finanzierung und ihres Managements autonomen Krankenhäusern.
- Trennung der öffentlichen Verantwortlichkeiten (beispielsweise Unterscheidung von Zahlnern und Leistungsanbietern).
- Umverteilung der für öffentliche Gesundheitseinrichtungen bereit gestellten Ressourcen, um eher Personen mit mittlerem und niedrigem Einkommen zu erreichen.
- Stärkung der Rolle der Krankenkassen und die Festlegung von einheitlichen Rahmenbedingungen für die existierenden Versicherer.
- Etablierung einer halb-unabhängigen Agentur, die für die Unterstützung der Krankenkassen verantwortlich ist, deren Effizienz verbessert und die Arbeit dieser Versicherer mit einer klaren Strategie reguliert.
- Sicherung der sozialen Gleichheit zwischen den verschiedenen Krankenkassen.

Das zweite Modell stützt sich darauf, ein gesetzliches Krankenversicherungssystem einzuführen, mit dem Ziel, zusätzliche Ressourcen für das Gesundheitssystem erschließen, um die Selbstzahlungen zu reduzieren, die einen starken Druck insbesondere auf ärmere Bevölkerungsschichten ausüben. Dieses Modell zielt darauf, folgende Punkte zu erreichen.

- Fusionierung ähnlicher Krankenkassen, die zu einem wirtschaftlichen Sektor gehören, zu einer einzigen.
- Ausweitung der Möglichkeit des Zugangs zu den Krankenkassen auf alle Gruppen der Bevölkerung, die Beiträge bezahlen können.
- Verleihung von Kompetenzen an eine „Krankenversicherungskomitee“ genannte halb-unabhängige Agentur, um die Arbeit der Versicherer zu koordinieren.
- Steigerung der Solidarität durch einen risikoadjustierten Ausgleich zwischen den Krankenkassen.
➢ Errichtung einer speziellen Krankenkasse, die hauptsächlich aus öffentlichen Geldern finanziert wird, um ärmere Bevölkerungskreise zu versichern.

➢ Umwandlung aller staatlichen Krankenhäuser in autonome Körperschaften und die Erhebung von Gebühren auf die Mehrheit der angebotenen Gesundheitsleistungen.

- Das dritte Modell diskutiert ein Regelwerk für die Implementierung eines nationalen Krankenversicherungssystems, das die gesamte Bevölkerung auf einmal versichert (starker Anstoß). Dieses Modell basiert auf folgenden Ansätzen:

  ➢ Fusionierung aller bestehenden Krankenkassen zu einer nationalen Krankenkasse. Diese Krankenkasse ist eine selbstverwaltete Körperschaft und hat im jeder Provinz eine Abteilung (beispielsweise Gebietskrankenkassen)

  ➢ Umwidmung der staatlichen Haushaltsmittel, die an öffentliche Gesundheitsanbieter verteilt werden, zugunsten ärmerer Bevölkerungsschichten, indem aus diesen Geldern deren Beträge zur nationalen Krankenversicherung gezahlt und diese so der nationalen Krankenkasse beitreten können.

  ➢ Verpflichtende Mitgliedschaft für die gesamte Bevölkerung in der nationalen Krankenkasse.


Der dritte Abschnitt diskutiert die Möglichkeit, durch die Anwendung der einzelnen Modelle universelle Versicherung zu erreichen. Der Weg zur universellen Versicherung basiert auf drei Hauptelementen: Beschaffung ausreichender Mittel, geringerer Rückgriff auf direkte Zahlungen für Gesundheitsleistungen und der Verbesserung von Effizienz und sozialer Gleichheit. Hieraus ergibt sich, dass das erste Modell universelle
Versicherung nicht erreichen kann, während das zweite Modell diese eher als das erste erreichen kann. Allerdings könnte die Freiwilligkeit der Mitgliedschaft in der Krankenversicherung für bessergestellte Arbeitende des informellen Sektors und die Existenz mehrerer Versicherungen ohne übergreifende Streuung von Risiken sich auf die Zukunftsfähigkeit des Modells auswirken und eine universelle Versicherung behindern. Das dritte Modell wäre das Beste, um eine universelle Versicherung zu erreichen. Deshalb stellt sich die Frage, ob das dritte Modell direkt oder schrittweise implementiert werden sollte. Viele Gründe sprechen für die Wahl der zweiten Option. Diese Gründe können wie folgt zusammengefasst werden:

- Die radikale Reform des öffentlichen Gesundheitswesen hin zu einer nationalen Krankenversicherung erfordert viele Vorkehrungen wie
  - hochqualifiziertes Personal, um diesen Übergang und das neue System zu steuern
  - viele Absprachen, Regeln und Gesetze, um den Übergang zu kontrollieren
  - viele Studien, um festzulegen, wer als so arm gilt, dass er in den Genuss von staatlichen Zuschüssen kommen soll, und die Erstellung eines Regelwerks, um das Einkommen der im informellen und selbständigen Sektor Tätigen zu bestimmen, um die Beitragshöhe zu errechnen.
  - Moderne (Informations-) Technologien, um der nationalen Krankenversicherung die Zusammenarbeit mit den Leistungserbringern zu ermöglichen.
- Die gegenwärtige wirtschaftliche Situation ist einer direkten radikalen Reform nicht angemessen, da ein großer Anteil Bevölkerung im informellen Sektor tätig, ein großer Anteil der Bevölkerung arm und das Wirtschaftswachstum langsam ist.
Summary

The main objectives of this thesis are (1) to discuss which financing method would be more realistic and more suitable to finance the Syrian health care system in order to reach universal coverage, and (2) to design three alternatives of health financing systems to the current health system suitable to Syria.

The first part of the thesis describes health care systems and health financing functions in general. The first section analyses the health care financing functions: collecting revenues, pooling risks, and purchasing services. The second section defines major models of health care systems. These are the National Health Service system (the Beveridge model), the Social Health Insurance system (the Bismarck model), Community-based Health Insurance, and private health insurance. The key features, advantages, and disadvantages of each model are outlined.

The second part of the thesis describes the current Syrian health care system, including describing the organizational structure and management of the Syrian health care system; the health financing functions; the new health insurance law; the role of private health insurance; and the health benefit schemes in Syria. The organizational structure of the statutory health system in Syria gives the Ministry of Health (MoH) the responsibility for coordinating and managing health services provision. Further responsibilities for financing, administrating and providing health services are given to the following bodies: Ministry of Finance (MoF), Ministry of Local Administration (MoLA), State and Planning Commission, Ministry of Higher Education (MoHE), Ministry of Social Affairs and Labour (MoSAL) and Ministry of Defence (MoD). In addition, there are quite a number of schemes in Syria that give special health benefits to those working in the many ministries, public companies and professional associations. Most of these schemes provide modest services and they cannot protect their members against financial risks. Such schemes cover approximately 15% of the population and are quite diverse in terms of coverage, costs, management and benefits. The private sector’s role in delivering health care services has substantially increased.
In principle, the public health facilities that include state hospitals and health centres provide health services free of charge for the whole population. However, since 1998 some state hospitals have had a part of their operations converted to charging departments. The Syrian health care system is financed mainly by (1) the general revenues allocated from the state budget via MoF to the related ministries mentioned above (2) Out-of-pocket payments paid directly to private health providers or in the form of user fees imposed by several MoHE hospitals and the MoH autonomous hospitals. The out-of-pocket payments contribute to about 54% of the expenditure on health services (WHO 2010). (3) Health insurance contributions are paid for health benefit schemes. These contributions play a modest role in financing the health care system.

The Syrian health care system has suffered from many problems such as growing gap between the limited resources and the increasing costs of health services, the fragmentation of health system financing and the absence of one risk pool that would reduce financial risk, and high direct out-of-pocket payments spending on health.

The second part studies as well wide-ranging examples of different health care systems that have been implemented in various countries namely Colombia, Germany, Romania, South Korea, Spain, Tunisia, and the United Kingdom. This study does not only emphasise the current structure of each system, but it focuses also on the beginnings of each system, including the background and reasons for its adoption, and how the system has developed over the time. The lessons learnt from the experiences of the selected countries are used in designing models of health financing systems that are suitable for Syria. To select these countries, some issues were considered. First, population size: compared to the size of the Syrian population (about 20 million), the populations of the selected countries are not so small, nor so large. Second, although those countries currently belong to varied income categories, most of them were at a low income level when they initiated their national health systems. Third, the selected countries are situated on different continents and have diverse traditional backgrounds. Fourth, the most important factor in the selection of the countries was the particular experience of each selected country in implementing or reforming its health care system:

- Colombia has an interesting health financing system based on two separate insurance schemes according to the ability to pay. These are, first, the
contributory regime that is financed through contributions, and second, the subsidized regime that is financed by government subsidies which cover poor people.

- Germany is considered a pioneer of the Social Health Insurance (SHI) system. It is a good example of a country that has gradually achieved almost universal coverage throughout different levels of the income.
- Romania is a good model of the countries that move from the central health system to Social Health Insurance (SHI) system.
- South Korea is a good example of a country that has achieved universal coverage a bit more than two decades after applying the SHI system.
- Spain is a special example of a country that has reformed its health care from the SHI system towards the National Health Services (NHS) system. The administration of health affairs has also been fully decentralised to the autonomous regions.
- Tunisia had two separate health insurance schemes until 2007: one for the private workers and self-employed and the second for public workers. Beside these schemes there are two free medical assistance programs. Under the recent reform, the two schemes were unified as the National Health Insurance Fund. This insurance is only available for people who are able to pay the contributions, while the poor people can benefit from free medical services provided through the Ministry of Health facilities.
- The UK is a good example of a country that adopted the NHS system and achieved universal and comprehensive coverage. In 1991 the British NHS introduced the purchaser–provider separation (internal market).

The third part is based on face-to-face interviews on the current health system and future health insurance in Syria. These interviews are analyzed using qualitative data analysis. The interviews aim to explore the public's satisfaction with the current health care system, their willingness to participate in social health insurance, and their expectations about the new health financing system. The results of this analysis are used to design three alternative models of a health insurance system that should be suitable for what people expect. The main results of the analysis can be summarized as follows:
• Two-third of the respondents does not believe that the Public Health Sector can protect them in the case of catastrophic illnesses.

• Nearly two-thirds of the respondents said that they are satisfied with the public health sector, although their satisfaction was graded starting from low to excellent.

• About half of the respondents said: their income is not enough; therefore, they have to postpone their health treatment or borrow money to pay for health care.

• More than one-third of the respondents were not familiar with the concept of health insurance, to the point that they did not know what the term 'health insurance' means, as they have never heard about it.

• In general the majority of the respondents were willing to participate in the NHI.

• The majority of the respondents supported the solidarity principle by being willing to pay more for the NHI in comparison with poorer people.

• More than half the respondents thought that the private sector would be better able to manage the NHI project than the public sector.

• Nearly one-third of the respondents said that their income is low and they cannot spend any money on the HI, although, they are enthusiastic to participate in the health insurance.

• More than two thirds of the respondents confirmed that the public sector is better able than the private one to collect the contributions for the HI.

• The majority of the respondents preferred the structure of risk pooling to be on the national level.

• More than half the respondents said the public sector is more qualified to purchase the health services than the private one.

• More than half the respondents said the membership in the NHI should be voluntary.

The fourth part on “designing the health insurance system models for Syria” discusses which financing method would be more realistic and more suitable to finance the Syrian health care system in order to reach universal coverage and efficiently achieve the main three objectives of the health care system. These can be summarized as follows: improving the health of the population the system is meant to serve; and reducing the
health inequalities amongst the society, responding to people’s legitimate expectations, and providing people with financial protection against the high costs of the health treatment. Based on the last discussion and the information acquired in the three previous parts, three models of health financing systems are designed. The models are as follows:

- The first model design is aimed to improve the efficiency of the current health financing system, and using the health benefit schemes as a parallel system beside the current system. The first model focuses on the following approaches:
  - Improving the efficiency of public expenditure on the health system.
  - Converting all the state-hospitals to become autonomous hospitals in terms of financing and management.
  - Separation of public responsibilities (e.g. separating the payers from the public services provision).
  - Redirecting the resources allocated to the public health facilities to target the low and middle income people rather than the whole population.
  - Increasing the role of the social health schemes and organizing a framework for the existed schemes according to unified criteria.
  - Establishing a special semi-independent agency to be responsible for supporting the health benefit schemes, improving their efficiency, and ruling the work of these schemes with a clear policy.
  - Ensuring the equity between the health insurance schemes.

- The second model relies on introducing a social health insurance system incrementally as a strategy to mobilize complementary resources for the health care system away from out-of-pocket payments that form pressure on people and especially the poor people. This model aim to achieve the following issues:
  - Merging the similar schemes that are belonging to one economic sector into one scheme.
  - Expanding the health benefit schemes to cover all groups of population who can afford paying the contributions.
  - Giving the semi-independent agency called the Health Insurance Committee more authorities to coordinate the work of these schemes.
  - Enhancing the solidarity through introducing a risk adjusted mechanism between the health benefit schemes.
Establishing a special health insurance fund financed mainly by general revenues aiming to cover poor people.

Converting all state hospitals to be autonomous bodies, and imposing charges on the majority of the health services provided.

The third model discusses the framework for implementing a national health insurance system that covers the whole population at once (big push). This model relies on these approaches:

- Merging all the existing health insurance funds into one national health insurance fund. This fund is a self-governed body, and has one branch in each governorate (i.e. district health insurance funds).
- Transferring the state budget allocated to public health providers towards the poor people in a form of contributions paid on their behalf to join the national health insurance.
- Making national health insurance obligatory for the whole population.

In the fifth part, the current Syrian health system and the designed models are assessed separately according to the following criteria: feasibility, efficiency, sustainability and equity. In the second section the three proposed models of financing the Syrian health care system in addition to the current system are compared with each other according to the major indicators for each criterion; feasibility, efficiency, sustainability, equity, and achieving universal coverage.

The third section discusses the possibility of reaching universal coverage through applying each model. As the path to universal coverage is based on three main elements: raising sufficient funds, reducing the reliance on direct payments to finance services, and improving efficiency and equity, the first model is unable to achieve universal coverage, while the second model would be better able to achieve universal coverage than the first model. However, the voluntary membership in the health insurance fund for better-off informal sector workers and multiple funds without complete risk pooling could affect the sustainability of this system and obstruct universal coverage. The third model would be best able to attain universal coverage. Since the third model would be the best one in terms of providing universal coverage, the question is raised of whether the third model should be established directly or
whether would be better to implement it in many stages. Many reasons support the selection of the second option. These reasons can be summarized as follows:

- The radical reform from the public health system to national health insurance requires many prerequisites such as:
  - Highly qualified staff to manage this change and to run the new system.
  - Many arrangement, rules, and laws to control this change.
  - Many studies to define the poor people who will benefit from the government subsidies, and a mechanism for defining the income of people who belong to the informal and self-employed sectors, who will be subject to paid contributions.
  - Sophisticated technology to connect the insurance fund with health providers.

- The current economic situation is not suitable to this radical reform, taking into account the large proportion of the population in the informal sector, the large proportion of poor people, and the low economic growth.
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ACs</td>
<td>Autonomous Communities</td>
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<tr>
<td>AMG</td>
<td>Free Medical Assistance</td>
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<td>CBS</td>
<td>Central Bureau of Statistics</td>
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<tr>
<td>CBHI</td>
<td>Community-Based Health Insurance</td>
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<tr>
<td>CBHIIs</td>
<td>Community-Based Health Insurance schemes</td>
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<tr>
<td>CNAM</td>
<td>National Health Insurance Fund (Caisse Nationale d’Assurance Maladie)</td>
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<td>CNRPS</td>
<td>National Pension and Social Insurance Fund</td>
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<td>CNSS</td>
<td>National Social Security Fund</td>
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<td>CR</td>
<td>Contributory Regime</td>
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<td>DRG</td>
<td>Diagnosis-Related Groups</td>
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<td>DHIFs</td>
<td>District Health Insurance Funds</td>
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<td>EMRO</td>
<td>Eastern Mediterranean Region Office</td>
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<td>EUR</td>
<td>Euro</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GGHE</td>
<td>General government expenditure on health</td>
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<td>GNP</td>
<td>Gross National Product</td>
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<tr>
<td>GP</td>
<td>General Practitioner</td>
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<td>HBS</td>
<td>Health Benefit Scheme</td>
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<td>HIFs</td>
<td>Health Insurance Funds</td>
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<td>HIC</td>
<td>Health Insurance Committee</td>
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<td>HMOs</td>
<td>Health Maintenance Organisations</td>
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<td>MAP</td>
<td>Medical Aid Program</td>
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<tr>
<td>MENA</td>
<td>Middle East and North Africa</td>
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<td>MoD</td>
<td>Ministry of Defence</td>
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<td>MoEd</td>
<td>Ministry of Education</td>
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<td>MoF</td>
<td>Ministry of Finance</td>
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<td>MoHE</td>
<td>Ministry of Higher Education</td>
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<td>MoH</td>
<td>Ministry of Health</td>
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<td>MoHP</td>
<td>Ministry of Health and Population</td>
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<td>MoLA</td>
<td>Ministry of Local Administration</td>
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<td>MoI</td>
<td>Ministry of Interior</td>
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<td>MoSAL</td>
<td>Ministry of Social Affairs and Labour</td>
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<tr>
<td>MoTel</td>
<td>Ministry of Telecommunications</td>
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<tr>
<td>n.a.</td>
<td>Not available (data)</td>
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<tr>
<td>NHI</td>
<td>National Health insurance</td>
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<td>NHIC</td>
<td>National Health Insurance Corporation</td>
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<td>NHIF</td>
<td>National Health Insurance Fund</td>
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<td>NHS</td>
<td>National Health Service</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
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<td>OOP</td>
<td>Out-of-pocket</td>
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<td>PCTs</td>
<td>Primary Care Trusts</td>
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<td>PHC</td>
<td>Primary health Care</td>
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<td>PHI</td>
<td>Private Health Insurance</td>
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<td>POS</td>
<td>Point-of-Service</td>
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<td>PPOs</td>
<td>Preferred Provider Organisations</td>
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<td>Abbreviation</td>
<td>Full Form</td>
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<td>PvtHE</td>
<td>Private expenditure on health</td>
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<td>PPP</td>
<td>purchasing-power-parity</td>
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<tr>
<td>SHI</td>
<td>Social Health Insurance</td>
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<tr>
<td>SP</td>
<td>Syrian Pound; 1EUR=64.42 SP (11/02/2011)</td>
</tr>
<tr>
<td>SPC</td>
<td>State and Planning Commission</td>
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<tr>
<td>SR</td>
<td>Subsidized Regime</td>
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<td>THE</td>
<td>Total health expenditure</td>
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<tr>
<td>TPA</td>
<td>Third Party Administration companies</td>
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<tr>
<td>UK</td>
<td>The United Kingdom</td>
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<tr>
<td>UNICEF</td>
<td>United Nations International Children’s Emergency Fund</td>
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<td>WHO</td>
<td>World Health Organization</td>
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1. Introduction

The Ministry of Health is responsible for planning health policy and providing primary, secondary and tertiary health care services in Syria. At the provincial level, health services provided by the Ministry of Health are administered by provincial Health Directorates.

The organizational structure of the statutory health system that is financed by the general revenues allocated from the state budget, gives the Ministry of Health the responsibility for coordinating and managing health services provision. Further responsibilities for financing, administrating and providing health services are given to the following bodies: Ministry of Finance (MoF), Ministry of Local Administration (MoLA), State and Planning Commission, Ministry of Higher Education (MoHE), Ministry of Social Affairs and Labour (MoSAL) and Ministry of Defence (MoD). In addition, there are quite a number of schemes in Syria that give special health benefits to those working in the many ministries, public companies and professional associations. Most of these schemes provide modest services and they cannot protect their members against financial risks. Such schemes cover approximately 15% of the population and are quite diverse in terms of coverage, costs, management and benefits.

The private sector’s role in delivering health care services has substantially increased.

In principle, the public health facilities that include state hospitals and health centres provide health services free of charge for the whole population. However, since 1998 some state hospitals have had a part of their operations converted to charging departments (Bensa et al. 2003). Out-of-pocket payments take the form of direct payments to private clinics, pharmacies, private hospitals and treatment abroad. These payments contribute to more than 50% of the expenditure on health services (WHO 2010).

During the past four decades basic health indicators show that the Syrian health care system has achieved relative success, reflected by significant declines in maternal and infant mortality rates and marked improvements in life expectancy rates and vaccine
coverage rates against childhood diseases. However, many problems and challenges facing the Syrian health system require further action or reform to improve the performance and financing of the health system. The challenges facing the Syrian health sector can be summarized as follows:

- Inability of the health care system to meet an increasing demand for health services resulting from demographic changes, including an ageing population and high fertility rate, in addition to a demand for health services which include new and expensive technologies.
- The growing gap between the limited resources and the increasing costs of health services.
- The running of the publicly-financed health care lacks efficiency and accountability, and this system is subject to abuse and overutilization of resources. Furthermore, this system has suffered from a vulnerable structure and a lack of financial and human resources.
- The fragmentation of health system financing and the absence of one risk pool that would reduce financial risk.
- The insufficient quality and quantity of health services provided by the public health care system (State Planning Organization 2006).
- High out-of-pocket spending on health, which accounts for more than half of the total expenditure on health, has increased the pressure on people and reduced the security of poor people who are unable to pay for private medical services.
- The total expenditure on health as a percentage of GDP, general government expenditure on health as a percentage of total government expenditure, and the total health expenditure per capita in Syria are at among the lowest levels of spending in the Middle East area (WHO 2010); this fact emphasizes the insufficient resources used to finance health services in Syria.

For all the problems mentioned above, it is important to develop a more efficient and equitable health financing system. This system should be able to mobilize sufficient funds and achieve universal access for all citizens to good health services.
Objectives

The main objective of this thesis is to examine the possibility of the establishment of a national health insurance system as an alternative to the current health system. This study will focus on design options for health financing models that can satisfy the following conditions:

- They should be suitable to the socio-economic situation in Syria.
- They should be able to mobilize extra funds for the health care system and improve the national health accounts.
- They should reduce the reliance on direct out-of-pocket payments, and introduce a fair financing mechanism based on the ability of the population to pay, rather than on their health status.
- They should increase the efficiency and equity of the health system.
- They should increase financial risk protection and achieve universal coverage.

The scope of the study

To meet the objectives of this thesis, the Syrian health care system will be not the only system under study, rather the health care systems in seven other selected countries will be analysed as well. The experience of each country, particularly related to the financing of the health system, will be used to design the models. These countries are Colombia, Germany, Romania, South Korea, Spain, Tunisia, and the United Kingdom.

The structure of the thesis and thesis strategy

In order to achieve the objectives, the research will be presented in four main parts (see Figure 1):

- First, a background that includes one chapter: health care systems. This chapter will explain general theories about health care systems and health financing functions.
The information provided in this chapter, particularly that related to health financing functions, will be the main basis for the review of the health care system in Syria and the other seven selected countries. Furthermore, the health financing functions will be the main aspects that the design of the models will be based on.

- Second, a review that includes an explanation of the health care system in Syria and case studies of the health care systems in the other seven countries. The experience of each country, particularly related to the financing of the health system, will be used to design the models.

- Third, the interviews part includes the results of interviews conducted with selected householders to get their opinion on their understanding of as well as ability and willingness to pay for social health insurance. The results of these interviews will be used in the design of the models.

- Fourth, the building of the models, based on the information acquired in the three previous parts; the fourth part includes designing three methods of health financing systems suitable to Syria. These models will be assessed according to the following criteria: feasibility, efficiency, sustainability and equity.

**Methodology used**

The following methodologies are proposed according to each part:

- A literature review: this method will be used in the first and second parts. The reports, books, governmental documents and statistic provide information about organizational structure and management and health care financing functions in Syria and the other selected countries. This literature review presents the basis and background for the design of the models.

- Comparative study: the literature reviews of the health financing systems in the seven selected countries will be presented in the same arrangement as an attempt to outline the health financing functions, the general structure of the health systems in these countries, the main characteristics of key reforms, and the reasoning that was behind the reforms. This information will be compared and used as a background to design the models of health financing for Syria.
• Qualitative analysis: face-to-face interviews will be held with a representation of Syrian householders. These interviews will be analyzed using qualitative data analysis. These interviews aimed to explore the public's satisfaction with the current health care system, their willingness to participate in the social health insurance, and their expectations about the new health financing system. The results of these interviews will be used to design feasible alternatives to the current health financing system in Syria. To boost the validity of these interviews, the interviewees will be selected according to several criteria and they represent diverse categories of the Syrian society.

Figure 1.1: Chart structure of thesis
2 Health Care Systems and Health Financing Functions

In the last few decades, the interest in health care systems in most countries has experienced a great growth all over the world. Achieving accessibility of health care at feasible costs and good quality represents a real challenge for governments and policy makers in these countries. According to the World Health Organization (2007), the global spending on health care was about US$ 4.1 trillion ($10^{12}$). 80% of global expenditures were made in the countries belonging to the Organization for Economic Co-operation and Development (OECD), although only 18% of the world’s population live in these countries. The total health expenditures in low-income countries and lower middle-income countries amounted to 4.7% and 5.4% of GDP in 2004 respectively, whereas in upper middle and high-income countries these percentages were 6.7% and 11.2% respectively (The World Bank 2007).

As a result of higher expenditure on health per capita, increasing the average length of life, and transferring the bulk of diseases towards incommunicable and chronic diseases such as diabetes and heart diseases, the demand for health care has increased. Health care demands are shifting towards high technology and high quality. Therefore, the rise in health spending is posing pressures for high-income countries to control this expenditure, whereas low and middle-income countries face the problem of increasing the health expenditures needed to cover the essential health needs of their people. Regardless of the level of the country’s income and the type of its health care system, there are growing concerns about improving the health care system. In other words, reforms of health care systems have been carried out to satisfy public health needs and achieve equity and financial sustainability objectives.

2.1 What is a health system?
It is not easy to find an exact definition for a health system. It may be defined according to the bodies involved in health services, their roles or functions, and their interconnection in terms of providing, delivering, financing, and managing health care. An example is the definition by Lassey et al. as “the combination of health care institutions, supporting human resources, financing mechanisms, information systems, organizational structures that link institutions and resources, and management structures that collectively culminate in the delivery of health care services to patients” (1997). Also, a health system may be defined according to its essential roles. For example, the World Health Organization defines it as “all the activities whose primary purpose is to promote, restore or maintain health” (2000). This definition indicates all the activities aimed to enhance health services. These include preventive, curative, and palliative interventions, regardless of whether these activities are undertaken in a formal or informal way, and whether they influence these services directly or indirectly.

The main objectives of a health care system could be summarized as follows (WHO 2000):

- First, enhancing the level of health of the population and reducing the health inequalities within them.
- Second, improving the average level of responsiveness of the health system to the expectations of the population for the non-health improving dimensions of their interaction with the health system, and in addition reducing the inequalities in its distribution. This goal includes the following points: respect for the dignity of the person, and the right of the patient to choose the health providers, treatment the patient’s personal health information as a strictly confidential, meeting people’s expectations about the quality of the received health service, prompting attention to health needs, and waiting times for diagnosis or health treatment.
- Third, fair financing and financial risk protection, in other words, protecting households from the impoverishment that would result from paying an excessive share of their income to receive the necessary health care. This can be achieved through constructing an important degree of financial risk pooling, and designing payment mechanisms based on income rather than on the services used or level of risk.
2.2 The major influences on health care systems

As an open system, a health system is influenced directly or indirectly by social, economic, political and environmental factors. Therefore, it is not always easy to predict the changes in a health care system resulting from certain modifications, as it comprises a complex adaptive system (The World Bank 2007).

The major factors influencing health care systems can be summarised as follows (Lassey et al. 1997):

- Economic factors: the economic and fiscal features of every country have a major influence on the selection of the type of health care system, its breadth, and its quality in a given country. In general, the level of expenditure on health care per capita is thus closely related to the level of the GDP per capita.
- Demographic influences: the characteristics of a country’s population (e.g. population density, age structure) have a significant effect on the health care system.
- Historical and cultural influences: current health systems can be understood after an analysis of the historical development of health care systems and their financing forms in different countries over the time. A health care system is highly dependent on the cultural characteristics of its country, such as traditional habits, beliefs, and family structure.
- Political influences: the political system in a certain country determines the organizing style and financing type of its health care system.

2.3 Health system functions

The functions of a health system can be classified into four main functions: stewardship, creating resources (investment and training), delivering services (provision), and financing. The implementation of these functions and the coordination between them influences the performance of the health system and the accomplishment of its goals.

- Stewardship is strongly related to the other three functions. Also, stewardship directly
or indirectly influences the performance and the outcomes of the whole system. It is needed for managing, regulating, and establishing the framework for the entire system. Furthermore, the stewardship function is needed for providing the policy maker with the necessary data and the coordinating of the health system activities with the other systems related to health care.

- Creating resources, or, in other words, producing inputs, including human resources, equipment, buildings, and medicines. Most of these inputs are partly or totally generated outside the health care system and are out of the direct control of health system policy makers. Most of these investments require a long time and sustained effort, e.g. the training of medical staff or the development of drugs. However, the health care system must supply health services urgently required by the public through the available resources as soon as possible.

- The service provision function is one of the major health system’s activities. It comprises delivery of medical care and preventive health care, such as vaccinations and good child and maternal care.

- The health system financing function contains: collecting revenues, pooling risk, and purchasing services (The World Bank 2007; WHO 2000). In the next section this function will be discussed in detail.

2.4 Financing of health care systems

Health outcomes, social fairness, consumer welfare, level of individual income, share of employment, and macroeconomic stability in general are all affected by the selected health financing system. Therefore, the financing of the health care system is a critical issue for every concerned country in the world (Schieber 1997). Countries manage and finance their healthcare systems in different ways according to their political and socioeconomic systems. These ways vary between public and private funding. According to WHO, the purpose of health financing is "to make funding available, as well as to set the right financial incentives for providers, to ensure that all individuals have access to effective
*public health and personal health care*" (2000). Health care system financing function can be divided into three main categories: collecting revenues, pooling resources, and purchasing services. Based on the implementation of these functions, four major models of health care financing systems can be distinguished. These are the National Health Service system (the Beveridge model), the Social Health Insurance system (the Bismarck model), Community-based Health Insurance, and private health insurance. Experiences with these systems differ from one country to another. However, all efforts must focus on mobilizing adequate revenues that meet the population's health needs through sustainable, fair, and efficient methods. Furthermore, the chosen system must protect the population against the risk of high personal health expenditures. That protection can be achieved using suitable and appropriate mechanisms to pool health risks and utilize the resources in an efficient way (Gottret and Schieber 2006).

This section is divided into two subsections. The first section analyses the health care financing functions. The second section defines major models of health care systems and outlines the key features, advantages, and disadvantages of each model.

### 2.4.1 Health financing functions

As is stated in the World Health Report 2000 (Health systems: Improving performance), health financing includes three main functions: collecting revenues, pooling risks, and purchasing services, as is depicted in Figure 2.1. Various actors, inside and outside the health system, are involved in carrying out these functions. Therefore, the efficient implementation and the coordination between these functions represent a key prerequisite for the success of the whole health system. In this section the main health financing functions will be briefly described.
Collecting of Funds

The function of collecting revenues means the mobilization of resources to pay for health goods and services (The World Bank 2007). The revenue-raising capacity increases with income. Also, a more stable economy results in more sustainable funding of health care. Therefore, high-income countries can allocate a higher percentage of their GDP to the health care system than can low and middle-income countries. Unsurprisingly, the income elasticity for per capita health expenditures relative to per capita GDP is directly proportional to a country’s level of income (Schieber 1997). However, the percentage devoted to health care funding is also dependent on the country’s preferences, which are unable to be isolated from the country’s political, social, and economic characteristics (Busse et al. 2007). The success of this function is dependent on the following principles that have to be considered:

- First, the collected revenues should be sufficient and sustainable to enable the health services to cater to population. The volume of the required revenue is appropriate to the...
level of the health services covered. The health services covered are determined according to the preferences of each country, using many criteria, such as necessity, effectiveness, cost-effectiveness etc.

- Second, in order to prevent unnecessary costs and avoid wasting any possible resources without distorting the economy, the principle of economic efficiency for collecting the funds for the health system should be adopted (Gottret and Schieber 2006).

The collecting revenues function is related to the answers to these main questions; which mechanisms would be used to collect the funds, and which organizations would collect these funds?

### Revenue collection mechanisms

There are several ways to collect the sources for health care system funding, for instance, general tax, payroll contributions, mandatory or voluntary risk-related premiums, medical savings accounts, out-of-pocket payments, and developmental assistance that is provided by rich countries to support health care systems in many low-income countries. The average developmental assistance volume is estimated to be about 7% of the total health expenditures in low-income countries. Almost all high-income countries mainly rely on taxes or social insurance contributions to finance the health care system, while the middle and low-income countries mostly rely on private financing, especially out-of-pocket payments, to finance their health care systems. However, most countries use a mixture of the methods mentioned to generate the required resources (The World Bank 2007).

**General taxes**

Two main types of tax can be distinguished. The first type is direct tax; this includes income taxes, in other words, company taxes, personal taxes, and property taxes etc. The direct taxes are usually levied on a progressive basis as is the case in most high-income countries. The second type is indirect tax, this includes, for example, value-added tax,
purchase tax, stamp duties, import tax, and taxes on production factors. The indirect taxes are levied regardless of income, or in other words, they are levied on a regressive basis. The volume of collected tax is largely dependent on the economic structure of each country. Countries with large formal economies will be able to extend their tax raising capacity through direct taxing, while low-income countries that have a significant shadow (informal) economy sector, and weak administrative structures, have a limited ability to raise revenues through direct taxes. Therefore, these economies rely more on indirect taxes to overcome the shortage of tax revenue (Gottret and Schieber 2006). However, it is important to note that most countries depend on a mixture of taxes that may be collected on a national or local level.

As mentioned above, the NHS system depends mostly on general taxes to finance health expenditure. Therefore, the burden of financing the health care system is allocated among a wide range of people, and almost all people have the right to access health services free of charge at the point of service delivery (Evans 2002; Robinson 2002). In general, the percentage of taxes devoted to the health sector differs according to the level of priority given to health care in the political agenda at any given time. Furthermore, it depends strongly on the annual tax revenue; as a result, the collected funds for health care may swing from one year to another in the tax-financed systems (Schieber 1997). To counter unstable revenue, some countries seek to diversify their health funding resources by earmarking part of their indirect taxes for the health budget, e.g. taxes on alcohol and tobacco consumption. The SHI countries tend to rely on taxes that are considered a less important resource to fund the health system (Siadat and Stolpe 2005).

**Payroll contributions**

Payroll contributions form the main source of funding in SHI systems. The SHI system levies certain earmarked payroll contributions from employees and employers according to a predefined percentage. These contributions are irrelevant to the health status of the participants (Saltman 2004). According to Gottret and Schieber (2006) this source of financing health care is limited in low-income countries, where payroll taxes only
contribute to 2% of the THE, compared to 15% in the lower middle-income countries, and 30% in the high-income countries.

However, there are many differences between the SHI countries regarding payroll contributions. These differences can be summarized as follows:

- First, the uniformity of the rate. The rate of contribution is often the same for all insured people, as is the case in Korea and France. In other countries, such as Japan, the rates differ according to the employment status, moreover in the municipal health insurance scheme, also between sickness funds in each municipality. In order to encourage competition between the sickness funds in Germany, this rate used to vary from one sickness fund to another until 2009, when a reform was applied to equalize the contribution rates between different sickness funds (Ognyanova and Busse 2009).

- Second, the distribution of contributions between employers and employees varies from one country to another. For instance, in Belgium and Austria, the employer pays 50% of the contributions, and the employee pays the other 50%, while in France the employer pays about 70% of the overall contributions.

- Third, the existence of an upper income ceiling for contributions. For example, Austria, Germany, Japan, and the Netherlands apply an income ceiling, while Korea generally has no income ceiling (Normand and Busse 2002).

- Fourth, the existence of additional non-wage related contributions. In general, the rate of the contributions is related to the income earned (wages and salaries). However, some countries such as France have extended the contribution assessment base from the wage-related contributions of the employees to include unearned income as well. The aim of this reform was to reduce the effects of the employment fluctuations on the revenue collected (Henke and Schreyögg 2004).

**Risk-related premiums**

Risk-related premiums can be calculated according to one of the following rates:

- First, the individual risk rate that is based on an assessment of the individual's future health risks. In order to assess the future health risk, some factors should be considered such as the health status of the insured person, age, gender, and occupation. Therefore,
the elderly people, the unemployed or low-income individuals, and those who are not healthy, have a lower chance of acquiring private health insurance coverage. This is because of the high premiums required, at which private health services would be available (Mossialos and Thomson 2004).

- Second, the group rate, at which health insurance is available for all a firm's employees. In this case, the premium rate depends on the average risk of the employees in this firm. The premium is paid either by the employer or shared between the employer and the employee (Maynard and Dixon 2002).

- Third, a community-rated premium that relies on the average risk of a defined group. In this case, all the participants pay the same premiums to the private insurance company.

**Medical Saving Accounts**

Since 1984, the Medical Saving Accounts system has been mainly implemented in Singapore. Furthermore, there have been pilot projects to apply the Medical Saving Accounts system in the USA (1996-2003), and recently in China. The financing of the Medical Saving Accounts system relies on compulsory premiums estimated according to a defined percentage of the income. These premiums are deposited every month by individuals or by employers in a special account called a Medical Savings Account. This account covers the insuree (the owner of this account) for the necessary health expenses at the point of use, for example, the payment for hospital services and some outpatient procedures (Busse et al. 2007). Medical Saving Accounts are not considered as risk pooling mechanisms due to the fact that the construction of these accounts is not based on redistributing the risks and the income among individuals. Medical Saving Accounts do not offer a catastrophic risk financial protection. However, the structure of the Medical Saving Accounts allows for the smoothing of the risks over the life cycle of the individuals (Gottret and Schieber 2006). Therefore, this mechanism of financing health care system is used in combination with other financing mechanisms to cover expensive treatment. For instance, in Singapore, the Medical Saving Accounts system (Medisave) is complemented by catastrophic illness insurance (Medishield), which is financed by obligatory premiums and public funds, and a third form of insurance, Medifund, which is financed by governmental
subsidies to provide health care for poor people. In the USA, the implementation of Medical Saving Accounts has been carried out in parallel with PHI system to relieve the burden of the high deductibles applied (Maynard and Dixon 2002, pp.122). According to Schreyögg (2004), Medical Saving Accounts as a mechanism for financing health care, have two advantages: first, the Medical Saving Accounts system reduces moral hazard behaviour, due to the fact that Medical Saving Accounts are based on individual's savings in special accounts (self insurance). This style of financing of health care increases the sense of responsibility on the part of patients and improves their awareness of the utilisation of the health services. Also, this style stimulates the rational use of the resources. Second, the Medical Saving Accounts as a complementary health financing system could be the best solution to finance the growing needs of old people. The aging population is increasingly placing significant demands on the health care systems in many high-income countries. The Medical Saving Accounts system offers the means to accumulate savings in individuals' saving accounts as a capital reservation to cover the increasing expenditures on health care of the depositors when they retire. This is particularly the case if it is taken into account that the revenue that could be otherwise collected from this group, either as taxes or other sorts of contributions, would be less.

*Out-of-pocket payments*

Out-of-pocket (OOP) payments finance about 55% of the total health expenditure in low-income countries and 49% of the total health expenditure in lower middle-income countries, while out-of-pocket payments only account for 14% of the total health spending in high-income countries (Busse 2006). According to WHO (Health Evidence Network), there are the following three types of OOP payments:

- First, direct payment for private health services. Since patients may have to pay the medical providers proportionally large amounts in comparison to their incomes, they can be subject to financial risk. These payments are an inequitable source of funding for the health care system.

- Second, cost sharing and user charges payments such as payment for pharmaceutical, dental, or other services that are covered by public or private health benefits packages.
This type of payment is used in many State-Funded Health system countries to share the costs with the public health funds. Cost sharing is used to fill the gap between health care expenditure and tax revenue allocated to health care, and is undertaken because raising more taxes is not always a feasible option due to political or economical reasons. Nevertheless, charges for health care which must be paid by users can have a negative effect on lower-income people, who will be unable to bear these additional costs, and as a result, will be restricted from accessing health services (Evans 2002; Robinson 2002). Also, many SHI system countries use direct forms of cost sharing, such as co-insurance, co-payments, and deductibles\(^1\). These countries use cost sharing to mobilize extra funds to finance their health systems, and contain costs as well as control problems related to moral hazard risk and other potential selection behaviour (Busse et al. 2007). However, these cost sharing fees could impose a burden on the patients and decrease both the necessary and the unnecessary health care utilization.

- Third, informal payments or what is known as under-the-table payments. These payments are paid for health services that should be fully financed by the pooled revenues (WHO 2005).

### Collecting organizations

The collecting organizations vary according to the health system in question. However, a collecting organization could be associated with one collection mechanism or more. For instance, the Ministry of Finance often plays the role of the revenues collector in the NHS system. Also, the Ministry of Finance or other tax authorities linked to this ministry

\(^1\) A deductible is a fixed amount that must be paid by the insured individual before receiving any insurance benefit.

- Co-payment is a fixed amount the insured individual is asked to pay for medical services such as a visit to the doctor.

- Co-insurance: is the percentage of the cost of the medical services paid by insured individuals (European observatory on health systems and policies, Glossary.2007)

contribute to collecting earmarked taxes or compulsory payroll contributions in some SHI systems (Mossialos and Dixon 2002. pp.5). Independent or semi-independent agencies are the other collecting organizations that collect the obligatory contributions in SHI systems. For example, sickness funds in some SHI countries, such as Germany and Austria, directly collect the contributions and purchase the health services for their members. In other countries such as the Netherlands, the contributions are collected by external agents, and in turn are distributed to the sickness funds (Saltman 2004). The PHI systems gather the voluntary insurance premiums through either not-for-profit or for-profit private insurance funds (Mossialos and Dixon 2002).

Pooling of Funds

The collected funds flow via several allocation instruments to one or more pooling organizations that distribute those resources via other allocated mechanisms among purchasing organizations (Busse et al. 2007). According to Gottret and Schieber (2006) risk pooling is "the collection and management of financial resources so that large unpredictable individual financial risks become predictable and are distributed among all members of the pool". Risk pooling aims to protect people, especially those who are low-income, against the potential financial losses that might result from disease or injury. The protection can be done through contributions that are paid in advance and equal to the average expected costs. These prepayments should be calculated according to the capacity of people regardless of their health status and their age.

The implementation of risk pooling is based on the principle of sharing the risk between the low and the high-risk categories (risk subsidy), and shifting the costs from the low to the high-income individuals (equity subsidy). The affectivity and equity of the equity subsidy are dependent on two factors; the first is the percentage of the population covered by the same pool, the higher the percentage the better affectivity and equity. The second factor is the way of collecting the contributions. The feasible and progressive base of collecting the contributions improves the performance of the equity subsidy.
The various models of health care systems have different arrangements to set up the pooling risk. For example, the NHS system, in which the total population is provided with health services, the risks are pooled roughly across the population. Therefore, the problem of risk selection disappears. In addition, the risk pooling can precisely predict the costs and minimize the expenses due to the big size of this pool (economic scale) (Gottret and Schieber 2006).

In the SHI system, the contributions are based on the ability to pay rather than risk based. The extent of risk pooling can be multiple or single risk pooling, and this extent varies from one country to another (Carrin and James 2004). In some SHI countries such as Germany and Netherlands, the SHI system tends to centralize pooling organizations in order to avoid the high financial risks (Busse et al. 2007). The performance of risk pooling in the SHI system in terms of constricting fragmentation and achieving sustainable financing, relies on the type of membership in the SHI system. For example, in a voluntary SHI system many problems related to adverse selection may emerge due to fact that the low-risk or richer individuals tend to opt out the SHI funds, seeking lower costs in private health insurance companies. However, the obligatory SHI system can avoid this problem and insure the solidarity principle of the SHI (Carrin and James 2004).

In the majority of low and middle-income countries, where out-of-pocket payments dominate, the structure of risk pooling is fragmented and covers limited parts of the population, particularly, those who work in the formal sector. Furthermore, most of these forms of pooling risk require better equity and efficiency (The World Bank 2007).

Two processes can be noticed in the risk pooling function, which are, first, the allocation of resources from collecting to pooling organizations, and second, the allocation of resources from pooling to purchasers.

*Allocation of resources from collecting to pooling organizations*

In relation to the position of collecting and pooling organisations, two situations can be distinguished. First, the collecting of revenues and the pooling of risk functions are
implemented by the same organization (e.g. the sickness funds as is the case in some SHI countries such as Austria and Luxemburg). Second, the collection of resources may be carried out through a special organisation that is separate from the pooling organization. For instance in the Tax-Based system, where the health financing functions are integrated and controlled by the government, the Ministry of Financing that plays the role of collecting organization moves the collected funds through defined channels to the Ministry of Health which plays the role of pooling organisation. Also, in some SHI countries such as Germany and Netherlands, the organisations that collect the funds are independent to the pooling organizations (Busse et al. 2007).

Allocation of resources from pooling to purchasers

In most countries, the pooling and purchasing functions are applied by separate bodies. The purchasing function is usually carried out on a regional or local level (Busse et al. 2007). The allocation of resources from pooling organizations to purchasers is conducted in one of the following ways:

- Retrospective allocation, by which pooling organizations reimburse the purchasers all the actual expenditures.
- Using fixed schedule of fees to reimburse all the services provided. The system of Diagnosis-Related Groups is an example.
- Prospective funding, which is assessed according to the expected future expenditure. In contrast with the retrospective funding method, the purchasers are restrained by a fixed total budget. This budget is determined according to a political negotiation, a historical precedent, or an application of independent measures of health care needs to assess the expenses of each person covered by the purchasing agent (risk-adjusted capitation) (Rice and Smith 2002. pp.251).

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Diagnosis-related groups is a system which classifies patients into groups according to diagnosis, as an attempt to reduce the resources required and length of stay in hospital. [http://www.euro.who.int/observatory/Glossary/TopPage?phrase](http://www.euro.who.int/observatory/Glossary/TopPage?phrase) (accessed 25/02/2008).
Nowadays, most high-income countries have moved toward risk-adjusted capitation to allocate resources between the purchasers. The aims of this are first, to avoid the unfair allocation of resources between the purchasers. The second is to ensure that every purchaser will have a sufficient share of resources to meet the needs of its members. The third is to ensure the equitability of the geographical allocation of the resources between the different health centres as is the case in the countries that use the NHS system. The capitation is estimated according to the risk status of the individual using some personal characteristics (e.g. age, morbidity, income, sex, disability and occupation) which vary from one country to another (Mossialos and Dixon 2002; Busse et al. 2007).

**Resource allocation and purchasing**

This function is related to transferring the pooled resources to health service providers on behalf of the defined groups of population. This transfer occurs according to contracts between the purchasers and the health service providers (Kutzin 2001). Regarding the allocation of resources and purchasing health services, some principles should be considered, these are as follows: first, the accurate selection of the sorts of services that extremely affect health outcomes. A high level of attention should be paid to the quantity and quality of the purchased services. Second, the commitment to allow the total population to access essential health care services. The equitable delivery of these services geographically should be considered. Third, producing or purchasing medical services and products should achieve technical and allocative efficiency³ (Gottret and Schieber 2006). Two key objectives have to be explained before designing the payment system. First, the role of the purchasers and their effect on the providers. Second, the market structure of the purchasers (Kutzin 2001).

³ Technical efficiency means producing the maximum possible outputs from the given set of inputs. Allocative efficiency means allocating resources in such a way that the resulting outputs can achieve the most satisfaction for the beneficiaries, where any change in this process would lead to worse consequences. [http://www.euro.who.int/observatory/Glossary/TopPage?phrase](http://www.euro.who.int/observatory/Glossary/TopPage?phrase) (accessed 26/02/2008).
Role of purchaser

Regarding the allocation of resources to the providers of the health services, the purchasers may merely perform this task as an inactive financial mediator. In this case, the providers might have the power to push the market towards increasing the costs. In the meanwhile, through the active provider payment systems, such as the performance-related pay system, the purchasers can play an active role in affecting the supply side of the market. In this way, the purchasers can achieve better quality and control the costs of the delivery of health care. Also, the purchasers can play an essential role in motivating the providers to increase their positive interaction with the users, and also develop the models of health services delivery (The World Bank 2007).

For instance, active purchasing mechanisms might use one or more of the following methods:

- Using financial incentives to encourage the provider to contain the costs while maintaining quality, thereby improving efficiency.
- Putting in place a primary care gatekeeper, whose role as a care coordinator is to refer the patients to specialists or secondary care. This aims to control costs.
- Contracting with selected providers in order to push them to offer better services with lower costs; and using a feedback system to supervise their actions and measure them against defined criteria (Kutzin 2001).

Market structure of purchasers

The number and size of the organizations involved in the purchasing function, and the scope of the health service areas for which those organizations are responsible, vary from one country to another. In this context two main types of purchasing organisations can be noticed, these are:

- Firstly, single purchaser (single national purchaser) that transfers the pooled revenues on behalf of the population to the service providers at the national level, as is the case in Greece (in respect to its NHS), Korea and Singapore.
- Secondly, multiple purchasers. The decentralization tendency in many countries caused many purchasing systems to convert to be multiple purchasers. In this framework, the
Purchaser organizations might be divided either on a geographical basis or upon a competition basis.

- Purchaser organisations might be divided on a geographical basis into regional purchasers. In this case, every purchaser covers geographically distinct populations. Many NHS countries rely on the multiple purchasers who purchase the health services at the regional levels as is the case in Italy, Spain, Canada, the UK, and the Scandinavian countries. It is worth mentioning that although the health services are provided through facilities owned by the government and public providers, many tax-financed health systems have intended to detach the purchasers from the providers. Also, the reforms allowed these two actors to practice more management autonomy, and regulated the contract progress between purchasers and providers.

- The multiple purchasers can be divided into multiple non-competing purchasers and multiple competing purchasers. In many SHI system countries such as Luxembourg, France, and Greece, the purchasing system depends on a number of non-competing sickness funds that are allocated on the basis of occupational status. In Japan and Austria every fund is devoted to a certain occupational group and/or for region of residence. As a result people do not have a choice of sickness fund. On the other hand, in a few countries such as Germany, Netherlands, Belgium, and Switzerland, the purchasing system is based on multiple competing sickness funds. Moreover, individuals have the right to choose their fund. Therefore, the competing funds always try to improve the quality of purchased services and control their costs (Kutzin 2001; Busse et al. 2007). The number of sickness funds in the majority of the countries that have competing sickness funds system, has substantially declined in order to increase the efficiency of the purchasing procedures and raise their competitive capacity (Normand and Busse 2002).

**Methods of payment**

The contracting process with the health care providers should achieve the following objectives: overcoming health problems, delivering health services, meeting people's
expectations, and containing the costs (WHO 2000). Direct payment made to providers is still one of the common methods in most health care systems. Direct payments can be paid by different bodies, as follows: first, direct payment can be paid to the health care providers by the patients themselves (OOP). Second, direct payment can be paid to the health care providers by the patients, however, these payments will be fully or partially reimbursed afterwards by the purchasers. Third, direct payment can be paid to the health care providers by the purchasers. Although, the first two avenues give the consumers clear knowledge about the prices, some problems might arise. These problems can be associated with the inability of some people to afford these payments; especially those with low-incomes, even though the purchaser will reimburse them afterwards as is the case in the second avenue. In the third avenue, the purchasers are supposed to play a key role in affecting the behaviour of the providers through the payment arrangements, and creating active incentives rather than prices (Langenbrunner and Liu 2004).

According to Ensor and Langenbrunner (2002), there are three main means of reimbursing the providers by the purchasers, which are time-based payment, service-based, and population-based payments.

- Time-based payment: the providers are paid according to the work time needed to supply the services, irrespective of the number of these services. Under this payment system, many styles of payments are implemented. For instance, line item budget, whereas this budget is paid per a defined time (typically a year). The total amount that is allocated to the line item budget is divided according to certain items such as medicine, equipment, salaries etc. This system of payment was applied in the former Soviet Union Republic, where public health facilities were dominant, and it is still used in other countries, such as Egypt or Vietnam. This method has demonstrated good efficiency in controlling the costs. However, it has problems related to long waiting lists and underproduction. Global budget is another example; this budget is a one line item budget, which is allocated to a specified category of people or used services such as physician services, hospital services or pharmaceuticals etc. According to the time-based payment method the individual providers are salaried as is the case with the
hospital-based doctors in the United Kingdom, Germany and China, and the doctors who service outpatients in the health centres in Greece, Turkey, Portugal and India. Salary as a payment method has problems related to underproduction, and inadvertently encouraging the physicians to move into the private sector because of the low salaries paid in the public sector.

- Population-based payments, or what is known as capitation payment\(^4\). In this method, the remuneration to both the ambulatory and the inpatient care is dependent on the size of the group of people covered by the health facility (physician or hospital) regardless of the actual number of patients. The providers receive their reimbursements either through flat fees or through risk-adjusted flat fees. This method has been implemented in many countries, regardless of the type of health care system, such as the United Kingdom, Italy, Netherlands, Thailand and Indonesia etc. This method has created incentives to control costs through removing the potential for overprovision and enhancing cost-effective care, however, the problem of underproduction may arise.

- Service-based payment: in this mechanism, the providers are paid according to the number of services they offer the patients (Langenbrunner and Liu 2004; Carrin and James 2004). Since 1980, many countries in Western Europe and North America have moved toward a service-based payment system to correlate the remuneration of the providers with their performance. According to this mechanism, the individual providers such as physicians are reimbursed according to what is called fee-for-services. However, this method of payment, that is applied in many of the SHI system countries and even more in PHI systems, has several disadvantages. First, it has been accompanied with increasing expenditure because of overprovision of health services. Second, extra costs are shifted to patients in order to reduce moral hazard effects (Langenbrunner et al. 2005). Third, it can result in a decline in the quality of services because of a reduction in the time spent providing services as a result of physicians' attempts to increase their amount of activity in order to increase their income (Carrin and James 2004). In the service-based payment method, the hospitals are remunerated

\(^4\) Capitation payment is a fixed payment to a provider for each listed or enrolled person served per period of time [http://www.euro.who.int/observatory/Glossary/TopPage?phrase](http://www.euro.who.int/observatory/Glossary/TopPage?phrase) (accessed 26/02/2008).
in one of the following ways: first, fee-for-service, whereby the hospital is paid according to the services they provided the inpatients with. Second, fees paid per hospital day (per diem). In this method, the purchasers pay a flat amount for each inpatient day, irrespective of the actual medical services that are provided. Although per diem payment can contain the administrative costs and is simple to apply, this method encourages hospitals to increase the average length of the patient's stay, and reduces the quality of the provided services. Third, case mix-adjusted fees. In this means of remuneration, a fixed amount of money is paid for every case classified with a specific diagnosis, regardless of the services that are provided (Langenbrunner and Liu 2004; Carrin and James 2004). The most common type of case-based payment is the diagnosis-related group (DRG) system, which is based on classifying patients according to the diagnosis and the amount of resources required. The United States Medicare program introduced the DRG system in 1983. Since then, many countries with the NHI system, such as Canada, the United Kingdom, Italy and Australia, have adopted the DRG system to reimburse hospitals instead of the global budget. Similarly, SHI countries, such as Germany, Netherlands, France and Korea, have moved to the DRG system from per diem payments to remunerating the hospitals. However, it is important to pay attention to the fact that every country has applied several modifications to the DRG system to the point that each has produced its own particular DRG system (Busse et al. 2007). The DRG system has a few disadvantages, for example, it increases unnecessary admissions and encourages the providers to diagnose particularly well-paid cases (Carrin and James 2004).

It is very important to take into account the fact that there is no optimal payment method, and that most countries do not use a single system, but rather a combination of methods to pay for the ambulatory and the inpatient care. Instead, there are combinational payment systems. For instance, the capitation or salaries payment system can be mixed with or supplemented by fee-for-service payments and vice versa, as is the case in England and Germany (Busse et al. 2007). Also, many countries combine the global budget with case
mix-adjusted hospital budgets to create a new means to reimburse hospitals (Langenbrunner and Liu 2004).

### 2.4.2 Models of health care systems based on the main source of their funding

Take into account that the majority of countries use a hybrid of resources to finance their health care systems and provide health care to their population, four major types of health care systems can be distinguished according to the main source of their financing (Table 2.1). It is important to pay attention to the fact that there is no system that is ideal or preferred over the other systems. However, the cultural, economic, and institutional characteristics of every country should be considered by the policymakers when they establish the appropriate health care system in order to optimise efficiency, equity, and sustainability (Gottret and Schieber 2006).

**The Beveridge Model (National Health Service)**

106 countries out of the 191 that are WHO members rely on general revenue as a main financial source for health care expenditure (Savedoff 2004). Historically, the National Health Service (NHS) system, based on the proposals of the Beveridge report published in 1942, was created according to the National Health Service Act of 1946 in the United Kingdom (Gottret and Schieber 2006).

In 1948 the NHS came into existence, and it remained a unique case of free national provision of health services for two decades in the Western world until it was applied by Sweden. This model contains the following key features:

- Universal coverage for all citizens regardless of their income, occupation, or health status.

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5The universal coverage ensures access to sufficient health care for the entire population at an affordable price (Carrin and James 2004).
• This model is comprehensive and free at the point of service delivery. However, the benefits packages provided in many NHS countries are not precisely defined, and vary from one country to another. Most NHS countries exclude some health services from their benefits package such as some dental care services, pharmaceutical services, and cosmetic surgeries etc.

• This model is mostly financed through general taxation and other general revenues that fund the general budget. Therefore, this system sometimes is called a State-Funded Health Care System or Tax-Based Financing System. The portion of funding devoted to the health care sector from the general budget depends on the political agenda and the state of the budget. To avoid unstable revenues being dedicated to health care, some countries use earmarked taxes such as taxes on tobacco or alcohol.

• NHS countries provide health care through facilities owned by the government. There are some exceptions in a few NHS countries that contract private providers to offer the health services, in addition to a network of public providers (Gottret and Schieber 2006).
<table>
<thead>
<tr>
<th></th>
<th>National Health Service</th>
<th>Social Health Insurance</th>
<th>Community-based health insurance</th>
<th>Private Insurance Model</th>
<th>Out-Of-Pocket</th>
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<td></td>
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<td>Indemnity</td>
<td>Managed care plan</td>
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<td><strong>The source of financing</strong></td>
<td>Taxes</td>
<td>SHI contributions</td>
<td>Community-rate contribution, Flat-rate</td>
<td>Voluntary health insurance premium</td>
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<td>Varying</td>
<td>Varying</td>
<td>No</td>
<td>No</td>
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<tr>
<td><strong>Purchaser</strong></td>
<td>MoH, Public intuition (health authorities)</td>
<td>Sickness funds</td>
<td>Community</td>
<td>Individuals</td>
<td>Managed care institutes</td>
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<tr>
<td><strong>Providers</strong></td>
<td>Mainly public</td>
<td>Mix of public and private</td>
<td>Public providers, the CBHIs’ own facilities, private providers</td>
<td>Mainly private</td>
<td>Mainly private</td>
</tr>
<tr>
<td><strong>Purchaser-provider relationship</strong></td>
<td>Mainly integrated</td>
<td>Contracts</td>
<td>Contacts</td>
<td>Contracts</td>
<td>Contracts</td>
</tr>
<tr>
<td><strong>Regulation</strong></td>
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<td>Strong, maybe self-regulation</td>
<td>Self-management</td>
<td>Weak</td>
<td>Medium</td>
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</tbody>
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Advantages of the National Health Service

In general, the success of this system is related to the political-economic features of each country, and its ability to mobilize and raise the adequate share of taxes in a fair and efficient way. Also, the success of the NHS system is dependent on the ability of the political-economic system to control the administrative costs, and selecting the better type of taxes that accomplish more resources without distorting the economy. Taking these considerations into account, the State-Funded System can achieve the following benefits:

- Universal and comprehensive coverage for the entire population.
- This system is financed by a wide base of revenue, tax (direct and indirect taxes), and non-tax alike. Also, a large share of the population may contribute to financing this system. This mean of financing is considered an efficient one, especially in low and middle-income countries, where the informal sector is predominant.
- Furthermore, as the tax system in many of the Tax-Based System countries is a progressive system, at least in the case of direct taxes, this makes the NHS model fairer than other models like the Private Insurance System.
- Since the payment is obligatory regardless of individual health status, the State-Funded health care system can avoid some problems such as those of adverse selection and risk selection⁶ that may face other health care systems (Savedoff 2004).
- The diversity of responsibilities and powers given to different levels of the government influence the characteristics of the Tax-Based System (Evans 2002). Taking this into account, this system relies on hierarchical authorities. Therefore, it has a relatively strong ability to coordinate and control all related activities with more administrative efficiency and fewer transaction costs (Gottret and Schieber 2006).
- In general and with respect to the economies of scale principle, the NHS as a single pool system has a relatively greater capacity to contain health expenses than other

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⁶ Adverse selection means the tendency of an individual with a higher risk to sign up for an insurance plan at rates below the fair rate, exploiting the asymmetric information.

models, and achieves benefits in both purchasing power and risk management (Savedoff 2004).

**Disadvantages of the NHS system**

The NHS faces many difficulties including the following:

- The funds devoted from the general budget to the health sector are annually changed according to the priorities of the government and the state of the budget. Consequently, the State-Funded System, especially in low and some middle income countries, may suffer from underfunding and poor quality of health care services provided.
- Some countries use user charges to compensate for the restricted ability to finance health expenditures. However, the user charges may cause limited access to health services for poor people.
- The State-Funded System in some countries has problems associated with unfair geographical delivery of health care facilities. This system use modest medical technology compared to the private sector that often uses a higher level technology (Gottret and Schieber 2006).
- Some problems may emerge from the political-economic structure of this system itself. These problems are related to inefficiency in the management of the public services, and weakness in the accountability of the health care providers (Savedoff 2004).

**Bismarck Model (Social Health Insurance)**

Historically, Social Health Insurance (SHI) system began under Bismarck law in 1883 in Germany (Saltman and Dubois 2004). Now this system is applied in about 60 countries (Carrin and James 2004). Moreover, many Tax-Funded countries use segments of social health insurance arrangements to finance their health care systems. However, on the other hand, in the 1970s and 1980s many countries converted their health care systems from SHI to Tax-Funded Systems, such as Italy, Spain, and Denmark (Saltman 2004). The SHI system can be defined through the following common features:
• Percentage of the population covered is different from one country to another, although, universal coverage is the ultimate goal for many SHI countries. Also, the membership varies from being compulsory for the total population to being voluntary for a specific group of people.

• The benefits package is distinctly determined either by the law or perhaps through negotiations between sickness funds and health providers (Busse et al. 2007).

• The SHI is financed by compulsory payroll contributions. These contributions are appropriate to the income of members and independent from their health status. These contributions are made by employees and employers according to defined rates that vary from one country to another. In the case of the self-employed, these contributions are paid either on an income-related or flat–rate basis. In general, these contributions are separately collected from the state general revenues. However, some countries finance their SHI systems totally through general revenues, such as Armenia and Lithuania.

• Since the SHI system is based on the concept of social solidarity, the number of the beneficiaries is more than those who actually contribute in payment to finance this system. Therefore, the government subsidies, which are financed through general taxation or earmark taxation, are another important source to support poor people, and meet the insufficient resources to finance health care in the SHI system.

• SHI system is run by independent or semi-independent non-profit sickness funds. Mostly, the government determines the number of these sickness funds, their structure, and their major features such as the benefits package provided, the contributions, and the way in which these contributions are determined and collected.

• The health care services in the SHI system are provided through contracts with public or private providers to supply these services for their members. These contracts can be collective or individual. The contracts determine the terms of prices of provided services (fee schedules), their quality, and the means of payment of health services providers (Gottret and Schieber 2006; Saltman 2004; Normand and Busse 2002).

Advantages of the Social Health Insurance system
Collecting funds in the SHI system is relatively simple as the contributions are deducted from the income of the members. Also, the link between the contributions paid and the health services received makes people more willing to pay.

The resources which finance the SHI system are determined by the contributions, and it is independent of yearly budgetary negotiations. Therefore, the resources which finance the SHI system are more stable in comparison to the resources of the NHS system.

Most SHI countries use general taxes to supplement payroll tax, which is not indeed enough alone to achieve universal coverage, especially for those who are unable to pay these contributions such as the poor, the unemployed, students, and retired people.

This system is based on the social solidarity principle. In this system, subsidies are reallocated from high-income to low-income members, from low-risk to high-risk, and from individual to families (Gottret and Schieber 2006).

Disadvantages of Social Health Insurance

Although more than 60 countries have implemented the SHI system, only 27 countries have reached universal coverage (Carrin and James 2004) in spite of the fact that universal coverage is the ultimate aim of the majority of these countries. Most of the countries that adopted the SHI system to finance their health care systems initially covered civil servants and employees working in big private companies, while the self-employed and other categories of the informal sector were the last group able to join the SHI system. Even now, in some SHI countries, these categories remain outside the statutory health system. Because of the difficulties faced in collecting the contributions or even taxes from the informal sector. These difficulties clearly appear in developing countries where the tax structure system is weak (Gottret and Schieber 2006).

Due to the fact that most SHI countries are dependent on the employment-based income (wages and salaries) as a contribution base, the following problems may occur:

- First, payroll contributions may increase the labor costs and cause the unemployment rate to rise.
Second, employment-based income is a narrow contributions base, and it does not take into account the capital income or the wealth of the members. Using unearned income would widen the base of contributions allocated to pay for the SHI.

Third, using employment-based income increases the trend towards self-employment at the expense of employment (Normand and Busse 2002).

- This system tends to place excessive demand on health services, as a consequence, raising costs and increasing payroll contributions to match these escalating costs.
- The inadequate funding of health organizations and the weakness of regulation represent real obstacles to developing the SHI system, as is the case in many Latin American countries that have adopted the SHI system.
- In contrast to the NHS system, the SHI system faces higher administrative costs in managing complicated tasks such as negotiation with providers, reimbursement of the expenses of the insured population, creation of new collection mechanisms for social contributions, collection of funds, and investment of funds in efficient way to sustain resources for the system. In addition, the creation of suitable monitoring mechanisms to control the problems linked to moral hazard\(^7\) or abuse of resources is necessary.
- Also, the SHI system does not give adequate attention to preventive care, because of the weakness of coordination with public health services, which are often run by the government (Gottret and Schieber 2006).
- Because SHI is a compulsory system, problems related to adverse selection might not emerge. However, at the same time, the low-risk insured people are prevented from opting out of this system (Mossialos and Thomson 2004).

The main questions that arise here are:

1. Is the SHI system feasible for all countries?
2. Is SHI the appropriate pathway to achieve universal coverage?

---

\(^7\) Moral hazard means the exploiting of the benefit system by the individuals or providers who do not bear the full financial consequences of their actions and shift these disadvantages to other parties (European observatory on health systems and policies, Glossary.2007 http://www.euro.who.int/observatory/Glossary/TopPage?phrase=Cost-sharing (accessed 13/04/2008).
Before adopting the SHI system, every country should analyze the pros and cons of implementing this system, and whether or not it has the necessary base to apply the SHI system, and achieve universal coverage through it. In this context, the feasibility of applying SHI in each country depends on the following key preconditions:

- Firstly, the size of the informal sector. If the informal sector together with self-employed people form a large percentage of the labor market, it will be not easy to cover them within the SHI because of the difficulties related to estimating and/or collecting contributions from them. Otherwise, they will be excluded from the SHI and as a result the base of payroll contributions will be insufficient to finance the SHI system.

- Secondly, the existence of skilled administrative staff who can run and regulate the SHI system’s organizations and related activities.

- Thirdly, the availability of a legal framework to be dedicated to determining the features of the SHI system, the main functions of its institutions, and the rights and the responsibilities of the insured members.

- Fourthly, the effectiveness of the health care infrastructure that can provide good services which are included in the SHI benefit package offered to the insured members. It is worth mentioning that good quality facilities encourage people to join and support the SHI system.

- Fifthly, the existence of a broad consensus between the stakeholders in order to meet the conditions and the main rules of the SHI system. Also, the level of solidarity in the society is a key factor in accomplishing financial protection through a noteworthy amount of cross-subsidisation (e.g. from low risks to high risks, and from rich to poor people).

- Sixthly, a strong growth economy is a necessary factor to build a successful SHI system, and achieve universal coverage. In a strong growth economy additional contributions to support the SHI system can be mobilized.

- Finally, demographic distribution plays an important role in the SHI system as the higher the percentage of urban people the more success in the SHI system can be expected. Therefore, countries with increasing population density and growing
urbanization have a greater chance to gather more members and collect more payroll contributions for the SHI system (Carrin and James 2004; Gottret and Schieber 2006).

Community-Based Health Insurance

Community financing for health refers to a mechanism of financing or co-financing the current and/or capital costs associated with a given set of health services by a group of people who share common characteristics related to geographic proximity, profession, religion, or ethnicity (Carrin et al. 2005).

For centuries many countries all over the world have used this system. Community-Based Health Insurance schemes (CBHIs) were the main foundations for the creation of the SHI systems in countries such as Germany, Korea, and Japan (Gottret and Schieber 2006).

Today Community-Based Health Insurance (CBHI) is a part of health financing strategy in a number of low income countries that could not achieve universal financial protection through a Tax-Funded System, due to a weak capacity of governments to raise taxes and lack of a strong tax base; nor through the SHI, due to large rural and informal sector populations. The community financing is broadly characterized by the following three features:

- Affiliation is based on community membership.
- In most cases the membership is voluntary (although examples of mandatory insurance can be found in Boboye, Niger).
- The community is strongly involved in managing the system, designing the rules and collecting, pooling, and allocating resources.
- These schemes provide different types of health services. In general, two main types of community financing schemes can be distinguished; the first type covering high-cost, low-frequency events and the second type covering low-cost, high-frequency risks.

Advantages of Community-Based Health Insurance

- CBHIs have proved their ability to mobilize noteworthy resources for health care.
CBHI is an effective way to reach a significant proportion of low-income people and protect them against the cost of illness. CBHIs contribute to reducing the out-of-pocket payments paid by their members and at the same time increase their utilization of health care services (Jakab and Krishnan 2004). CBHI cannot provide medical coverage to the whole population, however, it may be very useful to supplement other forms of medical coverage such as SHI, and reach specific categories of people, such as the rural middle class and informal workers.

Disadvantages of Community-Based Health Insurance

- CBHIs have some problems such the small size of the pool, restricted management and technical insurance skills. As a result many CBHIs are vulnerable to failure.
- The poorest groups are unlikely to participate in these schemes because they are unable to afford the premiums (Tabor 2005).
- The voluntary membership of these schemes raises the problem of adverse selection (Carrin et al. 2005).

Private Health Insurance Model

Historically, Private Health Insurance (PHI) goes back a few hundred years in many countries, such as the USA, France, Australia, and the Netherlands. SHI systems were developed on the basis of PHI. Moreover, in some countries PHI was replaced in certain cases with SHI. Nowadays, PHI is one of the health financing models that is popular in high and upper middle-income countries, although its role varies significantly from one country to another (OECD 2004). For example, in some countries that have a tradition of private insurance, such as the USA and Australia, the PHI system plays an essential role in financing health care, while it dose not have the same importance in European Union countries (Mossialos and Thomson 2004). It is important to draw a general definition for PHI from its following key features:
• Financing through risk-related premiums, or on a community or group basis. The access to PHI is almost related to the ability to pay, in contrast to tax-based or social insurance contributions that are both related to income.

• The payment in most PHI markets is voluntary in contrast to mandate contributions in both the NHS and the SHI systems.

• A PHI system provides its members with the health services either through its own health facilities (most of them for-profit) or through contracting with health providers on a selective base. In some countries insured people with PHI have a free choice to select the providers, as is the case in Germany (Mossialos and Thomson 2004).

Private Health Insurance types

In general PHI can be divided into two main categories: traditional indemnity plans (fee-for-service plans), and managed care:

• The traditional indemnity plans: in this insurance the insurers do not directly contract with providers. However, they close claim reimbursements of costs that were made by insured people after health treatment. The consumers can freely choose the doctor, hospitals and other health providers, and they directly visit the specialist without referral. This model imposes mostly deductible payments before the insurance company starts paying for the insured people. Usually insurers pay only for reasonable and customary medical expenses, otherwise the insured people probably have to make up the difference themselves. Traditionally, preventive care services like annual check-ups are excluded form the coverage. This model is applied in many countries such as Germany, France, Belgium, and Canada (OECD 2004; Hermer 2005).

