Regional equity in health care systems

Master project

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Summary

Enhancing equity could be considered one of the main objectives of welfare policies as well as a central theme in health policy. Policies however, are not static. The last decades, many health care systems have been subject to reform and trends. Massively expanding costs as well as changing needs of citizens have forced governments to make institutional changes. This thesis focuses on the dynamics between the concept of regional - geographical - equity and two of these trends; the introduction of market elements in government policy and decentralisation. Both reforms imply a change in the relationship between the central government and the actors operating in the policy field. In order for objectives to be met, the central government should coordinate between these actors. But with relationships changing, it is hard to identify how the coordination process should take place. The following central question was formulated: “Which instrument of coordination would be most optimal for national governments to realize the most geographical equity between regions in their health financing systems?”

From the theory, three models for coordination were identified: the market, the hierarchy and the network. Within a market system, actors act independently, on a voluntary basis and motivated by self-interest. It offers advantages as efficiency, but is also subject to market failure as it puts equity at stake. Within the hierarchy, actors pursue a predefined outcome. The process involves governing by exercising power and enforcing regulation. The hierarchical system ensures objectivity, consistency and accountability. However, non-market failures could be identified, as e.g. distributional inequity and internalities. The network seems to form a compromise in some ways. Actors act independently and voluntary, but do cooperate in order to meet commonly set objectives.

Subsequently, the health care systems of three countries; the United Kingdom, Spain and France, were analysed. Although the three health care systems seemed to have much in common at first sight, a closer look revealed that due to many different institutional and historical contexts, the reforms took many shapes and sizes. The United Kingdom implemented extensive marketisation reforms under the Conservative Party. In Spain on the other hand, emphasis lay on decentralisation and more autonomy for the regions after the nationalistic and centralistic reign of Franco. France tried to overcome its problems by allowing the central state to play a larger role, especially in health financing.

From the cases analysed it can be concluded that there is indeed a trend of decentralisation. However, as some tasks are being decentralised, ties with the centre are being strengthened in other aspects. By implementing different reforms, the central governments of seem to have had the same objective: asserting the grip on the actors in the field. In all three cases, it was concluded that there was actually a lack of national standards and guidance causing all sorts of problems as inequities, but also poor quality and service and inefficiency. The hierarchy seems indispensable for ensuring equity as it gives the government instruments as legislation on order to enable equity. However, extended planning could
have its negative effects. It is very hard to allocate resources ex ante, as health need is a very multidimensional and unpredictable concept. Also, the importance of efficiency should not be forgotten. It has no use redistributing resources when a lot gets lost along the way.

In choosing between methods of coordination, it seems that governments should make informed decisions on how and when to intervene. The introduction of small scaled market mechanisms and business techniques as a means to safe costs and take advantage of the positive sides of the market seems good. However, this may not be accompanied by a lack of government steering and control. In order to ensure a value as equity, there should be national - or even international - standards and - hierarchical - control on quality and the distribution of facilities.
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Before you lies the paper that completes 6.5 years of study. The months in which I wrote this thesis summarised my complete student life: I did not know what I got myself into, it lasted longer than I had planned and I only started to see the big picture at the end. The difficulty of the topic that I had chosen often made me despair. This thesis only touches the tip of the iceberg, and in my opinion, I only succeeded in summarising main lines. However, I am proud of this final result. Although extremely frustrating, the topic of equity is also extremely interesting. The amount of “aha”s definitely exceeded the amount of “aargh”s that were proclaimed from behind my computer. Also, this project has given me the opportunity to explore a field completely new to me, but, as turned out along the process, worth while the effort.

I would like to thank the persons that have been involved during the past months. First of all, I owe my supervisor Frans van Nispen a big thanks. On the critical moments, he was available for reviewing and commenting. I especially appreciate the effort he made when I was confronted with some unexpected problems. I am glad that he could come up with a solution when I did not know what to do anymore. Kor Grit literally saved my thesis and graduation by being so kind to be willing to be a “last-minute” second reader. I would like to thank him not only for being willing to take up the task, but also for managing to read and comment on this thesis at an almost Olympic speed.

This thesis was founded during and inspired by my internship at the Organisation for Economic Cooperation and Development in Paris. Therefore: a warm thanks to the kind people at the Statistics and Indicators Unit of the Governance and Territorial Development department. Vincenzo Spiezia: thank you for offering me the internship in your great team. Carine Ferretti: thank you for introducing me to the topic and its many, many, many dimensions. I am very happy to have been able to spend two months in such an inspiring environment.

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Den Haag, January 2006
## Glossary

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<td>Adverse selection</td>
<td>A market failure specifically of relevance to the insurance market. Due to the market system, the persons seeking - the most - insurance are also the most costly</td>
</tr>
<tr>
<td>Ambulatory care</td>
<td>Medical aid that can be delivered on an outpatient basis</td>
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<tr>
<td>Bureaucratic politics</td>
<td>The protection of the own bureaucratic units special interests - e.g. maximising the budget -, in competition with other agencies and units</td>
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<tr>
<td>Capitation</td>
<td>A transaction - either tax or subsidy - which is composed out of a fixed amount per individual, as opposed to e.g. a percentage of the income</td>
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<tr>
<td>Crude death rate</td>
<td>The number of deaths per 1000 people on an annual basis</td>
</tr>
<tr>
<td>Ex ante</td>
<td>In advance</td>
</tr>
<tr>
<td>Ex post</td>
<td>After the fact has taken place</td>
</tr>
<tr>
<td>Equity</td>
<td>The absence of differences that are unnecessary, avoidable and unjust</td>
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<tr>
<td>Inpatient basis</td>
<td>Treatment that involves admition - overnight stay - of the patient</td>
</tr>
<tr>
<td>Increasing returns</td>
<td>A concept referring to a selfreinforcing process of initial success leading to additional gains and vice versa: initial errors leading to additional failures</td>
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<tr>
<td>Maastricht Treaty</td>
<td>Formally: Treaty on European Union. The treaty led to the creation of the European Union; an expansion of the monetary union policies (by e.g. the introduction of the Euro) and the establishment of a political union</td>
</tr>
<tr>
<td>Moral hazard</td>
<td>A market failure specifically relevant to the insurance market. Individuals tend to become careless concerning the risks for which they are insured</td>
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<tr>
<td>Morbidity rate</td>
<td>The number of people dying of a disease during a given time interval</td>
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<tr>
<td>Mortality rate</td>
<td>The total number of people dying during a given time interval</td>
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<tr>
<td>Term</td>
<td>Description</td>
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<tr>
<td>Outpatient basis</td>
<td>Treatment that does not involve admission - overnight stay - of the patient</td>
</tr>
<tr>
<td>Progressive</td>
<td>System which involves high incomes compensating the low incomes</td>
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<tr>
<td>Primary care</td>
<td>The first point of consultation for the patient</td>
</tr>
<tr>
<td>Regressive</td>
<td>System which involves persons with a higher income paying a relatively smaller share of their income than the persons with lower incomes</td>
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<tr>
<td>Risk aversion</td>
<td>Methods created by insurers to limit the financial effects of adverse selection</td>
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<tr>
<td>Secondary care</td>
<td>Care provided by medical specialists, who are in general not the patient’s first point of contact.</td>
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**Acronyms**

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<tr>
<td>AC</td>
<td>Autonomous Community (Spain)</td>
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<tr>
<td>ARH</td>
<td>Agence Régionale de l'Hospitalisation - Regional Hospital Agency (France)</td>
</tr>
<tr>
<td>CANAM</td>
<td>Caisse Nationale d’Assurance Maladie des Professions Indépendantes - National insurance scheme for the self-employed (France)</td>
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<tr>
<td>CNAMTS</td>
<td>Caisse Nationale d'Assurance Maladie des Travailleurs Salaries - National Insurance Fund for Employed Workers (France)</td>
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<tr>
<td>CEE</td>
<td>Central and Eastern European countries</td>
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<td>CMU</td>
<td>Couverture Maladie Universelle - Universal Health Coverage (France)</td>
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<tr>
<td>CSG</td>
<td>Contribution Sociale Généralisée - General Social Contribution (France)</td>
</tr>
<tr>
<td>DHA</td>
<td>District Health Authority (UK)</td>
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<tr>
<td>DOM-TOM</td>
<td>Départements d'outre-mer, Territoires d'outre-mer - overseas departments and territories (France)</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>FHSA</td>
<td>Family Health Service Authority (UK)</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>GP</td>
<td>General Practitioner</td>
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<tr>
<td>GPFH</td>
<td>General Practice Fundholders (UK)</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<tr>
<td>INSALUD</td>
<td>Instituto Nacional de la Seguridad Social - the National Institute of Health (Spain)</td>
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<tr>
<td>NHS</td>
<td>National Health Service</td>
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<td>NHSE</td>
<td>National Health Service Executive (UK)</td>
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<td>NHS Lift</td>
<td>NHS Local Improvement Finance Trust (UK)</td>
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<td>NICE</td>
<td>National Institute for Clinical Excellence (UK)</td>
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<td>NPM</td>
<td>New Public Management</td>
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<td>NSF</td>
<td>National Service Framework (UK)</td>
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<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
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<tr>
<td>ONDAM</td>
<td>Objectif National des Dépenses de l'Assurance Maladie - National ceiling for health insurance expenditure (France)</td>
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<tr>
<td>PCG</td>
<td>Primary Care Group (UK)</td>
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<tr>
<td>PMS</td>
<td>Personal Medical Services (UK)</td>
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<td>RAWP</td>
<td>Resource Allocation Working Party (UK)</td>
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<td>RHA</td>
<td>Regional Health Authority (UK)</td>
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<td>SHA</td>
<td>Strategic Health Authority (UK)</td>
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<td>SHI</td>
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<td>SNS</td>
<td>Sistema Nacional de Salud - National Health Service (Spain)</td>
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<td>SROS</td>
<td>Schéma Régional d'Organisation Sanitaire - Regional Strategic Health Plan (France)</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>URCAM</td>
<td>Unions Régionales des Caisses d’Assurance Maladie - Regional unions of the health insurance funds (France)</td>
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<td>URML</td>
<td>Unions Régionales des Médecins Libéraux - Regional unions of self-employed doctors (France)</td>
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<tr>
<td>VAP</td>
<td>Value-adding partnership</td>
</tr>
<tr>
<td>VAT</td>
<td>Value added tax</td>
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<tr>
<td>VHI</td>
<td>Voluntary health insurance</td>
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<td>WHO</td>
<td>World Health Organisation</td>
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1. Introduction and problem analysis

Equity could be considered to be the ethical basis of Western health policies. During the last decades however, numerous reforms have changed both the structure of health care systems as the underlying values. Demographic, technological and financial pressures forced policymakers to take into consideration not only equity but also effectiveness and efficiency in order to keep health care financing sustainable. But with all the attention paid to these new values, how much is equity still assured? This thesis will address this problem. In this chapter, the general focus of this thesis will be defined. First of all, the topic will be introduced by a description of the background of the problem to be discussed. Then, the objective and relevance of the thesis will be discussed. Subsequently, a central question and research questions will be formulated. The research design and methodology will be discussed in the following sub-paragraph. To conclude, an outline of the thesis will be given in paragraph 1.6.

1.1. Background

Our health status is concerned with a very basic aspect of our lives. Poor health could not only have a general negative effect on the quality of our lives and limit us in developing our skills and talents, it could also prevent us from enjoying all other matters that have influence on the quality of our lives (WHO 2000).

Our health is not only one of our main personal concerns; it is also one of our main industries. Health care systems today represent one of the largest sectors in world economy. In 1997, a total of 2985 billion dollars was spent on health, accounting for 8% of the world Gross Domestic Product (GDP) (WHO 2000). In the member states of the Organisation for Economic Cooperation and Development (OECD), an average amount of 9% of the national GDP is spent on health. More than 70% of these costs are paid by public sources (OECD 2005).

This paragraph will provide an historical overview of the evolution of health care systems as well as an introduction to the topic central in this thesis: health care reform.

1.1.1. The evolution of health care systems

Societies began to realise the importance of a healthy population during the industrial revolution. The enormous toll of infectious diseases and industrial accidents and exposures was being experienced. Not only from a humanitarian point of view was this problem being acknowledged, the great death tolls meant most of all a great losses in productivity (WHO 2000). Several health care systems developed, which will be more closely described in chapter three. These initial health systems were all designed to ensure as much equity as possible.
Regional equity in health care systems

(WHO 2000). They were built to ensure that every member of the society would have equal access to health care and would also receive equal treatment, regardless of income, geographical position, social group or anything else.

1.1.2. Impulses for change

During the late 1970’s and early 1980’s, a need for more efficiency in the public sector in general as well as specifically in the health care sector arose. This need sprung from demographic, technological and financial, as well as political and academic pressures. The health systems in European countries became subject of various debates on reform.

In most OECD-countries, health expenditure increased faster than the economy as a whole. Figure 1 represents the large share of health care in the economy of OECD-countries. Moreover, it presents the growth of health care as share of the GDP. In most OECD-countries, the public sector accounts for the largest part of health care spending (on average 72%). Only the United States, Mexico and Korea have a largely privately funded health care system. The need for cost-containment formed a direct incentive for reform. Health care expenditure had grown to unsustainable rates (Docteur 2003).

![Figure 1 Health expenditure as share of GDP (2003) and change in health expenditure as share of GDP (1992 to 2003)](Source: OECD, 2005)

In addition, the ideas of Osborne and Gaebler’s ‘Reinventing Government’ (1992) and New Public Management (NPM) started to gain influence. The underlying idea of this new
Chapter one: Introduction and problem analysis

The paradigm was that governments were built upon the wrong principles and therefore needed to be ‘reinvented’ or re-build. The public sector had to become service- and client orientated. Furthermore, market-type mechanisms such as competition had to be introduced. Governments should foster a performance-orientated culture (Kickert 1997). The NPM ideas were highly popular amongst politicians and the general public. Many embraced the idea of business techniques being the solution to problems of poor quality and responsiveness. The political pressure for change thus became larger and larger.

1.1.3. Health care reform

Most OECD-countries reacted to these developments by economy first. They implemented measurements that would control costs pressures. A first attempt to control costs by several macro-economic restrictions did not work, as these measurements created problems in the provision of health care (Docteur 2003). Therefore, next to efforts to add micro- and macro-economic efficiency, government started to seek to combine the benefits of business techniques and entrepreneurial behavior as innovation and efficiency with solidarity (Saltman 2002). Moreover, not only should public organizations improve their efficiency and effectiveness, patients should also be empowered, having more choice and influence within existing service delivery systems. Ultimately, a general improvement of the quality of health care was the goal of all reforms.

Most European ad OECD-countries faced the same challenges in the beginning of the 1980’s. The many different institutional and historical contexts, however, implied that the reforms took many shapes and sizes. Yet, in all cases the reform implied a change in objectives. The original institutional setting was designed to ensure equity in and access to health care and improvement of the general health status. Focus has shifted more and more to health system performance however (Docteur 2003). Next to equity, efficiency and effectiveness became central values.

1.2. Problem statement

This thesis will concentrate on the possible tension between equity, the value that was initially the foundation of the health care systems, and health care reform. The problem central to this thesis will now be formulated.

Although organised health systems have been trying to take away differences in health and access to health care, inequities seize to exist, even within OECD-countries. As has been stressed by Whitehead:

“In every part of the [European] Region, and in every type of political and social system, differences in health have been noted between different social groups in the population and between different geographical areas in the same country” (1990:3).

Concerning geographical equity, there still seem to be a lot of differences between regions. For instance, in Norway, the arbitrary interpretation of the rules by regional committees led to the
situation where women from different regions had different chances of being selected for an abortion (Barnard 1987). In Greece, the amount of hospital beds per 1,000 inhabitants in Greater Athens (6.4) differs significantly from Western Macedonia (3.5) (Mossialos 2002).

This need for improvement is seemingly being contradicted by current health care reforms. Both reforms that will be discussed in this thesis, seem to put regional equity at stake. Decentralisation could increase regional inequalities as it could put a stop to the process in which the more prosperous and more densely populated regions are compensating the less-developed regions. Moreover, the market mechanism has a natural tendency to accumulate resources at specific areas. Central problem of the thesis will be the question what role the central government should take to ensure the most geographical equity in its health care. Should it keep control over its decentralised health care or should regulation be reduced even further?

1.3. Research objective

From the problem statement, the aim of this study can be defined. This paragraph will first address the objective of this research. Secondly, it will also define its relevance. This thesis will be written from the academic perspective of public policy. Within this discipline, research is being done not only to gain knowledge, but also to translate this knowledge into practice (Hakvoort 1996). Research has to be prescriptive: it has to add something to the existing situation by improving it or at least by providing a framework for further analysis. Therefore, the relevance of the research is composed out of two elements; academic and practical relevance. Both parts will be discussed in separate paragraphs.

1.3.1. Aim

The problem statement already addressed the problem central to this thesis: public administration reform as decentralisation and marketisation, implied a changing role for the central government. At the same time, there seems to be a need for the improvement of geographical equity. The aim of this thesis is to define what role the central government should take to ensure the most geographical equity in its health care. Is regulation the solution for the problems concerning equity? Taking into account the limited size and time-span of this research, the topic will be narrowed down to financial policy and the allocation of resources by national governments to regional actors. Therefore, the aim of this thesis can be summarised as:

To analyse the relationship between current health care reforms and geographical equity and to identify a model of coordination for national governments that ensures the most regional equity in their health financing systems.

1.3.2. Academic relevance

The academic aspect of this thesis will add to various debates on the role of government. The last decades, new societal arrangements have emerged. Peters and Pierre (2000) argue that these new arrangements would require new strategies for a government to maintain its control. One of their scenarios characterizes the state as stepping back, recognizing the limits of its interventions and its regulatory crisis. It allows for other institutions to gain importance, but maintains in control on the background. (Pierre 2000) States implementing reforms as
decentralisation and the introduction of market mechanisms seem to follow this strategy. The thesis will analyse the extent to which the strategy is followed and its practical implementation. It therefore also adds to theory on coordination (Thompson 1991). How should certain transactions be organized? Do they require public intervention?

The thesis engages also in the debate on the balance between equity and efficiency. Reforms involving decentralisation, as well as the implementation of market-mechanisms were realized out of need for a more efficient government. A stronger role for the market and a smaller one for government would, according to some theorists (e.g. Savas 2000), increase the efficiency and overall quality of government services. Decentralisation processes, that also took place in a majority of the OECD-countries, were based upon the same efficiency-motives. Decentralisation would be a means to attain costs as it reduces the layers of bureaucracy and there would be greater cost consciousness at the local level (Bankauskaite 2005). Some academics warn however for the implications the new developments might have on equity (Ham 1993).