• Managed care plans: to control both costs and health care utilization, these plans integrate the care delivery function with the care reimbursement function. All managed care plans are based on an arrangement between the insurer and a selected network of health care providers, and they offer financial incentives for patients to use the contracted providers. These plans use explicit standards usually to select the providers to assure good quality. The negotiations with providers can be undertaken either on a collective basis or on an individual basis. In general these plans provide comprehensive
health services to their members. Within the managed care plans, there are four basic types of plans:

- **Preferred Provider Organisations (PPOs):** PPOs make arrangements with a network of health care providers to offer lower fees for the patient as an incentive to stay within that network. The insured people thus receive discounted care as long as they are within the network, however, if they go out of the network they must pay the entire bill up-front and then submit the bill to the insurance company, which in turn will not reimburse the total amount in this case. These plans do not have a gatekeeper system to visit specialists. Although PPOs offer greater flexibility in physician choice and less oversight of healthcare utilization, most PPOs rely on copayments and deductibles.

- **Point-of-Service (POS):** they are similar to PPOs, but they introduce the gatekeeper, the insured people must choose the primary care physician from among the plan's network of doctors. If the patients choose to go out of network they still get some kind of coverage, however they will get smaller reimbursement and they may also have to pay a deductible. POS plans may also cover more preventive care services.

- **Health Maintenance Organisations (HMOs):** in general they are geared more toward members of group plans than individuals. In exchange for a low co-payment and low premiums the patients are required to visit primary care physicians before seeing a specialist, the patients have no option to go out-of-network, otherwise the care is generally not covered. HMOs have the best reputation for covering preventive care services and health improvement programs (Hermer 2005).

The role of the PHI system in providing health care, and its share in financing health expenditure is determined by a two main aspects: PHI market size, and the function of the PHI in providing health services (Colombo and Tapay 2004):

Private Health Insurance market size
The market size of the PHI can be measured by the percentage of people covered by PHI, or through the share of PHI in the total health expenditures (THE). Many factors determine the size of the PHI market and define the role of the PHI and the range of its services:

- The government policy plays a prominent role in sketching the framework of PHI through tax incentives (as tax relief on PHI premiums costs) or fiscal subsidies, and through levels of public expenditure on health care.

- The structure of the applied public health system, in terms of population coverage, comprehensive benefit package, quantity of provided services, equal access for all citizens of equal need, and timely access to hospital care, mandatory participation, and other regulation arrangements. The size of the PHI market may be affected by citizens’ satisfaction with the public health system and their demand for better health services outside this system (Mossialos and Thomson 2004).

- The demand for PHI is significantly related to the individual’s risk aversion, the individual health status, the probability of being ill, and the individual’s education. In addition, the individual’s income and the ability to pay the price of private insurance play an important role in the level of demand for PHI. However, the effect of these elements on the demand for PHI is different from one country to another (OECD 2004).

For example, in Mexico PHI covers only 2.8% of population although the public health system covers only about 55% of population. In the United States, where the public health programs such as Medicare and Medicaid cover only about 25% of population, PHI represents the main system devoted to financing health care. In the USA the PHI system accounted for about 35% of the total expenditure on health (THE) in 2004, and cover about 70% of population. In Spain and the United Kingdom, where most people are covered by the NHS system, the percentage of people covered by PHI was 13% and 10% respectively. In Germany, statutory health insurance covers about 91% of people, and 18% of population use PHI (about 9% are covered with primary private health insurance and the rest use supplementary or complementary PHI beside SHI). PHI is nevertheless common in countries such as France and Switzerland where the SHI covers nearly all the population. In France about 86% of population are covered with complementary private health insurance due to the necessity of covering the cost of co-
payment imposed by the statutory health insurance. In Switzerland 80% of population have supplementary private health insurance to cover the health services not covered within the mandated benefit package (Colombo and Tapay 2004).

Role of the Private Health Insurance system in providing health services

The role of the PHI system in providing health services is diverse. It ranges from primary coverage for defined groups of people to supplementary coverage. Four types of private health insurance can be distinguished, these are as follows:

- **Primary or substitutive private health insurance:** in this type the PHI is the main system of health coverage for people, either those who are excluded from the public health insurance system, such as in the USA, or those who are free to opt out the public health system which is the case in Germany. In Germany, people with incomes that exceed certain levels have the choice to take out PHI and leave SHI. In this case the substitutive PHI mostly offers comprehensive benefit packages that are similar to the services covered by the public health system.

- **Duplicate private health insurance:** this type allows people who are already covered with public health system to receive private health services. These services resemble those which are covered by the public health sector. This type is applied in the majority of the countries that use the NHS system such as Australia, New Zealand, and the United Kingdom.

- **Complementary private health insurance:** it complements all or a part of the costs that are not reimbursed by the public health system such as the co-payments. It is generally available in countries whose public health systems use fee charges such as France.

- **Supplementary private health insurance:** it provides extra services that are not included in the public system’s benefit package, such as dental care, medication, cosmetic surgery, private rooms in hospitals etc (OECD 2004; Petkantchin 2005).

*Advantages of the Private Health Insurance system*
• PHI gives extra choice for consumers, especially those with high incomes who can afford the costs of this system. As a result, this system would increase access to health services, especially when the mandated financing is incomplete. PHI would cause rich people to leave the limited public resources for poor people. In this case, poor people who have less opportunity to use the PHI system would enjoy higher availability in public health system.

• The flexibility of this system and its profit-making objective make it a highly efficient system. This system can provide a motivation to reform the public health sector (Maynard and Dixon 2002), and achieve further health policy aims, for example, increasing individual responsibility.

• As private insurers are competing, they are more responsive to the consumers’ preferences than the public health system. In this case, the private insurers try to improve the quality and the quantity of health services provided, increase efficiency in administering insurance plans, and control costs by the means of raising the pressure on health services providers.

• Compared with out-of-pocket expenditures, PHI can provide financial protection. As has been noticed in most OECD countries, there is an inverse relationship between the percentage of PHI contributions in the THE, and the share of out-of-pocket payments contributing to the THE (Colombo and Tapay 2004).

• PHI can provide extra health services that are not covered by the public health system, particularly through supplementary private health insurance, and can provide a means to avoid long waiting times to access health services, as is the case with duplicate private health insurance (Gottret and Schieber 2006).

Disadvantages of the Private Health Insurance system

• As has been noticed in countries with a large share of PHI participation in the health system, the health spending levels per capita are relatively high, as is the case in USA (Colombo and Tapay 2004). PHI requires higher transaction costs than the SHI system in order to assess risk, design benefit packages, advertise, reinsure and cover the costs of distribution through agents or insurance brokers.

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• As has been noticed in the European Union, the competitive PHI companies try to minimise their costs by controlling the demand side, through risk selection, rather than the supply side, through competitive purchasing. Therefore, PHI companies tend to cover healthy, young adults who need modest health care, and impose much higher premiums on those who are sick and/or elderly and require proportionally higher costs of health care. (Mossialos and Thomson 2004).

• The competition based on the consumer choice of different insurance plans, is usually inactive due to the fact that there is no a certain definition of the contents and the size of the health benefits offered (Maynard and Dixon 2002).

• To deal with adverse selection, the PHI companies tend to impose a high premium, and as a result this company will not attract the healthier people. To counter this, cream skimming is likely to occur through designed contracts to attract only those people with low risk (Carrin and James 2004).

• The PHI system in low and middle-income countries could cause a reduction in the money available for the public health system, taking into account that the rich people insured through PHI are less willing to pay for the public health system.
3 The Current Syrian Health Care System

As mentioned in the Syrian Constitution items 46 and 47, all health services and other forms of social care are the responsibility of the Syrian government toward all people. As a result of the government’s effort to provide universal health coverage for all, 95% of the resident population (100% urban population, 90% rural population) had access to health services in 2009 (Ministry of Health 2010). In principle nearly all health services had been free of charge in state hospitals and health centres. However, since 1998 some state hospitals have been converted to charging hospitals. The private sector has an increasing role in the provision and delivery of health services (Bensa et al. 2003).

In the first section of this chapter, the geographical and economic background of the Syrian Arab Republic and the health status of its people will be reviewed. The second section examines the organizational structure and management of the Syrian health care system. The third section describes the health financing functions. The fourth one explains the health care delivery system. The fifth one reviews the new health insurance law, private health insurance, and some information about the health benefit schemes in Syria.

3.1 Background

3.1.1 The geography and sociodemography

Syria lies at the eastern end of the Mediterranean Sea (see Figure 3.1). Syria shares borders with Turkey to the north, Iraq to the east and south-east, Jordan to the south, Palestine to the south-east, Lebanon and the Mediterranean sea to the west. The total area of Syria is 185,180 km².

The capital of the country is Damascus, with a population of 1.702 million in 2009 (Central Bureau of Statistics 2009). Administratively, Syria is divided into 14 governorates.
According to the Central Bureau of Statistics (2009), Syria’s population totalled 20.125 million in 2009 (see Table 3.1), of whom about 53.5% live in urban areas. The average annual growth rate of the urban population was 4.1% between 1970 and 1990, this rate dropped to 3.1% between 1990 and 2007. The density per km$^2$ is 109 people.

**Figure 3.1: Map of Syria**

![Map of Syria](image)

Source: CIA the World Factbook (2006)

**Table 3.1: Population (million) in Syria, 1960-2009**

|------|------|------|------|------|------|------|------|------|

Source: Central Bureau of Statistics (2009)

1-The population number is estimated according to the date of census.

As is visible in Table 3.2, the total fertility rate decreased from 8.5 per 1000 women in 1970 to 3.5 in 2009 as a result of the increased concern of the Syrian government with
family planning services, which are available for women in most local health centres. The average number of Syrian family members is 5.4.

Table 3.2: The total fertility rate per 1000 women, 1970-2009

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<tr>
<td><strong>The total fertility rate per 1000 women</strong></td>
<td>8.5</td>
<td>3.8</td>
<td>3.55</td>
<td>3.8</td>
<td>3.5</td>
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Source: Central Bureau of Statistics (2009)

During the past three decades and as a result of its socialist policies, Syria has achieved fairly good living conditions, including health and social facilities. During this period, great steps have been made in education as a key to economic development. Education in Syria is obligatory for children between 6 and 15 years in primary and preparatory school (from grade 1 to 9). The adult literacy rate (percent of people aged 15 and above) increased from 55.7% in 1981 to 84% in 2009 (The World Bank 2010b). In 2009, the male and female literacy rates were 90% and 78%, respectively, among individual aged 15 years and above (UNESCO Institute for Statistics 2009).

The labour force

The population is relatively young and rapidly growing, with 38% of the population under 15 years of age, while 3.6% of the population are above 65 years of age. This means that around 58% of the population are between 15 and 65 years, which represents a large labour force of about 11.7 million people. However, according to the labour force survey (2009), the actual work force was only about 26% of the population and 44% of the labour force in 2009, and unemployment was estimated at about 8.4% of the work force. In terms of economic dependency, an average of 3.6 family members in Syria depend on their family's breadwinner for their livelihood.

In 2009, the relative distribution of the work force (older than 15 years) according to economic activities was as follows: 15% in agriculture and forestry sector, 16% in
industry, about 17% in building and construction, 16% in hotels and restaurants, 8% in storage, transport and communication, and about 28% in the service sector.

The distribution of the work force (older than 15 years) according to employment status was 4% employers, about 30% self-employed workers, about 62% paid workers, and about 4% unpaid family workers.

The distribution of the workers (older than 15 years) according to work sector was 29% in government sector, about 38% in the formal private sector, 32% in the informal private sector, and 0.2% in the cooperative sector in 2009.

The distribution of the work force according to sex was about 87% male and 13% female (Central Bureau of Statistics: Labour Force Survey 2009).

### 3.1.2 The economic context


Syria’s economy is largely based on agriculture, industry, oil and trade. As shown in Table 3.3, the share of GDP attributable to industry has increased substantially since 1985, whereas that attributable to agriculture has remained much the same (after peaking in the mid-1990s). The share of GDP attributable to the service sector decreased from 57.1% in 1985 to 45.0% in 2008.

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⁸ Income group: Economies are divided according to 2009 Gross National Income (GNI) per capita, calculated using the World Bank Atlas method. The groups are: low income, $995 or less; lower middle income, $996 - $3,945; upper middle income, $3,946 - $12,195; and high income, $12,196 or more.

⁹ The exchange rate of the Syrian Pond in 2010 is 60 S.P equal 1 Euro.
Table 3.3: Structure of the economy as percentage of GDP in Syria, 1985-2008

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<tbody>
<tr>
<td>Agriculture</td>
<td>20.8</td>
<td>28.2</td>
<td>22.2</td>
<td>20.4</td>
</tr>
<tr>
<td>Industry</td>
<td>22.1</td>
<td>18.1</td>
<td>26.1</td>
<td>35.0</td>
</tr>
<tr>
<td>Service</td>
<td>57.1</td>
<td>53.7</td>
<td>51.7</td>
<td>45.0</td>
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</table>

Source: The World Bank (2006, 2009c)

The average annual growth of the GDP has been fluctuating since 1985. It was 6.1% between 1988 and 1998, and then dropped to 3.8% between 1998 and 2008. The average annual growth of the GDP per capita has decreased from 3.2% during the years 1988-1998 to 1.1% between 1998 and 2008 (The World Bank 2009c). Based on purchasing-power-parity (PPP) Table 3.4 reveals the total GDP and GDP per capita between 1985 and 2008.

Table 3.4: The development of gross domestic product, and GDP per capita, 1980-2008

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<tbody>
<tr>
<td>GDP (PPP) (billion)</td>
<td>21.563</td>
<td>28.437</td>
<td>48.104</td>
<td>55.640</td>
<td>75.812</td>
<td>92.399</td>
</tr>
<tr>
<td>GDP (PPP) per capita</td>
<td>2100</td>
<td>2346</td>
<td>3367</td>
<td>3409</td>
<td>4130</td>
<td>4648</td>
</tr>
<tr>
<td>Inflation rate (%) according to average consumer prices</td>
<td>16.8</td>
<td>11.1</td>
<td>7.7</td>
<td>-3.9</td>
<td>7.24</td>
<td>7.0</td>
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</tbody>
</table>

Note a: the numbers are estimated.
Source: International Monetary Fund (2008)

Since the 1990s, Syria has started moving from a centrally planned economy to a more market oriented economy, and over the past decades foreign and private investment has increased in Syria. This is mainly due to improved regulations since a specific investment law was passed in 1991 (Law No.10, 1991). As a result, access to information technology, the banking sector and foreign exchange regulation has improved in the last years.
3.1.3 Health status

Syria has made good steps towards improvement of health services since the 1970s as evidenced by the improvement of health indicators. These improvements have been due to several factors, including a rising standard of living, lower levels of illiteracy and improvement of the infrastructure of water, electricity and sewage. In addition, primary health care coverage has been extended, health human resources increased, and the emergency care system and ambulance services also improved. As is shown in Figure 3.2, the life expectancy at birth has increased from 56 years in 1970 to 72 years in 2009.

**Figure 3.2:** Life expectancy at birth, 1970-2009

![Bar chart showing life expectancy at birth from 1970 to 2009](image)

Source: Ministry of Health (2010) and WHO (2010)

The infant mortality rate has dropped from 132 per 1000 live births in 1970 to 14 in 2008; under-five mortality rate has also declined from 164 per 1000 live births in 1970 to 16 in 2008, as is visible in Figure 3.3. Taking into account that deliveries attended by trained personnel increased to 93% of the total deliveries, the maternal mortality rate has decreased from 482 per 100,000 live births in 1970 to 56 in 2008 (Ministry of Health 2010; WHO 2010).
Figure 3.3: Development of some health indicators in Syria, 1970-2008

Source: Ministry of Health (2010); WHO (2010).

In comparison to some countries in the Middle East and in North Africa (MENA)\textsuperscript{10}, Syria has somewhat good health status indicators (see Figure 3.4 and Figure 3.5).

Figure 3.4: Life expectancy at birth (years) for males and females in some MENA countries, 2008

Source: WHO (2010)

\textsuperscript{10} According to the World Bank’s classification in 2009 Egypt, Iran, Tunisia, Jordan, and Syria are lower middle-income countries. Lebanon and Libya are upper middle income countries, Kuwait and Saudi Arabia are high income countries (The World Bank 2010a).
Figure 3.5: Infant mortality rate and under-five mortality rate (per 1000 live births) in some MENA countries, 2008

Source: WHO (2010)

The vaccination coverage of infants against basic diseases in Syria has increased significantly in the last decades (see Table 3.5). The percentage of women immunised against tetanus has also seen a massive improvement: whereas in 1981 only 3% of pregnant women were given a tetanus shot (United Nations 2000a), the coverage increased to 93% in 2009 (Ministry of Health 2010).

Table 3.5: Child immunisation Coverage (%), 1981-2007

<table>
<thead>
<tr>
<th>Year</th>
<th>Tuberculosis</th>
<th>DPT(^1)</th>
<th>Polio</th>
<th>Measles</th>
<th>Hepatitis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>36</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>1998</td>
<td>100</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>91</td>
</tr>
<tr>
<td>2005</td>
<td>100</td>
<td>99</td>
<td>99</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>2007</td>
<td>100</td>
<td>99</td>
<td>99</td>
<td>98</td>
<td>98</td>
</tr>
</tbody>
</table>

Source: United Nations (2000a) and Ministry of Health (2010)

\(^{11}\) DPT means diphtheria, pertussis, and tetanus diseases.
However, the decrease in the incidence of communicable diseases has been accompanied by an increase in the incidence of noncommunicable diseases, such as cardiovascular disease, diabetes, cancer, etc. Mortality due to traffic accidents and other types of accidents are also increasing (WHO 2003). According to a health statistics abstract of the Syrian Health Ministry (2007), cardiovascular disease was the cause of 50.6% of the total instances of death, while the other diseases accounted for the remaining 50%; Figure 3.6 describes the different causes of death in Syria in 2007.

**Figure 3.6: Causes of death in Syria, 2007**

![Graph showing causes of death in Syria, 2007](image)

Source: Ministry of Health (2007)

According to the same source, Figure 3.7 shows the ten most common diseases in Syria: the digestive diseases came in first at 16.5%, followed with poisoning, respiratory and cardiovascular diseases at 14.5%, 13.1% and 12.4% respectively.
**Figure 3.7:** The ten most prevalent diseases in Syria, 2007

![Graph showing the ten most prevalent diseases in Syria, 2007](image)

Source: Ministry of Health (2007)

### 3.2 Organizational structure and management

As depicted in Figure 3.8, many ministries are involved in providing and/or financing health care in Syria. In 2003, the Ministry of Health installed a “Care Committee”, which is composed of deputies from the Ministry of Health, the Ministry of Finance, the State and Planning Commission, the Ministry of Higher Education, the Ministry of Social Affairs and Labour, and the Ministry of Defence, in order to coordinate the delivery of health services between these ministries more efficiently. The organizational structure of the public health system gives the Ministry of Health the main role of coordinating and managing health services provision. Furthermore, many but not all ministries, state companies, and professional associations provide health services for their employees, basically through the health benefits schemes (Bensa et al. 2003).
Figure 3.8: Organizational chart of the public health care system

The main tasks of these ministries in providing and financing health services are briefly explained as follows:

- The Ministry of Higher Education (MoHE) runs 15 teaching hospitals, it also shares responsibility with the Ministry of Health for undergraduate nursing and medical education.
- The Ministry of Social Affairs and Labour (MoSAL) is involved in health care provision through organizing programs with the Ministry of Health to provide medicine, vaccinations, and maternity care in rural areas (Galdo 2005). The MoSAL has its own general hospital in Damascus to provide health services to workers who suffer from injuries and diseases related to the delivery of labour (Schwefel 2003).
- The Ministry of Defence (MoD) provides medical services for military persons, and it has its own health care infrastructure in most of the Syrian governorates (Yassin et al. 2005a).
● The Ministry of Local Administration (MoLA): while the Ministry of Health supervises the activities of the Health Directorates at the local level in 14 governorates, the MoLA is directly responsible for financing Health Directors in the governorates. As a result the Ministry of Health has limited leverage over local hospitals as they are financially dependent on district administration.

● The Ministry of Health (MoH): although the formal structure of governance is highly centralised and hierarchical, in practice it is somewhat fragmented. Health care provision is largely divided between the MoH and Health Directorates. While the MoH proposes and plans health policy and health services at the county level, Health Directorates administer the health services provided by the MoH at the provincial level. As a result of the decentralisation of the health care delivery, the Health Directorate in each governorate is allocated its own budget, and is given enough autonomy and flexibility to execute its programs within the general strategy (Galdo 2005). The Health Directorates supervise and support sub-centres for outpatient care; specialised clinics (e.g. for diabetes, forensic medicine); local hospitals for inpatient care; stores for equipment and drugs for the entire Health Directorate; central administration office of the Health Directorate (Schwefel 2003). Since 1998 the MoH gradually started to give state hospitals more financial and administrative independence in order to improve their efficiency and effectiveness (Bensa et al. 2003). The MoH owns the central institutions and some other facilities including state hospitals. The Ministry of Health is the main body responsible for providing primary, secondary and tertiary care. In addition, the MoH has the following functions (Ministry of Health 2009):

- Providing health care services to the citizens.
- Health care system planning for the country and revising and modernising health sector strategies, in addition to reviewing laws and regulations related to health sector and introducing them to the government for approval.
- Supervising all health affairs and organizations, and coordinating among them.
- Promoting maternal and child health and family planning and encouraging healthy lifestyles through health education.
- The control and prevention of communicable and non-communicable diseases and environmental control.
Establishing schools and institutes that are needed for developing the nursing profession.

Supervising the locally produced and imported drugs, and developing the national drug industry.

Implementing medical research and arranging medical education and some environmental health programs.

Giving certification to health and medical professionals according to the qualifications regulations.

3.3 Health financing functions

According to World Health Organization statistics (2010), the share of total expenditures on health in Syria as a percentage of GDP decreased from 4.9% in 2000 to 3.6% in 2007. The percentage of general government expenditures allocated to health as a percentage of general government expenditures dropped 0.5% between 2000 and 2007. The public expenditure on health as a percentage of total expenditure on health grew from 40.4% in 2000 to 45.9% in 2007, however it is still less than private expenditure on health, as is shown in the Table 3.6. The total health expenditure per person in Syria increased from $105 PPP in 2000 to $154 PPP in 2007; the share of government expenditure increased from $43 PPP in 2000 to $70 PPP in 2007.

Table 3.6: Public and private health care expenditure in Syria as a percentage of total health expenditure (THE), 2000-2007

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2005</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total expenditure on health (THE) % GDP</td>
<td>4.9</td>
<td>4.2</td>
<td>3.6</td>
</tr>
<tr>
<td>General government expenditure on health (GGHE) % of THE</td>
<td>40.4</td>
<td>50.5</td>
<td>45.9</td>
</tr>
<tr>
<td>Private expenditure on Health (Out-of-pocket) % of THE</td>
<td>59.6</td>
<td>49.5</td>
<td>54.1</td>
</tr>
<tr>
<td>GGHE % general government expenditure</td>
<td>6.5</td>
<td>6.8</td>
<td>6.0</td>
</tr>
<tr>
<td>Per capita total expenditure on health (PPP int.$)</td>
<td>105</td>
<td>110</td>
<td>154</td>
</tr>
<tr>
<td>Per capita government expenditure on health (PPP int.$)</td>
<td>43</td>
<td>56</td>
<td>70</td>
</tr>
</tbody>
</table>

When compared to some other countries in the MENA region, Syria has relatively low figures for the percentage of GDP spent on health, and general government expenditure on health as a percentage of general government expenditure. In other countries these indicators in 2007 were as follows: Lebanon (8.8% and 11.7% respectively), Jordan (8.9% and 11.4%), and Iran (6.4% and 11.5%) (Figure 3.9).

**Figure 3.9:** Total expenditure on health as percentage of GDP, and general government expenditure on health as percentage of total government expenditure in Syria and selected countries, 2007

<table>
<thead>
<tr>
<th>Country</th>
<th>Total expenditure on health as % of GDP</th>
<th>General government expenditure on health as % of total government expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>3.4</td>
<td>11.5</td>
</tr>
<tr>
<td>Iran</td>
<td>8.9</td>
<td>11.5</td>
</tr>
<tr>
<td>Jordan</td>
<td>9.1</td>
<td>11.4</td>
</tr>
<tr>
<td>Kuwait</td>
<td>5.4</td>
<td>8.8</td>
</tr>
<tr>
<td>Lebanon</td>
<td>44.7</td>
<td>11.7</td>
</tr>
<tr>
<td>Libya</td>
<td>27.7</td>
<td>5.4</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>79.5</td>
<td>8.9</td>
</tr>
<tr>
<td>Syria</td>
<td>6.4</td>
<td>8.9</td>
</tr>
<tr>
<td>Tunisia</td>
<td>9.1</td>
<td>11.7</td>
</tr>
</tbody>
</table>

Source: WHO (2010)

In comparison with few other states in this region, the percentage of the governmental health expenditure out of the total health expenditure seems to be average in Syria. While this percentage was higher in Saudi Arabia (79.5%) and Libya (71.8%), it was significantly lower in Lebanon (44.7%) and Egypt (38.1%) (see Figure 3.10).

While social security has no significant role in financing health care in Syria, it accounts to different degrees for the financing of health care in a few other MENA countries. For example, in Lebanon, Tunisia, Iran and Egypt the social security expenditure on health as a percentage of general government expenditure on health was as follows: 51.2%, 42.8%, 41%, and 26.8%, respectively.
**Figure 3.10**: General government health expenditure and the private health expenditure as a percentage of total health expenditure in MENA countries, 2007

![Bar chart showing the distribution of government and private health expenditures in various MENA countries.](chart)

Source: WHO (2010)

Most of the private spending on health in Syria is made out-of-pocket, which is similar to the situation in Egypt. However, private health insurance contributes in different degrees to financing the health care in the other countries compared. For example, the contributions of private health insurance as a percentage of private expenditure on health in 2007 were as follows: Jordan (5.6%), Lebanon (18.3%), Tunisia (14%) and the highest number was in Saudi Arabia (30.3%).

The level of health expenditure per capita in Syria is still the lowest in comparison with other countries in the MENA region (Figure 3.11).
Figure 3.11: Total health expenditure and the general government health expenditure per capita at international dollar rate in MENA countries, 2007

Source: WHO (2010)

3.3.1 Collection of Funds

As is clear from Figure 3.12, the general revenues, out-of-pocket payments, and contributions are the main resources that finance the health care system in Syria:

- The general revenues: the general government’s budget represents the main source of finance for health services provided by the MoH, the MoLA, the MoHE, the MoSAL, Ministry of Interior, and the MoD.

The resources of the state budget in Syria are mainly a combination of oil revenue and general tax revenue. The oil revenues share in the state budget decreased from 40% in 2006 to 19% in 2009, while the tax revenues share was increased from 36% to 53% in the same period. The general taxes are collected by the MoF and its departments in the governorates. In 2006, the proportion of tax revenue to GDP was 18.1%. The structure of tax revenue was as follows: direct taxes formed about 58%, indirect taxes were about 19%, and other taxes were around 23% of the total collected taxes. In general, the Syrian tax system is progressive, the income tax rates (company income and personal income) range between 0% and 28% according to the different levels of income, the
higher rates are applied to the higher levels of income. The number of taxpayers in Syria is estimated at about 5.7 million, while tax evasion is estimated at around 4% of GDP. 90% of tax income revenue in Syria is collected from the upper and middle-income business classes, while the remainder is collected from the poor class (Alhaseen 2007).

Figure 3.12: Health care financing flow chart

Although the total budgets of the MoH and Health Directorates have doubled more than four times since 1992 (see Figure 3.13), as a percentage of the total government budget
both budgets have not shown clear growth, but have been roughly hovering between 3 and 5% of the total government budget.

**Figure 3.13:** The development of the budget of MoH and Health Directorates, 1992-2008

Source: Schwefel (2006) and MoH (2009)

The health care system in Syria suffers from disparities in budget allocations for health care among the different governorates. For example, the share of the budget of the MoH and the MoLA allocated to the inhabitants of Qunaitra is almost 10 times more than the share allocated to the inhabitants of Aleppo (see Figure 3.14).

**Figure 3.14:** Per capita spending by MoH and MoLA (in S.P) in each governorate, 2003

Source: Dashash et al. (2006)
- Out-of-pocket payments: although all health services are the responsibility of the Syrian government toward all people, OOP payments represent the main method of financing health care, constituting about 54% of the total expenditure on health in 2007. The majority of these payments are paid directly to private health providers, and the rest takes the form of user fees imposed by several MoHE hospitals and the MoH autonomous hospitals (WHO 2003).

- First, direct OOP payments to private health providers: these payments are paid to receive the health services in ambulatory health care in private clinics, laboratories, pharmacies, private hospitals and treatment abroad. In 2003, it was estimated that about half of this expenditure was spent on drugs, 25% and 20% for outpatient and inpatient care respectively, and the rest was spent on long-term care and rehabilitation (Schwefel 2003). Although many of these services are provided in public health facilities free of charge, many people prefer to pay more to receive better health services from private providers and avoid long waiting lists in the public health system.

- Second, user fees: Until 1998 all state-owned hospitals used to provide their services free of charge, however, since then about 15% of the MoH hospitals and most MoHE hospitals (university hospitals) became partially autonomous in terms of finance and management (Oxford Business Group 2010). According to the new system, these hospitals have two parts, the first part provides free or semi-free services for people (who are supposed to be poor people). According to the proposals of the hospital's board, the Minister of Health (or the Minister of Higher Education in the case of MoHE hospitals) determines yearly the percentage of free services provided and the conditions for their use; the free services are set at a minimum of 15% of the hospital's capacity. The second part is fully paid and is for people who want to receive extra services such as an individual room. This part relies increasingly on cost-sharing and direct patient payment. The user fees are paid to receive medical services, diagnoses, and surgical services. These fees are used to maintain equipment and building, addition to motivate medical personnel through the financial incentives. The fees are worked out in accordance with the roles legislated by the Minister of Health (or the Minister of Higher Education) and the proposals of the hospital's board, taking into account the tariff list of the MoH, which is almost lower than the prices in private health market. The emergency
services in all autonomous hospitals are free of charge. The introduction of user fees in autonomous hospitals in Syria could prevent low-income groups from using these hospitals that were previously free of charge, which, as a result, could negatively affect equity and social justice. However, on the other hand, the user fees could reduce the moral hazard resulting from the misuse of free services. Sometimes, even in the non-autonomous hospitals, patients are caused to pay a part of the operation’s cost, such as paying the cost of some supplementary materials needed for the operation or buying the medicines that are not available in these hospitals.

The health insurance contributions: these contributions are paid through three different channels (more details will be reviewed later):

- Contribution for health benefit schemes: until now there has been no national health insurance scheme in Syria. However, some small scale public health schemes have been in place for those working in public companies, some ministries, and professional associations. Such schemes covered around 15% of the population and they contributed to 6.45% of the total public expenditure on health in 2006 (Schwefel et al. 2008). The schemes are quite diverse in terms of coverage, method of financing, management, and benefits package provided. Some of them are financed by their ministry or company’s budget, other schemes are financed through monthly, or yearly contributions paid by their members. The value of these contributions and their means of collection are different from one scheme to another (Bensa et al. 2003).

- In 2009, Legislative Decree No. 65 of 2009 allows the public administrative sector to contract the General Syrian Insurance Company to cover their employees with health insurance. The employees in the administrative sector will not pay the new health insurance more than they used to pay for their benefit health schemes. The health insurance contribution per person equals about 8000 S.P per year. In general, the employees will pay 37.5% of the value of insurance contribution, while the government represented by the MoF will pay the rest (62.5%) to the General Syrian

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12 The information have been collected from laws of create autonomous hospitals (Syrian Parliament)

Insurance Company instead of all the insured employees in the administrative sector (The General Syrian Insurance Company 2010).

- Private insurance premiums: since 2004, several private insurance companies have provided health insurance coverage, however the number of the beneficiaries is still modest (approximately 0.5% of the population). These companies offer individual and/or group health plans on the Syrian market. In the case of individuals’ health insurance plans, the premiums are different from one plan to another, however, the premiums in general are risk-related, and they are varied according to the age levels of the insured people as well. In these plans the affiliation is individual and does not include the family members of the insuree (Syrian Insurance Supervisory Commission 2010).

3.3.2 Pooling of Funds

The risk pooling in Syria is segmented among many ministries, and benefit health schemes. Furthermore, the high percentage of OOP payments restricts the extension of risk pooling.

First, allocation of resources from the collecting to pooling organizations

The general government budget is prepared by the Cabinet, the State Planning Committee and the Higher Planning Council. It is then discussed and amended by the Majlis al-Shaab (People’s Council) and administered by the MoF. Until 2008, all the ministries negotiated their running budget (proposed running expenditures) only with the MoF, whereas they negotiated investment budgets with the State Planning Committee, which at that time was the main regulator of major investments and annual investment programs. Since 2008, all ministries have held negotiations on both types of budgets with the MoF on an annual basis. Reallocations among the line items may intervene during the year at central and governorate level.

Syria does not have one budget for health care. The public budget for health care is channelled from the government via the MoF to the MoH, other ministries that offer parallel health services and autonomous hospitals that belong either to MoH or to MoHE. In general, these budgets are estimated on a retrospective basis (the previous
year’s expenditure). However, the budgets could be increased if new projects (like building new hospitals or adding new departments) would be in need of finance. Discussions about the proposed health expenditures are held separately by the different ministers concerned and the autonomous hospitals with MoF on an annual basis.

It is important to take into account that autonomous hospitals and the university hospitals could have different systems of finance according to their establishment decrees (Regional Health Systems Observatory-EMRO 2006). Some of the university hospitals are financed totally through the MoHE. The budgets of these hospitals are determined in accordance with a negotiation process between the MoHE and the hospital directors, followed by negotiations between the MoHE with the MoF. The budget estimate for the following year is based on historical costs and the expected costs of new activities and projects (Schwefel 2003).

In 2006, the MoLA received the largest proportion of public health expenditure, with 38.6% of the total health expenditure, it was followed by the MoH at 27%, MoHE at 18.6%, MoD at 7.75%, and the health benefit schemes that belong to other ministries and public companies at 6.45% of the total public expenditure on health (see Figure 3.15).

Figure 3.15: Government health expenditure in million S.P, 2006

Source: Schwefel et al. (2008).

Second, allocation of recourse from the pooling organizations to purchasers
Since the health services are provided by state-owned facilities and there is no third payer system, allocation of the resources from the risk pooling organizations to purchasers is absent in the public health system.

In the case of the health benefit schemes each scheme plays the role of collector (in most cases), risk pooling organization and purchaser at the same time, where each scheme negotiates with the public or/and private health providers to provide its members with a defined benefit package.

3.3.3 Purchasing health care services and health providers’ payments

In the public health system there is no clear mechanization for the financing of the state health providers.

The autonomous hospitals have their own budgets. These budgets are decided by the Minister of Health (or the Minister of Higher Education in the case of MoHE autonomous hospitals) according to proposals made by the hospitals board and approval of the MoF. The autonomous hospitals receive their returns from the following resources (Law No. 17 for the year 2008):

- State aid established in the state’s general budget for these hospitals.
- The resources obtained from the activities of these hospitals through fees charged to patients.
- The rest savings from the budget of the previous fiscal year.
- Gifts and bequests and donations in accordance with the laws.
- Any other resources permitted by the laws and regulations.

Except for the autonomous hospitals, there are no separate budgets for the state hospitals. The state hospitals and health centres receive their resources from the concerned ministry according to their direct requests that are mainly dependent on the expenditures of the previous year.

The non-autonomous hospitals can be divided into two categories, the first category includes those hospitals that are directly belonging to the MoH, these hospitals are supplied with all their requirements by the MoH. The other category includes those
local hospitals that are serving the governorates; these hospitals are supplied by both the MoH and MoLA at the same time. The MoH is responsible for financing the local state hospitals in the governorates from the heavy medical equipments and some expensive drugs only, and the MoLA budget at the governorate level is responsible for financing the cost of building hospitals and providing them with the required furniture (as will become clear below).

Once the government approves its budget, the MoH receives its allocations according to a line-item budget and it redistributes the funds between recurrent expenditure and capital investment according to its annual programs of five-year plans (the same process is followed in other ministries) (Bensa et al. 2003). The MoH budget is divided into five main chapters according to categories of expenditures:

- Salaries.
- Maintenance of relevant bio-medical equipment and drugs for the national public health programs.
- Biomedical equipment (the MoH is responsible for providing all the state hospital and health centres that belong directly to the MoH or to the Health Directorates, and the autonomous hospitals, with this equipment) and training.
- Different expenses for participation in the WHO board, Arab League Board, publications.
- Inter-departmental debt (which is always nil).

Each health Directorate receives its budget directly from the MoLA, which is decentralised in governorates, under Governors’ supervision. However, the revenues come as block grants from the MoLA budget on the local level to finance all the hospitals and health centres and other operating units in each governorate. This budget covers these categories of expenditures of each Health Directorate:

- Salaries for employees, medical personnel etc.
- Construction and maintenance of hospitals and health centres.
- Non biomedical equipment for hospitals and health centres.
- Drugs other than those for national public health programs (Regional Health Systems Observatory-EMRO 2006).
Payment of doctors

Doctors working in their own solo clinics directly receive their fees from patients. Most of the dentists in Syria work as independent solo practitioners and are paid on a fee-for-service basis as well.

Medical personnel who work in the public sector are paid a monthly salary. Their salaries are determined in accordance to their qualifications, degree of management responsibility and years of experience. Only the medical personnel in the autonomous hospitals receive specific incentives related to the type and quantity of services provided.

Because of the low government salaries, most of doctors working in the public health sector supplement their salary by working privately after office hours in private hospitals or in their own clinics (Galdo 2005). The dual work of the physicians has negatively affected the quality of government health services and the exploitation of the public infrastructure by the private sector in the provision of its paid services. Furthermore, this practice has led to the waste of public resources invested in the health sector, low investments of the private sector in health care and a low tax yield from the private sector, which engages in most of its activities informally (State Planning Committee 2006).

3.4 Health care delivery system

The public and private sector together with philanthropic organizations, provide health services in Syria. However, the government still remains the leading provider of primary health care in the country at the village, district, and provincial level.

3.4.1 Private providers of health care

In the last decades private investment in the health sector has been increasing in Syria. In order to encourage private investment in the health sector, the Syrian government exempted the private hospitals from paying income taxes, in exchange for keeping 10%
of the beds for non-paying public patients. Nonetheless, this condition had not been met by the private sector. Since 2005, private hospitals have had to pay income taxes according to Law No. 41 enacted in 2005. Most private health projects are for profit and they are concentrated in the big cities. The number of private hospital beds across the country varies from one governorate to another. Whereas seven beds were supplied per 10,000 population in Damascus, only two beds per 10,000 population were available in governorates like Sweida and Daraa, and there were no private hospitals in Quneitra in 2008 (Figure 3.16) (The Central Bureau of Statistics 2009).

According to Central Bureau of Statistics (2009), the number of the private hospitals has increased more than seven times between 1970 and 2008 (see Table 3.7). However, the private sector supply of hospital beds is only about 28% of the overall supply of beds in the country. Private hospitals provide inpatient and outpatient care, including emergency services, laboratory services, surgical procedures, dialysis, physiotherapy and endoscopy.

**Figure 3.16** Supply of hospital beds (public, private) per 10,000 population according to Syrian governorates, 2008

Source: calculated from Central Bureau of Statistics (2009)
Due to the specific problems of the public health sector, such as poorly qualified and trained nursing and paramedic staff, and long waiting times to access health care, the private hospitals have been a strong rival of the state sector in the health care market today.

Table 3.7: Trends in the total number of hospitals, sanatoriums and beds, 1949-2008

<table>
<thead>
<tr>
<th>Years</th>
<th>State hospitals</th>
<th>Private hospital</th>
<th>Sanatoriums</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Beds</td>
<td>No</td>
<td>Beds</td>
</tr>
<tr>
<td>1949</td>
<td>21</td>
<td>1465</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1970</td>
<td>28</td>
<td>4257</td>
<td>1196</td>
<td>763</td>
</tr>
<tr>
<td>1975</td>
<td>31</td>
<td>5263</td>
<td>1436</td>
<td>780</td>
</tr>
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<td>1980</td>
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<td>6746</td>
<td>2134</td>
<td>734</td>
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<td>1985</td>
<td>43</td>
<td>8638</td>
<td>2832</td>
<td>421</td>
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<td>1989</td>
<td>48</td>
<td>10108</td>
<td>3248</td>
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<td>2004</td>
<td>78</td>
<td>15487</td>
<td>6795</td>
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</tr>
<tr>
<td>2007</td>
<td>114</td>
<td>21104</td>
<td>7646</td>
<td>-</td>
</tr>
<tr>
<td>2008</td>
<td>117</td>
<td>21849</td>
<td>8361</td>
<td>-</td>
</tr>
</tbody>
</table>


Most of pharmacies in Syria that provide drugs to patients are private. Over the country the prices of medicines are the same and fixed. In Syria there are many self-medicating patients who ask for the medical advice of pharmacists and buy the medicine without prescriptions (Ghanam 2004).

Since the late 1980s the Syrian government has supported the local pharmaceutical industry. As a result of this policy, the number of local pharmaceutical factories increased from 11 in 1970 to 67 in 2009, see Figure 3.17.
Figure 3.17: Development the number of local medicine factories, 1970-2008

Source: The Ministry of Health 2009

As seen in Figure 3.18, the number of local medicines manufactured grew dramatically between 1970 and 2008, rising from 100 medicine products in 1970 to 6168 items in 2008. In 2008, the Syrian pharmaceutical industry covered about 90% of the Syrian pharmaceutical market, while in 1970 Syria was dependent on imports to cover 94% of its pharmaceutical needs (Ministry of Health 2010).

The MoH, namely the quality control directorate, the technical committee for medicines and the national drug quality and research laboratories are responsible for the qualitative development of drugs by providing all the scientific and technical support to guarantee the accurate appliance of the international pharmacological standards such as (GMP-GSP-GCP-GLP-ISO 9000/1/2-TQM) (Ghanam 2004).

Figure 3.18: Number of national medicinal products, 1970-2008

Source: The Ministry of Health (2010)
3.4.2 Philanthropic providers of health care

The main philanthropic provider is the Syrian Arab Red Crescent that was established in 1942. It consists of 14 branches in addition to its headquarters in Damascus. Each branch is financially and administratively independent. All branches provide health services to the most vulnerable in the community through their network of clinics, which mainly depend on preventive health activities. The Syrian Arab Red Crescent also participates in vaccination campaigns in cooperation with the MoH and UNICEF, and gives lectures to raise awareness about mother and child care and family planning (The International Federation of Red Cross and Red Crescent Societies 2005).

3.4.3 The health services provided by the government sector

First, public health services: those are jointly administered by the MoH and the MoSAL, which provide in particular maternity care and vaccinations programs at rural community development centres. In addition, the Ministry of Education administers a preventive medicine and dental care program for schoolchildren (Galdo 2005).

Second, environmental health services: due to increased urbanisation and industrialisation, which has often neglected the environmental protection rules, Syria has been confronted by various diseases related to water pollution like typhoid and diarrhoeal diseases among children under five. In addition to this, air pollution from motor vehicles and industry, especially in large cities, causes problems with respiratory diseases (WHO 2003). The main bodies involved in environmental health in Syria are the MoH, the MoLA and the Ministry of Industry.

The Environmental Health Program administered by the MoH has carried out several activities and participated in conferences on the health and the environment in pursuit of its goal to create and preserve a healthy environment. The responsibilities of the MoH in environmental health are (Ministry of Health 2010):

- Conducting research into environmental issues that may have influences on public health in Syria.
Preparing evidence on waste management, food safety and other activities in the home.

Measuring the concentration of pollutants in the air of some cities in collaboration with the Centre of Studies and Scientific Research.

Maintaining continuous cooperation with the various sectors involved in health and environmental protection through participation in workshops and studies.

Third, occupational health service: the MoH supports an occupational health program that provides a number of occupational health services through the primary health system. Such services include:

- Education, training and development of doctors and professionals in the health centres on occupational health.
- Training of agricultural workers and craftsmen on the prevention of occupational hazards.
- Conduct of relevant studies and research related to occupational health.

Fourth, primary health care: the health system in Syria is based on primary health care. Primary health care is delivered at three levels, the village, district and provincial level, and it is provided through general health centres, specialised health centres, small-scale so-called ‘medical points’ and general clinics. Most of these units belong to the MoH, and provide free health services to all people, including: immunisation, maternal and paediatric care, family planning, control and prevention of communicable diseases, environmental control, preventive care for chronic noncommunicable diseases, health education, and dental services. Antenatal care is provided in most primary health centres. Almost all the family planning centres provide contraceptive services as well as prevention and treatment for Reproductive Tract Infections (RTI) and Sexually Transmitted Diseases (STD) (United Nations 2000b). According to the Central Bureau of Statistics (2009) the number of public health centres, including the general and specialised centres, in Syria increased from 311 in 1970 to about 1404 in 2008 (see Table 3.8).
Table 3.8: General and specialised health centres in Syria, 1970-2008

<table>
<thead>
<tr>
<th>Years</th>
<th>General health centres</th>
<th>Specialised Health Centres</th>
<th>Total number of general and specialised health centres</th>
<th>Medical points</th>
<th>General Clinics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>-</td>
<td>-</td>
<td>288</td>
<td>23</td>
<td>311</td>
</tr>
<tr>
<td>1975</td>
<td>-</td>
<td>-</td>
<td>246</td>
<td>33</td>
<td>279</td>
</tr>
<tr>
<td>1980</td>
<td>-</td>
<td>-</td>
<td>355</td>
<td>45</td>
<td>400</td>
</tr>
<tr>
<td>1985</td>
<td>-</td>
<td>-</td>
<td>463</td>
<td>45</td>
<td>508</td>
</tr>
<tr>
<td>1990</td>
<td>154</td>
<td>408</td>
<td>562</td>
<td>51</td>
<td>613</td>
</tr>
<tr>
<td>1995</td>
<td>250</td>
<td>504</td>
<td>754</td>
<td>41</td>
<td>795</td>
</tr>
<tr>
<td>2000</td>
<td>248</td>
<td>694</td>
<td>942</td>
<td>41</td>
<td>983</td>
</tr>
<tr>
<td>2004</td>
<td>373</td>
<td>802</td>
<td>1175</td>
<td>43</td>
<td>1218</td>
</tr>
<tr>
<td>2007</td>
<td>-</td>
<td>-</td>
<td>1315</td>
<td>52</td>
<td>1367</td>
</tr>
<tr>
<td>2008</td>
<td>-</td>
<td>-</td>
<td>1350</td>
<td>54</td>
<td>1404</td>
</tr>
</tbody>
</table>


As a result, the number of the people served by each health centre declined from 25 230 in 1970 to 11 009 persons per health centre in 2009 (see Figure 3.19).

Figure 3.19: The average number of the people served by each health centre, 1970-2009

Source: Ministry of Health (2010)

However, the geographical allocation of the health centres, measured as the number of population served by one centre, is unequal across the country. For example, while in Quneitra, Sweida, and Tartous, respectively, 1511, 3435, and 4871 persons are served...
by each health centre on average this number is much higher in Aleppo (22,594), Damascus (21,342), and Al-Rakka (19,071), hence, differences of up to more than 10 times can be observed (see Figure 3.20).

**Figure 3.20**: The number of population (in thousands) served by one health centre\(^\text{13}\), 2004

![Population served by one health centre](image)


Although health centres provide health services free of charge, significant numbers of people look for ambulatory health care in the private sector due to many problems that face the health centres such as the low quality of services provided, low qualified and poorly trained staff, and the inability of the health centres to respond to the real needs of patients and the broad range of existing diseases. Furthermore, a significant proportion of people seek ambulatory care from the state hospitals that provide better quality. As a result of the weak role of health centres as a first point of reference and the absence of a referral system, the state hospitals face significant pressure in emergency and ambulatory care, in addition to the waste of hospital resources, since the majority of these cases could have been effectively managed at the primary level. As a result, the utilisation rates of these centres are low, despite the high spending on health centres at the national level. For example, these centres on average provided only 15% of the total

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\(^{13}\) Health centre here includes the following: general health centres, specialised health centres, medical points, and general clinics.
ambulatory care in 2005. This percentage varied significantly among the governorates, from 3% in Deir-ez-zor to 25% in Homs (see Figure 3.21) (Yassin et al. 2005b).

Figure 3.21: Ambulatory care provided by public health centres as a percentage of total ambulatory care utilisation per governorate, 2005

![Bar chart showing ambulatory care provided by public health centres as a percentage of total ambulatory care utilisation per governorate, 2005.]

Source: Yassin et al. (2005b)

Fifth, secondary and tertiary care: due to increased government investments in hospital infrastructure over the last four decades, the number of state hospitals has doubled nearly 4 times between 1970 and 2008, as is clear in Table 3.8, while the total number of beds increased more than five times during the same period. The state hospitals supplied about 74% of the overall number of beds in 2008. The MoH has the highest number of the state hospitals (85 hospitals in 2008) and provides the largest percentage of hospital beds in the country.

The supply of hospital beds in the governorates suffers from inequality and irrationality. Some governorates such as Damascus, Quneitra, and Sweida have a large supply of public hospital care, whereas other regions face shortage in secondary care (Figure 3.16). This creates additional costs for patients in the underserviced regions who have to travel to other cities to receive the health care they need. In additions to these discrepancies, an illogical division of beds among the various medical specialties or the absence of some specialists in some public hospitals and/or in some governorates causes more pressure on some hospitals that provide these services and further results in longer
waiting times for access to hospital care, especially for certain diseases. For example, in Damascus and Aleppo, there exist long waiting times for cancer patients. Since 1970 the average length of stay in hospitals in Syria has declined dramatically, from 8 days in 1970 to 2.38 days in 2009 (The Central Bureau of Statistics 1970; Ministry of Health 2009).

According to the WHO (2010), the supply of hospital beds per 10,000 of population was estimated in Syria at 15 in 2009, this rate is among the lower figures in comparison with some countries in MENA, where the hospitals bed per 10,000 of population was 37 in Libya, and 34 in Lebanon (Figure 3.22).

**Figure 3.22:** Hospital beds per 10,000 populations in some MENA countries, 2009

![Hospital beds per 10,000 population](image)

Source: WHO (2010)

In general, the allocation of expenditure among health care services for the main partners of health care financing including households, shows the shares of inpatient care services and drugs (self-medication, out and inpatient care) in 2003 were relatively large, at 34.8% and 37.6% of all expenditure on health, respectively, while the shares of public health and long-term care and rehabilitation in the same year were 5.1% and 2.5% respectively (see Table 3.9).
Table 3.9: Total estimated public and private expenditure on health (in million SP) according to different categories of health services in Syria, 2003

<table>
<thead>
<tr>
<th>Sources / Uses</th>
<th>Public health</th>
<th>Outpatient care</th>
<th>Pharmaceutics</th>
<th>Inpatient care</th>
<th>Long-term rehabilitation</th>
<th>Total (in million SP)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Households</td>
<td>MoH</td>
<td>MoLA</td>
<td>MoHE</td>
<td>MoSAL</td>
<td>Public insurances</td>
</tr>
<tr>
<td>Public health</td>
<td>0</td>
<td>1.904</td>
<td>764</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>6.869</td>
<td>2.596</td>
<td>508</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>13.739</td>
<td>1.904</td>
<td>2.063</td>
<td>1.270</td>
<td>149</td>
<td>203</td>
</tr>
<tr>
<td></td>
<td>5.495</td>
<td>2.285</td>
<td>4.124</td>
<td>4.573</td>
<td>537</td>
<td>731</td>
</tr>
<tr>
<td></td>
<td>1.374</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total (in million SP)</td>
<td>27.477</td>
<td>6.347</td>
<td>9.547</td>
<td>6.351</td>
<td>746</td>
<td>1.015</td>
</tr>
</tbody>
</table>

Source: Schwefel (2003)

3.4.4 Health human resources

The numbers of human resources in the health care sector in Syria has clearly been increasing since the 1970s. The average number of persons per physician dropped from 3856 persons in 1970 to 667 persons in 2008. The average number of persons per nurse decreased from 4467 persons in 1970 to 630 persons in 2008 (see Table 3.10).
Table 3.10: The number of health professionals, 1946-2008

<table>
<thead>
<tr>
<th>Year</th>
<th>Nurses</th>
<th>Midwives</th>
<th>Health technicians</th>
<th>Pharmacists</th>
<th>Dentists</th>
<th>Average of No of persons per dentist</th>
<th>No of physicians</th>
<th>Average No of persons per physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946</td>
<td>-</td>
<td>240</td>
<td>-</td>
<td>157</td>
<td>260</td>
<td>10885</td>
<td>670</td>
<td>4224</td>
</tr>
<tr>
<td>1970</td>
<td>1401</td>
<td>566</td>
<td>-</td>
<td>857</td>
<td>376</td>
<td>16644</td>
<td>1623</td>
<td>3856</td>
</tr>
<tr>
<td>1975</td>
<td>1267</td>
<td>877</td>
<td>-</td>
<td>1255</td>
<td>765</td>
<td>9614</td>
<td>2400</td>
<td>3065</td>
</tr>
<tr>
<td>1980</td>
<td>5655</td>
<td>1638</td>
<td>-</td>
<td>1739</td>
<td>1398</td>
<td>6423</td>
<td>3880</td>
<td>2314</td>
</tr>
<tr>
<td>1985</td>
<td>8326</td>
<td>2201</td>
<td>-</td>
<td>2621</td>
<td>1975</td>
<td>5198</td>
<td>6163</td>
<td>1666</td>
</tr>
<tr>
<td>1989</td>
<td>11095</td>
<td>3824</td>
<td>-</td>
<td>3634</td>
<td>3362</td>
<td>3486</td>
<td>9814</td>
<td>1194</td>
</tr>
<tr>
<td>1996</td>
<td>23582</td>
<td>6423</td>
<td>18925</td>
<td>6331</td>
<td>8164</td>
<td>1791</td>
<td>16988</td>
<td>861</td>
</tr>
<tr>
<td>2000</td>
<td>27164</td>
<td>4909</td>
<td>12030</td>
<td>8868</td>
<td>11160</td>
<td>1462</td>
<td>22408</td>
<td>728</td>
</tr>
<tr>
<td>2002</td>
<td>28325</td>
<td>5171</td>
<td>14057</td>
<td>10055</td>
<td>14610</td>
<td>1172</td>
<td>25073</td>
<td>683</td>
</tr>
<tr>
<td>2004</td>
<td>28665</td>
<td>5443</td>
<td>16542</td>
<td>12724</td>
<td>15312</td>
<td>1174</td>
<td>25890</td>
<td>694</td>
</tr>
<tr>
<td>2007</td>
<td>30672</td>
<td>5539</td>
<td>19524</td>
<td>14895</td>
<td>13742</td>
<td>1395</td>
<td>29506</td>
<td>650</td>
</tr>
<tr>
<td>2008</td>
<td>31199</td>
<td>5343</td>
<td>21303</td>
<td>15647</td>
<td>15560</td>
<td>1263</td>
<td>29473</td>
<td>667</td>
</tr>
</tbody>
</table>


However, this expansion has not been accompanied by a qualitative development in the skills and capabilities of health personnel at all levels. Furthermore, some problems, such as low productivity, misallocation of manpower, lack of needs-based training, an inadequacy of well equipped institutions, and the large deficit in some medical specialties and administrative staff in this sector present a major challenge for the health system (WHO 2003).
Human resources in Syria are not optimally distributed over the country. Some governorates are overstaffed, while others have low staff rates per population. For instance, the average number of physicians per 10,000 of population in Al-Hasaka and Idleb is almost five times less than average number of physicians per 10,000 of population in Qunaitra, as is shown in Figure 3.24.

With regard to doctors, the number of general practitioners was slightly more than the number of specialists between 1997 and 2002. However, since 2002 the number of specialists has increased more than the number general practitioners (see Figure 3.25).

**Figure 3.25**: The number of general practitioners and specialists, 1997-2008

![Graph showing the number of general practitioners and specialists, 1997-2008.]


When compared to some countries in MENA such as Jordan and Egypt, Syria has relatively low numbers of physicians and nurses per 10,000 of population (see Figure 3.26).

**Figure 3.26**: The numbers of physicians, nurses and midwifery personnel, dentistry personnel and pharmaceutical personnel density (per 10,000 of population) in some MENA countries, 2009

![Graph comparing the numbers of physicians, nurses and midwifery personnel, dentistry personnel and pharmaceutical personnel density in various MENA countries, 2009.]

Source: Ministry of Health (2009); WHO (2010)
3.5 Health insurance in Syria

Since 1959, the General Social Security Organization has provided social protection such as paying security pensions for their participants in the following cases: occupational accidents, labour illnesses, retirement, death and disability. According to the law, the employers in the public and private sectors organizations or businesses which employ 5 employees or more are required to contribute about 17% of the salaries to the social insurance fund to ensure their employees against old age, disability, death, and work injuries, while the employees have to pay the social insurance fund 7% of their salaries. In the case of the private companies of less than 5 workers; the total contribution (5% of the wages) should be paid only by the employer. However, many private companies do not report the real number of personnel or the payroll expenditure in order to reduce payable contributions. In early 2008, there were 2,921,872 persons were covered by the General Social Security Organization, about 59% of them working in the private sector\textsuperscript{14}. Although the social insurances for old age, disability, death, work accidents/injuries have been in operation for a relatively long time in Syria, until now there has been no social health insurance. Health insurance has been limited by the health benefit schemes.

3.5.1 The health benefits schemes

Many ministries, public companies and professional associations provide health insurance for their members thorough the health benefit schemes. These schemes contract the private and/or the state health sector to provide their members with heath services. Some of these schemes have their own health facilities. However, these schemes are different in terms of the method of financing, and the health services provided, furthermore only some of them cover the beneficiaries’ families (Schwefel et al. 2008). In the following short paragraph a brief review of one example of a public company's health benefit scheme, one example of a ministry's health benefit scheme,

\textsuperscript{14}This information is taken from the annual report of the General Social Security Organization 2008.
and one example of a professional association's health benefits scheme will be described.

_The health benefit scheme of the Public Electricity Company as an example of a public company's health benefit scheme:_

Most of the state-owned companies and enterprises run some kind of health benefit scheme for the benefit of their employees; in some cases the health insurance covers, in addition to the employees, their family members. These schemes are financed through different ways, for example the health insurance scheme of the Central Bank is financed through contributions shared equally between employer and employees, while all other companies finance their schemes through allocating them a part of their budgets.

The employees in the Public Electricity Company are automatically entitled to benefits from the company's health benefit scheme. Moreover, all family members of the employees, including all wives of male employees, all dependent children, and even parents, in the case that they do not have their own income, are entitled to the benefit company's scheme. For female employees, the husband is only entitled to receive the benefits if he is not covered by any other benefit scheme. The employees are provided by a health benefit photo ID booklet containing names and photos of all dependents. Entitlement to benefits ends automatically when the labour contract ends or the employee retires.

The benefit scheme is financed totally by the company’s budget through predefined dedication to the health care of employees and beneficiaries. In other words, the employees do not have to pay contributions to the scheme; furthermore, they do not have to pay any kind of cost-sharing.

This scheme covers a comprehensive benefit package for its members, including outpatient and inpatient care, drugs, emergencies, and even treatment abroad if the required procedures are not available in Syria. Only cosmetic surgery and dental prosthesis are excluded.

For dependents, however, only the primary health care is fully covered, while coverage of inpatient and outpatient services is limited to 85% of the costs, and reimbursements for drugs is limited to 50% of the cost up to a defined ceiling.
To control the cost, a gate-keeping system is applied in this scheme: except in emergency cases beneficiaries need a referral by the contracted GP or the specialist to access hospitals. Furthermore, there is continuous monitoring of each individual expenditure profile to reduce the avoidable costs. Beneficiaries have to pay up front and then submit the bill for reimbursement. However, the company pays the compensation according to the MoH fee schedule that is in most cases less than the real costs. In other words the members will pay the difference between what they really paid and the received reimbursement.

*The health benefit scheme of the Ministry of Telecommunications as an example of a health benefit scheme provided by some ministries for their employees*

About half of the employees working in Syrian ministries are covered by some kind of health benefit scheme. In many ministries these schemes cover the employees and their families free of charge.

The employees of Ministry of Telecommunications (MoTel) are automatically enrolled in the health benefit scheme. Coverage is limited to the first wife, but includes all children of all other spouses; husbands of female employees remain uncovered. The employees receive photo ID booklets containing the names and photos all their family members entitled to health benefits as well. The employee loses his/her affiliation to benefits when the working contract ends or the employee retires.

The MoTel health benefit scheme is financed exclusively by an explicit item in the Ministry’s yearly overall budget, and employees pay neither contributions nor co-payments.

The benefit scheme provides a comprehensive health benefit package including primary health care, specialised outpatient care, inpatient care, emergencies, transportation, and drugs. Some treatments are excluded, such as cosmetic surgery, any kind of infertility treatment, and dental prosthesis.

Beneficiaries are entitled to receive all drugs available in the Ministry’s own pharmacy, for other pharmaceutical products not available in Ministry’s own pharmacy, the employees have to buy them from any other pharmacy and they are reimbursed later. The scheme uses a gatekeeper system. Furthermore, the ministry contracts a health
provider network, including many clinics and diagnostic centres, and one private hospital in Damascus. To enter this hospital the patients need a referral from a general doctor or any contracted specialist, while the employees can receive in-patient care in all state hospitals without referral.

To prevent the abuse of health benefits the Ministry employs a physician who is involved in claim processing and the control of invoices. Furthermore, all the data such as GP visits, referrals and other procedures are saved by the scheme.

Providers’ payments are based on fee-for-service. To receive their reimbursement, the specialists and hospitals have to present detailed bills that include all single items delivered to enrollees of the MoTel benefit scheme together with the referral form they have received.

*The health benefit scheme of a teachers' association*\(^{15}\) *as an example of a professional group's scheme*

The teachers' health benefit scheme is not ministry-born since it was created by the Teachers Association; however affiliation was mandatory and coverage included all employees working in the Ministry of Education (MoEd) and the MoHE. The teachers’ health insurance included about 300,000 subscribers; this made the teacher benefit scheme one of the most developed and interesting public sector benefit schemes because it reached a reasonable risk pool size. This scheme covered the employees and their family members including the spouse, except in the case of female employees their husbands remained uncovered.

The employees used to pay about 0.85% of their monthly salary for the health benefit scheme. Further to this, although the scheme was not managed by the ministries, it received relevant financial support from the MoEd and MoHE budgets.

The teachers’ health benefit scheme was a nationwide schemes and it developed a clearly designed benefit package and built up a hierarchical providers network all over the country.

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\(^{15}\) Recently, the Ministry of Education and the Ministry of Higher Education contracted the General Syrian Insurance Company to provide their 360,000 employees with health insurance according to the Legislative Decree No. 65 of 2009.
the country. This scheme in each governorate had its pharmacy and laboratories, and it also contracted general and specialist physicians.

The beneficiaries paid no fees for out-patient treatment when they visited the contracted providers. However, they had to pay 50% of the cost of drugs that were bought from the scheme's own pharmacies, and if the drugs were not available in these pharmacies, the patient had to pay the drug's cost up front out of pocket and the benefit scheme reimbursed him/her 40% of the costs. Moreover, the scheme contributed 25% of the price of drugs that are bought from outside the country, in the case that the drug was not available in Syria.

To control the costs, if the prescription value exceeded a certain amount, the employee needed approval from the association management in order to get it reimbursed. Furthermore, the benefit scheme did not reimburse the employee for medicines that were used for cosmetic purposes or for some infertility treatments.

Except for emergency cases, the beneficiaries needed a referral from the contracted physicians to have an operation in the private hospitals. The scheme paid 50% of the cost of inpatient treatment in public or private hospitals, 100% of the cost of operations in the public hospitals. In the case the operations done in private hospitals or in the private department in some university hospitals, the scheme would pay 90% of the cost of operations. However, the reimbursement was according to list prices of MoH.

Salaries or fee-for-service payments largely prevailed in this health benefit scheme to remunerate physicians and other health professionals (Holst 2006).

3.5.2 Private health insurance companies

Insurance activities were limited by the General Syrian Insurance Company until 2004, and health insurance has become one of the company’s activities only after 2006. Since 2004, the government has permitted private insurance companies that meet certain conditions to operate in Syria. According to the Legislative Decree No. 68 for the year 2004, Syrian Insurance Supervisory Commission was established as an essential organization for perpetrating, defining the general rules for the establishment of insurance companies, and setting up of the regulatory provisions of the national insurance market. Following the Decree No. 68 a series of regulations were adopted
such as Legislative Decree No. 43 for the year 2005 which set up the basic guidelines for organizing the insurance sector, and determined the system of Third Party Administration companies (TPA). The Degree No. 43 declared that the insurance companies should be Syrian, but non-Syrian companies could contribute to the company’s capital. However, at the beginning, the Syrian insurance market was mainly driven by Lebanese and Jordan insurance companies that have longer-term experience in the region.

Since then many private insurance companies, all of them for-profit companies, have been established in Syria. Most of these companies provide health insurance services besides other types of insurance. In 2009, there were 13 insurance companies, only one of them is public company, working on a competing basis, and six competing third-party administration companies (all of them are private for-profit companies).

The third party administration companies are responsible for these tasks:

- Receiving claims for damages and paying damages and health costs for the insured on behalf of the insurance company or the fund's management.
- Applying and implementing the programs of medical insurance adopted by the insurance company.
- Proposing and developing medical insurance programs and special automation programs for managing medical insurance for the insurance companies or the insured parties, as well as providing advisory services in this field.
- Concluding agreements with medical service providers on behalf of the insurance company or the special funds.

In 2009, the health insurance formed only 4.71% of the total insurance activities of the 13 insurance companies (Syrian Insurance Supervisory Commission 2010). Although the insurance companies situate in Damascus, they have branches in most governorates and they contract health providers (private clinic, private hospitals, private pharmacies, and some university hospitals and public autonomous hospitals) all over the country through one of the TPA companies. These companies offer individual and/or group health plans on the Syrian market, whereas some private companies and some well-performing public companies have contracted a private insurance company to cover their employees with health insurance as a benefit. The individual health plans have
focused on the healthy and high income people only. However, in general the number of insured people within these companies is still too modest.

Most insurance companies offer relatively comprehensive insurance plans and contract good selective medical provider networks inside Syria. Many of these plans cover the in-patient treatment in high-level hospitals, with 100% coverage and without financial limits; the out-patient diagnosis, but with only a limited number of visits per year; lab testing; X-rays; physiotherapy; dentistry; and drugs. However, most plans exclude eye glasses and lenses, cosmetic surgery, some dental care and psychiatric diseases.

The applicants for the private health insurance must fill in a medical questionnaire and a medical check might also be required. In the case of some diseases such as cancer, heart diseases, pregnancy and delivery services etc, the applicants may be subjected to waiting periods (sometimes up to one year). The insured people must renew the contract every year, however after a certain number of years (two or more) the insured person can make a permanent contract with the company, of course contingent on approval of the company.

Providers’ contracts and fees are individually negotiated between the insurance company and each single health care facility. Provider payment relies on a fee-for-service mechanism\(^\text{16}\).

### 3.5.3 The new health insurance law

In 2009, Legislative Decree No. 65 of 2009 made health insurance obligatory for the administrative governmental sector, which consists of about 750 thousand employees. The administrative governmental sector is given priority to receive the health insurance taking into account that many of the public entities do not have any form of health benefit schemes, as opposed to the economic governmental sector (i.e. the public companies) that provides its workers with medical benefits. Since 2010, according to this decree the ministries have gradually entered into health insurance contracts with the

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\(^{16}\) This information is collected through personal interviews with managers of some private insurance companies and third party administration companies.
General Syrian Insurance Company, which has monopolized the right to cover the public employees after the approval of the Prime Minister upon the proposal of the concerned minister and the Minister of Finance. According to this decree, health insurance is mandatory for employees only and does not include their families. However, this insurance could cover employees’ families on a voluntary basis for extra money. The workers of public companies of about 700 thousand workers could join this health insurance at a later stage. Retired people could be covered by this new insurance later after all the employees have gained access to health insurance.

This insurance will place emphasis on covering the more expensive medical services, especially the treatment of certain diseases and some surgical operations that were not covered previously, such as heart disease, cancer, and infant deliveries (normal and caesarean section). The coverage will be up to 250 000 S.P for each case regardless of the number of cases during the year. In addition, out-patient treatment will be covered, including doctor's visits, pharmacies, and laboratories, with an average of 12 visits per year for each one. Treatment outside the hospital is limited to 50 000 S.P yearly.

The project is currently administrated by the General Syrian Insurance Company through a special department of this company, however, it is suggested that in the near future a general health insurance company financed by the General Syrian Insurance Company and the General Social Security Organization will be established to manage and implement this project\(^{17}\) (The General Syrian Insurance Company 2010). Recently, the General Syrian Insurance Company has contracted a third party administrative company that is responsible for receiving claims for damages, paying them and the health costs for the insured, and concluding agreements with health providers on behalf of the insurance company, etc.

\(^{17}\) This information was taken from the speech of Minister of Finance (Al-haseen, M.)

4 Interviews on the Current Health System and Future Health Insurance in Syria

The purpose of this chapter is to explore the feasibility of introducing the National Health Insurance system (NHI) in Syria according to the perspectives of outreach pilot householders. To find out these perspectives, interviews were carried out. These interviews will provide clear information on the views of the Syrian people about the current health care system and how much they are interested in establishing an NHI system. To study these perceptions the qualitative data analysis method was selected as a tool to collect and analyse these interviews. The results of this analysis will be used to different degrees to design three alternative models of a health insurance system that should be suitable for what people expect.

Section one explains the qualitative data analysis method and discusses why this methodology was chosen over other methods. The second section describes the study design which includes the interview design and outline of the objects of these interviews, the selection of interviewees and the basis of their selection. The third section contains data analysis and explains the methodology used to analyze the interviews. The fourth section views the results of the interview analysis and the comparison of these results.

4.1 The qualitative data analysis method

Qualitative research is concerned with developing explanations of social phenomena as they happen naturally. Qualitative research is concerned with the experiences, opinions and feelings of individuals. Therefore, qualitative research is particularly good at answering the 'why', 'what' and 'how' questions in order to understand the situation from a holistic perspective (Hancock 2002).

With respect to what the researcher wants to get out of the data, three broad levels of analysis can be pursued here:
• One strategy would be to simply count the frequency of a particular word or concept which occurs in a narrative. The qualitative data can then be categorized quantitatively, and subjected to statistical analysis.

• A thematic analysis, which would lead to a deeper analysis. All units’ sentences or paragraphs referring to, for example, loneliness could be given a particular code, extracted and examined in more detail.

• A theoretical analysis such as grounded theory: in this level of analysis theories may be developed (Lacey and Luff 2001).

4.1.1 The difference between qualitative and quantitative data analysis

The difference between the qualitative and quantitative research methods can be summarized as follows:

• Qualitative data typically involves words and quantitative data involves numbers.

• Qualitative research is inductive and a hypothesis is not needed to begin research, while quantitative research is deductive, and all quantitative research requires a hypothesis before research can begin.

• In qualitative research the researcher can participate and become immersed in a research situation. In quantitative research, the researcher is ideally an objective observer who neither participates in nor influences what is being studied (Miles and Huberman 1994).

4.1.2 Theories and methods in qualitative data analysis

There is no one right way to analyse qualitative data, and there are several approaches available to undertaking qualitative analysis. Selection of a particular approach is dependent on many factors such as the research question, the time available and funders’ priorities, and the overall aims of the analysis, in other words; does this study aim to answer a specific policy-related question or generate new conceptual or theoretical understandings in a particular area. Two theories will be briefly explained:
• Grounded Theory: is a methodology; in other words, it is a way of thinking about and conceptualising data. Grounded theory analysis is inductive, in that the resulting theory ‘emerges’ from the data through a process of rigorous and structured analysis. This method emphasises theory as the final output of research. Whereas other forms of qualitative analysis may reasonably stop at the levels of description or simple interpretation, the aim of grounded theory is theoretical development.

• Framework Analysis: is a more recent approach to qualitative analysis that is gaining popularity in health-related research. In contrast to grounded theory, framework analysis was explicitly developed in the context of applied policy research that aims to meet specific information needs and provide outcomes or recommendations, often within a short timeframe. Framework analysis can provide systematic and visible stages to the analysis process. Although the general approach in Framework Analysis is inductive, this form of analysis allows for the inclusion of a priori as well as developing concepts. This can be important in many applied studies, where there are explicit issues that the stakeholders want to be addressed (Lacey and Luff 2001).

4.1.3 Methods of collecting qualitative data

The main methods of collecting qualitative data are:

• Individual interviews that can be highly structured, semi-structured or unstructured.
  ➢ Structured interviews involve the same questions that are asked in the same way.
  ➢ Semi-structured interviews consist of a series of open-ended questions. In the semi-structured interview, the interviewer has the freedom to probe the interviewee to elaborate on the original response.
  ➢ The unstructured interview which has very little structure at all, this type of interview discusses a limited number of topics, sometimes as few as one or two.

• Focus group: in this method several focus groups should be run in the research project. Each group includes between 6 and 10 people who share a common feature. Focus groups are used to collect qualitative data when limited resources allow undertaking only a small number of interviews, and when the group interaction among participants has the potential for greater insight to be developed.
• Observation: this method is used when data collected through other means can be of limited value or is difficult to validate. To collect data through observation methods many techniques can be used such as written descriptions, video recording, photographs and artifacts, and documentation (Hancock 2002).

4.1.4 Why was the qualitative data analysis method selected?

The qualitative data analysis method was selected over other methods as a tool to collect and analyse the interviews for the following reasons:
• The previous impression that the concept of health insurance is not familiar in the Syrian community made using the quantitative research ineffective.
• The qualitative data analysis method granted the chance to talk with interviewees in detail and explain the meaning of health insurance and the structure of this system.
• Conducting these interviews in depth face to face placed emphasis on people’s lived experience and the interviewees’ views about the current health system and expectations of the proposed health insurance system.
• This method guaranteed that answers would be as valid as possible. This possibility could not be achieved through quantitative methods, for example.
• This style of questionnaire achieves the highest possible response rate.
• The limited budget allocated to this study was not enough to allow the use of other assistants to conduct a large number of interviews, which are required by the quantitative method. In addition, the limited time allocated to this study made this unfeasible.

4.2 Study design

4.2.1 Defining the research questions

The goal of the interviews was to define and achieve the following objectives
• Identify people's views about the public health system, the degree to which they are satisfied with this system, and the advantages and disadvantage of this system in their point of view.

• Shed light on the health expenditure on health care and the ability of the Syrian family to afford health costs.

• Explain the role of the current health benefit scheme in alleviating health costs, and how much the participants are satisfied with their health insurance.

• Discover how much people are willing and able to participate in the NHI system as an alternative to the current health system.

• Review what the people expect from the proposed NHI system.

• Find out the preferred structure of the proposed NHI system.

4.2.2 Design of the interviews

The individual interviews were selected as a method to collect the data; these interviews were conducted as in-depth, face-to-face interviews. The interviews included both closed questions and open-ended questions, although some questions that related to the proposed structure of the NHI system included a few options, taking into account that the Syrian people do not have a clear idea about these technical subjects, such as the means of payment for NHI, risk sharing and selection of the insurance plan. However, the way in which these interviews were managed gave the respondents the chance to talk about their thoughts and ideas without restriction.

The interviews were structured into three main phases. The first part focused on gathering relevant personal information relating to demography, education, work, total income of the family, how many people depend on this income to live, and whether the interviewee has subscribed to any form of health insurance scheme. The second part aimed to find out some information about the health expenditure of the Syrian family, particularly out-of-pocket expenditure, and income elasticity for health care services in the Syrian community. In addition, it investigated the satisfaction of Syrian people with the public health system. The third part emphasized the willingness and ability of people to pay for the proposed NHI system. Also, it attempted to discover the favoured structure of the NHI system from the point of view of the interviewees.
4.2.3 Selecting the interviewees

To conduct this study, 19 interviewees were selected. Their selection was based on many factors:

First, the selected interviewees belonged to different backgrounds, in other words there was significant variation in terms of gender, age, education, type of work, income, number of family members, life in an urban or rural area (see Table 4.1 that summarizes the respondents’ social characteristics). Indeed, the only common characteristic which appeared to define the interviewees collectively as a group was the fact that they were all householders or had a share in financing their family. Therefore, all the interviewees were more than 30 years old, and about 86% of the interviewees were men, due to the fact that women form only 13% of the work force in Syria, according to a survey was carried out by the Central Bureau of Statistics: Labour Force Survey in 2009.

Second, the type of work was mainly the essential basis and the starting point for selecting the interviewees. This was because the type of work was directly or indirectly linked with many other factors such as social-economic situation, level of education, and demographic status. At the same time the type of work was influenced by those factors. As a result, the type of work can affect the prospects of people and their response or reaction to any amendment. Taking into account the possibility that many people in the Syrian community may work more than one job to ensure their life necessities, according to their main job and with respect to employment status, the interviewees can be classified as follows. 11 of them are paid workers; 2 of which work in the formal private sector, 2 of which work in public companies, and 7 of which work in the administrative government sector. 7 respondents are self-employed; 2 of which work in the formal sector and the rest in the informal sector. One respondent is unemployed.

Third, income was a main factor in selecting the interviewees due to the fact that income has a big influence on people's ability to participate in the NHI system. The respondents were divided according to average monthly income per capita into three groups.

- The first group is the one with a lower income, this group includes people with an average monthly income of 3000 S.P per capita or less (according to Shaoul (2010))
the extremely poor people are those whose income is less than 92 S.P or US$2 per capita per day). This group includes 6 respondents.

- The second group is the one with a middle income, this group includes people with an average monthly income of between 3000 and 7000 S.P per capita. This group includes 9 respondents.
- The third group is the one with a higher income, this group includes people with an average monthly income higher than 7000 S.P per capita. This group includes 4 respondents.

Fourth, the other important point that was considered in the selection of the interviewees was whether or not the interviewees have any sort of health insurance. This was part of an attempt to explore the effect of receiving health benefits provided by one's employer on the interviewees' decisions to participate in the proposed NHI system.
|                | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 | C17 | C18 | C19 |
|----------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| **Gender**    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |
| Male          | ☐  | ☐  | ☐  | ☐  | ☐  | ☐  | ☐  | ☐  | ☐  | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   |
| Female        | ☐  |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |
| **Age**       |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |
| 30-40         | ☐  | ☐  | ☐  | ☐  | ☐  | ☐  | ☐  | ☐  | ☐  | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   |
| 40-50         | ☐  |    | ☐  | ☐  | ☐  | ☐  | ☐  | ☐  | ☐  | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   |
| 50-60         | ☐  |    |    | ☐  | ☐  | ☐  | ☐  | ☐  | ☐  | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   |
| 60-           |    |    |    |    | ☐  |    |    |    |    |     |     |     |     |     |     |     |     |     |
| **No of members the family** | 3  | 6  | 5  | 16 | 4  | 5  | 5  | 7  | 6  | 5   | 9   | 5   | 5   | 5   | 4   | 10  | 3   | 8   | 9   |
| **Education** |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |
| University degree | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Institute | ☐ | | | | | | | | | | | | | | | | | | |
| Secondary school | ☐ | | | | | | | | | | | | | | | | | | |
| Primary school | ☐ | ☐ | ☐ | | | | | | | | | | | | | | | | |
| Elementary school | ☐ | | | | | | | | | | | | | | | | | | |
| Illiterate | ☐ | | | | | | | | | | | | | | | | | | |
| **Life**      |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |
| Rural         | ☐  | ☐  | ☐  | ☐  | ☐  | ☐  | ☐  | ☐  | ☐  | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   | ☐   |
| Urban |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Employment** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Government employee | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Formal private employee | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Self-employed | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Unemployed | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Farmer/Herdsman | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Retired | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Casual worker | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| The average income per family member (S.P.) monthly | 20000 | 3333 | 3600 | 15600 | 5500 | 20000 | 5100 | 3570 | 5000 | 3400 | 111 | 6000 | 8000 | 2760 | 5000 | 900 | 1000 | 1875 | 2000 |
| **Participate in HI** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefit health schemes | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| PHI within their work | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| They do not participate in any HI | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
4.2.4 Data collection

Data were collected through individual interviews, which were held in person. Every interview lasted about 40 minutes. Most of the interviews took place either in people’s home or in their place of work. The majority of interviews were tape recorded. All the interviews were transcribed or re-written for analysis. Most of the interviewees accepted the interview immediately and there were no problems in persuading them to participate. These interviews were carried out in Syria in October 2008.

4.3 Data Analysis

Analysis of data involves summarising the data collected and presenting the results in a way that defines the most essential features. This section will review the processes used to analyse the collected data, following a general thematic:

4.3.1 Transcription

Most of the interviews were tape recorded and transcribed verbatim. Once transcriptions were completed, written versions of the interviews were made. Every interview was transcribed wholly to avoid the problems of bias. On average the interview took about three hours to transcribe.

4.3.2 Translation

As the interviews took place in Syria, the Arabic language was used. After transcription these interviews, were translated into English (see Index 1). It was not an easy job because of the special characteristics of every language, and the interviewees belong to different backgrounds and many of them used slang language. Although careful attention was given to translating these interviews in correctly without changing the essential meaning, the Arabic version has been the main source for analysis.
4.3.3 Familiarization

Once the text had been prepared, through multiple detailed readings the raw data became familiar and understood. Through the reading of each interview the sentences that contained apparently interesting or relevant information were underlined and a brief note was made in the margin about the nature of the information.

4.3.4 Identifying a thematic framework

After reviewing the purpose of the evaluation, the categories and themes were identified. In addition to the categories that were already derived from the research aims such as satisfaction with the public health system, income elasticity, willingness and ability to participate in NHI, other categories were created through reading the raw text which included dual work of doctors working in public hospitals, long waiting times to access health services, inhuman behaviour of the medical staff, moral hazard problems, etc.

4.3.5 Coding

This stage involved using textual codes to identify specific pieces of data which correspond to different themes. While reading through the whole text of each interview, specific segments of the text that answered each question or belonged to each theme were identified to condense general and varied raw text data into a brief, summary format. Through the copy and paste functions, the text segments were marked into each suitable category. This process was repeated with each interview.

4.3.6 Charting

In this step headings from the thematic framework were used to create charts of the data to ease reading across the whole dataset. A chart by case for each respondent across all
themes was used. All the texts segments marked into each suitable category belonging to each interview were organized into a single chart. This process was repeated with all the interviews. The data was categorized to the point that all the relevant themes across all responses to each theme had been identified and labelled. This process was repeated for the responses within each theme.

4.3.7 Interpretation

The final step to be taken was analysis of the data and writing the research report. This step included interpreting the descriptive data into an understandable and useful piece of writing. Using quotes or descriptive examples to illustrate the points and bring the data to life was helpful in order to produce a text that in the end provides a clearer understanding of the views and opinions of the interviewees.

4.4 The results

This section will view the results of the analysis of the interviews: the analysis results of each interview will be independently discussed in detail as an attempt to answer on the research questions. Each interview will be divided into two parts. The first part will include analysis of the answers to many questions such as to what degree the notion of health insurance is familiar to the Syrian people, and the situation of the public health sector and the level of satisfaction with it. The second part of the interviews will be analysed to explore the views of the interviewees on their willingness to participate in the NHI system and the preferred structure of the proposed NHI in their point of view.

4.4.1 Interview 1

She is 30 years old, holds a diploma of higher education, works in the private sector, is responsible for her mother and brother, has one child, and has an income of 30000 S.P. Her family’s total income is 60000 S.P. She is living in the city, and has private health insurance as a part of her job benefit package. She does not pay for her HI, which
covers her alone. This insurance covers the cost of all types of medical care within the network from private hospitals, private clinics and pharmacies so that it is all free of charge. There is no cost sharing.

Part I

Understanding of health insurance
She defined health insurance (HI) as free health services provided by her company as a benefit, but she could not recognize clearly the distinction between health insurance and other types of insurance “There are two types of health insurance: the first one is provided by my company. The second type of health insurance that is now introduced is the one that includes life insurance, childhood insurance, fire insurance, and car insurance”.

Satisfaction with current health insurance
She expressed satisfaction with the ease of her dealings with the insurance company, but said that she would be more satisfied if her HI provided family coverage and were to continue after she leaves the job. “The members of my family are not covered in my current insurance. It is valid while I am working for the company, but if I left the work here my health insurance would be cancelled. It is free and also, it is so easy to deal with them. I do not need to worry about it, I just give them my insurance card and they do their work”.

Expenditure on health
Regarding expenditure on health, she has no financial problems. She highlighted the moral hazard problem that the costs of health expenditure would be higher as a result of abuse of HI system. “If anyone were in my place and had free health treatment, they would visit doctors very often while the company pays the bills, but fortunately, I am not likely to be in need of doctors, thank God, and also, I do not abuse the health insurance system”.

Income elasticity for health care
Therefore, the income elasticity for health care services is low for her as was clear from her answers; except for buying better quality medicine, her consumption of health services would be the same even if her income was higher.

**Advantages and disadvantages of the public health system**

When she was asked about the advantages and disadvantages of the public health system, she pointed out that the public hospitals provide medical treatment for large numbers of people, particularly for poor people. “There is a large number of people who are using the public hospitals. I think the public hospitals save these people from misery”. However, the high demand for services provided by public hospitals creates the problem of long waiting times. “For example, one day, we booked an appointment for one of our relatives who had to wait one month. This example reflects the high demand placed on public hospitals”. She said that the public hospitals are supplied with qualified staff that provide good quality health services. However, the main problem is the staff have a bad attitude towards the patients and do not treat them well. This problem is due to the low salary of the public employees. On the other hand, there is favouritism. “Those who have privilege are dealt with in a better way, while those who do not get lost when they enter the hospital, believe me, they will get lost”.

**Financial protection**

She thought that the public health system is unable to protect her because of the fact that not all public hospitals are provided with the necessary medical instruments dedicated to treat some chronic diseases such as cancer and kidney diseases. “The chemical doses that should be taken in the case of cancer, are not provided here in our province. The patients are required to travel to the capital, Damascus, to take doses in the Nuclear Medicine Department; you can imagine how they suffer in travelling. Another example, the kidney disease patients. I know a child who is a kidney disease patient, and his mother has to take him to Damascus to be treated every two days”.

**Satisfaction with the Public Health Sector**

In general, she is not satisfied with the public health sector “It is neither fair nor good”.

**Part II**
The draft law on health insurance
In response to the question about the draft law regarding the introduction of health insurance for civil employees working in the public sector, she said, “No, I have not heard about it”. Her answer declared the weakness in the communication between the government’s discussion and the public. She believes this HI should be comprehensive and available for everyone, not only for public employees. The government should also be particularly responsible for paying on behalf of vulnerable groups such as elderly people, children and poor farmers who cannot afford to pay insurance contributions. On the other hand, the government should not be responsible for those who are able to work “If this insurance cannot cover every one, it should at least insure children and disabled people” “I do not agree with the idea that the government should provide health insurance for someone who is able to work”.

Willingness to participate in the National Health Insurance
Then in response to a question exploring her willing to participate in the NHI, she linked her participation in the NHI with whether this kind of insurance would be continuous, universal, created by the government, and whether it would cover her family “If I left my work in this company my health insurance would be cancelled. I am interested in the creation of a universal health insurance scheme by the government, because it would be a long-lasting one” “Also, the members of my family are not covered by my current insurance”.

Management of the NHI
She thought the NHI should be run by the private sector which has a better disciplinary system “If you are working in the private sector and you know that someone is responsible for your performance and supervising you, you would work hard to maintain your work and do it perfectly, without any mistakes”.

Paying for NHI
On the level of contributions and the preferred way to pay for NHI she stated that she is able to pay 1000 S.P monthly for each member of her family. She thought the flat-rate contribution per capita is fairer than paying a percentage of income, which would be
progressive “In the case of paying a ratio of the salary, this amount would be increasing on parallel with the income. If the way of paying is payment-per-capita, this would be fair; a certain amount of money should be paid for each member of the family”.

Insurance plans and services covered
Responding to the question about insurance plans and covered services, she said that the selection of the insurance plan is dependent on income. However, the quality of the provided health services through each insurance plan should be in line with the contribution paid “I want the services to be equal to the payment paid. If the HI provided options in terms of insurance plans, and I chose the more convenient option, I want to receive good services in all areas, excluding cosmetics and dental correction”.

Collection of the contributions for NHI
In relation to the question about which sector is the most suitable for collecting the contributions for NHI, she claimed that the public sector is more trustworthy “The government cares about my rights. The situation is the same with banking. Although the private banks provide good services I think that the government banks are more secure”.

Risk pooling
When asking about the structure of risk pooling, she answered that the risk pooling should be organized at a national level as the revenues would be higher and as a result the benefits would be greater “At the level of the state the total revenues would be more, and as a result we would receive more benefits”.

Purchasing health services
In her view the private sector is more qualified than the public one to purchase health services because the private sector is more concerned with the quality of services “The private sector is interested in quality rather than quantity. It would purchase the appropriate equipment for the right place”.

Providers of health services
When she was asked about the health body from which she prefers to receive the health care within the proposed NHI, she replied that the most important criterion for the selection of a hospital is the behaviour of the members of its staff “The public and private hospitals are the same for me. I would prefer to receive health care from the one who respects me as a patient. I care about the personal treatment”.

Membership in the NHI
With respect to membership in the NHI she proposed the membership should be optional, taking into account the stereotype of the Syrian people that they do not comply with mandatory decisions. She also thought that good services provided through the NHI would be the only motivation that would attract people to participate “In our community, if we mention the word “mandatory”, people choose to alienate themselves. Therefore, it is better to keep the membership optional. It is possible that I would participate while others do not. But one day when I need this insurance and find it as I expected, then my neighbour would be encouraged to participate”.

The solidarity principle
She supports the solidarity principle whereby she would have to pay more for NHI in compensation for elderly people, the disabled, and children. However, she said she would not wish to support poor people who are able to work “If this poor person is an elderly person or a disabled child I would have no problem with helping them by paying more. But if this poor person is healthy like me, but they have not been given opportunities in their life, for example, they are not educated, I would not be impelled to help them”. She proposed that a study be conducted to shed light on the proportion of poor people in the country and their income before imposing the contribution “It is important to carry out a study on the proportion of poor people to the total population and their incomes. For example, farmers, they are unlikely to be employees and so have no fixed salaries. This matter should be taken into account”.

The future of public hospitals under the NHI
Regarding the future of public hospitals that will not contract with NHI, she drew a connection between the success of these hospitals and their efficient management, and she supports the idea of maintaining the work of public hospitals even if the NHI was
established “I know professional people who took over a public hospital; they were able to make significant changes within a relatively short time. We have to improve, not to destroy”.

4.4.2 Interview 2

He is 60 years old and unemployed. His level of education is primary level. He and four other members of his family rely on his sons’ incomes. The total income of his family is 20000 S.P per month. He lives in a rural area.

Part I

Understanding of health insurance
He had no idea about the meaning of health insurance.

Satisfaction with current health insurance
He does not participate in any type of health insurance.

Expenditure on health
When he was asked whether or not he can afford the cost of health care, he said that his income is not enough, therefore, he has to postpone his health needs “Not at all enough. I have no teeth and I cannot afford the cost of dentures”. He added that physicians request additional medical procedures, so the inputs required by the physicians to provide health treatment create an additional demand on the medical care, which causes higher health expenditure and places more financial pressure on patients “Sometimes I visit a doctor to check out a minor problem, but the doctor requests several things, for example, radiophotos for the head and other parts of the body. I prefer to endure the pain in order to avoid visiting doctors as most of them are just traders”.

Income elasticity for health care
Therefore, the income elasticity for health care services is in general high for him. If his income was higher, the frequency of his visits to dentists and specialist doctors would
be higher. He would also use laboratory services more frequently. In addition, he would buy better quality medicine.

Advantages and disadvantages of the public health system
When responding to the question about the satisfaction with the public health system he said that he does not trust the public hospitals because he believes the staff of the public hospitals do not work properly and most doctors only look for profit as traders. “The employees at every level including the directors in the public hospital do not work properly”. The public hospitals’ doctors either work for private hospitals or have their own clinics at the same time. Therefore, they try to persuade the patients of the public hospitals to use their own private health centres, aiming to charge them money. “The doctors postpone the health treatment in the public hospitals again and again until the patients get bored and go to the private hospitals, and pay them money”. There is favouritism. “The patients have an operation in the public hospitals only if they have applied many times to the public health sector’s administrators or if the patients have a special privilege”. The role of the medical centres in providing good health services is weak “Medical centres only provide pills for headache, what is available up there in medical centres?! It is hard to find even a tetanus injection to help someone with a minor injury”.

Financial protection
He thought that the public health sector is unable to protect him from the catastrophic illnesses. “No, I cannot trust the public hospitals, for several hundred reasons”

Satisfaction with the Public Health Sector
In general, he was not satisfied with the public health sector. “I would be satisfied with the public hospitals only if the staff working for the public hospitals had a sense of patriotism and not a sense of individual interest; they work only for their own benefit”.

Part II

The draft law on health insurance
His response to the question about the draft law regarding the introduction of HI for civil employees in the public sector was “No, I have not heard about it”. He understood this law as an attempt to privatize the public health sector. He thought this would be better because private companies are careful about their reputation, they have better staff, and better supervising policies in contrast to the public sector. “The private companies are very keen on maintaining their brand name and reputation to the best standards. For example, if one of the staff, such as a doctor, or a laboratory worker, did not perform properly, they would be at risk of losing their job”.

**Willingness to participate in the National Health Insurance**

In any case he was willing to participate in the NHI.

**Management of the NHI**

Regarding the issue of the management of the proposed HI, he believes the private sector is better than the public sector because it has a good disciplinary system, and the private sector in contrast to the public sector is interested in selecting better staff. “If the private sector was not satisfied with some members of the staff, it would replace them and employ others. In the government sector the bad and good are equal”.

**Paying for NHI**

Regarding the level of contributions and preferred way of paying for HI, he said that as he is unemployed, he would prefer to pay a monthly flat-rate contribution. He said the amount of contribution paid for HI should be determined by the quality of provided services, particularly the staff. “Initially, I would pay a monthly rate of 500 S.P for HI, and then if the HI system performed well, met my expectations, and satisfied me with their services, especially with the quality of staff, I would be prepared to pay a monthly rate of 1000 S.P for HI”.

**Insurance plans and services covered**

Responding to the question about insurance plans and the covered services, he said that in order to reduce the financial risk, he would select the best insurance plan, despite the fact that he is unemployed and his family’s income is limited. He confirmed that according to the selected insurance plan the HI system should cover all the services he
or his family may need. “The company should ensure all medical services from supplying headache medicine to providing open-heart surgery”.

Collection of the contributions for NHI
In relation to the question about which sector is the most suitable for collecting the contributions for HI, he stated that the agent collecting the contribution should be a Syrian private company, competent, confidential, and working correctly and efficiently. The HI company should be paid directly without any intermediary “I am willing to pay a competent Syrian company that does not belong to the government or to other nations. This company should have a formal office and the staff should work properly, so that I can go and pay them securely. I do not dare to pay through intermediate agents as these could be untrustworthy! The company should be all Syrian money, facilities, and doctors”.

Risk pooling
When he was asked about the structure of risk pooling, he answered that NHI performs in a cooperative way, so the risk pooling should be at the national level. He also confirmed that NHI should be universal “At the national level, because of the fact that HI is a cooperative project, it should benefit all people regardless of their situation”.

Purchasing of health services
In relation to the purchasing of the health services within the proposed HI system, he mentioned that the private sector is more qualified than the public one to purchase the health services because the private sector cares about providing a better quality of services, whether through equipment or staff. “The private sector provides a better quality of equipment. The private company has not been established for a day, month or year but for a long term. So they should gain people's confidence, and attract new costumers. This can be achieved only through working properly, providing good equipment, and providing qualified doctors and nurses”.

Providers of health services
When he was asked about the health body from which he would prefer to receive health care within the proposed HI, he stated that private hospitals are better able to provide health services in the HI system, because they are keen to maintain their reputation.
“The private hospital is keen on keeping its reputation good. I prefer to deal with any agent that is careful about its reputation”.

Membership in the NHI
In relation to membership in the NHI, he said that the success of the HI system is dependent on the harmony between the members, and their awareness of the importance of the HI, and not on the number of participants. This would only be achieved through optional membership. Furthermore, he thought the optional membership makes the people more willing to pay for NHI “If the members are ignorant and not aware of the benefits of health insurance, the health insurance company would struggle to collect the monthly contribution”.

The solidarity principle
To explore the viability of the principle of solidarity in the Syrian community, he was asked whether or not he would be ready to pay more for HI than poor people, he answered, “If I was not in need for health care, other citizens might be in need. If any citizen got medical treatment, I would be as happy as if I myself got treatment, and I would have no problem, because I might need surgery one day that might cost an amount equals to all the money I have paid in the HI system”. He proposed carrying out a study about the situation of poor people and their incomes. He thought that poor people should pay a smaller amount for HI that suits their income. However, the quality of the medical services provided through the HI system should be the same for all citizens regardless of the contribution paid. “They should do a study about the situation of the poor people and their income, so that, poor people pay the HI company an amount of money according to their financial situation. This amount of money can be expected to be smaller in comparison with that which the rich people should pay. However, the access to treatment must be provided equally to all people without partiality between the rich and poor people”.

The future of public hospitals under the NHI
About the future of the public hospitals that may not meet the required criteria that make them legible to contract within the HI system, he said the existence of the public hospitals would be necessary within the HI system to treat people who are unable to
participate in the HI. “The public hospitals should not be closed because there are many people who cannot afford to pay health insurance”.

4.4.3 Interview 3

He is 37 years old and his highest level of education attained is secondary. He works in a public company. He is responsible for 3 children, his income is 9000 S.P, and the total income of the family is 18000 S.P per month. He lives in a rural area. As part of the job benefit package, his company compensates him the costs of medicine, laboratory analysis, check-up, and teeth treatment of up to 6000 S.P annually. However, he cannot exceed this limitation. These benefits cover him only, not his family.

Part I

Understanding of health insurance
He defined HI as a protection of insured people against financial risk. He linked the success of the HI system to an honest administration and the reduction of the moral hazard phenomenon. “The concept of health insurance is good, because some people may be unable to afford the cost of operations, but the insurance fund must be administered honestly, and the beneficiary should be genuinely ill not a malingering”.

Satisfaction with current health insurance
He expressed that his satisfaction with a health insurance scheme is contingent on the services provided, and on an attempt to mitigate the moral hazard phenomenon. “Of course I am not satisfied, because the benefits are few”. He believed the moral hazard phenomenon is a result of the low awareness of beneficiaries who abuse health insurance services. He stated that the solidarity among the workers can deal with the shortage of health insurance benefits that are provided by the company. “The workers within the company can help each other by shifting the compensation for health services provided by the company from the healthy workers to the ill ones”.

Expenditure on health
When he was asked whether or not his income is enough to cover his health needs, he said not all of the time, because his expenditure on health is variable from one month to another. “The expenditure on health is not fixed. Maybe for months we haven’t spent any money on health. But it is possible that within 10 days my children could become ill, then I might pay about 3000 S.P”.

Income elasticity for health care
Income elasticity for health care services for him is high as his income is not enough and he has to postpone health care. As was clear from his answers, if his income was higher he would visit the specialist and dentist whenever he had a health problem instead of enduring the illness, usage of laboratory services would increase, and he would buy better quality medicine.

Advantages and disadvantages of the public health system
He is not satisfied with the public health system, because he had a bad experience with a public hospital. He lost two children as a result of a nurse’s negligence “My wife gave birth to twins in the seventh month of her pregnancy, who later died. And I am sure that I lost my children as a result of negligence, the negligence of nurses who I had to beg more than once to do their job properly”. He ascribed this negligence to the weakness of the supervision system, lack of attractive work incentives and large demand on public hospitals in comparison to the available staff. Since the income of a large proportion of the Syrian population is low, people use the public hospitals more than the private ones “The weakness of control or supervision of staff causes the defect. The large number of people who frequent visit public hospitals cause the officials and nurses to feel tired. It is possible that the nurses have the same money problems as I have, so they do not do their work properly”. “Per capita income is still low in Syria. The proportion of people using the services of public hospitals is significant because the income of most individuals is similar and it is low”. He said that although all the requirements, supplies and medical care are available in the public hospitals, many problems arise such as the inefficient use of these requirements and procedures, as well as administration problems, and moral hazard problems related to the low awareness of people and the exploitation of public health services “The state provides the required supplies, but the problem is a citizen himself and whether he uses these supplies in an appropriate way”.
Financial protection
He thought the public health sector can not protect him against catastrophic diseases, because this is related to available resources in this sector and their affectivity. He confirmed at other points in the interview that the main problem in the public hospitals is the large demand on their services. When a new public hospital was opened in his province, the health care became better and the medical staff working in the public hospitals became friendlier.

Satisfaction with the Public Health Sector
In general he is satisfied with the public health sector.

Part II

The draft law on health insurance
In response to the question about the draft law on the introduction of HI for civil employees in the public sector, he said that heard about this law on television “I heard on television that the health insurance law is still being debated, but what it includes I do not know”. He believes this law would be unfair if it covered civil employees only, because other people such as farmers need the HI more than employees who receive stable salaries. He also said that this insurance should be universal or at least it should cover the employee’s relatives through insurance cards “If this law was only for the administrative staff, it would be unfair. But if it covered everyone it would be excellent. Or at least it should include my relatives or your relatives or relatives of my colleagues with the insurance card, so that it will cover a large number of people”. He focused on putting in place regulations to control the moral hazard within the proposed HI system.

Willingness to participate in the National Health Insurance
He is willing to participate in national health insurance.

Management of the NHI
He said the private sector is better run than the NHI system. The private sector aims to profit, therefore it has a strong supervision and disciplinary system, while the government sector suffers from bureaucracy and disorder.
Paying for NHI
He said that he can spare about 500 S.P monthly for NHI. He preferred to pay a flat-rate contribution. He believes that people who are paid more, also have more expenditures for their families, therefore it would not be fair to pay more for HI “My colleague has worked for 30 years, this means his salary is higher than mine, but my son is 5 years old, and certainly his requirements are less than the requirements of my colleague’s son who has to go to university and has a lot of expenses, therefore I would prefer a flat rate contribution, because those whose salary is higher, does not deserve envy because his family needs more money and has more requirements”.

Insurance plans and services covered
He preferred to pay more regardless of whether he was in need to extra health services or not. He added that the NHI should cover the costs of check-ups and medicine, because a person is subject to illness more than they require operations.

Collection of the contributions for NHI
He preferred the government sector to collect the contributions for the NHI. He said that he has not had to deal with the private sector and so he doesn't know much about it “Certainly the government sector, but perhaps if I had any idea about the private sector I would have another view”.

Risk pooling
He answered that if the structure of risk pooling was at the level of work it would be better, because if the NHI was extended to be at the country level, it would be out of control. He confirmed his opinion that there are many cooperative funds at the province level and at the level of work that have proved their success.

Purchasing of health services
He recommended using a bids system to achieve a good quality of health services at the lowest costs either from the private or the public sector.

Providers of health services
He preferred to receive health services from private hospitals, because of the fact that the private hospitals do not have a crowd of patients as the public ones do. However, the most important thing for him is human behaviour and the conscientiousness of the medical staff. “The percentage of patients who go to the private hospitals is small in comparison to the number of patients who visit the public hospitals”.

Membership in the NHI
For membership in the proposed NHI system, he stated that mandatory membership is better because health insurance is necessary for all people in order to reduce the financial risk. “Mandatory membership would be better, nobody can do without health insurance”.

The solidarity principle
To explore the solidarity notion in the Syrian community, he was asked if he would be prepared to pay more for NHI than poor people, he answered, “I am certainly willing to pay more than poor people to receive the same services”.

The future of public hospitals under the NHI
He said that the public hospitals should have a chance to improve their work and that would be achieved through a good management and strong disciplinary system. “The subject is related to the management, no more, no less”.

4.4.4 Interview 4

He is 43 years old, his level of education is primary, he is a driver who has own his bus and works in trade as well. He lives in a rural area with his family which consists of 15 people including the wives of his two sons and their four children. He works with his sons together and there is no separation in the income arising from their work. The total income of the family is between 200 000 and 300 000 S.P. monthly. He does not participate in any type of health benefit schemes.

Part I
Understanding of health insurance
He has no idea about the meaning of health insurance.

Expenditure on health
His financial situation is good and he has no problem in affording the necessary expenditures on health.

Income elasticity for health care
Therefore, his income elasticity for health care services is low in general. In other words, he will not expend more on health if his income was higher.

Advantages and disadvantages of the public health system
He said that the medicine, medical equipment, standard of care and hygiene are good in public hospitals. However, favouritism is very common in medical centres, where the nurses allocate the medicines only for their relatives. He added that the situation in public hospitals is not better, where only those who are privileged can have an operation done in these hospitals.
Also, the doctors working in public hospitals push the patients of public hospitals to their own private clinics through procrastination “The doctors in public hospitals are traders, thus they force patients to have the operation done in private hospitals through procrastination, by delaying the patient's turn to be treated in the public hospitals”.

Financial protection
He feels secure knowing that there are public hospitals, however, if he was in need of a complicated operation, he thinks these hospitals would not be able to help him “The public hospitals protect me in case of illness, however if I was in need of a big surgery, I thought the public hospitals would help me only if I was favoured”.

Satisfaction with the public health sector
In general his level of satisfaction with the public health sector is not bad.

Part II
The draft law on health insurance
In response to the question on the draft law on the introduction of HI for civil employees in the public sector, he said, “I have not heard about it, but health insurance is a good thing, even if we would have to pay a monthly fee for HI”.

Willingness to participate in the National Health Insurance
He is willing to participate in the NHI, because it would allow him to receive health services without long waiting times, and because the doctors would be held accountable in the event that anything wrong was to occur. “Since people would pay contributions for the health insurance then he could judge the doctors and hold them responsible, in contrast with the current system”.

Management of the NHI
He thought the private sector is better able to manage the NHI “The private sector can stop the fraud and manipulation”.

Paying for NHI
He can pay between 3000 S.P and 4000 S.P for NHI. According to the nature of his job, where his income is not stable, he preferred to pay a flat rate contribution. “Taking into account my job circumstances, I would prefer to pay a monthly flat rate contribution. I drive a bus, and sometimes I earn money and at other times I lose money”.

Insurance plans and services covered
He linked the selection of the better insurance plan with maintaining dignity, and the right to access health care without feeling inferiority. “Even if I did use the health service provided by the better insurance plan one time during ten years, I would keep my dignity, and workers in the health insurance would help me and respect me more than if I were not participating in this insurance scheme”. He also expected to receive better medical services provided as he selected the better insurance plan.

Collection of the contributions for NHI
He confirmed that the public sector is more trustworthy to collect the contributions for HI. He held a negative view about the role of the private sector as the collector of
money, perhaps because many Syrian people have had bad experiences with private companies that collect money from them to invest it but then these companies left the country with the money “I do not trust the private sector because there is not any law which obliges it to pay or provide its services, also, the private sector might escape and abandon its responsibilities”.

Risk pooling
He preferred to share the risk with the whole population in the country.

Purchasing of health services
In his point of view the private sector is better suited to purchase the services for the NHI system, because it is more efficient in controlling costs and preventing corruption “The private sector is more efficient preventing stealing and fraud”.

Providers of health services
He would prefer to receive the health care within the proposed NHI system from the private sector. He said the private hospitals are better able to provide health services within the HI “The private hospitals care more about the individual person, and provide better services. In addition, they are interested in their reputation more”.

The solidarity principle
To explore the notion of solidarity in the Syrian community, he was asked if he would be prepared to pay more for HI than poor people, and he answered that he would. “I would be willing to help the poor people and pay more than them for the health insurance”. He added that the private sector and government should support the poor people to participate in NHI “The government imposes many fees on people, therefore it must share a part of the cost for health insurance”.

The future of public hospitals under the NHI
He linked the success of public hospital with its management, and good supervision system. “This subject is related to the hospital director: if he was a failure then the hospitals would be a failure as well. The solution is to implement a strong supervision system in these hospitals”.

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4.4.5 Interview 5

This respondent is 37 years old, his level of education is preparatory, and he is an employee in the government sector (military sector). His family includes two children, and his wife is an employee also. His income is 12 500 S.P and the total income of the family is 22 000 S.P monthly. He lives in an urban area. He has health insurance as part of the job benefits package. He pays 388 S.P monthly for this scheme which covers him and his children only. His health insurance provides check-ups, medicines, and operations free of charge in the military hospitals only. In addition the insurance fund pays for medicine up to the value of 2500 S.P in one quarter.

Part I

Understanding of health insurance
He defined HI according to the type of the services provided by the health care benefits scheme in his work: “The health insurance includes two parts, first, financial reimbursement where the government pays medical bills. The second is a services part, which means free medical treatment in public hospitals”.

Satisfaction with current health insurance
He is not totally satisfied with his HI due to long waiting times for access to health care, and because not all services provided are good: “The services provided are not always good and sometimes I have to wait a long time to have a check-up. In the case of operations the patient has to wait a long time, maybe about one year”.

Expenditure on health
Although he has health insurance through his work, sometimes the out-of-pocket expenditures on health care require more than one-third of his income. Sometimes he has to postpone some health care requirements due to lack of money, or he may have to borrow. The physicians request particular medical procedures that result in higher health expenditure and more financial pressure on patients: “I have to pay a lot of money to some doctors, especially if they require many X-rays or laboratory tests, then my income would not be enough and I would pay more than one-third of my income for
medical care. This is for one person, how would this be possible for all family members?".

Income elasticity for health care
For him the income elasticity for health care services is high in general. He said that if his income was higher he would not visit the specialists more because the number of visits to specialists was already high. However, he would spend more on visits to dentists because the cost of the dentist is about three times more than his current income. Also his usage of laboratory services would certainly increase. If his income was higher he would buy all the medicine his family needs: “Now I have to keep some medicines and use them for one or two months, although it is preferrable to throw the bottle away if it has been open for a long time”.

Advantages and disadvantages of the public health system
When responding to the question about his satisfaction with the public health system, he said that the public health facilities are free of charge. However, there is a long waiting time for access to health services. Not all medicines are available in public hospitals, only a small portion is available. Most patients having check-ups in public hospitals do not receive the time and attention they require, compared to check-ups in private clinics: “I have to go to a doctor who is not at a public hospital to be sure that the check-up is done correctly”. He added that the public hospitals are careless in terms of hygiene, supervision and handling emergencies. All these are in a primitive state and need more attention.

Financial protection
The role of the public health sector is modest in protecting the citizens in case of surgeries and catastrophic illness, because in general the public hospitals cannot ensure services for many people, and not all the required medicine is available in the public hospitals: “A friend of mine has a chronic disease and the public hospitals cannot provide him with all the necessary medicine, because it is not available in the public hospitals. He has to buy it from the private pharmacies although he needs it regularly”.

Satisfaction with the public health sector

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In general, he is not completely satisfied with the public health system, and the situation would be worse in the case that he was in need of an operation. “I am satisfied with the current situation to a degree of about 60%, this would be in normal cases, but if I was in need of an operation then I would be satisfied to a degree of less than 60%”.

Part II

The draft law on health insurance
When he was asked about the draft law on HI’s introduction for civil employees in the public sector, he said, “No, I have not heard about it”. He mentioned that professional people and industry workers should receive priority of access to health insurance over administrative employees, because the former’s situation is more difficult: “Those who work with machines or whose work is dangerous, their insurance is modest in proportion to the danger of their work and they are in need of better health insurance than they have now”.

Willingness to participate in the National Health Insurance
With respect to his willingness to participate in the proposed NHI, he linked his participation in the NHI to some conditions that should be met in the new NHI system such as provision of excellent quality health services, limited waiting times for access to health services, coverage of members of the family, and that the government must support the salaries of low-income earners in order for them to be able to afford the monthly contributions that would be paid for NHI: “In the current situation the employees would not be able to pay their contributions, because their salaries now are not enough before the payment of health insurance fees”.

Management of the NHI
He thought the NHI should be run by the private sector: “The for-profit company, in other words, a company in the private sector, is better at management”.

Paying for NHI
He said that if it were a small proportion of the salary which would go to the fund, it would not have a bad effect on him and at the same time all the employees would benefit.

He preferred to pay a percentage of his salary for NHI, because it is a fair method. Not all the employees or workers receive the same salaries, for example in the public sector, according to the level of education there are 5 categories of employees from 1 to 5 and they do not all receive the same salaries: “It is better to calculate the contributions on the basis of a percentage of the salary, such as 5% for example, so it would fair for the lower-income earners. I would prefer to pay a percentage of my income to achieve equity”.

**Insurance plans and services covered**

When responding to the question about insurance plans and services covered, he answered that the selection of insurance plan is related to income, and he added that he couldn't decide because he has a limited income and he would pay more or less according to his income: “The situation is different for those with a low income. I cannot pay 70%, for example, from my income on health care and live with my family on the rest”.

However, he wished for the insurance to cover every health service, especially the surgeries which cost a lot of money and present a burden on the patient: “Health insurance should cover everything in the case that the person is exposed to any illness or accident, but there are some things that are more important than others, such as surgery, because of its high cost and many people have to borrow to have an operation”.

**Collection of the contributions for NHI**

He thought that the private sector is a better collector of the contributions for the following reasons: it could invest the surplus of the collected funds in other charitable projects, the private sector as the for-profit sector can use the money in an efficient way and it has a good management system: “The private sector is interested in profit. I do not trust the private sector more than the public, but the point is that the private sector has strong managerial organization”.
Risk pooling
He said that risk pooling should be at the national level through a company. This company should have many branches to cover the whole country and serve all the community.

Purchasing of health services
The public sector is in need of a new institution that is a specialist in the area of purchasing health services; this institution would ease the work of the public hospitals. He added that since the private sector has more control and a greater supervision system than the government sector, it is better that this institution be private, but the government must control and observe this institution.

Providers of health services
He said, “In general and in the current situation I am with the private sector, but if the health services became better in the public sector I would go there”.

Membership in the NHI
With respect to membership in this NHI, he said that voluntary membership in NHI would be better because in the case of mandatory membership so that the health insurance would cover all people, some problems could arise such as that the health insurance company would not be able to force the entire health sector to work with it. On the other hand, if there were special hospitals and doctors contracted with the health insurance company and membership was mandatory this would mean many people would use health insurance facilities and these health facilities would be overcrowded. However, if the membership was voluntary the pressure on these facilities would be less.

The solidarity principle
He said that he would probably help the poor to access the HI. But the problem is that a large category of people will be in need of help and many people will say they are not prepared to pay for others because their income is low: “Willingness to help poor people is dependent on salary, which is insufficient in general”. He added that the idea of solidarity exists among the Syrian people and this is clear from the existence of
charities: “Without voluntary contributions these charities would have been forced to stop working a long time ago”.

He proposed using a special stamp for the poor. Also, contributions should be a small proportion of salaries that do not negatively affect the person. The state should also support the poor people.

The future of public hospitals under the NHI

With respect to the future of public hospitals that could not achieve the required criteria to contract with HI, he suggested that they should re-qualify and be incorporated into the insurance system. Also, he supported the idea of converting a part of some public hospitals into paid departments as a way of increasing their resources: “Some government hospitals have opened a private part, and its profit is used in these hospitals. Even in a military hospital there is a special section that provides operations at a low cost compared to operations in private hospitals, so now it has its own source of profit”.

4.4.6 Interview 6

This respondent is 39 years old, the mother of three children, and lives in an urban area. She is a self-employed pharmacist. Her own income is 50 000 S.P monthly, and her family's total income is 100 000 S.P monthly. She has health insurance through the Association of Pharmacists which has a contract with a private insurance company. The Association of Pharmacists deducts the insurance payments once a year from the fees paid by the pharmacists to their Association. Her children are also covered by this health insurance. Her husband has his own insurance through the Association of Engineers to which he belongs. Her insurance covers caesarean operations and other operations that are done in the private hospitals.

Part I

Understanding of health insurance
She defined health insurance as arising from the need for people, particularly for limited income people, to reduce the financial risk resulting from catastrophic illness through reasonable contributions: “Health Insurance is a necessity for people, particularly for the employees sector. HI is a means to provide health security at minimal or reasonable costs”.

Satisfaction with current health insurance
She is not satisfied with her HI because this insurance does not cover the costs of medicines and check-ups: “The costs of medication are not included in the HI, and the costs of medication are proportionally high”.

Expenditure on health
She has no problems in affording the cost of medical treatment.

Income elasticity for health care
Except for dental treatment, income elasticity for health care services is inelastic in general, because she considers the health of her children an essential need that can not be ignored: “When it comes to the needs of my children for drugs, I will not save money even if that forces me to beg”.

Advantages and disadvantages of the public health system
When responding to the question about the situation of the public health system, she said this system provides vaccines for children and free treatment. Drugs are available so that patients can get medication easily. The public hospitals are equipped very well but the managers and the staff deal with patients in a poor manner, also, their experience is not very good. She complained about the dual work of doctors in public hospitals and private ones: “The doctors who work in public hospitals push the patients to have operations in their own private surgeries. Doctors justify this by claiming that there are not enough places for patients or their turn in the hospital would be very late”. The doctors and nurses treat patients in a bad and inhumane manner.

Financial protection
She does not trust that the public health system could help her in the case she had catastrophic illness: “Based on the cases I have witnessed, the public health system does not benefit patients. The patients were forced to sell their possessions to be able to cover the costs of their medical treatment”.

**Satisfaction with the public health sector**

In general, she is not so satisfied with the public health system “The management and the style of dealing with patients are not satisfactory. Also, hygiene is very bad; you can confirm that by writing the mark x ten times next to this”.

**Part II**

**The draft law on health insurance**

She had not heard about the draft law of HI´s introduction, but she was enthusiastic for this law: “It is an excellent idea”.

**Willingness to participate in the National Health Insurance**

She encouraged the idea of the establishment of the NHI and she was willing to participate in it: “I would participate in this system and pay monthly contributions”.

**Management of the NHI**

She thought that the NHI should be run by the public sector which has a better disciplinary system than the private one, and it is more trustworthy: “The public sector has more strict supervision and it is more trustworthy”.

**Paying for NHI**

She would pay 5000 S.P monthly for NHI. She linked the means of payment for NHI with the nature of her work, as the income that results from her work as a pharmacist is not stable and it varies at least from one season to another. Therefore, she preferred to pay a monthly flat rate contribution: “Taking into account my job circumstances, I would pay a monthly flat-rate contribution”.

**Insurance plans and services covered**
She would select the better insurance plan to reduce the risks, however she added the contributions should be reasonable. Also, she linked the selection of a better insurance plan with the financial situation: “I would select the possibility to receive a wide range of health services, because I am worried about my children. However, the financial situation should be taken into account, but definitely a reasonable higher contribution”. She said the NHI should cover the cost of operations, medication, teeth treatments, eye treatments, etc.

Collection of the contributions for NHI
She confirmed that the public sector is more trustworthy for the collection of these contributions for NHI: “I trust the government sector”.

Risk pooling
She answered that risk pooling at the national level would be better able to mobilize more resources for NHI, as a result this structure would reduce the risk and increase security for members: “I would prefer to share the risks at the national level, because the collected money would be more and people would feel more secure”.

Purchasing of health services
In her view a well supervised public company would be better able to purchase the health services in the proposed NHI system.

Providers of health services
She would prefer to receive health services under the proposed NHI from public hospitals, where she feels more secure with the public sector, particularly if it is supplied with a trustworthy staff, because its resources would be better than those of the private one.

Membership in the NHI
With respect to membership in this HI she recommended that the optional membership in NHI would be better: “The individual would choose freely whatever is more suitable for them”.

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The solidarity principle
She linked help for the poor with the financial possibility: “I will support the poor people if it is possible”. She thought support of poor people is the responsibility of the government and privileged people at the same time: “The poor can be supported through co-operation between the government and individuals”.

The future of public hospitals under the NHI
She confirmed the important role of good management in improving the public hospitals: “The public hospitals should be enhanced by improving their management”.

4.4.7 Interview 7
This respondent is 44 years old, has a graduate degree, and is an employee in the General Social Security Organization. He lives with his family, which includes his wife and 3 children, in an urban area. His salary is 15,500 S.P monthly. In addition to his salary there is an income coming from agriculture of between 10,000 and 15,000 S.P monthly. He participates in a health benefit scheme as part of his job benefit package. He does not pay any fees for this scheme, where the organization pays on behalf of its employees in the case of illness. This benefit covers him only, not his family. It covers the cost of doctor check-ups, medicines, and medical services within the contracted hospitals. The organization contracts with some private hospitals, so the employees are referred only for these hospitals, if they went to other hospital without a referral, the organization would pay only the cost according to the price set by the Ministry of Health and the patient would have to pay the difference.

Part I

Understanding of health insurance
He defined health insurance as to the health benefits provided by his department: “Our organization treats us and refers us to hospitals as necessary and the medicine is free”.

Satisfaction with current health insurance
He is not very satisfied with his current health benefits because his family is not covered by these services, although this health benefit scheme provides good health services free of charge.

**Expenditure on health**

His income is not enough to cover the cost of medicines and check-ups in addition to living expenses, therefore, he sometimes has to borrow: “*My income is not commensurate with the costs of drugs and check-ups, and living expenses. So I am forced to borrow*”. He added that the cost of medical care changes from one month to another, sometimes it is about 2000 S.P, where a doctor’s check-up is alone 600 S.P.

**Income elasticity for health care**

He thought that health care needs, particularly his children’s need for health care, is an essential requirement which cannot be postponed even he is forced to borrow. Therefore, the income elasticity for health care services is low in general for him: “*Even if my income was higher, my expenditure on health would stay the same, because a person cannot postpone medical care and taking children to the doctor*”. Only the number of visits to specialists would increase if his income was higher, while the usage of other health services would stay the same.

**Advantages and disadvantages of the public health system**

He said there are a lot of public health facilities such as hospitals and medical centres and most of them are free of charge and they provide acceptable services. On the other hand, there is bureaucracy, long waiting times for access health services in public hospitals, and the number of the medical staff is not enough. The hygiene in public hospitals should be better: “*There is a problem with the bureaucracy in public hospitals and there is also not enough care. Some surgeries are postponed for more than 5 months in public hospitals, and some medical equipment is not available*”.

**Financial protection**

He thought that the public hospitals can protect his family in the case of catastrophic illness, without going to private hospitals and paying a lot of money there: “*Government hospitals are good and you can dispense with the private hospitals and go*
to public ones”. He added that the autonomous public hospitals have proved their efficiency and have provided good services: “The government hospitals which require payment are better than private hospitals because they are not free, especially for treatment of heart disease”.

Satisfaction with the Public Health Sector
In general, he is satisfied with public health system: “The service is good; there are a lot of medical centres and public hospitals”.

Part II

The draft law on health insurance
He has not heard about the draft law on HI’s introduction for civil employees in the public sector.

Willingness to participate in the National Health Insurance
He is willing to participate in the NHI and he thought it is a good project and will meet the needs of employees for health services.

Management of the NHI
He said the successful management is dependent on good staff and excellent managers, and the sector that had these factors would be more efficient in the running of the NHI system: “If the public sector failed to provide staff and managers of a high quality, I think the private sector would be more efficient”. He believed that the public sector would have more compassion towards people, and as a result, it would impose smaller contributions for NHI in comparison to private companies that are interested only in their profits: “The public sector tends to show more care towards the citizens than the private sector, and as a result the size of the contributions would be smaller”.

Paying for NHI
He stated that because the employees receive a limited salary, paying a percentage of this salary for the NHI makes the insured employee feels more comfortable: “I would
prefer to pay a percentage of my salary monthly, in this way people will not feel the financial burden of payment because their income is not enough”.

He said that only salary should be taken into account for NHI contributions, and that he should not pay more for the NHI on the basis of additional income such as that resulting from agriculture.

Insurance plans and services covered
He would select the better insurance plan to face any risk, because the person is subject to many health problems: “The health situation of the individual is unstable and prone to a lot of problems that could require long treatments, in addition to serious diseases”. He confirmed that NHI should cover all health services.

Collection of the contributions for NHI
He confirmed that the public sector is more trustworthy for the collection of the contributions for NHI, while the private one does not have people's confidence for this task: “I trust the government because it is trustworthy and it maintains its people's funds. Confidence in the private sector is very scarce, especially these days”.

Risk pooling
He preferred the structure of risk pooling to be at national level: “I would prefer to share the risks with the whole population of the country”, because in this case the health services provided would be good and the revenues will be adequate and able to benefit all people.

Purchasing of health services
In his view the government is better able to purchase health services through special centres: “The government should have special centres to buy the health services and then distribute them at the national level”.

Providers of health services
He would prefer to receive the health services under the proposed NHI from public hospitals: “I trust the public hospitals more than private ones”.

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Membership in the NHI
He recommended mandatory membership, because it would secure high funds for the NHI system, and all people could also benefit from the services of NHI: “If participation was mandatory the income of this fund would be proportionally high, and all citizens would be eligible for the insurance services”.

The solidarity principle
He related the ability to help poor people to one's financial situation. He proposed to give poor people the right to participate in the NHI free of charge, while the rich people should contribute to finance the NHI on behalf of poor people: “Maybe we let the poor participate in insurance funds free of charge, and the very rich may contribute to cover the costs of the participation of poor people in this insurance”.

The future of public hospitals under the NHI
He said these hospitals should have a supervision system to control their work. He added that to close these hospitals would not be a wise solution: “The error must be monitored and dealt with. If we started with closing the unsuccessful hospitals, one day all the public hospitals would be closed”.

4.4.8 Interview 8

This respondent is 50 years old, his level of education is preparatory, and he lives in a rural area. He is an employee in a formal private company, and he is registered with the General Social Security Organization. He works on his land with his family, which includes 5 children and his wife. His salary is 15 000 S.P. Monthly and the total income of his family is about 25 000 S.P monthly, including his salary and income from agriculture. He has no health insurance.

Part I

Understanding of health insurance
The notion of health insurance was not clear for him, so he defined health insurance as free services provided with public hospitals: “It means that the public hospitals provide their services for all people”.

Expenditure on health
In general he has no problems affording the cost of health care, although these costs vary from one season to another: “Whether or not my income is enough depends on the current health situation of my family. I spend about 3000 S.P on medical care monthly, especially in winter when there are more illnesses like influenza”.

Income elasticity for health care
He believes that illness is a serious problem, and one cannot be stingy in this area, and the public hospitals would be a good alternative to private ones in the case a patient had no money. For him the income elasticity for health care services is elastic for the dental services, usage of laboratory services, and buying better quality of medicine, while it is inelastic for visit to specialists, which depends on health status only: “I am interested in repairing my tooth. If I had no money I would take inflammation tablets, but if I had money I would go to dentist”.

Advantages and disadvantages of the public health system
He mentioned that the public hospitals are good and services provided are free of charge: “Last year my father accessed the public hospital in an emergency and he did not face any problems there. The doctors and nurses were good and the health services were good also”. However, the hygiene is not very good: “The people inside these hospitals throw away paper on the floor, and there is no punishment for this behaviour”. Also, there is favouritism: “There is a head and shoulder among people. All people should receive health care and people should be treated equally”.

Financial protection
He said public hospitals can protect him in some cases but not in the case of complicated surgery, due to a lack of equipment: “If the public hospital is supplied with good and sufficient instruments I would prefer to go to this hospital because it is free,
but in the case this equipment is not available I would go to a private hospital. For instance, in the case of heart diseases, who goes to a public hospital?”.  

Satisfaction with the Public Health Sector
He is satisfied with the public health system, and he confirmed that the public hospitals’ performance has improved in the last ten years: “It is good, especially if we compare the current situation of public hospitals with their situation 10 years ago, now they are better”.  

Part II

The draft law on health insurance
When he was asked about the draft law on HI’s introduction for civil employees in the public sector, he said, “Because I work in the private sector, I have not heard about this law”.  

Willingness to participate in the NHI
He is willing to participate in the NHI system in order to reduce the financial risks in the future: “Through paying a monthly contribution, for example 2000 S.P, the burden will be relieved later if I face any problems and need the services”.  

Management of the NHI
He stated that the private sector is better able to run the proposed NHI system and it would best ensure the success of the project because it is keen on its reputation, and it would be able to face the corruption through its strong system of accountability: “The private sector is interested in maintaining a good reputation and also the private sector has a strong supervision system to avoid corruption”.  

Insurance plans and services covered
When responding to the question about insurance plans and services covered, he linked the selection of insurance plan with his financial situation, and he said that health is not the only necessity, there are a lot of expenses where the prices are too high, and there is extra expenditure in winter or in periods of feasts. Therefore, there should be
equilibrium among these costs: “Then I would select the option according to my expenditures and how much money remains from my income at the end of the month”. For the covered services, although he chose to pay a smaller contribution for fewer services, he expected to receive all the health services that he might need one regardless of the type of insurance plan, due to the fact that he may pay for this insurance for many months without using its services, therefore one day he may need the health services, and the NHI should then provide him with what he needs: “As long as I pay for health insurance I want to be covered for everything, such as operations, medicines, and check-ups”.

Paying for NHI
He preferred to pay a percentage of his wage monthly, because he thought this method would relieve the burden of payment: “I would prefer to pay a percentage of my wage monthly, for example 2% or 3%, so the contribution would be deducted from the salary without my feeling its burden”.

Collection of the contributions for NHI
In relation to the question about which sector is the best able to collect the contributions for the HI, he said that both the public and the private sector have their own problems, and that the most important issue is that the collector of contributions should be a trustworthy agent: “I would pay trustworthy institutions that transfer these collected contributions to the responsible agent. The most important thing is that they are trustworthy”.

Risk pooling
When asked about the structure of risk pooling, he answered that risk pooling at the national level would better cover all people with the services of the HI system: “With the whole population of the country, so all people in the country can benefit from this health insurance and receive its services”.

Purchasing of health services
He mentioned that the agent that would purchase the health services within the NHI system should be trustworthy regardless of whether it belonged to the public or private
sector. However, he thought the private sector would be better able to buy these services because it can control the costs and it has good supervision system in contrast to the public sector: “The private sector would be better able to purchase the health services because the public sector suffers from corruption and there is a lack of good supervision in its work”.

Providers of health services
He prefers to receive the health care within the proposed NHI from the public sector because it is more trustworthy: “I trust the public sector more than the private sector. So the public sector means the government, which I trust in”.

Membership in the NHI
With respect to membership in this HI, he answered that mandatory membership would be better as long as all people would benefit from NHI: “Mandatory membership would be better, because of the fact that the benefits of this insurance are for all people”.

The solidarity principle
He said that the payment for health insurance should be in accordance with the income of individuals, so those in a weak financial situation should not pay for NHI and the rich people should pay instead of the poor ones: “The people should help each other, what is the problem if the poor person does not pay? Maybe one day his son will become rich and pay for this insurance”.

The future of public hospitals under the NHI
About the future of the public hospitals that may not meet the required criteria that would make them legible to have contracts with the HI system, he said they should improve the public hospitals and defeat corruption, as there is poverty in the Syrian community and people are in need of these free public hospitals. He said, “Personally I would like the public hospitals to become better than the private ones. Everyone wishes the same that they do not need to use private hospitals, God help people, they suffer from poverty”.

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4.4.9 Interview 9

This respondent is a teacher, with a graduate degree, and is 40 years old. He lives in a rural area with his family, which includes his wife and 4 children who are still dependent on their father's income. His salary is 17 000 S.P monthly. Also, he has a car and cement machine but his sons and brother work on them. The total income of his family is 30 000 S.P monthly. He participates in the health insurance fund which belongs to the Teacher Association. He pays 1% of his salary monthly for this fund, which covers all his family members except his sons who are older than 18 years of age. The insurance fund pays for 50% of the value of medicines prescribed by those doctors. For tests and operations in private hospitals the insurance pays for 25% of their value. However, the teachers pay the complete fees for check-ups.

Part I

Understanding of health insurance

When he was asked about the meaning of HI, he defined it according to the services covered through his health insurance: “They reimburse us half the value of medicines, but other health services covered within this HI are negligible and calculated on illogical grounds, because they are not estimated according to the real price or the price in the market, their estimates are less than the market prices”.

Satisfaction with current health insurance

He is not so satisfied with his current health insurance because most health services covered within this HI are inadequate, and the compensation is calculated according to the prices set by the Ministry of Health, which lower than the actual prices, and as a result the insured employees have to pay extra money to cover the difference between the two prices: “The insurance fund estimates the costs of health services paid for by teachers to be less than they are in reality”.

Expenditure on health

When responding to the question about his expenditure on health, he said: his salary alone is not enough to cover life expenditures including health care costs: “If I were
dependent only on my salary, certainly I could not afford the health costs. But by relying on my other job, yes, I can”.

Income elasticity for health care
The income elasticity for health care services is low in general, where he thought that health care is dependent on what God wants. So if his income was more he might pay more for dental treatment because it costs so much and the employees with proportionally low incomes cannot afford these costs, and he might buy better quality medicine also. The frequency of visits to specialists and use of laboratory services would depend only on health status.

Advantages and disadvantages of the public health system
When he was asked about the situation of the public health system, he mentioned in general that the health services provided by the public health sector are good. However the members of staff deal with the people in an inhuman way: “The attitude of the staff towards the patients is not good in general”. The hygiene is not good: “Some departments in public hospitals are not as clean as they are supposed to be in a hospital”, and not all the sorts of medicines are available, which presents a pressure on patients, because the cost of medicines is a particularly significant cost. The doctors working in medical centres are not always available, also, the medicines are not available all the time in these centres: “Medical centres allocate the medicine in a random way so the medicine is available in one week and for the rest of the time the medicine is unavailable”.

Financial protection
The public hospitals cannot protect the patient against the financial risks resulting from catastrophic illness due to long waiting times: “I cannot have an operation in a public hospital within the necessary time frame because of long waiting times”.

Satisfaction with the Public Health Sector
His satisfaction with the public health sector is acceptable.
Part II

The draft law on health insurance
He had not heard about the draft law of HI’s introduction for civil employees in the public sector. He is in favour of the establishment of HI: “It is excellent idea”.

Willingness to participate in the National Health Insurance
His willingness to participate in the NHI system is related to how much the contributions would be: “How much would the payments be for this insurance?”

Management of the NHI
Regarding the management issue of the proposed NHI, he thought the NHI should be run by the private sector, which has proved its efficiency: “The private sector has proved its efficiency more than the government sector”.

Paying for NHI
He would prefer to pay a flat-rate contribution monthly for NHI. He would prefer that the contribution be determined according to salary only because his other income is unstable: “My second income is not a fixed income and it depends on the nature of my work, especially in winter it may stop two or three months, so how would I be able to pay then?”.

Insurance plans and services covered
When responding to the question about insurance plans and services covered, he linked the insurance plan selected with the level of income: “I would prefer to select the insurance plan with less health services, because it would be difficult to spend a significant portion of my salary on health insurance”. However, he expected to receive better services within NHI than the services provided through the current system: “Then there would be fewer services available to me, but more than the services currently available”. The most important services that should be covered by the NHI system are particularly the costs of operations, and laboratory analysis.

Collection of the contributions for NHI
In relation to the question about which sector is best able to collect the contributions for NHI, he confirmed that the private sector is more suitable for the collection of these contributions for NHI.

**Risk pooling**

When he was asked about the structure of risk pooling he answered that the risk pooling structure should be at the national level to serve all the citizens, particularly the poor: “With the whole population of the country, as it would be better that as many people as possible can benefit from this health insurance, particularly the poor people”.

**Purchasing of health services**

He mentioned that the private sector is better able to purchase the health services within the proposed NHI system, because it is well supervised.

**Providers of health services**

He would prefer to receive health care within the proposed NHI from the public hospitals, if they were competitive with the private ones in term of performance: “If the same services were provided in public and private hospitals I would not distinguish. But I would prefer the public, if its performance were to be improved”.

**Membership in the NHI**

With respect to membership in this NHI, he recommended the optional membership due to the fact that it allows the person to be free in joining the health insurance scheme: “People should not feel forced to participate in the NHI, it is better that they freely makes their decisions”.

**The solidarity principle**

To explore the solidarity notion in Syrian community, he was asked if he would be prepared to pay more for NHI than the poor people. It was clear he was enthusiastic to help the poor, and that he believed that poor people have the right to share the funds of rich people according to the Zakat religious duty: “Of course I am prepared to. I feel that the poor have a right to the funds obtained by the rich people, so the poor must receive a portion of these funds according to the principle of Islam Zakat”. He proposed
developing a health program to define the people in need and support the ill people who cannot afford the cost of health services: “It is important to define the people in need and develop a health program, so that in the event of illness or in the case of serious need these funds can be distributed among them periodically”.

The future of public hospitals under the NHI

He said that as long as these hospitals have been given the opportunity, but have not succeeded, they should not continue their work. They should improve their work and performance: “If they fail to prove that they are useful and continue their work in the same system, it would be preferable that they do not continue their work”.

4.4.10 Interview 10

This respondent is a retired teacher and 60 years old. He has a diploma from Syria, and did a diploma in mechanical engineering in Germany. He lives in a rural area with his family, which includes his wife and 3 children who are still dependent on their father's income. His salary is 17 000 S.P and it equals the total income of his family. He still participates in the health insurance fund that belongs to the Teacher Association, after he retired. Now he pays a flat-contribution about 2820 S.P yearly for this insurance. This insurance covers him and his wife, while his sons are older than 18 years of age and his daughters are married. The insurance covers about 30% of the cost of operations in private hospitals according to Ministry of Health prices, and 50% of the value of medicine according to prescriptions signed by doctors who contract with the Teacher Association. He pays the entire fee for doctors in case of check-ups. But if he goes to doctor who is contracted with the Teacher Association, he will pay no fees.

Part I

Understanding of health insurance

He defined health insurance as membership in a health benefits scheme: “I am a member of the health benefits scheme of the Teacher Association so I have a copybook as an insurance card. This card covers me and my wife”.
Satisfaction with current health insurance
He is not satisfied with his HI, because the HI has suffered from deficits that have caused it to reduce the compensation paid out: “I am not satisfied because 10 years ago the insurance covered 75% of the value of medicine but now it covers only 50%. Their excuse is that there is a deficit in the fund”. Therefore, he is interested in changing his current HI: “Yes of course I want to change my current insurance”.

Expenditure on health
Although this insurance pays half of the value of medicines, he has to pay between 2000 and 2500 S.P monthly for health care which places a burden on his income: “In general I pay between 2000 and 2500 S.P monthly, in this situation the health costs present a problem but in general the situation is not bad”.

Income elasticity for health care
When he asked whether his health expenditure would increase if his income was greater, he said that it would not because this increase would be used to cover other life requirements: “If my income was greater my expenditures on health would stay the same but of course it is not easy to ensure the requirements of life”. However, when the issue was discussed in detail it was clear that his income elasticity for health care services is high, whereby he would go to private health facilities instead of the public health ones and his preventive health services would be increased if possible.

Advantages and disadvantages of the public health system
When responding to the question about the public health system situation, he said the public hospitals are necessary to help people: “Without the public hospitals the situation would be so bad”. The Ministry of Health provides good services: “In Syria both the Ministries of Education and of Health are good and the people are satisfied with them. The Ministry of Health provides good services”. Not all medicines are available in public hospitals which places a burden on citizens: “Many types of medicine are not available in public hospitals, so we have to buy them out of my own pocket”. Favouritism prevails in the public hospitals: “If I and my wife entered the hospital, we would not receive the same care or attention as the person who has privileges, who
would receive better care, and doctor would visit him more”. He criticized the referral system in the public hospitals and inequity in the treatment of patients: “When one goes to the clinic of a doctor who contracts with a public hospital, and this doctor refers him to this hospital, then the patient will receive greater attention there, while in the case of emergency for other patients it is possible for the patient to stay for 24 hours without a doctor coming to see him”. Patients have to wait a long time to have an operation done: “In public hospitals the patients have to wait a long time, maybe 3 or 4 months, to have operation done”. The doctors in ambulatory clinics are not specialists.

Financial protection
The public hospitals may provide a part of the necessary services but not all, in other words, the public hospitals do not completely protect the patients against financial risks: “I know someone who has a chronic disease, the hospital has provided a part of his treatment while his family has paid the bigger part of his treatment costs”. “My son had an operation done in a public hospital, but we had to buy a metal bar for his surgery, this bar cost about 37 000 S.P”.

Satisfaction with the Public Health Sector
In general, he is not very satisfied with the public health sector.

Part II

The draft law on health insurance
On the draft law on HI’s introduction for civil employees in the public sector, he said that he had been given a form about health insurance, he filled it in, and he is now waiting for this insurance. It is a good law: “The people feel safe when they have health insurance. If my income was low but I and my family had health insurance I would feel secure”.

Willingness to participate in the National Health Insurance
I would be prepared to participate and to pay for HI.

Paying for NHI
He would prefer to pay a percentage of his income for NHI, because he thought it would be easier than paying a flat-rate contribution: “I would prefer to pay a percentage of my income monthly, that would be easier than paying a sum at one time, which would cause difficulty or confusion”.

Management of the NHI
Regarding the management issue of the proposed NHI, he thought the NHI should be run by the government sector, because it has stronger supervision and discipline system than the private sector: “The government sector would be better able to run the NHI, because there is supervision and the employees are accountable for their work”.

Insurance plans and services covered
When responding to the question about insurance plans and services covered, he linked the selection of a better health insurance plan with feeling more secure and reducing financial risk in the future: “If you pay monthly a bigger amount then you would be sure that if you got ill or had an accident one day you would be able to access good services”. He classified the importance of the provided services according to the following hierarchy: a regular check-up, laboratory analysis, surgeries, and medicine, which is also important to complete the treatment.

Collection of the contributions for NHI
He confirmed that the public sector is better able to collect these contributions for NHI, because the public sector is more secure than the private one, which is subject to bankruptcy: “The government sector because it provides more security and safety for citizens than the private sector, because the latter might become bankrupt”.

Risk pooling
When he was asked about the structure of risk pooling, he answered it should be at the national level, so the NHI would be more able to take more responsibility, and at the same time its revenue would be greater: “On a central level, then the NHI will be able to afford the great burden, and its returns will be bigger”.

Purchasing the health services
When asked about purchasing the health services within the proposed HI system, he recommended that every association, such as those for teachers or workers or students etc, purchases the health services or contracts with health providers to ensure the health services for their members and defend their interests. He justified this with the fact that these organizations best know about the needs of their members and will defend their rights: “I trust the Teacher Association more than any other group. At least those who work in this association are my colleagues and maintain the rights of other colleagues”.

Providers of health services

He stated the public hospitals are better able to provide health care within the proposed NHI, because there is good supervision of their work: “I prefer to select the hospital that works under the supervision of the government”. He gave an example about a trustworthy public hospital that provides a part of its services in exchange for charges: “In the public hospitals because there is supervision of their work. For example Al Saad University Hospital is a public hospital but it includes a paid department”.

Membership in the NHI

With respect to membership in this NHI he said that at the beginning the membership should be optional, but later when the NHI extends, improves its activities, and includes a proportionally high number of participants, at that stage the membership should become mandatory: “At first the membership should be optional, and later when the company becomes bigger and its revenue is greater, the membership should become mandatory”. He added that mandatory membership would achieve the universal coverage of all citizens, which is the last ultimate aim of this system: “Through the mandatory membership a large number people will be covered and that is the aim of this insurance”.

The solidarity principle

To explore the solidarity notion in the Syrian community, he was asked if he would be prepared to pay more for HI than poor people, and he answered that we have to support the poor people, because the situation here is so bad: “I can buy my medicine but some people cannot even buy medicine, their lives are so difficult, so what is the problem if
we help them?”. He thought that help for poor people is the responsibility of all the citizens who are able to lend a hand.

The future of public hospitals under the NHI
He confirmed that these hospitals must be improved to be at the same level as other good public hospitals, when there are more good health facilities, they will positively influence on the health and quality of people's lives: “If these hospitals were closed it would be a mistake, because when there are more hospitals of good quality the health status of the people will improve in this country and this will be a development”.

4.4.11 Interview 11

This respondent is 43 years old, his highest level of education was elementary school. He works as a farmer, and lives in a rural area with his family which includes his wife and 7 children. He said that this year there was no profit, there was a loss. The expenditure of his family is about 10 000 S.P monthly. There is no additional income. He does not participate in any form of health insurance.

Part I

Understanding of health insurance
He had no idea about the meaning of health insurance: “I have not heard anything about HI”.

Expenditure on health
His income is not enough to cover his health needs and he has to postpone visits to doctors or he has to borrow to purchase the health services: “I cannot afford the cost of medical care. I always borrow. If I don’t have money I postpone the visit to the doctor. We spend about 2000 S.P on medical care monthly”.