The academic objective of this thesis will therefore be to add to the existing body of knowledge by analysing the role that states take in the coordination of transactions in health care. It will also attempt to provide empirical information on current health care reforms and a possible trade-off between equity and efficiency.

1.3.3. Practical relevance

There still exist many differences between regions. Therefore, there is still need for improvement of the current arrangements. The amount of information on the impact of the various reforms is however still very limited. This limits policy-makers to engage in new reforms and improvements (Docteur 2003). New information on the impact of various reforms could for this reason be very useful. The practical objective of this thesis is therefore to provide a framework for the improvement of financial and monitoring instruments in relation to regional equity in health systems by letting countries draw upon the experience of other member states.

1.4. Research questions

In order to draw conclusions about the central problem and to fulfil the objectives stated above, this thesis will answer a central question, which is composed out of several sub-questions.

1.4.1. Central research question

In this thesis, the following central question will be answered: “*Which instruments of national coordination ensure the most geographical equity in health financing systems between regions?*”

1.4.2. Sub-questions

In order to answer the central question, a number of sub-questions will be formulated. First of all, the ways allocation processes could be organized in a society will be defined;
1. Which models of coordination could be used to coordinate the allocation of resources?

Then, the nature of the reforms and the different factors and actors that provided incentives for the reforms will be analysed;

2. What were the reasons for the public administration and health care reforms in the last two decades and what were the theoretical assumption behind these reforms?

Both reforms will be conceptualized and the theoretical assumptions underlying their implementation will be clarified. In order to analyse various health systems, the general characteristics and goals of health systems have to be clear;

3. What are the characteristics of the health systems and health financing systems and what is their relationship with equity?

Subsequently, the information derived from the previous questions will be linked to empirical evidence. First of all, the health systems the United Kingdom, Spain and France will be identified;

4. What are the characteristics of the health systems in the United Kingdom, Spain and France and what did the health care reforms in these countries imply?

Then, the fifth question will analyse how health care is being financed momentarily after -or during - reform has taken place;

5. How do the United Kingdom, Spain and France coordinate the distribution of resources in the health care sector and to what extent do they still take into account regional differences in this process?

After that, it will be time to identify to what extent systematic differences in health care between regions in a country can be perceived, and whether they could be related to current distributional arrangements;

6. Which regional differences in health care can be perceived in Spain, France and the United Kingdom and how could they be explained?

The integration of all sub-questions will lead to an answer to the central question in the conclusion of this thesis.

1.5. Research design and methodology

The answer to the central question and sub-questions will be derived from a literature study as well as a case study. In this paragraph, the methodology used to draw conclusions will be discussed. First of all the research strategy will be described, followed by a discussion of the
research design, operationalisation and data collection. Finally, potential pitfalls will be discussed.

1.5.1. Research strategy
According to Yin (1984), the choice of what research strategy to use depends on three conditions; the type of research question, the extent of control the investigator has over actual behavioural events and the focus on contemporary or historical events.

Concerning the type of research question, Yin (1984) distinguishes between “how-why” and “who-what” questions. This distinction can be related to the purpose of the research; is it explanatory or exploratory? In this case, the question, “Which instruments of national coordination ensure the most geographical equity in health financing systems between regions?” can be defined as a “how-why” question. The purpose of the research is to be more explanatory than exploratory.

“The case study is preferred in examining contemporary events, but when the relevant behaviours cannot be manipulated.” (Yin, 1984:19) The study will focus on the current status of allocation mechanisms and geographical inequity; it is focussed on contemporary events. Consequently, an historical analysis will not be relevant. Moreover, as might be obvious there is no extent of behavioural control over the research. Hence, an experiment is not possible. (Yin 1984)

Therefore, the empirical evidence in this research will be presented in the form of case-studies. A case study can be used in a qualitative as well as quantitative research. The nature of the unit of analysis, government paradigm on allocation policy, is not numerical and therefore, this research will be qualitative (Babbie 2004). The measurement of one of the variables, equity, will however be based on some statistical data. This will be discussed in more detail in paragraph 1.5.3.

1.5.2. Research design
The purpose of this thesis is to compare different approaches of national governments in their allocation, in a way to find an explanation for possible differences in geographical equity. In order to compare, a multiple-case study will be conducted.

Three European countries were selected for the case study; The United Kingdom, Spain and France. These three countries are known for the large differences between regions concerning economic activity as well as population density, as will become clear from chapters 5, 6 and 7. Therefore, it will be most likely that these countries are confronted with regional disparities in health care. Moreover, the health systems in the selected countries show similarities. The health system of the United Kingdom is the prototype of a Beveridge system. The Spanish system is converted to a Beveridge system during the period of democratic transition. The French system is originally Bismarckian, but has during the last years taken over several Beveridgean characteristics-as will also become clear from chapters 5, 6, 7.-

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1 The characteristics of the Beveridge, Bismarck as well as liberal health care models will be discussed in chapter four.


1.5.3. Operationalisation

The central question can be broken down in several variables. Their relationship is visualised in figure 2. The two main variables are the coordination mechanism of health financing and regional equity. The central question is based on the relationship between these two variables. Health care reform can be seen as an explaining factor that has largely influenced the coordination mechanism.

Accordingly, the two main variables have to be operationalised. First of all, the coordination process will be operationalised by means of the theory by Thompson and Wolff in chapter two. A summary of the main characteristics of the process and the three models that will be identified can be found table 2 in chapter two. The processes of the different countries will be matched with the characteristics defined in the matrix.

The second variable - regional equity - is harder to operationalise. In chapter three, regional equity will be defined as “avoidable and unjust regional disparities in health services”. In order for a situation to be equitable, health supply should match health need to the same extent in each defined region. Health need and health supply are however, hard to measure.

**Health care need**

The “need” of a population is hard to define. It is an addition of thousands of individual health statuses, each consisting of many different factors. A regions health care need could involve demographical, sociological, environmental, cultural and economical factors, and probably much more. Within the time and money span of this research, it is not possible to provide for a completely valid measurement of health care need. However, this thesis does intend to give an indication.

In order the measure health need, the crude death rate is selected as indicator. The crude death rate is the number of deaths per 1000 people on an annual basis. The indicator is largely influenced by the age composition of the population. Although this might hinder comparison in some fields (Anderson 1998), this characteristic is actually very relevant in this study. According to a study by Pampalon (1996) in Quebec, age stratification seems to make up for 60% of the regions total social need, including health. A regional population composed out of a large share of older persons, will probably have a higher crude death rate, as well as a higher health care need, since the elderly generally have a poorer health status and higher morbidity.
Chapter one: Introduction and problem analysis

rates (Schwefel, 1987) Also, the indicator is relatively objective and free of cultural bias, as will be explained in paragraph 1.5.5.

Unfortunately, there are some limitations to the use of this specific indicator. First of all, the rate indicates the total number of deaths, not just morbidity - death caused by disease - or illness in general - for not everyone who is or gets “unhealthy”, dies -.

In many countries, one can perceive life expectancy increasing and the number of chronic diseases rising (OECD 1999). Unfortunately, mortality is not a good indicator for the measurement of the quality of life. However, indicators as disability-free life expectancy, healthy life expectancy or active life expectancy - relating to the amount of years a person will live in full health- were not available during the period of the study. As there seems to be a positive relationship between quantity and quality of life (Robine, 1999), even the life expectancy in general would have been a relevant addition to the crude death rate. Unfortunately, this information was also not available at a regional level.

Furthermore, health need is concerned with mental health. The relationship between mental health and mortality is still debated (compare e.g. Janicki 1999, Vogt 1994, Knight 2003). Therefore, the validity of the crude death rate as an indicator for this aspect of the health status could also be debated.

Considering the time-span of this thesis and the availability of data, it will not be possible to measure health need to a very exact extent. This will have serious consequences for the validity of this part of the study. However, as the crude death rate indicates age composition and age composition is closely related to health need, the indicator will probably give a relatively good indication, although the limitation should always be kept in mind.

Health supply

In order to measure health supply, the total amount of physicians and hospital beds will be taken as an indicator. The number of physicians in a region is very relevant, not only because of the health care the physician provides, but also because of the research being done by the physicians and the fact that these persons will train new physicians. For instance, in France physicians clearly have the tendency to stay and work in the area they are trained in, causing a large differences in the number of physicians in regions with a higher university density and more rural regions (European Observatory on Health Care Systems, 2004).

Although it might seem like health supply would be easier to measure than health need, also here arise some limitations. First of all, the amount of health supply does not say anything about the quality of health supply. Moreover, the concentration of health care providers is not being considered. The average rate might be good, but when all hospitals are concentrated in one area, travelling distance might become a serious problem for some (Jordan 2004). Although more valid and clear than the indicator used for health need, also the drawbacks of these indicators should be kept in mind.

Unfortunately, data on the selected indicators can not been collected over an extensive time period. Especially in the case of regional data, data does not go back to more than 10 years ago. Therefore it will not possible to measure any change in the situation. The analysis of the health care supply situation in the regions will therefore not be more than a snapshot of the situation in the year 2000.
Next to these two main variables, a view general indicators relating to the economic and demographic situation of the region will be discussed. A complete overview of the indicators used, as well as the sources used, can be found in table 1.

This study is meant an indication of the health care situation in the various regions. It is in no way intended to form the basis of hard conclusions. The time and money limit of this thesis, as well as the lack of regional data, prevent the formation of solid and valid conclusions on equity. To extend the validity of the short study, as well as to a literature review will be added to the analysis.

1.5.4. Data collection

The information that will be required to analyse and compare the different cases will be collected using multiple sources. Concerning the background and theoretical part of the thesis, an extended desk review was done. In relation to the case-studies, information will be derived from desk research, as for example the HiT-profiles (Health care systems in Transition) made available by the World Health Organisation. The data on equity will be derived from the regional databases of EuroStat - the statistical office of the European Union - (Eurostat, 2006) and the OECD regional database (OECD 2006).

Some of the selected indicators in the selected countries are not measured every year. In some cases, recent data are not available yet. To be able to compare the countries, data from the year 2000 will be used. Information from 2000 is at the moment the most recent and most complete.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Variable</th>
<th>Year</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP total</td>
<td>General characteristics</td>
<td>2000</td>
<td>Eurostat, 2006</td>
</tr>
<tr>
<td>% of GDP</td>
<td>General characteristics</td>
<td>2000</td>
<td>Eurostat, 2006</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>General characteristics</td>
<td>2000</td>
<td>Eurostat, 2006</td>
</tr>
<tr>
<td>Population total</td>
<td>General characteristics</td>
<td>2000</td>
<td>OECD, 2006*</td>
</tr>
<tr>
<td>Population %</td>
<td>General characteristics</td>
<td>2000</td>
<td>OECD, 2006*</td>
</tr>
<tr>
<td>Population density</td>
<td>General characteristics</td>
<td>2000</td>
<td>OECD, 2006*</td>
</tr>
<tr>
<td>Classification</td>
<td>General characteristics</td>
<td>2000</td>
<td>OECD, 2006*</td>
</tr>
<tr>
<td>Crude death rate</td>
<td>Health need</td>
<td>2000</td>
<td>Eurostat, 2006</td>
</tr>
<tr>
<td>Physicians per 100.000</td>
<td>Health supply</td>
<td>2000</td>
<td>Eurostat, 2006</td>
</tr>
<tr>
<td>Beds per 100.000</td>
<td>Health supply</td>
<td>2000</td>
<td>Eurostat, 2006</td>
</tr>
</tbody>
</table>

Table 1 Indicators

1.5.5. Pitfalls

Next to the validity of the indicators, there are some other pitfalls that should be kept in mind.
Ecological fallacy
The interpretation of statistical data is often a very delicate process, especially when is to judge about individual welfare - as is the case with the topic of this study. A widely recognised pitfall in the interpretation of statistical data is the ecological fallacy. This situation occurs when characteristics of the group are assigned to the individual (Babbie 2004). This is a serious pitfall for this study, as it focuses on population health instead of individual health. The groups studied in this thesis include rural and urban population, rich and poor and young and old. However, only regional averages are measured. The conclusions of this study are therefore also based on these averages and therefore they might not be representative for the individual. This disadvantage is hard to avoid within the design of this study. As described in the previous paragraph, other literature will be included as much as possible. These studies might shed some light on the status of individuals.

Old information
Health care systems are under constant pressure for change. Today’s information might therefore not be accurate anymore tomorrow. To overcome this problem, priority will be given to recent information, preferably starting from the year 2000. Information older than 10 years - thus, up to 1996 - will not be used at all in this research, because it is probably dated. Still, it cannot be completely excluded that some information used in this thesis is outdated.

Cultural bias
The information in international databases as the OECD regional database and Eurostat is often a collection of national health surveys. International comparison is hard, since each survey has its specific character in terms of protocol and question formulation (Robine 1999), not to mention the cultural interpretation of terms (Pollitt, 2004) - A concept as health status might be differently interpreted from language to language and culture to culture. Also, the standard set to define this health status might differ significantly from culture to culture (Johansson, 1991). Some cultures might have significantly higher standards to define a healthy life than others. For this reason, international comparison of the health status seems futile. This thesis will therefore focus on the comparison of general trends between countries. On the national level, data will be compared. The cultural bias might also exist between regions, but will probably be smaller than on an international level. Moreover, the study will make use of a relatively objective indicator; the crude death rate. The objectivity of an indicator as the death rate will probably diminish the influence of cultural bias even more.

Bias
The thesis will be for a part of an internship for the OECD. The internship can be considered as a participatory observance. As information can be derived from inside the organisation of the OECD it will be very useful. One of the pitfalls of basing research on an assignment of an organisation is the chance that the research will say what the assigner wants it to. In this particular case, the OECD is a fervent advocate of the liberal market economy and privatisation. As the research is designed to give value judgment about the decisions of some countries to implement a quasi-market, this might be a crucial problem. To avoid this problem, much information from outside the OECD will be used in this study.
1.6. Outline of the study

The next chapters will form the basis of the answers to the question formulated above in paragraph 1.4. First of all, the theoretical framework will be established in chapter two. The theoretical framework will make use of theories on market and non-market failures and social coordination models. In the third chapter, the scope of this thesis will be narrowed down to the specific field of health care and health care financing. A general conceptual framework of health systems and equity will be established in order to provide a basic insight in the characteristics of the key variables of this research. Subsequently, the characteristics and backgrounds of the public administration health care reforms will be described in chapter four. Special attention will be paid to marketisation and decentralisation. Then, following this theoretical and conceptual framework, the chapters 5, 6 and 7 will comprise empirical information. The three cases of the United Kingdom, Spain and France will be analysed. On the basis of this analysis, conclusions and recommendations will be given in chapter 8.
Chapter one: Introduction and problem analysis
2. Coordination

A government is not the only player in the policy field. Resources are most likely to flow from one actor to another. Therefore, governments need to coordinate between these different actors in order to realise the objectives set in their health policies. According to economical organisation theory, one can distinguish three models of coordination: the hierarchy, the market and the network. In this chapter, the theoretical framework will be established that will help to define the coordination methods that are used by the countries in the empirical chapters 5, 6 and 7. In the following paragraphs, first of all coordination in general will be defined. Then, the three models of coordination that one can distinguish will be described: the hierarchy, the market and the network. The models will be discussed according to three categories: the coordination process, advantages and disadvantages. The coordination process will be analysed by discussing the organization of the system itself, the characteristics of actors and their relationships and objectives and planning methods and instruments.

2.1. Social dilemma’s and coordination

A central concept in this thesis is coordination. Coordination is a term that can be used in a variety of contexts and can have different definitions. In this paragraph, coordination will be defined.

The central question of this thesis is concerned with transactions between different actors and reaching the objective of equitable health care. Normally, governments cannot obtain the policy objectives that it has set by acting alone. To the contrary, in most cases, the government cooperates with a large variety of actors. Ideally, all of these actors would share the same objectives, so that by furthering the individual interest, the collective interest would be furthered too. In reality however, we live in societies characterised by multiple rationalities and multiple actors (Amin 1997). Without any intervention, these conflicting interests would lead to a situation that is not socially desirable or in the collective interest - and therefore, not in the interest of the government -. (Dijk 1993)

Coordination is an instrument that helps to break out of this situation. Coordination can be defined as “bringing into relationship otherwise disparate activities and events. Tasks and efforts can be made compatible by coordinating them” (Thompson 1991:3). In the case of many public problems, the task of coordinating lies with the government. Coordination can be put under the broader umbrella of governance. Governance, can - in this context\(^2\) - be defined as

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\(^2\) The term governance is used in many contexts and has therefore also many meanings. Peter and Pierre (2000) and Rhodes (1997) give a good overview.

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“the regulation of these elements, the effectiveness of their reproduction, of their alignment and coordination” (Thompson 2003:37). As coordination simply brings together elements and activities, governance brings them together in order to obtain a certain objective. (Thompson 1991).

The need for public coordination in health care might seem obvious. The question by means of which type of coordination the best results are being achieved is to a larger extent subject to debate (Thompson 1991). In the next paragraphs, three models that roughly indicate the most used means of coordination will be described; the market, the hierarchy and the network. These models are theoretical models to indicate a certain paradigm. They all indicate a certain way relationships between actors are structured, and can therefore manifest themselves between private as well as public organisations, but also within organisations (Thompson 2003). In reality, all three forms of coordination may overlap or even co-exist in one field. Also, differences exist within systems. There is not one hierarchy, one market, or one network, but there are several forms and methods (Thompson 1991). The models are therefore only mentioned here in order to be able to indicate a general direction and paradigm.

2.2. The Hierarchy

The first model to be discussed here is the hierarchy. The hierarchy can be seen as the traditional model used by governments to steers the actors in the policy process. This coordination method is characterised by “some kind of overt rule drive design and direction”(Thomson 2003:22). It involves governing by exercising power and authority over a subordinate function or functional. Power is being operationalised by means of a set of rules. All actions are coordinated in such a way that the outcome complies with the collective interest. The focal point lies at the outcome and the collective interest (Thompson 1991).

The failures of the market - as will be described in sub-paragraph 2.3.3. -, have long been the justification of hierarchical intervention. The government interfered in areas as for example the health care sector because the market was incapable of allocating resources the ‘right’ way, due to several flaws in the health markets but most of all because markets were thought to be incapable of distributing equitable.

The next paragraphs will give a deeper insight in the working of the hierarchical model. The coordination process will be described, followed by the advantages and disadvantages.

2.2.1. The coordination process

The corner stones of the hierarchy are division of labour, hierarchical order and objective, rational rules. This sub-paragraph will categorise the specific characteristics of the hierarchy according to the previously set criteria.