Income elasticity for health care
The income elasticity for health care services is high in general for him. If he had higher income he would visit specialists, dentists, and access laboratory services more, and he would also buy better medicine: "My teeth are damaged, so if I had money I would have them treated".

Advantages and disadvantages of the public health system
When responding to the question on his point of view about the public health system he said, "I have not visited the public hospital. Therefore, I do not know anything about it". The medical centres are not so good because the medicine and other provided health care services are not sufficient: "The medical centres are not good because the existing medicines are insufficient and the medical care is also inadequate".

Financial protection
He thought that public hospitals can protect him in the case of catastrophic illness, because they are free of charge: "If I do not have the money, I will go to public hospital. It can help me".

Satisfaction with the Public Health Sector
In general he is satisfied with the public health system.

Part II

The draft law on health insurance
In response to the question on the draft law on HI´s introduction for civil employees in the public sector, he said, "No I have not heard about it".

Willingness to participate in the National Health Insurance
He linked his willing to participate in NHI system with the ability of the latter to serve the people: "I would participate in NHI if this thing were to benefit us".

Management of the NHI
He thought the NHI should be run by the private sector that aims to achieve a profit, therefore, it will be interested in running this system in an efficient way, while the
absence of motivation in public sector will result in lackadaisical efforts to realize success: “The private sector is better able to run the NHI, because the private sector is interested in money, while the public sector is free and careless in its work”.

Paying for NHI
Because his income is not stable, he would prefer to pay a flat-rate contribution for NHI: “I would prefer to pay a flat-rate contribution monthly because I am not an employee, but the employees can pay a percentage of their salary”.

Insurance plans and services covered
When responding to the question about insurance plans and services covered, he said “I would pay more to receive a wider range of health services”. He added this insurance should cover all the health services that the insured may need: “Operations, medicines, check-ups, whatever can be happening to the person must be covered”.

Collection of the contributions for NHI
He confirmed that the government sector is better able to collect the contributions for NHI because it is more secure: “The government is a more secure agent for the collection of contributions”.

Risk pooling
When asking about the structure of risk pooling, he answered it should be at the country level because this system would be run by the government and it should be for all the people: “At the national level, because it is managed by the government”.

Purchasing the health services
In his view, the government sector is better able to purchase the health services within the NHI because the government can impose the rules and regulate the health providers well: “The government can control the providers”.

Providers of health services
He was asked about from whom he would prefer to receive the health care with the proposed NHI, and he said that the private hospitals are better than public ones, because
they provide better medical services: “The private hospital provides better medical care and is better than a public one”.

Membership in the NHI
With respect to membership in this HI he preferred the optional membership: “Voluntary, because the mandatory is not good”.

The solidarity principle
To explore the solidarity notion in Syrian community, he was asked if he would be prepared to pay more for HI than poor people, he answered yes, he would help the poor if he had the ability to help, as he thought that neighbours should help each other: “The help should come from the neighbours”.

The future of public hospitals under the NHI
With respect to the future of public hospitals that could not achieve the required criteria to contract with HI, he confirmed that these hospitals should be improved: “We let these hospitals stay open and help them to improve their performance”.

4.4.12 Interview 12

This respondent is 40 years old, his highest level of education was secondary school. He had been working in interior decoration in the Gulf. Now he has a water well and his own agricultural enterprise. He lives in a rural area with his family which includes his wife and 3 children. His income is between 25 000 and 40 000 S.P monthly. He has no health insurance.

Part I

Understanding of health insurance
When he was asked about the meaning of HI, it was clear that he had a good understanding of the notion of HI, where he linked HI with the solidarity principle, feeling safe, and mitigating financial risks: “HI is an issue of solidarity, and that those
who have money will help those who do not. HI is a good thing to permanently ensure the possibility of treatment with drugs and medical care in exchange for the small sum paid from the income of the person to receive treatment and medicines for him and his family, so he will always feel safe”.

Expenditure on health
In general he has no problems in meeting his family’s needs for health care, although he has to borrow sometimes: “I can afford the cost of check-ups and the cost of a dentist, but sometimes we face a bad situation and then we have to borrow, and this is a normal thing”. His wife has diabetes, but the Health Department pays for the biggest part of diabetes medicine costs, through allocation of this drug through its medical centres free of charge: “My wife has diabetes, she registered her name with the Health Department, and she gets the medicine for free, and sometimes if there is no medicine we buy it”.

Income elasticity for health care
The income elasticity for health care services is high in general. If he had a higher income he would increase his visits to doctors and access to laboratory services and he would buy a better quality of medicines.

Advantages and disadvantages of the public health system
When responding to the question about the public health system he said: in general the public hospitals and medical centers are good but not as good as one would wish in one's own country. The hygiene in public hospitals is so bad: “The hospital is supposed to smell nice and smell of disinfectant, without any unpleasant smells”. In general both the doctors and nurses do not care about patients: “There is carelessness on the part of both doctors and nurses”. The supervision system in public hospital is weak and there is no disciplinary system and transparency: “The doctors or nurses make mistake and they are not punished”. Sometimes the medicines and doctors are not always available in Health Centers “Most times there is no medicine in exterior clinics. Most doctors are not available according to their schedules”. Favouritism controls everything. He thought that the improvements in the public health system should start with changes
from the top of the hierarchy: “We should look for a good director who starts in his turn to change things towards the bottom of the hierarchy”.

Financial protection
He does not feel secure because of carelessness and his worry would be more in the case of chronic disease and operations: “There is carelessness, for example, there is not always medicine. I do not feel much security, especially if one had a chronic disease or was in need of an operation”.

Satisfaction with the Public Health Sector
In general, he is not satisfied with the public health sector because there is no commitment from the medical profession in general. Most times there is no medicine in exterior clinics and doctors are not present according to their schedules: “One time I helped someone who was injured to go to a medical centre, but we did not find the doctor there, and what can the nurse do for us if the patient was in need of a doctor?”.

Part II

The draft law on health insurance
When he asked about the draft law on HI’s introduction for civil employees in the public sector, he said, “No, I have not heard about it”. He thought this system should cover the entire population, not only employees: “This insurance is supposed to cover all people without distinguishing between employees and non-employees”. He added that all people are subject illness, and the health insurance is necessary for all people regardless of their work: “Will the employees get ill while workers or farmers will not get ill?”

Willingness to participate in the National Health Insurance
He is willing to participate in the NHI system due to the reduction of the risks and in order to feel secure and to share with others and increase the solidarity: “Of course I would participate, firstly for solidarity, second because there is insurance, so one would feel secure”.
Management of the NHI
He also thought that the NHI should be run by the private sector as it is more efficient.

Paying for NHI
Taking into account the nature of his work, he would prefer to pay a flat-rate contribution monthly.

Insurance plans and services covered
When responding to the question about insurance plans and services covered, he said he would prefer to pay more to receive more services: “I would prefer to pay more for better services”.

Collection of the contributions for NHI
He said that he preferred the government sector to collect the contributions if the private company was not trustworthy. He set some conditions before he would trust the private companies to do this task. The most important thing is that company should be trustworthy: “If the private company was well known and trustworthy, for example if it has dealings outside the country or is a local trustworthy company that has good experience in insurance or maybe if the government contributed to its capital, then I would have no problem with the private company collecting the contributions”.

Risk pooling
When asking about the structure of risk pooling he answered that the risk pooling should be with the whole population in the country to feel safe during the movement from one city to another within the country. He added that the most important thing is that the health insurance covers the whole country: “For example if I travelled to Aleppo and I had an accident there, would they get me back to my province to receive the treatment? The insurance must cover the whole country”.

Purchasing the health services
In his point of view a well known private company is better able to purchase the health services for the HI system: “The private sector is better able to purchase the health
services, especially if the company is known and has had a good career inside the country and outside, among neighbouring countries”.

Providers of health services
When he was enquired about from whom he would prefer to receive the health care within the proposed NHI he said that the private hospitals are better.

Membership in the NHI
With respect to membership in this NHI he thought that compulsory membership would be better.

The solidarity principle
To explore the solidarity notion in Syrian community, he was asked if he would be prepared to pay more for NHI than poor people, and he answered that he would support poor people, because health insurance is based on the principle of solidarity, and he suggested that a survey is carried out about the financial situation of people to recognize the portion of poor people who are in need of assistance to access to NHI system. He thought the financial situation of a person is changeable, and those who are unable to pay for NHI now might be able to in future: “The financial situation of a person is changeable, so that the situation of those who are poor now may improve one day and those people will be able to pay for health insurance in the future”. At any case help for the poor to access the HI system would be the responsibility of the government: “Supporting poor people to access the proposed health insurance system is the responsibility of the government”.

The future of public hospitals under the NHI
With respect to the future of public hospitals that could not achieve the required criteria to contract with HI, he confirmed that these hospitals should be improved. This is because the people need these hospitals to serve them and closing them would not be a suitable solution: “These hospitals should be improved, as anything is better than nothing”.
4.4.13 Interview 13

This respondent is 40 years old, and has a graduate degree. He is an employee in a government department. He lives in an urban area with his family which includes his mother, his wife who is an employee as well, and two children. His salary is 16 000 S.P monthly and the total family income is 32 000 S.P monthly. He belongs to a Cooperative Fund of health insurance in his work, and this fund contracts with a private insurance company. He pays 350 S.P which means 2% of his income monthly and the government pays nothing. This insurance covers him and his two children and his mother because she is a dependent of him; it does not cover his wife because she is an employee. It covers medicine, laboratory analysis and operations according to different percentages up to 70% of their cost. There are ten coupons annually for each employee. Through this insurance he cannot choose a doctor. Also, he can access specified private hospitals only. He has also been covered with family insurance in the General Syrian Insurance Company, which covers the cost of disease and operations, for nearly two years.

Part I

Satisfaction with current health insurance
When he was asked whether or not he is satisfied with his current health insurance, he criticized it for the following reasons, first, that they have no possibility to choose doctors or hospitals freely: “For example my wife is treated by a gynecologist and in the insurance they have contracted with another doctor, but I do not want to go to that doctor and this issue is a matter of personal freedom”. Second, he said that there no direct contact between the insured employees and the insurance company: “The private insurance company is located in Damascus, and we do not know what is happening there”. Third, there are administrative complexities, and even the contracted doctors are not happy and hate this insurance system, because it includes a lot of complexities such as a system of coupons which are distributed from Damascus where the company is.

Expenditure on health
In general, he has no problems in affording health expenses.
Income elasticity for health care

Income elasticity for health care services is high in general. If he had a higher income he would care more about his health such as having more regular laboratory tests and check-ups to check on his health. Also he would buy medicine with a better level of effectiveness.

Advantages and disadvantages of the public health system

When responding to the question about his satisfaction with the public health system, he answered that the cost of health care in Syria is low in comparison to neighbouring countries: “The costs of education and health care in our country are lower than in all the countries of the region”. The government health sector is better than the private one, which exploits the patients: “In my point of view the private hospitals are places of trading, these hospitals behave as traders”. The public hospitals and health centres are necessary to protect people, particularly the poor: “Without the public hospitals, some people would die as they will not go to private hospitals - what can the people who have no income do?” The service and its quality in public hospitals are generally acceptable. He added the public health system has suffered from lack of supervision and negligence and there are cases of indiscipline and corruption, however chaos and corruption are prevalent in all government departments so the health sector alone cannot be attacked. The problem is not lack of equipment in public hospitals but inefficiency in the use of the equipment: “In public hospitals there are great possibilities provided for health care such as computers and many staff, so they should correct the flaws”. The managers of public health system are not qualified, both the directors of the public hospitals and the director of the Health Department, who has wider responsibilities of course, are physicians: “How would the urine doctor, who has no experience, know about administration?”.

Financial protection

He has absolute confidence in the government health sector although there are a few deficiencies. The public hospitals and health centres are excellent because they provide medical care for all people: “The public hospitals protect all people, regardless of their situation”.
Satisfaction with the Public Health Sector
His satisfaction with the public health sector is excellent: “We should all support the
government health sector, because it benefits all of society, while private hospitals aim
to profit”.

Part II

The draft law on health insurance
When he was asked about the draft law on HI’s introduction for civil employees in the
public sector, he said, “No, I have not heard about it”.

Willingness to participate in the National Health Insurance
He is willing to participate in NHI insurance as long as it would be created and run by
the government, then he would be absolutely confident in it. However, the flaws must
be corrected and management must be good and honest. Furthermore, he confirmed that
the NHI system should not abandon the public health sector: “I do not want the public
health sector to be abandoned; we want to maintain the public health sector as the
dominant sector”. He added this insurance should cover all people.

Management of the NHI
He thought the NHI should be run by the public sector; however the management
should be through a board of directors that includes efficient people who have
managerial experience: “For any large organisation, there must be a board of directors
including efficient people who have managerial experience”. He criticized doctors being
managers in the health sector, because they do not have the required experience for
management “Possibly a doctor is good as a doctor but he has no managerial
experience”.

Paying for NHI
He said the means of payment to NHI should be a lump sum. This method would be
equitable, in other words, everyone would pay the same fee to receive the same
services, while he thought that payment as a proportion of income is an inequitable
means: “It is not reasonable to pay a proportion of income, for example, that one person would pay 500 S.P and another 1000 S.P to get the same service”.

Insurance plans and services covered
When responding to the question about insurance plans and services covered, he linked the selection of a better insurance plan with the notion of solidarity and reduction of financial risks. However, he confirmed that the contributions should be reasonable in any case and that the NHI system must use these contributions in an efficient way and ensure the rights of its members: “If one had paid reasonable contributions for 20 years he would forget them and would not feel their burden even in the case that he had not needed any health services throughout this whole period. But at the same time the insured must be able to be sure that the payments made for the insurance are spent in the correct way and not stolen or wasted, and that if one day he went to a hospital he would find good treatment”. He added that the NHI should cover operations, accidents or cancer or other chronic diseases, while minor check-ups are not so important.

Collection of the contributions for NHI
He confirmed that the public sector is more trustworthy for the collection of these contributions for HI; because any company in the private sector has its problems.

Risk pooling
When asking about the structure of risk pooling, he answered that risk pooling should be on the level of the province so that people could know and monitor what was happening. If the system was created on a bigger scale it would get lost, and things would not be transparent: “In terms of psychological comfort, it would be better to share the risks on the level of the province, because if the system became bigger it would be more complicated and we would return to disorder, corruption, and fraud”.

Purchasing the health services
He thought the government sector is better able to purchase the health services, however this sector should have good supervision and a disciplinary system: “But this does not mean that the government has the right to behave as a master who no one can judge or discuss”.
Providers of health services

He said he would prefer to receive health services from the public sector: “I always support the government sector.”

Membership in the NHI

With respect to membership in this NHI, he focused on many points, such as that obligatory membership is not good thing, but if the ultimate aim of the insurance company is the achievement of universal coverage, in this case the compulsory membership would be necessary: “If the company wanted to cover the whole society, it would not be wrong to make the membership mandatory”. However, in the NHI people should be given freedom of choice of doctors.

The solidarity principle

To explore the solidarity notion in Syrian community, he was asked if he would be prepared to pay more for NHI than poor people, and he answered that if he was able to help he would help: “If a person is unable to pay, should he pay? It must be a system of solidarity”. He proposed giving the poor people, who are not able to participate in this HI, the chance to access health care in public or in private hospitals through reasonable costs suitable to their financial situation: “As it was before the implementation of health insurance. At least the poor people could go to government hospitals or the private sector if it were to become common, and find the services and pay reasonable costs within their capacity”.

The future of public hospitals under the NHI

With respect to the future of public hospitals that could not achieve the required criteria to contract with HI, he confirmed that selection of good management, which has a strong disciplinary system, to run the public hospitals, is an essential means to develop their situation: “The management should be changed, when management is disciplined and its functions are compatible, then where is the problem?”.

4.4.14 Interview 14
This respondent is 60 years old, his highest level of education was elementary school, and he is an employee in the government sector. Sometimes if he finds another job after his work he does it to ensure he has money for life expenses. He lives in a rural area with his family which includes his wife and 3 children. His salary is about 12500 S.P. the total family income is 13500 S.P. monthly. He does not participate in any health benefit scheme.

**Part I**

**Understanding of health insurance**
The notion of HI is not familiar for him: “I do not know any thing about HI”.

**Expenditure on health**
His granddaughter was born in the seventh month and she has a health problems. The sickness of his granddaughter presents a huge financial pressure not only for her father but also, for all the family: “Until now we have paid about one million S.P for my granddaughter, me and her father and her uncle pay almost all our salaries for her treatment, as we cannot ignore her needs”. A huge expenditure on health care is paid out of pocket not only for fees for private hospitals but also for the transport costs. In general his income is not enough to cover all health expenditure, so he has to borrow or postpone his health care, in addition to replacing medicine with herbs in order to save the medical costs sometimes: “Sometimes we take herbs or other alternatives, so we treat our health problems by ourselves to save the medicine costs which we cannot afford”.

**Income elasticity for health care**
Income elasticity for health care services is high in general. If his income was higher he would increase his visits to doctors and buy better quality medicine: “If one was ill and he had money he would go to the doctor because health is the most important thing, but when one has no money then what can he do?”. 

**Advantages and disadvantages of the public health system**
He said the medical centres and public hospitals treat the patients free of charge and this is important for poor people. The public hospitals treat well and they have a good system: “Two months ago I entered to public hospital and I received good treatment and the doctors were excellent. The situation was good and hygiene was good. The doctors and nurses behave in good way”. He added the regulation the in public hospitals now is better than before. However, sometimes people do not find the medicine they need in the medical centres.

Financial protection
The public hospitals do not completely protect the patient against the financial risks of illness because they can afford only a part of the cost of treatment, not all of it, and because of long waiting times for access to health services: “My colleague underwent a heart operation and it cost about 90 000 S.P so all his colleagues collected some donations for him. The public hospital cannot help in these cases”. Sometime the medicine is not available in medical centres.

Satisfaction with the Public Health Sector
The existence of the public health sector is better than nothing. For example, medical centres provide some simple treatments and that is better than going to a private clinic because the doctors outside the public hospitals are traders and they care about their own interests only.

Part II

The draft law on health insurance
When he was asked about the draft law on HI’s introduction for civil employees in the public sector, he said, “No, I have not heard about it”.

Willingness to participate in the National Health Insurance
He linked his participation in the NHI system with the ability of the latter to help him: “If it will support us well, yes, I will participate”.

Management of the NHI
He thought the government sector is better able to run the NHI because it has a strong supervision system.

Insurance plans and services covered
He would prefer to select the insurance plan that would be suitable for his income “According to my income and my financial situation I would prefer to pay a small sum for fewer services”. He had no clear idea about the sorts of services covered, but he expected to receive all the services that he might need one day: “If I or any member of my family was ill they should treat us. If I was in need of an operation or I had a pain they could help us. I cannot determine what I need, maybe I would not be in need of an operation, for example if I had cancer they should treat me”.

Paying for NHI
He would prefer to pay a flat-rate contribution to NHI, this would make the insured feel more comfortable: “I would prefer to pay a flat-rate contribution monthly so that I can work for one day in building, for example, and pay this contribution and then be free of its burden”.

Collection of the contributions for NHI
He confirmed that the public sector is better able to collect these contributions for NHI, however the most important thing is the trustworthiness of the agent responsible.

Risk pooling
When asked about the structure of risk pooling he answered that it should be on the country level, and it was clear he supported the solidarity principle and his willingness to share the risk with the whole population: “With the whole population of the country, so if I or any member of my family did not get ill but another person was ill and benefited from the services of this insurance, I would feel comfortable because I did a human thing when I helped another person in need of these services”.

Purchasing the health services
In his point of view the government sector is better able to purchase the health services within the NHI because there is supervision of its work as is the case in all government departments.

Providers of health services
He would prefer to receive the health care within the proposed NHI from private hospitals: “I would prefer private hospitals of course, because there is better hygiene and better technology and I trust their work more than that of public hospitals”.

Membership in the NHI
With respect to membership in the NHI he said he would prefer it to be optional, or at least the insured people can select the insurance plan that is suitable for them: “If they offered options (insurance plans), for example paying 500 S.P for less health services, in this case they would not oblige us”.

The solidarity principle
He linked the help for others with the financial situation and ability of the person. It was clear that he had a religious motivation to help the poor: “According to my ability, but of course I help any poor if I can, I have no problem. I help the poor people as a charity”. He thought the assistance of the poor is the responsibility of rich people: “The immigrants who have a lot of money should make enterprises to employ the poor people”.

The future of public hospitals under the NHI
With respect to the future of public hospitals that could not achieve the required criteria to contract with HI, he confirmed that these hospitals are necessary, particularly for poor people who have no alternatives: “People are different, not at the same level of living, poor people need these hospitals and there is no alternative”.

4.4.15 Interview 15
This respondent is 55 years old, has a graduate degree, and is an employee in a public department. She lives in an urban area, and two children depend on her salary (12 000 S.P) and her husband's income to live. Her partner has no stable income as he has a publishing office; however her family spends between 25 000 and 30 000 S.P monthly. She has no health insurance.

Part I

Understanding of health insurance
When she asked about the meaning of health insurance, she answered that “*It means the person pays a certain amount and if he needs anything, he can go to certain hospitals or certain doctors*”. She thought that HI is a good thing and she wished to have HI at her work.

Expenditure on health
In general she can afford the necessary health expenditures, although she has to postpone some of her health care such as getting glasses: “*Our income is not enough exactly but we can manage that, for example we can postpone buying new glasses*”.

Income elasticity for health care
Income elasticity for health care services is high because of the services that one cannot ignore them may postpone. Also, if her income was higher, the regular check-ups would increase and she would buy better quality medicine.

Advantages and disadvantages of the public health system
With respect to the question about her satisfaction with the public health sector, she said that the public hospitals ensure a good chance for the poor people to be treated and cured: “*These hospitals are a good resort for the poor*”. However, the public hospitals are not good in terms of hygiene, treatment, operations, or interest in the patient. The public hospitals are supplied with good equipment but the problem is related to the staff members themselves and taking their responsibility and duty. Corruption is dominant among the doctors, nurses, and administrative members due to the lack of a good disciplinary system that punishes those who are wrong and rewards good workers. Also,
there are long waiting times to access health services: “One time I went to a public hospital and I had to wait a long time because there was a crowd, therefore I got back home without meeting the doctor”. However, nowadays there is an improvement in public hospitals.

Financial protection
The citizen can feel safe that the public hospitals provide treatment for chronic diseases such as cancer and they provide free medicine for cancer, and also, complicated operations such as open heart surgery are done in these hospitals. But the problem is with the waiting times to have these operations because is a huge number of patients. She added that the poor can also access health care in a public hospital that includes a paid department and a free department. Although in the latter department there is the problem of waiting times, the poor can find a solution and access health services.

Satisfaction with the Public Health Sector
In general she is satisfied with the public health sector. She said the government makes an effort to support the public hospitals, but the problem is with the person himself who must take more responsibility towards others. She confirmed that there have been improvements in the performance of the public hospitals that have been converted to autonomous hospitals in recent years: “Many hospitals have been improved, such as Mojtahed”.

Part II

The draft law on health insurance
About the draft law on HI’s introduction for civil employees in the public sector, she mentioned that people are enthusiastic to have HI; however the contributions should be reasonable and proportional to their income: “Now this law is discussed on the country level. Before this idea was discussed for application here on the organization level but the contributions were so high. Therefore, the employees did not want to participate although they were in favour of health insurance”.

Willingness to participate in the National Health Insurance
She linked the participation in NHI to feel of security that the HI would provide the insured person with health services as needed: “If they took a part of my income for health insurance and I was sure that if I or any member of my family was in need of an operation at any time we would find the treatment, I would not refuse to participate in HI and I would pay for health insurance if we can”. The willingness to participate in HI is a result of the bad situation of public hospitals and long waiting times: “Some people have to wait a long time and they might die before they could access health services”.

Management of the NHI
She thought the NHI should be run by the private sector. The private sector is keen to achieve profit. Therefore, it manages the project in a more efficient way in comparison to the public sector, and it provides better quality of services to attract customers: “The private sector may do its work in a better way because it is interested in having a profit. Thus it provides better services”.

Paying for NHI
She excluded the income of her partner for the payment to NHI because it is not stable: “I take into account my income only because my husband's income is not stable”. In general, she can not spare any money from her income because it is a low but if she had health insurance she would pay 500 or 1000 S.P for all her family. She preferred to pay a monthly flat-rate contribution, she thought this way of payment will make the insured people feel more comfortable: “I know this sum is for health insurance so I can put it away in the same way as I pay for other obligatory things”.

Insurance plans and services covered
She linked the selected insurance plan with the level of income: “I prefer to receive a wide range of health services, but my income is low, therefore I cannot afford the higher contributions”. For the services covered she expected to receive the best quality of services and treatment in return for the contribution paid “So what I want when I pay for health insurance is to receive the best quality of treatment”.

Collection of the contributions for NHI
She said the private sector would be better because it provides good services in return for contributions paid: “The private sector knows no mercy, but if it ensures it makes a profit it will work in good way”.

Risk pooling
In general she would be with any structure of risk pooling they would suggest. However, she preferred the risk pooling to be on the level of work, so the work of the NHI system would be observed and the employees would feel more secure: “I would prefer to share the risk with my colleagues at the work level because I consider my work team as my own family; while at the national level it would be very extended and uncontrollably large”.

Purchasing the health services
She said the private sector is better able to purchase health services within the NHI, because the private sector always provides the better services.

Providers of health services
She said that if the public hospitals offer the same quality of services the private hospitals offer (including the doctors and treatment) she would prefer the public one: “If the public hospital offered the services in correct way, why would I not go to it and benefit my country?.”.

Membership in the NHI
With respect to membership in the NHI she said that mandatory membership can ensure that universal coverage is achieved: “If the membership was voluntary many people would not participate in health insurance. I imagine that if the membership was mandatory all people would pay and all would receive the services”. She added that the government should pay health insurance contributions on behalf of the poor people who are not able to afford the cost of health insurance. She thought the mandatory membership will ensure improvements in the work of public hospitals: “If the membership was voluntary, a part of public hospital would still be free for uninsured people, which would mean that these hospitals would not be at the same level of private hospitals and the services of these hospitals would still not be good”.

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The solidarity principle
To explore the solidarity notion in Syrian community, she was asked if she would be prepared to pay more for HI than poor people, and she answered yes: “Why not? If I can I will help the poor”. She added, I would support solidarity and I would pay for health insurance whether I need it or not. She thought the government should help the poor through the Ministry of Social Affairs.

The future of public hospitals under the NHI
With respect to the future of public hospitals that could not achieve the required criteria to contract with HI, she confirmed that the public hospitals should be at the same level as private hospitals in the case they would receive the same benefits and have the same advantages. The government should apply a strong disciplinary and supervision system, and deal with the corruption in public hospitals: “The government should observe the public hospitals’ work seriously and impose punishments in case of defects”.

4.4.16 Interview 16
This respondent is 65 years old and illiterate. He is Bedouin, and works as a herdsman. He lives in a rural area with his family which includes 9 people, including his wife. His income is equal to the total income of the family, between 8000 and 9000 S.P monthly.

Part I

Understanding of health insurance
The notion of health insurance is not familiar to him.

Expenditure on health
Without the government assistance through the public hospitals and medical centres that have opened in rural areas, his income alone would not be enough to cover all his medical care needs: “I experienced a high-cost health event; at first I paid out-of-pocket to specialist doctors, but when I found the treatment would cost so much I went to a public hospital which helped me so much”.

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Income elasticity for health care

In his view expenditure on health care is changeable from one time to other: “For many years I might not have paid even 10 000 S.P for medical care, however in one month I might pay about 20 000 S.P for medical care”. Because the expenditure on health care depends on whether there is disease or not, therefore, the income elasticity for health care services is low in general. If he had a higher income his spending on health care would stay the same: “I swear if I had millions and did not have any disease, I would never do any laboratory analysis”.

Advantages and disadvantages of the public health system

The medical centres and public hospitals relieve the burden of expenditure on health through allocation of the medicines free of charge: “I do not face any problems in affording the cost of medical care because I receive most medical care from the medical centres”. The public hospitals are good and they are supplied with all the requirements. There is medicine for all needs in medical centres, and there is a lot of medicine in hospitals. However, the medical care is a little bit bad; he wished that there were more attention by the doctors towards their patients. The doctors in medical centres are not always available: “Most times I go to medical centres I do not find the doctor, and they say as an excuse that he is busy or he has a shift”.

Financial protection

He thought the public hospital can protect him in the case of catastrophic illness, and these hospitals are his first resort in the case of illness: “The public hospital is able to satisfy all my needs, because everything is available like modern instruments, so these hospitals can help me. If had illness I would go immediately to public hospitals”.

Satisfaction with the Public Health Sector

In general he is satisfied with public health system: “I am satisfied; nowadays there is no lack or problem in this system”.

Part II

The draft law on health insurance
When was asked about the draft law on HI ´s introduction for civil employees in the public sector, he said, “No, I have not heard about it”.

Willingness to participate in the National Health Insurance
He supported the idea of the establishment of NHI and he would participate in the NHI system to reduce financial risks: “Of course I would participate immediately. One day I may need an operation costing 100 000 S.P and I may only have 5000 S.P of its cost”. He related his participation in NHI with good quality and the timely provision of services: “If I need medical care one day, this fund should help me in a good way and provide me with the services I need.”

Management of the NHI
He thought that the NHI should be run by the public sector, because it is more secure and trustworthy than the private sector which may cancel its work and run away at any time. As result of this fear, he is against the private sector managing this system: “If this company was a private, I would not participate and I would advice every person not to participate with this company”.

Paying for NHI
He stated that he would pay for this insurance even he had to sell whatever he owns to spend about 1000 or 2000 S.P on this health insurance. He would prefer to pay a flat-rate contribution monthly.

Insurance plans and services covered
He linked his selection of insurance plan with quality of services provided, and the credibility of the NHI system: “If this insurance were established and their work was good and correct, then I would be pay more, not less”. From his point of view, the most important services that should be covered by the NHI system are the cost of operations: “In normal cases the medicine cost is not a problem; the most important thing is covering the cost of operations.”

Collection of the contributions for NHI
In relation to the question about which sector is the best for the collection of the contributions for HI, he confirmed that this agent should be well-known. However, the
public sector is better able to collect these contributions, because it would be easier to deal with in future than the private sector.

**Risk pooling**

He would prefer to share the risk with the whole population of the country, and he thought this insurance should cover the whole population: “This fund will be for all the country, not for one person, and every citizen should benefit from the services of this fund”. He added that in this way the person would feel safe during the movement from one city to another within the country: “I and many people have to travel from one province to another, therefore it would be better if this fund covers the whole country. For example if someone was insured in Sweida for example and he had an illness in another province, would he get beck to his city to have medical care there?”

**Purchasing of the health services**

A public company is better able to purchase health care services within the proposed NHI system.

**Providers of health services**

When he was asked about from whom he would prefer to receive the health care with the NHI he reported that the public hospital is better able to provide health care within the NHI: “Because everything is available there and the health care is good there also”.

**Membership in the NHI**

He preferred the optional membership, because some people cannot afford the cost of the health insurance contributions: “Some people cannot afford to pay one Syrian Pound for this insurance”.

**The solidarity principle**

He said of course that if he could he would help poor people: “If my neighbour is in need of course I will help him”. He thought the government should support the poor people to access NHI: “We cannot force people to help the poor but the government must do that”.
The future of public hospitals under the NHI

With respect to the future of public hospitals that could not achieve the required criteria to contract with HI, he confirmed that these hospitals should continue their work and the government should improve the work and situation of public hospitals, because, closing of public hospitals would not be to the benefit of citizens.

4.4.17 Interview 17

This respondent is 80 years old, and his highest level of education is primary school. He has his own newsagent where he sells stamps and copies of the newspaper. He lives in an urban area with his wife and his daughter. Some days he earns 50 or 100 or 200 S.P, and on other days he does not sell anything, therefore, he cannot determine his monthly income: “I do not know, I never calculate my income”. He receives medical benefits through the Handicraft Worker Association. He pays 1000 S.P annually for this service. This insurance covers the cost of medicines up to 2000 S.P annually, and half of the cost of operations. This medical benefit does not cover the cost of check-ups.

Part I

Understanding of health insurance
The notion of HI is not familiar to him: “I hear about the health insurance but I do not know what this means”.

Expenditure on health
His income is enough to afford the cost of health care: “My income is enough and I do not need to borrow. I rarely visit the doctor and take medicine”.

Income elasticity for health care
Income elasticity for health care services is low in general for him: “If I had higher income I would not spend more on health. I am healthy and I do not need to spend money on health care”. “If I have no illness why I would I have a laboratory test?”
Advantages and disadvantages of the public health system
When responding to the question about the situation of the public health sector, he said, “I have not visited the public health sector because I have not been in need of it. Therefore, I cannot say anything about the public health sector”.

Financial protection
When he was asked whether the public health system can protect him in case of catastrophic illness, he said that is not in need of the public health system, because he trusts the Islamic funds that can help the poor people to receive medical care, by paying the cost of operations in either public or private hospitals for them. This fund is financed through the donations of people who grant this fund a lot of money: “We have Alaafia Fund; it is enough for all people. It is an Islamic fund that supports poor people to receive medical treatment”.

Satisfaction with the Public Health Sector
“I heard that in Abn Alnafies (a public hospital) there are the best doctors of the whole country, but I have not tried them”.

Part II

The draft law on health insurance
When he was asked about the draft law on HI’s introduction for civil employees in the public sector, he said, “No, I have not heard about it”.

Willingness to participate in the National Health Insurance
He did not have enough motivation to participate in NHI due to the following reasons: he is old: “Because I am too old and on the verge of the grave”; the existence of the Islamic fund that reduces the need for HI and as a result reduces the willingness to participate in NHI: “We have the Alaafia Fund, that is good enough for all the people”; the social habits or religious belief: “When I get sick I fast for one day then I recover, I treat myself. I am reliant on God”; and the existence of the free public hospitals: “All public hospitals treat everything and make operations free of charge”. However, it was also clear that his willingness to participate in NHI would be influenced by the
behaviour of the majority: “But if all the people jointed this insurance, I would participate as well”.

Management of the NHI
He thought the NHI should be run by the public sector which has a better disciplinary system: “The government sector because the employees there would be accountable if they did something wrong”.

Paying for NHI
He said that his income is low because he is old and my work is little, therefore he could not pay so much for the NHI. He would prefer to pay a flat-rate contribution monthly.

Insurance plans and services covered
When responding to the question about insurance plans and services covered, he said that he would pay according to his financial situation, although he wanted to receive all the medical services that he may need regardless of the contribution paid: “They should provide me with all what I need as long as I participate with them”.

Collection of the contributions for NHI
He confirmed that the public sector or licensed association would be more trustworthy in the collection of the contributions for NHI: “The person always feels more secure with the government or licensed association than with a private one”.

Risk pooling
When asked about the structure of risk pooling he answered that it should be with the whole population of the country. He believed that the NHI should be universal for all Syrian people: “Because if the number of members was more it would be better, as it would help all the Syrian citizens”.

Purchasing the health services
In his point of view the government is better able to purchase the health services because it is unimpeachable and trustworthy.
Providers of health services
When he was enquired about from whom he would prefer to receive the health care with the NHI, he said that well qualified doctors are the essential indicator to select the hospitals regardless of whether they are private or public: “I would ask where I can find the better doctor and then I would select the hospital”.

Membership in the NHI
With respect to membership in this HI, he answered that mandatory membership would be better: “The mandatory membership would be better, then every one will do his duty and he would be obliged to pay for health insurance”.

The solidarity principle
To explore the solidarity notion in Syrian community, he was asked if he would be prepared to pay more for HI than poor people, and he answered that helping others is the first principle, because we are the same. Helping others is a natural thing and he helps poor people even though he does not know them. He added that the government and associations should do their duty towards the poor. All the associations pay for the poor: “Yesterday they said in the mosque that the Alaafia Fund has contributed to the treatment of more than 400 000 patients in Damascus”.

The future of public hospitals under the NHI
With respect to the future of public hospitals that could not achieve the required criteria to contract with HI, he confirmed that the public hospitals are free of charge and not bad. Maybe there are problems related to the behaviour of some employees in these hospitals, but the doctors do their duty in good way, and the doctor who treats the patients in his own clinic is the same doctor who is working in a public hospital: “The doctors are supposed to do their work at the same level of quality in both places because first, they are keen on their reputation, second according to their conscience, as they swear to help people”.

4.4.18 Interview 18
This respondent is 47 years old, and his highest level of education is primary school. He is a casual worker, and his profession is carpenter. He lives in a rural area with his family which includes his wife and 6 children. He works with both his sons, and the total family income is more than 15 000 S.P on average monthly: “If God was pleased, one can earn 40 000 S.P per month, it is possible in another month earn 10 000 S.P, and it is also possible that one remains for one month or more without work. Our work is not fixed but generally as average it is about 15 000 S.P each month”.

Part I

Understanding of health insurance
In general, the notion of health insurance is familiar to him, because he has worked in many countries that have health insurance companies, such as Jordan and Lebanon. He stated that the government provides insured people with the services in turn for payment for HI: “If an individual is enrolled in an institution or a particular position and pays for health insurance, then the state will have responsibility toward him in case he was in need of operation or another thing”.

Expenditure on health
In the past he had a high-cost health event: “In past my father had kidney failure, he had to wash his kidneys for 3 months in the hospital and 6 months at home, and I paid a lot of money for his treatment. I paid between 500 000 and 600 000 S.P through one year”. Although the public hospital is free of charge, and it paid a part of the cost of the medical care, he had to buy some related instruments, in addition to strong inflammation needles, which were very expensive.

He said that although the public hospital is free of charge there are indirect costs such as transport and disruption of work: “If any member of my family stayed in the public hospital for a week, there would be a lot of costs related to fees for transport and other costs which is not the surplus of income, in addition to the disruption to my work”. Also, the doctor’s fee is a burden on the citizen: “The doctor’s fee at the level of the village is between 100 and 150 S.P and it is a burden on the person in the village regardless of his income”. He added that the expenditure on health is not related to poverty or wealth.
but is related to season and environment: “The expenditure on health varies from God. In the winter season the family will visit the hospital one time at least”.

Income elasticity for health care
For him the income elasticity for health care services is high in general. If he had a higher income he would pay more attention to any health problem, whatever it was, that might happen to his family: “Now if one of my children told me that he has a pain, I would tell him to drink herbs like everyone else does, but if my financial situation was better, I would take my child to the hospital immediately to make sure”. However, he thought the income elasticity for health care services varies from one person to another not only according to financial situation, but also to his fear and concern about his family, and the size of the family: “The person who has many children is not the same as the one who has one child, in the latter case the father will be concerned about the health of the child more”.

Advantages and disadvantages of the public health system
When responding to the question about the public health sector situation, he answered that the public hospitals provide many services free of charge for all people. However, favouritism plays a role in public hospitals, although this phenomenon dominates all public departments: “If I know some doctor in a public hospital, he will help me more than another patient who is in need of treatment or medication more than me”. Also, when a patient is referred to the hospital by a particular doctor, the doctor may pay attention toward him more than another patient who was referred to the hospital in an emergency or by another doctor. Long waiting times to have operations in public hospitals are the result of exploitation of the doctor who postpones the treatment of the patient or delays his treatment until the patient goes to the private hospital. Abuse of health services provided within public hospitals by some patients causes inconvenience: “Some people enter the hospital in any occasion and in any case, although the problem is simple, thus the treatment of the simple disease may take the time and requirements that are necessary for the more serious disease”

Financial protection
The public health sector cannot protect the patient in the case of catastrophic disease such as incurable diseases, and the large operations, where the hospital bears a small part of costs, and the patient will take on the burden of the remaining costs: “In the case of incurable diseases, and the large operations, the hospital bears a small part of costs, and I would bear the remaining 60 or 70%”. Also, there is bureaucracy and complicated procedures in having an operation done in the public hospitals, especially in the case of complicated operations.

Satisfaction with the Public Health Sector
In general, although there are many defects, he considered the services provided by the public health sector to be excellent: “In the case of the public hospital I cannot say anything that they neglect, because they provide me with many services free of charge”.

Part II

The draft law on health insurance
When he was asked about the draft law on HI’s introduction for civil employees in the public sector, he said, “No, I have not heard about it”. According to HI experience in neighbouring countries, where he was working, he thought the HI system would not be successful in Syria. He added, for example, that although the HI in Lebanon has been in place since 1975, the individual can hardly receive this insurance after a lot of complications; also favouritism plays a big role in affecting how the insurance fund pays the compensation for the costs of the operation: “Then how would this project work well in Syria during the next 5 years or a year or two?”. He would prefer to stay with the government control of the health care system in Syria, regardless of the problems that have faced this sector: “I would prefer to keep the state health system, with all the corruption and all the problems, in control of the issue of health”.

Willingness to participate in the National Health Insurance
Despite his fears he is not against the project of NHI: “If this project was successful it would be excellent”. He added that the HI is necessary to reduce the financial risk: “If a middle-income patient had an operation which costs a million S.P and the insurance would pay a part of the cost and help him, it would certainly be better than if this
patient resorted to other people, or had to sell his land or his home!! I wish to create this health insurance”.

Management of the NHI
He thought that the NHI should be run by the public sector that has a better disciplinary system, so that people will feel secure, rather than the private sector: “The government sector may include one or two corrupt employees but not all. Read the news and you will notice that privatization is always accompanied by looting”. He confirmed that if the health insurance were under the authority of the Ministry of Health it would be better without any controversy: “I would prefer the public sector in which I can hold the responsible authorities to account in the case of defects”.

Paying for NHI
He said that the contributions for NHI should be small: “I am not able to pay any money. I wish the company would request a small amount for insurance for example, 50 S.P. However, if the company requested 500 or 1000 S.P I would be of course forced to pay it for my future and the future of my family”. He would prefer to pay a flat-rate contribution monthly, because his job is casual and his income is not stable: “As a stroke of luck I may make 100 000 S.P a month - it would be unreasonable to pay 10 000 S.P of it for health insurance!”

Insurance plans and services covered
He said the selection of the insurance plan depends on the income and the possibilities of each person: “Sure those who have a better potential will look for better quality and a more secure insurance plan for their family”. He added that his income as a casual worker is unstable and he cannot afford to pay high contributions for NHI. However, he thought that paying a small contribution for less services will contribute to reducing financial risk, and will create a motivation for the insured person to care more about his health; in other words it will reduce the moral hazard phenomenon and exploitation of the NHI services: “If the contribution was 500 S.P, a small sum for less services, the insured would benefit from them, and wish to be always healthy and not use any services more than is allowed”. He wished for this insurance to cover the whole cost of complicated operations.
Collection of the contributions for NHI
He said that he would prefer for the public sector to collect the contributions so that he could hold the responsible authorities accountable in the case of defects. He had a bad impression of the private sector that might run away and leave its responsibilities: “It is possible these companies are swindlers or they fail and run away”. However, he thought that the private sector can prevent the people from committing fraud and the intervention under the table, due to strict procedures that the private sector uses: “If the individual is able to procrastinate or manipulate in the state sector he will be unable to do the same in the private sector due to the presence of private actors who defend their rights or at least they can terminate the contract with this person”.

Risk pooling
He said that the risk pooling should be on the country level. This structure could ensure the continuation of NHI and it would be away from the tribal domain: “At the province level I think it would not last for a long time. Also the majority of projects at the village level are tribal and so families interfere after a while and the projects fail. Therefore anything formal would be best”.

Purchasing the health services
He thought that the Ministry of Health is best able to purchase health services within this NHI, because it is interested in buying the best quality and in ensuring the quality of medicine to preserve the health of the citizens: “The Syrian government has never imported or manufactured medicines that harm citizens”. If the purchaser was a private company then this company must be under special government supervision. He has a bad impression of the private sector, where the managers tend to increase their profit at the cost of the quality or quantity of provided services. In addition, they are unaccountable and there is no supervision in their work in contrast to the employees in the public sector.

Providers of health services
He said that the better doctors are the essential indicator to select the hospital regardless of whether it is private or public: “In this situation there is no difference between public and private hospitals where the insured does not have to pay any more for the private
hospital. Then the issue is related to the skill and honesty of the physician who will do the operation in the private or public hospital”. However, he was worried that he could not choose the doctor who would carry out operations in the NHI system: “In normal cases without health insurance, I can choose the best doctor in a private hospital. While under the health insurance system they might take me to the hospital, and determine the date of the operation and the doctor who will do it”.

Membership in the NHI
He thought that people would better accept the insurance notion if the membership was optional than if the membership was mandatory. Also, the mandatory membership would be a financial pressure on the family: “If the membership was mandatory, it would be like any financial pressure on the family”.

The solidarity principle
He said that he hopes to help the poor, however the assistance of the poor depends on the psychology of the person, his financial situation, and if the other person was in a special situation and in need of real help. The state should support the poor people.

The future of public hospitals under the NHI
With respect to the future of public hospitals that could not achieve the required criteria to contract with HI, he confirmed that the improvement of public hospitals is the responsibility of the government, which should provide them with efficient doctors, excellent nurses and the necessary opportunities. He added that the establishment of NHI does not excuse the public hospitals’ carelessness of the patients: “If there was an insurance company, would the national hospital ignore their responsibilities towards people?”

4.4.19 Interview 19

This respondent is 58 years old, illiterate, and works in a public company as a production worker. He lives in a rural area with his family which includes his wife and 7 children. His salary is equal to the total family income of 18 000 S.P. He receives
medical treatment as a benefit from his work. This benefit covers the worker only, and it covers the cost of medicines, laboratory tests and check-ups, but the total compensation cannot exceed 6000 per year. He can select the doctor he wants, and he must take the bill to his company which repays it after two months or more. But through this benefit he cannot access private hospitals.

Part I

Understanding of health insurance
The notion of health insurance is not familiar to him: “No, I have not heard about it”.

Satisfaction with current health insurance
He is not satisfied with his current health insurance because the provided medical benefits are not enough: “I have backache and have a problem due to the smell of industrial materials and the medical treatment here is not enough”. Therefore, he is looking to get better medical benefits.

Expenditure on health
His income is not enough, and he has to borrow to meet his needs for health care. He said that his children are in need of medicine but he cannot buy it because he has no money and has to wait until the end of month to receive his salary.

Income elasticity for health care
The income elasticity for health care services is high in general. He said that certainly his expenditure on health care would increase if his income increased: “I have a backache due to my work and I need to get treatment, but I cannot afford the cost of treatment”.

Advantages and disadvantages of the public health system
When he was asked about the situation of the public health sector, he said the public hospitals support the poor people: “When I get ill I go to public hospitals because I have no money to go to private ones”. The hygiene in public hospitals is good and the behaviour of the members of staff is good. However, doctors very often do not care and
delay treating their patients: “Patients may stay for two days in a bed in a public hospital without receiving attention from any doctor. I would prefer to stay at home with the pain and slow death which is more merciful than going to the hospital”. As a result of this procrastination, the patient has to pay extra costs, such as transport costs: “Because of the procrastination of doctors, the patient has to come to the hospital several times between now and tomorrow”. Also, there are long waiting times due to overcrowding in public hospitals.

Financial protection
He believes that public hospitals will protect him in the case of catastrophic illness: “Of course the public health system protects my family”.

Satisfaction with the Public Health Sector
He is satisfied with these hospitals: “Of course I am satisfied, all the hospitals are good and they are a great advantage”.

Part II

The draft law on health insurance
When responding to the question about the draft law on HI’s introduction for civil employees in the public sector, he said, “No, I have not heard about it”.

Willingness to participate in the National Health Insurance
He is willing to participate in NHI for a small contribution. However, he expressed his worry about not being able to access this HI when he becomes retired: “How I would know about this fund, when I am retired and stay at my home, as I am illiterate?”.

Management of the NHI
He thought the NHI should be run by the public sector, because it is more safe and merciful with people, while the private sector may terminate the contract with insured people following any small problem: “I do not trust the private one that may dismiss us at any time”.

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Paying for NHI
He said he can only pay 100 S.P for NHI, and he would prefer to pay a percentage of his income monthly, for example 0.5%.

Insurance plans and services covered
He said he would wish to receive the better insurance plan, but he should select the insurance plan that is suitable to his income: “Certainly I would prefer to receive a wide range of health services and pay higher contributions; if my income increased I would pay more”. He would like this insurance to cover what is necessary, such as medicine or operations: “I do not want to exploit the fund and take more than I need”.

Collection of the contributions for NHI
He confirmed that the public sector is better able to collect these contributions for NHI, because he does not trust the private sector.

Risk pooling
When asked about the structure of risk pooling, he answered that it should be with the whole population of the country because in this case the health insurance would support all people.

Purchasing the health services
In his point of view the government sector is better able to purchase of health services within NHI.

Providers of health services
He said that he would like to receive the health services from the hospital where he felt more comfortable, either in the public or private sector: “I would like to receive the health services from both - if I do not feel comfortable in the public hospital I will go to private one. They are the same so I do not mind to which one I go”.

Membership in the NHI
With respect to membership in the NHI, he said the membership is a personal affair and it should be optional: “I would prefer the voluntary membership, for me I would commit toward this fund, but about the others I do not know”.

The solidarity principle
To explore the solidarity notion in the Syrian community, he was asked if he would be prepared to pay more for NHI than poor people, and he answered that yes, he has no problem with it, and that everyone should help according to their financial situation. He proposed to allocate salaries for old people for example 500 or 1000 S.P monthly that would help them to live.

The future of public hospitals under the NHI
With respect to the future of public hospitals that could not achieve the required criteria to contract with NHI, he confirmed that these hospitals can be used as a substitute; the public hospitals cannot be dispensed with as they treat a lot of people: “We could participate in the health insurance and use the public hospitals”.

4.5 Comparison of interviews results
In this section all the items of data in one interview will be compared with data collected from other interviewees. Opinions of the respondents about each theme will be compared to underline the differences and similarities in the attitudes and opinions of the interviewees about the key questions that the study aims to answer. The qualitative data will to a limited degree be categorized quantitatively, however, at the same time it will focus on the special point of views of the interviewees that did not converge with other interviewees’ responses.

Part I

Understanding of health insurance
Approximately half the number of the respondents, from a sample size of 19, is health insured through either their work or their associations. Three of them are covered by private health insurance companies through their work.

More than one-third of the respondents were not familiar with the concept of health insurance, to the point that they did not know what the term 'health insurance' means, as they have never heard about it. Of course all of those do not participate in any form of health insurance.

The rest of the respondents defined health insurance in different ways. For example, five respondents defined HI according to the types of the health services provided through their work as benefits. Only five respondents were familiar, according to different degrees, with the definition of HI as a health care financing strategy; most of latter group defined HI as a protection of the insured person against the financial risks through prepayment: “HI is a means to provide health security at minimal or reasonable costs”.

From the statements of the respondents, it became clear that the familiarity with the concept of health insurance is somewhat related to the level of the respondents’ education. The respondents who have worked in countries applying health insurance systems, were able to explain the meaning of HI in a better way. One of the respondents could not distinguish between health insurance and other types of insurance.

Satisfaction with the current health benefit schemes and private health insurance

No one in the sample was completely satisfied with their health insurance due to various reasons:

- Two respondents said their insurance does not cover all the members of their families.
- Six respondents stated that the provided services are not enough, and less than what they expected. One said, “Of course I am not satisfied, because the benefits are few.”
One respondent stated that the moral hazard phenomenon dominates the health benefit scheme due to the lack in the beneficiaries’ awareness as they abuse and misuse the scheme.

One interviewee working in a private company linked their satisfaction with the HI to continuity of its services after leaving work: “Health insurance is valid while I am working for the company, indeed, but if I left the work here my health insurance would be cancelled”.

One mentioned there are long waiting times to access some types of health care services covered by his insurance: “In the case of operations the patient has to wait a long time, maybe about one year”.

One respondent was not satisfied with his health insurance for the following reasons. First, he cannot freely choose the doctor. Second, it is difficult to access medical care even in the rural areas due to the inequitable allocation of the doctors contracted with the health insurance company. Third, there are complications in dealing with this insurance for both the patients and the contracted doctors: “There are bureaucratic and administrative complications with the health insurance company”. Finally, the health insurance company is in Damascus and the insured employees cannot contact it easily, therefore they do not trust it so much: “The private insurance company is located in Damascus, and we do not know what is happening there”.

Expenditure on health

About half of the respondents said: their income is not enough; therefore, they have to postpone their health treatment or borrow money to pay for health care. One said, “My income is not commensurate with the costs of drugs and check-ups, and living expenses. So I am forced to borrow”. One respondent said that sometimes they have to replace the medicine with some herbs, because they are unable to afford the cost of the medicines: “Sometimes we take herbs or other alternatives, so we treat our health problems by ourselves to save the medicine cost which we cannot afford”.

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Four respondents said health expenditure varies from one season to another. For example, in winter there are more illnesses such as influenza, therefore the health expenditure is higher.

Two respondents mentioned that although the public health facilities are free of charge, there are indirect costs such as the cost of transport and disruption of work.

**Income elasticity of health care services**

The respondents were asked whether or not they would pay more for health services if they had a higher income: the income elasticity of health care services was proportionally high for about two thirds of the respondents. The income elasticity of health care services according to the different income groups can be summarized as follows:

For the first group (low-income group) the income elasticity of health care services was proportionally high for two thirds of the respondents who encounter some difficulties in affording the cost of health care. One respondent said, “If one was ill and he had money he would go to doctor because the health is a most important thing, but when one has no money then what can he do?” The remainder of this group was as few as two. One of these two respondents mentioned that the expenditure on health care is dependent only on whether or not a member of his family was sick, not on the level of the income. For the other respondent the influence of religious habits on health expenditure was clear, as he said: “I am healthy and I do not need to spend money on my health. If I got sick I would implement fasting (stop eating) for one day, then I would recover. In this way I treat myself. I am relying on God”.

One of the respondents believes the income elasticity for health care services varies from one person to another not only according to the financial situation, but also to his fear and concern about his family, and the number of members of the family.

For the second group (middle-income group), which includes nine respondents, the income elasticity of the health care services was proportionally high for the majority of the respondents, although about half of the respondents belonging to this group do not encounter difficulties in affording the costs of the health expenditure. Most of those,
who can afford health expenses, said that if their incomes were higher, they would pay more attention to preventive health care, through for example having regular check-ups and blood analysis. In addition, in this case they would buy medicines of a better quality.

One respondent of this group considered the health care needs, particularly the health of his children, as an essential need. The treatment cannot be delayed even if he is forced to lend money to pay the costs. “Even if my income was higher, my expenditure on health would stay the same, because a person cannot postpone medical care and taking children to the doctor.”

For the third group (upper-income group), which includes four respondents, except for one respondent, the income elasticity of health care services was proportionally low in this group that has no financial obstacles in affording health expenses.

Advantages and disadvantages of the public health system (public hospitals, the Medical Points program) and the satisfaction with this system

Nearly two-thirds of the respondents said that they are satisfied with the public health sector, although their satisfaction was graded starting from low to excellent.

According to the opinions of the respondents, the advantages and disadvantages of the public health sector can be summarized as follows:

- More than two-thirds of the respondents said that the public health facilities such as hospitals and medical centres provide free medical treatment for a large number of people, and the existence of the public hospitals is important to help people, particularly those who have low incomes. Few respondents went beyond that, saying, “Some people, who cannot afford the private hospitals, would die if there were no public hospitals. What can people who have no income do?”

- Four respondents stated that the public hospitals are supplied with good equipment and qualified staff who provide good quality health services, however, the quality of service varies depending on the doctors.

- Four respondents confirmed that the public hospitals nowadays are better than in the past in terms of the services provided.
Four respondents thought that the availability of paid departments\(^{18}\) in public hospitals has improved the performance of public hospitals: “The paid public hospitals, because they are not free, are better than private ones, especially in the treatment of heart disease”.

The disadvantages of the public health sector mentioned by many respondents were

- Nearly half of the respondents complained about the problem of long waiting times to access health services. Many respondents attributed this problem to the high demand on services provided by the public hospitals. Two respondents linked this to the moral hazard problem caused by the lack of people's awareness and misuse of public health services.
- About one-third of the respondents complained of favouritism.
- Four respondents said the main problem is the lack of a humanitarian style of dealing with patients.
- Nearly one third of the interviewees said the medical staff of the public hospitals does not work properly, due to the large demand on public hospitals with a shortage of available staff. Two respondents added that the staff of the public hospitals does not work properly, due to the lack of attractive work incentives. One respondent said, “I lost my twin children as a result of the negligence of nurses. I had to beg them more than once to do their job properly”.
- Five respondents stated that the public hospital’s doctors either work for private hospitals or have their own clinics at the same time. Therefore, the doctors deliberately destroy the reputation of the public hospitals, and they try to persuade the patients of the public hospitals to use their own private health centres with the aim of charging them money. Three respondents said the doctors working for the public hospitals are almost traders: “The doctors in public hospitals are traders, thus they force patients to have the operation done in private hospitals through procrastination, by delaying the patient's turn to be treated in the public hospitals.”

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\(^{18}\) A paid department is a special department in public hospitals where patients can choose to be treated for a charge. It is unlike the rest of the departments in the public hospital where the treatment is free. The advantage of it is that treatment is available whenever patients want it, without being on a waiting list.
Another four respondents said that the public health sector suffers from bureaucracy, corruption, administration problems, and weakness of the supervision and disciplinary system. One respondent said, “Doctors and nurses make mistakes and no one punishes them”.

Five interviewees mentioned that the medical centres do not play an effective role in providing good health services, because the doctors of the centres are not available all the time, and most of them are not specialists.

Five interviewees said that not all types of medicines are available in the public hospitals and the medical centres. The shortage of medicine places a financial burden on patients.

More than half the respondents said the public hospitals are not good in terms of hygiene, treatment, operations, and care for patients.

Financial protection

Nearly one-third of the respondents said the public health system is able to protect them in the case of catastrophic illnesses. For example, one respondent said, “If I did not have the money, I would go to a public hospital. The public hospital can help me”.

More than two thirds of the respondents said the public health system is unable to protect them against the financial risks resulting from catastrophic illnesses, and one respondent said, “I know several patients who had to sell their possessions to cover the costs of their medical treatments”. Those interviewees gave many reasons to explain their opinions:

- Three respondents said the public hospitals cannot protect patients due to the long waiting times for access to health services: “The public hospitals cannot protect me because I cannot do an operation in the public hospital in the suitable time”.

- Six respondents said the public hospitals are not all provided with the necessary medical instruments required to treat some chronic diseases such as cancer and kidney diseases. Also, not all medicines are available in the public hospitals: “I know someone who has a chronic disease, the hospital has provided a part of his treatment, while his family has paid the majority of his treatment costs”.

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Two respondents said that favouritism plays a vital role in whether one has the chance to have an operation, especially in the case of complicated operations: “The patients would do an operation in the public hospitals only if they applied many times to the public health sector’s administrators or if the patients had a special privilege”.

Part II

The other part of the interviews was conducted to explore the respondents' willingness to participate in the NHI system, and the view of interviewees about the preferred structure of the proposed national health insurance. It should be taken into account that the NHI was explained for the respondents who had no idea about the concept, as follows: the NHI means that you have to pay a defined payment monthly for the NHI in exchange for receiving health services such as outpatient or inpatient services and medicines when you need these services. This system is based on social solidarity.

Awareness of the draft law on HI’s introduction for civil employees in the public sector

In response to the question about the draft law on HI’s introduction for civil employees in the public sector, most of the respondents stated that they have not heard about this law. Their answers highlighted the weakness in the connection between the government’s discussion and the public. The respondents reacted to this law in the following ways:

- Three respondents said that it would be unfair if this law covered only the civil employees; the HI should be universal and available for everyone, not only for public sector employees. One respondent went beyond that and said that the government should be particularly responsible for vulnerable groups such as elderly people, children and poor farmers who cannot afford to pay insurance contributions, and not for those who are able to work.
Another respondent commented that the HI should cover the professional and industry workers, because these employees need the health insurance more urgently than administrative employees. These workers are more prone to dangerous work accidents because of their work circumstances, and their health insurance is poor.

Another respondent understood this project as a step to privatize the public health sector. He thought this would be better because private companies are careful about their reputations, and they have in contrast to the public sector better staff and better supervising policies.

Three respondents said that this project is good.

Willingness to participate in the NHI system

In general the majority of the respondents were willing to participate in the NHI. They were motivated by different factors. With respect to the respondents' motivations to participate in the NHI, the opinions can be summarized as follows:

- Four respondents were willing to participate in a HI system with the aim of reducing financial risks and because HI would give a feeling of safety, “for example if a person from the middle-income class needs an operation that costs a million Syrian pounds, the HI would pay part of the costs. This would help him a lot and it may allow him to avoid selling his property to pay the costs”.

- One respondent said through the NHI the doctors would be held accountable in the event that anything wrong was to occur. “Since people would pay contributions for the health insurance then he could judge the doctors and hold them responsible, in contrast with the current system.’’

- Two respondents said that they are willing to participate in the NHI system, because they can receive health services without long waiting times which are normally found in the public hospitals. “Some people have to wait a long time and they might die before they can get access to health services in public hospitals.’’

Many respondents linked their willingness to participate in the NHI to many requirements, for example:
Five respondents linked the participation in the NHI to the quality of provided services, and its ability to provide them with the services they would need most.

Two respondents linked their participation in the NHI to the coverage of all their family members.

Two respondents linked their willingness to participate in NHI to the value of the contribution, admitting that the contribution should be reasonable and proportional to their income. Another respondent went beyond that, saying that the government should compensate the low-income earners with the amount of contributions paid for NHI: “The salaries now are not high enough even before paying towards the health insurance”.

Three respondents related their participation in NHI with whether the insurance company would be created by the government: “If this company was private I would not participate and I would advise every person not to participate in this company”.

Two respondents added that this HI system should be universal.

Two respondents wished to continue this insurance after retirement.

One respondent confirmed that the proposed NHI system should not replace completely the role of the public health sector: “I do not want the public health sector to be abandoned; we want to maintain the public health sector as the dominant sector”.

Three respondents related their participation in NHI with timely provision of services, without long waiting times to receive the services.

Only two respondents showed hesitation about their participation in the proposed NHI. The first respondent did not have enough motivation to participate in the proposed health insurance system due to following reasons: (1) he is too old; (2) the existence of an Islamic charity that helps poor people access medical care, which reduces the need for HI; (3) social habits or the religious beliefs, for example, he said, “When I get ill I fast for one day then I am recovered. I treat myself. I am relying on God”; and (4) the existence of free public hospitals. However, despite the reasons mentioned he said, “But if other people joined this insurance, I would participate as well”.

The second respondent stated that according to the HI situation in some neighbouring countries such as Lebanon and Jordan, the HI system would not be successful in Syria. However, he added, “If this project succeeded in Syria, it would be excellent”.

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Management of the NHI

More than half the respondents thought that the private sector would be better able to manage the NHI project than the public sector for various reasons:

- Five respondents said the private sector has a better disciplinary system, and it would be able to face the problem of corruption: “If you are working in the private sector and you know that someone is responsible for your performance and supervising you, you would work hard to maintain your work and do it perfectly, without any mistakes”.

- One interviewee said that the private sector in contrast to the public sector is interested in selecting better staff.

- Four respondents said as the private sector is interested in profit, it has proved its efficiency more than the government sector: “The private sector is better able to run the NHI, because the private sector is interested in profit, while the public sector is free and careless in its work”.

The rest of the respondents thought the public sector should run the HI system for the following reasons:

- Five respondents said the public sector has better disciplinary and supervision policies than the private one.

- Five respondents thought the public sector should run the HI system, because it is more secure and trustworthy than the private sector, which may cease its work and run away at any time: “I do not trust the private one that may dismiss us at any time”.

- Two respondents believed the public sector would be more compassionate and merciful towards people, and as a result, it would impose lower HI contributions in comparison to private companies that are interested only in their profits: “The public sector tends to show more care towards the citizens than the private sector, and as a result the value of the contribution would be lower”.

- One respondent thought the public sector should run the HI system, however, the management should be composed of a board of qualified directors who are efficient and have strong managerial experience: “At any large agent, there must be a board of directors that includes efficient people who have strong managerial experience”.

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Paying for NHI

The answers of the respondents clarified that the level of income was the most critical factor for determining the size of payments for HI. Nearly one-third of the respondents said that their income is low and they cannot spend any money on the HI, although, they are enthusiastic to participate in the HI, for example, one respondent said, “I would like to sell whatever I own in order to spend about 1000 or 2000 S.P for this health insurance”. Another respondent said that if the insurance contribution was a small percentage of income, it would not financially affect the insured people, but at the same time that would be beneficial for all the employees. One respondent stated that the size of contributions paid towards HI should be determined by the quality of services provided, particularly the staff: “Primarily, I would pay the HI a monthly rate of 500 S.P, and then if the HI system performed well, met my expectations, and satisfied me with their services, especially the quality of staff, I would be prepared to pay the HI a monthly rate of 1000 S.P”.

Many respondents have in addition to their salaries other incomes such as the money raised from selling their agricultural crops, but for this sample of respondents only their salary is taken into account in relation to paying for the NHI. Other incomes are not included, for example, one respondent who is teacher said, “My additional income resulting from construction work is not a fixed one, and it is dependent on the circumstances of the work, for example, during the winter my work stops for two or three months, then how will I be able to pay for the HI?”.

About two-thirds of the respondents said that they would prefer to pay for the NHI with a monthly flat-rate contribution. More than half of these respondents do not receive a stable income. Therefore, for them it would be better to pay for the HI with a monthly flat-rate contribution. One respondent who works as a bus driver said “Taking into account my job circumstances, I would pay a monthly flat-rate contribution. I drive a bus, sometimes I earn money and other times I lose money”. The rest of the respondents from this group had various reasons for preferring a monthly flat-rate contribution. For example, one respondent thought the flat-rate contribution per capita is fairer than payment as a percentage of the income which is progressive: “In the case of paying a
ratio of the salary, this amount would increase parallel with income. If the way of payment is per capita, this would be fair”. Another one supported the same idea that the flat-rate contribution is equitable, because it would mean that the same payment is made to receive the same services, in contrast with the method of paying a contribution that is a percentage of the monthly income: “It is unreasonable to pay a proportion of income, which means the people with higher income would pay higher fees for HI in comparison to those who are with lower income for receiving the same service”. Two respondents preferred to pay a monthly flat-rate contribution because they thought this way of payment will make the insured people feel more comfortable: “I would prefer to pay a monthly flat-rate contribution, so I pay the amount devoted for health insurance and forget about it, in the same way as I pay any other obligation”.

On the other hand, about one third of the respondents would prefer to pay a percentage of their salary for NHI. One respondent who is working in the public sector said that paying a percentage of salary for HI is fairer for employees with low incomes due to the difference between the salaries in the public sector. Three respondents would prefer to pay a percentage of their salary for NHI because they think this way of paying would make them feel more comfortable.

Insurance plans and services covered

More than half the respondents said that the selection of the insurance plan is dependent on the income. For example, one respondent said, “I cannot decide because I have a limited income and according to my income I would decide how much to pay”. One respondent said that the selection of the insurance plan is related to the quality of the services provided and the credibility of the HI system: “If this insurance was established and its performance was good and correct, in this case I would pay the HI more not less”.

More than half the respondents would select to buy the better insurance plan that implies paying more money. It was noticeable that not only the group with high incomes selected this option, but also many respondents from both the middle and the
low-income groups. The motivations for selecting a better insurance plan can be summarized as follows: five respondents selected the better insurance plan in order to reduce the financial risk: “I may get ill and I have no money, while if I pay a higher monthly amount, I would be sure that if I got ill or had an accident one day, I would be well served”. One respondent linked the selection of the better insurance plan with maintaining dignity, and the right to access to health care without feeling inferiority: “I expect the workers in the health insurance would help me and respect me more in comparison to if I did not participate in this better insurance plan”.

Regarding the services provided within each selected insurance plan, it was noticeable that almost all the respondents expected to receive all the medical services which they may need regardless of the contribution paid or the type of insurance plan selected. For example, one respondent said that he might pay for the HI over many months without receiving any services from them, therefore he would have the right to receive all the services that he might need one day regardless of the type of insurance plan selected and the contribution paid.

Three respondents expected to receive the best quality of services and treatment in return for the contribution paid: “For me the most important thing is to receive the better quality of service”.

Almost one-third of the respondents thought that financing the cost of the operations is the most important service that should be provided by the NHI: “I would prefer that the insurance covers everything, because the person may be exposed to any illness or accident, but there are priorities when some services are more important than others, such as surgery because of its high cost and often many people have to borrow to have an operation”. Two respondents confirmed that this HI should cover the cost of check-ups and medicine, because a person is more likely to be ill than in need of an operation.

**Collection of the contributions for NHI**
More than two thirds of the respondents confirmed that the public sector is better able than the private one to collect the contributions for the HI due to the follows reasons:

- Nine respondents said the public sector is more trustworthy and secure than the private one: “the government cares about my rights. Government is similar to banks. Although the private banks provide good services I think that the government banks are more secure”. Another one said, “I do not trust the private sector because there is not any law which obliges it to pay or provide its services, also, the private sector might escape and abandon its responsibilities”.
- Another respondent said that it is easier to deal with the public sector in comparison to the private sector.
- Another interviewee added “I would prefer to deal with the public sector because in this case I can appeal to the responsible authorities in the case of any mistake”.

Only four respondents confirmed the private sector is better able to collect the contributions for the health insurance, for these reasons: two respondents said that as the private sector works for profit it works properly: “No mercy with the private sector. However, if the private companies ensure their profit they work properly”. One respondent said that the private company that would collect the contributions should be a Syrian private company, competent, confidential, and working correctly and efficiently. The NHI company should be paid directly without an intermediary.

Two respondents mentioned that the collector of contributions should be a trustworthy agent, which can safely transfer the money to the special organization, regardless of whether it is a private or public company: “Both public and private sector have their own problems, I would pay trustworthy institutions that transfer the collected contributions to the responsible agent. The most important thing is that they are trustworthy”.

Risk pooling

The majority of the respondents preferred the structure of risk pooling to be on the national level, for different reasons:
• Three of them said that the total collected revenue would be more at the national level; as a result, the insured people would get more benefits.

• One respondent said that at the national level the NHI would be more able to take responsibility and support everybody, particularly poor people.

• Three respondents said that if the risk pooling were at the national level, the relocation from one site to another within the country would be safer: “If I travel by my own car to Aleppo and I had an accident there, would they bring me back to my county to receive the treatment? The insurance must be universal for all the country”.

• One respondent answered that the risk pooling should be at the national level, as the NHI would be continuous and it would be free of tribal influence: “The majority of the projects that are at the village level encounter tribal interference. They are subject to arguments and they would soon fail. Therefore, anything formal would be best”.

• Nine respondents preferred the risk pooling to be at the national level because they believe that the NHI should cover everyone: “At the national level, because of the fact that HI is a cooperative project, it should benefit all people regardless of their situation”.

Two respondents preferred the risk pooling to be at the level of the workplace, where the NHI system would be supervised and the employees would feel more secure, but if the HI were to be extended to the country level, it would be out of control: “I would prefer to share the risk with my colleagues at the work level because I consider my work team as my own family, while at the national level it would be very extended and uncontrollably large”.

One respondent said the risk pooling at the level of the province would make things visible, more supervised and less complicated in comparison to if the risk pooling were to be at the national level: “In terms of psychological comfort, it would be better to share the risks on the level of the province, because if the system became bigger it would be more complicated and we would return to disorder, corruption, and fraud”.

Purchasing the health services
More than half the respondents said the public sector is more qualified to purchase the health services than the private one. Six respondents believed that the public sector has good supervision policies and is reliable. One interviewee said the Ministry of Health is best able to purchase health services within the NHI, because it tends to buy the best quality of medicine and ensures the efficacy of the medicine: “The Syrian government has never imported or manufactured medicines that harm citizens”. Another respondent clarified: “I think the public sector is better; of course this sector should have good supervision and discipline system. But this does not mean that the public sector acts as a master in the way that it cannot be judged or discussed”.

Nearly one-third of the respondents said the private sector is more qualified than the public one to purchase the health services for these reasons:

- Three respondents said the private sector is keen on providing a better quality of service in terms of both the equipment and staff: “The private sector is interested in quality rather than quantity. It would purchase the appropriate equipment for the right place”.

- Two respondents said the private sector is better able to purchase the services for the NHI, because the private sector is more efficient in controlling costs and preventing corruption, and it is well supervised: “The private sector is more efficient in preventing stealing and fraud”.

One respondent recommended using a bidding system to get good quality health services at the lowest costs either from the private or public sector: “We could select from the offers of required services provided by public or private companies, trading off between quality of services and the cost”.

One interviewee recommended professional syndicates and organizations, such as the teacher syndicate and labourer syndicate and student organization, to purchase the health services for their members, within the NHI system. He justified this by the fact that these organizations know best about the needs of their members and their rights: “I think it would be better if every association purchases the health services or makes contracts with health services providers”.

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Providers of health services

About half the respondents said that the public hospitals would be better than the private ones in their performance in providing health services under the NHI system. For instance, three respondents said that they trust the public hospitals and feel more security: “I feel greater security with the public hospital, particularly if it is supplied with trustworthy staff. The public hospitals are better equipped than the private ones”. Another interviewee added that the supervision is good in the work of the public hospitals.

Only six respondents said the private sector is better able to provide health services than the public one. Two respondents said the private sector cares about its reputation: “The private hospitals are keen on keeping their reputation good. I prefer to deal with any agent that is careful about its reputation”. According to another respondent, the private hospitals are not crowded with patients like the public hospitals. One respondent stated that he indeed prefers the private hospitals because there is better hygiene, better technology and he trusts their work more than that of public hospitals.

One respondent replied saying that the most important criterion for the selection of a hospital is the behaviour of the members of staff: “The public and private hospitals are the same for me. I would prefer to receive health care from the one who respects me as a patient. I care about personal treatment”.

Two respondents said that well qualified doctors are the essential factor for the selection of the hospitals, regardless their being private of public: “I would ask where I can find the better doctor and then I would select the hospital”.

Membership in the NHI

More than half the respondents said the membership should be voluntary, for different reasons. For example,

- Two respondents said membership should be optional taking into account the stereotypes of the Syrians that they do not comply with mandatory decisions: “In
our community, if we mention the word “mandatory”, people choose to alienate themselves”.

* One respondent thought that good services provided through the HI are the only motivation that can attract people to participate: “It is possible that I would participate while others do not. But one day when I need this insurance and find it as I expected, then my neighbour would be encouraged to participate”.

* Another respondent said the success of the NHI system is dependent on the harmony between the members, and their awareness of the importance of the HI, while the number of participants is irrelevant. This would only be achieved through optional membership: “If the members are ignorant and not aware of the benefits of health insurance, the health insurance company will struggle to collect the monthly contribution”.

* Three respondents said the optional membership in the NHI would be better because the citizens would be able to choose freely whatever is more suitable for them.

* Two respondents said that mandatory membership would apply a financial pressure on the family: “Some people cannot afford to pay even one Syrian Pound for this insurance, therefore, the membership should be optional”.

* If the membership was mandatory this would mean many people would use health insurance facilities and these health facilities would be overcrowded.

The rest of the respondents stated that mandatory membership would be better, for different reasons:

* One respondent stated that health insurance is necessary for everyone in order to reduce the financial risk.

* Two respondents expected that the mandatory membership would mobilize higher funds for NHI system.

* Four respondents said that mandatory membership would achieve universal coverage, so every member of the community would pay for the health insurance and receive its services.

* One respondent said at the beginning the membership should be optional, but later, when the NHI extends, improves its activities, and includes a proportionally high number of participants, at that stage the membership should become mandatory. If it
is mandatory, it would achieve universal coverage of all citizens, which is the ultimate aim of this system.

- One interviewee thought that mandatory membership would lead to improvements to the performance of the public hospitals: “If the membership was voluntary, a part of public hospitals would still be free for uninsured people which would mean that these hospitals would not be at the same level as private hospitals and the services of these hospitals would still not be good”.

The solidarity principle

The majority of the respondents supported the solidarity principle by being willing to pay more for the NHI in comparison with poorer people. One of the answers was: “If I was not in need of health care, other citizens might be in need. If any citizen got medical treatment, I would be as happy as if I got treatment, and I would have no problem”. One respondent thought the principle of solidarity already exists among the Syrian people; this is visible in the existence of charities. Another interviewee believed that poor people have the right to share the funds with rich people according to the Islamic Zakat rite: “The poor members of the community must receive a portion of the rich people's funds, on the basis of the Islamic practice of Zakat”.

About half the respondents linked their readiness to help poor people to their financial situation. For example, one interviewee thought that a large part of the Syrians are poor people and that one's willingness to help them is related to one's own income. “The number of poor people who need help is large. Firstly and finally being able to support poorer people is dependent on salary. However, salary is insufficient in general and there is not a surplus”.

Only one respondent stated that he would be ready to support elderly people and disabled children. However, she would not support those who are able to work, even if they are poor.

In order to support poor people to access the NHI system, many proposals were made, for example:
• Four respondents proposed to carry out a study to shed light on the proportion of poor people in the country and their income before imposing the contribution so that poor people would pay an appropriate amount of money for NHI, according to their financial situation.

• Most of the respondents answered that the poor people should pay the NHI a smaller amount to fit their incomes or perhaps not even pay any contribution. One respondent said the medical services provided through the NHI system should be the same for all citizens regardless of the contribution they paid.

• Eight respondents thought that the support of poor people is the responsibility of both the government and privileged people: “The poor people can be supported through co-operation between the government and individual”. Another said, “The government imposes many fees on people, therefore it must share a part of the cost for health insurance”.

• Five interviewees said that supporting poor people to access the NHI is the government’s responsibility. One said, “We can not force rich people to help the poor people; this is government’s duty”.

• Another suggested introducing a special financial stamp, and the revenue of that stamp would be devoted to supporting poor people to join the HI system.

• One respondent suggested giving the poor people who are not able to participate in this NHI the chance to access public or private hospitals through reasonable costs that suit their financial situations.

• Another suggested allocating salaries for elderly people, for example 500 or 1000 S.P monthly, that would help them to live.

The future of public hospitals under the NHI

About one third of the respondents said the existence of the public hospitals would be necessary within the NHI system to treat people who are unable to participate in the NHI system. There is poverty in the Syrian community and people are in need of these free public hospitals. For example, one respondent said, “The public hospitals should not be closed because there are many people who cannot afford the costs of health insurance”. Another said, “People live differently, they are not all at the same level of
living. Poor people need these hospitals and there are no alternatives”. Another interviewee said that closing these hospitals would not be a wise solution: “If we started to close the unsuccessful hospitals, one day we would close all the public hospitals”.

The majority of the respondents said that these hospitals should have another chance to correct their work. Nearly one-third of the respondents said that that would be achieved through good management and a strong disciplinary system. One respondent confirmed that these hospitals should be re-qualified and incorporated into the insurance system. Two respondents expressed the opinion that improving the public hospitals is the responsibility of the government, which should supply them with efficient doctors, excellent nurses and apply a strong disciplinary and supervision system, and fight the corruption in the public hospitals.

Only one respondent said that if these hospitals continued working in the same style of bureaucracy, and could not improve their efficiency, then in this case they should be closed: “If these hospitals were given the opportunity to improve, but they could not, they should not continue working”.

5 Other Health Care Systems and Lessons Learnt

The purpose behind this chapter is to study wide-ranging examples of different health care systems that have been implemented in various countries. By taking into account the political and socioeconomic structures of each country, it will be not easy to copy any health financing system from those case studies and apply it in Syria. However, these case studies will focus on the important lessons that can be learned from the experiences of the selected countries to design models of health financing systems that are suitable for Syria. These case studies will not only emphasise the current structure of each system, but it will focus also on the beginnings of each system, discussion the background and reasons for its adoption, and how the system has developed over the time, in addition to providing a review of the weak and strong points of each system.

5.1 Criteria of selecting the countries studied

The countries studied are Columbia, Germany, Romania, South Korea, Spain, Tunisia, and the UK. To select these countries, some issues were considered (see Table 5.1):
-First, population size: compared to the size of the Syrian population (about 20 million), the populations of the selected countries are not so small, nor so large: the size of the population ranges from 10 million (Tunisia) to about 82 million (Germany).
-Second, although those countries currently belong to varied income categories, most of them were at a low income level when they initiated their national health systems. Many of these countries, such as Germany and South Korea, have gradually achieved almost universal coverage during different levels of income. This fact could provide grounds for an optimistic vision of Syria as a lower middle-income country also being able to implement Social Health Insurance (SHI) and achieve a high degree of population coverage over time.
-Third, the selected countries are situated on different continents and have diverse traditional backgrounds. Moreover, the selected countries have different political and socioeconomic structures. This variety has affected the health care systems that have been adopted, and could provide a broad outline of alternatives that can be used to design the models.
Fourth, the most important factor in the selection of the countries was the particular experience of each selected country in implementing or reforming its health care system. Although all the selected countries, except for Spain and the UK, adopted the Social Health Insurance system, every country has a unique system in terms of coverage, method of financing, structure etc:

- Colombia as an upper middle-income country has an interesting health financing system based on two separate insurance schemes according to the ability to pay. These are, first, the contributory regime (CR) that is financed through contributions, and second, the subsidized regime (SR) that is financed by government subsidies which cover poor people. Also, the state shifted its participation from supply-side subsidies (subsidies to the public health care network) to demand-side subsidies of health services.

- Germany is considered a pioneer of the SHI system. Germany is a good example of a country that has gradually achieved almost universal coverage throughout different levels of the income.

- Romania is one of the Eastern European countries that was influenced by communism and applied the Soviet Semashko health care system. Recently it has adopted the SHI system. Therefore, it will be a good model of the countries that move from the central health system to SHI. Also, Romania as an upper middle-income country can provide a clear example of how SHI can be extended with limited resources and what problems may prevent the system achieving universal coverage.

- South Korea is a good example of a country that has achieved universal coverage a bit more than two decades after applying the SHI system.

- Spain is a special example of a country that has reformed its health care from the SHI system towards the NHS system. The administration of health affairs has also been fully decentralised to the autonomous regions.

- Tunisia is an example of a lower middle-income country that has recently introduced a unified health insurance system. Until 2007, Tunisia had two separate health insurance schemes: one for the private workers and self-employed and the second for public workers. Beside these schemes there are two free medical assistance programs. Under the recent reform, the two schemes were unified as the National Health Insurance Fund. This insurance is only available for people who are able to pay the contributions, while the poor people can benefit from free medical services provided through the Ministry of Health facilities.
The UK is a good example of a country that adopted the NHS system and achieved universal and comprehensive coverage. In 1991 the British NHS introduced the purchaser–provider separation (internal market).

Every case study contains the following components: first, a description of the historical development of the health care system, taking into account the political and socioeconomic factors that prompted the country to adopt its health care system, or to reform it. Second, a review of the major reforms of the health care system. Third, an explanation of the structure of the health care system. Fourth, a review of the population coverage and the basis for entitlement. Fifth, a discussion of the health financing functions. Sixth, an outline of the benefits packages available. Finally, lessons that can be learned from each experience will be drawn out.
Table 5.1: General information about the selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>The number of population in 2008 (millions)</th>
<th>GDP per capita (PPP int.$) at the time of launching the health care system or the reform</th>
<th>The main resources to finance the health care before the reform</th>
<th>The main resources to finance the actual health care system</th>
<th>The degree of the system centralization before and after implementation or reform the health care system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbia</td>
<td>45</td>
<td>(1993) 5011 PPP</td>
<td>Out of pocket payment, taxes, contributions</td>
<td>Contributions, government subsidies</td>
<td>More decentralization through transferring the power to local governments</td>
</tr>
<tr>
<td>Germany</td>
<td>82</td>
<td>(1883) 2143 PPP</td>
<td>Out of pocket payment, premiums</td>
<td>SHI (contributions)</td>
<td>The system is self-governance and relatively independent from both state and market</td>
</tr>
<tr>
<td>Romania</td>
<td>21</td>
<td>(1999) 2940 PPP</td>
<td>General taxes</td>
<td>SHI (contributions)</td>
<td>Integrated, centralized, stat owned and controlled system ➔ More decentralized and pluralistic social health insurance system</td>
</tr>
<tr>
<td>South Korea</td>
<td>48</td>
<td>(1963) 1316 PPP</td>
<td>OOP payments (72.1% in 1980)</td>
<td>NHI (contributions 43%) +OPP (36%)</td>
<td>NHI base initially on decentralized administration ➔ unified administrative system presented by the National Health Insurance Corporation</td>
</tr>
<tr>
<td>Spain</td>
<td>44</td>
<td>(1986) 9722 PPP</td>
<td>Contributions</td>
<td>NHS (taxes)</td>
<td>Central system ➔ significant decentralization of the health care system</td>
</tr>
<tr>
<td>Tunisia</td>
<td>10</td>
<td>(1951) 1106 PPP (2007) 7130 PPP</td>
<td>Taxes and OPP</td>
<td>OOP, taxes and contribution</td>
<td>Centralized</td>
</tr>
<tr>
<td>The UK</td>
<td>61</td>
<td>(1946) 6745 PPP</td>
<td>Contribution, taxes, OPP</td>
<td>NHS (taxes)</td>
<td>Centralized ➔ less centralized (purchasing function is decentralized (according to regional purchasers)</td>
</tr>
</tbody>
</table>

Table 5.2: Health expenditure ratios, 2007

<table>
<thead>
<tr>
<th>Country</th>
<th>THE as % of GDP</th>
<th>GGHE as % of total expenditure on health</th>
<th>Private expenditure on health as % of THE</th>
<th>Social security expenditure on health as % of GGHE</th>
<th>OOP expenditure as % of private expenditure on health</th>
<th>Per capita total expenditure on health (PPP int. $)</th>
<th>Per capita government expenditure on health (PPP int. $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbia</td>
<td>6.1</td>
<td>84.2</td>
<td>15.8</td>
<td>70</td>
<td>48.7</td>
<td>516</td>
<td>435</td>
</tr>
<tr>
<td>Germany</td>
<td>10.4</td>
<td>77</td>
<td>23</td>
<td>88.3</td>
<td>56.6</td>
<td>3588</td>
<td>2758</td>
</tr>
<tr>
<td>Romania</td>
<td>4.7</td>
<td>80.3</td>
<td>19.7</td>
<td>83.2</td>
<td>99</td>
<td>592</td>
<td>475</td>
</tr>
<tr>
<td>South Korea</td>
<td>6.3</td>
<td>55</td>
<td>45</td>
<td>78</td>
<td>79</td>
<td>1688</td>
<td>927</td>
</tr>
<tr>
<td>Spain</td>
<td>8.5</td>
<td>72</td>
<td>28</td>
<td>7</td>
<td>74.6</td>
<td>2671</td>
<td>1917</td>
</tr>
<tr>
<td>Tunisia</td>
<td>6</td>
<td>50.5</td>
<td>49.5</td>
<td>43</td>
<td>84</td>
<td>463</td>
<td>234</td>
</tr>
<tr>
<td>The UK</td>
<td>8.4</td>
<td>81.7</td>
<td>18.3</td>
<td>0</td>
<td>63</td>
<td>2992</td>
<td>2446</td>
</tr>
</tbody>
</table>

Source: WHO (2010)
5.2 National Social Health Insurance System in Colombia

5.2.1 Historical background

In 1810, Colombia declared its independence from Spain. Colombia is situated in the north west of South America. According to World Health Organization statistics, in 2008 Colombia had about 45 million inhabitants, 74% of them living in urban areas. Colombia is an upper middle-income country. In 2008, the GNI per capita was 8510 (PPP int. $) (WHO 2010).

Between 1975 and 1982 the Colombian government increased the number of hospitals, health care centres and personnel in the health sector. However, the fiscal crisis of 1982 reduced the proportion of the national budget dedicated to health care from 8% to less than 4% in the following years. Colombia’s 1991 Constitution gave the state the responsibility for directing, coordinating, and regulating a universal social security system, thus paving the way to the establishment of a legal framework for National Social Health Insurance in 1993, according to Law 100.

The health system before the reform was structured into three independent subsystems. They were public, insurance and private subsystems:

- The public subsystem, which included a network of public hospitals and health centres, served unemployed and low-income people who were not protected by any kind of medical insurance. This subsystem was financed by general revenue transferred directly to health care delivery institutions.

- The insurance subsystem that used to have a network of health centres and hospitals covering insured people. This subsystem consisted of two types of institutions. First, the Social Security Institute (Instituto de Seguridad Social) covered formal workers working in the private sector. It was financed by payroll taxes paid by both employers and employees. Second, the Social Benefit Societies (Cajas de Previsión Social) that were financed directly by the state. The insurance coverage of these societies was restricted to public sector workers
• The private subsystem that covered the high-income population (Alvarez 2004; Gaviria et al. 2006).

This system had been criticised for these reasons:
• At the end of the 1980s, the public subsystem covered only 40% of the population, the social security covered 18%, while 17% of population used the private subsystem, leaving about 25% without access to proper health care services (Vos et al. 2006).
• Absence of equitable access to the health services between the different regions and between different income groups of the population.
• Low levels of solidarity and segmented risk pooling organizations.
• High inefficiency in the public provision of services.
• The most affluent people were using the state health facilities that were supposed to support the poor people. Furthermore, a large share of public subsystem services including highly complex medical procedures benefited the top-income quintile (Alvarez 2004; Gaviria et al. 2006).

5.2.2 The major reforms of the health care system

In 1993, a reform of the health care system was introduced as a solution to the problems of inequality that had characterised the previous system. The reform featured the following changes:
• The new system was to be based on two separate insurance schemes according to the ability to pay: first, the contributory regime (CR), and second, the subsidised regime (SR) (Pinto 2008).
• The national health insurance structure was to be based on a market managed competition model in order to improve efficiency and quality. The first regime, the CR, uses health insurance companies called Empresas Promotoras de Salud (EPS) (Health Promoting Companies), while the SR uses insurance carriers (ARS) that are equivalent to the EPS of the CR (Gaviria et al. 2006), whereby consumers within their insurance regime are free to enrol in any health insurance plans. Therefore, these companies compete for contributors on the basis of the quality of the services
provided due the fact that both prices and benefits are determined by the government (Giedion and Uribe 2009).

- Law 100 focused on separating financing and health provision, therefore, the state ceased its role in delivering health care and it shifted its financial participation from supply-side subsidies to demand-side subsidies of health services (McPake et al. 2003).

- The state health facilities were granted financial and managerial autonomy to become self-sustainable by selling their health services. Moreover, they have to compete with private institutions to contract the insurance companies (Alvarez 2004).

- Solidarity was promoted by establishing the Solidarity and Guarantees Fund that allows payroll contributions and treasury resources to cross-subsidise the insurance premium for the poor.

- The new reform was considered one of the most ambitious social reforms ever undertaken in Latin America, on the basis of the key principles of the reform which may be summarized as follows: equity in access to health services, mandatory health insurance to everyone, and comprehensive coverage (Gaviria et al. 2006).

- The new system is based on the devolution of the health care system to local governments, through transferring the administrative and financial resources as well as decision making power to local governments (Plaza et al. 2001).

5.2.3 The structure of the National Social Health Insurance System

In 2003, the Ministries of Health and Labor were merged to form the Ministry of Social Protection (MPS), the head of the health sector. The MPS is responsible for formulating national health policies and regulating their progress. The other main players of the National Social Health Insurance are:

- The National Health Superintendence that monitors the functions of the health plans.

- The Solidarity and Guarantees Fund (SGF) or national health insurance fund that pools the system’s revenues and reallocates them among the different regimes (see risk pooling).
The National Council for Social Security in Health that acts as a policy making body. It has authority over various aspects of the health care system. The council consists of the Minister of Social Protection as the head and many members, including the Minister of Finance and representatives of various stakeholders, such as employers and workers, public and private health plans, and public and private health sector providers. The council is responsible for setting benefits, premiums, tariffs, copayments, enrolment rules etc (Pinto and Hsiao 2007).

Health insurance companies EPS and ARS are responsible for undertaking insurance, collecting the contributions, and organizing and guaranteeing the delivery of health services (Eduardo 2007).

5.2.4 Extending population coverage and the basis for entitlement

The health reform in 1993 aimed to achieve universal coverage within a 10-year period. According to initial calculations 70% of the population would enrol in the CR and the remaining 30% in the SR (Pinto 2008). During the first seven years, the insurance coverage extended from 15.7% in 1990 to 57% of the total population due to enrol new family members in CR and to increase the poor population covered by the SR (Ruiz et al. 2006). The good economic growth contributed to success of the insurance system in increase population coverage, where Colombia during the first half of the 1990s had one of the most stable economies in Latin America.

Insured people are covered within one of the two main schemes in the National Social Health Insurance:

First, the contributory regime (CR) is a compulsory health insurance scheme for the formal sector workers, pensioners, and the self-employed who can afford to pay. To enrol in this regime, the employees must earn at least one minimum monthly salary, while self-employed workers’ earnings should be at least twice the minimum wages (Giedion and Uribe 2009). The minimum wage was estimated at around US$355 in 2006. The CR health insurance covers all first-degree family members of the subscribers.

Second, the subsidised regime (SR) covers indigent people. The beneficiaries of the SR are selected through a test of their economic earnings. This test is known as Sistema de
Identificación de Beneficiarios (SISBEN) (the Beneficiaries Identification System), and it is managed by municipalities. SISBEN scores are calculated on a number of dimensions of poverty, such as income, assets, labour market participation, family structure, educational attainment, housing material and crowding, and access to water and sanitation. According to the SISBEN six groups of social-economic levels are determined. Level 1 represents the poorest population. The households which belong to levels 1 and 2 of the SISBEN and do not contribute to the CR are only eligible to receive the SR care. However, as a result of limited resources, the eligible population for the SR has largely exceeded the number of beneficiaries. Therefore, the people who belong to the lowest scores and within vulnerable groups, such as pregnant and lactating women, children under five, the handicapped, and displaced population, are given priority in enrolling in the SR (World Bank 2007). Since the municipalities have considerable flexibility in determining the SISBEN scores, a wide margin for a political patronage and unfair selection for beneficiaries of the SR has been detected (Gaviria et al. 2006).

By 1997, the country suffered an economic recession that has negatively affected poverty, employment and public social expenditure. For example, the percentage of the population living in poverty increased from 53.2% in 1995 to 58.2% in 1999. The unemployment rate increased from 10% in 1996 to 20.1% in 2001 (Pinto and Hsiao 2007). Social public expenditure as a percentage of GDP dropped from 15.3% in 1997 to 13.6% in 2000, which had a detrimental effect on enrolment in the National Social Health Insurance (Pinto 2008). Despite the fact that economy has started to recover since 2000, the poverty rate is still high, at about 49.2% (Pinto 2008). Furthermore, the large share of the informal economy, which was 61% in 2003, has been a major obstacle to expanding employment-based social insurance schemes (Castaño and Zambrano 2007). By the end of 2005, about 77% of the total population had health insurance through both regimes. The CR scheme hardly covered only 15.5 million enrollees (37% of population). This has placed more pressure on the government to bridge this gap by expanding coverage through the SR, which at the same time covered about 16.5 million enrollees (about 40% of population) (Pinto 2008). It is not surprising that Colombia has not achieved universal health care coverage within the planned time, given the
permanent economic crisis and armed conflict (Vos et al. 2006). To mitigate this problem, many other insurance schemes were established. These schemes are:

- **Partial Subsidies (PS):** because of the lack of funds to provide full subsidies, the PS subscheme was introduced within the SR in 2004 to cover the urban SISBEN 2 and 3 populations not covered by the SR. It covers part of the services covered by the SR benefits package, therefore, PS provides its members with about half the “full” SR insurance premium. By December 2005, 2.1 million people were covered by PS (about 5% of population) (Pinto 2008).

- **Supply Subsidies:** the poor people who are eligible but not covered by the SR and the insured people who require services not included in benefits packages have the right to receive those services that are provided by public hospitals (or private ones, by means of contracts with regional entities). These services are financed with the so-called supply-side subsidies (Gaviria et al. 2006). By the end of 2005 the supply subsidies covered 2.1 million (about 5% of population).

- **Special regimes:** despite efforts to merge the insurance schemes existing in 1993, some sectors, such as the military and police forces, the education sector, and the employees of the Colombian Oil company have remained autonomous in the organization and provision of health benefits. In 2005, these independent schemes covered 5% of Colombia’s population (Pinto 2008).

**5.2.5 Health financing function**

The financial sustainability of the system is affected by three variables: first, the average reported income; second, the number of beneficiaries per contributor; and thirdly the costs of the medical services, or costs to the insurers (Pinto 2008).

**Collection of revenues**

The National Social Health Insurance Schemes are financed in various ways according to the type of the scheme.

- The contributions: these contributions are paid by the subscribers of the contributory regime (CR). The formal workers contribute 12% of their total salary (4% is paid by
the employee and 8% by the employer). The self-employed contribute the full 12% of their income. The contributions are collected by the EPSs and transferred to the central fund. The contributions are the main resource used to finance the CR regime and they partly contribute to financing the SR through the process of the reallocation of part of the pooled contributions by the Social Security and Guarantees Fund among the different schemes (which will be explained later).

- National government transfers: these funds contribute to financing the different health insurance programs: SR regime, Partial Subsidies, and Supply Subsidies. The share of government transfers in financing the SR has increased from 14.3% of the total resources of the SR in 1995 to 56.3% in 2005.

- Local taxes earmarked for health: these finance the SR regime, Partial Subsidies, and Supply Subsidies. The local health authorities transfer subsidies to insurers or to public health providers according to service provision contracts. Local tax revenues from “sin taxes” formed 8.8% of total resources of the SR in 2005.

- Out-of-pocket payments: these have decreased from 44% of the total health expenditure in 1993 to 6.4% in 2006. These payments include direct payment to receive the services not covered by the National Social Health Insurance Schemes and cost sharing. The EPS health insurers can charge co-payments for ambulatory and hospital services up to a yearly ceiling. The co-payment rates in the CR are charged according to salary income, those who have a higher income would pay higher rates of co-payment. No cost sharing exists for emergency care, preventive services, and services for conditions of public health interest (e.g., hypertension, diabetes). ARS health plans apply co-payments only for hospital services. The co-payment rate varies from 0% of the service value for persons classified as SISBEN I (the poorest) to 10% for SISBEN III (Ruiz et al. 2006). If the health services demanded are not covered by the SR, then beneficiaries would have to pay 5% of the cost if they were classified as SISBEN I, and 10% if classified as SISBEN II in order to receive these services from the public health care providers (Gaviria et al. 2006).

**Risk pooling**
Because the National Social Health Insurance Schemes are based on separate schemes financed through different types of recourses, the risk pooling is segmented into the Social Security and Guarantees Fund and municipalities.

Allocation of resources from collection organizations to pooling organizations
The total collected contributions by the EPSs are transferred to the Social Security and Guarantees Fund that pools and redistributes revenue among the subfunds according to defined shares.

The national government allocates its resources directly to the local governments (municipalities), which in turn transfer these funds to the SR, Partial Subsidies, and Supply Subsidies programs, in addition to financing the programmed gradual expansion of insurance coverage to the eligible population.
The allocation formula for the national government transfers to municipalities includes population size, geographic distribution of the population, local administrative capacity, immunization rates, and risk of malaria and dengue.
In the allocation of national funds among the municipalities to finance their programs of expansion of insurance coverage, the municipality’s total uninsured population with respect to the total uninsured population in the country as well as the wealth of the municipality is taken into account (Pinto 2008).

Allocation of resources from pooling organizations to purchasers
First, the Social Security and Guarantees Fund (SGF) reallocates the collected contributions to health plans EPSs and ARSs that act as purchasers for their enrollees, in addition to other programs and subfunds as it is clear below:

- The SR regime receives 1% of the total contributions. These revenues are allocated among the different ARS insurance carriers according to the number of their enrolled members who can freely choose among the plans operating in their municipality. The share of solidarity contributions in financing the SR has been reduced over the time from 85.7% in 1995 to 34.4% in 2005.
- The promotion and prevention subfund obtains 0.41% of the total contributions to finance health promotion and prevention activities.
- For sickness leave payments, 0.25% of total revenues are allocated.
For maternity leave payments, 0.25% of total revenues are set aside.

Every EPS receives from the SGF the value of the premiums for their enrolled members. These premiums are called UPCs (per capita payment unit) and represent the average health service consumption of an individual with average expenditures (Ruiz et al. 2006; Giedion and Uribe 2009; Pinto 2008). Furthermore, at allocation the recourse among the EPSs, risk adjustment mechanism is used to reduce adverse selection consequences among contributive regime insurers. The value of the UPC is adjusted by age group and location. Higher premiums are paid for young children, women of childbearing age, and the elderly, the value of the premium would be around 20% higher for EPS members in dispersed geographical areas.

The SGF pays the claims filed by EPS health plans for medications and procedures not included in the benefits package.

Surpluses are invested in government bonds and reserved for future contingencies.

Second, the national governments´ transfers that are allocated yearly to each municipality (where the local health authority directly contracts health plans serving the SR) are distributed among the ARSs health plans working within this municipality. Each ARS receives a fixed premium called UPCs for each enrolled member (Pinto 2008). The value of the premium equals the estimated value of the services in the benefit package stipulated for the SR (Gaviria et al. 2006). This premium is around 20% higher for the ARSs located in remote geographical areas.

Purchasing health services and health care provision

Market structure of purchasers
The contributory regime is structured around insurers EPS that are responsible for purchasing the health services included in the compulsory plan for their enrollees. The enrollees have free choice among available plans operating in their area of employment (Eduardo 2007). These plans could be private (for-profit or non-profit) or public. The share of private plans increased from 1993 to reach 72% of the market in 2004. The EPSs work on a competing basis.
Health plans serving the subsidised regime ARSs were authorized to operate in 1995. The ARSs could be public, private (for-profit or non-profit), or community-based non-profit organizations. In 1999, Colombia had 239 ARSs covering 22% of the total population (Cardona 1999). The large number of ARSs prohibited adequate risk pooling and caused large inefficiencies due to large transaction costs. Therefore, Decree 1804 was issued to force ARSs to have a minimum of 200 000 enrollees. As a result, a wave of mergers reduced the total number of ARSs to 43 in 2004. Of this total 45% were private and 42% were community-based (Pinto and Hsiao 2007).

The health services providers
After the reform, the health plans purchased the health services for their enrollees from a network of providers (either public or private) who are selected on the basis of quality. In general, most health plans contract with private providers to supply first and second level care, while they use a mix of private and public providers to provide the tertiary care (Pinto 2008).

In the SR regime each individual ARS arranges agreements with a limited number of public or private hospitals and health professionals to provide health services to their enrollees within the benefit package (the POSS). In order to protect the financial sustainability of public hospitals, ARSs are forced to contract with the public providers who should form at least 40% of the ARS network of health providers (Gaviria et al. 2006).

In the CR regime the EPS health plans freely establish contracts with their network of providers, although recently there has been a trend toward vertical integration (ownership of first-level providers by the insurance plans themselves) (Giedion and Uribe 2009).

In both EPSs and ARSs the patients can freely choose within the plan network of providers. The main administrative strategies used by health plans to control demand are the use of gatekeepers and utilisation management for specialists, hospitals, and diagnostic care.

Payment of providers
The old public subsystem that included a network of public hospitals and health centres was financed by state resources transferred directly to health care delivery institutions based on historical criteria and institutional demands.

After the reform, the health plans are free to use the payment mechanisms to pay providers. Therefore, the health plans within the same regime may use different means to pay their network of providers. However, the National Social Health Insurance System has set fee schedules, adjusted for inflation, that are used as high ceilings for price negotiations between health plans and providers. Two mechanisms of payments are common between health plans: preventive and primary care services are paid mainly by capitation, and most specialist care and hospital care is paid on a fee-for-service basis or by service packages (Pinto and Hsiao 2007).

The public providers who serve the Supply Subsidies subsystem are paid by municipalities through establishing service provision contracts between public providers and the local health authority (Pinto 2008).

5.2.6 The benefits packages

Although, the reform aimed to achieve universal coverage and make all health plans equal to the contributive health services package by 2000 (Ruiz et al. 2006), the CR and SR regimes have been required to design their benefits package within the resource constraints of each regime. Therefore the two regimes have provided different benefit packages. The CR package, known as the POS (Plan Obligatorio de Salud), includes a comprehensive, standard benefits package, while the SR package that is known as the POSS (Plan Obligatorio de Salud Subsidiado) covers less services, only about 50% of what the POS does.

The benefits common to both the POS and POSS are public health education and outreach services; preventive services; all medications in the national listing; transportation in case the of referrals; catastrophic care, including treatment with radiotherapy and chemotherapy for cancer, dialysis and organ transplant for renal failure, heart, cerebrovascular, neurological, and congenital surgeries and treatment of
major trauma; treatment in intensive care units; hip and knee replacement; major burns; and treatment for HIV/AIDS.

While the POS covers maternity and sickness leave, and all out and inpatient services, the POSS covers some out-patient services such as all obstetric services, all pediatric services for children under age one, low complexity outpatient services, minor trauma, glasses for children and the elderly, and family planning. It also provides only limited coverage for hospital care such as hospitalisation for low-complexity care; all obstetric services; all pediatric services for children under age one; general surgery for herniorrhaphy, appendectomy, cholecystectomy and hysterectomy; and orthopedic care. And it provides no short-term disability coverage.

To meet the demand for health services that are not covered by the POSS, it is complemented by services provided by public hospitals. The insurers pay providers for services actually delivered to their clients independent of the type of supplied services and the patients’ insurance status (Giedion and Uribe 2009).

The beneficiaries of the Partial Subsidies (PS) program can receive few outpatient and inpatient services including all obstetric services and all pediatric services for children under one year of age, in addition to all orthopedic care in the case of inpatient services. Also, they can receive all medication in the national listing that is required for the treatment of covered conditions and primary-level care. Moreover, the beneficiaries of PS can access the same catastrophic care that is covered by the CR and SR (Pinto and Hsiao 2007).

5.2.7 Lessons that can be learned from the experience of Colombia

The National Social Health Insurance system was initially designed as two separate schemes with different target populations, financing sources, and benefits. This design has these advantages:

- The CR regime provides the ability to build a sustainable financial scheme for those who can afford to contribute to the health insurance.
• The SR that is financed through subsidies from the government and contributory regime can protect the indigent people who cannot afford to pay for health insurance.

• Transferring the state subsidies from the supply side to the demand side, in other words, reassigning subsidies to poor people as individual insurance premiums instead of being granted to public health facilities that serve both rich and poor people, this approach allows this system to devote the limited resources to support and protect the impoverished who are in urgent need to these financial support.

• The national health insurance is structured as dual market managed competition model: competition among insurers, and competition among providers. This structure can improve efficiency and quality.

Despite the positive results, the Colombian National Social Health Insurance System has been criticised for these reasons:

• It has not achieved universal coverage according to the plan drawn up.

• The SR system has shown problems relating to resource allocation and efficiency: it does not reach all the poorest individuals. Furthermore, a large group of independent workers who are not poor enough to be eligible for the SR but at the same time earn less than the minimum wage to contribute to the CR, are still outside the health insurance coverage (Gaviria et al. 2006).

• Absence of equity in terms of the benefit package: the SR provides less comprehensive benefits package (POSS) for the poor than the benefit package (POS) provided by CR (The World Bank 2007).

• As a result to the decentralised process that began in the early 1990s and has given local governments and local health authorities the responsibility to manage the preventive ‘collective health services’, the morbidity and mortality rates from communicable diseases have increased due to the fact that only very few local governments and local health authorities have the ability to ensure sufficient delivery of these services (Vos et al. 2006). In addition, public health programs have been reduced and replaced with individual programs for insured people (Alvarez 2004).

• Competition has not increased the efficiency of many public hospitals. Moreover, these hospitals continue to operate with very low levels of occupation because of the
preference of the poorest citizens, who receive subsidies, to use private hospitals. Therefore, this system has suffered from the duplication of expenditure: the cost of subsidies paid as premium for poor people in addition to the cost of subsidies for the maintenance of public hospitals (Gaviria et al. 2006).

5.3 The Social Health Insurance system (SHI) in Germany

5.3.1 Historical background

Germany is a federal republic consisting of 16 states (Länder) situated in Central Europe. The population was approximately 82 million in 2008. According to the World Bank's 2009 classification, Germany is a high-income country. The GNP per capita was 35 940 PPP int. $ in 2008 (WHO 2010).

Unlike many other health care systems, such as the British NHS, the development of the German health care system has been characterized by incremental legislative modifications during both its initial and its more mature stages of achieving universal coverage. Statutory sickness funds developed out of the relief funds that were a part of solidarity-based support systems in the 17th century. In the late eighteenth and early nineteenth centuries the work of voluntary sickness funds was governed by laws that determined the fund management, the benefit package, and provisions concerning contributions. The origin of the SHI system reaches back to 1843 when the municipal authorities were allowed to recognize the existing voluntary funds and make insurance in these funds compulsory (Bärnighausen and Sauerborn 2002). In 1849, Prussia (the largest of the German states) made health insurance compulsory for miners and allowed local communities to make it obligatory that employees and their employers share financial contributions (Busse and Riesberg 2004).

In 1854, local governments received the right to pressure all uninsured people into creating insurance funds for mutual support. In the same year, the laws were extended from the regional to the supraregional level. As a result, compulsory insurance was
established on a supraregional level to include the entire territory of Germany for one employment group.

In 1883, workers’ insurance was introduced by Bismarck who was worried about increasing political pressure from Marxist-influenced labour unions. Bismarck’s workers’ insurance made health insurance obligatory for most workers and people employed in trade and crafts and extended the coverage to their family members. Furthermore, the principle of supraregional compulsory insurance for different occupational groups in 1883 set the ball rolling to achieve universal coverage through an incremental approach which covered more and more occupational groups. The size of the risk pools and the benefits covered had also been growing gradually. In three main steps the coverage was extended to the unemployed (in 1927), all primary dependents (in 1930) and retirees (in 1941), however, self-employed farmers were not covered until 90 years after the introduction of Bismarck’s workers’ insurance due to the difficulty in assessing and taxing farmers’ incomes.

Bismarck’s law doubled sickness insurance coverage from around 5% to 10% of the total population. Thereafter, coverage in the statutory health insurance grew steadily from 11% in 1885 to 37% in 1910. By 1930 about 50% of the total population was covered and by 1950 this proportion reached about 70% (Bärnighausen and Sauerborn 2002). The German insurance system had historically developed along pluralistic lines. People were assigned to a sickness fund as compulsory members basing on occupation or region of residence. The freedom to choose a sickness fund was limited, only voluntary white collar members and voluntary blue collar members had the right to choose among several funds. Other white collar workers and certain blue collar workers were able to choose when becoming members or changing their jobs (Busse and Riesberg 2004). The most important factor to speed up the transition to universal coverage was the steady economic growth that facilitated universal coverage (Busse et al. 2007).

When Germany admitted defeat in 1945, it was divided into the Federal Republic of Germany (FRG) and the German Democratic Republic (GDR), and these states remained until reunification in 1990. The health care system, like other sectors of German society, was split into two different systems. While the FRG continued to use
the existing social health insurance system, the GDR maintained the principle of social insurance, i.e. workers and employers continued to share contribution costs, but the administration was concentrated in only two large sickness funds, one for workers that covered about 89% of the population, and the second which covered about 11% of population, including professionals, artists, the self-employed, and members of agricultural cooperatives. The role of the social insurance system in GDR was very restricted. The majority of health care personnel were employed by the state, and most ambulatory care was delivered through community-based or company-based health care centres, and there were only a small number of solo practices.

In 1990, after the fall of the Berlin Wall and Germany reunification, the German health insurance model used in the old FRG was rapidly extended to the new federal states (known as Länder) in the east of the country, and the structure of the command-and-control system in the former GDR was replaced quickly and completely with a self-governance system. The federal government supported the upgrading of infrastructure in the east through immediate aid programs, directed mainly towards hospitals and nursing homes, and through substantial investment to decrease inequalities (Busse and Riesberg 2004).

5.3.2 The major reforms of the health system

This section will focus only on the new reforms which can be summarized as follows:

- The risk structure compensation (RSC) came into effect in 1994 to reduce the effect of the cream skimming that would result from attempts of the sickness funds to compete for ‘good risks’. Furthermore, a new law made it illegal for the sickness funds to dump enrollees or to refuse to enroll anyone, in order to prevent the adverse effects of competition. The sickness funds are required to cover a comprehensive ‘minimum’ benefit package for all enrollees.

- In order to improve quality, which would lead to higher consumer satisfaction, and develop administrative efficiency, competition among the sickness funds was introduced in 1996 (Bärnighausen and Sauerborn 2002). Since then, enrollees have been able to for the first time choose their statutory sickness fund on a yearly basis.
with three months’ notice. However, the miners’, farmers’, sailors’ funds, some company-based funds, and guild funds have been closed for their members only. Between 1999 and 2000, 4.7% of all insured persons changed their sickness funds; the level of the contribution rate was the main motive for changing sickness funds.

- In 2002, disease management programs (DMPs) for chronically ill patients was introduced (Wörz and Busse 2005).
- In 2004, DRGs were introduced to pay hospitals.
- In the 2007, the "Act to Strengthen Competition in Statutory Health Insurance (SHI)" was enacted.
- The health reform of 2007 created the Health Fund which commenced its work in 2009 (this will be explained in further detail later).

5.3.3 The structure of German Social Health Insurance

The system of financing health care in Germany is self-governing and relatively independent from both state and market. Therefore, in contrast to the health care financing systems in most Western European countries, the German system has proved its strength over time (Bärnighausen and Sauerborn 2002). The authority to regulate the health care system, which works at the central (federal) and regional (Bundesland) levels, is distributed between the state and the self-governing bodies that consist of the associations of the sickness funds and the associations of providers (Wörz and Busse 2005).

The structure of the German health care system is organized on three levels as is explained below:

- At the national level: the regulation of SHI, the regulation of social long-term care insurance, and the regulation of hospital financing are carried out at the federal level. The Federal Assembly, the Federal Council, the Federal Ministry of Health and Social Security are the key actors. The Ministry of Health and Social Security has been reorganized into eight areas: administration; European and international health and social policy; planning, future of the social state, innovation and information; pharmaceuticals and health protection; health care, statutory health
insurance, securing long-term care; prevention, combating disease and biomedicine; social insurance, retirement insurance; Social Code Book; social compensation; and issues of disabled people, social welfare. Many subordinate authorities help the Ministry of Health such as the Federal Institute for Pharmaceuticals and Medical Devices (BfArM), the Federal Institute for Sera and Vaccines, the Federal Institute for Communicable and Non-Communicable Diseases (Robert Koch-Institute), the Federal Center for Health Education (BZgA), the German Institute for Medical Documentation and Information (DIMDI), the Federal Insurance Authority (for social insurance actors) and the Federal Authority for Financial Services Supervision that is responsible for supervising private for-profit insurance. In 2004, the Federal Joint Committee (G-BA) was created to increase efficacy and compliance.

- At the regional level: the health care system is represented mainly by the 16 state governments. None of these states has a ministry dedicated exclusively to health, rather they have ministries in which health is combined most commonly with Labour and Social Policy, less commonly with Family or Youth Affairs, and only in one state the Ministry of Health is combined with Environmental Affairs.

- At a corporate level: firstly, on the providers’ side, the physicians working in the statutory health insurance scheme are organized in regional physicians’ associations. These bodies are a quasi-public corporation based on mandatory membership and democratically elected representation. There is a physicians’ association in each of the 16 states. However, the highly populated state of North Rhine-Westphalia has two physicians’ associations. SHI-affiliated dentists are organized in the same way as physicians. The German Hospital Organization is one of the decision-making bodies of the statutory health insurance structures. This organization is based on a private law and represents the interests of hospitals. Secondly, there are sickness funds and their associations on the purchasers’ side. The purchasers’ side is made up of non-profit, autonomous, non-governmental bodies regulated by the government and organized on a regional and/or federal basis (Busse and Riesberg 2004).

5.3.4 Extending population coverage and the basis for entitlement
Excluding civil servants and the self-employed, SHI is compulsory for people earning up to around €4050 monthly (in 2009). Those who earn above this threshold are not obliged to be covered by SHI, although 75% of them elect to remain in SHI. Recently, to enhance solidarity and financial fairness in health insurance, the people whose income exceeded a certain threshold could opt out of sickness funds only if their income exceeded this threshold for three years.

As of 2007, 85% of citizens were insured through sickness funds, 10% had private health insurance (5% of them are civil servants who receive partly free governmental care and complementary private insurance) and 4% of the population was covered by other sector-specific governmental schemes, such as those for the military, the police and for immigrants seeking asylum. Less than 1% of the population has no insurance coverage.

In order to achieve universal coverage, the 2007 "Act to Strengthen Competition in Statutory Health Insurance (SHI)" was enacted. According to this act health insurance became mandatory depending on previous insurance and/or job status either in the social sickness funds (effective from 2007) or in the private health insurance scheme (effective from 2009). In other words the uninsured persons who were previously insured through a sickness fund have to return to their sickness fund, and uninsured persons who were previously insured through private insurance have to take out private insurance. Uninsured persons who have never been previously insured, such as the self-employed, have to be insured in the system which is principally applicable. Under this act sickness funds and private insurers now have to accept all eligible persons.

In order to protect insured people from premiums which increase drastically according to age and which may be accompanied with a loss of income in retirement, and to facilitate their entrance or reentrance to private insurance, private insurers have to offer a basic benefit package similar to those offered by SHI funds in exchange for a statutorily defined basic premium tariff. This tariff should be paid by all applicants without additional premiums for higher risks related to age, sex and health condition, furthermore, this tariff is uniform for all private insurers.
Since 2009, the private insurers who offer substitutive coverage have been obliged to pool their risks resulting from offering the basic premium through creating a risk structure compensation scheme between private insurers (separate from the SHI structure compensation) to reduce risk selection effects (Van Ginneken and Busse 2009; Busse 2008).

5.3.5 Health financing functions

The general German government expenditure on health was 77% of the total health spending in 2007 and is more than the 73% average for OECD countries. OOP expenditure on health as a proportion of the total expenditure on health was 13.1% (OECD 2009).

Collection of revenues

The SHI system in Germany is financed mainly through contributions, taxes and user-charges.

The contributions: the compulsory contributions are the main source of the sickness funds’ revenue. The sickness funds are responsible for collecting contributions directly from the insured people and their employers and from the public agencies (as will be explained below). The contributions are calculated based on wages up to a certain ceiling per year (it was €4050 in 2009). From 1949 until 2004, the insured people and their employers shared equally the contributions. However, from July 2005, employees must pay higher contributions (0.9%) than their employers. For people with earnings below a threshold of €400 monthly, only employers have to pay for contributions (at a rate of 11% for all sickness funds). Unemployed people contribute in proportion to their unemployment entitlements. However, in the case of the long-term unemployed with a fixed low level entitlement, the government employment agency pays instead of them a flat-premium per capita. For artists and students the federal government takes over half of the contributions. The sickness funds operate on a pay-as-you-go principle, therefore, they may officially not incur deficits or accumulate debts. Until 2009, the sickness funds had been free to set their own contribution rates. Their decision was, however,
subject to an approval by the responsible state authority (Busse and Riesberg 2004; Busee 2008). By law the running accounts of each sickness fund should be balanced to zero, therefore sickness funds were required to translate any profit or losses that had occurred into decreases or increases of the contribution rate. As a result the contribution rate was different from one fund to another according to the risk and income structure of its members. For example, in 1993, the difference between the highest and the lowest contribution rates was 9% (between 7.8% and 16.8%) (Bärnighausen and Sauerborn 2002). However, the introduction of the risk-adjustment scheme and of free choice for insured people led to more harmonization of the contribution rates among the sickness funds (Wörz and Busse 2005). Since January 2009, a uniform contribution rate, set by the government, has been applied to all German sickness funds. The new rate is equal to 15.5% of the contributory income (up to a limit of €4050 per month in 2009); 7.3% is paid by employers and 8.2% paid by employees. Children and non-employed spouses are insured at no extra costs (Ognyanova and Busse 2009).

Taxes: during the last two decades the share of taxes dedicated to financing the health care system has decreased especially after introducing the statutory long-term care insurance. Taxes are used to finance many activities in the health care system such as covering the investment costs in the acute hospital sector, financing research in university hospitals and the education of medical doctors, pharmacists, dentists, nurses and other health professionals in public schools. Moreover, the taxes are used to finance free governmental health care schemes for the police, military, other officials, young civil servants, prisoners, immigrants seeking asylum, and the severely disabled. Taxes are also used to subsidize artists and the farmers’ funds expenditures for retired farmers. Since 2004, the sickness funds receive from the federal budget a fixed amount, which is independent of actual utilization of benefits and the actual revenue from the tobacco tax. The fixed amount is used to finance several benefits relevant to families such as maternity benefits, sick-pay for parents caring for sick children, in-vitro fertilization, sterilization for contraceptive purposes, and prescription-only contraception up to the age of 20 (Busse and Riesberg 2004).

User charges: traditionally, the SHI scheme had imposed a few cost-sharing provisions mainly for pharmaceuticals since 1923. Between 1977 until 1989, when reference prices
were introduced, nominal co-payments were in place. Between 1989 and 1992 no co-payment had to be paid for reference-priced drugs above the price differential. Since 1993 flat-rate co-payments have had to be paid above the differential between the actual and reference prices. From 1994 until 2003, the co-payment amount was linked to the package size as an incentive to patients to buy larger package sizes. In order to raise revenues and contain the costs, cost-sharing has been charged for inpatient days in hospitals, rehabilitative care facilities and ambulance transportation since the 1980s (Busse and Riesberg 2004). With the exception of children below 18 years old, the SHI Modernization Act in 2004 imposed co-payment on everybody, including those whose income falls below a certain income threshold. The cost-sharing is generally limited to 2% of the household income. For people with chronic illnesses and those living on social subsidies the threshold is 1% of their annual gross income. Furthermore, all preventive medical checkups are excluded from the co-payment (Hesse and Schlette 2005). Adults aged above 18 years old must pay copayments equal to €10 for the first visit to physicians and dentists per quarter, and €10 per inpatient day for up to 28 days per year. Furthermore, insured people should pay between €5 and €10 for prescribed medical aids, and between €5 and €10 per pack of outpatient medications, however if the price of the medicine was at least 30% below the so-called reference price, the patient should not pay the co-payment (Busse 2008).

**Risk Pooling**

At the beginning, the sickness funds were relatively small in size. Over time the pool sizes have been growing due to the following reasons. First, the total number of insured people has been increasing as a result of population growth and the expansion of coverage. Second, sickness funds have been merged. The number of funds fell sharply after the First World War. The first wave of mergers was caused by the Reich Insurance Ordinance of 1911 which disbanded the community funds and stipulated a minimum size for the membership of the sickness funds, thus within one year the number of funds dropped from 21,238 in 1913 to 10,004 in 1914. Between 1919 and 1938 the gradual process of unification of funds halved the number of sickness funds from 9,145 funds to 4,524 funds. Following the Second World War, the number of funds was reduced from
Between 1940 and 1948. Recently the Health Care Structure Reform Act of 1992 forced funds to realize economies of scale, so the number of sickness funds became 483 in 1998 (Bärnighausen and Sauerborn 2002). Through the Health Care Structure Act of 1992, the general regional funds and the substitute funds were legally opened to outside members, in 1994/1995 the general regional funds merged into single general regional funds per Land. In 1995, the guild funds followed with another wave of mergers. The latest wave of mergers has included the company-based sickness funds (Busse and Riesberg 2004).

**Allocation of resources from collecting to pooling organizations**

Until 1977 there was not any form of risk equalization scheme, therefore the sickness funds played triple roles as collector, pooling and purchasing organizations, and they had no incentives to contain the costs, reduce contribution rates, or improve the quality. As a result many problems associated with equity and efficiency arose.

In 2009, a new fund called Health Fund was created; the main purpose behind the establishment of the Health Fund was to separate the income based contributions to health insurance from the risk-based allocations to health insurers (sickness funds). According to the new reform, the sickness funds will continue to collect contributions that will be centrally pooled by a new national health fund (Ognyanova and Busse 2009).

**Allocation of resources from pooling organizations to purchasers**

Since 1977, the structure of the risk-adjustment mechanism has been developed throughout many steps, and as a result the role of sickness funds as pooling organizations has been diminished towards a purchasing role, especially after the introduction of disease management programs in 2002 (Busse et al. 2007). The development of the risk-adjustment mechanism in Germany can be summarized as follows:

Firstly, in 1977, a ‘risk equalization scheme’ for retirees was established. Through this scheme the expenditure on the treatment of retirees only was pooled over all the sickness funds, while each sickness fund had to pool the financial resources for other insured groups by itself.
Secondly, in 1992, a risk-adjustment mechanism was established that preceded the introduction of competition between funds in 1996. The risk-adjustment scheme was put into effect for the first time in 1994, excluding pensioners, and has since 1995 included pensioners. The risk-equalization among the sickness funds (the health purchasers) was based on age, gender, the number of family members covered by the policy of the family head, and the number of disabled (Bärnighausen and Sauerborn 2002).

Until 1998, there were two separate compensation mechanisms, one for the Western and one for the Eastern part of Germany. In order to avoid the deficits that faced the sickness funds in the East which resulted from rates of expenditure rising faster than the levels of income contributions, the two risk compensation schemes were linked in a limited way in 1999 (Busse 2000).

Thirdly, since the risk structure compensation (RSC) mechanism could not avoid the affects of risk selection resulting from chronic disease, Disease Management Programs (DMPs) for chronically ill patients was introduced in 2002 to improve the quality and cost-effectiveness of health care for chronic conditions. The DMPs defined minimum standards for the treatment of conditions type 2 diabetes, breast cancer, coronary heart disease, and asthma/chronic obstructive lung disease. Through these new programs the standard costs of chronic illness for each defined condition across funds (adjusted by age and sex) are calculated and included in risk compensation payments between the sickness funds. This system has encouraged sickness funds to attract chronically ill patients due to the higher compensation (Schreyögg and Busse 2005).

Fourthly, in January 2009, the existing risk structure compensation scheme between sickness funds was expanded to include morbidity-oriented factors. The introduction of morbidity-oriented risk structure compensation (morbi-RSC) aims to prevent risk selection, improve care for patients with chronic diseases, and achieve more equitable distribution of funds according to morbidity-related expenditure of sickness funds. The morbi-RSC includes 80 diseases; some of them are split according to diverse levels of severity. As a result, there are 106 hierarchical morbidity groups for classifying insurees. These 106 morbidity groups, together with 40 age/sex risk groups and 6 groups of people receiving invalidity benefits are used as a basis for calculating the
individual risk structure of each insuree. According to the morbi-RSC, allocation of resources to the sickness funds follows a prospective model depending on treatment expenses in the following year (Schang 2009).

Fifthly, since 2009 the Health Fund has allocated resources to each sickness fund based on the improved risk-adjusted capitation formula. The centralized Health Fund will offer more transparency, equitability and competition among insurers as well as less bureaucracy. The sickness funds have to cover all their expenditures using the allocated resources from the central pool. Sickness funds that work efficiently can refund part of their allocations to their insured clients or offer additional benefits. If a sickness fund is unable to cover its costs with the funds allocated to it, then it might levy a surcharge in the form of an income-dependent contribution or a flat rate, however, only to a limited extent. The Health Fund will receive increasing tax revenues that can widen the income base of the SHI system and make the system more stable (Ognyanova and Busse 2009).

**Purchasing health services and health care provision**

*Market structure of purchasers*

The market structure of the purchasers is based on competing sickness funds. However, the risk structure compensation formula between funds has reduced the divergence of premiums and competitive pressures; furthermore there is little competition in terms of the range of services offered or quality because the catalogue of benefits is uniform and largely set by the law (Robinson et al. 2005).

In 2010, there were 169 statutory sickness funds allocated as follows: the 14 general regional funds (AOK); the 6 substitute funds formerly open to either white collar workers or to blue collar workers; the 130 company-based sickness funds (BKK); 9 guild funds (IKK); the sickness funds for farmers (9); and only one sickness fund for miners. The sailors’ fund unified with the miners’ fund in 2008 (The Federal Ministry of Health 2010).

*Health services providers*
Ambulatory health care is mainly provided by private for-profit providers, including physicians, dentists, pharmacists, physiotherapists, etc. Acute care and long-term care are commonly provided by non-profit or for-profit providers employing nurses, assistant nurses, caretakers for the elderly, social workers and administrative staff (Busse and Riesberg 2004).

Free choice of providers has taken place since the end of the 19th century and culminated in a ruling by the Supreme Court in 1960 that indirectly extended patient choice to any physician (Bärnighausen and Sauerborn 2002).

The health care reform act of 2004 introduced the option of using a family physician as a gatekeeper. The purposes behind this reform were to improve coordination of care, contain the costs, and improve the quality of care. According to this reform the insured person can choose whether to register for the option of family physician centered care or to remain in the regular system. To encourage the insured people to select the new model, they will be eligible for a bonus from the sickness fund such as a waiving of the quarterly €10 user fee. On the other hand, the contracted physicians, who manage to enrol their patients in the gatekeeper model, can receive quality-related additional payments or registration fees. The family physicians who can receive this contract should meet some criteria such as participating in quality circles, treating patients according to evidence-based guidelines, running a quality management program within their practice, and meeting minimal administrative standards (Hesse and Schlette 2004).

**Payment of providers**

The purchasing of ambulatory and long-term care takes place according to collective contracting. The SHI Modernization Act has introduced selective contracting with selected providers within the framework of family physician and integrative care models (Busse and Riesberg 2004).

Since the 1960s ambulatory care physicians and dentists have been reimbursed mainly via a fee-for-service system. Until 2009 the remuneration took place in two steps. First, the regional associations of the sickness funds paid a so-called total remuneration to the regional associations of the SHI-affiliated doctors. Taking into account the differences among sickness funds and among the Länder, the total remuneration was usually
negotiated as a capitation per insured person in the SHI. Second, the regional association of the SHI-affiliated doctors distributed the total remuneration amongst its SHI-affiliated physicians according to a uniform-value scale including lists of all services that are reimbursable by the SHI. Every service receives a number of points, set by the regional physicians association, calculating according to the relative value of the service compared to other services. Since 1993 the total budget for ambulatory care physicians has had an upper limit linked to the wage increases of the insured people in the SHI system (Wörz and Busse 2005).

In 2009, the methods for paying SHI-affiliated physicians in ambulatory care were changed. First, the global payments made to the regional physicians' associations are now based on morbidity-related criteria taking into account patients' average utilization of services. Second, each regional physician’s association distributes this payment among its GPs and specialists on a fee-for-service basis, however instead of a floating-point fee schedule, a fee schedule with fixed euro prices is used. Furthermore, a payment ceiling is set quarterly for each physician. The payment ceiling is adjusted according to (1) a physician's specialization, (2) the total number of cases treated during the same quarter of the previous year and (3) the age of the patients. The new mechanism aims at reducing the incentives to provide an excessive number of services (Blümel and Henschke 2010).

Payment of hospitals: regardless of their ownership, hospitals are principally staffed by salaried doctors. Senior doctors may also treat privately-insured patients on a fee-for-service basis. The federal state finances the investment costs in the acute hospital sector, independent of ownership (The 1972 Hospital Financing Act), while running costs are paid by the sickness funds or private patients of the hospitals (Busse and Riesberg 2004).

Until 1985 hospitals were paid by per diems which were set for each hospital by the ministries of the federal states. In 1985, prospective budgets were introduced to reimburse hospitals. These budgets were negotiated between hospital owners and the sickness funds. These budgets were based on per diems and procedure fees (the latter was used to cover expensive costs). In the two methods of payment, hospitals were eligible for full reimbursement of their costs, therefore there were no incentives to contain the costs. In 1992, according to the Health Care Structure Act, the full cost
cover principle was abolished and the budgets started to be calculated on an individual hospital level. Moreover, the increase in the budget was linked to the increase in the growth rate of the contributory income to the sickness funds (Wörz and Busse 2005).

In the year 2000, the self-governing bodies opted for the Australian-refined DRG system and adapted it into the German DRG (G-DRG) version. In 2004, the DRG system allocated by admission was introduced, and since that time it has been revised annually to take into account new technologies, changes in treatment patterns and associated costs into account. Currently, the DRG system contains about 1 100 DRG categories (Busse 2008).

The G-DRG system applies equally to all patients, regardless of whether they are members of the statutory health insurance system, private health insurance, or are self-paying patients. In addition, the G-DRG system has been applied to all hospitals and clinical departments with the exception of institutions or facilities providing services in psychiatry, psychosomatic medicine, or psychotherapy (Schreyögg et al. 2005). The 2009, the Hospital Financing Reform Act (KHRG) mandated the German self-governing bodies to develop a prospective payment system (PPS) for psychiatric and psychosomatic facilities. Similar to the old system, the future psychiatric PPS will be based on per diem payments, however these payments are to be adjusted for patient characteristics and procedures in order to introduce performance incentives to this part of the German hospital sector (Geissler and Quentin 2010).

5.3.6 The benefits package

The process of extending the benefit package to attain comprehensive coverage was incremental as well. Until the early 1970s, the benefit packages were extended gradually to additional disease groups and services such as those encompassing occupational diseases, the treatment of sexually transmitted diseases, and a broad spectrum of preventive measures. Furthermore, the benefits were gradually increased in amount or duration. For example, amount and duration of sick pay were increased in 1957, and the time limit on coverage of in-patient care was eliminated in 1974. Over
time the structure of the benefit package was changed towards a decrease in the ratio of cash benefits (sick pay) to benefits in kind (medical care).

Since the economic recession in the early 1970s and in order to contain the costs, the scale and scope of benefits package have been reduced through the introduction of eligibility conditions, notably for pharmaceuticals, glasses, dentures, medical cures and hospital stays, and through the gradual increase in co-payments. Furthermore, some benefits have been completely excluded from the benefit package, such as medical aid devices, certain dental services, and pharmaceuticals for the so-called petty diseases, diseases acquired during tourist travel and common colds, as well as for pharmaceuticals which are either cheap or of unproven medical benefit.

In 1994, the Social Long-Term Care Insurance Act was passed, and under this insurance both inpatient and outpatient long-term care is offered by a separate insurance scheme. Since 1995 long-term care insurance has been compulsory for the whole population (Bärnighausen and Sauerborn 2002).

In 2003, the SHI Modernization Act was passed; this reform put many burdens on the insurees or consumers of health-care services such as cutting minor benefits, increasing user charges and shifting a greater part of the responsibility for financing the SHI from the employers to the insured. For instance, since 2005 insurees have had to pay the full costs of dental replacement and sickness allowance, although these benefits had been financed by both employers and employees since 1949 (Wörz and Busse 2005). Prosthetic treatment was excluded from direct reimbursement through the sickness funds; however the sickness funds pay a lump sum to patients who are required to obtain private treatment and contract with health providers (Busse and Riesberg 2004).

Currently, the publicly-financed benefits package covers preventive services, physician services, inpatient and outpatient hospital care, mental health care, prescription drugs, dental care, rehabilitation, and sick leave compensation, in addition to long-term care (Busse 2008).

5.3.7 Lessons that can be learned from the experience of Germany
• German SHI started from small, voluntary, informal risk-sharing schemes. These schemes served as learning models for fund administration and solidarity that translated into increased willingness to participate in larger schemes.

• SHI can base at an early stage on a huge number of small sickness funds. The optimal number and size of health insurance funds may depend on the stage of development of the SHI system. Later these funds can gradually merge or at least risk equalization mechanisms can be introduced among these funds to enhance equity and efficiency and to improve risk pooling.

• The existence of comprehensive social insurance in addition to health insurance is a necessary condition to extend the availability of health insurance to some groups such as the unemployed and the retired.

• Strong political commitment plays a crucial role in establishing SHI and to expand population coverage (Bärnighausen and Sauerborn 2002).

• Economic growth and a formal economic sector have been key conditions for the expansion of social health insurance. The evolution of universal coverage in Germany has developed according to different stages of economic development: health insurance in Germany began on a voluntary basis in the early 19th century when it was a poor-income country. While still a low-income country Germany introduced nation-wide social health insurance for certain groups in 1883, and reached coverage of 83% in 1960. Germany expanded its SHI coverage to only 88% in the 1970s as a high-income country (Busse et al. 2007).

• To ensure sustainability of SHI, the mandated benefits package should be adapted gradually in accordance with changing needs and economic circumstances.

• The competition between insurance funds can improve the outcome of these funds; however, before introducing the competition, many measures should be taken, such as the establishment of a risk equalization mechanism to prevent risk selection problems.

• The free choice of the sickness funds and introduction of competition among these funds do not have to be established from the start of the SHI system, rather it can be added at later stages of its development when its administrative and legal capacity enables safeguards to be installed in order to prevent adverse effects.
5.4 The Social Health Insurance System in Romania

5.4.1 Historical background

Romania is situated in the south-east of Central Europe. The population was 21.36 million in 2008, about 54% of which live in urban areas. According to the World Bank classification in 2009, Romania is an upper middle-income country. In 2008, GNI per capita was 13 500 PPP int. $ (WHO 2010).

Before the revolution in 1989, Romania was a communist country. In December 1989, the political system shifted towards a liberal democracy and Romania became a republic. Romania is divided into 41 districts.

Between the First and the Second World Wars, Romania implemented a social insurance system. This system was available for employees and the self-employed. However, at that time, insured people accounted for only 5% of the population. In 1949, the health system was gradually changed to the Semashko health system that was used in the former Soviet Union (European Observatory on Health Care Systems 2000). The Semashko health care system had the following features:

- The state controlled health provision, and a private health sector did not exist.
- The management was highly centralized.
- The health system was financed through general taxation.
- Health care services were free at the point of use and there was no cost-sharing.
- All health care professionals were salaried civil servants.
- The health care system was hospital-based, while primary care facilities were given very limited responsibilities.
- It was mainly comprised of specialists and there were no general practitioners.
- It emphasized large numbers of hospital beds and doctors over quality and health care outcomes (Chacin and Murrugarra 2003).

Although health services continued to be provided in the state-owned facilities, OOP payments for some ambulatory services were introduced in 1983. After 1990 the
Romanian health system faced a lot of problems related to the structure of the Semashko system itself, such as:

- Underfunding: the share of GDP spent on health care was relatively small. Between 1985 and 1989, public expenditure on health was on average 2.2% of the GDP.
- Centralized poor managerial capacity and inequitable allocation of resources between regions and between different social groups.
- Increasing OOP payments, especially under-the-table payments.
- Poor quality of health services, especially primary care services, and an emphasis on hospital-based curative services.
- The supply of beds and personnel was not in proportion to the inadequate supply of health care equipment and drugs (European Observatory on Health Care Systems 2000).

As a result of these problems and corresponding with the general policy of rapid changes in many socioeconomic sectors away from a “bureaucratic state collectivist system of welfare” toward capitalism, following the revolution of 1989, Romania has experienced significant health sector reforms (Vlădescu et al. 2005).

A shift was made in the financing of the health care system from the Semashko model towards the Social Health Insurance system as a compromise between supporters of a free market and supporters of government planning. Furthermore, many decision makers believed SHI would improve the health care system because it is considered to be able to achieve the following aims: increasing the resources dedicated to health care, increasing the transparency of the resource allocation process, greater financial independency, increasing earnings for health professionals, a better match between patients’ needs and the services provided, increasing service-provider accountability, and improving the quality of health care (Scintee and Vlădescu 2006; Vlădescu et al. 2005).

5.4.2 The major reforms of the Social Health Insurance system
Many laws concerning the structure and organization of the Romanian health care system have been enacted after 1995. The most important laws are: Law 74/1995 concerning the organization of the College of Physicians, Law 145/1997 on Social Health Insurance, Law 100/1998 on Public Health and the Law 146/1999 on Hospital Organization. These changes aimed to initiate radical change in the entire structure of the health care system (European Observatory on Health Care Systems 2000).

In 1997, the Health Insurance Law was issued; however, it was adapted many times according to political changes, and the social and economic context. This law aimed to achieve the follows tasks:

- It shifted the centralized state-owned and tax-based system to a more decentralized and pluralistic social health insurance system.
- It introduced contractual relationships between health insurance funds as purchasers and health care providers.
- It focused mainly on prevention and primary health care, and the enhancement of the provision of a minimum package of services including more effective emergency services.
- It focused on the development of the private sector.

The Health Reform Law enacted in May 2006 focused mainly on the extension of the decentralization process, the development of the private sector and the establishment of a clear relation between the health system and the social care system (Vlădescu et al. 2008).

5.4.3 The structure of the Social Health Insurance system

- The Ministry of Public Health is responsible for ensuring the health of the population through defining policies and strategies, planning, coordinating and evaluating outcomes. The Ministry of Public Health holds responsibility for financing and managing the national public health programs, and investments in buildings and high-technology medical equipment (Vlădescu et al. 2005).
There are 42 District Public Health Authorities (DPHAs) acting as decentralized units of the Ministry of Public Health. They are responsible for the monitoring of health status and public health programs, coordination, and the management of health services at the district level.

The National Health Insurance Fund (NHIF) is an autonomous public institution that administers and regulates the SHI system. Currently it is responsible for developing the strategy of the SHI system, coordinating and supervising the activity of the district health insurance funds (DHIFs), in addition to setting up the benefit packages and provider payment mechanisms, and allocating resources to the DHIFs and between the various types of health care. The Council of Administration consists of 17 members: five representatives of the trade unions; five representatives of employers’ associations; two members appointed by the prime minister upon consultation with the National Council of the Elderly and five representatives appointed by the following ministers: Minister of Public Health, the Minister of Labour, Social Solidarity and Family, the Minister of Public Finances, the Minister of Justice.

District Health Insurance Funds (DHIFs) have worked as the main third party payers in Romania since 1999. They are entitled to contract with health providers, either public or private, and collect contributions only from the insured persons, who directly pay the whole contribution. In addition to the 42 DHIFs, two countrywide health insurance funds were established in 2002, one related to the Ministry of Transportation for transport workers (CAST), and one related to employees of the Ministries of Defence, Justice and Interior and the agencies related to national security (CASAOPSNAJ). Although these two social health insurance funds have different target populations, they are controlled by the same regulations and rules that control the DHIFs, and all of them are coordinated by the NHIF (Vlădescu et al. 2008).

5.4.4 Extending population coverage and the basis for entitlement

According to Romanian law, social health insurance is compulsory for all citizens. Romanian citizens residing in other countries, members of the diplomatic missions in
Romania, foreigners, and stateless persons can participate in social health insurance on a voluntary basis (Vlădescu et al. 2008). Before the new Health Reform Law (95/2006) many categories of people who receive no wage were exempt from payment for health insurance. By 2005 a total of 5 million people were paying insurance contributions, while 22 million were offered insurance coverage (Scintee and Vlădescu 2006). After the new Health Reform Law (95/2006) the number of exempt categories decreased. For example, contributions will be collected from pensioners whose income is over the pension taxation base. Nowadays, only some non-wage earners are exempt from the contributions and entitled to benefits, including children under 18 years, those aged 18-26 years who are enrolled in any form of education, patients covered by the national health programs, pregnant women, family members of an insured person (spouse, parents without own incomes), war veterans, and people with disabilities (Vlădescu et al. 2008).

Although universal coverage is a right of all people according to the Romanian constitution, limited resources mean that universal coverage is not yet a reality. For example, people who are unemployed for a period exceeding 27 months lose support from the government to access health insurance, so they are not insured anymore and have to pay for each medical service out of pocket. Also, not all people working in rural areas (40% of the population) are able to pay contributions for health insurance due to low and unstable incomes. Furthermore, since employers have to pay contributions to an insurance fund for their employees, they prefer to hire persons in an unofficial way, on the so-called "black market" (Bara et al. 2002; Waters et al. 2008).

5.4.5 Health financing functions

The public expenditure on health as a share of GDP was 2.9% in 1990. The implementation of the health insurance scheme in 1999 increased this percent only to 3.8% of GDP in 1999 compared with 3.1% in 1998 (The World Bank 2002). In 2007, the total expenditure on health as a share of GDP was 4.7%, this level of spending on health services places Romania at the lower end of the spending distribution among most other countries in Central and Eastern Europe (WHO 2010).
Collection of revenues

Until 1991, general taxation was the main resource used to finance health care. Private expenditure on health care consisted of direct payments for some drugs and some outpatient services, in addition to informal payments. After establishing SHI in 1999, the main resources used to finance the health care system can be summarized as follows:

- Contributions: between 1999 and 2002, SHI contributions were locally collected by the DHIFs and the two special funds from employers and employees working in their districts. Since 2002, a special body called the Fiscal Administration National Agency under the authority of the Ministry of Finance has been in charge of collecting the contributions at the national level, while DHIFs have been responsible for raising contributions only from insured persons directly paying the whole contribution, such as the self-employed. The share of the contribution as a percentage of the total expenditure on health has increased from 64.6% in 1998 to 85% in 2006.

The NHIF is financed mainly by the contributions paid directly by employees and employers and by other governmental budgets that pay the contributions or subsidies instead of some groups (as is explained below). The contributions paid by employees and employers formed 96.8% of the total resources of the NHIF in 2004 (Vlădescu et al. 2008).