Organization

The hierarchy has a centralised structure. Decision-making takes places at the macro-level. The model has a stratified structure in which the higher authority steers the subordinate. Authority directly flows from accountability. The manager, being accountable for the
fulfilment of the task, must have enough authority to ensure that the subordinates will fulfil the task. (Jaques 1991)

**Actors and relationships**

The basic idea of the hierarchy is that the process of realising a goal can be broken down in sub-processes, that can be carried out by groups or individuals that are competent at fulfilling the specific task. The actors in the process are thus organized units of specialised planners (Stillman 1992). The driving force is rationality and the common interest. In stead of a focus on the individual and the process, the focal point lies at the outcome and the collective interest (Thompson 1991)

**Objectives and planning**

Within the hierarchy, actions are coordinated in order to pursue a pre-defined outcome. Contrary to the market, planning happens on an ex post basis. The process of realising the goals is very consciously managed. (Thompson 1991)

**Instruments**

Coordination is accomplished by means of the operationalization of a set of rules. These rules can be for example edicts, orders, statutes, etc,

### 2.2.2. Advantages

The hierarchical method has a number of advantages:

- **Objectivity and consistency.** The amount of arbitrariness in decision-making can be reduced due to the institutional structure of rational and objective rules and laws. (Thompson 1991).
- **Specialisation.** The hierarchy allows for the people with the necessary competence and specialization to be placed within the part of the process that they can do best. (Jaques 1991)
- **Expertise.** Due to this specialisation, the amount and quality of technical knowledge within the organization is high. (Weber 1968)
- **Accountability.** Also, the hierarchy enables to nail down accountability at each stage of the process (Jaques 1991).

### 2.2.3. Disadvantages: non-market failure

In 1988, Wolf wrote a theory of market failure, summing up the failures of the hierarchy, which was up till then considered to be flawless. Non-market failures can be summed up in the following points (Wolf 1988):

- **Redundant and rising costs.** While a market links costs and revenues by means of price, in a nonmarket system, this link is completely absent. The costs of producing are completely loose from the – nonprice- revenues that sustain the system – as for example taxes and donations. This disjuncture could lead to misallocation and inefficiencies. Redundant costs arise from the sometimes infeasible and internally inconsistent objectives that are set – e.g. supplying fully funded, equitable and top-quality health care to individuals and at the same time stimulate them to live as healthy as possible. These kinds of objectives arise from the fact
that the main incentive lies not in financial survival, but in political survival; the voters must be pleased.

- **Internalities and organizational goals.** All organizations require guidelines that set day-to-day management and operations as e.g. salaries, offices, evaluating personnel etc. The problem with setting these standards within a non-market system is the fact that it is difficult to measure the output of non-market organizations. For example, as will be demonstrated in paragraph 3.2., it is impossible to relate health outcome directly to health policies. Furthermore, feedback and other signals from the demand-side are often hard to measure. Internal standards within non-market systems will therefore not be derived from these incentives. The incentives for adopting cost reducing standards are even further weakened by a lack of competition. Within these circumstances, non-market agencies often develop internalities that do not have a clear or reliable connection with the purpose that it has to set. Agencies might strive for maximising their budget as much as possible. Also, new technologies might be adopted too promptly, without consideration on whether the improvement measures up against the costs. Furthermore, as knowledge is power within the hierarchy, the acquirement and control of information within the game of bureaucratic politics seems to become an end in stead of a means, conflicting with the core objectives of the agency.

- **Derived externalities.** As the market, also the non-market will be confronted with externalities. In this context, the concept of externalities implies the effects that are not being noticed by the agency creating them, and therefore are not affect the agents calculations or behaviour. This type of market failure is already sketched in subparagraph 4.2.2. Due to the specific characteristics of public problems but also the ex post character of hierarchical planning, it is hard to change plans once unforeseen problems arise.

- **Distributional inequity.** Concerning equity, also the hierarchy seems not to be perfect. “Arbitrariness, pettiness, favouritism and delay in bureaucratic decision-making” (Wolf 1988:156) characterise government intervention. The non-market is highly subjective and the more extensive its role, the more pervasive are its characteristics. In stead of income and wealth, the non-market system seems to tend to be under the influence of power and privilege (Wolf 1988). “Political and bureaucratic processes can result in rent-seeking behaviour, vote-trading short-time horizons and other behaviour which lead to poor-quality decision-making. In particular, politicians may adopt policy positions which give precedence to political rather than economic and social benefits.” (Scott 2001: 29-30)

Okun (1975) added to these arguments by his leaky-bucket experiment. Imagine that resources were redistributed amongst several parties using a bucket. However, the bucket that is used to transfer the resources, is leak: some of the resources will be spoiled during the redistribution process. If the bucket is leak to a large extent - and so: very inefficient-, then what is the point of redistributing? (Okun 1975)

When it comes to the allocation of resources in a system of total planning, that is: the state being the all-owner, all-seller and sole decider

“.. the consensus among economists largely is that if the cost (or efficiency pricing) problem of collectivised planning has a solution, it can only be a solution of this sort: In the absence of a real market, the planner must be able to simulate
a market. Without a market system, resources cannot be rationally or efficiently allocated, and this because the collectivistic planner goes around in circles – he has no (economic) cost basis from which to go.” (Sartori 1991:157)

What Sartori implies is that there is simply no economically justified basis for a hierarchy to allocate resources, since the main instrument - price- is lacking (Sartori 1991)

2.3. The Market

Another method of coordination, and in many ways quite the opposite of the hierarchy is the market. The market can be typified as the “voluntary exchange of goods and services between two parties at a known price” (Levacic 1991:21). Within the market, exchange is motivated by self-interest. Price is the crucial signalling instrument to which actors respond. The market is a decentralised coordination device; actors act independently and do not operate in a certain form of hierarchy. Actually, the market is a system of ‘no coordination’. The underlying assumption is that the pursuit of self-interest by individually motivated and welfare maximising individuals will eventually lead to the best outcome. (Levacic 1991) This paragraph will discuss the characteristics of the market according to the previously set and used criteria.

2.3.1. The coordination process

In a market system, resources are allocated according to the dynamic interaction of offer and demand. In this sub-paragraph, the coordination process itself will be discussed in more detail.

Organization

The market is a decentralised coordination device; actors act independently and do not operate in a certain form of hierarchy. It is a system of ‘no coordination’. The underlying assumption is that the pursuit of self-interest will eventually lead to the best outcome (Levacic 1991). Hence, the price is set by the system itself: the unseen hand of the market.

Actors and relationships

Actors are rational and welfare maximising individuals. Exchange is motivated by self-interest. All exchange happens on a voluntary basis, it is assumed that at least one of the parties is better off, and no party is worse off. Following, the market system is based on two underlying assumptions. First of all, it assumes that individuals have sufficient information when they engage in exchange. Secondly, it assumes that individuals are rational human beings that primarily want to maximise their level of welfare - the homo economicus-, and secondly also know how to do this (Levacic 1991)

Objectives and planning

Due to its specific character, the outcomes of the market process are always spontaneously generated, and not planned in advance. In other words, the market is forced to coordinate demand and supply ex post rather than ex ante. Decisions by an actor depend on other decisions made during the process, which cannot be foreseen in advance. This brings about the
risk of making the wrong decisions. On the other hand, the flexibility of the system makes it easy to adjust plans during the course of time, without any changes in ‘the basic data of the market’ - as e.g.: consumer tastes, technologies and resource availability - . (Krizner 1991)

Therefore,

**Instruments**
Price and competition are the markets most important elements. In order to survive and eventually grow within a market process, actors have to protect themselves against new entrants to the market. As price relative to costs determines the profit, it directly influences all decisions of the actor. A high price (relative to the costs) means a high profit and therefore it provides an incentive for actors to produce more. Similarly, a low price would encourage actors to lower production, or a change in product or marketing strategy. (Thompson 1991)

In a system of perfect competition “the market price is set ... by the interaction of the decisions these market agents make in the light of the prevailing price but over which the individuals have no direct control.” (Thompson 1991:7)

2.3.2. Advantages
The advantages of the market system can be generally summed up in four points (Breitenbach 1991):

- **Efficiency.** In order to survive within the market system, producers are forced to operate as efficient as possible.
- **Innovation.** Actors are forced to regularly develop new products and production processes in order to compete with other actors.
- **Complexity.** The market system provides a natural form of coordination, without any human intervention, of the millions of decisions that are made by millions of actors in complex economies.
- **Freedom of choice.** Consumers as well as producers have a large freedom of choice. Furthermore, the pursuit of ex ante planning, contrary to the ex post planning of the market, is said to be impossible in our complex societies. Planners could not possibly have all the knowledge and foresight to regulate prices and output. It is argued that ‘... the waste of resources associated with the ex post coordination of supply and demand through markets is as nothing when set against the loss of production associated with the weak incentives of a planned economy and when compared to the inefficiency, bungling and corruption of every economic planning economy yet devised”’. (Breitenbach 1991:51) Moreover, the pursuit of ex ante planning can be seen as destructive to some basic individual freedoms (Breitenbach 1991). Therefore, the ex post planning of the market can be seen as an advantage, or at least a lesser bad.

2.3.3. Disadvantages: market failure
Although the market system promotes efficiency, it will in some cases not be “socially efficient” (Le Grand 1991). This means that in some cases, the market is not able to allocate resources in a way that is socially desirable. This is said to be market failure. Roughly, five failures of the market can be defined:
• *Imperfect competition due to increasing returns.* A free market might result in a monopoly due to increasing returns⁴.

• *Imperfect competition due to unequal access to information.* In situations where there is no equal access to information, for example when consumers do not have access to all information about a product or where production technologies are not equally available, the market system might fail as well.

• *Externalities.* The “spillover” of economic activity as for example pollution, forms another reason for distributional problems. These outcomes cannot be appropriated or collected by the producer and are therefore left out of the calculations upon which production decisions are based. Where externalities could be seen as benefits, as for example education, the market will tend to produce too little. On the other hand, where externalities imply costs, as pollution, the market will produce too much. When the outcomes of a production process are completely nonappropriable, as national security, and/or noncollectable, as for example a prevention campaign, the good produced can be defined as a collective good. These goods will most likely not be produced at all in a market system.

• *Distributional inequity and adverse selection.* In some cases, the outcome of the distribution process by the market might not be in compliance with what is seen as equitable or fair by society. On the one hand, a market system guarantees impersonality and objectivity. But on the other hand, a market system does not take into account the very different starting points of people (Wolf 1988). Specific to the - health - insurance market is adverse selection; those that seek insurance need it the most, so insurers will exhibit behaviour of risk aversion that in the end will limit access to health care for those who need it the most (Scott 2001). No matter how perfectly a market system might function, its outcomes must comply with the social and ethical norms of a society for it to be accepted by the public. (Wolf 1988)

• *Moral hazard.* A failure very typical of the health care market is the moral hazard, referring to the tendency of individuals to become careless concerning the risks for which they are insured. Also, individuals tend to want something in return for the insurance money that has been paid for. This could lead to an expansion of health care costs. (Scott 2001)

### 2.4. The Network

Although many discussions are limited to the contraction of the market versus the government, there is still a third alternative to be considered. A network can be defined as:

> “... a specific type of relation linking a defined set of persons, objects or events. (...) The structure of relations among actors and the location of individual actors in the network have important behavioural, perceptual and attitudinal consequences both for the individual units and for the system as a whole.” (Knoke 1991:175-176)

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⁴ The concept of increasing returns refers to a selfreinforcing process of initial success leading to additional gains.
The essential difference with the other two approaches is that the network method analyses actors not as individuals but as individuals;

“... participating in a social system involving many actors, who are significant reference points in one another’s decisions. The nature of the relationships a given actor has with other system members thus may affect that focal actor’s perceptions, beliefs and actions.” (Knoke 1991:173)

In this last paragraph, the third model of coordination, the network, will be analysed.

2.4.1. The coordination process
Networks appear in two variants. In an organized variant, the network is established and sustained by conscious, directive action of one or more actors (Thompson 2003). One could imagine a government bringing together various actors in a policy field to mediate and find mutual solution to problems. Networks also appear in a self-organizing variant, that spontaneously arise from non directed interactions (Thompson 2003). In this paragraph, the main characteristics of the model, in both of its variants will be discussed.

Organization
The network method involves a horizontal organisation form, based upon informal relationships between independent agents and agencies.

Actors and relationships
In the market system, transactions are being realised by self-interested, anonymous buyers and sellers, with no need to enter a continuing relationship. The network however, assumes a system of mutual dependency and therefore: a need for cooperation (Lorenz 1991). Actors are forced to cooperate as the value of the solution achieved jointly exceeds the one that could be realised individually.

Objectives and planning
Objectives could be designed or generated spontaneously. Planning could also happen on an ex post as well as ex ante basis.

Instruments
Whereas rules are the coordinating mechanisms in a hierarchy, and price competition in the market, trust and cooperation are the main mechanisms in the network. The system of social relationships brings about the importance of trust within the network.
In contrast to the other methods, the network implies “doing things together in stead of doing them alone” (Kooiman 1993:1). The coordinating process happens in less formal and more cooperative ways. This requires more than just a compromise between parties; it requires an essential change in paradigm, making it able to search for mutual solutions and converting zero-sum into zero-plus games. These solutions are subsequently reached by means of interaction; negotiation and consultation. (Kickert 1997b)
2.4.2. Advantages
The network has some advantages that seem very relevant to the field of health care:

- **Sharing of information.** The cooperative form and the amount of trust of the network creates an atmosphere in which information is easily shared. There is no need to strategically hold back information in order to maintain the lead. Moreover, the fact that individual success increases the success of the whole network, makes it very probable that knowledge and information will be shared eagerly.

- **Specialization.** The network structure makes it possible for actors to each focus on and specialize in their part of the process.

- **Innovation.** The independent position of the actors and the diversity within the network stimulates innovation. There is no higher authority and there are no rules that could hold back creativity. (Johnston 1991)

2.4.3. Disadvantages
However, the network method also has some disadvantages.

- **Decision making costs.** Participation in negotiation requires a lot of time, money and energy. The multifinality of the network actors might put a heavy burden on the ones trying to influence the network, as this means that strategies have to be fine-tuned and several strategies and instruments will have to be managed at the same time.

- **External political costs.** Cooperating means having to compromise. Actors as well as their members or voters will have to accept this.

- **Number of actors.**Restriction of the number of participants in the network will help to keep collective action manageable and reduces complexity of solutions and permutations. Although there is no empirical evidence yet to confirm this claim, it might seem logical to at least put a maximum on the network somewhere to keep some control. However, excluding some actors might be difficult, because of the existing relationship of dependency.

- **Closed character.** Networks tend to be self-regulating and therefore also self-referential. They tend to be relatively insensitive for signals from outside of the system. (Kickert 1997)

2.5. Conclusion
This chapter discussed several coordination techniques that could be used by a government to shape relationships with actors, in order to meet the objectives set. It should be kept in mind that the distinction between these three models is made solely to give a theoretical support when analysing the cases. In reality, no strict distinction can be made as the models overlap.

Concerning the topic of this thesis, two worlds seem to collide. The allocation of resources within a health care system is an economic problem – it has to be efficient. However, it implies an at least as important political problem – it has to be equitable. On economic grounds, coordination by means of market mechanisms would be the most reasonably choice. However, on political grounds, the hierarchy would be a better alternative. Many discussions focus on this choice between market and governments. Wolff (1988) summarised the failures of both market and non-market in the points that are being visualised in figure 3. He concluded that to some degree, non-market intervention and redistribution is necessary to assure equity. How
much the non-market should intervene however, without letting its own flaws overshadow the flaws of the market system, is a very interesting question.

<table>
<thead>
<tr>
<th>Market failures</th>
<th>Non-market failures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imperfect competition due to increasing returns</td>
<td>Disjunction between costs and revenues; redundancy and rising costs</td>
</tr>
<tr>
<td>Imperfect competition because of unequal access to information (market imperfections)</td>
<td>Internalities and organizational goals</td>
</tr>
<tr>
<td>Insufficient allocation of private goods with externalities or public goods</td>
<td>Derived externalities</td>
</tr>
<tr>
<td>Distributional inequity (income and wealth)</td>
<td>Distributional inequity (power and privilege)</td>
</tr>
</tbody>
</table>

**Figure 3 Market versus non-market failures**
*Source: adapted from Wolff, 1988*

This chapter discussed an alternative to market and hierarchy – the network. This alternative seems to form a compromise. In many aspects, networks seem to operate in the gray area in between the market and the hierarchy. They are not completely unorganized as the market, nor officially sanctioned as elements in the hierarchical system. They do not coordinate solely according to the price system, nor only to official rules. (Thompson 2003) The characteristics of the three different models are being summarised in table 2.

Following the theoretical framework discussed in this chapter, the next chapter will narrow down the scope of this thesis by introducing the policy field that will be focussed on: health care.
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Model</th>
<th>Market</th>
<th>Hierarchy</th>
<th>Network</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organizational form</strong></td>
<td></td>
<td>Decentralised</td>
<td>Centralised</td>
<td>Decentralised</td>
</tr>
<tr>
<td><strong>Coordinating element</strong></td>
<td></td>
<td>None: the invisible hand</td>
<td>Top of the hierarchy</td>
<td>Social relations and trust</td>
</tr>
<tr>
<td><strong>Actors in the coordinating process</strong></td>
<td></td>
<td>Rational, welfare maximising individuals</td>
<td>Organized units of specialized planners</td>
<td>Networks of equal, mutual dependent actors</td>
</tr>
<tr>
<td><strong>Approach to relationships</strong></td>
<td></td>
<td>Competitive</td>
<td>Competitive</td>
<td>Cooperative</td>
</tr>
<tr>
<td><strong>Kind of relationships</strong></td>
<td></td>
<td>Voluntary</td>
<td>Compulsory</td>
<td>Voluntary</td>
</tr>
<tr>
<td><strong>Driving force</strong></td>
<td></td>
<td>Self-interest</td>
<td>Rationality and the common interest</td>
<td>Mutual dependency</td>
</tr>
<tr>
<td><strong>Objectives envisaged</strong></td>
<td></td>
<td>Spontaneously generated</td>
<td>Designed and consciously organized</td>
<td>Either designed or spontaneously generated</td>
</tr>
<tr>
<td><strong>Planning</strong></td>
<td></td>
<td>Ex post</td>
<td>Ex ante</td>
<td>Ex post as well as ex ante</td>
</tr>
<tr>
<td><strong>Instruments</strong></td>
<td></td>
<td>Price and competition</td>
<td>Set of rules</td>
<td>Trust, cooperation and negotiation</td>
</tr>
</tbody>
</table>

Table 2 Characteristics of the three models
3. Health policy and equity

This chapter narrows down the scope of this thesis and creates a general understanding of the workings of health systems and their relationship with equity. The central question links the theoretical framework as described in chapter two with this specific policy field. Therefore, key-concept as health and equity will have to be defined. Moreover, the assumptions defining health as a task for government will be explained. Furthermore, the relationship between public policy and health differentials will be described. Then, three models of health care systems will be described, followed by a discussion of the system of health financing, the most used instrument to equalize differences. Possible actors in this process will be defined and possible processes and relations will be explained.