The current contribution rate is 7% of employees’ salaries paid by employers and 6.5% paid by employees (Scintee and Vlădescu 2006). The employee contribution is not applied only to their salaries, but extends to include the gross income obtained from other activities such as independent activities, lettings, pensions, dividends and interests on reserves agriculture. If the income from agriculture is under the national minimum gross wage and the family is not given any social security allowance, the contribution rate is calculated by applying 6.5% to the sum representing one-third of the minimum gross wage at the national level. The self-employed, farmers, and pensioners are required to pay 7% to the health insurance fund, although it is not easy to assess the incomes of the self-employed and farmers.
Contributions are paid monthly by those who are paid salaries, quarterly by those whose income is based on agriculture and independent activities, and yearly for incomes resulting from interest on reserves, lettings, and dividends.

-Taxes: taxes were the only source of finance for the health care system in Romania before the implementation the SHI system in 1998. Between 1998 and 2004, the share of taxes as a percentage of total expenditure on health has decreased from 32.4% to 15.8%. General taxes formed a large share of these taxes, while the local taxes represent a small proportion. For example, the local taxes financed only 1.4% of total expenditure on health in 2004. Earmarked payroll taxes that include small taxes on tobacco, alcohol sales, and advertising are used to finance national public health programmes and emergency care. In order to increase tax collection and to stimulate small and medium enterprises, the progressive income tax system was replaced by a universal flat income tax rate of 16% in 2005. The Ministry of Finance is responsible for collecting all taxes at the local level. The taxes contribute to financing the NHIF indirectly, whereas budgets of some governmental bodies pay the social insurance contributions on behalf of the non-employed and the exempted population groups, as follows:

- The state budget pays contributions for persons working in military service and penitentiaries, and persons on maternity leave.
- The unemployment insurance budget pays contributions for unemployed persons.
- The social security budget pays contributions for those who have sickness resulting from a work accident or occupational disease.
- Local budgets cover contributions for persons receiving social security allowances.

For these groups contributions are paid at a rate equal to 6.5% of the sum representing the value of two national minimum gross wages.

Out-of-pocket payments: these include the following types of payments:

- Direct payments for goods or services that are not covered by the health insurance benefits package or by the national health programmes (see section on benefits package). Except for emergencies and certain conditions for which, by regulation, a referral is not necessary, patients who visit a specialist directly without having a referral from the family doctor should pay physicians in ambulatory units directly.
• Cost-sharing: the purpose of these payments is to reduce inappropriate demand for health services, to control costs and to increase revenues. The cost-sharing in Romania includes, first, co-payments that are applied for long-stay care as well for some ambulatory services and drugs that are not fully covered by the health insurance, and second, co-insurance. There was debate about applying cost-sharing for each hospital admission to prevent inappropriate admissions and increase the hospitals’ revenues, however, it has not been applied until now. Currently co-insurance is applied only for stays longer than a certain length in balneary settings. Also, the patients should pay co-insurance for 10% or 50% of the reference price for some categories of pharmaceuticals. All pregnant women and children are exempt from paying for cost-sharing irrespective of their insurance status, while vulnerable groups are exempt from only some cost-sharing, especially for pharmaceuticals.

• Informal payments: the informal payments phenomenon arose during the communist era, and still has a presence now. Informal payments are estimated to account for over 40% of the total out-of-pocket expenditure.

**Risk pooling**

*Allocation of resources from collecting to the pooling organizations:*

According to the type of resources allocated to finance health care, and the pooling organizations, two processes should be recognized:

First, allocating taxes from the state budget to health care; until 1996, the Parliament, according to an annual political process, determined the share of the state budget earmarked for recurrent and capital expenditure of the health sector. Since establishing the health insurance system in 1999, the annual budget of the overall public health budget (including the NHIF budget) has still been established by the government and approved by Parliament according to the state budget law.

Second, allocating contributions to the NHIF; until 2002 health insurance premiums were collected by the DHIFs that used to retained 75% of the collected funds at the local level, while they sent the rest (25%) to the redistribution fund. The segment district pooling and the absence of national level pooling of contributions caused an
increase in inequity, especially in the case of the two special funds (CASAOPSNAJ and CAST) that cover specific categories which are high-income and low-risk compared with the national average. Although these two funds contributed 25% of their recourses to the redistribution fund, the budget surplus of these special health insurance funds was 30% higher than the surplus of all the other DHIFs together in 2000.

Since 2002, the segment risk pooling organizations represented by the DHIFs, CASAOPSNAJ, and CAST have been merged into one risk pooling organization represented by the NHIF. Since then the contributions have been collected at the national level by the Fiscal Administration National Agency and the total collected amount has been transferred to the NHIF.

Allocation of resources from the pooling organization to purchasers:

Until 1996, the parliament had determined minimum health service budgets for each district. After the reform, the allocation of resources among different types of care and the budget levels for each district have been projected at the central level by the NHIF and the Ministry of Public Health and approved by the annual budget law on the basis of proposals made by the districts (DPHAs, DHIFs).

The Ministry of Public Health allocates funds to the DPHAs and to its devolved units mainly on an historical basis and past utilization data. The Ministry of Public Health is responsible for financing public health programmes, capital investments, high-technology medical procurement, and it can also cover the costs of complicated emergency situations that exceed the case payment. The money allocated to the national public health programmes, which have since their establishment in 1994 had separate budgets within the Ministry of Public Health budget, is distributed to the different institutions according to their responsibilities in implementing the programmes (Vlădescu et al. 2008).

The NHIF allocates money to the DHIFs in accordance with a formula based on a risk-adjusted capitation depending on the number of insured persons and the mix of population risks (Scintee and Vlădescu 2006). The NHIF budget covers ambulatory (primary and specialist), inpatient and dental care, including clinical preventive services
and drugs. Moreover, the NHIF budget contributes in financing the national public health programmes, paying for drugs and medical supplies (Vlădescu et al. 2008).

**Purchasing health services and health care provision**

*The market structure of the purchasers*

The DHIFs purchase the health services for their members at a local level. The DHIFs work on a not-for-profit and non-competitive basis. Until 2002, insured people had free choice of DHIF. However, since then this advantage is no longer available (Vlădescu et al. 2008).

*Health services providers*

The DHIFs and the two special funds sign selective contracts with the providers in the district to ensure quality. The DHIFs contract only with the health units that meet the quality criteria approved by the National Insurance Fund and the College of Physicians (Vlădescu et al. 2005). The same rules of contracting apply to both public and private providers. Usually the DHIFs contract with all providers in the district.

According to the health insurance legislation, patients have free choice of health care providers. If a person chooses a provider located in another locality, he should cover the travel costs. To receive specialized ambulatory medical services the insured people should be referred by the family doctor. The insured people can freely choose their family doctor and they are allowed to change him or her after six months.

The provision of health care services in Romania works at three main levels:

- **Primary health care**: provided by family doctors who are independent practitioners. They operate in their own offices, and they are rarely organized into group practices.
- **Secondary care**: provided in ambulatory settings or in hospitals through the network of centres for diagnosis and treatment, office-based specialists, and hospital outpatients departments.
• Tertiary care: delivered in teaching hospitals and specialized hospitals. Most of the secondary and tertiary health care facilities are publicly owned and they work under state administration.

**Payment of Providers**

Until 1998, the district health directorates allocated funds to hospitals and other providers, which were state-owned, based on line item budgets according to historical criteria, and past utilization data. It was impossible to shift the allocated funds among the major expenditure categories (personnel, material and capital).

After the reform, payment for health services has shifted away from funding based on input costs. Recently the conditions for service delivery, payment mechanisms, and the basis of the contracts between the DHIFs and healthcare providers are defined according to a yearly framework contract that is annually arranged by the NHIF and the Ministry of Public Health and approved through a governmental decision. The health providers are paid according to different methods that can be summarized as follows (Vlădescu et al. 2008):

- **Primary care services** are paid by a mix of per age-weighted capitation and fee-for-service.
- **Specialists in ambulatory settings**, including dental care services, are paid fee-for-service.
- **Hospitals** receive prospective payments consisting of a mix of payment methods. The total value of the contract signed by hospitals is composed of:
  - **Case payment**, either through DRGs (case payment by diagnosis) or based on a flat rate per case.
  - **For hospitals or hospital departments that provide long-term care and rehabilitation services**, the budget is calculated according to the number of estimated cases, the optimal length of stay and the negotiated tariff per day.
  - **Payment for hemodialysis services** are paid on the basis of a negotiated tariff.
  - **Payment for services provided by the outpatient departments of the hospitals** are fee-for-service.
  - **Payment for ambulatory laboratory tests** is calculated by multiplying the estimated number of services by the negotiated fee for service.
Payment for services provided as day treatment is calculated by multiplying the number of services by the negotiated tariff.

Home care services are reimbursed according to a fee-for-service.

Rehabilitation services provided by sanatoriums are paid by global budgets established on the basis of the number of inpatient days and the negotiated tariff per day, while rehabilitation services provided in ambulatory settings are paid fee-for-service.

Public health professionals and doctors working in the Ministry of Public Health and DPHAs in public health functions are paid by a salary.

5.4.6 The benefits package

The covered health services can be summarized as follows:

- Preventive health care services: includes early diagnosis of disease that might affect the normal physical or mental development of children. Insured persons aged over 18 are entitled to a yearly medical check-up.
- Ambulatory healthcare: includes diagnostics, medical treatment, nursing, rehabilitation, drugs and health care supplies.
- Hospital care: the insured people can receive specialized care in accredited hospitals and this includes full or partial hospitalization with medical examination and investigations; medical and/or surgical treatment; nursing, drugs and health care supplies; housing and food.
- Dental services: quarterly preventive dental services are refunded for children under 18 years of age and two check-ups a year for individuals between 18 and 26 years if they are enrolled in any form of education. Adults are entitled to preventive dental services once a year.
- Drugs: the Ministry of Public Health together with the NHIF and the College of Pharmacists set up a positive list for prescription drugs on a yearly basis with reference prices approved by government decision.
Health care materials: those are needed to correct eyesight and hearing, for prosthesis of the limbs, and for other specialized health care materials on the grounds of medical prescription.

Insured people are entitled to medical emergency services, complementary medical rehabilitation services, physical therapy, medical rehabilitation, home care and transportation related to medical treatment pre-intra and post-birth medical assistance, and home care nursing;

Some medical services are exempt from the covered benefits package, such as health care services required for professional risks, professional diseases and work accidents, selected high-technology health care services, selected dentistry services, cosmetic surgery, luxury accommodation services in hospital, and curative health care assistance in the workplace.

Persons insured voluntarily are entitled to a particular benefit package that covers emergencies, communicable diseases with outbreak potential, mother and child care, and immunizations. Uninsured people are entitled to a minimum benefit package that covers emergencies, communicable diseases with outbreak potential and family planning services. In addition, both insured and uninsured persons can access all health programmes funded through the Ministry of Public Health. From 2007 uninsured people can receive preventive services through the programme “Assessment of the health care status of the population through primary health care services”. Through this program uninsured people can visit a family doctor free of charge and they can receive a minimal set of lab tests (Vlădescu et al. 2008).

5.4.7 Lessons that can be learned from the Romanian experience

The implementation of the health insurance system has been a very difficult process since it was not prepared properly.

Political instability, lack of managerial capacity and low economic level can influence the success of the social health insurance system implementation (Vlădescu and Scintee 2005).
Romanian SHI lacks autonomy because the health insurance funds' annual budget is proposed by the government and approved by Parliament (Scintee and Vlădescu 2006).

Introducing health programs funded by the Ministry of Public Health for the whole population, and special programs for uninsured people can relieve the negative effects of the inability of the SHI system to attain universal coverage.

Collecting the contributions by the Fiscal Administration National Agency that works under the Ministry of Finance authority at the national level, could contain the transaction costs and increase the transparency of the SHI system. However, on the other hand, using agencies working under the authority of the Ministry of Finance to collect the contributions for the NHIF could decrease the autonomy of the latter.

Reaching single risk pooling can be done in incremental stages. The Romanian social health insurance system started with segment district pooling. Since 2002, the segment risk pooling organizations have been merged into one risk pooling organization represented by the NHIF.

5.5 The National Health Insurance System in South Korea

The Republic of Korea has a population of 48 million, 81% of whom live in urban areas. South Korea is a high income country, GNI per capita was PPP 28 120 in 2008 (WHO 2010).

5.5.1 Historical background

South Korea was occupied and ruled by Japan between 1910 and the end of the Second World War. The Korean War (1950-1953) followed soon after the Second World War and, as a result, Korea was divided into South and North Korea (Anderson 1989). Since 1963 South Korea has achieved rapid economic growth, whereby the GDP per capita grew up from 1 316 PPP in that year to 8 027 PPP in 1989 (Maddison 2008). This was accompanied with alterations in the structure of economy that towards an extreme
industrialization. Therefore, the work force composition changed from agriculture into industrial sector, as a result, the share of urban population rose from 28% in 1960 to 74.4% in the late 1980s (Son 2002).

As a result of the rapid economic growth and in response to rising demands of people for welfare services, the government has made efforts in the last three decades to improve quality of life by introducing various social security programs, including National Health Insurance (NHI) (Shin and Lee 1995).

The selection of the NHI as the main health financing system in South Korea was due to many reasons which can be summarized as follows:

- Launching the NHI was a solution to the necessity for improvements in health care which did not receive enough attention from the government after the Korean War. For example, in 1970 the public share of the total health expenditure was only 8.2%, while the OECD average was 70.5%. The total health expenditure as a percent of the GDP was 2.3% lower than the OECD average of 5.6% (Huber 1999). The share of OOP payments in total health expenditure was 72.1% in 1980 (OECD 2009).
- Adopting the NHI was consistent with the desire of the Korean government to not be directly responsible for the budgetary and administrative burdens associated with a tax-based health care financing system. Instead it preferred to play the role of regulator rather than a financer or provider of health care (Kwon 2008).
- More than half of the self-employed had not paid income tax, making implementation of tax-based financing system inappropriate (Lee 2003).
- The historical relationship between Korea and Japan left the Korean welfare system influenced by the colonial legacies (Hwang 2008). Therefore, it is not surprising that South Korea adopted Japan’s health insurance system as a model. The Korean NHI was influenced by the Japanese model in three aspects: the administrative structure, the way of mobilizing of resources for NHI system, and the means of determining the beneficiaries of the health insurance (Lee 2003).
- The NHI system reflects Korea's traditional Confucian philosophy which emphasizes mutual dependence between family members (Son 1997).

The NHI system developed according to incremental processes can be summarized as follows:
First, NHI was initiated in South Korea in 1963. In this year legislation was passed to create medical insurance societies, and to give enterprises that employ more than 300 workers permission to offer health insurance for their workers (Gottret and Schieber 2006). However, the health insurance coverage under this law was very modest because of the absence of compulsory enrolment in health insurance due to the weak economic and social infrastructure in Korea at that time (Kwon 2008).

Second, in 1976, the health insurance program was established based on the three principles: first, that coverage is compulsory. Second, that payroll contributions are appropriate to the income of the members. Third, that the provided benefits are independent of the level of contributions. This program was designed to provide equal access to medical care and to protect people from the financial risks resulting from catastrophic illness (Anderson 1989).

Third, in 1977, the free and subsidized Medical Aid Program (MAP), as part of the Korean welfare system, was launched parallel to NHI. The MAP is independent of the NHI and it is financed through general taxes. The MAP supports the people whose income is below a certain level to access medical insurance free of charge, although they can receive the same benefits that are covered by NHI.

Fourth, between 1976 and 1989, the NHI system attained universal coverage through many stages (for more details see the section on extending population coverage and the basis for entitlement). The incremental development of the NHI over time based on multiple health insurance societies appeared to be the best way to gradually extend health insurance to the all population (Lee 2003). The multiple health insurance system was consistent at that time with the government’s desire to cover employees and the self-employed by separate insurance societies in order to avoid problems related to the absence of accurate assessments for income of the second group (Kwon 2008). Also, multiple health insurance system was consistent with the government’s interest to bear less financial commitment toward these societies (Hwang 2008).

Until 2000, the population was covered by the different health insurance programs. In 1993, the allocation of the beneficiaries (as a proportion of the total population) between these programs was as follows: 37.7% of population was covered through the wage-earner program (IW) that includes wage-earner industrial workers and their dependents; 11% of the population was covered through civil servant and private schoolteachers program (GPSE); 12.3% of non-wage-earners or the self-employed in
rural areas and 33.6% of non-wage-earners or the self-employed in urban areas were covered through the non-wage-earners’ (self-employed) (SE) program. The remaining 5.4% of people benefited from the MAP. Under each insurance program there were many insurance societies. For example, in 1995 there were 149 medical insurance societies under IW, under the GPSE there was only one society, the Korean Medial Insurance Corporation (KMIC), and under the non-wage-earners (SE) program there were 104 and 130 societies in rural and urban areas respectively (Shin and lee 1995). Each independent insurance society had autonomy to manage the scheme. Although most of these societies were owned and operated by for-profit corporations, their work was not-for-profit (Anderson 1989).

5.5.2 The major reforms in the Korean National Health Insurance system

The major reform was in 2000, when the National Health Insurance Corporation (NHIC) was established to unite fragmented multiple quasi-public insurance societies. The government decided to merge all the insurance societies for the following two main reasons:

- Firstly, to increase equity in health financing. The insurance societies offered their members the same benefits, and they followed the same procedures to reimburse the providers. However, due to the absence of government regulation in setting contributions, which left this task to insurance societies, the insurance societies differed widely in the methods used for calculating contributions. As a result, people with the same earnings paid different social insurance contributions depending on in which insurance society they were mandatorily enrolled. Moreover, problems of financial imbalance arose among the ex-funds. For instance, while most of the funds that covered urban wage-earners had been achieving surplus, the funds that covered the rural and urban self-employed were losing.

- Secondly, to improve the efficiency of the NHI system. The NHI system had an inefficient financing structure in many aspects. The size of many insurance societies was not big enough to guarantee an efficient pooling of revenues and to spread the risk across a sufficiently large number of insurees. As a result, they could not achieve fiscal stability. Moreover, the multiple insurers system could not take
advantage of economies of scale in management, therefore the administrative costs tended to be high (OECD 2002; Kwon 2008).

In October 1998, the first integration was completed, where 227 regional insurance societies that covered all the self-employed insured and the KMIC were merged under the National Medical Insurance Corporation (NMIC). The second integration initiative integrated NMIC with 139 employee insurance societies covering employees of companies in the private sector under the NHIC. As a result of this reform the administrative costs dropped from 8.85% of total NHI expenditures in 1999 to 7.3% in 2000, and below 4% in 2005.

The NHI system underwent many other reforms which can be summarized as follows (National Health Insurance Corporation 2007):

- In 2000, the separation of the prescribing and the dispensing of drugs was implemented.
- In 2002, a special act for the financial stability of the NHI system was enacted.
- In 2003, the separated health insurance funds of employees and of the self-employed were fully integrated.
- In 2004, a co-payment ceiling system was launched to alleviate the financial burden of households against catastrophic or high-cost diseases.
- In 2005, a road map for extending benefit coverage was made and publicized.
- In 2006, foreigners employed in Korea were mandatorily covered with the NHI program by law. Most of these reforms will be further reviewed later.

5.5.3 The structure of the National Health Insurance system

Before the integration, the insurance societies that worked under the different insurance programs had autonomy in managing health insurance for their enrollees. These societies joined the Central Federation of Medical Insurance Societies (CFMIS). The major role of CFMIS was to manage medical and welfare institutions, ensure stable insurance financing, provide the insurance societies with financial administrative
support, and review the claims made by the health care providers and pay those providers from deposits made by the societies (Lee 2003; Shin and Lee 1995).

Currently the Korean NHI system, which can be described as a unified administrative system, is managed by the following main authorities:

- The Ministry of Health and Welfare (MOHW) supervises the operation of the NHI program as a whole through the formulation and implementation of policies, enacting the regulations of the health insurance system, supervising the implementation of these regulations, approving the annual activities and budgets of the NHIC and the Health Insurance Review & Assessment Service (HIRA).

- The National Health Insurance Corporation (NHIC) is a not-for-profit organization. NHIC is responsible for administering the national health insurance program, collecting the contributions, purchasing the health services, setting the medical fee schedules through negotiation with providers, providing health insurance benefits, and managing of the enrolment of the insured people and their dependents to provide universal health coverage for all Korean citizens.

- The Health Insurance Review & Assessment Service (HIRA) is in charge of reviewing and evaluating the claims submitted by the medical care institutions and reporting the results to the NHIC, evaluating whether health care services are medically necessary and delivered to beneficiaries at an appropriate level and cost, and assessing quality of health care institutions (National Health Insurance Corporation 2007).

5.5.4 Extending population coverage and the basis for entitlement

The universal coverage of medical insurance was achieved in the following stages in line with different levels of income:

- In 1977, when the GNP per capita was 1012 US$, the medical insurance program provided coverage for employees and their families in enterprises of 500 people or more. Insurance societies for industrial workers (IW) had existed since the establishment of the NHI system in 1977. In the same year the MAP was launched parallel to NHI. The beneficiaries of the MAP are divided into two classes: class 1
includes households who are unable to work due to old age, disability, pregnancy etc. Class 2 consists of livelihood protection beneficiaries who are employable but self-supporting (OECD 2002). According to Shin and Lee (1995), only 14.5% of the population in 1977 was covered by health insurance. 5.7% were covered by the MAP, while the remaining 8.6% were covered by IW.

- In 1979, when the GNP per capita was 1644 US$, the coverage extended to the enterprises with 300 people or more, and to civil servants and teachers in private schools. The population coverage was 26.9%.
- In 1981, when the GNP per capita was 1734 US$, the coverage was extended to the enterprises with 100 or more people. In the same year pilot project for the self-employed in three geographic areas was implemented. The population coverage was 29.6%.
- In 1983, when the GNP per capita was 2002 US$, the health insurance extended to firms with at least 16 employees. At the same time many programs started in the rural areas to widen medical health insurance. The population coverage was 39.3%.
- 1988, when the GNP per capita was 4127 US$, insurance became compulsory for the rural self-employed. The population coverage was 79.1%.
- In 1989, when the GNP per capita was 4994 US$, the government extended health insurance coverage to self-employed urban workers on a mandatory basis in order to achieve the universal statutory medical coverage (Gottret and Schieber 2006; Lee 2003; Jo and Choi 2002).

5.5.5 Health financing functions

As result of a rapid rise in public spending on health, the total expenditure on health as a percentage of the GDP in South Korea gradually increased from 4% in 1980 to 6.3% in 2007 (see Table 5.3). However, it is still lower than the OECD average of 8.9% (OECD 2009). During the past decade the share of public expenditure has gradually increased from 41.6% of total health spending in 1997 to 55% in 2007, however, it remains below the OECD average of 73% (OECD 2009).
Collection of revenues

The main resources used to finance the health care system are the contributions paid by insured people and their employers, the government subsidies, and out-of-pocket payments.

Contributions: the contributions paid by the insured and their employers represent the major source of NHI revenue (National Health Insurance Corporation 2007). The share of the social contributions doubled during the 1980s as a result of widening the population coverage. Thereafter the share of social contributions has gradually increased since 1990 thanks to increases in the rate of contribution over the last two decades. The increase of the contribution rate has been accompanied by enlargements of the benefits package. It also provided a means to reduce the deficit that faced the NHI between 1997 and 2002.

Before the integration reform, each independent insurance society had autonomy to set the level of contributions and benefits, collect premiums and co-payments, and accumulate reserves (Anderson 1989). The contributions paid by the employees either in the public or private sector were based on wages, while the contributions of the self-employed were calculated on the basis of income, property and family size (Shin and Lee 1995).

After the integration, the NHIC became responsible for collecting revenues. The individuals’ contributions go directly to the NHIC, not to the government’s purse. Thus, the financial management of the NHI system is separated from the government budget plan (Son 2002). Currently the Health Insurance Policy Review Committee is responsible for setting the contribution rate.

The contribution rates for the two categories of the insured (employees and self-employed) are calculated in different ways. First, the contribution of employees insured either in the public or private sector is based on salary and is deducted from the individual’s salary. After 2000 the contribution rate of insured employees gradually increased from 3.63% in 2002 to 5.33% in 2010. These contributions are equally shared by employers (in either the government or private sector) and employees. In the case of
the private school employees’ category, the insuree pays 50% of the contribution, the employer pays 30% and the government pays the rest. Second, the contributions of the self-employed insured, because of the difficulties related to assessing income, are calculated by using a formula including the insured persons’ property, income, motor vehicles, age, and gender. These contributions are paid through monthly billing and individual payment (National Health Insurance Corporation 2007).

There is a wage ceiling for contribution assessment, but it is very high (a monthly wage of 50 000 US$) (Kwon 2008). Also, there are possible reductions in contributions in different categories. For example, insured people living on islands or in remote rural areas benefit from a reduction of contributions equal to 50%, while the contributions of insured people living in rural areas can be reduced by 22%. The reduction of contributions is between 10 and 30% for insured people who have a low income. People who have a family member aged 65 or over and the disabled can benefit from a reduction in the rate of a maximum of 30% (National Health Insurance Corporation 2007).

-Government Subsidy: historically, the NHI program was a heavily contribution-based insurance system, with relatively low reliance on the government's financial support. To encourage the self-employed to join the NHI system, a government subsidy was meant to account for 50% of the payment medical benefits of this category, but the ratio decreased over the years to about 25% in 1999 (OECD 2002). According to the National Health Insurance Act in 2006, the government is required to contribute to financing the NHIC, and the total government subsidy to the NHIC, paid as a lump sum, is about 14% of the total annual projected revenue raised through NHI contributions from the insured, while the Health Promotion Fund pays at 6% of the total annual projected revenue raised through NHI contributions from the insured (Chun et al. 2009). The MAP, which covered 3.7% of population in 2008, is financed entirely through general taxation.

-Out-of-pocket payments: this includes co-payment for insured services and direct payments for uninsured health services. First, direct OOP payment as a percentage of the total health expenditure has gradually decreased with the establishment of the NHI
system and in line with the extension of population coverage. For example, OOP share diminished from 72% of the THE in 1980 to 52.9% in 1989. Since that time the share of OOP of the THE has continued to decrease due to the extension of the scope of benefit coverage. However, OOP share is still one of the highest in OECD countries due to the fact that the covered benefits are still insufficient and that private health providers have substituted uninsured services for insured ones (see the section on purchasing health services) (Moon and Shin 2009).

Second, cost-sharing: the share of cost-sharing in financing the health care increased since the second half of the 1980s to reach a higher rate at the end of the 1990s. The high cost-sharing fees reveal the failure of the government, which has concentrated on the demand side, in order to decrease the overutilization of health services by patients, instead of regulating the supply side of the health market (Kwon 2003). The co-payments are applied according to different values to all medical facilities and all services covered by the NHI (National Health Insurance Corporation 2007):

- In the case of outpatients in tertiary hospitals, the patient pays per visit consultation and 50% of treatment cost.
- In the case of outpatients in general hospitals, the patient has to pay 50% of (the fee for the visiting consultation in addition to the cost of treatment).
- For outpatients in hospitals, the patient has to pay 40% of (treatment cost in addition to the fee for visiting consultation). The classification of the medical institutes will be explained later.
- In clinics, patients have to pay 30% of the treatment cost.
- For inpatient care, the patient has to pay between 10% and 20% of total treatment cost.
- The patients pay 30% of the total cost for pharmaceutical products.

Only the Class 2 members of beneficiaries of the MAP have to pay the co-payment (OECD 2002). To protect people who pay high co-payments, a co-payment ceiling system has been introduced since 2004. The co-payment ceiling threshold is currently
set at 3 million Korean Won (KRW)\textsuperscript{19} within a period of 6 consecutive months. Those who exceed this threshold will be exempted from any further co-payments incurred.

The financing of long-term care
Long-term care insurance is financed through contributions for long-term care insurance paid by the insured, government subsidies that finance 20% of the expected total long-term care insurance contributions within the budget range, and co-payments from beneficiaries. However, there is 50% reduction for co-payments for old age, and allowance beneficiaries whose income is below 130% of the minimum cost of living (National Health Insurance Corporation 2007).

\textsuperscript{19} The exchange rate of the Korean Won in 2011 is 1KRW equal 0.0007 Euro

http://www.exchangerateeuro.org/KRW
**Table 5.3:** Financing sources as a percentage of the total expenditure on health (THE), and expenditure on health in South Korea

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<td>34.3</td>
<td>29.1</td>
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<td>Social security</td>
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<td>Others corporation</td>
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<td>Per capita THE (PPP)</td>
<td>94</td>
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<td>533</td>
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<td>720</td>
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<td>Per capita public</td>
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<td>expenditure on health</td>
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<td>THE as % of GDP</td>
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Source: OECD 2009
Pooling risk

Prior to the integration reform, the NHI was fragmented across multiple quasi-public insurance societies. In 1997, there were as many as 373 insurance societies, working as autonomous bodies. They were not-for-profit and not competing for enrollees (OECD 2002).

Many of these insurance societies were not big enough to guarantee an efficient pooling of revenues, and to achieve a sufficient dispersion of the risk across a large number of enrollees (National Health Insurance Corporation 2007). The Korean NHI system used risk adjustments based on the proportion of the elderly and the catastrophic expenditure of each insurance society. The major beneficiaries of the risk adjustment mechanism were the health insurance societies for the self-employed. However, using the risk adjustment mechanism did not prevent the financial deficit of health insurance societies in some rural areas. Therefore, the government finally decided to merge all insurance schemes into one in 2000 (Kwon 2008).

Since the integration reform, the risk pooling of the NHI has been organized at the national level. The risk pooling organization is presented by the NHIC which is a semi-government agency (Kwon 2003). However, the employees and the self-employed medical insurance societies had been managed separately until 2003, when the pooling of insurance financing was adopted (National Health Insurance Corporation 2007).

The NHIC acts at the national level as a collecting, pooling and purchasing organization. Therefore, there is no special mechanism for the reallocation of resources between collecting and pooling, and there is no risk adjustment scheme to reallocate the budget to geographical regions or between the different sectors within the health care sector (Chun et al. 2009).

Purchasing health services and health care provision

The market structure of the purchasers
Before merging all the insurance societies into one fund in 2000, each independent insurance society had the autonomy to reimburse and purchase services for their enrollees (Kwon 2003). Nevertheless, a central review agency reviewed medical claims made by providers for reimbursement (Kwon 2008). After the integration reform, the NHIC acts as a single purchasing organization. It purchases the health care services for insured people.

*The health services providers*

The NHIC contracts with most private and public providers to deliver health care services. The medical institutions are broadly classified into tertiary hospitals, general hospitals, hospitals and clinics. All of them provide outpatient and inpatient services. ‘Tertiary hospitals’ have more than 400 beds and about 80% of them are private. ‘General hospitals’ are much larger than ‘hospitals’. They can hospitalise more than 100 and less than 400 inpatients, and they have a minimum number of specialty departments. About 83% of them are private. ‘Hospitals’ have a minimum of 30 inpatient beds and no more than 100. About 94% are private. Many of the ‘hospitals’ have been developed directly from the offices of entrepreneurial physicians. ‘Clinics’ have less than 30 inpatient beds and they provide inpatient along with outpatient facilities. Most of them are private (National Health Insurance Corporation 2006).

Korean health care provision can be described as follows. First, it is dominated by the private sector in the delivery and supply of most health care services (OECD 2002). Second, medical specialists formed more than 80% of practicing medical doctors in Korea (Lee 2003). Third, patients can select any practitioner or any medical care institution. Until 1998, patients could visit hospitals without referral, however, after the NHI financial deficit, and in order to contain costs, patients need referrals issued by a doctor to receive medical care from a secondary hospital (specialized general hospital). However, the referral channel does not apply in the case of childbirth, emergency medical care, dental care, rehabilitation, family medicine and medical services for a haemophiliac (National Health Insurance Corporation 2007). Fourth, there is more competition than coordination between hospitals and clinics, mostly because of the unclear functional differentiations between them (OECD 2002). Fifth, before separating medical care reimbursement from pharmaceutical reimbursement in 2000, Korean
pharmacists were free to sell antibiotics and other potent biomedical drugs to customers without a doctor’s prescription (Lee 2003).

**Payment of providers**

Public health services that are provided by the central and regional governments and local authorities are financed by the state. The health care personnel in public health facilities are civil servants and receive salaries (Chun 2009).

The NHIC allocates resources to health providers retrospectively on the basis of a fixed schedule of fees according to the annual negotiation between the corporation and providers (Busse et al. 2007). The fee schedule incorporates fees for all medical services and materials, including drugs. It also includes the remuneration of providers for the services they provide. The services provided at higher level facilities deserve additional reimbursements: these are 20% for hospitals, 25% for general hospitals and 30% for tertiary hospitals. The fee schedule includes a drug list. The list sets the prices at which drugs dispensed by pharmacists are reimbursed (OECD 2002). At the end of 2006, the government introduced a new pharmaceutical reimbursement arrangement, the so-called Positive List, where only the cost-effective and reasonably-priced pharmaceuticals can be selectively listed on the NHI pharmaceutical package (National Health Insurance Corporation 2007).

Health care personnel working in primary, ambulatory and community care are paid on the basis of fee-for-service. Also, doctors, community pharmacists, dentists, complementary and alternative medicine practitioners and physiotherapists are paid on the basis of fee-for-service. Doctors working in hospitals are salaried employees (Chun 2009).

Independent doctors and those working in hospitals are reimbursed through fees for the provision of insured services. While they receive direct OOP payments from patients for uninsured services, they are at mostly unregulated market prices and can vary greatly by facility (OECD 2002).

DRG for selected diseases has been applied in a pilot program since 1997 (Kwon 2003). The pilot program has included voluntary health care institutions. The participation
rates vary depending upon the type of provider. For example, about two thirds of all clinics, only one out of 40 tertiary hospitals, and about 40% of hospitals and general hospitals joined the DRG system (Bong-min Yang 2008). Currently, about 2000 medical institutions participate in the DRG system on a voluntary basis (Chun 2009).

5.5.6 The benefits package

Benefits coverage is standardized and there are no differences in the benefits provided by NHI and the MAP. Before the integration reform in 2000, corporations and employees used to be able to negotiate over the benefits package, as long as it met a minimum set of benefits recognized by the government (Anderson 1989). These benefits included benefits in cash and benefits in kind. The latter one formed 99% of the insurance benefits, including hospitals, physicians, maternity benefits, and drugs prescribed by physicians.

After 1995 the benefit package has been increased gradually and the insurance coverage had been extended gradually to reach 365 days in 2000, while the insurance coverage was limited to 180 days per year in 1995 (Jo and Choi 2002).

Since 2005, the benefits package has provided the following two different categories of services:

- First, service benefits that are divided into health care and health checkup.
  - Health care benefits include diagnosis, tests, medical materials, drugs, treatments, surgery, rehabilitation, preventive care, hospitalization, nursing, and transportation. Non-essential treatment for conditions such as freckles, acne, warts, impotence and snoring, as well as plastic surgery, are not covered by the NHI program.
  - Health checkup benefits include health screening services free of charge to ensure the early detection and treatment of chronic degenerative diseases such as hypertension, diabetes, liver disease and pulmonary tuberculosis. The eligible beneficiaries are the insured and their dependents who are 40 years or over. They can receive this service once every two years. Also, they can apply
for examinations for 5 major cancers which are stomach, colon, breast, liver and cervix cancer.

- Second, cash benefits that include:
  - Refunding allowance for health care that is available in the case that a beneficiary receives health care treatment in an emergency situation at any health care institution that does not contract with the NHI system.
  - Funeral expenses which are payable in the case of death for the beneficiary who is in charge of the funeral ceremony.
  - Compensation for Excessive Co-payment which is payable when the insured or dependents received treatments at health care institutions and made co-payments exceeding 1 200 000 Korean won within 30 days. The insured will be compensated 50% of the excess by the NHIC.
  - Appliance Expenses for the Disabled are paid to improve the health of people with disabilities. This program pays 80% of the expenses for medical appliances such as canes, wheelchairs, hearing aids, etc.

In 2008, a long-term care services program was established separate from health insurance to relieve the burden of population aging on health insurance (Kwon 2008). This program includes, first, in-home services such as home-visit care, home-visit nursing, day and night care and respite care. Second, institutional services that are provided at long-term care facilities. Third, special cash benefits, such as family care cash benefits, exceptional care cash benefits and hospitalizations attending care benefits (National Health Insurance Corporation 2007).

5.5.7 Lessons that can be learned from the South Korean experience

The success of South Korea in reaching universal health care coverage within a relatively short time was a result of many factors. These factors can be summarized as follows:

- Korea has gradually achieved full coverage through many steps in line with its economic development. In 1963, at the stage of a low-income country, Korea introduced health insurance on a voluntary basis. At the stage of a middle-income
country Korea gradually extended coverage from the employees of larger companies to employees of medium and small-sized companies on a compulsory basis. In 1989, at the stage of a high-income country Korea reached full coverage (Busse et al. 2007).

- From 1977, the authoritarian political regime enforced mandatory enrolment in health insurance, except for low-income people who benefit from the MAP. The MAP was launched parallel to NHI and it is financed by full subsidy.

- Mandating employers to pay a share of the contributions paid by their employees for the NHI has been an effective way to extend health insurance.

- The extension of health insurance to the self-employed was the main stepping stone to achieving universal coverage, although this step was the major challenge to be overcome in achieving it. However, many factors helped to cover the informal sector under the NHI. For example, the high annual growth of economy that reached about 12% between 1986 and 1988 improved the ability of the self-employed to pay for NHI. The increased fiscal capacity of the government enabled it to provide a partial subsidy to support the self-employed to access the NHI. Politics also played a role in this achievement, as the expansion of social welfare programs was one of the major items on the ruling party campaign agenda in 1987.

- Family-based health insurance membership has contributed to a rapid extension of population coverage (Kwon 2008).

- From the beginning of the NHI, the government gave the extension of the population coverage higher priority than extension of benefits coverage. It took into account that expanding the benefits package requires a high rate of contribution, which could be an obstacle to the rapid extension of population coverage (Kwon 2008). For example, the premium for salaried workers was only 3% of their wages in 1994. They paid only half while their employer paid the rest (Shin and Lee 1995).

- The provider payment system that is dependent on fee regulation and which applied to all public and private health providers has contributed to overall cost containment, and consequently to a rapid extension of population coverage (Kwon 2008).

- Macroeconomic stability and rapid economic growth influenced in its turn the demographic structure of Korean society. For example, the proportion of the population living in urban areas has increased.
There is a strong sense of family solidarity in the Korean society.

At the time of launching the NHI, Korean citizens had higher income elasticity for health care services in comparison to other countries (Anderson 1989).

The process of implementing NHI started with the gradual introduction of many social insurance programs for different groups of people. NHI started with coverage of the formal sector. Since 2000, these social insurance programs have been united into the NHIC.

5.6 The National Health Services system in Spain

Spain is located in south-west Europe and had a population of 44.5 million in 2008. 77% of the population live in urban areas (WHO 2010). According to the World Bank classification in 2009, Spain is a high-income country. In 2008, the GNI per capita was 31 130 PPP (current international $) (WHO 2010).

5.6.1 Historical background

The development of the Spanish health care system is related to the history and development of the social security system. The notion of social protection gained ground in Spain in late 19th century. In the early 1900s the National Institute of Social Insurance (Instituto Nacional de Previsión, INP) was set up to organize the design and implementation of the first social insurance policies. Theses policies aimed to protect people against various risks resulting from sickness, retirement, etc. The INP tried to develop social health insurance for low-salaried workers under the initiative of the Socialist Party (PSOE) but the Civil War (1936-1939) stopped this proposal. An act implementing Statutory Sickness Insurance was approved in 1942. During the 1940s and 1950s the health care system was modest in terms of population coverage and the extent of the health services provided. The public insurance system covered, 20%, 30%, and 54% of the population in the years 1942, 1950, and 1960 respectively.
The Basic Social Security Act of 1967 extended the coverage to self-employed professionals and qualified civil servants, increasing the proportion of the population covered from 53% in 1966 to about 82% in 1978. During 1960s the social security system set up an extensive network of centres and services for general medical care, and specialized inpatient and outpatient care owned by the public sector. During the 1970s a network of modern public hospitals was established. So within the social security system, the predominance of public provision was the key feature of the Spanish health care system. For example, the public sector owned 70% of the available hospitals beds, and public providers received 75-85% of the public health care budget between 1975 and 1995.

At the time of the political transition towards the democratic system in 1976, the Spanish health care system had many problems. For instance, primary and preventive health care were underdeveloped, there was no universal coverage, and the responsibilities of health care networks were distributed over a variety of government departments which led to poor coordination and inadequate organization, in addition to the unequal geographical distribution of health care structures and resources.

During the democratic transition (1976-1982), the 1978 Constitution declared the right of all citizens to the protection of health, and equity in access to health care and in the territorial distribution of health care resources. The 1978 Constitution paved the way towards universal coverage and a significant decentralization of the health care system, through defining the territorial division of powers in the fields of public health and health care.

The establishment of the Spanish national health system took place in the context of the political transition from the Franco dictatorship towards the democratic system (1975-1986). In that period, 70% of public opinion and 98% of the medical profession and the administrators of the health care system stated the necessity for reform of health care. Popular pressure was an important force for change during the transition. The workers' movement had traditionally demanded universal coverage and public tax-based financing of health care. Furthermore, there were debates about the need for reform of primary health care, which was considered to be of very low quality, and free choice and free access to any medical professionals (European Observatory on Health Care Systems 2000).
The majority of the public and the political left (PSOE, PCE) were in favour of changing the health system to the NHS system. When the PSOE won the election in 1982, it represented the workers’ class as well as the middle classes and their aspirations to a welfare state similar to the social democratic systems in Europe. The victory of the PSOE allowed the establishment of the Universalist NHS which represented the preference of the population (Elola and Española 2001).

The General Health Act was enacted in 1986. It defined the regionally based organizational structure and put the necessary arrangements for the future integration of all public health care networks under the authority of regional governments within the process of devolving central public health powers to the regions (European Observatory on Health Care Systems 2000). The Act also enhanced the universal right to public health care established by the 1978 Spanish Constitution by setting up the general principles for the transformation from the Bismarck model into the Beveridge model for healthcare in Spain. These principles were the following (Durán et al. 2006):

- Universal coverage with free access to health care.
- Public financing through general taxation.
- Integration of different health services networks under the NHS structure.
- Political devolution to the Autonomous Communities (ACs) and region-based organization of health services.
- A new model of primary health care, emphasizing integration of promotion, prevention and rehabilitation activities at this level.

The gradual transition towards a full general tax-based financing system was completed in 1999. The process of decentralization to all ACs was finalised in 2002. So the 17 ACs have now full authority to draw up their policies governing the organization and provision of health services within a general framework and principles established under the General Health Act (Lopez-Casasnoves et al. 2005).

5.6.2 The major reforms of the Spanish National Health Services system
In 1999 the Annual Budgetary Act opened the way for the transformation of all public hospitals into independent agencies under the legal status of public foundations. In the same year the Immigration Law gave illegal immigrants the right of access to the public health system (García-Armesto et al. 2010).

In 2001 a new system of regional funding was approved, whereby health services are financed through the general regional budget rather than through an earmarked transfer.

In 2006 the Interterritorial Council of the National Health System (CISNS) approved the new Spanish national health system common benefits package and introduced an updating procedure.

In 2009 the responsibility for social policy within the central government was shifted to the Ministry of Health, which became the Ministry of Health and Social Policy (MSPS) (García-Armesto et al. 2010).

5.6.3 The structure of the Spanish National Health Services system

- The Interterritorial Council of the National Health System (CISNS): this council acts as advisor and coordinating body among the state and the regions on the subject of health. CISNS is composed of the national Minister of Health and the 17 regional Health Ministries.

- The Ministry of Health and Social Policy is responsible on a national level for general coordination and drafting basic legislation regarding medicine, and broader health issues. The national Ministry of Health undertakes central governance of the NHS, and guarantees the effective right of all inhabitants to health protection (García-Armesto et al. 2010).

- The regional Health Ministries are responsible for public health, health care planning, and management of health services at the regional level (Martin-Moreno 2009).

5.6.4 Extending population coverage and the basis for entitlement
The Spanish NHS system has achieved almost universal coverage, with 99.5% of population is covered within this system. Only 0.5% of the population, who are high-income non-salaried individuals, can opt out the social security system.

There are three means of gaining access to health coverage. The first is the general social insurance regime that includes some 95% of the population covered by the statutory system. The second is for civil servants and their dependants who have a special social insurance regime. They can stay within the NHS or opt out it. The third means available applies to foreign residents in Spain. Depending on their country of origin and administrative legal status, foreigners in Spain can follow different entitlement paths to the NHS system. EU citizens remain insured by their national schemes. In the event of their residing and working permanently in Spain, they may be entitled to the same general regime of social insurance as Spanish citizens, the same applies to immigrants from other countries with legal working status in Spain. The immigrants in an illegal administrative situation are also fully entitled to health care, where non-legal residents in Spain can register in municipal registries and become entitled to health care. In any case, emergency services are free for anyone in need, regardless of their legal or administrative situation. Children and pregnant women have explicit full coverage despite their legal status (García-Armesto et al. 2010).

5.6.5 Health financing function

Historically the Spanish health care system was financed through social security contributions, where the employer paid about 80% of the contribution rate and the employee paid the rest (Rodriguez et al. 2000). In the mid 1970s, the social security system covered about two thirds of the total health care expenditure, while the state budget (i.e. funding from general taxation) covered the remaining third. However, through the transition to the NHS system, the financing of the health care system gradually moved towards funding through general taxation.

Taxation finances 94% of the public expenditure on health, payroll and employers’ contributions to the work injuries and professional diseases mutuality schemes amount to 2.53% of public health funds, and the civil servants mutual funds contribute with 3.4% of the public resources (García-Armesto et al. 2010).
Collection of revenues

Since the reform in 1986, the Spanish health system has been financed mainly through the following revenues:
- Taxes: in 1989, state funding through general taxation accounted for 70% of public health expenditure while the share of social security contributions dropped to about 30% of the total. Since 1999, social security contributions have been virtually entirely supplanted by general taxation (European Observatory on Health Care Systems 2000).

In this context it is important to review briefly the structure of the Spanish tax system: the total tax to GDP ratio was 33.1% in 2008, 4 percentage points lower than the EU arithmetic average. The revenues from indirect taxes, direct taxes and social security contributions were equal to 10.2%, 11.2% and 12.3% of the GDP respectively. The lowest level of taxation in Spain is mainly observable in indirect taxes. Indirect taxes as a percentage of GDP is roughly 3.6 percentage points lower than the EU-27 average, due to the fact that the standard VAT rate in Spain is 16%, one of the lowest rates in the EU. Direct taxes and social contributions are respectively 1.0 percentage points lower and 1.3 percentage points higher than the EU-27 average (European Commission 2010).

From the early 1990s, over 30% of income taxes were devolved to ACs. Until 1997, most taxes were centrally raised, while the Spanish regions played a modest role due to their limited fiscal autonomy. The financing system of the regions (ACs) that was reformed in 1997 gave the ACs more fiscal autonomy under the new financial agreement (“AC financing model”). This reform has lead to a noticeable rise in the regional taxes as a percentage of GDP. Since 2002, the regional governments' share has doubled to the current level of 7.5% of the GDP. Currently Spain with its 17 ACs can be considered to have a quasi-federal system with three levels of government: the central government, the Social Security Funds, and the regional governments. They collect 33.3%, 36.2%, and 22.5% of total taxes respectively (Strong Abogados 2009; European Commission 2010).

In 2002, the decentralization process to all ACs was finalised, henceforth health care funding has been integrated in the mainstream regional financing system, and the role of
regional taxes in financing health care is strengthened. Health care now is the main responsibility of the ACs and accounts for 60-70% of the total ACs expenditure.

The regions administer directly taxes on gifts and inheritances, properties and property transfers, gambling taxes, 33% of the personal income tax collected at the AC level, 35% of VAT, 40% of the revenues from petrol, alcohol and tobacco taxes according to the estimated consumption share per region (Lopez-Casasnovas et al. 2005).

In 2005, some changes in the financing scheme were introduced such as increasing the tax rate on alcoholic beverages and tobacco as an attempt to raise more resources for health care in order to keep health care funding growing in line with the growth of GDP (Durán et al. 2006). A new retailer petrol surcharge was earmarked to fund health care (Lopez-Casasnovas et al. 2005).

In general the financing of the Spanish health care system can be said to be slightly progressive, taking into account the mix of mildly progressive income taxes and regressive indirect taxes like VAT, which was introduced after Spain joined the EU in 1986.

- The civil servants' mutual funds: These funds are financed by the state through taxation (70%) and through contributions from the civil servants to their own mutual funds. These funds protect their members and their dependents from social risks in addition to health risks. Civil servants have the choice to select between the NHS and private health insurance. In the case that they choose to join the NHS, their mutual funds will pay a per-capita sum directly to the NHS, otherwise if they select private health coverage for civil servants, a sum is paid to private insurance companies in line with the pre-agreed stipulations of their mutual fund (European Observatory on Health Care Systems 2000).

- Out-of-pocket payments: These include direct payments and cost sharing. For the services not included in the benefits package of NHS, such as dental care, and social and community care, the patient has to pay full OOPs to buy these services. In the Spanish NHS system there is no cost sharing mechanisms for access primary or specialist care services. However, in the case of pharmaceuticals, medical aids and prostheses there are user charges. The user charges aim to reduce the inappropriate demand, contain the cost, and raise the financial resources allocated for health care at
the same time (Durán et al. 2006). The users pay 40% of the price of medicine prescribed by the NHS doctors and they pay the total price on private prescription drugs. There is not cost sharing for drugs for inpatient use. Also some groups, including the retired, the handicapped, and people who were subject to occupational accidents are exempt from user charges on medicine prescribed by the NHS doctors. Furthermore, drugs for chronic diseases are subject to 10% cost charges only (Lopez-Casasnovas et al. 2005).

**Risk pooling**

The Spanish regions (ACs) have received more autonomy, not only regarding the collection of resources, but also in terms of risk pooling (Busse et al. 2007).

*Allocation of resources from collecting to pooling organizations*

After the transition to democracy, most taxes were centrally raised and allocated to the ACs on an annual basis, according to the State Budget Act of the Spanish Parliament. Once the Spanish Parliament had determined the volume of health care expenditure in the National General Budget, funds were allocated to the regions by means of a block grant following the lines of an unadjusted capitation formula (Lopez-Casasnovas et al. 2005). The ACs controlled their own health services and distributed these funds among the regional health services programs and expenditure headings according to the ACs’ parliaments in their respective budget acts. The ACs might add extra funds from their own financial resources to the state funding. The allocation system was different from one AC to another. For example, up to 1993, the annual budget for the ACs was essentially determined on an historical basis, although in both Catalonia and Galicia the resources were allocated on capitation targets basis up to 1997 (European Observatory on Health Care Systems 2000).

Before 2002, AC funds were determined by political bargaining between the central and regional departments of health. However, after 2002 the allocation of regional health care depends on, firstly, bargaining between Finance Ministries at the central and
regional level, secondly, at the regional level, between ministries with expenditure responsibilities within each AC.

As a result of structural reform and for the first time, the health care funding was integrated into the general block grants that the central state transfers to regions. For this purpose a new allocation formula was established for distributing funding to regional health care. The formula weights are 75% population, 24.5% demographics (population over 65), and 0.5% insularity for Balearic and Canary Islands. Under the new reform health expenditure is no longer earmarked, in other words the regions can re-allocate the funds from health care to other expenditure headings, but the regional governments are not allowed to go below a pre-defined limit with their regional health expenditure (European Observatory on Health Systems and Policies 2005).

To reduce inequality among regions the funds are reallocated among the regions according to risk-adjustments, and through a set of central compensatory funds to ensure quality of health care and to guarantee a basic level of service provision within all regions (Durán et al. 2006). These funds are: first a so-called Cohesion Fund that is financed by the central budget to compensate cross-regional patient flows, i.e. for the patients who receive health care services outside their region, and for foreign European patients treated in the regions. Second, a so-called Sufficiency Fund to ensure a minimum financial capacity in every region. Third, a so-called Equalization Fund to control regional diversity (Lopez-Casasnovas et al. 2005).

Allocation of resources from pooling organizations to purchasers

The ACs act simultaneously as pooling organizations and as purchasers of health services as well. Thus there is no specific method to allocate the resources to purchasers (Durán et al. 2006).

The typical structure of regional health systems consists of a regional ministry or department of health which is the main receiver of the health budget allocated by the regional budgetary process and approved by the regional parliament. The regional ministries or departments of health play the role of purchaser. They negotiate global annual budgets with the regional health service that in most cases is the main health services provider. In turn, the regional health service negotiates global annual contracts with its integrated providers of primary care, specialized and hospital care, and public
health and prevention services. A certain amount of activity can be contracted out to private providers, typically in order to reduce waiting lists for surgical procedures or high-technology diagnostic tests (García-Armesto et al. 2010).

Many ACs have no purchaser-provider split. Only some regions, in particular Andalucía, the Basque region and Catalonia, have experimented with contracting models (Thomson et al. 2009a).

Purchasing health services and health care provision

The market structure of the purchasers

Until 2002, seven special regions (covering 62% of the population) had responsibility for purchasing health care, while the central government purchased the health care on behalf of the remaining ten regions. From 1 January 2002, however, the other ten ordinary regions have also received purchasing responsibilities. Thus all regions now have purchasing functions while the central government maintains a broad regulatory function only (Robinson et al. 2005). The regional purchasers cover geographically distinct populations and each region now has a regional health service that is responsible for managing definite types of health care for the population in the region (Durán et al. 2006). Some ACs have developed regional agencies with a semi-autonomous status from the health departments in order to purchase health care. In Catalonia, for instance, where two thirds of hospitals are private (non-profit) a purchaser-provider split was implemented (Lopez-Casasnovas et al. 2005).

The health services providers

With the exception of Catalonia, health care delivery is mostly carried out through the public network of inpatient and outpatient centres. Primary health care is predominantly publicly funded and run. The access to ambulatory specialist care requires a previous visit to a general practitioner. The gate-keeping system was established in 1986. Scheduled access to hospitals requires a referral from a GP or from a specialist. Many people bypass the gate-keeping system by going to hospital emergency departments,
which can be considered to be chronically overloaded in urban areas (Rodriguez et al. 2000).

Payment of providers

The majority of GPs and specialists are public employees paid on a salary basis. Although capitation formulas have been gradually initiated for financing primary care providers, these formulas have some limitations since they do not account for specialist referrals or drug prescription costs (Lopez-Casasnovas et al. 2005).

GPs working under the single practice model are paid by capitation. The capitation component is calculated adjusting for population density and for the percentage of the population over 65 years of age. Private physicians in the ambulatory sector are paid on a fee-for-services basis (Durán et al. 2006).

For inpatient health care delivery, except for Catalonia, about 68% of hospitals beds are publicly owned. So the majority of staff is employed on a salary basis (Lopez-Casasnovas et al. 2005).

The reimbursement of hospitals was shifted from a retrospective (global budget based on routine basis) to a quasi-prospective payment system through negotiation of a contract program between the third-party payers (the regional health services) and hospitals. These contract programs are dependent on three strategies; first, determination of the benefit package; second, establishment of quality, activity and service volume objectives; and finally, allocation of financing related to specific activities at public hospitals (Durán et al. 2006). Since the 1990s, many ACs have adopted different methods to finance their hospitals. From 1997 some new public hospitals became self-governed, while the existing hospitals have become quasi-independent agencies since 1999 (Lopez-Casasnovas et al. 2005). In 1999, DRGs were introduced as a way to pay hospitals (Thomson et al. 2009a).

5.6.6 The benefits package

The Royal Decree for Services Provision 63/1995 drew up for the first time the list of services provided by the public health system. Safety, quality, effectiveness, and efficiency criteria were used to regulate the introduction of new services and technologies in the benefits basket. The 1995 Royal Decree had allowed for ACs to
provide additional health services at their own expense. The services provided across regions differed, reflecting local preferences. However, this diversity could obstruct access for citizens temporarily located in different regions, in addition to posing an inequity problem across the NHS system.

From 1995, to enhance equity within the NHS regardless of the territory of residence, the ACs are obliged to provide within their financial liability a common services set, thus, negotiation and agreement to define the list within the CISNS is required.

In 2006, a new Royal Decree (1030/2006) allowed a change to the common health benefits basket and the establishment of a procedure for inclusion of new services or technologies in this package. Henceforth, the inclusion of certain health services in the common benefits package entails the right of the citizen in need to seek this type of care at the expense of the NHS, even if it is not available in their region of residence. Currently, ACs are free to approve their own health benefits baskets, and supplement the common benefits package defined by the NHS. However, the CISNS should be informed about and debate this inclusion of benefits (García-Armesto et al. 2010).

5.6.7 Lessons that can be learned from the experience of the Spanish National health Services system

- The Spanish NHS system is almost universal in terms of coverage of population, and providing a comprehensive benefits package.
- In principle, the financing of the NHS system aims to achieve solidarity in financial contributions through using general taxation gathered at both the national and the regional levels. However, the NHS has become less progressive since it started to be funded by indirect taxation resulting from the introduction of VAT. Also, the co-payments for prescription pharmaceuticals can be considered as regressive method of financing the NHS, and it may erode the solidarity principle.
- The funding model of the NHS system aims to reduce inequality among regions through the reallocation of funds among the regions according to risk adjustments, and through a set of central compensatory funds to ensure equality of financing
health care and guarantee a basic level of service provision within all regions (Durán et al. 2006).

- The decentralization of the health care system to regions can have many benefits such as:
  - It allows the easier implementation of necessary reforms and creative initiatives.
  - The autonomous management is more responsive to needs of the regional population. For example, Catalonia and Basque Country which are particularly affected by the demographic problem of an aging population have increased the number of beds for long-term patients.

On the other hand, decentralization of the health care system can encounter many problems, such as:

- The inequalities in access to some specialities or treatments, such as palliative care (Jose M Martin-Moreno 2009). Also, there are obvious variations among the regions in terms of hospital specialisation, physician and nurse density, level of technology used, and clinical quality of care.

- Some studies have revealed that these differences are not related to differences in health care financial inputs, but rather more related to differences in health-related policies and the organization of service provision, as result of decentralization (Lopez-Casasnovas et al. 2005).

- The global strategic and coordination role of the Interterritorial Council of the NHS is weaker than expected, and in addition there is a lack of a good and transparent information system.

- Although many initiatives for cost containment have been adopted, such as regulation of the pharmaceutical market, an explicit benefits package, and regional resource allocation, cost containment is still a real challenge for the NHS system. A consequence of the decentralization of the health care system has been the marked increase in health expenses in most regions (Durán et al. 2006).

5.7 The Health Care System in Tunisia
Tunisia is a Northern African country with a population of 10.169 million in 2008, 67% of whom live in urban areas. According to the World Bank classification in 2009, Tunisia is a lower middle-income country. In 2008, the GNI per capita was 7 070 PPP (current international $) (WHO 2010). In 2007, the GDP annual growth was 6.3 (World Bank 2009b).

After Tunisia’s independence from France in 1956, the economy was tightly controlled by the government until the mid-1980s. Since then, the Tunisian economy has moved towards liberalization and integration into the global market. In 1990, Tunisia became a member of GATT and signed an association agreement with the European Union in 1995. GDP growth increased from an annual rate of 3% during the period 1985-1990 to more than 5% between 1996 and 2002.

5.7.1 Historical background

The Constitution of Tunisia, which was established in 1956, declared the right of each citizen to health protection. Until the end of the 1980s the health system depended on colonial medical infrastructure, especially the hospitals that are concentrated in the urban areas. At that time the government focused on improving the supply of services and health coverage; providing preventive programs against communicable diseases; enhancing the geographical access to primary care; training health care workers; and establishing social insurance for a big proportion of the population, including civil servants and employees in the formal sector. In the 1980s health services were mainly supplied through the public sector, while the role of the private sector was modest and limited to ambulatory health services. After 1990, the private health care supply showed fast development, especially in the area of inpatient health care. The noticeable growth in the private sector was a result of the quantitative and qualitative changes in health care demands (Regional Health Systems Observatory 2006).

The progression of health insurance in Tunisia has been in line with the expansion of social security in the country. Until 2007 the Tunisian health insurance system consisted of multitude of schemes that met the needs of certain professional groups.

-In 1951, the National Pension and Social Insurance Fund was established (Caisse nationale de retraite et de prévoyance sociale) (CNRPS). The CNRPS provides social
protection for employees in the public sector. Furthermore, until 2007 it ran a compulsory health scheme that covered all the employees in the public sector and the retirees.

- In 1960, compulsory social insurance was extended for employees in the private agricultural and non-agricultural sectors, under the administration of the National Social Security Fund (Caisse nationale de sécurité sociale) CNSS. This social insurance scheme covered its members with social health insurance as well.

- In 1982, an act was adopted to establish a compulsory social insurance scheme for self-employed workers within the CNSS, with a medical care branch that was the same as for employees in the private sector. The CNSS established six polyclinics in the areas with high concentrations of insured people to provide health care for its members (Kechrid 2002). The CNSS also provided health care coverage to certain other categories, including students and the disabled. The number of people enrolled in the social security schemes has doubled since 1987 because of the expansion of eligibility to new groups. However, only 84% of those eligible for CNSS were actually enrolled in it, because the rest joined the AMG 2 (as will be discussed below).

The CNSS and CNRPS extended coverage to the insured members’ spouses (if not covered elsewhere) and their children (up to the age of 16 years) (El-Saharty 2006).

In addition, and in parallel to social health insurance two “Free Medical Assistance” (Assistance Médicale Gratuite (AMG)) programs were established in 1958. The first program, AMG1, provides free care through the Ministry of Public Health (MoPH) facilities for the following categories of the population:

- Beneficiaries of the national aid program for poor households.
- Beneficiaries of the aid program for persons with disabilities who are unable to work.
- Beneficiaries of the aid program for the poor and elderly.
- The householders who are ineligible for either one of the two social health schemes, and their average income is equal or below the poverty level that is determined by the National Institute of Statistics, and they moreover have no current or potential support from active family members (Achouri 2007b).
The beneficiaries are provided with free health care cards. The card is valid for five years within national limits and regional quotas.

The second AMG program (AMG2) provides health care for less vulnerable people at greatly reduced fees. The beneficiaries pay only 20% of the user fees for the services provided at the MoPH facilities. Beneficiaries of reduced fees receive fee reduction cards according to their annual household income, relative to the family size. The fee reduction card is valid for five years, within regional quotas, and it must be validated annually through the deposit of 10 Tunisian Dinar (TD) (Arfa and Achouri 2008). The annual income of the household must be below the Minimum Guaranteed Salary (salaire minimum interprofessional garanti - SMIG) for a family of one or two persons; or below one and half times the SMIG for a family of three to five persons; for a family with more than five persons the income of household must be below 2.5 times the SMIG. The beneficiaries of reduced fees can not benefit from the two social security systems; furthermore, they must not be able to enrol in any one of those social security systems. However, in practice many beneficiaries are eligible for one of the two national insurance schemes, but they prefer the AMG2 system because it is less costly.

In 2006, the CNSS and CNRPS covered 66% of population, AMG1 and AMG2 covered 7-8% and 25% of population respectively. About 1% of population was not covered under any insurance schemes or medical assistance programs (Achouri 2007b).

As a result of the insufficiencies of the social health insurance schemes, supplementary insurance schemes (group insurance and mutual insurance companies) have been developed (Samson 2009). Many private employers provide their employees with private health insurance as a benefit; however, this benefit is typically limited to large private companies. Besides private health insurance, more than 60 non-profit insurance funds (mutuelles) provide health coverage to about 130 000 beneficiaries in both the public and private sectors (El-Saharty 2006).

Several problems had faced the segment social health insurance funds, such as:

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20 The exchange rate of the Tunisian Dinar is 1 TD equal 0.52 Euro (as of 7th February 2011)

http://www.exchange-rates.org/currentRates/E/TND
Both CNSS and CNRPS provided insufficient pooling and financing for the health care of their members.

- Inequity in the benefits provided by the two funds. In addition, contribution rates were widely different between the public and private sector.
- The contribution levels could not sustain the expenditures of the mandatory scheme of the CNRPS and could barely sustain the CNSS scheme.
- Because the public sector was the main provider of health care under social health insurance, it was overwhelmed by a growing demand for high quality and timely health services. The inadequate contributions allocated by the social security funds to the budget of the MoPH made the latter unable to meet the needs the people.
- The exclusion of private health care from health insurance coverage, and the inability of public sector provision to meet the growing needs of the population, made insured people turn increasingly to the private sector, even if this meant paying for their own health-care costs. This caused a growth in OOP payments, comprising nearly half of all health expenditures, which has increased the burden on household budgets (El-Saharty 2006; ISSA 2008).

5.7.2 The major reforms of the health care system

In 1996, efforts were undertaken to reform the health care financing system. This reform keeps the financing of the health care system within the framework of social health insurance due to Tunisia’s historical commitment to financing social services through social insurance, and the health insurance system has been one of these social services. The reform process began on 1 July, 2007, with the merger of the sickness benefit programs of the various social security schemes into a new unified scheme.

This reform is based on the following principles:

- Solidarity and equal opportunities between all socially secure people.
- Introducing a single and unified mandatory scheme, this scheme would be managed by the National Health Insurance Fund (Caisse Nationale d’Assurance Maladie (CNAM)).
• Maintaining the optional supplementary regimes to cover the needs which remain unmet by the basic regime, and to avoid overlap between the basic and the optional coverage. The management of this optional plan could be done by private insurances or by the mutuelles, but the CNAM could also offer it.

• Extending health insurance to include private health care provision.

• Separating financing of health care services from the provision of health care.

• Setting up cost control mechanisms to control health care expenditure and to define the responsibilities of all parties in this effort (El-Saharty 2006; ISSA 2008).

The new scheme has been introduced in two stages. The first phase began on 1 July, 2007, took only 12 months to complete, and involved:

1. Increasing contribution rates set by the various schemes annually over a period of two to five years to eventually equalize at a single rate.

2. Applying a single insurance scheme that will gradually include all the existing schemes with the exception of schemes for students and workers with low incomes, who will continue to receive the same benefits as previously. These schemes will be reviewed at a later date.

The second phase of the implementation of the new health insurance scheme with all its component parts commenced on 1 July, 2008 and included setting the options of insurance plans that insured people can choose from (public option, private option, and the system of reimbursements).

Prior to and during each stage of the reform process, there was a great emphasis on the mechanism of contracting with health-care providers. An extensive media campaign informed end users of the details of the new scheme and its new rules. The health care system was also to be modernized by putting even greater emphasis on technologies that will facilitate data exchange procedures between the CNAM and its partners. In 2009 the new fund covered about 7 million (70% of the population) (ISSA 2008; CNAM 2009).

5.7.3 The structure of the health care system
The Tunisian health system is mainly managed by the MoPH and its regional directorates. Even after several attempts to decentralize the management of the health sector at the regional departments of public health or at the hospital level, the management of the health sector is still centralized. The development of public health infrastructure and its evaluation are framed by the five-year plans of economic and social development that also determine investment in the public health sector. These plans are organized on the basis of broad dialogue at the local, regional and national levels and they are defined after negotiation between the Ministry of Economic Development and International Co-operation (which is in charge of national planning), Ministry of Finance and the MoPH.

The regional directors who follow the MoPH policy are involved in planning, supervising, coordinating and allocating resources at the regional level. The authority of the regional directors is not limited to public health facilities, however. The authority of the regional directors extends to the private health sector as well.

Some other ministries have their own health facilities (para-public facilities) that provide health care for their employees, such as Ministry of Defense hospitals, and the Ministry of Interior.

The National Health Insurance Council will be in charge of reviewing and assessing the functions of the health insurance scheme and recommending necessary means to ensure its financial viability (El-Saharty 2006).

The CNAM will be responsible for monitoring health care services provided to socially insured patients and contracting with health providers (Regional Health Systems Observatory, 2006). The CNAM will be represented by 51 centres across the country (CNAM 2011).

5.7.4 Extending population coverage and the basis for entitlement

While “Free Medical Assistance” (AMG) programs will continue to provide their free or fee reduction services to poor people, the new fund, CNAM, will cover all the socially insured members, and their dependents, who belong to one of the following social insurance schemes:
The insured people (the public employees and retirees) within the National Pension and Social Protection Fund (CNRPS)

The insured members within the National Social Security Fund (CNSS) who belong to one of these social security schemes: the non-agricultural workers’ scheme; the agricultural workers' scheme; the non-salaried workers' scheme in the agricultural and non-agricultural sectors; the Tunisian overseas workers' scheme, and the artists, creators and intellectuals' scheme (ISSA 2008; CNAM 2009).

5.7.5 Health financing functions

Collection of revenues

The Tunisian health care system is financed through the general revenue allocated by the state budget, social insurance contributions and OOP payments:

First, general revenue: until the end of the 1980s, the general government expenditure on health as a proportion of the total expenditure on health was about 65%, of which the social insurance contributions formed 15%. In 2007, the public funds represented 50.5% of the total expenditure on health, the social security expenditure formed about 43% of the public expenditure on health (WHO 2010). The budget of the MoPH in both parts investment and operational, is annually defined after a negotiation with the Ministry of Finance and recently with social security funds as well (Regional Health Systems Observatory, 2006). Beside the state budget, social security funds and householders contribute to financing the budget of the MoPH. In 2003, the three mentioned bodies contributed to financing the budget of the MoPH according to the following shares: 63.6%, 22.2% and 14.2% respectively (El-Saharty 2006). The MoPH finances all the preventive programs that are free of charge for the Tunisian people, in addition to financing the investments and operational budgets of public health facilities.

Second, social security contributions: before the reform the CNSS and the CNRPS were financed through payroll taxes. The CNRPS members (the employees and retirees in the public sector) had to pay 1% of their wages and the employer had to pay 1% as well for
the basic compulsory coverage regardless of scheme chosen. Active CNRPS beneficiaries who chose the supplemental coverage had to pay an additional 3% payroll tax, and the employer had to pay an additional 1.5%. The CNSS members had to pay varying rates of contribution depending on their category; however, the highest rate did not exceed 4.75%. For example, non-agricultural employees pay a wage tax of 4.75%, 1.32% of which is paid by the employee and 3.43% paid by the employer (El-Saharty 2006).

After the integration reform, the CNPRS and the CNSS will continue to collect contributions and transfer them to the CNAM. The latter set a single contribution rate for all economically active insured people that equals 6.75% of their wage, of which 4% is paid by employers. To reach this rate, the previous contribution rates for the different groups are planned to progressively increase. For example, in the CNRPS, the premiums will increase from 2% of the salary to 6.75% (4% paid by employer and 2.75% paid by employee). For pensioners who had to pay a 1% contribution before the last reform, the contributions will similarly increase and will be capped at 4% of their income. In the CNSS, the rates are planned to progressively increase to 6.75% (4% paid by employer and 2.75% paid by employee). The self-employed pay the whole contribution rate of 6.75% themselves (The Tunisian Parliament 2009; El-Saharty 2006).

Third, out-of-pocket payments: these payments can be classified into two categories.

- First, cost-sharing, beneficiaries of the second AMG program must pay about 20% of the total fees to receive health care at MoPH facilities, and they must also pay a 10 TD annual fee for the validation of their health care card. Before the merger reform, socially insured patients had to pay a lump sum for each service received through a moderated ticket. The value of these tickets varied according to the facility type and the specialized care received (Regional Health Systems Observatory 2006). Since the reform, with the exception of chronic diseases and some medicines, insured people must pay for most services provided through the public, private and reimbursement insurance schemes. The cost sharing equals the difference between the actual payment by the CNAM for the provided services and their real cost (El-Saharty 2006). The cost sharing payments range between 15% and
60% of the cost of services received according to the selected scheme and type of the services provided (for more details about the cost-sharing see benefit package) (CNAM 2011).

- Second, direct out-of-pocket payments to the private and public health sector. The patients without official coverage or private insurance coverage must pay the entire health care cost out-of-pocket whether they receive the health care in the private or public sector, on the basis of official tariffs and nomenclature of professional acts. It is worth mentioning that the beneficiaries of AMG programs spend a considerable proportion of their income on private health care. In 2004, the household OOP payments on health according to ownership of health facilities were allocated as follows: 10% for public facilities, about 87% for private facilities, and about 3% for para-public facilities (Regional Health Systems Observatory 2006).

**Risk pooling**

Before the merger reform, risk pooling in Tunisia was fragmented through various schemes, such as CNPRS and the CNSS, in addition to the MoPH. Under the new law, the MoPH will keep its own budget and finance its tasks as usual.

*Allocation of resources from collecting to pooling organization*

The CNPRS and the CNSS will continue to collect contributions, however, they will transfer them through appropriate financial links to the CNAM. Following the merger reform, there is large financial pool managed by the CNAM. The CNAM will have responsibility for assuring the actuarial and financial viability of the funding pool.

*Allocation of resources from pooling organization to purchaser*

The CNAM plays the role of purchaser of health care services for the beneficiaries. Therefore, there is no special mechanism to allocate resources between the pooling organization and the purchaser.

**Purchasing health services and health care provision**
The market structure of purchasers
Following the merger reform there is a single purchaser for health care services presented by the CNAM.

The health services providers
Following the reform, health services are provided by the public health facilities owned by the state, para-public facilities (CNSS polyclinics, military hospitals, and national security force hospitals), and private facilities. The public health facilities are classified according to a pyramidal scheme as follows: PHC centers, district hospitals, regional hospitals and teaching hospitals. Although private delivery of health care, especially for hospitalization and basic medical services, has grown rapidly, and private bed capacity has doubled in the past five years, the public health sector is still predominant, with 87.5% of hospital beds and more than 55% of all medical personnel. Moreover, tertiary health care services are mainly provided through public sector providers (Arfa and Achouri 2008; Regional Health Systems Observatory 2006).

Payment of providers
Before the integration reform, provider payment mechanisms varied according to the type of the health providers and the payers:

- The MOPH pays regional and university hospitals on the basis of a global operating budget. These budgets are negotiated on the basis of actual and expected costs and admissions every year, while local hospitals and primary care centers are financed on a line-item basis.
- The public employees in the health sector are paid on a salary basis by the Ministry of Finance.
- The CNRPS and the CNSS used to pay for regional and university hospitals on the basis of a simple case-based fee system, but within the context of a global budget.
- The CNSS used to finance the polyclinics through global budgets, and the polyclinics’ employees are salaried employees.
- The private health sector facilities were paid by the CNRPS and the CNSS according to negotiated fees for agreed services. In the case of CNRPS optional scheme, the private health sector was paid through fee-for-services basis.
• Group insurance and mutual insurance companies pay the private health sector facilities on a fee-for-service basis (El-Saharty 2006; Arfa and Achouri 2008).

After the integration reform, the CNAM held contracts with representatives of health services providers, these contracts determine the fees for the health services provided, mechanisms for control of health expenditure, and ensure good quality (CNAM 2011). The health services providers in the private sector are paid on a fee-of-service basis, while for the providers in the public sector, the system of reimbursement is based on lump sum for each diagnosis (Achouri 2007a).

5.7.6 The benefits package

All health care programs in Tunisia, including the social insurance schemes, have not stipulated well-defined health care benefits packages. In general, patients can access all types of health treatment within these programs and there are no limitations in the public sector for available services (Arfa and Achouri 2008; El-Saharty 2006).

Before the reform:
The CNRPS services were restricted to the health care required for long-term illness and surgical operations. Since 1972 the insured people within the compulsory insurance scheme were granted the freedom of selecting between two alternatives, in addition to freely registering in an optional supplementary scheme.

• The first alternative was the reimbursement or refund system. In this option the coverage was limited to some long-term treatments for chronic diseases and surgical interventions, excluding all common diseases. These services were provided by public and private health providers. In this option, the patient must pay the health providers at first and submit the bills to the CNRPS to reimburse them. However, there were limitations and ceilings on reimbursement of the services provided by the private sector.

• The second alternative was direct access to all health care services in public facilities run by the MoPH upon presentation of a health care card.

• An optional supplementary scheme for higher contributions was launched to cover services not provided under the basic reimbursement scheme such as common
diseases coverage. In this scheme the services were provided by public and private health providers (Kechrid 2002). However, only 15 percent of all beneficiaries had chosen the optional scheme due to the high cost and limited reimbursement possibility (El-Saharty 2006).

The CNSS provided insured people with direct and almost free access (subject to cost sharing) to all public health structures upon presentation of a health care card. Also, they could receive care in one of six polyclinics owned and operated by the CNSS (Kechrid 2002).

After the reform:
The new fund, CNAM, provides similar benefits to all insured people through the public or private health care sector. Within the new reform, the insured people can select one of three insurance schemes, however, they can revise their choice if desired once a year (Jeffreys 2008). Each insurance scheme is associated with a set of benefits as well as cost control measures. These insurance schemes can be summarized as follows:

- The public sector scheme that offers access to all health services provided through the public or para-health sector facilities, including ambulatory and inpatient care, procedures, and drugs that are contained in the hospital formulary. In this scheme the patients have to pay a part of the treatment cost, however, the annual cost sharing (which is the difference between the actually payment made by the scheme and the real cost of the medical treatment) will be capped at the equivalent of a one and a half month salary for a worker, and any additional costs that exceed this level would be borne by the CNAM. Moreover, the patient would be exempt from cost sharing in the case of chronic diseases or if the insured person or any member of her or his dependents is disabled.

- A private sector scheme allows its beneficiaries to obtain care from the private health providers who contract with the fund. Except for certain types of specialist care, such as ophthalmology, gynecology, pediatrics, and dental, the beneficiaries must have a referral from a primary care provider, who will serve as a gatekeeper, to access specialist care. The insured people can change their family doctor yearly. In order to reduce the incentive for citizens to choose the option of a private sector scheme, the patients are required to pay higher cost sharing for services received
under this scheme. Under this option, the CNAM covers the costs of the different illnesses treatment with different percentages depending on the type of illness. On the other hand, the total costs should not exceed a specific annual limit, which is increased with an increase in the number of family members. Also, in this scheme the patient would be exempt from cost sharing in the case of chronic diseases.

- A reimbursement scheme enables the patient to consult any provider of health care, regardless of specialty or sector, however, the patients should pay the health providers the entire cost according to the fees set by the CNAM. Then the CNAM reimburses the patients according to different percentages depending on the type of disease, however, the annual reimbursements are capped. The annual limit is increased with an increase in the number of family members. However, the scheme would reimburse the total cost of treatment for chronic diseases without a limit (Samson 2008; CNAM 2011).

5.7.7 Lessons that can be learned from the experience of Tunisia

- The existence a strong social security system that covers a wide proportion of people can support the establishment of social health insurance and extension of health coverage.
- Providing services free of charge or at reduced fees through the MoPH facilities to vulnerable groups only can achieve these benefits:
  - Protection of the poor and low income people against the financial risk resulting from illness.
  - Devotion of the public resources to support poor people, and the simultaneous mobilization of funds from the patients who are able to pay.
- Transferring the government subsidies to MoPH facilities to support the AMG programs and the existence these programs beside the CANM will keep the health programs divided and reduce the size of financial risk pooling. Moreover, it will maintain inequality in terms of the services provided between the two systems.
- The integrating reform that took place in 2007 can achieve these benefits:
- Merging the separate social insurance schemes in one scheme. This can achieve a large financial pool that can ensure greater financial protection for insured people.
- A reduction in inequality in terms of the provided services and rate of contribution between the different insurance schemes.
- Extension of health services provision to include the private health sector. This step has encouraged the private sector to include more in its health care and reduce pressure on public health facilities.
- The creation of a sort of competition between the public health facilities and private sector that motivates both sectors to improve their performance.

- Introducing several health insurance plans (public, private and reimbursement) within a single insurance system reform might cause many problems such as:
  - It can cause complicated administration problems related to information systems and processing of the reimbursements.
  - If the CNAM is in charge of balancing the global budget, while each scheme does not have balancing obligations, the CNAM will create financial transfers among the schemes. However, it will be not clear if this system of crossed financial subsidies will benefit the scheme that needs it the most (El-Saharty 2006).
  - The implementation of the three schemes could lead to risk selection problems among the different channels due to the different proportions of cost sharing among these schemes. Private health providers attract only richest patients, while the poor patients would thus tend to remain in the public sector (WHO 2006c).

5.8 The National Health Services system in the United Kingdom

In 2008, the population of the United Kingdom was 61 231 million, 90% of whom live in urban areas (WHO 2010). According to the World Bank classification in 2009, the United Kingdom is a high-income country which had a GNI per capita of 36 130 PPP (current international $) in 2008.
5.8.1 Historical background

Britain's NHS system was launched in 1948 as a health system that was to be universal, comprehensive, and free at the point of delivery (Busse et al. 2007). As opposed to the public health insurance systems that had been applied in some countries, the NHS was the first system in Western society that offered free national provision of health services to the whole population and which was not based on the insurance principle (Musgrove 2000).

The launching of the NHS system was a solution in order to improve the health services which were inadequate in relation to the standard of welfare services which Britain was concerned to provide for its citizens before the Second War. The previous health care system in the United Kingdom was mired by some problems such as irrational and insufficient coverage and quality. The previous health care system was provided by muddled mixture of three parts. The first component was the state insurance scheme that was set up by Lloyd George in 1911, which was restricted only to the manual workers, and excluded their families. Also, it covered only the general practitioner services, even though and due to scarce financial revenues, the general practitioners were unable to keep up with developments in medicine. The second was hospitals owned by municipalities or by voluntary bodies that provided charged services to those able to pay, and free care to poor people unable to afford the treatment costs. The coordination between the municipal and voluntary hospitals was weak. Moreover, the number of beds and the resources that were devoted to these hospitals were unequal between the provinces. The specialists, who were almost honorary, tended to work in hospitals located in the prosperous regions, where they could work in private practices as well. Therefore, the allocation of the specialists was irrational, and as a result, the quality of health services varied significantly between the regions. In addition, the voluntary hospitals were facing financial crises by the mid 1930s, and therefore, increased their reliance on public finance. The third component was private insurance that played a modest role in providing health care.

The NHS system was adopted after long controversies, many reports, various proposals and legislation between the two world wars. According to the 1946 Act, the Health and Housing Minister Aneurin Bevan established the NHS system based on a recommendation of the Beveridge report in 1942. Launching the NHS was an attempt to
repudiate the comprehensive national insurance model, which was the followed system in most Western societies in the post-war period. On the other hand, adopting the NHS was consistent with the following points:

- The intellectual tradition in Britain; the NHS was found and developed on the basis of the local authority provision that dated to the nineteenth century. Since that time, the local government was involved in running the hospitals and providing preventive and curative medicine, in addition to providing care to the elderly, schoolchildren and maternity health. The NHS model emerged as a consequence of a compromise between what was desirable and what was achievable (Klein 2006).

- The commitment of the government to a collective solution in order to provide welfare necessities and finance them away from the contributions that were deducted from individuals’ salaries to finance national insurance schemes. The launching of the NHS was in harmony with the notion of the maintenance of employment and income, as was declared in the Beveridge report in 1942 (Musgrove 2000).

- The changes that took place after the Second World War, such as a victory of the Labour Party, and the development of cross-class solidarity during the war, in addition to the influence of socialist notions that emerged from within the Communist bloc (Savedoff 2004).

### 5.8.2 The major reforms of the National Health Services system

Since the establishment of the NHS, many reforms and changes have been introduced to the system. For the past 15 years the reforms have been focused on improving the efficiency of the supply side of the market (Maynard 2005). The following summary will focus only on relatively recent reforms.

- In 1991, the NHS system introduced the purchaser-provider separation (internal market).
- In 1999, 303 PCTs were created to be the main purchasers of health services in the NHS.
- In 2000, the Government announced increased investment in the NHS.
In 2000, the Government signed a “concordat” with the private sector; PCTs were allowed to purchase from private health providers to increase capacity.

In 2003, DRGs were introduced to pay for hospital services.

In 2004, according to the Quality and Outcomes Framework, new contracts for GPs linked payment to achievement of quality, outcomes and other performance targets (Thomson et al. 2009a).

In 2004, the first wave of hospitals of the NHS Foundation were created. These hospitals became self-governing public trusts. The goals of this reform were to ensure better quality services, to give the patients extended choices, and to reduce waiting times (Oliver 2005).

In 2005, the number of PCTs was reduced from 303 to 152 (Thomson et al. 2009a).

5.8.3 The structure of the National Health Services system

The structure of NHS has been changed continuously since its establishment in 1946. Many bodies have been abolished or replaced with others. The main players of NHS and their roles can be summarized as follows:

- Department of Health is responsible for drawing up the polices, leading the transformation of the NHS and social care, and improving the quality of services through working with other partners, such as Strategic Health Authorities; the Healthcare Commission, which regulates both NHS and private sector providers; and National Services Frameworks (NSFs), which concentrate on standards of effectiveness and the achievement of the aims of disease groups, including heart disease, the elderly, diabetes, mental health etc (Brennan 2005; Oliver 2005).

- Strategic Health Authorities are the link between the Department of Health and the NHS system on the local level. They are responsible for implementing the central health policy in their local areas, improving the quality and capacity of the provided health services in these areas, and achieving the effective performance of the local health system (Brennan 2005). Also, the Strategic Health Authorities are responsible for developing of the workforce supply, and supporting the Primary Care Trusts (PCTs), and the health care providers including NHS trusts, mental health trusts, etc, to reach their goals (Department of Health 2008).
Primary Care Trusts (PCTs) are the core of the NHS. Their work as local leaders of the NHS puts them in a suitable situation to be acquainted with the requirements of their community (Brennan 2005). PCTs are responsible for improving the health of the population through providing comprehensive, high quality, and efficient services. Furthermore, the PCTs are responsible for ensuring the equitable and efficient allocation of the resources across the different service sectors (Department of Health 2008).

5.8.4 Extending population coverage and the basis for entitlement

As mentioned earlier the NHS system is a universal system aiming to cover the whole population.

5.8.5 Health financing functions

Collection of revenues

The NHS system is financed mainly through general taxation, national insurance contributions and user charges.

- The general taxation: in 2006-07 the taxes and national insurance contributions financed 94.6% of the NHS expenditure in England: 76.2% from general taxation and 18.4% from the NHS part of national insurance contributions. The rest of the NHS funding comes from charges and receipts (Department of Health 2006). It will be useful to review some general information about the tax system in the UK. In 2008, 94.5% of general tax revenues were collected on the central level by the Treasury (the Ministry of Finance). In general, the tax revenue as a percentage of the GDP formed 37.3% in 2008, of which the value-added tax (VAT) formed 6.3% of the GDP, the taxes on income, profits and capital gains formed 18.2% of the GDP, and the social contribution formed 6.8% of GDP (European Commission 2010). Although, the tax system in the UK is a progressive system, with more progressive direct taxes, the share of regressive indirect taxation, particularly the
VAT, as percentage of total taxation increased from 14.7% to 17.8% between 1980 and 2008 (OECD 2008). The shift towards indirect tax has increased income inequality. In 2008-09, less than two-thirds of the adult population, which accounted for around 50 million, are liable for income tax. The total number of income taxpayers has increased slowly over the last three decades, while the number of higher-rate taxpayers has grown much more quickly, from less than 3% of the taxpaying population in 1979-80 to around 12% in 2008-09. The top 10% of income taxpayers now pay over half of all the income tax paid (Adam and Browne 2009).

- The user charges: are used only in the provision of pharmaceuticals, dentistry and optical services. However, children, students, pregnant women, elderly people, and people with certain chronic diseases and disabilities are exempted from paying prescription co-payments. Also, the transport expenses to and from health provision locations are covered for poor people (Boyle 2008). Therefore, the user charges, as an instrument to influence the demand-side to reduce moral hazards and increase revenues, do not play an extensive role in the NHS system in the UK (Oliver 2005).

### Pooling risk

In the NHS system the risks are pooled roughly across the population (Gottret and Schieber 2006, pp.7). The organization of risk pooling in the UK is conducted by the Department of Health which is allocated central governmental funds from the Treasury.

*Allocation of resources from the collecting to the risk pooling organization*

The Treasury negotiates the budget with the Department of Health every three years. The size of the budget dedicated to health care depends, as a result, on the negotiating ability of the Department of Health with the Ministry of Finance, and on political considerations (Thomson et al. 2009a).

*Allocation of resources from the risk pooling organization to the purchasers*

The Department of Health allocates the resources according to geographically-defined plans to the purchasers of health care such as the health authorities and PCTs, who provide and commission health care for the residents within their geographical area.
(Oliver 2005). The Department of Health allocates 85% of the NHS budget to 152 geographically organized PCTs (Thomson et al. 2009a). The resources are allocated from the risk pooling organization to the purchasers on the basis of a weighted capitation method to achieve the principle of equal access for equal need. The capitation principle in England for allocation of resources is dependent on the following risk adjusters: age, mortality, morbidity, unemployment, elderly people living alone, ethnic origin and socioeconomic status (Busse et al. 2007).

Purchasing health services and health care provision

In 1991 the NHS system introduced the purchaser-provider split. The providers became quasi-independent and acquired their own budgets that were financed through contracting with purchasers. The aim of the purchaser-provider separation was to encourage competition between the providers. At that time there were two types of purchasers. The first type was the district health authorities who received budgets to purchase hospital care. The second one was the GP fund-holders who were GPs managing the budget on a voluntary basis to purchase primary and some secondary care services for their patients. By 1996, about half of GPs chose to be GP fund-holders. Although, GP fund-holding achieved success in reducing waiting times and referral rates, criticisms concerning high transaction costs and the deterioration in clinical outcomes, negated the positive points. In 1997, the old internal market was eliminated and a new version was developed. In the new internal market, GP fund-holding was abolished, and a nation-wide system of Primary Care Trusts (PCTs) was established, in which the GPs and other health professionals again hold executive functions. Currently, all primary care doctors are assigned to a PCT, each trust covering an average population of about 170 000 people. Moreover, the district health authorities were replaced by 99 health authorities that were later united into 28 Strategic Health Authorities (Oliver 2009; Robinson et al. 2005).

The market structure of the purchasers

The market structure of the purchasing organizations in the UK relies on regional purchasers who cover geographically distinct populations (Kutzin 2001). The PCTs
contract with health care services providers: GPs, Acute Hospital Trusts, and independent providers to meet the needs of people for primary health care, community services and most secondary care (acute care) in their local area (Boyle 2008).

The PCTs control the usage of resources in both primary and secondary care. Furthermore, the PCTs have been given discretion and incentives to manage the funds with efficiency and control the costs (Oliver 2005). Most publicly funded health services have been purchased by PCTs. Since 2005, some purchasing takes place through practice-based commissioning (PBC) led by GPs.

The health services providers

PCTs mainly purchase services from publicly owned hospitals and self-employed GPs (Thomson et al. 2009a). More recently, the PCTs are allowed to purchase health care from the private sector in order to reduce waiting times for elective surgery and as a step to extend patients choice (Oliver 2009). The structure of the public health providers is:

- General Practitioners (GPs): mostly they are the point of entry into the health care system. More than 90% of the daily contracts with the NHS are managed in the GP’s surgery or office. Also, the GPs act as a gatekeeper for access to secondary health care (Maynard 2005).

- NHS hospital trusts (Acute Hospital Trusts): the hospitals have been organized as NHS trusts, which are directly responsible to the Department of Health. They contract with PCTs to provide secondary health care to the local population (Boyle 2008). The NHS hospital trusts work to be sure that the hospitals provide high quality care and manage their money in an efficient way (Brennan 2005).

- Foundation Trusts: they are the NHS hospitals, however, they have more autonomy in their management (Oliver 2005).

- NHS ambulance trusts: they provide emergency access to health care.

- NHS care trusts: these organizations were set up to provide health and social care as a step towards establishing a faster connection between the NHS and local authorities.

- NHS mental health trusts: they provide mental health and social care services through GPs and other primary care services or through more specialist care.
• Special Health Authorities: they are independent organizations that provide health care services on the national level, like the National Blood Authority (Brennan 2005).

Payment of providers
Most of the independently contracted GPs with the NHS are remunerated through a combination of fee-for-service, salary, and capitation payments, although a large part of the GPs' income is paid through the capitation payment (Maynard and Bloor 2003). Around a third of GPs choose to work as salaried employees of PCTs (Thomson et al. 2009a).

All hospital doctors are paid on a salaried basis. The NHS hospitals doctors are supplemented in their salaries by performance-related payments (Gottret and Schieber 2006).

Hospitals have traditionally been financed through a system of global budgets, based on annually negotiated block contracts. In 2003, the government introduced a new payment system known as “payment by results” (PbR), which uses a nationally uniform tariff defined by “health resource group” (HRG) (Thomson et al. 2009a). Through this system the hospitals will be not able to compete for patients on the basis of price. This system will therefore encourage these hospitals to improve their quality to attract the patients. As a result, the PbR system will create stronger incentives to improve performance, and to incentivize expansion of elective surgery in order to reduce waiting times (Boyle 2005).

5.8.6 The benefits package

The NHS in the UK is a comprehensive system that provides most health services free at point of delivery.

5.8.7 Lessons that can be learned from the experience of the UK
• The NHS system is a universal system that covers most ordinary residents in the UK.
• The role of GPs as gatekeepers has played a role in controlling costs. Compared with their counterparts in other developed countries, British GPs have shown a high level of restraint in making referrals to access non-emergency specialists.
• Although, the English NHS appears to be the archetypal planned health system, the NHS system has tended toward decentralism. In the early years of the NHS, the health system was dominated by the largely autonomous actions of health care professionals, especially doctors (Smith 2008). Also, the English NHS introduced a purchaser-provider separation. Furthermore, the decentralization of the purchasing function occurs according to regional purchasers that can increase accountability to the public as well as efficiency of care provision (Busse et al. 2007).
• The NHS system in England has applied a performance rating to improve the performance of individual NHS organizations. For example, more recently, the NHS hospitals that achieve the best performance became eligible to apply for NHS Foundation status and, as a result, to have more autonomy in their management. Also, to improve the work of GPs, in 2004, a new contract implemented an ambitious system of quality targets and incentives. According to the new contract, around 18% of GP income is distributed annually on the basis of quality measures (Smith 2008).

On the other hand,
• In contrast to the competing social insurance schemes that are independent of the government, the NHS constitutes a politically controlled state monopoly. This fact makes the NHS work less fairly and efficiently (Browne and Young 2002).
• The limited resources for funding the NHS system make it suffer from some problems, such as long waiting times for some procedures, poor quality of the equipment, in addition to poor service provision for chronic diseases (Maynard 2005).
5.9 Comparison of health care systems

Taking into account that the situation in each country is unique, in this section the health care systems in the seven case studies will be briefly discussed and compared with reference to the following key issues: the background behind the establishment of each health system, population coverage, funding, the structure of risk pooling, purchasers, providers of health care, and additions to the benefits package.

5.9.1 Background and the main reasons for the establishment of the health care systems

Improving health care and protecting the people against the financial risks resulting from catastrophic illnesses were the main reasons behind adopting or reforming the health financing systems in the seven countries. In addition to these reasons, the political regime could also play an important role in reforming the health system, as in the case of Romania, where the revolution in 1991 changed the socioeconomic structure of the country, including the means of financing the health system. In Germany, Bismarck adopted the SHI to manage the rising political pressure from Marxist-influenced labour unions. In contrast, introducing the NHS in the UK was in harmony with social notions that emerged within the Communist bloc and following the victory of the Labour Party, in addition to the notion of the maintenance of employment and income as was declared in the Beveridge report. In Spain and as a result of the Socialist Party's (PSOE) win in the general election in 1982, the health care system was reformed from the Bismarck model into the Beveridge model to achieve universal coverage. In the case of South Korea, as a result of rapid economic growth, the Korean government was under pressure to meet the increasing demands of people for welfare services. Therefore, establishing the NHI system responded to the people's needs and the desires of the government, which preferred to play the role of regulator rather than a financer or provider of health care.
5.9.2 Population coverage

All the health care systems in the seven countries have aimed to achieve universal coverage. Regardless of the selected health care system, the success of some of these countries in achieving universal coverage has been driven largely by several conditions associated with political willingness, political stability, existence of a strong social insurance system, economic growth which influences the size of the formal sector, and the employment rate, etc (see Table 5.3). Strong legislation and regulation to manage the health care system in an efficient way, as well as a capacity to monitor the system, have also affected the ability of the health systems to reach universal coverage.

With respect to the conditions mentioned above, each country selected a particular health financing system and/or followed a special method to extend the health coverage. For example, the UK and Spain could achieve universal coverage through applying the NHS system that is in principle based on universal coverage.

Germany and South Korea chose the SHI system and they followed somewhat the same processes to extend the coverage. They gradually reached universal coverage through adopting targeted, incremental approaches to increase the availability of coverage to uninsured populations. Extending the health coverage had been in line with the evolution of income. While Germany achieved almost universal coverage over the course of one century, Korea achieved this goal in only twenty years (1963-1989) as a result of high economic growth over that period.

The last three countries, Tunisia, Colombia, and Romania, introduced the SHI system, however, none of them has reached universal coverage yet. Although health care is a right for all the population according to the constitutions of these countries, limited resources mean that real universal coverage is not yet a reality.

Tunisia, for example, has restricted SHI to only the people who can afford the contributions (about 70% of the population including their independents). Colombia introduced SHI for all people through two separate schemes, the contributory regime (CR) that is financed through contributions, and the subsidized regime (SR) that is financed by government subsidies to cover poor people. However, low economic
growth has prevented both schemes from achieving universal coverage of their respective groups.

In most countries that adopted the SHI system, wage-earning people were given priority in access to health insurance, while the self-employed were the last category that accessed the health insurance in some countries, or still remain outside SHI, as is the case in Germany.

Most SHI countries have supported deprived groups such as the unemployed and the retired to receive health care through different means, such as paying on behalf of these groups to access SHI, as is the case in Germany; launching parallel systems for access to health care, such as the Medical Aid Program (MAP) in South Korea or Free Medical Assistance (AMG) programs in Tunisia; or introducing a separate insurance scheme for the poor people financed by government subsidies as is the case in Colombia.

5.9.3 Collection of revenues

In most of the countries studied, the national government sets a statutory framework for financing their health system. The selected countries raise the money to finance their health care systems in different ways. Great Britain's NHS draws mainly on general taxes that are collected at the central level, Spain’s NHS is dependent mainly on general taxes and regional taxes. The health care systems in Germany, Korea, Tunisia, and Colombia rely primarily on work-based social insurance contributions. In Romania, the employee contribution is applied to gross income obtained from salaries, independent activities, lettings, pensions, dividends and interests on reserves agriculture.

All the countries studied, regardless of their health systems, rely to various degrees on cost sharing to mobilize extra funds for their health systems and to control moral hazard problems. The role of cost sharing in financing the health system ranges between modest, as is the case in UK, and large, as is the case in South Korea. Out-of-pocket payments as a percentage of total health expenditure vary among the selected countries as follows: 6.4% in Colombia, 11.4% in UK, 13.3% in Germany,
21.5% in Spain, 22% in Romania, 36.8% in Korea, and the highest percentage, 46%, in Tunisia (these figures are from 2006).

5.9.4 Risk pooling and the extent of its integration

The integration of risk pooling varies from one country to another regardless of the health financing system in place. For example the pooling organization in the UK is centralized and the risks are pooled roughly across the population, while the Spanish regions (the ACs) have received more autonomy not only regarding the collection of resources but also in terms of risk pooling. Most countries that adopted social health insurance system initially had segmented risk pooling, that caused an increase in inequity and inefficiency in management, therefore these fragmented pooling schemes have gradually been merged. For example, South Korea had 373 insurance societies in 1997 which were merged into the National Health Insurance Corporation after 2000. Germany is another example where the sickness funds have been gradually merged over one century to reduce their number from 21 238 in 1913 to 169 in 2010, and recently Germany established the National Health Fund as one risk pooling organization. Upon the launching of health insurance in Romania, there were segmented risk pooling organizations represented by 41 DHIFs that were merged into one risk pooling organization represented by the NHIF in 2002. Tunisia had two separate health insurance schemes: one for the private workers and self–employed and the second for the public employees. In 2007, Tunisia merged the two schemes into one represented by CNAM. However, the role of the ministries of health in both Romania and Tunisia in providing health care for the uninsured people, particularly poor people who are unable to access health insurance, makes the risk pooling somewhat fragmented. Because social health insurance in Colombia is dependent on different schemes, the risk pooling is divided between the Social Security and Guarantees Fund and the municipalities according to the type of resources. Table 5.4 shows the evolution of the collecting, pooling and purchasing organizations over time in the seven countries.

Allocation of resources to purchasers
Many countries use the capitation formula to allocate resources to the purchasers in both the tax-financed and SHI systems. The capitation principle in England for allocation of resources is dependent on the following risk adjusters: age, mortality, morbidity, unemployment, elderly people living alone, ethnic origin and socioeconomic status. In Spain the formula is weighted by population at 75%, demographics (population over 65) at 24.5%, and insularity of Balearic and Canary Islands at 0.5%. Germany uses the following risk adjusters in its capitation formulas: age, sex, disability pension status, participation in disease management program, and recently morbidity groups as well. In Romania the NHIF allocates money to the DHIFs in accordance with a formula based on a risk-adjusted capitation depending on the number of insured persons and the mix of population risks. In Colombia there are two ways to allocate the resources to purchasers depending on the type of resources. First, the allocation formula for national transfers to the municipalities is defined by population size, risk of malaria and dengue, immunization rates, geographic dispersion of the population, and local administrative capacity. Also, the municipality’s total uninsured population with respect to the total uninsured population in the country, and the wealth of the municipality, are considered. The allocation of contributions between the insurance purchasers is based on risk adjustment dependent on age, sex, and location. Both Korea and Tunisia have no risk adjusters due to the fact that there is no separation between the risk pooling organization and the purchasing one.

5.9.5 Purchasing of health services

The number of purchasers, their size and their market structure varies between the selected countries. For example, in South Korea there is a single national purchaser. In Tunisia, in addition to the Ministry of Public Health, the CNAM purchases health services for insured people. In Germany, the multiple competing sickness funds buy health services for their members. In Colombia, the competing health insurers EPSs and ARSs are responsible for buying the health services for their members. In Spain, the UK, and Romania, the market structure of the purchasing organizations is based on regional purchasers, each one covers geographically distinct populations.
The providers and the payment of providers

Providers of health care can be public and/or private. For example, in the UK recently the PCTs are allowed to purchase health care from the private sector. From 2004, there has been a move to give the NHS hospitals more autonomy in their management, in order to become self-governing public trusts (NHS Foundation Trusts). In Tunisia and Colombia, according to the reforms in 2007 and 1993 respectively, the health insurance fund(s) can contract with private providers who are competing with public health providers. In South Korea, the NHI system contracts with the public sector and private providers. In Germany, ambulatory health care is mainly provided by private for-profit providers, while the acute hospitals vary between public, private not-for-profit or for-profit. In Spain, with the exception of Catalonia, health care delivery is mostly carried out through the public network of inpatient and outpatient centres. In Romania, the DHIFs usually contract with all providers both public and private in the districts.

All the selected countries use the gatekeeper system, in other words, patients need referral issued by the family doctor to receive medical care from specialists and hospitals. However, the conditions related to the use of the gatekeeper system vary from one country to another. For example, in Tunisia this system is only applied to insured people who select the private sector scheme, moreover certain types of specialist care need no referral from the family doctor. Since 2004 in Germany, an insured person can choose whether to register for the option of family physician-centered care or to remain in the regular system.

The seven health financing systems follow somewhat similar methods of payment to the health services providers. In general, family physicians and ambulatory care physicians are paid by one or a mix of the following methods: fee-for-services, salary, and capitation payments, while hospitals are remunerated through one of a combination of payment methods including negotiated tariff, fee-for-service, and DRG.

5.9.6 The benefits packages
The levels of the covered services in the selected countries vary from one country to another. Some countries, such as the UK, provide comprehensive coverage. However, most of the health care systems exclude some services or require patient cost sharing.

Except for Colombia, where the different health insurance schemes provide their members with different benefit packages according to the level of contributions paid, the provided benefits in the other health care systems studied are independent of the level of contributions, in other words, there is equal access for equal need. Some health systems give the purchaser a margin to provide extra services for their beneficiaries, such as is the case in Spain, where the ACs can supplement the common benefits package established by the NHS.

Tunisia and Romania, where health insurance has not reached universal coverage, support the uninsured population generally and vulnerable populations on a targeted basis to receive the necessary health care. For example, in Romania uninsured people are entitled to a minimum benefits package.
**Table 5.4:** Coverage of public health insurance schemes over total population according to the development of GDP per capita over the time

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Columbia</strong></td>
<td>na</td>
<td>2 153 PPP</td>
<td>na</td>
<td>2 497 PPP</td>
<td>na</td>
<td>3 094 PPP</td>
<td>18%</td>
<td>6 817 PPP</td>
<td>16%</td>
<td>4 826 PPP</td>
</tr>
<tr>
<td><strong>Germany</strong></td>
<td>10 %</td>
<td>3 881 PPP</td>
<td>37%</td>
<td>7 705 PPP</td>
<td>50%</td>
<td>85.2%</td>
<td>89.2%</td>
<td>92.3%</td>
<td>88.8%</td>
<td>15 929 PPP</td>
</tr>
<tr>
<td></td>
<td>2 143 PPP</td>
<td>na</td>
<td>3 348 PPP</td>
<td>na</td>
<td>7 105 PPP</td>
<td>na</td>
<td>7 080 PPP</td>
<td>10%</td>
<td>6 754 PPP</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Romania</strong></td>
<td>100%</td>
<td>1 844 PPP</td>
<td>100%</td>
<td>2 853 PPP</td>
<td>100%</td>
<td>3 511 PPP</td>
<td>100%</td>
<td>3 006 PPP</td>
<td>100%</td>
<td>4 134 PPP</td>
</tr>
<tr>
<td><strong>South Korea</strong></td>
<td>100%</td>
<td>1 844 PPP</td>
<td>3 881 PPP</td>
<td>3 973 PPP</td>
<td>100%</td>
<td>2 853 PPP</td>
<td>100%</td>
<td>3 511 PPP</td>
<td>100%</td>
<td>4 134 PPP</td>
</tr>
<tr>
<td><strong>Spain</strong></td>
<td>100%</td>
<td>1 844 PPP</td>
<td>3 881 PPP</td>
<td>3 973 PPP</td>
<td>100%</td>
<td>2 853 PPP</td>
<td>100%</td>
<td>3 511 PPP</td>
<td>100%</td>
<td>4 134 PPP</td>
</tr>
<tr>
<td><strong>Tunisia</strong></td>
<td>100%</td>
<td>1 844 PPP</td>
<td>3 881 PPP</td>
<td>3 973 PPP</td>
<td>100%</td>
<td>2 853 PPP</td>
<td>100%</td>
<td>3 511 PPP</td>
<td>100%</td>
<td>4 134 PPP</td>
</tr>
<tr>
<td><strong>UK</strong></td>
<td>100%</td>
<td>1 844 PPP</td>
<td>3 881 PPP</td>
<td>3 973 PPP</td>
<td>100%</td>
<td>2 853 PPP</td>
<td>100%</td>
<td>3 511 PPP</td>
<td>100%</td>
<td>4 134 PPP</td>
</tr>
</tbody>
</table>

Sources: Docteur and Oxley (2003); Maddison (2008); Vos et al. (2006); Pinto (2008); Ruiz et al. (2006); Bärnighausen and Sauerborn (2002); The Diplomat (2009); Shin and lee (1995); European Observatory on Health Care Systems (2000); Achouri (2007b).

NA: the information is not available.
**Table 5.5: Evolution of the collecting, pooling and purchasing organizations over the time**

<table>
<thead>
<tr>
<th>Country</th>
<th>Development of the number of collecting organizations</th>
<th>Development of the number of pooling organizations</th>
<th>Development of the number of purchasing organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbia</td>
<td>EPS Health insurers, central government and municipalities</td>
<td>The risk pooling is segmented into the Social Security and Guarantees Fund and municipalities according to the type of resources</td>
<td>Health insurers EPS and ARSs</td>
</tr>
<tr>
<td>Romania</td>
<td>District health insurance funds 41 (DHIFs) → Fiscal Administration National Agency + DHIFs (from the self-employed)</td>
<td>The segment risk pooling organizations (DHIFs) → one risk pooling represented by the NHIF</td>
<td>District health insurance funds 41 (DHIFs)</td>
</tr>
<tr>
<td>Spain</td>
<td>Finance Ministries at the central and regional levels</td>
<td>17 ACs (Communities Autonomous)</td>
<td>The central government and some ACs → 17 ACs (Communities Autonomous)</td>
</tr>
<tr>
<td>Tunisia</td>
<td>CNPRS and the CNSS, the Ministry of Finance</td>
<td>CNPRS and the CNSS, Ministry of Public Health (MoPH) → CNAM, and MoPH</td>
<td>CNPRS and the CNSS, MoPH → CNAM and MoPH</td>
</tr>
<tr>
<td>UK</td>
<td>The Treasury (the Ministry of Finance)</td>
<td>The Department of Health</td>
<td>District health authorities and GP fund-holders → 152 geographically organized PCTs</td>
</tr>
</tbody>
</table>
6. Designing the Health Insurance System Models for Syria

According to the results of the interviews’ analysis, the Syrian health system was widely criticized for the following reasons:

- Two-third of the respondents does not believe that the Public Health Sector can protect them in the case of catastrophic illnesses.
- Five interviewees said: not all the types of medicines are available in the public hospitals and the Medical Points. The shortage of medicine creates a financial burden on patients.
- More than one-third of the respondents criticized the deep effect of favouritism in accessing the state hospitals, particularly in the case of complicated operations.
- Nearly half the number of the respondents complained about the problem of long waiting time required to receive health services. Many respondents attributed this problem to the high demand on services provided by the public hospitals.
- Nearly one third of the interviewees said: The staffs of the public hospitals do not work properly. The reasons of that are the large demand on public hospitals with the shortage of the available staff and the lack of work motivations. One respondent said “I lost my twin children as a result of negligence of nurses. I had to beg them more than once to do their job properly”.
- Five respondents stated: the doctors who are working in public hospitals either work for private hospitals or in their own clinics at the same time. Therefore, the doctors try to persuade the patients of the public hospitals to use their own private health centres aiming to charge them money.
- Another four respondents said: the public health sector suffer from bureaucracy, administration problems, and weakness of supervision and disciplinary system.
- Five interviewees mentioned the medical centres do not play an effective role to provide good health services, because the doctors of the Medical Points are not available all the time, and most of them are not specialists.
- More than half the number of the respondents said: the public hospitals are not good in terms of hygiene, treatment, and care about patients.
As a result to these criticisms and to the other mentioned earlier problems that face the Syrian health system (see health care system in Syria), it will be important to improve or even reform the current system.

Three goals should be targeted by designing any model of health financing system (WHO 2000):

- Improving the health of the population the system is meant to serve; and reducing the health inequalities amongst the society.
- Responding to people’s legitimate expectations.
- Providing people with financial protection against the high costs of the health treatment, and recommending fair financing method.

These objectives can be achieved through selecting an efficient combination of financing mechanisms; organizational risk pooling, and delivery structure for health services; payment methods for health providers; regulatory arrangement; programmes of public educations etc (Drouin 2007).

6.1 National Health Services system versus Social Health Insurance system

In order to reach universal coverage and efficiently achieve the main three objectives of the health care system mentioned above, which financing method would be more realistic and more suitable to finance the Syrian health care system? This discussion imposes many questions:

First, is financing the health care system using the general revenues as a predominant resource \(^{21}\) the most efficient way to finance the Syrian health care system?

According to the World Health Organization statistics for 2010, the general government expenditure on health as a percentage of total health expenditure in Syria was 46% in

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\(^{21}\) The predominant funding from the general revenues means these revenues represent more than half of government health expenditure, and the government health expenditure account more than half of all spending
2007; most of these expenditures are financed through the general taxation, while the social security plays an insignificant role in financing the health care system. In comparison to some State-funded health system countries such as the UK and Spain where the general government expenditures on health as a percentage of total health expenditure were 72% and 82% respectively in 2007, the share of the general taxes in financing the Syrian health system is proportionally much smaller than those in the countries that have National Health Services system. Therefore, the Syrian health care system could not be described as national health services system.

Many facts should be shown to answer the first question, these are as follows:
As in many of the developing countries, the assessment and collecting taxes are very primitive, for this reason, the outcome of the taxes is low. For example, in 2006, the proportion of tax revenue to GDP was 18.1% in Syria, direct taxes formed about 58% of the total taxes, and indirect taxes were about 19% (Al-haseen 2007). While in Spain and the United Kingdom, the total tax revenues as a percentage of GDP were 36.4% and 36.8% respectively in the same year (European Commission: taxation and customs union 2010).
Many factors have contributed to reduce the capacity of raising taxes in Syria, these are (Central Bureau of Statistics 2010):
• The high percentage of the informal sector that was estimated of about 32% of the market labour force\(^\text{22}\).
• Tax evasion.
• The population is relatively young, 38% of the population are under 15 years old.
• The work force was only about 26% of the population and 44% of the labour force in 2008.
• The unemployment rate was estimated of about 8.4% of the labour force.
• Imposing higher taxes to finance the health system will face a high protest because of the absence of the direct link between the paid taxes and the received health services.

\(^\text{22}\) According to the World Bank, informal sector includes. First, individuals who work in survival activities such as temporary jobs, casual works, unpaid jobs, multiple job holding and subsistence agriculture. Second, small private unregistered market enterprises within the tax authorities, which have employees working without legal contracts, and do not pay contributions to social security funds.
The number of taxpayers in Syria is estimated about 27% of the population, while 90% of the tax income revenues in Syria are collected from the upper and middle businesses classes, the remainder is collected from the poor class (Al-haseen 2007).

The expenditure on health is not considered to be one of the high political priorities in Syria; as a result, the MoH and its Health Directorates’ budget formed only 4.3% of the total government budget in 2008.

According to the facts mentioned above, the current situation in Syria where the general taxation is inadequate as a predominant source of health care financing (the general taxes cover less the half of the total health expenditure), and the low capacity to raise taxes in general, the possibility of adopting the NHS as a main financing system is aborted.

Second, is the financing using the compulsory insurance contribution as a predominant resource the most efficient way to finance the Syrian health care system?

Using the compulsory social health insurance contributions could solve some problems related to the tax-based health care system such as reducing the inequity associated with subsidizing the non-poor self-employed and other non-poor of informal sector as a result of tax evasion, and reducing the budgetary burden on the government. Furthermore, to face the rising of the health care costs and inadequate general tax revenues as a result to the reductions imposed by the budgetary cuts, the compulsory insurance contributions are considered as a good complementary or even main source to raise funds for the health system. For example, in 2007 the social security expenditure on health as a percentage of the public expenditure on health in Colombia, Germany, Romania and South Korea were as follows: 70%, 88%, 83%, and 78% respectively (WHO 2010).

Compulsory insurance contributions as a main resource to finance health care system would, however, not be the most efficient way to finance the Syria health care system with respect to the following facts:

In 2007, 12.7% of the Syrian people lived in extreme poverty. The extreme poverty is defined as inability to obtain their basic food and non-food needs, with a lower
income than 92 S.P or 2 US$ per capita per day. In addition to those who are in extreme poverty, another percentage was added by the Central Bureau of Statistics who reported that the percentage of people living in poverty rose from 30.1% to 33% between the year 2004 and 2007 (Shaoul 2010). The Central Bureau defines poor people as those who can only afford to cover a “reasonable amount” of their basic needs.

- The high percentage of the informal economic sector, and high unemployment rate.
- The self-employed sector forms about 30% of the labour force, while this sector for instance represented only 11% of the labour force in Germany in 2009 (Bundesagentur für Arbeit 2010).

These mentioned factors could form real obstacles in front of expanding prepayment schemes and imposing the statutory health insurance on a proportionally high percent of people. As a result, there would be a barrier restricting the extended coverage to the whole population.

Third, what is the most efficient way to finance the Syrian health care system?

Financing the health care systems in many countries is based on a mixture of resources. For example, all the countries that use the social health insurance as a main financing system rely to different extends on government subsidies. The government subsidies are used to support the poor people or/and finance the public health services. On contrary, the countries that mainly use the general revenues to finance their health care system rely at different degrees on the insurance contributions.

In Syria, there is a shortage in general revenues, and high direct out-of-pocket payments. Also, the capacity of collecting compulsory social health contributions is proportionally low. To tackle this problem, it is important to find the mechanisms or strategies that would be suitable for Syria to combine the capable resource for mobilizing sufficient resources to achieve of the health system objectives, equity, and solidarity in financing, in addition to maximizing risk pooling, and reducing fragmentation.
The previous discussion raises the question about the feasibility of the partial usage of the social health insurance contributions in financing the Syrian health system. Many factors could confirm the possibility of using the social health insurance contribution as a complementary option to finance health care in Syria such as:

- The Syrian economic has been slightly growing up since 1990s; this growth could enhance the role of the statutory insurance contributions in financing the health system in the future.

- The workers and employees in the governmental sector formed about 28% of the total work force in 2009, and the size of the formal private sector was about 39% of the labor force (Central Bureau of Statistics 2010), this means that about 67% of labor force are working in the formal sector. This percentage of the regularly employed workers out of the total work force could form a sufficient base to launch the social health insurance and to share the health care risks on a statistically stable basis.

- According to the results of the interviews, only one-third of the respondents believe that the Public Health Sector can protect them in the case of catastrophic illnesses, and most of interviewees support establishing a prepayment health scheme as a way to protect them.

- The high share of out-of-pocket payment paid to receive the health care from private health providers, and imposing user fees in many state hospitals that were used to be free of charge for a long period of time, make it more likely for people to pay social health contributions.

- Increasing the demand for better quality and high-cost technology induces the government to seek more substantial efficient way to mobilize more resources to bridge the deficit in financing.

As a result of this debate, any reform of health financing system in Syria would be based on both the general revenues and social contributions to mobilize adequate resources and achieve the universal coverage.

In this chapter, three models of health care system will be suggested (see Table 6.1). The design of all these models is based on (1) the case studies of the mentioned seven
countries, the possibility of applying each health system totally or partly in Syria, and (2) the results of the analysis of the interviews and the interviewees’ opinions.

In these models, it will be focused on finding efficient mechanizations to transfer the direct payment (OOP) toward prepaid payments such as social health contributions, and raise more funds for the health system. On the other hand, the general taxes allocated to financing the health system need to be optimised through transferring these funds into other channels that are working more efficiently.

The models are as follows: (1) The first model is dependent on improving the efficiency of the current health financing system, i.e. to use social insurance contributions as a parallel system beside the current system. (2) The second model relies on a gradual achievement of social health insurance (step by step). (3) The third model is dependent on the implementation of national health insurance (big push).

One general framework will be used in drawing up the three models as it is explained below.

6.2 The general framework to design the models

Designing the models of health financing systems that are suitable for Syria will be only focused on the three following elements: the population coverage, financing functions, and stewardship as basic stones to design the models.

- Population coverage; this issue would be discussed through the following questions:
  - Will the health insurance cover all the population at its start? If not which groups will have the priority to be covered within the health insurance?
  - In order to become a universal coverage, will expanding the health coverage be achieved depending on regional, personal, or the place of work principles?
  - Will the membership be voluntary or compulsory?

- Revenue collection; this issue will focus on ensuring the efficiency and sustainability of the resources to finance the health system. This discussion includes the following points:
The mechanisms that will be used to mobilize the money from the households, firms, government etc. The used mechanisms could be one or more of the following ways: compulsory insurance contribution, general taxes, voluntary insurance rated by risk or by income, earmarked taxes, user fees.

The collector of the revenues and the extent of the public sector versus private participation in this task. These organizations could be central or local government, social security agency, independent public body, private not for profit or private for profit insurance funds.

- Fund pooling: design the pooling risk that can achieve a sufficient solidarity across population groups, this includes many issues such as:
  - Structural arrangements of fund pooling such as the number and size of the funds pooling, and the governance of these pools (public or private organizations).
  - The mechanisms of transfer funds among the pools and transfer the funds from the pools to purchasers etc.

- Purchasing: design of this function embraces many aspects such as:
  - The governance of purchasers, the number and size of the purchasers, in other words, the market structure for the purchasers: national purchaser, regional purchaser, multiple non-competing or competing insurers etc.
  - Selecting the providers, and choosing the provider payment mechanisms.

- The benefit package: this includes discussing the quantity and quality of the covered services.

- The stewardship and regulation, this issue involves:
  - Determining the type of the organization or agency that will manage the health financing system.
  - The relation between this agency and other ministries, in other words, the degree of the independency of this agency.
  - Defining role of the stewardship in setting the rules that control the health system, and coordinating the activities amongst the main players in the health system.
Table 6.1: Comparison the main health financing function between the three models

<table>
<thead>
<tr>
<th>The groups that have the priority to be covered within the HI</th>
<th>The first model (improving the current model)</th>
<th>The second model (gradual health insurance)</th>
<th>The third model (NHI one push)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-The publicly-financed health care (only the poor people)</td>
<td>-The employees in the public sector</td>
<td>Universal</td>
<td></td>
</tr>
<tr>
<td>-The existed health benefit schemes (HBSs)</td>
<td>-The employees in the formal private sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-The private health insurance (rich people)</td>
<td>-The formal self-employed sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-The better-off informal sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The principle of extending the membership</td>
<td>The place of work principle (economic sector)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Personal principle in the publicly-financed health care</td>
<td>and the type of occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-The place of work principle (economic sector) and the</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>type of occupation in the HBSs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The type of membership</td>
<td>Compulsory in the HBSs</td>
<td>Except for the health insurance fund for</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>the better-off informal sector, the membership is compulsory</td>
<td></td>
</tr>
<tr>
<td>The main resource</td>
<td>Taxes, contributions, premium, OOP</td>
<td>Taxes, contributions</td>
<td>Taxes, contributions</td>
</tr>
<tr>
<td>The collector</td>
<td>The Ministry of Financing, HBSs</td>
<td>The Ministry of Financing, Health insurance Funds (HIFs).</td>
<td>District Health Insurance Funds.</td>
</tr>
<tr>
<td>The risk pooling</td>
<td>Fragmented through the MoH and HBSs.</td>
<td>Incomplete risk pooling at national level</td>
<td>One risk pooling at national level (National Health insurance Fund)</td>
</tr>
<tr>
<td></td>
<td>There is no risk pooling among HBSs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The purchasers</td>
<td>HBSs at national level, Local health authorities</td>
<td>The HIFs at national level.</td>
<td>Multiple non competing insurers: District Health Insurance Funds at governorate level</td>
</tr>
<tr>
<td>The criteria that are used in the risk adjusted to allocate the resources to purchasers</td>
<td>The risk adjusted only used to allocate the resources among the Local Health Authorities using these criteria: the number of poor, percent of people with chronic diseases, and the revenues achieved by the public health facilities.</td>
<td>To allocate the resources among the HIFs: the number of beneficiaries, the number of beneficiaries less than 5 years and those older than 65 years old, disability, chronic disease.</td>
<td>The number of people in each governorate, urbanization rate in the governorates, mortality, the percentage of population in each governorate who has chronic diseases or who are disable.</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Health services providers</td>
<td>-The publicly-financed health care (only the poor people)</td>
<td>Mix of public and private providers</td>
<td>Mix of public and private providers</td>
</tr>
<tr>
<td></td>
<td>-Mix of public and private providers in HBSs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The payment of providers</td>
<td>-Quasi-prospective payment system in state hospitals</td>
<td>Case-based fee and case mix-adjusted fees</td>
<td>Case-based fee and case mix-adjusted fees.</td>
</tr>
<tr>
<td></td>
<td>-Per-admission cost adjusted in relation to each case.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The benefits package</td>
<td>Comprehensive</td>
<td>Comprehensive</td>
<td>Comprehensive</td>
</tr>
<tr>
<td>Regulation</td>
<td>Weak and fragmented among the MoH and HBSs</td>
<td>Medium: MoH and Health Insurance Committee</td>
<td>Strong: presented by the National Health Insurance Fund</td>
</tr>
</tbody>
</table>
6.3 The first model: improve the efficiency of the current health financing system

In general, everybody regardless their financial situation has the right to receive health care free of charge in the public health facilities. In order to meet the high public demand, the pressure on the limited general revenues allocated to the public health facilities\(^{23}\) has increased. As a result, the free health services are inadequate to meet all the public health needs; moreover, these services have sometimes failed to reach poor people who are in need to these services more than the rich people. Two thirds of the respondents agreed with this opinion. For example, one respondent said “I know several patients who had to sell their possessions to cover the costs of their medical treatments”. Furthermore, more than half the number of the respondents have to postpone their health treatments or borrow money to pay the costs of their health care.

The first model does not aim to change deeply the current health system; therefore the structure of the health system according to the first model will be close to the current structure. However, the new system will focus on improving the efficiency of the current health system, reducing the health inequalities, and protecting the low and middle income people from the high costs resulted from catastrophic diseases. This protection is realized through reallocating the public expenditure on health and mobilizing extra funds through increasing the role of the social health schemes. Several approaches could be used to achieve these goals:

- First, improving the efficiency of public expenditure on the health system, and focusing on the rationality and priority of the provided public health services.
- Second, converting all the state-hospitals to become autonomous hospitals in terms of financing and management, and improving the managerial capacity and independency within them.
- Third, separation of public responsibilities (e.g. separating the payers from the public services provision).

\(^{23}\) The public health facilities refer to the general and specialized hospitals and health centres belonging to the Ministry of Health and its Health Directors only, either autonomous or not.
Fourth, redirecting the resources allocated to the public health facilities to target the low and middle income people rather than the whole population.

Fifth, improving the linkage among the existing health benefit schemes (HBSs) as a part of the general health policy and confer their work by legal existence.

Sixth, increasing the role of the social health schemes and organizing a framework for the existed schemes according to unified criteria.

Seventh, establishing a special semi-independent agency to be responsible for supporting the health benefit schemes, improving their efficiency, and ruling the work of these schemes with a clear policy.

Eighth, ensuring the equity between the health insurance schemes, and also between people who are covered within those schemes and those who are outside insurance schemes particularly the poor people.

6.3.1 Extending coverage

Regarding the fact this model relies on different financing methods, people would be covered by different systems according to their financial situation and their economic sector:

First, the publicly-financed health care

To increase the equity in the health system, it should reallocate the limited general revenues to protect the low and middle income people rather than those who are able to afford the cost of the health treatment. Therefore, according to the first model, the public health facilities, including out-patient and inpatient networks, will have two parts. The first part is a paid part that provides the health care for the members of the health benefit schemes and for the rich people. The second part provides free or semi free charged health services only to the poor people who are not participating in any health benefit scheme.

However, this raises the question about who are eligible to free access in the public health facilities?
Many obstacles obstruct the precise identification of the poor people who deserve these subsidies in Syria, such as:

- The poor statistical information about this category.
- The absence of the governmental or non-governmental organizations that care about this category of people.
- The weak role of the social insurance security.
- The difficult estimation of the income of those who are working in the informal sector, who form a large share of the Syrian economic sector.

Therefore, in order to determine these people who are eligible to the free health treatment in the state hospitals, efforts of many governmental and non-governmental associations should cooperate to organize this category. These people should be identified according to fair criteria using special cards. The precise definition of this group is important due to the following reasons: it gives a clear idea about the size of the required government subsidies to this group, protect this group from falling into poverty as a result of the high expenses of the health treatment, and avoid transfer these subsidies to non-poor people who can afford the insurance contributions and/or out-of-pocket payments.

The groups who deserve these subsidies could include, for example, the poor unemployed people and some vulnerable population groups such as widows, orphans, the unsupported elderly, and people with disabilities.

**Second, the health benefit schemes**

The first model relies on the existing health benefit schemes that cover many groups belonging to the formal sector. Many ministries, public companies and professional associations have health benefit schemes that provide health insurance for their members. Many of these schemes are organized at a national level. Recently, the Legislative Decree No. 65 of 2009 made the health insurance obligatory for the administrative governmental sector. The new health insurance in the related ministries has replaced the old health benefit schemes of these ministries.
According to the opinions of the interviewees, no one of the sample was completely satisfied with her/his health insurance scheme because of one or more of the following reasons:

- Some of these schemes do not cover all the members of their families.
- The provided services are not comprehensive.
- The inability to choose the doctors.
- The difficulty of accessing the medical care even in the urban areas because of the equitable allocation of the doctors who are on contracts with the health insurance schemes.
- Cancelling the insurance services at retirement in some schemes.

Therefore, in the first model, the work of these different schemes should be developed to gain the trust of their members and meet their expectations, increase their ability to mobilize extra money and work in more efficiency, reduce the negative effects of the moral hazard phenomenon that is dominated in these schemes, and reorganize these schemes according to a unified framework to pave the way to create a type of cooperation among each other.

The united framework will precisely define the structure of these schemes, income-related contributions, cost-sharing, minimum benefit package, the beneficiaries, the rules of financing etc.

To ensure a speedy extension of the health insurance and avoid the adverse selection and risk selection problems, the membership in these schemes should be compulsory. Furthermore, the health insurance coverage should be extended within acceptable costs to include the members’ families (spouse, parents without own incomes, children under 18 years, and those aged 18–26 years enrolled in any form of education).

**Third, private health insurance companies**

The private health insurance companies cover the affluent people on a voluntary base. Otherwise, the rich people should pay out-of-pockets payments for the state or private health providers. In spite of the advantages that could be gotten through the private health insurance such as the protection of the insured people, and relieving the pressure
on the public health facilities. However, the private health insurance has many disadvantages, such as excluding high-cost patients, the government could lose an important share of the potential revenues resulting from attracting the wealthy clients or companies by the private insurance companies, and the private insurance could restrict the extension of the social health schemes to the wealthy groups such as a better-of self employed, or even more could restrict the extension of the national health insurance in a long term plan.

6.3.2 Collection of funds

The main methods to finance the health care system

Financing the health care system in the first model relies on the general revenues, social health insurance contributions, private insurance premium, and OOP payment

1-The general revenues

In this model, the general revenue is still having an important role to finance the health care system. A large percentage of population, including the informal sector, contributes in financing this system through direct and indirect taxes, and nontax alike. The general revenues will contribute in financing the health system in two main channels:

I) As in the case of Tunisia, in the first model the government subsidies are transferred to the poor people through a supply-side subsidized network of public providers. Although this approach has some disadvantages, such as:

- Inability to reach the whole targeted group.
- Due to lack of information, and corruption, some of the wealthy people can use these benefits instead of the eligible people.
- The beneficiaries from this system might be a subject to discrimination by the health service providers.

However, this approach could be the most feasible way to support the poor people within the conditions of the first model, which is based on fragmented health benefit schemes, because of the following reasons: first, this way is close to the traditional approach in Syria that has been relying on offering health care free-at-point-of-service
through the public health facilities, this makes the implementation of a supply-side subsidized network of public providers easy with no need to complicated procedures. Second, this way could be more efficient to contain the costs, and control the moral hazard effect.

II) Also, the general revenues contribute in financing the health benefit schemes in two ways: first, in the form of contributions paid by the government as an employer. The contributions are paid to some of these schemes such as the health insurance schemes for the administrative governmental sector and public companies. Second, taking into account that these schemes vary in their risk-pooling size and their revenues, the government subsidies to the health benefit schemes, particularly to the poor ones, have a significant role aimed to unify the framework of these schemes, enhance their performance in providing the health insurance, and gain the trust of their members.

In this context, it would be a good practice to establish a semi-independent agency or organization financed by the general revenues. It can be called the Health Insurance Committee (HIC). This agency would be responsible for coordinating the work of these schemes, overseeing their work, and providing them with the necessary financial support (as it is explained below).

2-The health insurance contributions

As the subscribers of the HBSs can not get benefits from the free health services provided by the public health facilities any more, this imposes on these schemes more responsibilities toward their members so that they cover them with an adequate benefit package and protect them from the high costs of health treatments. The structure and the framework of the first model requires some additional arrangements on the way the HBSs are working, including increasing the revenues to cover the demanded health services, improving the mechanisms of contracting and reimbursing of the health providers, working in more efficiently etc.

Salary-rated contribution or a flat-rate payment imposed by the current health benefit schemes on their members is different from one scheme to another. To boost the revenues of the HBSs, the contribution rate should be increased so that it can cover the members and their families with an acceptable benefit package. The targeted
contribution rate could be defined and imposed by HIC on all the benefit schemes, however, these schemes are allowed to decrease or increase this rate with an acceptable margin. Furthermore, according to the first model, the government as an employer should share the contribution with the subscribers according to unified percentage in all the benefit schemes. As an attempt to reduce the disparity among the schemes, the HIC should pay the poor schemes an amount equal to the difference between the contribution rate defined by the HIC and the actual one imposed by the health benefit scheme.

3-Out-of-pocket payment
The OOP payments include the user fees and direct OOP payment. In the first model, in order to control the misuse of the free services, the public health facilities could impose small user fees on patients for receiving services in the free part. In the paid department, excluding some treatment, the patients should pay the whole costs of health treatment. In the case of some chronic illnesses such as heart diseases, stroke, cancer, chronic respiratory diseases, diabetes, and high-cost operations, the government should set a maximum ceiling on the payments any patient should make in any twelve-month period taking into account that the private insurance companies could refuse the high-cost patients.

To protect the middle-income people who are not participating in any health benefit schemes and can not get benefits from the free part in the public health facilities, the user fees should reflect the income of those people. Therefore, the user fees and maximum ceiling on the payments in the public health facilities should be determined on a sliding scale according to the level of the income as the case in Colombia.

The health benefit schemes could impose on their members reasonable cost-sharing charges on certain health treatments in both the public or private health facilities to mobilize extra funds and reduce the effects of the moral hazard phenomenon.

People who are not participating in any of the health benefit schemes should pay direct out-of-pocket payment to receive health services, either from the private or public health facilities. Furthermore, the insured people should pay out-of-pocket payments for the services that are not covered within the health insurance.
Second, the organizations undertaking the collection of resources
As it is clear in Figure 6.1, every scheme collects the contribution from its members, while the Ministry of Financing collects the taxes.

6.3.3 Risk pooling

The first model is dependent on segmented health financing systems. These systems are different health benefit schemes, taxed-financed public health providers, and private health insurance. As a result, there is no one risk pooling.

Allocation the resources from the collector to risk pooling organization
Each health scheme plays the role of collector and risk pooler at the same time, as a result, there is no special mechanism to allocate resources from collectors to pooling organizations.

In the case of a supply-side subsidized network of public providers, the Ministry of Financing allocates the general revenues to the Ministry of Health according to the same actual followed mechanism which was previously explained (see health care system in Syria).

Allocation the resources from the risk pooling organization to the purchasers:
As each health benefit scheme purchases the health services for its members, there is no special method to allocate the revenues between the risk pooling organization and purchaser.

The first model aims to increase the health system efficiency through introducing a purchaser-provider split. As to the case in the UK and Spain, the local health authorities are established, one authority for each governorate. Each health authority is responsible within its local area (governorate) for purchasing and/or financing the following health services from the public health facilities: (1) comprehensive health services for the poor people, (2) preventive health care for the whole population, (3) the difference between the real cost of health treatment and user fees paid for these services by the patients.
The resources are allocated from the Ministry of Health to each purchaser (health authority) on the base of weighted capitation method that is dependent on the following factors: the total number of population in the purchaser’s area (governorate), the number of the poor people who have special identity cards, the number of the patients in this governorate who have chronic diseases, and finally, the revenues achieved by the public health facilities in this area from charging user fees and the reimbursements paid by the health benefit schemes and private insurance in return for the delivered services.

6.3.4 The purchasing function

The first model focuses on improving the purchasing function as a way to increase the efficiency of the health system, through introducing a purchaser-provider split in the publicly-financed health care and improving the purchasing mechanism in the health benefit schemes.

First, market structure of purchasing organizations
In the publicly-financed health care, the market structure of the purchasers is dependent on the local non-competing organizations presented by the health authorities. These authorities are semi-independent agents. Each authority within its geographical area is responsible for providing good quality and adequate health services for the whole population and ensuring that all the poor people can access the public health facilities. The work of the health authorities as purchasers on a local level makes them in a suitable situation to be acquainted with the requirements of their community and ensure the equitable and efficient allocation of the resources to the public health providers across the country.

The HBSs as purchasers are non-competing organizations working on a national level. The advantages that could be achieved from being each health benefit scheme responsible for purchasing the health services for its members are that each scheme is more familiar with its members and their needs, and also, it is supposed to be the best agent to protect them and increase their benefits. One respondent confirmed this proposal “I think it would be better that every association such as those for teachers or workers or students etc, purchases the health services or contract with health providers to ensure the health services for their members and defend their interests. For example someone who is not teacher will not know what I need while the Teacher Association understands the needs of teachers more than others.” The small size of some of these schemes and the poor purchasing power could wipe out of these advantages.

The first model should focus on evolving these schemes and developing their purchasing power to be more effective so that they can contain the costs and improve the quality and accessibility of the health services. Even in the case of a facilities-owned scheme, where there is no purchaser-provider split, the scheme should promote the performance of these facilities through using financial incentives and improving the delivery structure.

The Health Insurance Committee could play a key role through reorganizing and unifying the purchasing strategy of the different schemes, including the negotiation prices with providers, defining a benefit package that includes cost-effective services,
adopting appropriate payment mechanisms that contain the cost and ensure good quality services, using tighter referral control to mitigate the moral hazard problems.

**Second, who are the providers?**
The publicly-financed health care relies on the public health facilities to provide the health services, according to the first model all these facilities should be autonomous bodies.
In the case of the health benefit schemes, some of them have their own health facilities that provide their members directly with the available health services, the other schemes hold contracts with public or/and private health providers to provide their beneficiaries with the health services. The private health insurance can hold contracts with the private and public health providers.

**Third, remuneration of providers**
The private facilities, including in-patient and out-patient facilities, are paid by one or more of the following:
- Directly by patients through out-of-pocket payments.
- Reimbursements by the private health insurance or by health benefit schemes.

The public health facilities are paid in the same way and by the same payers in addition to the government subsidies.
The doctors working in the primary care facilities, either state facilities or facilities-owned schemes, are salaried employees; however, the capitation way could be used as additional payment method to the doctors as an incentive. Salaries are paid to the state hospitals doctors and the doctors working in the hospitals belonging to health benefit schemes, but they are supplemented by performance-related payments.
The reimbursement of the state hospitals is based on a quasi-prospective payment system through negotiation of a contract program between the regional health authorities and the hospitals. The HBSs can follow the same process to reimburse the hospitals within their own schemes.
The health benefit schemes can pay the private and state hospitals according to per-admission cost adjusted in relation to each case according to a fixed schedule of fees set
according to the annually negotiation between the schemes and providers. Private physicians in the ambulatory sector are paid on a case basis.

**Fourth, the covered benefit package**
The Ministry of Health keeps its responsibilities for providing and financing public health services that include prevention and health promotion for the whole population, in addition the Ministry of Health provides a comprehensive health treatment in its health facilities. According to the first model the state health centers should work as a gatekeeper and use a good referral system to access the poor people to the state-hospitals, therefore the work of these centers should be more active through providing them with adequate number of general and specialist physicians to provide free health services for the poor people.

The health benefit schemes should provide their beneficiaries with a kind of comprehensive benefit package to be appropriate to the received contributions; the covered services should include hospitalization, out-patient services, maternity care, prescription drugs etc

### 6.3.5 The stewardship and regulation

According to the first model, the stewardship of the health system is segmented. While the Ministry of Health is still the main responsible actor for planning, financing and providing the health care for the whole population, The Health Insurance Committee has an increasing role to coordinate and control the work of the HBSs. The HIC consists of one representative from the MoF, one representative from the MoH, and two representatives from each HBS (one of whom represents the employer, and one of whom represents the employees).

### 6.3.6 The pros and cons of the first model

**The pros:**
• Compulsory health insurance for some categories in the formal sector can be the first stone of an incremental coverage expansion of other social groups as it is the case in Germany and South Korea.

• Giving the state hospitals the financial and managerial independency can increase their efficiency.

• Converting a part of the state hospitals services to be paid services can increase their revenues, and as a result, the financial motivations are enhanced, and the medical personnel performance is improved. Two respondents claimed that the availability of paid departments in public hospitals has improved their performance.

• Redirect the general revenue to support the poor people and impose user fees on the rich people in return for some of the health services provided by the MoH facilities can achieve these benefits:
  • Protecting the poor people from a possible financial risk caused by the need for the health treatment.
  • Reducing the pressure on the limited recourse available for the public health facilities.
  • Mobilizing extra funds for the health care system from the patients who are able to pay.
  • This model could encourage the better-off people whose health services are not free anymore to join social health insurance in the future.
  • Introducing the providers-purchaser split, and transferring all public health facilities to autonomous bodies can increase the efficiency of the publicly-financed health care.

The cons

• Transferring the government subsidies to MoH facilities in another approach to support the poor people beside the health benefit schemes will keep the health system segmented and reduce the financial risk pooling.

• Making the health services provided by public health facilities free of charge for only poor people threat the middle-income people who are not participating in any health benefit scheme.
The poor people who receive the government subsidies may be subject to discrimination by the health providers.

The out-of-pocket payment is still a main payment method which weakens the extending of risk pooling.

The financial sustainability of the health benefit schemes could be endangered due to the following factors: high administrative costs, the small size of some schemes, and adverse selection problems.

The small-scale insurance schemes and absence of risk adjustment mechanism in these schemes increase the fragmentation of the health system, and reduce the purchasing power of these schemes.

6.4 The second model: introducing social health insurance step by step

The design of the second model is based on the steps tackled in the first model, especially the steps that are related to recognize the health benefit schemes, unifying the structure of these schemes, reallocating the public expenditure on health to target the poor people, and provider-purchaser split.

The second model relies on introducing the social health insurance system incrementally step by step as a strategy to mobilize complementary resources for the health care system away from out-of-pocket payments that form pressure on people and especially the poor people. Also, it aims to increase the equity and the solidarity through reorganizing the existing health benefit schemes and establishing new schemes. Implementing the second model will depend on the following strategies:

- Merging the similar schemes that are belonging to one economic sector into one scheme.
- Expanding the health benefit schemes to cover all groups of population who can afford paying the contributions.
- Organizing these schemes with a clear strategy aiming at reaching universal coverage.
• Giving the semi-independent agency called the Health Insurance Committee more authorities to coordinate the work of these schemes, monitor their work, and strengthen the schemes management and their purchasing power.
• Enhancing the solidarity through introducing a risk adjusted mechanism between the health benefit schemes.
• Establishing a special health insurance fund financed mainly by general revenues aiming to cover poor people.
• Enhancing the provider-purchaser split in the publicly-financed health care.
• Converting all state hospitals to be autonomous bodies, and imposing charges on the majority of the health services provided by these hospitals, in other words, abolishing the free part in these hospitals.

6.4.1 Extending coverage

In this context the framework of this model imposes many issues, such as determining the principle of the coverage extension, the groups that will have the priority to join the social health insurance funds, the number of the health insurance funds, and the type of the membership in these funds.

First, the principle of the coverage extension

Germany and Korea could be the best examples of the countries that gradually reached universal coverage through adopting targeted and incremental approaches to increase the availability of coverage to uninsured people. Since 1883, the German health insurance system has historically developed along pluralistic lines based on occupation or region of residency (Busse et al. 2007). In Korea, extending the national health insurance coverage relied on the principle of the place of work along both vertical lines (size of company), and horizontal lines (type of the economic sector). Tunisia introduced the social insurance according to the type of the economic sector. In the case of Syria, the place of work principle (economic sector) and the type of occupation would be the best bases to extend the coverage to cover a significant percentage of people at an acceptable period of time. However, it is important to
extending the insurance coverage in line with the economic growing in the country, or at least introducing the health insurance for people who can afford the contributions

Second, the groups that will have the priority to join the social health insurance schemes
The health insurance in Germany, Korea, and Tunisia started to cover the wage-earner people at first. While the self-employed were the last category that accessed the health insurance in both Korea and Tunisia, this category has been outside the statutory health insurance in Germany until now (2011).

In the second model, the health insurance coverage is gradually extending to the following groups:

- First, the administrative governmental sector. This sector was already given the priority to receive the health insurance based on the Legislative Decree No. 65 of 2009.

- Second, the economic governmental sector. The majority of the public companies provide their workers with medical benefits through the health benefit schemes. However, these schemes differ from one company to another in terms of financing, services covered, workers families coverage etc. Therefore, it would be important in this model to uniform the framework of these schemes to make these schemes similar in terms of financing, provided benefits, the mechanism of contracting with providers etc. Unifying the structure of these schemes will pave the way to merge these schemes in one fund in the future.

- Third, the formal private companies.

- Fourth, the formal self-employed, i.e. those who are registered in the related syndicates and paying income-taxes, such as lawyers, engineers, physicians, merchants, handicraft workers who have their own enterprises like blacksmiths and carpenters etc. Regarding the fact that the self-employed sector forms about 30% of the total labour force, it would be illogic to ignore the potential participation of this category in this scheme, particularly the formal self-employed.