3.1 Health policy

In this thesis, the topic of geographical equity in health care will be linked to government policy. To fully understand the relationship between policy and equity, it should first of all be clear what defines health and why health care is a task for government at all.

3.1.1. Defining health

In order to completely understand the working of the health system, first of all its objective: health, should be clearly defined. According to the constitution of the WHO, health refers to “the state of complete physical, mental and social well-being” (WHO 1998). It could also be defined by what it is not: health is “the absence of illness” (Alban 1995). Or it could be defined by what it is meant to offer us: health is “the extent to which an individual or group is able, on the one hand, to realise aspirations and satisfy needs and, on the other hand, to cope with the interpersonal, social, biological and psychological environments. Health is therefore a resource of everyday life, not the objective of living” (Starfield 2001a:453). These three definitions apply to health on an individual basis. Health on a regional, national or international basis, ‘population health’, does not only refer to the sum of the health of individuals, but also to the nature of the distribution of health throughout the population (Starfield 2001b). This thesis focuses on population health, the sum of health of the population within a region.

3.1.2. Health as a human right and public issue

A topic becomes subject of policy when it can be defined as a ‘public problem’. Birkland (2001) defines public problems as those problems that are in the public interest. Problems that are in the public interest “affect everybody, but not everybody in the same way” (Birkland 2001). On the level of population health, health status can be directly related to the interest of
Regional equity in health care systems

Regional equity in health care systems

society. Having an unhealthy population could have negative influence on a state, as the health status of the population influences strongly economic live and social cohesion (WHO 2000). Population health is therefore in the interest of the population at large and could therefore be defined as a public problem. Accordingly, health is a relevant topic for policy.

One could even take it a step further and define health not only as a public issue but as a basic human right. A human right should be “inviolable, inalienable, and must be equally enjoyed by all” (Belli, 2004:61). Therefore, a human right should be protected by government. In order to answer the question of what makes health a human right, first of all the concept of human right has to be defined. Roughly, one can make a distinction between negative and positive human right. The school of negative human rights argues that just a few core rights such as freedom of speech and safety, should be protected by the state. Subsequently, government should not interfere with individuals decisions (Belli 2004).

During the industrial revolution however, a counter-reaction to this notice of human rights was developed. During this period, the state respected negative rights as private property and economic freedom, but most people lived in appalling conditions. The school of positive human rights argued that it matters what a person can actually be or do in stead of what the state allows him or her to be or do. Positive individual rights include therefore amongst others housing, nutrition and education (Belli 2004). Poor health could have a general negative effect on the quality of our lives. Moreover, it could limit us in developing our skills and talents. Health is a necessary condition for a person to flourish.

Concluding: on the individual level, health can be defined as a positive human right, whereas population health - the sum of individual health - is a necessary condition for a society as a whole to function economically and socially.

3.2. Equity in health care

As has been discussed in the previous paragraph, human rights should be equally enjoyed by all. This notion is related to the concept of equity, a concept that will be focussed on in this thesis. The central question narrows the concept down to geographical equity. The topic of geographical equity in health care is highly complex. It is also one of the main values underlying distributional policy, and therefore a clear definition is very relevant for understanding the central problem of this thesis. In this paragraph, equity will be first of all defined, followed by a discussion on the role of equity in health policy.

3.2.1. Defining equity

Equity in health refers to “equal treatment for equal needs” (Le Grand 1987), “equal treatment and equal outcomes” (Rice 2001) and “justice as manifested by the absence of systematic differences in health” (Starfield 2001 b). As can be perceived from these short definitions, equity and equality are almost homogenous. It is therefore important to first of all make a distinction between these concepts. Equality is a statement of fact. Equity on the other hand, is a value judgement (Le Grand 1987). Consequently, equity adds a normative aspect to equality. This normative feature is also reflected in the definition of the World Health Organisation, referring to inequity as a difference that is not only unnecessary and avoidable but in addition also unfair and unjust (Whitehead 1990). For this reason, equity is also a highly subjective concept. For who defines what is fair? In most Western-European countries, fairness in health
care is need based; a person in need of care is entitled to receive care. On the other hand, the general notion of fair in other cultures could be getting the treatment you paid for. Paying for another person’s treatment could be considered as ‘unfair’ (Saltman 2002). Because equality can not directly be defined as a social problem, this thesis focuses on inequity.

In the context of this thesis it is also important to make a distinction between equity in health and equity in health care. Inequity in health refers to systematic differences in health status. In this thesis however, equity will refer to equity in health care; no systematic differences in the access to and provision of health care (Starfield 2001). The choice for this particular aspect of equity is made because it is one of the few differential factors that government could actually influence, as will get clear later in this chapter.

Furthermore, equity in health services consists of two dimensions. An equitable situation in health services implies a horizontal dimension: “equal treatment of equals” and a vertical dimension: “the unequal, but equitable treatment of unequals” (Mooney 1997). In other words: in an equitable situation one does not only try to treat equals as equals, but also tries to treat different persons differently, according to their needs. To speak with the metaphor of the division of the cake; equals get a piece of cake of the same size, but the ones that are starvning will get a larger piece than the ones that have just had a fancy dinner.

The unit of analysis of this thesis will be narrowed down by a focus on geographical equity. Inequity refers to differences between groups in society, and as might be expected, there are of course different kinds of groups. Differences can occur on the basis of income, education or ethnicity. Geographical equity is based purely on area of residence (Rice 2001). Geographical inequity can be defined as avoidable and unjust regional disparities in health services.

The relevance of geography in health care can be summed up in three points. First of all, most health care systems are organised on a geographical basis. Therefore, geographical equity has become a central value in the mechanisms distributing resources. Moreover, health care facilities usually are concentrated at specific locations. The geographical position of a citizen therefore naturally determines his or her abilities to access health care. Finally, there is considerable evidence that geographical inequalities in health, “area effects”, “may exist beyond social class and income inequalities” (Rice 2001:256).

3.2.2. The role of equity in health policy

The specific characteristics of health make it a very relevant ethical issue in designing distributional policies. First of all, the nature of our health, being inalienable and most of all unpredictable, makes it almost impossible to see it as a part of the reward system. A healthy body could be a reward for adopting a healthy lifestyle, but health is also based on pure arbitrariness. There is no direct relationship between an unhealthy lifestyle and sickness, nor a direct negative relationship between a healthy lifestyle and sickness. As everyone, whether rich or poor, has to live in their body, their starting position is the same: each needs protection against health risks as much as possible. This is in contradiction to for example housing policy, in this field a need for protection either raises or it does not (WHO 2000).

A second reason to focus on equity while distributing resources is the ethical importance it has to the public at large. Of the many underlying values of health policies, “the vast majority of the population would elect equity to be the prime consideration” (Le Grand 1987:257). There is a good reason for stressing the importance of equity; equity can be considered to be “an important element of the ethical basis underlying the design of health care systems” (Rice...
2001:256). Hence, equity in health care has a very obvious humanitarian and ethical importance.

Finally, improving equity could also be relevant from an economic standpoint; no country can afford to let the development of talent and labour of groups in its society be stunted because of the failure of policy to reach the whole population (Whitehead 1990).

3.2.3. Defining health differentials and inequities

Deviations in health can have various causes. Whitehead (1990) distinguishes seven main determinants of health differentials:

1. Biological variation.
2. Freely chosen health-damaging behaviour as smoking or participation in certain sports and pastimes.
3. The momentary health advantage of one group over another, when that group is first to adopt a health-promoting behaviour (as long as other groups have the means to catch up fairly soon).
4. Health-damaging behaviour where the degree of choice of lifestyles is severely restricted.
5. Exposure to unhealthy, stressful living and working conditions.
6. Inadequate access to essential health and other public services.
7. Natural selection or health-related social mobility involving the tendency for sick people to move down the social scale.

Factor one can be considered inevitable; there will of course always be biological differences between human beings which will affect their health status. This can not be influenced by policy and is therefore in this context not relevant. Factors two and three can be influenced by policy, for example by education or by discouraging smoking by raising taxes. However, these factors depend on free will, and can thus be classified as relatively ‘fair’. Factors 4, 5, 6 and 7 can be seen as avoidable as well as relatively ‘unfair’ and can therefore be classified as inequities.

3.2.4. Health differentials and the role of public policy

Except for the biological factor, every health differential can be related to a policy field. Starfield (2001) translated Whiteheads (1990) differentials into more broad areas of influence and related them to policy. A schematic representation can be found in figure 4. The figure denotes that the eventual result of equity in health outcome is influenced by a lot of factors, which are in their turn being influenced by a lot of policy fields. Also, factors interrelate, as is being visualised by the multi- and bi-directionality of the connecting arrows. As can be concluded from the figure, it would be impossible to research all variables affecting equity in health or even health outcome. At the same time, completely isolating one factor in this research would not be realistic and probably also impossible.
This research will focus strongly on the single differentiating factor that government policy is most likely to have the most influence over: the characteristics of the health system. It is also a factor that is being influenced mainly by only one policy field: health policy. Moreover, the characteristics of the health system refer directly to the institutional setting of the state and its political system. It is therefore highly relevant in the context of public policy studies.

### 3.3. Models of health care systems

This paragraph will focus on one of the aspects of the model in figure 4: health care system characteristics. One can distinguish many different arrangements and actors in health care systems. Differences strongly reflect underlying norms and values of the specific societies. Health systems reflect “a consistent logic that underscores how citizens view their relationship to the broader society around them as well as to the State” (Saltman, 2002:1) Therefore, there are as many different health care arrangements as there are states. However, one can
distinguish three dominant models. These models are based on the predominant source of funding of the system and reflect the underlying philosophy and history of the specific health care system. This paragraph will give a general overview of these three models.

3.3.1. The Bismarck model

In 1883, German Chancellor Bismarck initiated the first state-mandated social insurance model. His motives were political; insurances were up to then in the hands of the labour unions, which were gradually starting to get more and more support. The government took over labour unions’ sickness funds and in this way removed a source of their support (Saltman 2004). The popularity of the law made Belgium, Norway and Britain follow. After the First World War, the system spread across Europe and also influenced countries as Japan and Chile (WHO 2000).

The Bismarck system is characterised by obliged occupation-based sickness funds. Funds are under the supervision of the state. Contributions are shared between employer and employee. Health provision can be public as well as private. Insurance coverage is often supplemented by private insurance. As the model allows for a mix of public and private funding and providers, it is very flexible (Lameire 1999). On the other hand, it offers relatively few instruments to keep health care spending under control as most providers are private (OECD 2006). A rise of the premium could have negative economic consequences as it makes labour more expensive for the employer (Kutzin 2001).

At the moment, the Bismarck model forms the basis of health care systems in, amongst others, Germany, the Benelux, France and several Central European countries.

3.3.2. The Beveridge model

The Second World War damaged the infrastructures of many health systems and in this way, made room for another model. The Beveridge Report of 1942 defined health care as one of the three basic perquisites for a viable social security system. The new Beveridge model developed as a model in which state health care was provided for the entire population, financed by taxes (Musgrove 2000). The model affected policies in many Western countries, as well as the new post-colonial states (WHO 2000).

This system is fully taxed-based and also completely public. There is only one public insurer. Most of the health care is being provided by a centrally organized National Health Service. It is based on the underlying principle that health care should be free and accessible for all (Musgrove 2000). In this system, health budgets compete with other government spending priorities. This implies that on the one hand health spending could directly affect other policy fields (Lameire 1999), and on the other hand that the size of the budget is largely out of the reach of health policy makers (Kutzin 2001). A large challenge is keeping public spending on health within borders without having to compromise in terms of quality (OECD 2006).

The Beveridge model forms the basis for the health system in, amongst others, the United Kingdom, the Scandinavian countries and Canada.

3.3.3. The liberal model

The liberal model is characterised by the strong influence of market-oriented thinking (Lameire 1999). This system is being characterised by the absence of obligatory insurance. Health care is being funded by the contributions to private insurers. An exception is social care, targeted at
very specific a limited groups, for instance the elderly, the poor, etc. Health care is predominantly provided by private organizations (OECD 2006\textsuperscript{d}). Market incentives allow for more dynamics and greater efficiency. Moreover, they make the patient more responsible and would therefore limit abuse or misuse of the system. However, the system could limit access to health care for certain groups as the chronically diseased and deprived as costs would be too high for them.

The pure liberal model can only be found in the United States. More regulated forms can be perceived in Japan and Switzerland (OECD 2006\textsuperscript{d}).

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Method of financing</th>
<th>Insurer(s)</th>
<th>Coverage</th>
<th>Provider(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Bismarck model</td>
<td>Obliged, occupation based insurance premiums</td>
<td>Public and/or private</td>
<td>Insured</td>
<td>Public and private</td>
</tr>
<tr>
<td>The Beveridge model</td>
<td>Taxes</td>
<td>Single public insurer</td>
<td>Universal</td>
<td>Public</td>
</tr>
<tr>
<td>The Liberal model</td>
<td>Voluntary insurance premiums</td>
<td>Private insurers</td>
<td>Insured</td>
<td>Private</td>
</tr>
</tbody>
</table>

Table 3  Health care models

3.4. Health financing

A further narrowing down will be effected by a focus on the financing mechanisms of the system. Financing or redistribution policy seems to be one of the main instruments of governments to ensure equity in health systems. In this paragraph, the general characteristics of financing policies will be clarified.

3.4.1. The health financing system

According to the WHO (2000), to ensure that individuals have -equitable- access to health care, three interrelated functions of the health financing system are important:
1. Revenue collection; households and organizations contribute money to the health system in various possible ways, as for example general taxation, social insurance, private health contributions and out-of-pocket payments.
2. Pooling of resources; in most systems, resources are pooled in order to spread risks among the population.
3. Purchasing of interventions; the pooled funds are paid to providers in order to deliver sets of health interventions.

A schematic representation of the financial flows from sources of revenue to service provider in a health care system can be found in figure 5. The figure represents the functional flows within the system, that is: the money flows between four different functions. This does not necessarily have to mean that it also flows between four different organizations. For example, a social insurance fund can be responsible for the entire range of functions, from the collection of funds to the provision of services. This still means however, that finances flow through the process, although it might not be in a very explicit way. Many forms of functional integration and separation can exist, even within one country.

![Figure 5 Conceptual framework of financial flows](source: adapted from Kutzin, 2001)

In the next paragraphs, the different phases will be described in more detail.

### 3.4.2. Collection of funds

In the first phase, resources are being collected. Issues for policy in this phase are (Dixon 2004):

- *How much money to collect and from who?*
- *Who and what to cover?*

Methods of collecting funds vary widely. Examples of the different actors and different methods can be found in figure 6. In practise, most funds are being paid by individuals, either by taxes or contributions. In some countries, as for example Germany, the Netherlands and the Czech Republic, contributions are shared between employee and employer. In some third-world countries a fair share of health care is being subsidised by foreign NGO’s or charitable organizations. Also, there are many different receiving organizations, ranging from ministries to government agencies to private insurers. (Kutzin 2001)
All systems face serious difficulties with financing health care. The different methods of collection all imply their specific problems. For example, in tax-based systems, the most immediate source of raising health resources would be an increase in public expenditure. However, the level of funding is for a large part being influenced by factors cannot be directly influenced by health policymakers, as for example economic growth and the efficiency of the tax-collection system. Policies that tie contributions to employment could create distortions in the labour market and could have an influence on economic growth when the contributions would be raised (Kutzin 2001).

![Diagram of Health Care Financing](image)

**Figure 6 Contribution mechanisms: examples of actors and mechanisms**

*Source: adapted from Kutzin, 2001*

### 3.4.3. Pooling of funds

Pooling resources refers to the accumulation process of health care revenues. Policy issues in this phase are (Dixon 2004):

- **“How to pool resources?”**
- **“How to allocate resources to purchasers?”**

Again, there are many variations on methods and actors within this phase. A schematic representation can be found in figure 7. The organization receiving funds in the initial phase will pool them and then allocate the funds to another actor. This process can be completely public, for example a ministry of health allocating the funds to a public agency, as well as completely private, the insurer reimbursing the patient, as well as mixed.

A system fully relying on voluntary purchase of (private) insurance will probably suffer from adverse selection. In this system, it is most likely that the persons seeking insurance are more costly than those that do not. Insurers have therefore created methods to limit the financial effects of this adverse selection, called risk aversion (Scott 2001). Without government intervention, the population would most likely be segmented in different ‘risk-groups’, making it harder to insure people in ‘sicker’ pools. In a system of full competition, this could even lead to a gradual de-insurance of the population. Therefore, in many countries governments intervene to some extent in the way resources are being allocated to the
population and other health purchasers. While some countries still rely heavily on historical patterns and negotiation for resources allocation, others have implemented certain need-based formula, mostly based on demographic factors. Some countries with a system of competing insurers, as the Netherlands, Germany and the Slovak republic, have adopted a system of risk adjustment. This implies that the contributions made to insurers are being pooled centrally and divided amongst insurers on the basis of the number of members and their risk-profile (Kutzin 2001).

Pooling is the main instrument of societies to spread risks among the population. Furthermore, pooling enables the system to make use of a larger economy of scale. In a pool where everyone makes the same contribution, cross-subsidies allow for the high-risk categories to benefit from the contribution low-risk categories without damaging the latter. A schematic overview of this process is given in figure 8.
Within this system of spreading risks, however, there is still a possibility for regressiveness. In a regressive system, members with higher incomes pay a relatively smaller share of their income than the members with lower incomes. In a progressive system, the high incomes compensate the low incomes. This can be realised by another cross-subsidy (WHO, 2000). A schematic overview of this process is given in figure 9.

### 3.4.4. Purchasing and provision of services

Strategic purchasing involves a search for the best intervention to buy, from the best provider and by the best payment mechanism and the best contracting arrangements (WHO 2000). In other words, purchasing involves (Dixon 2004):

- “From who to buy and how to buy?”
“At what price to buy and how to pay?”
A schematic representation of the mechanisms and actors involved is again given in figure 10. The overlap in examples in figure 7 and 10 already indicates that pooling and purchasing is often done by the same organization.

Purchasing takes place at two levels. The first level is concerned with stewardship. At this level, society determines the priorities of health provision by regulation and financing incentives. In the case of weak stewardship, priorities are being determined by the purchaser and market forces.

The second level involves the responsibility of the provider; this involves the purchasers’ day-to-day decisions on interventions and financial arrangements (WHO 2000). Purchasers can pay by a variety of methods and each of these methods could provide different incentives to the provider. As in this part of the process, the role of the central government is marginal in the large majority of the cases, we will not go into depth on these methods and incentives. A good overview is given by Kutzin (2001).