- Fifth, the better-off informal sector, such as the farmers, those who work outside the country, construction workers, drivers etc.

- Sixth, the poor people who are mostly outside the formal sector.
The first four groups form about 70% of the labour force. This means the health insurance schemes could cover an acceptable percentage of the population.

**Third, the number of the health insurance schemes, or the degree of integration**

The national health insurance in South Korea was at first dependent on a huge number of medical insurance societies, these were later merged in one national health insurance corporation in 2000. Also, the social health insurance in Germany was at an early stage based on a huge number of small sickness funds. This number has been decreased over the time as a result of merging of these sickness funds. The social health insurance in Tunisia was relying only on two separate funds, the first one was for the employees in the public sector and the second was for the workers in the private sector and self-employed sector before merging these sickness benefit programs in one unified mandatory scheme (the National Health Insurance Fund) in 2007.

According to the second model, the number of the current health insurance schemes should be decreased, furthermore, the number of the new schemes established would be limited to avoid the segmentation and get benefits from the economic size scale.

Taking into account, that all the funds are organized at a national level, the suggested health insurance funds would be as follows:

- First, one health insurance fund for the employees and workers in the public sector, in addition the retired people (HIFP).
- Second, one health insurance fund for the employees and workers in the formal private companies (HIFC).
- Third, taking into account that the formal self-employed sector includes dissimilar categories in terms of income, the type of work, and the degree of organization, and the different syndicates they are participating in or co-operative, the formal self-employed sector will be joining many different health insurance funds according to the type of occupation of the members and their syndicate or co-operative. For example, one fund for the engineers, another fund for lawyers, a third fund for the merchants, and a fourth fund for the handicraft workers. These funds can be called health insurance guild funds (HIFG). Although segmenting the insurance funds affects the size of the risk pooling negatively, the harmony between the members belonging to the same guild fund would be better.
Fourth, one fund for the better-off informal sector (HIFI).  
Fifth, one fund for the low-income people (HIFL).

Fourth, the membership type
According to the German, Korean, and Tunisian experiences, the compulsory membership could be the best way to achieve the planned coverage. Moreover, the three countries have adopted family-based membership, whereas the dependents becoming members of the scheme in which their household was enrolled, this has contributed to a rapid expansion of population coverage.

In the second model, the membership is mandatory in the following health insurance funds: the health insurance fund for employees and workers in the public sector, the health insurance fund for employees and workers in formal private companies, and health insurance guild funds. To ensure a rapid coverage extension, the coverage should also include the families of the members.

Although, the mandatory membership contributes to extending the coverage, reducing the adverse selection and risk selection problems, and diminishing the fluctuation of the contributions, the compulsory membership could affect the employment rate negatively. Since employers have to pay their share of the contributions to the insurance fund; they prefer to hire persons in an unofficial way. As a motivation to encourage the employers to register their employees in the health insurance schemes, and share in the contributions, they should be offered discount on their income-taxes so that this discount increases proportionally with increasing the number of the employees affiliated to health insurance.

The membership in the health insurance fund for the better-off informal sector is voluntary due to the following: First, difficulty of estimating the income of the informal sector. Second, their income is fluctuating dependent on the seasons as farmer’s case. Third, the lack of any formal obligation about duties toward the government such as a license to do their work or paying taxes etc.

Because of the voluntary membership many problems could arise, such as fluctuation of the contributions, adverse selection and risk selection problems, and affiliation for a short time to receive a certain health treatment. As a result, this scheme could quickly
go bankrupt. To mitigate these problems, some reconditions could be used to accept the members such as using a waiting time before registering people in this scheme, and obliging the beneficiaries to hold at least 5 years contracts with the schemes to avoid the temporary affiliation. Furthermore, the government subsidies could contribute to stabilise this fund.

The membership in the special scheme for the poor people is compulsory to protect them from the high costs of health treatment, where this scheme is mainly financed by the general revenues.

6.4.2 Collection of funds

First, the main methods to finance the health system
Financing the second model relies on the general revenues, social health insurance contributions, and the cost-sharing

1-The general revenues
Because of the low capacity of the social health contributions, and the incapability of the health benefit funds to cover the whole population, the government subsidies would be an important resource to share in financing the health care system. The countries that decided to apply the social health insurance step by step followed different ways to support the poor people. For example, in Germany the government has supported the deprived groups such as the unemployed and the retired people to join the statutory health insurance, while Korea launched in parallel with NHI the Medical Aid Program (MAP) to provide the poor people with free of charges benefits so that these benefits are the same of the benefits covered in NHI.

Extending prepayment schemes for the poor people, who are mostly informal population, as a self-financing scheme could face many challenges such as the lack of resource, adverse selection problems, lack of large-scale pooling etc. Therefore, the general revenue plays an essential role aimed to alleviate these problems and ensure the stability of this scheme, and reduce inequity across the society.
In the second model, the government subsidies are converted from being paid to the public providers to be paid on behalf of the poor people to the special health insurance fund. The Ministry of Financing pays on behalf of each low-income person a flat-rate contribution that is equal to the average contribution. According to this type of subsidies, poor people will access nearly the same benefits provided by other health insurance funds and they will not be subject to discrimination by the health providers as it could happen when the poor people receive free services at the public health facilities. Furthermore, this way could enhance the health insurance as a main method to finance the health care and pave the way to establish a national health insurance in the future. However, this type of subsidies can escalate the administrative costs and increase the moral hazard problems.

Earmarked taxes such as the taxes on alcohol and tobacco could be imposed to mobilize extra revenue for the insurance scheme for poor people. In addition, a new tax assigned directly to finance the health insurance fund for poor people could be imposed on the income of the rich people.

2-The health insurance contributions

Imposing a relatively low contribution rate encourages people to join the health insurance funds, as it is the case in Korea where the health insurance extension to cover the whole population within low contributions has received the priority over expanding the benefit coverage.

Taking into account the variety in organizing the health insurance funds that rely on economic sector and/or the occupation of their members, the way of collecting the imposed contributions and their estimation should be different from one fund to another according to the average income of their members, the degree of the income stability, and the way of receiving the income (monthly, yearly, etc). In general, the imposed contributions should somewhat be close to the average health insurance contribution that is calculated according to the actuarial study at the national level.

The members of the health insurance fund for the public sector (HIFP), and health insurance fund for the employees and workers in the formal private companies (HIFC) should pay their health insurance according to the salary-rated contribution. The
employers and the employees share the paid contribution so that the employers pay a certain percentage of the contribution while the employees pay the rest.

The members of health insurance guild funds (HIFG) should pay the total contribution. The contributions are estimated according to the community-rate contribution, taking into account that the average income of the members varies from one guild fund to another in dependent to the type of their work. It is noticeable that the income of the members varies according to the type of occupation and the place of work even within the same guild fund. For example, the income of a shop-owner who works in a rich urban area is noticeably higher than that who works in a rural area.

The members of the fund for the better-off informal sector (HIFI) should pay flat-rate contributions. The income, property, type of car etc can be used as indications to determine the scale of the flat-rate premiums. The lowest premium should be near the average insurance contribution.

The members of the special fund for the poor people should pay a small flat-rate contribution which reflects their proportionally small income.

3-The cost-sharing

To control the moral hazard and increase the revenues, the health insurance funds could impose cost-sharing on some of the provided services. However, the Health Insurance Committee should set a maximum ceiling on the payments that a patient should make in a twelve-month period. Furthermore, the user fees should be determined on a sliding scale according to the level of income.

In order to receive health services people who are not participating in any of the health insurance fund should pay out-of-pocket payment. Also, the insured people should pay out-of-pocket payments to receive the services that are not covered by their health insurance.

Second, the organizations undertaking the collection of resources

As it is clear in Figure 6.2, each health insurance fund collects the contributions from its members. In cooperation with the health insurance fund for the poor people, the Ministry of Financing, which collects the taxes from people, pays the contributions on behalf of the poor people.
6.4.3 Risk pooling

To increase the solidarity and equity, and reduce the negative effects of the fragmentation of the health system, the second model introduces a risk adjusted mechanism between the health insurance funds.

First, the resources allocation from collectors to risk pooling organization

To ensure the sustainability of the health insurance system in general, the following two types of subsidies are recognized:

First, subsidies among the health insurance funds. These subsidies can contribute in alleviating the high differences in the financial situations between the different funds.

According to the second model, the health insurance funds are participatory and the
members of each fund have the sense of ownership, thus, each health fund allocates only a part of its collected contribution to one risk pooling. The partial risk sharing allows the subsidies to roam across the insurance funds, and at the same time, it motivates the wealthy members to pay their funds in exchange for receiving more benefits. The percentage of the shared revenues could be determined yearly by the Health Insurance Committee with respect to total collected contributions by all the insurance funds. As it is the case in Romania, the percentage of the shared contributions will be increased gradually to reach the percentage of 100% of the risk sharing. This increase will be in parallel with the development of the health insurance system and the enhancement of the solidarity notion in the society.

Second, direct government subsidies for the risk pooling. In addition to the government subsidies that are paid to the special insurance fund on behalf of its members of the poor people, extra government subsidies should be directly paid to the risk pooling, instead of paying them separately to some funds as it is the case in the first model. These subsidies contribute to support the poor funds to provide their members with adequate health services.

**Second, resources allocation from pooling organizations to purchasers**

To ensure that every purchaser (health insurance fund) will have adequate resources to provide their members with at least the minimum health benefit package, the recourses are reallocated from the risk pooling to the purchasers according to a risk adjusted capitation. Many factors should be considered in estimating the risk adjusted capitation such as the number of beneficiaries who are younger than 5 years old, the number of those who are older than 65 years old, disability, and the number of beneficiaries who have a chronic disease.

6.4.4 The purchasing function

**First, market structure of purchasers**

Each health insurance fund purchases the health services for its members and holds contracts with health providers. The market structure of the purchasers is dependent on
non-competing organizations. The purchasers are not-for-profit agents organized at the national level.

**Second, who are the health providers?**
The health insurance funds hold contracts with the public health facilities that are autonomous bodies, and the private health facilities that meet the conditions set by the fund. In order to facilitate the access to the health care, the funds should consider the fair geographical deploying of the health providers network, and contract with enough number of hospitals, specialists, pharmacies, etc.

According to this model the state hospitals would be in a competition with the private ones. The patients could freely select the health provider either in the case of out-patient or in-patient treatment. This would be within the network of providers who hold contracts with the insurance fund.

**Third, the remuneration of the health providers**
In cooperation with the Health Insurance Committee, the insurance funds negotiate with the Syrian physicians syndicate and the Ministry of Health as these are the formal representatives for the private and state health providers. The negotiation raises issues, such as the provided inpatient and out-patient services, putting a clear schedule of fees for these services, the quality of these services, and the way in which the providers will be paid. According to this way of negotiation, the power purchasing of these funds could increase and the funds could strongly impose suitable fees.

The physicians can be paid according case-based fee, in other words a flat payment per diagnosis package, such as for normal childbirth services. The case-based fee can be adjusted for risk factors, such as age and co morbidities, in addition for complexity of each case. The hospitals can be remunerated by case mix-adjusted fees. In other words using a fixed amount of money is paid for every case classified with a specific diagnosis, regardless of the services that are provided. This way could be a fair way to reimburse the health providers, and this way could contain the costs.

**Fourth, the covered benefit package**
The Ministry of Health keeps its responsibilities for providing and financing the public health services that include prevention and health promotion for the whole population. The Health Insurance Committee should determine the minimum benefit package that should be provided by each health insurance fund to its beneficiaries. The package should be appropriate to the average insurance contributions, furthermore, the conditions of cost-efficiency and good quality should be considered. In general, the benefit package should be comprehensive, including hospitalization, out-patient services, maternity care, prescription drugs etc.

6.4.5 The steward and regulation

The Ministry of Health is the main responsible for observing and enhancing the health of population. The HIC should have an increasing role aiming to coordinate the work of the health insurance funds, monitor their activities, and strengthen their role in financing the health care system.

The HIC consists of one representative from the MoF, one representative from the MoH, and two representatives from each health insurance fund (one of whom represents the employer, and one of whom represents the employees).

6.4.6 The pros and cons of the second model

The pros

- Regarding the South Korea experience, the health benefit schemes could form the base to establish one prepayment health scheme.
- The compulsory membership in most of the health insurance funds smoothes the coverage extension, alleviates the effects of the risk selection and adverse selection problems, and increases the financial sustainability.
- The government subsidies are paid as contributions on behalf of the poor people to join the health insurance. This helps the poor people to access the health care services and avoid being discriminated by the health providers.
Introducing a risk adjusted capitation between the different health insurance funds reduces fragmentation, and increases the equity and solidarity between these funds.

Converting the majority of the health services provided by the state hospitals to be paid services, and making these hospitals competing with the private sector, may improve the state hospitals efficiency.

The cons

According to the experiences of Germany and South Korea, achieving universal coverage is related to economic growth. However, the slow economic growth and the denomination of the informal sector could deter the universal coverage achievement in Syria in the near future.

The financial sustainability of the insurance fund for informal sector workers in which the membership is voluntary, is threatened because of the adverse selection problem, instability of the number of members, varying the income of the members from one month or season to another, and finally, some members could mislead by stating fault information about their income.

Because of the lack of information, the health insurance fund for the poor people could fail to reach all the poor people, on contrary some better-off people could abuse this fund.

Under uncompleted health insurance coverage, converting the state hospitals to be paid hospitals can create a real problem for uninsured people, particularly the low and middle income people. Approximately, one third of the respondents said that the existence of the public hospitals would be necessary in the health insurance system to treat those who are unable to participate in the HI system.

6.5 The third model of the health financing system is the national health insurance (big push)

The third model discusses the framework for implementing a national health insurance system that covers the whole population at once. Colombia and Romania could be the
best examples of the countries that have applied the social health insurance for the total population at one time instead of performing that according to many stages as it is the case in Germany and South Korea. This model relies on these approaches:

- Merging all the existing health insurance funds into one national health insurance fund. This fund is a self-governed body, and has one branch in each governorate (i.e. district health insurance funds).
- Converting the state-hospitals to autonomous bodies. These hospitals will provide their services in exchange for fees and they will be in competition with the private hospitals.
- Transferring the state budget allocated to public health providers towards the poor people in a form of premium contributions paid on their behalf to join the national health insurance.
- Making national health insurance obligatory for the whole population.

6.5.1 Extending coverage

More than half the respondents said: the membership in the national health insurance system should be voluntary and suggested different reasons. For example, one respondent said the success of the HI system is dependent on the harmony between the members and also their awareness to the importance of the HI, while the number of participants is irrelevant. Few respondents said the mandatory membership would create an additional financial pressure on the family “Some people can not afford to pay even one Syrian Pond for this insurance; therefore, the membership should be optional”. The rest of the respondents stated that the mandatory membership is better and stated different reasons. For example, the health insurance is necessary for every one to reduce the financial risk. One said: the mandatory membership would help to achieve higher funds for HI system. Few respondents said the mandatory membership would achieve universal coverage.

With respect to experiences of the countries that adopted the NHI system, the mandatory membership is the better way to reach universal coverage.
Taking into account that the government will pay on behalf of the poor people to join the NHI, the membership in the third model should be compulsory. The mandatory membership has many advantages, such as achieving universal coverage in a short time, avoiding adverse selection, risk selection, and finally, the inequity problems where the coverage will be extended to include all population regardless of their income or their health status. The extension of coverage will be performed in harmony with the type of economic sector such as a public sector, formal private companies, self-employed sector, and informal sector.

6.5.2 Collection of funds

The most important factor that helps the NHI to achieve universal coverage is the stability of the systems’ revenues which is dependent on many factors, such as the economic growth, and reducing the size of both the informal sector and unemployment. For example, Romania as a lower middle income country that introduced mandatory social health insurance for all citizens has failed to achieve universal coverage. Also, Colombia had not achieved universal health care coverage during the intended time because of a permanent economic crisis and an armed conflict.

First, the main methods to finance the health care system

According to the arguments discussed earlier, neither the general taxation nor the social insurance contributions as a unique recourse are enough to achieve universal coverage. Therefore, in the third model both the general taxation and the social insurance contributions will finance the health care system. Also, co-payments and earmarked taxes will be used to mobilize extra resources to finance the health care system.

1-The social health insurance

Although they are enthusiastic to participate in the NHI, nearly one-third of the respondents said that their incomes are low and they can not spend a single Syrian Pound towards the HI. One respondent said: if the insurance premium was a small percentage of the income, it would not noticeably affect on the financial situation of the insured people, but at the same time that would be beneficial for everybody. The South
Korean experience confirms the opinion of these interviewees. In South Korea, the low health insurance contributions imposed by NHI system have contributed to spread health insurance coverage, despite the fact that the benefit package has been comparatively small and the share of user-fees and OOP payment have been relatively high.

In the third model, the National Health Insurance Fund will be the direct responsible for estimating the average insurance contribution amount. Many factors should be considered at estimating this average, such as the insurance contribution should be enough to cover the planned benefit packed, the outcome of contributions should ensure sustainability of NHI, finally in order to encourage people to pay the national health insurance, the social health contributions should be reasonable and not relatively high so that it fits with the income of people and their non-health requirements.

According to interviews, more than two-thirds of the respondents prefer to pay the NHI a monthly flat-rate; more than half of those respondents do not receive a stable income. Regarding the payment type of the social contributions, dependent on the type of economic sector and the way in which people receive their income, the social insurance contributions can be calculated either proportional to the income or a flat rate payment as it is explained below.

The social health insurance contributions are paid by the following categories:

- The employees in the governmental sector and in the formal private companies. They will pay these contributions together with their employers, either the private companies or the government, according to a defined percentage for each party. These contributions will be determined as a percentage from the salaries or wages, and not from the total income. It is worth to mention that many Syrian people have another job or a small project beside their main work and it is not easy to estimate the total income of those people.

- The formal self-employed will pay the health insurance as a monthly flat-amount. The average income of the self-employed people varies according to the type and the location of their businesses, thus, the self-employed people will pay different scale of contribution according to the type of their work. It is worth to mention the difficulties to precisely estimate the income of this category of people.
Better-off outside formal sector employment such as persons engaged in small-scale agricultural production, workers in construction jobs, those who work outside the country, etc could pay a flat-rate contribution regarding the difficulties of determining their incomes. The income, property, type of car etc can be used as indications to determine a scale of flat-rate premiums that should be close to the average insurance contribution.

2-Government subsidies
The government subsidies for the poor people contribute in extending the health insurance coverage seamlessly and avoiding inequity. The government subsidies can support the poor people in the following different ways: first, through supply-side subsidized network of public providers that provides the poor people with free or semi-free services as it is the case in Tunisia, this way is used in the first model. Second, the government subsides can be paid on behalf of poor people to join a special scheme, not the social health insurance which is only available for those who are able to pay, as it is the case in Colombia and the Medical Aid Program (MAP) that covers the poor people in Korea (this way was used in the second model). Third, subsides can be used to pay the insurance contributions on behalf of specific groups to join the social health insurance as it is the case in Germany and Romania.

In the third model the government subsidies are used to pay the contributions on behalf of the poor people who have special identity cards that entitle them to join the national health insurance. This method will allow the poor people to receive the same health services as the other members and it will ensure the extension of the health coverage for the whole population.

3-User fees and earmarked taxes
This way of financing achieves these advantages: First, the obtained money increases, this will help to finance the health care system and ease the government's burden. Second, user charges could contribute to reduce the moral hazard problems. However, it will be important to control the size of the user fees, taking into account that this type of payment could form an obstacle to access the health care for the poor people, and
negate the advantages of the national health insurance model unless a sliding scale of fees is introduced.

The earmarked taxes such as the taxes on consuming tobacco and alcohol form extra resources to finance the national health insurance system.

**Second, the organizations undertaking the resources collection**

The contributions for the NHI system are collected by the National Health Insurance Fund through its district health insurance funds. This fund is a semi-government, not-for-profit committee, and independent in terms of management and finance. Due to the fact that the fund is a semi-government body, this meets somewhat the opinion of more than two thirds of the respondents who believe that the public sector is more trustful than the private one in collecting the contributions.

The number of the district health insurance funds is equal to the number of the Syrian governorates, where each governorate has one district fund. These funds collect the contributions from the members on a local level. The government pays directly to these funds on behalf of the poor people in addition to its share of the public employees` contributions.

The district health insurance funds deduct the contributions directly from the salaries of the workers in the formal sector, while collecting the contributions from the personals outside the informal sector is more complicated due to the low usage of banking system by most of the Syrian people. As a result, this task could require a large number of staff to collect these funds.

**6.5.3 Risk pooling**

The majority of the respondents preferred the structure of risk pooling to be at the national level. Three of them said: the total collected revenues would be more at the national level; as a result, the insured people would get more benefits. One respondent said at the national level, the HI would be more able to take more responsibility and support everybody particularly the poor people.
In the third model, there is one risk pooling at the national level that can insure the principle of solidarity, in other words, income is redistributed from the rich people to the poor people, the healthy people to the ill people, singles to families, the young people to the old people, and the employed people to the unemployed and the retired people. Furthermore, the NHI system within one risk pooling will be more stable.

First, the resources allocation from the collectors to the pooling organizations
As illustrated in Figure 6.3, each district health insurance fund collects the contributions from the insured people living in its area and transfers the whole amount to the central fund, the National Health Insurance Fund.
If each local fund transfers all the collected contributions to one central fund, and the central fund in its turn redistributes these contributions to the district health insurance funds according to precise criteria, then, it would be easier and more transparency than forcing the local funds to share the money obtained by their members with other areas or funds.

Figure 6.3: The proposed structure of the national health insurance system in Syria
Second, allocation of resources from the pooling organization to the purchasers

To reallocate the revenues in a fair way across the country, the National Health Insurance Fund (NHIF) keeps a part of these funds for administrative costs, re-insurance etc, and redistributes the rest of the collected money to the purchasers (the district health insurance funds) according to the number of insured people in each governorate, urbanization rate in the governorates, mortality, the percentage of population in each governorate who has chronic diseases or who are disable.

Three respondents prefer the risk pooling to be at the national level to protect the persons wherever they are “If I travel by my own car to Aleppo and I had an accident there, would they bring me back to my county to receive the treatment? The insurance must be universal over all the country.” To tackle the concerns of those respondents, it would be necessary in the NHI system to introduce compensation mechanism between the district health insurance funds or create a special fund that is responsible for financing the health treatment for the patients who received the health treatment outside their governorate. This could be happen in the following cases. First, if the persons were temporarily outside their governorate. For example, if a person was travelling across the country or working in other governorate had an accident or needed an emergency care. Second, in some complicated operations or analyses that require special medical devices, and these devices are not available in the local hospitals in some governorates, those patients should be referred to hospitals that are supplied with these devices in another governorate to receive these services.

6.5.4 The purchasing function

The national health insurance system should not focus only on raising revenue, but this system should ensure the efficient delivery and the quality of the health services. An effective purchasing function can play a main role in the sustainability of the health care financing, and as result, bringing the system to success.

First, the market structure of the purchasers
More than half the number of the respondents prefers the public sector to purchase the health services, that is because they thought the public sector is more qualified than the private one, while one-third trusts the private sector more than the public one as a purchaser for the health services. Therefore, to find a compromise between the opinions of the two categories, the third model uses district health insurance funds that are semi-government bodies, as purchasers for the health services. The market structure of purchasers relies on multiple non-competing insurers. Each district health insurance fund covers geographically distinct population according to the governorates. Regarding that these funds are working on a local level, this enables them to follow and respond to the health needs of their members.

This structure is identical in some aspects to the German one where each sickness fund collects the contributions from its members and purchases health services for them. However, in Germany, the insured people can select their sickness funds freely and the sickness funds are working on a competing base. The market structure of the purchasers, according to the third model, is close to the British and Spanish NHS that are dependent on the local non-competing purchasers.

Second, who are the providers?
In the third model, because of the fact that the health insurance covers all people, the purchasers should hold contracts with the majority of health providers both public and private. The public health facilities will stay owned by the government, however, they would be autonomous in terms of financing and administration. According to the results of the interviews, the number of the respondents who preferred the public health facilities was approximately equal to the number of those who preferred the private hospitals. In this model, the patients can select freely the contracted physicians or hospitals within their governorate.

Third, the remuneration of providers
The payment system of the health providers includes two main elements: first, the method of remuneration of providers. The selected way to reimburse the providers has a significant role to create incentives for them to improve the efficiency and quality of the health services provided. Also, the selected way has a great impact on containing the
costs. Second, the amount of payment per unit basis that is used to pay for providers (Drouin 2007). In the national health insurance model, it is so important to prevent the cost escalation of the private health care, and redirect the extra collected funds. The aim is not to increase the revenue of the health providers but to improve the quality and quantity of the services provided. For example, to control the costs, a standard fees schedule based on benchmark prices can be used to reimburse the health providers. The benchmark prices should cover the full costs of the services provided at a standard quality.

The physicians can be paid according case-based fee, in other words a flat payment per diagnosis package, such as for normal childbirth services. The case-based fee can be adjusted for risk factors, such as age and co morbidities, in addition for complexity of each case. The hospitals can be remunerated by case mix-adjusted fees. In other words using a fixed amount of money is paid for every case classified with a specific diagnosis, regardless of the services that are provided. This could be a good method to control the cost on contrary to fee-for-service way that could cause overprovision of the health services and increase the expenditure.

**Fourth, the covered benefit package**

All the interviewees expected to receive all the medical services they might need regardless of the paid contribution or the type of the selected insurance plan. These services should be at least better than the services provided at the moment by the public health facilities.

To design a suitable benefit package, it will be useful to consider these points:

First, at the beginning, will the NHI model start with providing comprehensive benefit coverage? South Korea could be a good example to answer this question. South Korea gave the extension of the health insurance to the whole population the priority in implementing the NHI more than the expansion of the benefit coverage. The NHI model could impose relatively low contribution to ensure a rapid extension of population coverage, and start with a low benefit package. Then, the benefit coverage can be extended incrementally on line with increasing the system’s revenues.

Second, will the NHI system focus on covering the high-cost events with low frequency or on low-cost event with high-frequency? Covering the inpatient or catastrophic
expenses illness is important to protect the low/and middle-income people from falling into poverty which is the main goal of this model. Almost one-third of the respondents thought that financing the cost of the operations is the most important service that should be provided by the HI. However, even small payments for primary care services can have catastrophic consequences for vulnerable households. Also, covering outpatient care gives the members a bigger chance to experience the benefits of the health insurance. As a result, they will be more willing to pay the NHI. According to this argument, the NHI system should find a balance to cover both inpatient and outpatient care. For example, benefits package can cover physician services, inpatient and outpatient hospital care, prescription drugs, and rehabilitation. However, certain services might be excluded from the benefits such dental care, glasses, cosmetic operations, etc.

Third, will the benefit package become the same for all people? Except of Colombia, where subsidized regime provides its members of poor people with fewer health services than the benefit package provided by the contributory regime, the provided benefits in the other studied health care systems are independent from the level of contributions. Applying equal access for equal need in the suggested NHI model could enhance the solidarity and achieve more fairness. Consequently, it will increase the satisfaction of people particularly the poor people. On the other hand, it could increase the percentage of people who evade paying to the NHI system through providing wrong information about their income. In other words, equal access for equal need regardless of the amount of contribution could reduce the motivation to pay the NHI system.

6.5.5 The stewardship and regulation

More than half the number of the respondents thought that the private sector can manage the HI project more efficiently than the public sector. Few respondents said: regarding the fact that the private sector is profitable, it has a better disciplinary and supervision system, it selects good qualified staff and provides better quality of service. The rest of the respondents thought that the public sector should run the HI system. Three respondents said: the public sector is more secure and trustful than the private sector that can cancel its work and run away at any time.
As a compromise between the different opinions of the two groups, the NHI system is managed by the National Health Insurance Fund. Regarding that this fund is autonomous in terms of management and financing, this gives this fund more flexibility to set the rules and arrangements that control and improve the performance of the health financing system. The NHIF will involve in these tasks:

- Setting and implementing the rules that control the health financing system.
- Coordinating between the main players in the system, particularly the providers, purchasers, and patients.
- Organizing each function separately and also within the framework in which each function is related to another.
- Also it should focus on evaluating the performance of the organizations involved in revenue collection, purchasing, provision etc.
- It should focus on implementation and performance management issues to avoid problems related to evasion, moral hazard etc.
- Establishing the computerized information systems at the medical facilities and building an information network to settle the accounts and link the social insurance administration to the health providers.

In the NHI system, the government will not have a direct managerial role. However, the government will focus on ensuring that the poor people get full access to the health services. The government will be responsible for subsidising the poor people health treatment out of general taxation, and also, training and qualifying human forces capable to manage this system. The Ministry of Health will keep its responsibilities towards providing and financing public health services including prevention and health promotion for the whole population.

6.5.6 The pros and cons of the third model

The pros

- The majority of the respondents are willing to participate in the national health insurance; this promotes the accomplishment of this model.
The direct link between the paid contributions and received health services makes people more willing to pay.

This model will ensure a large-scale pooling at the national level and enhance the principle of solidarity.

It will protect the low and middle-income people from falling in poverty as a result of high expenses health treatments.

The mandatory enrolment can avoid the adverse selection and risk selection problems.

Generating extra revenues for financing the health care system.

Subsidized insurance membership entitles the poor people to receive the same services and protect them from possible discrimination by health service providers.

The escalating number of private health insurance companies and third administration parties has increased the knowledge about the concept of the health insurance in the Syrian society, so implementation of the NHI should be well accepted.

The majority of the respondents supported the solidarity principle through paying more for the HI in comparison to the poorer people. One interviewee believes that poor people have the right to share the funds with rich people according to the Islamic Zakat rite “the poorer people have the right to receive a certain portion of the rich funds on the basis of the Islamic practice of Zakat”.

The cons

The shortage of knowledge about the health insurance in the Syrian society could hinder extension of health insurance. The results of the analysis of the interviews revealed that more than one-third of the respondents were not familiar with the concept of the health insurance, further, they have never heard about it.

The statutory health insurance could face some resistance from people when they are asked to contribute towards some benefits they had always enjoyed them for free or semi free at the public health facilities.

Although the NHI model relies on a mandatory membership, the success of this model to reach universal coverage is dependent on the generation of stable resources.
The model could face, at least at the beginning, administrative complexities in addition to governance and accountability problems.

The payroll contributions can lead to a higher unemployment rate.

The moral hazard problems and providers’ capture could increase the costs, however, using a combination of co-payments and /or high-ceiling number of doctors’ visits could relief these problems.

The social habits or the religious believes could hinder the extending of the NHI. For example, one respondent said “When I get ill I fast for one day then I get recovered, I treat myself. I am relying on God”.
7. Assessment of the Proposed Models vs. the Current System

In this chapter, the financing mechanisms that were suggested previously in each model will be assessed according to the following criteria: feasibility, efficiency, sustainability, and equity. In the first and second sections these criteria will be explained briefly and the current health care system and each proposed model will be judged in turn on the basis of these criteria. In the third section, each model will be compared with the other models according to these criteria. The fourth section will discuss the way forward to universal coverage.

7.1. Definition of the criteria used to assess the proposed models

The criteria that will be used to assess the models can be summarized as follows:

- **Feasibility**: The concept of feasibility refers to the possibility and tenability of applying the health financing reform. The feasibility of each model can be determined by answering the following questions: Are stakeholders likely to support this model? Is there adequate administrative capacity to manage this model? To what extent is the public satisfied with this model?

- **Efficiency**: The efficiency concept includes several issues, which include, first, administrative efficiency. This means that the costs of administration and resources collection should be low. Second, allocative efficiency refers to the allocation of resources for higher priority activities such as those to manage the heaviest burdens of ill health, or immunizations, which have a major effect on the health of a whole population. In other words, it implies giving priority to the most cost-effective interventions that offer the lowest cost per unit of health outcome. Allocative efficiency is achieved by allocating resources among diverse levels of care, e.g. tertiary care as well as primary health care, and among services related to each level of care, e.g. immunization, tuberculosis, hypertension, etc. Third, technical efficiency produces the maximum number of health services that can be provided with specific inputs without compromising quality of care (McIntyre 2007). Taking
into account that there are no explicit studies and statistics available to assess both allocative and technical efficiency in a current health care system and there is difficulty in assessing the ability of the proposed models to achieve these indicators in the right way, the criteria of efficiency will be assessed according to the general performance of each model.

- Sustainability: This concept relates to the ability of the financing mechanism to sustain its level of funding in the long term, and increase its level of funding over time to meet the increase in cost pressures resulting from new technologies and consumer expectations regarding health care coverage and quality. There are three options available to face rising health care costs and resource constraints. First, increasing revenue for the health system and the services provided. This option raises questions about the efficiency of financing mechanism that can generate a relatively large amount of funding to finance the health care system and to which extent people are willing to pay for health care on a collective basis. Second, increasing the value gained from the existing health system resources, in other words, improving the performance of the health care system. Third, cutting spending by reducing services, which raises the question of the level of benefit coverage that should be provided (Thomson et al. 2009b). In this chapter only the first two options will be discussed.

- Equity: An equitable health care financing system should perform with respect to the following principals: first, the members’ contributions to the health system should be assessed according to their ability to pay rather than their health status, avoiding regressive financing mechanisms, and reducing the reliance on direct payments for health care. Second, there should be financial risk protection and equity in accessing health care, and patients should take advantage of the health services only according to the need for care. Third, there should be cross subsidies from the rich to poor people and between different insurance funds, which includes maximising risk pooling size and setting up risk adjustment (McPake and Kutzin 1997).

7.2 Assessment of the current system and the three proposed models according to the defined criteria
The assessment of the current system is based on the available information about this system, in addition to the results of the interviews that sought to establish information about, for example, the level of satisfaction of the respondents and the advantages and disadvantages of this system from their point of view. In addition, the results of the interviews may be helpful in assessing some aspects of the third model, as the interviews focused on finding out the views of the respondents on the establishment of national health insurance and the preferred structure of the proposed model. In general, the assessment of the proposed models will be based on inductive arguments.

7.2.1 Assessment of the current health care system

Feasibility of the current health care system

In recent times, there has been a clear policy concerning the improvement of the health care system, which includes, for example, the Legislative Decree No. 65 of 2009 that has made health insurance obligatory for the administrative governmental sector, and the gradual conversion of the state hospitals to become autonomous.

The running of the publicly-financed health care system lacks efficiency and accountability; in general, the administration staff is poorly qualified (State Planning Organization 2006). The majority of the health directors and public hospitals' managers are physicians and most of them do not hold academic degrees in management as such managers are supposed to, which implies a shortage in the required formal management experience. One interview respondent confirmed this fact: “How would the urine doctor, who has no experience, know about administration?”

Four respondents said the public health system suffers from excessive bureaucracy, administration problems, and weakness of the supervision and disciplinary system.

According to the interviews, nearly two-thirds of the respondents said that they are satisfied with the public health system, although their satisfaction was rated from low to excellent. In general, the current system is widely criticized, as was mentioned before.
Efficiency of the current health care system

Although the cost of collecting general revenues that are the main public mechanism used to finance the health care system is relatively low, this resource is neither sufficient nor efficient. The administrative efficiency in general is low; the system suffers from corruption and abuse of the limited resources.

Efficiency of the current health system is relatively low: this system has suffered from the poor quality and quantity of the services provided by the state hospitals, and abuse of the health services provided in these hospitals. The role of health centres as a first point of reference is weak and inefficient and there is no referral system between these centres and public hospitals. As a result, the state hospitals face significant pressure in emergency and ambulatory care, in addition to the wastage of hospital resources, since the majority of the cases treated in hospitals could have been effectively managed at the primary level.

In additions to the discrepancies in the allocation of the number of beds among the Syrian governorates, an illogical division of beds among the various medical specialties or the absence of some specialists in some public hospitals and/or in some governorates causes more pressure on some hospitals that provide these services and further results in longer waiting times for access to hospital care, especially for certain diseases. The average length of stay was 2.2 days, and the bed occupancy rate was 83% in 2002 (Regional Health Systems Observatory-EMRO 2006). Utilisation rates of the health centres are low, despite the high spending on health centres at the national level. Five interviewees mentioned that the medical centres do not play an effective role in providing good health services.

A shortage of health workers, inappropriate training, and poor supervision are major obstacles to strengthening the health system. The low salaries of the medical staff and absence of financial incentives for their work has resulted in the problem of dual work of doctors in both public and private health facilities. This problem has negatively affected the performance of the public health facilities, where the utilization per doctor is low, in addition to the exploitation of these facilities by the doctors for the benefit of their own private work. Five respondents complained that the public hospitals' doctors either work for private hospitals or have their own clinics at the same time. Those
doctors try to persuade the patients of the public hospitals to use their own private health centres with the aim of charging them money.

**Sustainability of the current health care system**

Financing the current health system is based mainly on general revenues, and direct OOP payment. The general revenues cover less than half of the total expenditure on health. The total health expenditure per capita in Syria is at one of the lowest levels of spending in the Middle East (WHO 2010).

Although the general revenue is a somewhat stable resource, the slow economic growth and the inconsistent priorities of the government reduce the capacity to collect and allocate sufficient funds to finance the health care system. Since the 1990s, the share of the budget dedicated to health has increased, however, the gap between the limited resources and the increasing cost of health services is growing. Converting some of the public hospitals to autonomous hospitals and introducing user fees in these hospitals has contributed to an increase in the resources of these hospitals and an improvement in their performance. The expected effect of introducing health insurance for the public administrative sector on the financing of the health care system is not clear yet.

The option of dealing with rising health care costs and resource constraints by improving the performance of the health care system does not work well for the following reasons. First, there is no split between the purchasers and public health providers, and the public facilities are paid according in retrospect. Therefore, there are no good incentives to improve the performance of the public health facilities. Second, there is corruption, abuse and wastage of limited resources.

**Equity of the current health care system**

Since the Syrian taxation system is in general a progressive system, the general revenue used to finance the health care system can be considered as an equitable source. However, the OOP payments that form more than half the total expenditure on health are an inequitable means to finance the health care system. More than half the
respondents complained that they cannot afford health treatment costs and they have to postpone their health treatment or borrow money to pay for health care.

According to the Syrian Constitution, the Syrian government is responsible for all the health services needed by the people. Ideally, the whole resident population can access public health facilities. However, the limited resources allocated to these facilities, long waiting times, favouritism, the unavailability of some health services in these facilities, etc., form obstacles to access to the public health system. Furthermore, the high level of dependence on direct payments presents a major obstacle to universal coverage, as most outpatient services are provided in private clinics and they are financed though direct OOP payments. More than two thirds of the respondents said that the public health system is unable to protect them against the financial risks resulting from catastrophic illness.

The current health system is based on segmented risk pooling organizations: the MoH, some of the ministries that provide parallel health care for their members, and health benefit schemes. Furthermore, financing the current health care system is based on OOP payments as the main financing means, which obstructs the extension of risk pooling. As an attempt to decrease the inequity in the allocation of the budget between the governorates, each Health Directorate receives their budget directly from the MoLA which is decentralised in the governorates. However, there no a clear risk adjustment mechanism dedicated to allocating these revenues between the Health Directorates.

7.2.2 Assessment of the first model

Feasibility of the first model

The first model does not aim to introduce big changes. Many of the proposed procedures, such as converting the state hospitals to autonomous ones, and redirecting the resources allocated to the public health facilities to target low and middle-income people rather than the whole population, have almost been implemented in some public
hospitals. Furthermore, as the design of the first model is based on the existing health benefit schemes, this makes its implementation less complicated and it will not be resisted by the stakeholders.

Many of the health benefit schemes lack good administrative capacity for the management and purchasing of health services. Also, introducing the Health Insurance Committee and the local health authorities as purchasers at a local level requires skilled administrative staff to lead the work of these schemes and authorities in the right way.

A high percentage of wealthy and middle-income people who are not participating in any health benefit scheme would protest at paying for the services that have been previously provided free of charge by the public health facilities. On the other hand, many people might be in favour of the conversion of the public hospitals into paid hospitals with reasonable charges. For example, four respondents said the autonomous public hospitals have proved their performance and provided good services: “The government hospitals which require payment are better than private hospitals because they are not free, especially for the treatment of heart disease”.

**Efficiency of the first model**

The first model is based on many health benefit schemes alongside the publicly managed system, thus as a result the administrative costs will be higher than those in the current system. Furthermore, because the small-scale insurance schemes cannot take advantage of economies of scale, the costs will increase. However, on the other hand, the cost of collecting the revenues will be low given that most health benefit schemes work in the formal sector and the collection of the contributions need not be a complicated procedure. Also, giving the state hospitals independence in managing their activities can increase their ability to control the costs and avoid misusing the health services.

Converting all the state hospitals to autonomous hospitals, and introducing the provider-purchaser split will increase market incentives in the publicly managed system. Furthermore, purchasing authorities could be the best agencies to assess their defined
members’ health care needs, and determine the most cost-effective means of meeting these needs. In other words, those authorities will increase the allocative efficiency, i.e. which services are best financed, while the state health providers will focus on the technical efficiency, i.e. how best to provide specified services.

**Sustainability of the first model**

In addition to the general revenues and OOP payments, the first model creates new resources for financing the health care system through enhancing the role of the health insurance contributions and imposing user fees on the services provided by the public health facilities. Because most of the health benefit schemes work in the formal sector, this somewhat ensures their financial sustainability. However, many factors could undermine their stability such as high administrative costs and adverse selection and moral hazard problems. Also, the level of uncertainty in predicting health care needs will increase as the risk pool gets smaller.

In general the government subsidies for these schemes and for the public health facilities make the health system stable, unless these subsidies are changed from one year to another.

Furthermore, establishing the local health authorities as purchasers for health care and converting all the state hospitals to autonomous hospitals could improve the performance of the health care system, increase the value of existing health system resources, and reduce wastage. However, the small size of some health benefit schemes could weaken their purchasing power and their effect on the supply side of the health market, and as a result increase the cost of health services.

**Equity of the first model**

Besides the taxes that form a main source of funding for the first model and that are considered an equitable source, in the majority of the health benefit schemes, the contributions are calculated as a proportion of the employees’ salary. However, as the OOP payments still play a significant role in financing the health care system, this reduces the equity of the first model.
The first model cannot achieve a high level of equity in access to health services and therefore a high level of financial protection. This is because, first, although the government subsidies via the Health Insurance Committee support the poor health benefit schemes to provide their members with a basic benefit package, each health scheme provides a different benefit package. Second, the government subsidies allow poor people to receive the health services only from the public health facilities, and poor people could also be subject to discrimination by the health providers. Third, the free health services provided in the public health facilities are available only to those who have special identity cards proving their poverty. This model does not cater for middle class groups who are not members in any health benefit scheme and cannot afford the costs of the private health insurance. As a result, the middle class groups could be subject to impoverishment that would result from paying an excessive share of their incomes to receive the necessary health care.

The first model relies on segmented risk pooling organizations, including a huge number of small health schemes and the public health care system, in addition to private insurance companies. Moreover, in this model the OOP payments are still a main means to finance the health services. These payments weaken the extension of the risk pooling and cross-subsidies from rich to poor people. The first model does not introduce any risk equalization between the health benefit schemes.

7.2.3 Assessment of the second model

Feasibility of the second model

The second model introduces many innovations that could be supported by the stakeholders such as merging the similar schemes, extending the health benefit schemes to all the groups that are able to pay, and enhancing the role of the Health Insurance Committee. However, transferring the government subsidies from the public providers to the poor people as contributions paid on behalf of them to the special health insurance fund would be a controversial issue.
The health financing system according to the second model needs a good information system, high administrative capacity, and also, greater emphasis on technologies that facilitate data exchange procedures between the health insurance funds and the providers. Also, cross-subsidization between multiple funds requires technical and administrative capacities. Training and developing the skills of the staff who are employed to manage the system requires money and time. However, the increasing role of the private insurance market in Syria can help in the training and qualification of the required staff.

Imposing charges on the majority of the health services provided by the public health facilities will be a subject of protest by those who are not participating in any health insurance fund. Also, many people could complain about paying compulsory insurance contributions. Many people will be worried about the feasibility of the government subsidies to the health insurance fund devoted for the poor people.

**Efficiency of the second model**

The second model is based on a limited number of health insurance funds. These funds are large enough that they benefit from the advantages of the economic size principle and are able to reduce their administrative costs. However, in general multiple funding channels and pools, each with its own administrative costs, are expensive to run and need coordination. All the health insurance funds except the health insurance funds for the public sector and the employees in private companies could face relatively high administrative costs related to calculating and collecting the contributions, monitoring the changes in the income of their members, and pursuing the members who provide false information about their income. The autonomous state hospitals can increase their administrative efficiency through controlling corruption and abuse of services and resources.

As the majority of insurance funds are organized on a community basis, these funds will be subject to interrogation in the case they fail to satisfy their member’s needs. Therefore, each fund will protect its members’ rights and decide, according to its revenues, which services to purchase based on information about the health needs of the
population and link payments to providers with their performance, service costs, and service quality. As a result, this could increase allocative efficiency. If the public health facilities performed for profit, and on a competing basis with the private ones, their technical efficiency would theoretically increase.

**Sustainability of the second model**

Extending the health insurance to additional groups and establishing the social health insurance contributions as a main source of funding alongside the government subsidies could generate relatively large amounts of funding. The second model is relatively stable, taking into account the following factors: first, this model merges the schemes that belong to the same economic sector in one fund, this means that the majority of these funds become large pools resulting in higher sustainability of the resources. Second, a part of the resources collected by each insurance fund will be allocated to one risk pool; this increases the stability of the funds. Third, government subsidies will be offered to the special insurance fund dedicated to poor people, and better-off informal insurance funds will contribute in stabilizing these schemes. Furthermore, the government subsidies offered to the risk pool enhance the financial sustainability of the whole system.

On the other hand, the financial sustainability of the second model could be influenced by the fluctuation of the contributions, particularly in the case of the insurance fund of the informal sector workers and self-employed, and the stability of the government subsidies offered to the health care system.

The ability to increase the funds over time is related in general to the growth of the national economy. However, in this model, it will be easier to increase the rate of contributions due to the fact that the direct link between the paid contributions and received health services makes people more enthusiastic to pay.

Furthermore, the health insurance funds that are self-governed are supposed to have strong discipline and an accountable system to control the cost and waste of resources, and they are supposed to improve the performance of staff and providers through a financial incentives system.
Equity of the second model

The second model aims to reduce the reliance on direct payment for health care, and increase the prepayments. The different health insurance funds can use various methods to calculate the contributions, producing the options of salary-rate, community-rate, and flat-rate contributions. However, in general, calculating the contributions is assessed according to the ability to pay rather than health status. The weakness of the information system and the wrong information supplied by some insured people about their real income could reduce the equity of this system. For example, the employees in the formal sector could pay higher contributions than those working in the informal sector even if their incomes are lower than the incomes of the latter group.

The health insurance coverage is widened to include almost all groups in society through organizing them into suitable health insurance funds, also, the government subsidies are paid on behalf of the poor people who can join the health insurance fund specifically for low-income people. Because of the lack of information, the health insurance fund for poor people could fail to reach all poor people. In addition, some better-off people could abuse this fund. This model ensures the access of all insured people to the same health services, and poor people can freely select their hospital or doctor. However, poor people, who have insurance cards showing their participation in the special health insurance fund for poor people, could be subject to discrimination by the health providers.

Under incomplete health insurance coverage, converting the state hospitals to charging hospitals could create a real problem for uninsured people, particularly the middle-income people.

In the second model, the health insurance funds can benefit from two simultaneous levels of risk sharing and cross-subsidies. The first one is between the members of each fund. The second is a wider risk sharing that occurs between all the health funds, although this model introduces incomplete risk pooling at the national level. However, the voluntary membership in the health insurance fund for the better-off informal sector workers limits the extension of risk pooling.
The resources are reallocated from the risk pooling organization to the purchasers according to a risk adjusted capitation. This capitation uses the following criteria: the amount of the average insurance contribution in each insurance fund, the number of the beneficiaries who are younger than 5 years old, the number of those who are older than 65 years old, disabled people, and the number of the beneficiaries who have a chronic disease.

### 7.2.4 Assessment of the third model

**Feasibility of the third model**

Nowadays, there is broad-based political support for the establishment of social health insurance on the national level. The enactment of the Legislative Decree No. 65 of 2009 and the commitment of the government presented by the MoF to pay 62.5% of the insurance contributions are good indices of the government’s willingness to introduce the social health insurance as the method to finance the health care services. This fact makes the third model greatly supported by the stakeholders.

The organization of the NHI on the national level could encounter difficulties associated with managerial control, accountability and coordination. Also, the NHI will be in need of highly qualified staff all over the country to manage the system. However, the increasing interest of the Syrian government in developing the insurance market and the rising role of the private insurance companies can contribute to producing qualified insurance staff who will be important for running the health insurance system.

At least at the beginning, the NHI may not gain public support due to the following factors:

- First, it would face resistance from people when they are asked to pay for some of the benefits they had always enjoyed free or/semi-free at the public health facilities.
Second, many people are not familiar with the concept of health insurance and they do not recognize its importance. This could reduce their willingness to pay for the NHI.

Third, many people could refuse to participate in the NHI for religious reasons. For example, according to a survey done by the Syrian Insurance Supervisory Commission in 2007, 19.6% of the random samples that included 1100 persons in Damascus believed that insurance breaks religious rules.

To counter these problems, the NHI system should explain the role of the national health insurance to protect people and meet their needs, in addition to defining it as an expression of solidarity. These efforts can increase people's knowledge about the real meaning of national health insurance. The experience of the interviews can confirm this claim. In the interviews, the majority of the respondents became more enthusiastic about the establishment of the NHI after they understood its meaning. Also, the growing number of private health insurance companies and third administration parties can educate the public more about the concept of the health insurance in Syrian society.

**Efficiency of the third model**

As the third model is based on one national health insurance fund, it would be more capable of containing administrative and regulatory costs. This model would face the same problems related to the collection of contributions from the informal sector as is the case the second model, however, it would have more authority to collect the contributions and control the problems of misinformation, as it would be organized as a national health system. The NHI fund as self-governed organization is supposed to have significant authority and flexibility in managing the insurance system in an efficient way, removed from the bureaucracy that dominates the current system, and it should have a strong disciplinary system.

A well-functioning system would have low rates of inappropriate use and overuse, and it would make use of information tools to support efficient care. Furthermore, this model would increase performance in term of measures of national health expenditures. According to this model, the purchasers (the district health insurance funds) could
determine the most cost-effective means of meeting the needs of people in their areas. However, due to the absence of competition between these funds themselves, and the fact that the consumers cannot freely choose their funds, the potential efficiency could be limited. In general, the monopolistic behaviour of a single fund could reduce the efficiency of the health insurance system, if it was not controlled by an accountable and well disciplined system.

**Sustainability of the third model**

The compulsory social insurance contributions will be the main resource for the financing of the NHI system and will replace the multiple financing mechanisms. The third model is more stable than both the first and the second models because it has a larger pool. Bearing in mind that the larger pool can increase resource availability and minimize variations in expected expenditure, the sustainability of the system is higher. Furthermore, as the health insurance is compulsory for the whole population, the contributions are collected on a broad public base, and the direct link between the paid contributions and the received health services makes people more willing to pay. However, in the long term, many factors could negatively affect the stability of this model and its ability to increase its resources. For instance, the stability of the government subsidies that form a significant source of funding for the NHI, the size of the informal sector, the percentage of poor people, the economic growth, and the ability of this model to contain costs and reduce the effects of the moral hazard problem, etc. The large average size of the families in which the members are relying on their family’s breadwinner for their livelihood can reduce the sustainability of the system due to the fact that the breadwinner is the only one who pays for the NHI.

The national fund has a great purchasing power, therefore, it can efficiently affect the supply side of the health market and impose appropriate fees and payment methods to pay the health providers, and as a result it can contain costs and increase performance.

**Equity of the third model**
The third model uses an equitable financing method and it will be less dependent on direct OOP payment. The poor people are exempted from paying the contributions. Employees in the formal sector share the salary-rate contributions with their employers, the self-employed pay community-rate contributions based on the type of their work and its location, and better-off informal sector pay flat-rates according to scale taking into account their possessions. However, the ambiguity in the available information about the income of the latter two groups could negate the equity of this model.

The third model ensures financial protection through the equity in access to health care, as everyone is covered by the same benefits package. Also, the purchasing of the health services on a local level by the district health insurance funds can ensure equity through the fair allocation of health expenditure across the country. The resources are reallocated from the risk pooling organization to the purchasers according to a risk adjusted capitation based on the number of insured people in each governorate, the urbanization rate in the governorates, the mortality rate, and the percentage of population who has a chronic disease or disability.

The third model is based on a single risk pool at the national level that ensures complete risk sharing across the country and embeds the principle of solidarity in health financing.

7.3 The Health Financing Models Comparison

In this section the three proposed models of financing the Syrian health care system in addition to the current system will be compared with each other according to the major indicators for each criterion; feasibility, efficiency, sustainability, and equity. Diagrams will be used to compare the models, indicating the strength of each criterion’s major indicators. Based on previous discussions, the results of the interviews, available information, and expectations, the indicators are given five levels of strength; level one is the lowest level of strength, while level five is the highest level of strength.
Feasibility of the health care systems

As is clear in Figure 7.1, the feasibility of the three proposed models and the current health system is compared according to four indicators; first, the degree of innovation, in other words the size and depth of the changes in the health financing system. The degree of innovation gradually increases from one model to the next. The first model is based on an improvement in the performance of the current system without altering its financing structure. The second model merges and/or creates new health insurance funds such as the health insurance fund for poor people, and transfers the government subsidies from the supply side to the demand side. The third model includes the establishment a national health insurance fund and introduces compulsory social health insurance contributions as the main financing method.

For the second indicator, stakeholders’ support, the first model might receive approximately the same support that the current model has, since it does not aim to make deep changes. The second model might receive less support from the stakeholders, because the efficacy and efficiency of transferring the government subsidies from the public health providers to poor people in the form of contributions paid on behalf of them to the health insurance fund will be a point of contention. According to the current debates between Syrian policy makers, it seems that the establishment of the NHI (the third model) is highly supported.

Third, regarding available administrative capacity, the first model would not be in need of highly qualified staff to manage the health system as would be the case for the other two proposed models. According to the current situation the available administrative capacity would not be sufficient to manage in a professional way a national health insurance system regardless of whether this system were based on multiple health insurance funds or a single health insurance fund.

Fourth, in terms of the public’s satisfaction, it was clear from the results of the interviews that the people are not very satisfied with the current health system. In contrast, the people are enthusiastic about establishing the NHI system. In the first model a large category of middle-income people and even high-income people would not be satisfied about converting the free health services provided in the public hospitals to charged services.
Figure 7.1: Feasibility of the health financing models

Efficiency of the health care system

In Figure 7.2, the efficiency of the three proposed models and the current health system is compared according to two main indicators. The first is administrative efficiency, which will have a higher level in the first model than in the current model, because the first model introduces many changes that improve the efficiency of the health system, such as (1) the purchaser-provider split; (2) changing the method of reimbursement for health providers from a retrospective to a quasi-prospective payment system; and (3) converting all the public hospitals to autonomous hospitals in terms of financing and management. These changes could control the cost and overuse of limited resources and they would force the managers of the public hospitals to work more efficiently and eliminate waste and corruption. In addition to the innovations introduced by the first model to the health care system, the second model merges and creates new health insurance funds, which would benefit from the economic scale principle and could control the costs better than the health benefit schemes in the first model. However, merging funds or the establishment of one national health insurance fund, as in the third model, could lead to minimal expenditures for administrative and regulatory purposes, more so than would be the case for multiple health insurance funds. Furthermore one
fund that collects and purchases the health services for the whole population has a great purchasing power and it can engage in suitable strategic purchasing that would control the costs. The third model can deal with a high rate of inappropriate use of the limited resources, and the weakness of the disciplinary and supervision system.

The second indicator is technical and allocative efficiency. Introducing the purchaser-provider split and autonomous hospitals in the first model would improve hospital efficiency. These hospitals will significantly assess what services are needed and confront waste and corruption. Furthermore, it will increase financial motivation for health workers. As a result, this model could contribute to solving the problem of the dual work of medical staff of the public health facilities resulting from low salaries, thus increasing the productivity and performance of those members and reducing medical errors. In addition to positive changes introduced by the first model, the second and third models would be able to achieve higher levels of efficiency due to the following facts: (1) Both models enhance the complete separation between the purchasers and providers, which would make both sides assess the costs more carefully and work more efficiently. (2) Both models transfer the purchasing of health services from a passive function to a more active one, thus it can improve quality and efficiency by explicitly determining the population’s health needs and using the best interventions and services to meet these needs and expectations with the available resources. (3) Furthermore, both models will establish clear criteria to define how and from whom these interventions and services will be purchased and provided. In addition, they will build good methods of paying for providers and giving them incentives in order to encourage and enforce standards of quality and efficiency.
Figure 7.2: Efficiency of the health financing models

Sustainability of the health care system

Figure 7.3 provides a comparison of the three models and the current health system according the sustainability criterion. For this criterion two indicators will be compared: financial sustainability and ability to increase funds allocated for the health care system. The first model will not be able to increase the sustainability of the resources allocated to health care, nor their sufficiency. However, converting the public hospitals to autonomous ones and imposing user fees on the patients who do not have cards to prove their poverty could contribute to an increase in the resources of the health system. Also, improvements in the efficiency of these hospitals could increase the value of the available resources.

The second and third models would impose compulsory social insurance contributions besides the general taxes, which would increase the resources available for the health system. However, setting up one risk pool in the third model would make it more stable and capable of dealing with fluctuations in the size of the collected resources than the second model which includes fragmented risk pooling.

Both models can increase their resources through increasing the rate of contributions as the direct link between the contributions paid and the health services received makes people more willing to pay.
Figure 7.3: Sustainability of the health financing models

Equity of the health care system

The three models and the current health system will be compared with each other using three indicators of equity. First, in terms of the equity of the financing method, as is clear in Figure 7.4, the second and third models are more equitable than the current health system and the first proposed model due to the fact that the former models reduce reliance on direct payments and adopt the prepayment approach as a main method of financing the health care system. Furthermore, these prepayments are considered an equitable method, whereby the contributions are calculated as a proportion of the employees' and workers' salaries or determined according to a scale of values considering the financial situation of people.

Second, in terms of equity in access to health services and ensuring financial protection, introducing the user fees in public hospitals in the first model reduces the equity of this model so that it would be less than in the current system current, thus a significant part of middle-income people who do not participate in health benefit schemes or private health insurance would not be able to obtain the services they need and they could face financial risks. The design of the second and third models is based on deriving government subsidies from general revenues for people who cannot afford the cost of
health insurance, and as a result further increasing financial risk protection and access to services. With the exception of the better-off informal sector, the participation in the health insurance funds in the second model would be compulsory for the whole population and it would entail minimal differences among groups in terms of access to and quality of health care services. The NHI in the third model achieves universal coverage and ensures equitable access to health services for the whole population.

Third, in terms of integration of risk pooling and equity of cross-subsidies, the first model does not make any changes to the risk pooling structure in the current system, which is based on fragmented risk pooling that limits the cross-subsidies. In the third model compulsory prepaid funds are combined in one pool rather than kept in separate funds as is the case in the second model. As a result the third model is best able to cope with financial risks and ensure cross-subsidies from rich to poor and from healthy to ill people, in other words the possibility of providing more financial protection and achieving equity goals is increased.

**Figure 7.4:** Equity of the health financing models

![Equity of the health financing models](image)

**Achieving universal coverage**
The path to universal coverage is based on three main elements: raising sufficient funds, reducing the reliance on direct payments to finance services, and improving efficiency and equity (World Health Organization 2010). Based on the previous discussion which included an assessment of each model and a comparison of the models, and with respect to these three aspects, the possibility of achievement universal coverage through applying each model will be briefly discussed.

Apart from imposing user fees on people who do not participate in any of the health benefit schemes and who are not poor enough to benefit from free services provided in the public health facilities, the first model does not introduce a new method of mobilizing extra funds for the health care system or of replacing the direct payment for health services with a more fair means of payment. The direct OOP payments are an unfair financing method and it presents a real obstacle to achieving universal coverage. Although, the user fees in the public hospitals are set according to a scale considering the financial situation of the patients, the first model cannot achieve equity in access to health services. Furthermore, the absence of cross-subsides from rich to poor people or from healthy to ill people, in addition to high OOP payments, increases financial risk. Through converting the public hospitals to autonomous hospitals and introducing a purchaser-provider split the efficiency of the health system could improve. However, it is not a sufficient step towards universal coverage.

The second model merges the small health insurance funds, creates new funds, and imposes compulsory insurance contributions on a large base of people who have not paid any contributions before. As a result it creates new resources besides the general revenues to finance the health system. Through enhancing the risk pooling and prepayment system, the model reduces the reliance on direct OOP payment and ensures an increase in financial risk protection and access to services for the majority of the population. Government subsidies derived from general revenues would cover people who cannot pay for health insurance. This model improves equity in financing health services and access to health care, as well as ensuring cross-subsidies between the insured people within each insurance fund, and incomplete cross-subsidies between all insurance funds. However, the multiple pools without complete risk sharing could reduce the sustainability of this model. Also, multiple insurance funds, in which each
fund with its own administration and information system, are inefficient and create obstacles to equity.

The third model uses a mixture of mechanisms, general revenues and compulsory contributions, to finance health care in a way that increases the ability to generate sufficient revenues. The establishment of one risk pool at the national level and the channeling of the OOP payment to a prepayment approach would contribute to reducing reliance on direct payments. As a result of prepayments and the pooling of a high proportion of the available funds for health care, financial risk protection and access to services for all people will increase. The third model is an efficient and equitable health system that avoids fragmentation in pooling and increases the scope for the cross-subsidies between the whole population. Also, it channels resources in efficient ways to serve the needs of the population and meet their expectations.

As result of this analysis, the first model is unable to achieve universal coverage, the second model would be better able to achieve universal coverage than the first model. However, the voluntary membership in the health insurance fund for better-off informal sector workers and multiple funds without complete risk pooling could affect the sustainability of this system and obstruct universal coverage. The third model would be best able to attain universal coverage.

7.4 Achievement of universal coverage through applying a succession of the proposed models

Since the third model would be the best one in terms of providing universal coverage, the question is raised of whether the third model should be established directly or whether would be better to implement it in many stages, in other words, to consider each model as a basic stepping stone for the creation of the next model. Many reasons support the selection of the second option. These reasons can be summarized as follows:

- The radical reform from the public health system to national health insurance requires many prerequisites that are not available right now or in the near future such as:
Highly qualified staff to manage this change and to run the new system.

Many arrangement, rules, and laws to control this change.

Many studies to define the poor people who will benefit from the government subsidies, and a mechanism for defining the income of people who belong to the informal and self-employed sectors, who will be subject to paid contributions.

Sophisticated technology to connect the insurance fund with health providers, establish medical records for each patient and transfer this information between the responsible agents.

This reform requires a strong campaign to inform the population about the meaning and importance of health insurance and to persuade them to participate and pay for this insurance.

The current economic situation is not suitable to this radical reform, taking into account the large proportion of the population in the informal sector, the large proportion of poor people, and the low economic growth. For example, although Romania adopted NHI directly, it has not achieved universal coverage yet.

For these reasons it will more realistic to apply the NHI system gradually. The first model cannot be considered an ideal alternative even to the current health system. However, the first model used as an interim stage could mean some progress in developing the current system towards the national health insurance system. For example, the first model redirects the resources allocated to the public health facilities to target the low and middle-income people rather than the whole population. It converts all the state hospitals to autonomous hospitals and improves their managerial capacity and independence. It separates the payers from the public services providers, increases the role of the social health insurance schemes, and organizes a framework for the existing schemes according to unified criteria. The first model could require about three years to achieve this situation.

The second model is another step towards NHI. This model focuses on the achievement of the following objectives: merging the similar schemes that belong to one economic sector into one scheme, expanding the health benefit schemes to cover all groups of the population who can afford to pay the contributions, establishing a special health insurance fund financed mainly by general revenues in order to cover poor people,
introducing a risk adjusted mechanism between the health benefit schemes, and abolishing the free component of the public hospitals as a means to push people to participate in the health insurance funds.

The success of this model to achieve these objectives will be based mainly on economic growth, which affects the size of the informal sector and the number of poor people in the country. Improvements in economic growth will increase the ability of people to afford the cost of health insurance contributions, as well as the stability of the government subsidies paid on behalf of poor people for health insurance.

The accomplishment of the second model will ease the switch to the third model that will make national health insurance obligatory for the whole population, merge all the existing health insurance funds into one national health insurance fund and transfer the state budget allocated to public health providers towards the poor people in a form of contributions paid on their behalf for their membership in the national health insurance system.
Conclusion

To design strong and realizable health financing models as alternatives to the current health care system, the structure of these models was built considering the following components:

- First, the organization of the current health system, particularly that applicable to financing methods and health providers.
- Second, political regulations related to establishing health insurance for the administrative public sector and enhancing the Syrian private insurance market.
- Third, Syria's socioeconomic status which depends upon economic growth, level of income, size of the informal sector, percentage of self-employed people, percentage of poor people, etc; as this factor has an important effect on the selection of the most suitable method to mobilize sufficient funds for the health system.
- Fourth, the experiences of some other selected countries that provide a broad view on the possible means of financing the health system, mechanisms of shifting towards universal coverage, and the obstacles that have faced these countries in achieving this aim.
- Fifth, the results of the interviews that were done in Syria with some householders, the results of which provide background about the respondents' satisfaction with the current health system, their ability and willingness to participate in the NHI, their expectations of this system, and the prevailing attitudes to social solidarity.

As a complex adaptive system, assessment of these models of financing the health care system was dependent on many factors such as sufficient support of the stakeholders for this reform; available administrative capacities; and ability to mobilize sufficient funds, reduce the reliance on direct OOP payment, increase the efficiency and equity of this system, and provide an adequate level of financial risk protection.
This study has many implications in practice and can provide the Syrian policy makers with a good background to improve or even reform the current health system. The following facts confirm the importance of this study:

- First, this study sheds light on problems and aspects of weakness in the current health system, not only through reviewing information available in some reports and document, and comparing some indicators that related to health status and expenditure on health in Syria with some countries in the MENA area, but also through the results of the interviews done with some householders in Syria which provide broad information about the problems from the local perspective of a diverse group of citizens. Defining the most pressing problems of the health system ease the work of the policy makers to develop and monitor the solutions that are appropriate for Syria.

- Second, this study can be useful for holding a realistic discussion about the best channels of financing the health care system considering the socioeconomic background of Syria and reviewing the experiences of many countries in this area.

- Third, the importance of this study increases as it employs qualitative research methods to collect and analyze the information gained through face-to-face interviews. This type of analysis, if it has been used, has not been used on a large scale in Syria. This method provided a deep understanding of the opinions and preferences of the people. The information derived from the interviews allowed the identification of many facts that could be useful for the Syrian policy-makers such as providing field evidence about whether the population would be willing to participate and pay for health insurance, the readiness of the people to subsidize the poor people to participate in NHI, etc.

- Fourth, this study is one of few studies dedicated to designing alternative financing models for the current health system that aims to achieve universal coverage.

- Fifth, the findings presented here may help to support further research about establishing an NHI system in Syria.

On the other hand, some factors could limit the realization of the objectives of this study, such as:

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• First, inadequate or imprecise data available about Syria, particularly that related to the current Syrian health care system.

• Second, because of the limited time and budget allocated to doing the interviews in Syria, the number of the interviewees was somewhat smaller than would have been ideal, and these interviews covered only four provinces, which raises the question of the validity of generalizing the results of the interviews to the whole country. Therefore, it is advisable for future studies to attain the opinions of a larger number of people spread over the whole country to attain more representative results.

• Third, as the interviews were designed and made before the final structure of the three options for health financing were defined, these interviews focus only on the possibility of the third model, that is, establishing a national health insurance system, and the willingness of people to participate in and pay for it.
References


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Index 1: Survey of population opinion on ability and willingness to pay for health insurance

Code……..

A. General Information

1. What is your gender?

2. How old are you?

3. What is your level of education?

4. What is your main work? In case you have more than one job, mention it

5. Where do you live?

6. How many people in your family depend on your family's combined income to live?

7. How much is your average or net monthly income from your main work?

8. How much is the average or net monthly income of your family income from other sources such as your spouse income, capital income, and income from some industry or merchant or agriculture project you may have?

9. What do you know about health insurance systems?

10. Do you participate in any form of health insurance?

If you participate in any form of health insurance please answer questions 11 to 17 (in case of your spouse participates in any form of health insurance that covers you or the children please answer the questions as well)

11. How much do you pay monthly for health insurance?

12. Who is covered under this system?

13. Which services does it cover?

14. Can you select the physician you want?

15. Can you access a private hospital through this insurance?

16. Are you satisfied with your current insurance? Why?
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. Are you interested to improve your current health insurance or to have a better system covering more health services?</td>
<td></td>
</tr>
<tr>
<td>18. Have you or your family members experienced any high-cost health event?</td>
<td></td>
</tr>
<tr>
<td>19. How could you bear these costs?</td>
<td></td>
</tr>
<tr>
<td>20. How did the public health sector help you to get the needed health services and relieve these costs?</td>
<td></td>
</tr>
<tr>
<td>21. In case you or your spouse has any form of health insurance how could this form relieve these costs?</td>
<td></td>
</tr>
<tr>
<td>22. Can you afford the costs of treatment such as medicines or visiting doctors?</td>
<td></td>
</tr>
<tr>
<td>23. If you had a higher income would you pay more for health services?</td>
<td></td>
</tr>
<tr>
<td>24. If you had health insurance coverage for visits to physicians and medicines what would you expect?</td>
<td>-Your visits to specialists would increase:</td>
</tr>
<tr>
<td></td>
<td>-Your visits to dentists would increase:</td>
</tr>
<tr>
<td></td>
<td>-Your usage of laboratory services would increase:</td>
</tr>
<tr>
<td></td>
<td>-You would buy more medicine or medicine of a better quality:</td>
</tr>
<tr>
<td><strong>B. Satisfaction with the public health system</strong></td>
<td></td>
</tr>
<tr>
<td>25. In your point of view what are the positive and negative points about the public health sector (public hospitals, health centres)?</td>
<td></td>
</tr>
<tr>
<td>26. Do you think that the public health system can protect your family in case of catastrophic illness and meet their health needs? In other words do you trust that the public health system will help you in case you have catastrophic illness</td>
<td></td>
</tr>
<tr>
<td>27. Are you satisfied with the current health system? What are the factors?</td>
<td>No, the management and the style of dealing with patients are not satisfactory. Also, hygiene is very bad (you can confirm that by writing the mark x ten times next to it)</td>
</tr>
<tr>
<td><strong>C. The willingness and ability to pay for future health insurance</strong></td>
<td></td>
</tr>
<tr>
<td>28. If you were given the authority to change the current health system, which things would you change?</td>
<td></td>
</tr>
<tr>
<td>29. Have you heard about the new law to establish health insurance for civil employees in the public sector? What is your opinion about it?</td>
<td></td>
</tr>
</tbody>
</table>
30. If you knew that the government will establish a health insurance system would you participate in this system and pay monthly contributions? Mention the reasons in both cases.

**If you are willing to participate in a national health insurance system please answer questions 32 to 39**

31. How much are you able and willing to pay for this system monthly to cover you and all your family members?

32. How would you prefer to pay for health insurance contribution monthly? Why?

33. Which agent do you trust to collect your contributions to health insurance?

34. With whom would you prefer to share the risks?

35. Which sector do you think will be more active in purchasing health care services from health providers?

36. From which health service providers do you prefer to receive the health care (of course both public hospitals and private providers must achieve certain criteria before they can be contracted in this new system)? Why?

37. Which sector (private or government) do you think will be more successful in managing the suggested health insurance system?

38. Which option would you prefer?  
A- receive a wide range of health services but you are required to pay a higher monthly amount. In other words, is the reduction of risk worth an extra contribution  
B- receive fewer health services but you are required to pay lower monthly amount  
Why?

39. According to your selected option from the previous question, which benefit package would you prefer to be covered by?

40. How would you prefer the membership in this system (mandatory or voluntary)? Why?

41. Would you support poor people, who are unable to afford the costs of the health insurance system, through paying more than poor people would for the health insurance system?

42. In your point of view, what would be the better way to support the poor people to access the suggested health system insurance?
43. In the case that the national health insurance system is established, what would you suggest about the future of state hospitals and health centres which are not contracted within health insurance system? In other words, do you think it will be better if these hospitals continue in their work?