Purchasing mechanisms: examples of actors and mechanisms
Source: adapted from Kutzin, 2001

<table>
<thead>
<tr>
<th>Purchasing organization</th>
<th>Health care providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>For example:</td>
<td>For example:</td>
</tr>
<tr>
<td>- Ministry of health</td>
<td>- Public providers</td>
</tr>
<tr>
<td>- Local government</td>
<td>- Private providers</td>
</tr>
<tr>
<td>- Social insurance fund</td>
<td>- Regional or municipal</td>
</tr>
<tr>
<td>- Intermediary</td>
<td>health centres</td>
</tr>
<tr>
<td>organisation</td>
<td></td>
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<tr>
<td>- Insurance company</td>
<td></td>
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<tr>
<td>- Individuals</td>
<td></td>
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</tbody>
</table>

Payment method: Either prospectively or retrospectively

For example:
- Budgets
- Salaries
- Capitation
- Fee-for-service

3.5. Conclusion

This thesis will focus on geographical equity, the diminishment of avoidable and unjust regional disparities in health services. Equity is an important value and is much reflected in health policies. Health can be influenced by a lot of factors and therefore, by a lot of policy fields. This thesis will focus on a specific field: the health care financing system and its relationship with geographical equity in health services.

Now the scope of this thesis is narrowed down to a specific policy field, chapter four will describe recent public administration reforms. Public management reform often implied a
changing role of the state, which had its consequences for the coordination methods used. Two reforms will be discussed more closely: marketisation and decentralisation.
As discussed in the introduction of this thesis, public management reform sprung from urgent financial problems as well as an academic impulse for a change and a change in the public opinion. The goal of the reforms was not to change policy, but to change the institutional setting of the governments. Not only should government make savings, it should change its techniques. The use of private managements styles would help to perform more efficiently, and therefore: to do more with fewer resources. In most of the cases, health care reforms cannot be isolated from other changes in public administration (Saltman 1997). In this chapter, the two public management reforms that will be focussed on - the adoption of market incentives and decentralisation - will be analysed in order to create a general theoretic understanding. First of all, three key concepts, reform, effectiveness and efficiency will be defined in order to create a broader general understanding. Subsequently, the general characteristics of the reforms and the theoretical assumptions underlying them will be discussed.

4.1. Defining health care reform
The problems that gave rise to health care reforms as discussed in the introduction occurred almost simultaneously in every Western country. More and more, governments were forced to take into account values as efficiency and effectiveness Many OECD-countries were subject to these reforms. But how exactly could we define reform? And how can core-values as efficiency and effectiveness be defined? This paragraph will define these core concepts.

4.1.1. Reform
Reform in health care can be placed in the broader framework of public management reforms. The concept public management can be used in many senses, as for example “the activity of public servants and politicians” or “the structures and processes of executive government” (Pollitt 2004:8). In the context of this thesis however, it will be defined as “the systematic study of either activities or structures and processes” (Pollitt 2004:8), as the focus will be on structures and processes in health care systems. The word reform implies change. It should be taken into account though, that reform does not directly imply an improvement. It is not automatically a beneficial change. Beneficial change is however always the objective of reform. (Pollitt, 2004) Combining the two concepts “public management” and “reform” again, the following definition could be drawn; “deliberate changes to the structures and processes of public sector organisations with the objective of getting them ... to perform better” (Pollitt, 2004:16)

This definition however, is not complete yet. A further distinction between structural and incremental changes should be made. Reform is often understood as a political concept, involving a top-down process of structural change. In reality however, the most change is made by evolutionary changes; “a continuous process of day-to-day operational change” (Saltman,
The most substantial reforms are therefore often not debated on directly by a homogeneous entity, but take the shape of a package of different measures, sometimes even without a clear policy objective (Saltman 1997). Pollitt (2004) stressed the same point by implying that reforms are first of all mostly not comprehensive, not even in intent, and secondly often not even made intentionally at all. “Institutions are often the product of intentional activities gone wrong” (Goodin 1996:28).

4.1.2. Effectiveness and efficiency

What defines a good programme, a good process or even a good system? This question could lead to distinguishing hundreds of criteria. Three of those criteria play a central role in this thesis: equity, effectiveness and efficiency. Concepts can be defined broadly and interpreted differently; their meaning varies from user to user and from language to language. Therefore, the concepts of efficiency and effectiveness will be shortly defined here. The value mentioned in the central question - and therefore the core value of this thesis - will be defined in chapter three.

A schematic representation of the criteria and their position in the policy process as being represented by an input/output model can be found in figure 11. While equity relates to the social-economic situation at which policy is both aimed and starts from -the outcomes try to influence the situation, and at the same time, the situation brings about new policy issues-, efficiency and effectiveness relate to the policy-process itself. (Pollitt 2004).

First of all, economy relates to making savings. It aims at reducing the inputs for an activity as much as possible. Assessing economy defines whether the results were obtained against the lowest possible costs. Secondly, effectiveness refers to the outputs and effects of the reform or programme; have the desired results been achieved? And finally, efficiency refers to the process in which the results are accomplished; have the highest possible results been achieved against the lowest possible inputs? (Pollitt 2004)
A programme could ‘score’ very high on one criterion, as for example economy, and at the same time very low on a criterion as effectiveness. Therefore, improving efficiency or effectiveness does not directly imply that equity will be improved too. On the contrary, it might even have negative consequences. In economics there seems to be a straight-out trade-off between an efficient economy and equity (Okun 1975). This thesis will however focus on the balance between an efficient government and equity. Can we also find a trade-off here?

4.2. The introduction of market mechanisms

From the 1980’s on, health and other social policies have been influenced by a debate on the balance between regulation and market. Government began to re-assess the structure of governance, questioning the public primacy along with the strong and central role of the state. The current authority relationships and structures were being reviewed (Saltman 1997). One of the dimensions of this debate focused on the role for the private sector to play in the financing and delivery of goods as health care. While most of the health care field was still for a large part in the hands of the public sector, the question rose whether this was the ideal setting, why not let the private sector play a dominant role?

4.2.1. Theoretical foundation

The theoretical basis for the introduction of market mechanisms can be traced back to New Public Management and the theory of non-market failure that were already discussed in chapter 2. Governments turned out not to be perfect. Distribution by non-market organizations had flaws of all kinds as inefficiency and inflexibility but also arbitrariness. Market mechanisms
would introduce competition in the various processes and would therefore increase values as efficiency as well as innovation.

Also, the motives for governments to distribute some goods and services were critically analysed. Some argued that governments had simply outgrown their initial mandate. Goods can be classified according to two characteristics; excludability and joint or individual consumption. Excludability refers to the extent that it is possible to exclude persons from consumption. For instance, a dam is non-excludable whereas a toll-road is excludable. Joint consumption means that the consumption of the good by one individual does not reduce the amount of the good available for consumption by others. For example, a cake is consumed individually whereas TV broadcasting is consumed jointly. On the basis of these two characteristics, one can distinguish four types of goods; private goods, toll goods, common-pool goods and collective goods, as is being shown in table 4.

<table>
<thead>
<tr>
<th>Consumption</th>
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<tr>
<td>Excludability</td>
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<tr>
<td>Excludable</td>
</tr>
<tr>
<td>Private goods</td>
</tr>
<tr>
<td>Non-excludable</td>
</tr>
</tbody>
</table>

Table 4 Classification of goods

Originally, private and toll goods were supplied by the market while the non-excludable goods were provided by government (Savas 2000).

“More and more private and toll goods have been redefined in essence, and are being treated as collective or common-pool goods. Indeed, the big growth in government has taken place in expenditures for such redefined goods.” (Savas 2000:51)

Health care - with the exemption of prevention campaigns - could be defined as a private good; it is excludable as well as consumed individually. The fact that it is still a major concern for policy is its social importance, which will be discussed in chapter 3. Health could be defined as a collective or social good. Collective goods are those private goods that are being redistributed by public organisations out of social policy (Musgrove 1996). However, the essential characteristics of health care as being individual consumable and excludable, are for some scholars reason to at least privatise as much as would be possible (Savas 2000).

4.2.2. Reform and implementation into the field of health care

Although not all countries did in the end implement market-like elements, and no real private markets in health care came into existence, this debate did lead to a wave of health care reform amongst OECD countries (Ham 1993). Some governments started to experiment with the
implementation of market-incentives and the involvement of private actors in their health care system: marketisation (Pollitt 2004). So called ‘quasi-markets’ or ‘internal markets’ were being created. The quasi-market is subject to market forces, but within set conditions (Thompson 1991).

Market elements can be introduced within different aspects of health care financing. Furthermore, a market can be organized on different principles as for example price, quality or market-share. Specific instruments to choose from involve consumer sovereignty, negotiated contracts and open bidding. Consequently, rather than making a choice between market or government, most government have implemented elements of the private sector in various parts of their health care systems (Saltman 1997). The extent and way of marketisation or even privatisation varies therefore widely from country to country.

4.3. Decentralisation

The debate on the role and monopoly of the central state has another dimension. At the same time as more private actors were introduced to the policy process, regional and local governments became more involved as well. Decentralisation implies “the transfer of authority, or dispersal of power, in public planning, management and decision making … from higher to lower levels of government” (Saltman 1997:43) Increased local autonomy would increase the responsiveness of health care to local needs and would therefore be more effective. Furthermore, decentralisation would increase accountability. (Atkinson 2000)

One can distinguish several forms of decentralisation (Saltman 1997):

- **Deconcentration** (administrative decentralisation): Decision-making is transferred to a lower administrative level.
- **Fiscal decentralisation**. An increase in fiscal freedom of the lower administrative level, for instance when taxing authority is also (partly) leveled down.
- **Devolution** (political decentralisation): Decision-making is transferred to a lower political level.
- **Delegation**: Tasks are allocated to actors at a lower organisational level

4.3.1. Theoretical foundations

A plea for decentralisation was formulated by Oates (1972) in his decentralisation theory:

"For a public good - the consumption of which is defined over geographical subsets of the total population, and for which the costs of providing each level of output of the good in each jurisdiction are the same for the central; or the respective local government - it will always be more efficient (or at least as efficient) for the local government to provide the Pareto-efficient levels of output for their respective jurisdictions than for the central government to provide any specified and uniform level of output across all jurisdictions" (Oates 1972:34)

This theory defines the core of all pro-decentralisation theories: decentralisation is - where possible -, desirable as local governments have the ability to offer tailor-made services. Needs may differ from region to region. Relatively young communities might need more schools,
relatively old communities might need more health services etc. (Wolfson 1988). Saltman (1997) summarises the advantages of decentralisation in four points:

- **Flexibility**: decentralised institutions can respond more rapidly to changing circumstances and needs.
- **Effectivity**: as front-line workers, these institutions are better able to identify problems and opportunities.
- **Innovativity**
- **A higher moral**, more commitment and therefore higher productivity.

### 4.3.2. Reform and implementation

As could already be understood from the above, one can make a distinction between decentralisation of financial and political power. Certain elements may be more decentralised than others (Saltman 1997). Also, decentralisation can also be realised at different levels of the policy process. For example, the collection of revenues can be shared between regional and national authorities as in Finland and Spain or decentralised to the regional level as in Sweden or can be done by public or private insurers operating at a national level as in the Netherlands, Germany and many CEE-countries (Saltman 1997).

### 4.4. Conclusion

In this chapter, two public administration reforms were briefly discussed: marketisation and decentralisation. Both of the reforms were implemented in most of the health systems of the Western countries.

Marketisation and decentralisation have a lot in common. Both reforms concern the changing role of the state in society. In both cases, more actors were actively involved in the policy process, private organisations as well as other levels of government. Moreover, these actors were granted more financial and policy freedom. In both cases, actors act more independently, and the structure of the hierarchy is slowly disappearing. For this reason, marketisation could be seen as a form of decentralisation (Saltman 1997) and a decentralisation could in some cases be seen as a “marketisation” of the relationship between the central and the local government. It could be said that both reforms could be defined as a step in the direction of coordination by means of a market mechanism or a network instead of a hierarchy.

With the conclusion of this chapter, the theoretical framework as well as the conceptual background of this thesis is now completed. The next chapters will describe the empirical situation in the UK, Spain and France. This will be done by first of all discussing the three countries in separate chapters. The three subquestions related to the empirical part of this thesis - questions 4, 5 and 6 in paragraph 1.4 - will be answered in separate paragraphs, describing the characteristics of the health system and health care reform, the health financing system and policy on equity and analysing the situation on regional equity in health care supply.
5. The United Kingdom of Great Britain and Northern Ireland

The United Kingdom (UK) will be the first of the three cases to be analysed. The United Kingdom comprises four countries; England, Scotland, Wales and Northern Ireland. The population has reached almost 60 million, the majority of which is urban – over 89% in 1995. (European Observatory on Health Care Systems, 1999) Wales, Scotland and Northern Ireland are due to devolution responsible for their own NHS. Therefore, the focus of this discussion will be on the situation in England. The case will be analysed by an overview of the characteristics of the system in the first paragraph, followed by an overview of the financing system and the role of equity in health policy in the second paragraph. Subsequently, the health care supply status will be discussed.

5.1. The British health care system

The completely publicly financed and owned National Health Service largely dominates the health care system in the United Kingdom. The British health care system can be considered the classic example for all Beveridge systems. In fact, the Beveridge Report of 1942 was specifically designed to lay the foundation for the British National Health Service (NHS). This paragraph will give an overview of the structure of the British health care system.

5.1.1. The historical foundation

The NHS came into operation in 1948, following the 1946 NHS Act. The act placed a heavy emphasis on equality of access. It introduced collective responsibility by the state for a comprehensive health system, freely accessible for the entire society (European Observatory on Health Care Systems, 1999) It is based on four broad principles: access to health services should be universal, comprehensive, ‘free at the point of delivery’ to the patient and financed primarily by taxes (Scott 2001).

The present organisational system can be traced back to the NHS act of 1973. This act introduced the present hierarchical command and control system. The Department of Health
was placed at the top of the pyramid. Under the Department were the Regional Health Authorities (RHA’s). The RHA’s were responsible for broad planning. Beneath the RHA were 90 health authorities, which were in their turn divided into districts, administered by district management teams. (European Observatory on Health Care Systems, 1999)

5.1.2 Reform: marketisation

The financial consequences of the 1970 oil crisis and the following recession put large pressure on NHS budgets. At the same time, it became clear that the system, as introduced by the NHS act of 1973, was cumbersome, slow in making decisions and costly to administer. In 1979, the government of Margaret Thatcher was elected with a programme advocating large economic and social reform. Public expenditure and state involvement were seen as the source of Britain’s economic difficulties. Therefore, the government embarked upon a major programme of privatisation.

Despite some small changes - as e.g. contracting out ancillary services -, the NHS was being relatively spared from organisational change during the 1980’s. This was probably due to the deep and widespread support of the public for the NHS system. However, after an intensive debate on inadequate spending in 1987, Mrs Thatcher announced an internal review of the NHS under her own chairmanship. The review led to the NHS and Community Care Act of 1990. The act implied reforms that would introduce an internal or quasi market to the NHS. (European Observatory on Health Care Systems, 1999) The British quasi market implied a separation of purchasing and providing. The responsibility for purchasing was assigned to the health authorities. Within the Department of Health, a special NHS executive (NSHE) was appointed to monitor effective management and the cost-effective use of resources.

In 1994, the Regional Health Authorities lost part of their autonomy as they became regional offices of the NHS executive. Their number was reduced from 14 to 8 and also the number of staff was reduced. The RHA’s were assigned various monitoring and performance management roles on behalf of the NHS executive on the regional level.

In line with the reforms planned in the NHS and Community Care Act of 1990, District Health Authorities (DHA) were founded to fulfil the purchasing role. Each DHA had to take stock of the health needs within its district and accordingly contract providers for a range of services. The DHA was a corporate body, under supervision of a chairperson, appointed by the Secretary of State, and a board comprising executive and nonexecutive directors.5

Until the mid 1980’s, there has been relatively little attention for primary care. General Practitioners (GP) were had a relatively independent contractor status, which caused services to develop piecemeal and poor coordination. Therefore, a new GP contract was introduced in 1991, which made GP’s more accountable to DHA’s. At the same time, selected GP practises were allocated budgets which enabled them to purchase services for the patients; General Practice Fundholders (GPF’s). On the supply side, providers were given greater freedoms by the creation of trusts. Trusts were meant to compete for contracts of the District Health Authority and General Practitioners. (European Observatory on Health Care Systems, 1999)

The effectiveness of the measures was questioned. Studies concluded on the one hand that the new GP-contracts promoted investment in high-earning practices, where demand was high

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5 Traditionally, there has been a split between primary care and hospital services within the NHS. Primary care had its own version of the DHA; the Family Health Service Authority (FHSA). The DHA and FHSA were merged in 1996.
and health needs were easy to serve. On the other hand, the link between lack of capacity and the poor performance of the NHS was not broken. (Baker 2001)

**The new NHS under Labour**

In 1997, the Labour party won the elections and changed priorities. The White Paper “The new NHS: modern, dependable”, published in December 1997, was designed to replace the emphasis on market-based processes for a focus on planning, collaboration and partnership-working, claiming that the market system had caused “fragmentation, inequality, increased bureaucracy and a lack of accountability”. (European Observatory on Health Care Systems, 1999:19) This new approach was called the “third way”. The organization will work according to the principle of subsidiarity; tasks will be performed at the local level, while the centre will set standards, monitor performance and correct failure. The system will also imply “earned autonomy”; good performance will be rewarded with less intervention from the centre. (Department of Health, 2000)

The 1997 Labour government abolished the idea of General Practitioners Fundholders out of reasons of equity and transaction costs. It did preserve the idea of a ‘primary care-led NHS’ however. The GPF’s were converted into Primary Care Groups (PCG), which should gradually grow to earn autonomy and gain the status of Primary Care Trusts (PCT).6

The short term contractual relationships that characterised the era of the internal market were converted into longer service agreements by the Labour government. It also changed the focus on cooperation between commissioners and providers in stead of competition. (Department of Health, 2000)

**5.1.2. Actors**

Within the current financing system, the Ministry of Health still is situated at the top of the hierarchical pyramid. Furthermore, we can distinguish three main organizations that participate in the political process: Strategic Health Authorities, Primary Care Trusts and NHS trusts.

**The Department of Health**

The task of the Department is to set broad overall policy in the field of health and personal social services in England. As part of the Ministry of Health, a special NHS executive is assigned the task to audit management and the use of resources. The Secretaries of State for Wales, Scotland and Northern-Ireland hold separate responsibilities. (European Observatory on Health Care Systems, 1999).

**The Strategic Health Authorities (SHA)**

In 2002, the Regional Health Authorities merged with the District Health Authorities and were renamed Strategic Health Authorities (SHA). Furthermore, their number was gradually reduced to ten in 2006. The SHA’s now have various monitoring and performance management roles on behalf of the NHS executive on the regional level. Moreover, the SHA takes stock of health care needs within its region and allocates resources accordingly to the various trusts (Department of Health, 2002).

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6 The process from PCG to PCT comprises in four stages. The PCG develops from a body dependent of the health authority in the first stage to a free-standing body, the PCT, in the last phase. (Department of Health, 2000)
Primary Care Trusts (PCT’s)
General Practitioners (GPs) are organised in Primary Care Trusts. The PCTs comprise a certain geographical area. Their task is to cooperate in commissioning - secondary - care, as well as providing primary care. (Department of Health, 2002)

NHS trusts
Health care providers are organised in NHS trusts. The trusts are contracted by SHA’s as well as PCT’s.

5.2. Distribution and Policy
Following this description of the characteristics of the NHS, attention will now be paid to the process of the allocation of funds according to Kutzin’s model as described in chapter 3; the four functional flows. A schematic representation can be found in figure 13. In the second part of this paragraph, the policy on equity in health care will be discussed.

5.2.1. Health financing
The total spending on health in the UK accounted for 8,3% of the GDP in 2004, compared to an OECD average of 8,9% (OECD 2006). The system has a reputation of being relatively inexpensive, even typified by some as ‘value for money’ (Scott 2001). The current Labour government however, prefers to define the previous low levels of health expenditure as an underinvestment by previous governments (Department of Health, 2000).

Collection of funds
The NHS funds are collected by the Treasury, mainly as a part of general taxation - 80,5% of spending in 1997- and for a smaller part by national insurance contributions - 12,2% in 1997. A small amount of money - additional and voluntary premiums - is being collected by private health insurers. (European Observatory on Health Care Systems, 1999)

Pooling of funds
The funds that are collected by the Treasury out of general taxation and national insurance contributions are allocated to the Ministry of Health by means of a fixed annual budget (European Observatory on Health Care Systems, 1999). This budget is set prospectively and there is only limited room for adjustment for the actual level of activity. (Scott 2001)

After the Ministry receives its budget, it will allocate the resources to the Strategic Health Authorities. One of the problems following the NHS act of 1973 was the equitable allocation of resources to the different regions. Until the 1970’s, resources were mainly allocated on an historical basis – that is: based on past allocations – with some minor adjustments. This had led to some major regional differences. Therefore, in 1975, the Resource Allocation Working Party (RAWP) was founded. The working party was given the task of developing a formula that would help allocate resources in a more equitable way. In 1976 it advised to allocate resources according to principle of weighed capitation based on ‘health need’. The formula takes into account the region’s population size, age and sex composition, and its levels of morbidity. Throughout the years, the RWP-formula got reviewed and adapted several times,
but the core principle of weighted capitation has always stayed the underlying basis of allocation to the regions.

From the SHA’s, a part of the resources are being allocated to the Primary Care Groups. A part flows as subsidies to some publicly owned health care providers. (European Observatory on Health Care Systems, 1999)

Purchasing of services
In 2004, 86% of health spending was financed publicly – that is: by the NHS. A smaller part was financed privately via out of pocket spending and private health insurance on some pharmaceutical prescriptions, dental care and private health care. (OECD 2006)

The SHA and PCGs purchase services by means of a contractual relationship with the provider - most of the times a NHS trust. The contract can be defined as a ‘soft’ contract; the government did not intend it to be legally enforceable. In strict legal sense, they could therefore be better defined as ‘service agreements’ or ‘understandings’. (Saltman 1997)

Historically, GP’s were paid according to the number of patients registered with them. In the Health Plan of 2000, this method was defined as too focused on quantity and insufficiently on the services provided and quality.

In 1999, unified budgets for PCT’s were introduced. Before, the purchasers were allocated different budgets for different kinds of services without a possibility of using one budget for making up shortfall in another budget. The new unified budgets are believed to make GP’s more accountable for both the costs as well as the quality of the health care that is provided. The degree of control over the budget is determined by the level of responsibility that is achieved according to the system of earned autonomy - see the footnote in paragraph 5.1.2. - . (Majeed 1999)

Provision of services
Services are provided by the various NHS trusts. The NHS act does not specify exactly which services are to be provided and which not. The formulation of responsibilities stays very vague, from the level of the Secretary of State - “to provide services to such an extent as he considers necessary to meet all reasonable requirements” – to that of the health authorities – “to provide for an acceptable level of service for the resident population”- (European Observatory on Health Care Systems, 1999:35). Measurements have been taken by the Labour government to set national standards, as will become clear from paragraph 5.2.2.

In order to reduce waiting times and to solve insufficient offer of care on short notice, NHS services have established ties with the private sector. Private facilities are for example shared or leased by NHS trusts. The NHS Plan of 2000 expresses the wish to establish more constructive ties with the private sector by means of “concordats”. (Department of Health, 2000)
Figure 13  The health financing system of England
5.2.2. Geographical equity in health policy

Geographical equity has long been a concern for British health policy. Equitable health care is even one of its core principles, as could be understood from 5.1. Yet, equity stopped to be point of discussion - at least amongst government officials - during the 1990’s. The internal market was said to compromise equity. Equity was therefore for long a forbidden word within the political arena. (European Observatory on Health Care Systems, 1999). However, in the new NHS Plan of Labour (2000), the value of equity takes back its position as core value of health policy, although it has to share its position with other values. The plan uses equity and efficiency as core values against which new plans are tested.

The NHS plan points out that one of the main problems causing geographical equity was the lack of national standards. Since its creation, the NHS did not entail any national standards. It was assumed that standards would develop gradually over time. For long, it was therefore left to individual health authorities and GP’s to decide on levels and types of treatment, which had led to a “postcode lottery” of care. During the 1990’s, the lack of nationally set standards and responsibilities in combination with the limitations of the fixed budgets have even caused some health authorities to “restrict the range of services to be made available to their resident populations or … not to fund particular services for particular individuals” (European Observatory on Health Care Systems, 1999:39)

In order to develop and maintain national health care standards, two institutions, the National Service Framework (NSF) and the National Institute for Clinical Excellence were created. A new Medical Education Standards Board was assigned the task to track the number and distribution of GP’s.

The NHS plan further points out that the internal market slowed the process of spreading good practice. The new NHS trusts and primary care groups/trusts implies that individual hospitals and GP’s will cooperate, which would encourage spreading ideas and practices, which would lead to an overall improvement of quality.

Inequity due to the assumed underinvestment in the previous decades is tackled by the NHS Local Improvement Finance Trust (NHS Lift), a public-private partnership. The objective of NHS Lift is to invest in those primary care centres that need expansion the most, as for example in inner cities.

As part of a new remuneration system for health care staff, incentives will be created to encourage staff to take on employment in areas with labour shortages. These incentives will take shape as a Market Forces Supplement, a flexible system that will respond to developments in the local labour market. Payment will take place by Personal Medical Services contracts (PMS) that will calculate the specific payment of a GP according to the fulfilment of quality standards and the need of the local population. As a result, payment will thus be topped up for those that are willing to join health care facilities in area’s with market shortages. (Department of Health, 2000)

5.2.3. Market, hierarchy or network?

After this analysis, the characteristics of the NHS will be matched with the theory in chapter two. The system will be analysed according to the categories as determined in the chapter and visualised in table 2.
The coordination process
When the scope is narrowed down to the financial relationship between the national government and the regional actor, the financial process can be clearly defined as hierarchical. The Department of Health determines how much resources the SHA gets. Although the SHA and PCT are responsible for their own purchase of services, policies must comply with the central National Service Framework, set by the Department of Health. Coordination is entirely the responsibility of the Department of Health, the top of the pyramid, who delegates objectives and tasks to the SHAs.

Actors and relationships
Actors as the Department and the SHAs can best be seen as units of specialised planners. They operate all to accomplish the centrally set goals. The relationship between the region and the national government is definitely not equal. The Department still clearly exercises power over the region.

Objectives and planning
The driving force of the system is the common interest. The Health Plan of 2000 focuses on common goals as quality and equity. The goals for the NHS are thus ex ante and centrally planned by health plans and the NSF. The allocation formula is another instrument of ex ante planning. The objectives set are reinforced by a set of rules.

Concluding, the English model is obviously hierarchy based. As has become clear in the previous section, health care reforms have actually strengthened the hierarchical character by the development of more national rules and standards and by creating monitoring organisations.

5.3. Geographical equity in health care

A survey that was held amongst the British public in preparation of the NHS Plan of 2000 expressed a clear need for renewed attention for geographical equity. In the top 10 of things the public wanted to see “better local services” were mentioned as well as “ending the postcode lottery”, meaning that high quality should be assured in every part of the country. This did not seem to be just a matter of perception; the health plan mentioned that evidence was found of a “huge gap between the best and the rest”. Poor area’s and poor health care results seemed to be linked. (Department of Health, 2000).

In this paragraph, inter-regional inequalities in health care supply will be measured according to the method described in chapter 1. Furthermore, two studies on regional equity in England will be discussed.
5.3.1. Case study

England consists out of 9 NUTS 1 regions; North East, North West, Yorkshire and The Humber, East Midlands, West Midlands, Eastern England, London, South East and South West. The regions correspond with the territories of the Strategic Health Authorities, except for the South East England region, which is divided into two SHA areas; South Central and South East Coast. An overview of the geographical position of the different regions and NUTS classifications can be found in appendix 1.

Hereunder, the cases of 7 regions will be presented. For some regions, not all data on health care facilities was available. In order to keep this study clear, only those regions for which complete information was available will be analysed. Therefore, the regions North East, East Midlands and Eastern England will be left out of the study. A complete overview of all data available for all English regions can be found in the table in appendix 2.

General characteristics

First, some general characteristics of the various regions will be discussed. Figure 15 and 16 represent respectively the total GDP and the GDP per capita earned in the selected regions.
From these figures, we can conclude that London and the South of England are economically stronger than the other regions.

![Figure 15: Total GDP in millions of Euro](source: Eurostat, 2006)

![Figure 16: GDP per capita in Euro](source: Eurostat, 2006)

The table in appendix 2 summarises characteristics as the population, population density and defines the region as rural, urban or intermediate. A large share of the English population could be typified as predominantly living in urban areas, with only three “intermediate” area’s; East Midlands, Eastern and South West. Concerning the density of the population, a very large difference can be perceived between the London area and the rest of England.
Chapter five: The United Kingdom of Great Britain and Northern Ireland

Health need
As explained in chapter 1, the crude death rate will be used as indicator for health need. Figure 17 represent the crude death rate in 7 English regions. As can be seen, there is relatively little divergence from the British average of 10.2. Only London scores considerably lower with a crude death rate of 8.1., which lies 2.1 below the average. The crude death rate lies higher in the North West - 11.1 - and South West - 11 -.

![Figure 17 Crude death rate](source: Eurostat, 2006)

Health care supply
According to our definition of equity in health care supply and with the restrictions of this analysis in mind, the differences in crude death rate should be reflected in the number of physicians and hospital beds. These amounts are reflected in figure 18. An “unhealthy” area should have a higher supply of health care per inhabitant; regions scoring high in figure 17 - North West and South West- should also score high in figure 18.

When observing figure 18, we can see that it does not ‘match’ with figure 17. The regions scoring considerably higher than average here are Yorkshire and The Humber and London. The regions of the North West and South West that scored high on crude death rate, score more or less average. The West Midlands and the South East have a lower average number of physicians and hospital beds, but have an average crude death rate - 10.2 and 9.9-.
Conclusion

Apparently, a direct link between health need and health care supply can not be found from this first brief analysis.

The region of London is obviously the best-off region, scoring high in GDP per capita and low on death rate. When looking at the actual numbers, London’s health care supply is around average. Related to the very low death rate however, this means health care supply is more affluent than in other regions.

North West England is characterised by both a low GDP per capita as a higher than average death rate. Health care supply is below average. This might indicate a relative undersupply when compared to other regions.

Most peculiar is the case of Yorkshire and the Humber. The region scores low on GDP and is sparsely populated, but still has a high density of health care suppliance, especially when related to the nearly average death rate. A direct explanation could not be found. The other regions seem to score average on each factor, including the need/supply ratio.

Although the gap in health supply between the richest region -London- and the poorest region - North West - seems to confirm a degree of socio-economic inequity between regions, when other regions are being considered, especially the case of Yorkshire, the pattern is not that evident anymore. That there are differences between regions in the volume of health care supply, is however clear.

Literature study

Given the limitations of this study as described in chapter 1, other studies will be included in this research as much as possible, in order to generate more valid conclusions.

A study of Baker and Hann (2001) on GP’s, found no specific pattern of social-economic inequity in health care provision across the country, but cases of inequity in specific areas. In London, low income was to a large extent linked to low health care provision, as in the
Midlands and the North, similarly disadvantaged groups had above-average levels of service provision.

“It appears from the findings in this study that the geographical differences observed were related to underlying variations in the link between practice characteristics, particularly single-handedness, and levels of service provision” (Baker 2001:72)

Apparently, the previously discussed lack of standards - see paragraph 5.2. - created inequity on a local, intra-regional, scale.

A study on rural areas by Haynes and Gale (2000) concluded that the formula used to allocate resources geographically was urban biased. Indicators of urban deprivation did not match indicators of rural deprivation, which resulted in “doubly disadvantaged” groups within rural communities. Need-based allocation formula for regional allocation might equalise the averages, but the ecological fallacy within these formulas seems to strengthen socio-economic inequities within and between regions. (Haynes 2000) The conclusion that allocation formulas were urban biased is being supported by Gibson et al (2002)

5.4. Conclusion

The health care system in the United Kingdom appears to have switched from one end of the spectrum to another. Until the 1990’s, it has been managed in a hierarchical way. The model seemed to be ineffective and inefficient and under the Thatcher government, the NHS was reformed into an internal-market model. But also this model of fragmentation did not seem to work. The current Labour government proposes a “third way”, in many ways similar to the network model. But have the reforms actually brought what they promised? There seems to be a fare amount of rhetoric surrounding the actual reforms. A critical look seems at its place. To repose Le Grand’s question; “was it really tried?” (Le Grand 1991 a).

The English form of marketisation was the purchaser-provider split on the local level. However, this process was accompanied by such an increase of monitoring by the central state, that the question could be asked whether we could speak of the market as a new form of coordination or a new form of hierarchy. While claiming to implement a decentralised market system, the British government strengthened the ties with the regional health authorities, limiting their autonomy by the introduction of the NHS Executive. The previously almost completely autonomous GP’s were made accountable to the SHA’s. It seems that while giving the GP’s a new status of “purchaser”, the central state had found a good reason to strengthen the ties and to start monitoring more carefully.

From the study done in this chapter, it can be concluded that there are still differences between region in health care services. It is questionable however, to what extent these differences are very significant. The literature on geographical equity in the English system, however, speaks of intra-regional inequalities in stead of inter-regional inequalities. Moreover, these inequalities seem to be linked to socio-economic inequalities and especially the discrepancy between rural and urban communities.
The current allocation formula, although very detailed, seems to strengthen rural-urban inequities, because the specific indicators used in the English formula seem to measure urban deprivation, which differs from rural deprivation. (Haynes 2000). Also, inequities seem to occur on a specific local scale. A previous lack of national standards has created large differences in the quality of the health care. (Baker 2001)

This chapter discussed the first of the three case-studies. The next chapter will discuss the Spanish case.
Regional equity in health care systems
6. Spain

This chapter will discuss the second case of this study: Spain. Spain is characterised by the presence of several co-existing cultural, linguistic and political systems. After the abolition of the centralistic Franco regime, the country was quickly and thoroughly decentralised. It now consists out of 17 regions; Autonomous Communities (AC). The Spanish population has reached over 40 million. Historically, the inhabitants of Spain tend to concentrate in the capital and along the coastline, leaving the central areas increasingly under-populated. (European Observatory on Health Care Systems, 2000) This case will be analysed the same way as the British case. First of all, an organisational overview will be given. Following, the health financing system and policy on equity will be discussed. And finally, an overview of health care supply in the regions will be given.

6.1. The Spanish health system

The Spanish health system - Sistema Nacional de Salud (SNS) - set up as an integrated National Health Service, publicly financed via general taxes and free of charge at the point of use. It could therefore be defined as a Beveridge system. Consequently, it shares some general characteristics with the British system. However, similarities stay limited to the surface. The next paragraphs will show that the particular history and culture of the country have caused the organizational structure to differ significantly.

6.1.1. Historical foundation

The first Spanish health care system took shape of a Social Health Insurance (SHI) system, initiated first by the Socialist Party during the Second Republic (1931-1936) and recovered by the regime of Franco after the civil war (1936-1939). The system could be defined as Bismarckian; eligibility was based on employment. However, health care was to a large extent in public hands, contrary to other Bismarckian systems where financing and ownership is usually mixed public/private. Eligibility was very limited. Until the 1967 Basic Social Security Act, only 53.1% of the population was covered. After implementation of the Act, this number
rose to 81.7% in 1978. Over the years, several waves of decentralisation and centralization led to a variety of health care networks within the system and a number of different departments to whom the networks were responsible.

In 1975, the dictatorial regime of Franco was replaced by a parliamentary monarchy. The new Constitution of 1978 defined universal access to health care for all Spanish citizens as the main feature of the new health system. Subsequently, in 1999 financing by payroll taxes was replaced by general taxation financing. From a social insurance or Bismarckian system, the Spanish system was thus transformed into a NHS or Beveridge system during the period of transition to democracy. (Costa-Font 2004)

"The Spanish National Health System presents a complex panorama as it evolves away from its origins as a centralised system rooted in a social security scheme towards one of universal coverage delivered through 17 Autonomous Communities" (European Observatory on Health Care Systems, 2000:17)

6.1.2. Reform: Devolution

At the start of the period of transition to a democratic system, the Spanish health care system was characterized by three main problems. First of all, the great variety in networks and actors had led to poor coordination and inadequate organization of the system. Secondly, the system was highly underdeveloped. Third, the lack of universal coverage had created considerable inequalities between socio-economic groups. (European Observatory on Health Care Systems, 2000)

As was already discussed, the system was converted into a Beveridge system. However, the main change that was made during the transition period was devolution of the political system. The devolution was aimed at solving the problems that were caused by the large heterogeneity of Spain. A devoluted system would serve specific health care demands and regional preferences better. (Costa-Font 2004)

Spain was divided into 17 Autonomous Communities (AC) with their own governments and parliaments. The AC are in their turn subdivided into provinces and municipalities. The autonomy of the regions is arranged in a Charter of Autonomy - Estatutos de Autonomía-, which forms the institutional framework of the state together with the Constitution. The Constitution in its turn settles the responsibilities of the state and those of the regions. Regional laws have the same judicial value as national laws. (Claveranne 2003)

The devolution of health care was realised by means of a special process. Seven of the AC; Andalusia, the Basque Country, the Canary Islands, Catalonia, Galicia, the Foral Community of Navarre and the land of Valencia, held a status of special Autonomous Communities. These Communities were the first to adopt their own health system and followed each a specific devolution process. The other ten AC followed a more symmetrical process and still made use of the same health system: INSALUD, The National Institute of Health - Instituto Nacional de la Seguridad Social -. The devolution process started in 1978 and ended in January 2002, when the ten remaining AC created their own health system and INSALUD was abolished. (Claveranne 2003)

This special process reflected the political tensions that typified the decision-making process in Spain. On the one hand, politicians and nationalistic groups from some AC had great interest in self governance. On the other hand, other areas in Spain preferred a more unitary approach. The specific structure of the system left enough room for all parties to manoeuvre
and to structure the institutional characteristics of the state. The Special Autonomous Communities followed a system of asymmetrical federalism; they decided for a large part for themselves at which speed they would follow which process. Some Communities were granted maximum political power, while others were only partly decentralised. The other AC followed a process of symmetrical federalism and remained using the national INSALUD system, until they all were ready to develop an own system. (European Observatory on Health Care Systems, 2000)

This open model of decentralisation and high degree of flexibility is probably one of the most apparent characteristics of Spanish so called “coffee for all” decentralisation. In avoidance of coercing the strong autonomist aspirations of some Spanish regions, the central state tries to pursue only some very general goals of uniformity, a solution known as “café para todos” (Brighty 1999)

6.1.3. Actors
The Spanish system is to a large extent devoluted. The national arena comprises three actors: the ministry, the regions and the interregional deliberative body.

*The Ministry of Health - Ministerio de Sanidad y Consumo.*
The central government takes on general tasks as coordinating responsibilities, basic health legislation and financial responsibilities for the social security system. (European Observatory on Health Care Systems, 2000). Officially, central governance should be exercised from the Ministry of Health. However, due to historical developments, the Ministry of Social Affairs - e.g. still owner of the buildings- and the Ministry of Finance still hold considerable responsibilities. Therefore, the Ministry of Health could be defined as relatively weak, as it has to share its power not only with other ministries but also with the regional authorities. (Costa-Font 2004)

*The Autonomous Communities - Comunidades Autónomas (AC)*
The AC hold extensive decision-making powers. They are responsible for their own health planning as well as the organization of their own health care. The region decides itself to what extent health care is decentralised to lower levels of government. (European Observatory on Health Care Systems, 2000)

*Inter-Territorial Board of the SNS - Consejo Interterritorial del Sistema Nacional de Salud*
The function of this institution is to form a means of political coordination between national and regional bodies of governance - see also chapter 6.2.2. -. (Claveranne 2003)

6.2. Distribution and Policy

After this account on the general characteristics of the Spanish health system, the characteristics of the health financing system will be discussed in this paragraph. This will again be done by making use of Kutzins model as described in chapter 3. A schematic representation can be found in figure 20.
6.2.1. Health financing

Health expenditure in Spain accounts for 8.1% of the GDP, which lies slightly under the OECD average of 8.9%. (OECD 2006b).

Collection of funds

The Spanish health system is mainly financed out of general taxation. In 2004, 71% of health care was financed out of public resources. This number has decreased considerably since 1990, when still 79% of health care was financed publicly. (OECD 2006b). The bulk of health care financing comes from general taxation, collected by the Treasury.

On top of the budget allocated from central taxation, the AC are gaining more and more fiscal autonomy. Since 2002, regions participate in the revenue of most centrally collected taxes; 30% of the personal income taxes, 40% of VAT and 40% of taxes on petrol. Moreover, the regions are entitled to raise a new optional retailer petrol tax that is especially earmarked to fund health care. By raising this tax, regions can increase their health-budget. (Costa-Font 2004)

Although access to health care is universal and free, still one sixth of the Spanish buy supplementary private insurance as a means of avoiding waiting lists, to obtain more or better hospital facilities and to acquire ‘soft’ private health care. (Costa-Font 2004)

Pooling of funds

Until 2002, regional health care was funded out of a general block grant for the region, which was decided upon by the national parliament and mostly based upon historical -unadjusted- capitation formulas. In 2002, health care funding was split from the rest of the regional transfers. Budgets are decided upon by a new allocation formula. The new formula takes into account the following characteristics: population (75%), demographics - population under 65 - (24,5%) and insularity (0,5%). This national grant forms the minimum departure amount for health care expenditure by the AC. As described above, they are free to add to this amount out of their own tax resources. (Costa-Font 2004)

Purchasing of services

Reform in most AC has led to a purchaser-provider split. Regional agencies with a semi-autonomous status have been developed to purchase health care. These agencies often hold a more or less autonomous position. Consequently, once the regional parliament has decided upon the specific budget for health, it allocates its resources to a semi-independent purchasing organization, which will purchase health care for the inhabitants of the region. (Costa-Font 2004)

Services are in general purchased via a contractual relationship with the health care providers, based on payment in retrospective. A number of public health care providers are however, still completely publicly managed by means of global budgets. (Garcia-Mila 2001). GP’s have a status of civil servant and are employed by the system. They also receive a small capitation fee. (European Observatory on Health Care Systems, 2000)

Provision of services

The types of health care provided under public provision and free of charge at the point of use are affirmed by Royal Decree in 1995. (Garcia-Mila 2001)
Health care provision in Spain is still to a large extent publicly owned and managed. Primary care is for example almost completely public. (European Observatory on Health Care Systems, 2000) Hospital care is also mainly publicly owned, with the exception of Catalonia where only 64% of the hospitals are private. However, contracting out to private health care providers still accounts for 15% of public expenditure. (Costa-Font 2004)

Private care is mainly complementary to public care. For example, dental care is often not covered by the NHS and is therefore often provided (and financed) privately. (European Observatory on Health Care Systems, 2000)
Regional equity in health care systems

Figure 20 The Spanish health financing system
6.2.2. Geographical equity in health policy

The Spanish Constitution states that:

“the State guarantees the effective realization of the principle of solidarity ..., insuring the establishment of a proper and just economic balance among various parts of the Spanish territory, with particular attention to the status of the island possessions” (Article 138) (Berthier, 2005:8)

Geographical equity is thus a value high valued in the Spanish system. In order to reduce territorial health inequities within the country, three financial mechanisms were created. These mechanisms are funded by the central budget.

• The cohesion fund (€60m in 2005), compensating the cross-boundary flows of health reimbursements.
• The sufficiency fund (€26,9bn in 2005). This general fund covers the difference between the tax revenues and the needs in the AC. It is set up to equalize any possible differences in tax capacities. Allocation is based on need indicators.
• The equalization fund compensates the temporary incapacities (€240m in 2005) – improving the management of the national public Health care system.

Moreover, in order to reduce general inter-regional inequalities Spain makes use of several general national and European equalization funds as the Inter-Territorial Clearing Fund - Compensación Interterritorial - and the European structural and cohesion funds. (Berthier 2005)

These financial equalizing methods are supported by the 2003 Cohesion and Quality Law. Its main objectives are strengthening geographical equity and the overall quality of care (Costa-Font 2004). Before 2003, a system of drawing Regional Health Plans was used. This system was abandoned due to several flaws. For example, there was a lack of basic national requirements on the content of the plans, which resulted in a rich variety of Health Plans across the regions (Cabasés 2000). The new Cohesion and Quality Law has two objectives; to form a means of coordination amongst the regions for the central state and to provide regions with instruments for modernization. According to the law, the Inter-Territorial Council defines what services should be offered in a cartera de los servicios. Furthermore, the law defines six guarantees; access to all the services defined in the cartera de los servicios, mobility - the ability to access services across the country-, a maximum waiting time, the availability of complete information on the right and duties of citizens as well as the achievements of the system and “demonstrated usefulness”. A Commission for Health, composed out of several stakeholders, should monitor the achievements of the systems. Secondly, national standards are drawn up in an integrated framework, inspired by the English National Service Framework.

The cooperation between the state and the AC will take shape in the Inter-Territorial Board of the SNS, composed out of the national minister for Health and the 17 regional ministers. (Claveranne 2003)

6.2.3. Market, hierarchy or network?

Following the analysis of the health financing system, the characteristics of the Spanish system will now be matched with the criteria set in chapter two.
Regional equity in health care systems

The coordination process
The Spanish system is devoluted to a large extent. The various health systems of the ACs are relatively autonomous. However, when focussing on the health financing system, we perceive that the ACs have financially a much lesser degree of autonomy. The organisational form is decentralised and partly independent. Resources are still allocated by the central state by means of a formula. However, regions are allowed to raise taxes to expand their income to a small extent, allowing them some more financial autonomy.

Actors and relationships
The relationship between central government and ACs is compulsory, but to a large extent equal. The driving process of the process is mutual dependency. The Ministry of Health is holds still a large part of the responsibility for the allocation of the central budget. However, the ACs hold enough political power and therefore, a quite strong negotiation position.

Objectives and planning
The allocation process is still characterised by much political debate and negotiation. Also, the centrally set budget is often ex post replenished under pressure of the regions. This still proves the relatively weak position of the Ministry of Health as opposed to the politically strong ACs.

The Cohesion and Quality Law forms an instrument for ex ante planning. The Law defines general designed objectives. The ACs enjoy however still a large extent of freedom, and therefore we can also speak of spontaneously generated results. Deficits are often compensated out of general budgets. Therefore, we can also speak of a partly ex post planning when it comes to health care financing. Decision-making happens mainly by negotiation and consultation in the Inter-Territorial Board for Health. Key instruments for Spain in coordination are therefore trust and cooperation.

The Spanish coordination model can be seen as a network with some hierarchical features. The basis of equality of the relationship between ACs and the Ministry, forces the Ministry to use instruments of consultation and negotiation to accomplish the central objectives. The strange division of political responsibility of the ACs and the financial responsibility of the State for the quality of health care have given rise to the strengthening of the fiscal autonomy of the ACs. However, on the other hand, the central state tries to find other instruments to steer, for example by the Cohesion and Quality Law.

6.3. Geographical equity in health care
Maintaining geographical equity in a highly decentralised country is one of the main concerns of Spanish health policy makers. In the last paragraph of this chapter, an analysis of health care provision in the different regions will be presented, followed by a literature study.
6.3.1. Case study

The NUTS 2 regions for Spain correspond with the 17 Autonomous Communities and 2 African Autonomous Cities - Ceuta and Melilla -. Analysis of the Spanish case will therefore be at NUTS 2 level. The geographical position of the regions is presented in figure 21. In appendix 3, a detailed map of the Spanish NUTS classifications can be found. As the information for the Autonomous Cities was not complete, they will be left out of this analysis hereunder. However, the tables with all available information on the Spanish regions can be found in appendix 4.

General characteristics

As in the previous case of the UK, this case study will begin with an overview of general characteristics of the regions; GDP, GDP per capita, population, population density and population characteristics. Figure 22 and 23 present respectively the GDP in millions of Euro en GDP per capita in Euro in the Spanish regions. As can be seen, especially in total GDP there is considerable variation between regions, due the considerable variation in population density. This difference is more or less equalized in the GDP per capita figure. Still, a difference can be perceived between the richer north-eastern and the poorer southern regions.
Regional equity in health care systems

Figure 22 Total GDP in millions of Euro
Source: Eurostat 2006

Figure 23 GDP per capita in Euro
Source: Eurostat 2006
The table in appendix 4 shows the selected characteristics of the populations of the regions. As can be seen, on average the Spanish population lives in mostly intermediate communities. Population density is by far the highest in the national capital, Madrid. The tendency of the Spanish population to concentrate at the coastal regions is also evident from the population numbers in Cataluña, Comunidad Valenciana and Andalucia. Central regions as Castilla-la Mancha, Extremadura and Castilla y León are very sparsely populated.

**Health need**

Figure 24 represents the crude death rate in the Spanish regions. The crude death rate as measured over the whole of Spain is 9. The rate of the Canary Islands and Madrid rate lays considerably lower - respectively 7.3 and 7.5 -. The regions of Galicia, Principado de Asturias and Aragon lay considerably higher - 10.6, 11.7 and 10.7.

![Figure 24 Crude death rate](image)

Source: Eurostat 2006

**Health care supply**

The variations in death rate should be reflected in the variations in health care supply. The regions of Galicia, Asturias and Aragon would require a higher rate of health care supply. Madrid and the Canary Islands health need should lie lower and so, should have a rate lower than average. Figure 25 presents the number of physicians and hospital beds per 100.000 inhabitants.

At a first glance, there is much variance in the ratio physicians/hospital beds. This could indicate specific regional characteristics and interpretations of a good balance in health care.
However, this inequality could also indicate inequities in health care supply. To conclude anything on this tendency, a more detailed study would be necessary.

Concerning the three regions that, according to the used definition, have the highest health need - Galicia, Asturias and Aragon -, only Aragon seems to have an above average level of health care supply. Galicia lies slightly lower on the rate of hospital beds -6- and considerably lower on physicians. Asturias seems to lie around the Spanish average, -15.5 more beds than average and 7.6 less physicians than average.

Both of the rural areas have rates below the average. Also Andalucia rates below average. The regions of Navarra, Madrid and Cataluña have relatively high rates of health care supply. Coincidentally, these regions also have a high GDP per capita. This might indicate a small amount of socio-economic inequity between the regions.

Finally, the region of Cataluña forms an interesting case as a large share of its hospital care is private and the amount of beds is considerably high - The Cataluñian hospitals provide for 100 more hospital beds per 100 000 inhabitants than the Spanish average.

![Figure 25 Number of physicians and hospital beds per 100.000 inhabitants](source)

**Conclusion**

The Spanish case is hard to analyse, as regions tend not to score high or low on both factors, but just on one of the two, as for example Valencia, scoring relatively high on physicians - 69.9 more than average- but relatively low on hospital beds - 74.5 less than average. Whether this is a case of regional preference or inequity is a question impossible to answer by means of this
study. From this study, clear evidence for a link between health need and health care supply
can not be found. However, very clear evidence for the opposite could not be found either.
From the figure, a small tendency of health care to concentrate in areas with a higher GDP can
be found.

Literature research

Given the limitations of this study, the information above will be replenished as much as
possible with a literature study.

Research of Costa-Font (2004) showed no significant differences in health outcomes
between the 7 special AC who first gained autonomy and those that stayed under central
INSALUD control until 2002. The centrally managed AC showed slightly lager inequalities in
avoidable mortality. Overall, during the period of measurement, 1992-1999, inter-regional
health inequalities were not significant and showed a declining pattern. Costa concludes that:

“Spain has sought to decentralise the health system without weakening inter-
regional social cohesion. … there is evidence on innovations for efficiency
improvements whilst inequalities in inputs and outcomes do not seem to have
increased over time at state level.” (Costa-Font, 2004: 31)

A research by Urbanos-Garrido (2001) globally corresponds with Costa-Fonts conclusions.
The researcher tested the use of medical services corresponding to similar needs in different
circumstances. The research found a higher number of GP visits in smaller populated area’s
and a higher number of hospital visits in higher populated areas. This could indicate on the one
hand that the primary care system is well developed and primary care is present even in more
remote, less densely populated areas. On the other hand, there still seems to be a form of
distance barrier to hospital care. However, both variables were not significant and also
declining. It is therefore concluded that the regional factor does not seem to have notable
effects on health service consumption patterns. (Urbanos-Garrido 2001)

However, the study by van Doorslaer and Masseria finds a very high impact of the regional
factor on socio-economic inequity in health care use in Spain. Especially in the case of
specialist visits and hospital visits, Spain is amongst the highest scoring countries. (Doorslaer
2004) This means, that socio-economic inequity in health care use is in some regions much
stronger than in others.

6.4. Conclusion

During the period of democratic transition, the Spanish system has actually moved away from
a more private Bismarckian system to an integrated, completely public National Health
Service. However, the system did not become centralistic. The Spanish regions hold a lot of
political power. The system was devoluted, transferring a lot of administrative authority to the
regional governments. During the last years, the AC also received more fiscal autonomy.
Together with this fiscal autonomy, national standards were however set and strengthened by
means of the Cohesion and Quality Law.
According to the analysis of the data as done above, and with the limitations of the study in mind, we can conclude that health care facilities seem relatively equally distributed, although there seems a tendency of health care facilities to concentrate in economic more prosperous regions. Two studies discussed in the literature studied however, did not find any evidence of geographical equity. Both studies claimed that differences were marginal and therefore, that Spanish equalization policies had been effective. Doorslaer (2004) on the other hand, concludes that there is still a large regional factor influencing socio-economic inequities. Regional inequities seem therefore to be related to socio-economic inequities. The socio-economic deprived are in some regions worse off than in others.

The next chapter will discuss the case of France.
Regional equity in health care systems
7. France

France will be the last case-study of this research. Although known as a centralised country, France knows three levels of decentralised administration; the municipalities, the departments and the regions. All three of these layers hold responsibilities and a degree of autonomy and are run by elected councils. The French mainland population has reached a number of 59 million. The overseas departments Guadeloupe, French Guyana, Martinique and Réunion account for another 1.7 million inhabitants. The average population density varies considerably. Half of all French people live on 10% of its territory. (European Observatory on Health Care Systems, 2004)

Also this last case will be analysed according to the previously mentioned categories. An organisational overview will be given in the first paragraph, followed by a description of the health financing system and the role of geographical equity in health policy. Finally, an overview of the health care supply in the regions will be given.

7.1. The French health system

French health care system could be typified as an interesting mix of influences from both the Bismarck as the Beveridge model. The model is by some French politicians said to be the “… ideal synthesis of solidarity, liberalism and pluralism” (Rodwin, 2004:2260). In this chapter, an overview of the institutional characteristics of the French health care system will be given.

7.1.1. Historical overview

The 19th century in France was characterized by the rise of the mutual benefit movement7. During the first decades of the 20th century, the mutual benefit organizations have grown considerably in number and size. In 1930, an Act on Social Insurance was passed. This legislation emphasized the need for a statutory insurance system. It established compulsory protection for employees in industry and business whose earnings were below a certain level (European Observatory on Health Care Systems, 2004). During the years after the Second

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7 Non-profit, secular welfare organizations based upon principles of solidarity and ‘utopian socialism’ (Archambault, 2001)
Regional equity in health care systems

World War, the social security system was expanded. Coverage was extended to other professional groups as e.g. farmers (1961) and craftsmen (1966) (Jourdain 2000). During this period, fairness of payment by the various socio-economic groups was most important. Also, the idea of social democracy was given shape. The system was set up as a network of health insurers, run by elected boards of directors, comprising representatives of employees and employers.

The founders of the French social security system were largely inspired by Beveridge. A uniform system of health care was however opposed by certain socio-economic groups who enjoyed relatively beneficial insurance schemes. The French insurance system is nevertheless very concentrated; 95% of the population is covered by the general health insurance scheme - régime général-, the agricultural scheme and by the national insurance fund for self-employed non-agricultural workers. Also, in contrast to other Bismarckian systems, the state has taken up many responsibilities originally belonging to the insurance organizations. The central state is largely responsible for the financial and operational management of health insurance. It sets premium levels and the prices of goods and services.

During the 1980’s, a growing number of unemployed got deprived from health care as insurance was linked to employment. A series of legislation softened this aspect of the SHI system. In 2000, universal coverage was introduced by the implementation of the Universal Health Coverage Act (Couverture Maladie Universelle - CSU). The Act introduced the right of coverage on the basis of residence. Persons with an income below a certain level are entitled to free coverage. (European Observatory on Health Care Systems, 2004)

7.1.2. Reform; recentralization

“France’s health policy objectives are straightforward and widely shared: elimination of persistent inequalities of access, improved quality of care, appropriateness and, after two decades of financial deficits, avoidance of structural imbalances.” (Poullier, 2000:903)

During the 1980’s and 1990’s, France was confronted with the same problems as the other European countries; financial deficits and a growing dissatisfaction of the citizens on the quality of care and the apparent unequal access to services. The French solution however, can be seen as an exception.

In 1996, a series of reforms were initiated. These reforms were named after the Prime-Minister of the time: Juppé. The Juppé reforms introduced the French model of la maîtrise médicalisée; state-led managed care. Unlike other European countries, the French avoided the popular ideas of consumer choice and contracting arrangements and reinforced the powerful role of the central state instead. (Rodwin 2004)

“...ideas about competition, internal markets and economic decentralisation, which inspired reforms in many countries during the 1990s, have never been seriously considered in France. This is linked to French culture and the strong role of the state, but is also partly due to the fact that the impetus for such reforms were less present in France; patients already have free choice, fee-for-service payments tend to raise provider activity levels and waiting lists are rare.” (European Observatory on Health Care Systems, 2004:118)
The method of funding health care via a social insurance scheme was supplemented by a system of contribution based on total income; the General Social Contribution - Contribution Sociale Généralisée (CSG). Hence, health care funding moved in the direction of a tax-based system. Momentarily, CSG contributions account for a significant share of health care revenues. Table 5 represents the revenue received by the largest insurance fund, the general scheme. From the table can be perceived that the new CSG contributions accounted in 2000 for 1/3rd of the revenues collected. The disconnection of health insurance revenues from wages makes the system less vulnerable to employment fluctuations. (European Observatory on Health Care Systems, 2004) Subsequently, and in the context of this thesis not unimportant, the raise of central financing also increased the legitimacy of the central state to implement health policies and reforms. (Rodwin 2004) This new form of tax-based payment was implemented simultaneously with the Universal Health Coverage Act, the change to a system of universal coverage. These two reforms together formed a large step in the direction of a Beveridge system.

Table 5 Revenue received by the statutory health insurance system (the general scheme) in 1990 and 2000

<table>
<thead>
<tr>
<th>Source: European Observatory on Health Care Systems, 2004</th>
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<tbody>
<tr>
<td>1990</td>
</tr>
<tr>
<td>€ (millions)</td>
</tr>
<tr>
<td>Employees' contributions</td>
</tr>
<tr>
<td>Employers' contributions</td>
</tr>
<tr>
<td>Total contributions</td>
</tr>
<tr>
<td>CSG</td>
</tr>
<tr>
<td>Specific taxes (cars, tobacco, alcohol)</td>
</tr>
<tr>
<td>Taxes on the pharmaceutical industry</td>
</tr>
<tr>
<td>Total taxes</td>
</tr>
<tr>
<td>State compensation for the loss of contributions</td>
</tr>
<tr>
<td>Adjustment between health insurance schemes</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Total revenue</td>
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</table>

At the same time, the parliament was given a larger role in the definition of health care and financial targets. Furthermore, the Juppé reforms also implied the change from election to appointment of the board members of the social partners. An “agreement on targets and management” was established between the state and the largest insurance fund, the National Insurance Fund for Employed Workers (CNAMTS).

The Juppé reforms centered around the problematic debate concerning the division of power between the state and the insurance funds. Traditionally, a compromise between the two parties existed along sector lines: the state was responsible for public hospitals and drugs while the insurance funds handled independent medical services. The financing of health insurance schemes was a policy area of the state. The 1990’s were characterized by a more and more open struggle to define responsibilities between central state and the insurance agencies. “Over time, the balance seemed to shift more and more in the direction of the state” (European Observatory on Health Care Systems, 2004:10).
Another important aspect of French health care reforms is regionalization. Regionalization has been occupying the French debate since the beginning of the 1990’s. The Hospital Act of 1991 introduced detailed hospital planning at the regional level. Not much later, the ARHs were created. Regions were required to draw Regional Strategic Health Plans - which will be discussed in more detail in paragraph 7.2 -. (European Observatory on Health Care Systems, 2004)

7.1.3. Actors
In this subparagraph, the main actors that take part in the political process of the French health care financing system will be shortly discussed. The main actors, the national government and the insurance schemes, are represented at a national as well as at a regional level.

Parliament and government
The French government controls the following areas;
- It approves the prices that are negotiated on by the insurance schemes and private practitioners.
- The rates of the contributions of employers and employees to the National Health Insurance
- The volume of hospital beds and heavy technological equipment at a regional level by means of the medical map which will be discussed in paragraph 7.2.2.
- The volume of manpower, by setting a ceiling each year for the number of medical students.
- Health expenditures, by setting an annual ceiling, the ONDAM, which will be discussed in 7.2.2.
- The introduction of new drugs, as well as their prices according to agreements with the drug companies. (Poullier 2000)

Regional hospital agencies - Agence Régionale de l'Hospitalisation (ARH)
In 1993, the ARH were created to fulfil tasks as hospital planning (for both public and private hospitals), financial allocation to public hospitals and adjustment of tariffs for private for-profit hospitals (within the framework of national agreements). The directors of the ARHs are appointed by the Council of Ministers. They are directly responsible to the Minister of Health. Since 2000, the ARHs have the mandate to set up regional network of health providers and insurers. (European Observatory on Health Care Systems, 2004)

Insurance schemes
Three main health insurance schemes can be distinguished:
1. The general scheme (Régime général). Coverage of employees (including their families) in commerce and industry (84% of the population). The scheme also covers CMU beneficiaries (1.6% of the population)
2. The agricultural scheme (Mutualité sociale agricole) (7.2% of the population)
3. The scheme for non-agricultural self-employed persons (Caisse Nationale d’Assurance Maladie des Professions Indépendantes (CANAM) ) . (5% of the population).
Other schemes cover other professional groups - as for example civil servants, miners, seamen, employees of the national bank or national railway company. Some of these schemes fall under the general schemes, while other form completely autonomous schemes.
The regional unions of the health insurance funds - Unions Régionales des Caisses d’Assurance Maladie (URCAM)

The three main insurance funds are brought together at the regional level by the URCAMs. The task of the URCAMs is to coordinate the work of the funds. They do not however, exercise any authority over regional and local funds, they are supposed to influence and stimulate.

(European Observatory on Health Care Systems, 2004)

7.2. Distribution and policy

This paragraph will analyse the French health care financing system by making use of Kutzin’s model, - figure 5 in chapter 3. Subsequently, an analysis of the policy meant to decrease inequities will be given.

7.2.1. Health financing

The Health care expenditure in France accounts for 10.5% of the GDP. (OECD 2006a). Within Europe, France can be defined as a ‘big spender’. In this paragraph, the financing process will be discussed.

Collection of funds

Financing of the health insurance varies from scheme to scheme, but is in general based upon contributions of the employer and the employee based upon the wage of the employee. Since 1998, wage contributions are being supplemented by a general social contribution (CSG) based on income.

In order to cover possible discrepancies between the actual medical costs paid by the patient and the costs that are reimbursed by the insurance fund, additional voluntary health insurance can be purchased. The organizations offering this additional coverage can be public as well as private. Purchasing of this insurance can be on individual basis, but it is more common to enter a collective group contract arranged by the employer.

In 2000, the statutory health insurance schemes accounted for 75.5% of total expenditure. Complementary voluntary health insurance accounted for 12.4%. 11.1% of the costs were directly paid by patients by out-of-pocket payment. (European Observatory on Health Care Systems, 2004)

Pooling of funds

Funds collected by the insurance schemes are subject to an adjustment scheme based upon the demographic profiles of the insured. Therefore, a scheme insuring for example relatively many older persons, will be compensated for extra costs. (European Observatory on Health Care Systems, 2004)

From the collected funds, a special budget is allocated to the RHA for hospital financing. The formula used to allocate these resources takes into account population, health needs and hospitals’ efficiency.
Regional equity in health care systems

Purchasing of services
In France, patients purchase their health care themselves. They are completely free to choose the health provider of their preference. In general, patients are expected to pay the health care providers directly - with the exception of CMU beneficiaries-. Afterwards, costs will be reimbursed, after deduction of a possible co-payment. Hospitals and ambulatory care are most of the times paid directly out of the insurance funds. (Poullier 2000)

Since 1996, expenditure of health insurance agencies is restricted by a “projected target” or ceiling, the “National Ceiling for Health Insurance Expenditure” - Objectif National des Dépenses de l'Assurance Maladie (ONDAM) -. The effectiveness of the system is however undetermined.

“The credibility of this system is questionable: the constraint is soft, there are no effective mechanisms to ensure respect of the ONDAM, the government itself allows additional budgets within the year, and the principle of setting a cap on health care expenditure remains strongly opposed by professional organizations, notably doctors’ associations.” (European Observatory on Health Care Systems, 2004:101)

 Provision of services
The providers of health care services can be public as well as private. In general, most ambulatory care is private and on a fee-for-service basis. GP’s are free to set up practice wherever they like and enjoy freedom of prescription. They are not able to set the prices of their services anymore since the 1996 Juppé reforms introduced the setting of an annual ceiling to expenditure. Prices are set by means of negotiation between the provider and insurance funds and have to be approved by the government. (Poullier 2000)
Figure 27 The French health financing system
7.2.2. Equity in health policy

Historically, France has considerable differences in the physician/population ratio between regions. Because GP’s are free to establish a practice wherever they want, a strong tendency to concentrate in Île de France and the South could be perceived. Differentiation in numerus clausus for medical education and the number of internships, favouring regions with a low ratio, reduced regional disparities but did not always reach the expected results.

Regarding hospital care, the government was able to intervene more resolute. Regional hospital planning is arranged by means a Regional Strategic Health Plan Schéma Régional d'Organisation Sanitaire - SORS), drawn by the RHA. The quantitative part, the so-called “carte sanitaire” or medical map, determines quantitative norms as for example the population/hospital beds ratio and ascertains the availability of expensive diagnostic or treatment equipment. These norms are decided upon by the RHA director. For specialised types of care, equipment as well as treatment, the authorization of the Ministry of Health is required. Apart from the medical map, the SORS is a qualitative instrument. It sets out the goals for health care provision within the region. The general objective in hospital planning nowadays is the promotion of hospital networks within a region, including private as well as public providers. Within these networks, every hospital will provide care at its own level of technical capacity. In the end, the network will be able to provide an extensive range of care facilities. Since the introduction of regional hospital planning, a considerable amount of hospitals were merged, closed down or re-oriented towards new activities.

The ARH establishes contracts with public hospitals. In these agreements, goals and commitments are set out for three to five years. These goals relate to provision, but also to general quality and efficient management objectives. These contracts are linked to hospital financing. As a ‘reward’ for meeting objectives, hospitals can be allocated additional resources. There are no national standards for these contracts, nor for the financial consequences. Therefore, there is variation between regions in the content of the contracts as well as the possible implications. (European Observatory on Health Care Systems, 2004)

7.2.3. Market, hierarchy or network?

In order to define the coordination methods used by the French government, the system will be matched with the categories in table two in chapter two.

The coordination process
The French system is only partly decentralised. Its hospital planning is regionalised. Insurance funds stay operating at a national level, although their interests are represented at the regional level and GPs stay operating at the individual level. However, especially the financing system could be typified as hierarchical. Insurance premiums are set by the Ministry of Health. Negotiated prices have to be approved by the parliament and a ceiling is set to total health expenditures. Coordination of the actors is being carried out by the top of the hierarchical pyramid: the Ministry of Health.

Actors and relationships
The RHAs can be seen as regional agencies of the Ministry; organised units of specialised planners. Actors as the insurance companies and the GPs are, although more
and more subject of government regulation, independent. These parties keep on maximising their own welfare by offering opposition to government intervention

Objectives and planning
The objectives for health policy are set centrally by the Ministry and are reinforced by regulation.

The French system seems to evolve more and more from a network system to a hierarchical system. Formally relatively autonomous actors, especially the insurance providers, are bound by more and more regulation and monitoring. Although the effectiveness of the ONDAM is still questioned, the ceiling forms an obvious piece of evidence of the growing government interference. Also the evolvement of the system from a social insurance to a tax-based system has established a broader basis for the central government to control expenditures. In stead of the negotiation structure chosen by Spain, the French chose to use centrally defined regulation as instrument to coordinate autonomous actors.

7.3. Geographical equity in health care

This last case study will also conclude with an analysis of regional equity in health care supply. As in the previous two chapters, it will start with a discussion of the indicators selected in chapter 1. The conclusions that can be drawn from these statistics will be supplemented by a literature study.
Regional equity in health care systems

Figure 28 Map of the French regions

7.3.1. Case study
The French regions correspond with the European NUTS 2 classification. NUTS 2 will therefore also in this case be the level of analysis. Figure 28 presents a map of the French regions. A detailed map of the NUTS classifications of France can be found in appendix 5.

4 French regions are not part of the French mainland but of the DOM-TOM (Départements d'outre-mer and Territoires d'outre-mer); Guadeloupe, Martinique, French Guiana and La Réunion. Since information on these regions is not complete and the situation of these regions is quite exceptional when related to other European regions, these regions will not be included in the analysis. As for the other regions, a complete overview of all available data can be found in the tables of appendix 6.

General characteristics
This case study will begin again with a general overview of the regional landscape of France. Figure 29 and 30 represent the total GDP and GDP per capita of the regions. The Île de France region clearly forms the most distinct region in this category. The GDP per capita figure equalises the gap between Île de France and ‘the rest’ slightly, but the region still takes in a unique position in France.
Figure 29 Total GDP in millions of Euro
Source: Eurostat 2006

Figure 30 GDP per capita in Euro
Source: Eurostat 2006
In appendix 6, general characteristics of the population in the French regions can be found. Again, the Île de France region differs considerably from the rest of the French regions. 20% of the total French population is concentrated in the region, giving rise to an extremely high population density. Île de France is also the only region whose population is predominantly urban. Next to a number of intermediate regions, France is composed out of a considerable number of regions whose population is mainly rural.

**Health need**

Health need in the several regions will again measured by the crude death rate. Figure 31 represents the crude death rate in the French regions. Île de France has a considerable lower rate of 6.8. Considerable higher are the rates of Bourgogne, Auvergne and especially Limousin, all three rural regions located in the centre of France.

![Figure 31 Crude death rate](image)

Source: Eurostat 2006
Health care supply

In the last part of this subparagraph, the crude death rate will again be related to health care supply. At a first glance, the high number of hospital beds in the French regions is exceptional when compared to the other two countries.

The three regions that, according to the used definition of health need, need the most care have a supply that is slightly to reasonably above average, especially noticeable in the hospital beds rate. Physician/population rate differences seem considerably smaller. The preference of GP’s to settle in Île de France and the southern regions can still be perceived in the figure, although rates are probably equalized by the amount of hospital staff included in the cluster.

Conclusion

The number of hospital beds seems to match the crude death rate reasonably well. Concerning the amount of GP’s, a clear difference can be perceived. Ile de France has a considerable lower death rate but still also the highest amount of physicians. The higher death rate in regions as Bourgogne, Limousin and Auvergne is not reflected in the amount of physicians.

From this case-study, it can be concluded that concerning hospital beds, there does not seem to be large inequities. However, France still seems to cope with the fact that physicians tend to concentrate in certain area’s.
Literature study
The analysis given above, is on its own not valid enough to draw conclusions. Therefore, in this paragraph the results of some other studies will be discussed.

Despite the 1970 hospital law, accessibility to hospitals still seems to be problematic. The average distance to the nearest hospital is indeed short (19.1 km). However, due to differences in the quality of care offered, the average distance to the hospital actually attended is 29.5 km. The difference is linked to socio-economic class. The higher classes tend to travel farther to receive better health care (Jourdain 2000). So, technically, the hospital law removed the distance barrier. Due to the variety of health care however, a socio-economic form of inequity might have come into existence as higher social classes are prepared or able to travel farther in order to receive qualitatively better care. This might change however, now the tendency of the SORS is to focus more and more on qualitative in stead if quantitative goals.

A study on the treatment of patients with a coronary heart disease in three French regions showed no difference in hospital management. Differences were however perceived in the pre-hospital period. These differences were socio-economic as well as regional. (Lang 1998)

7.4. Conclusion

Confronted with many of the same problems as the rest of Europe; rising health care costs and a need for more quality as well as equity, France sought its solution in more centralisation. It implemented some Beveridgian concept as universal coverage and a tax-based manner of financing. Moreover, it started to take up more responsibilities as setting a ceiling to health care expenditure, the ONDAM, control over prices negotiated between insurer and provider and an overall larger role for parliament in health care planning and financial planning. At the same time, a part of the system, hospital planning, was regionalised. The institutions responsible for regional health care are, however, under the direct responsibility of the Ministry of Health.

Concerning hospital care, the French government is using extended planning tools to ensure equity. The quantitative hospital planning by means of the carte sanitaire ensured the availability of any medical treatment within a reasonable distance. Socio-economic inequities seem to arise when local hospitals are not able to provide a certain level of quality. Higher educated and the ones with a higher income are prepared to travel farther to receive better care. This problem might be solved in the coming years, as health plans seem to focus more and more on quality and efficiency objectives.

Inequities also seem to arise from the free position of the GP’s. The French government seems only partly capable of stimulating GP’s to set up practices in less favored regions. The political tensions that surrounded the debate on the ONDAM also showed the displeasure of the GP’s over too much political interference.

This last empirical chapter concludes this study. In the next chapter, general conclusions and recommendations will be formulated.
8. Conclusion and recommendations

In this chapter, the results of this analysis will be discussed and conclusions will be drawn that will answer the central research question of this study: “Which instrument of coordination would be most optimal for national governments to realize the most geographical equity between regions in their health financing systems?”. The aim of this thesis was to analyse the relationship between current health care reforms and geographical equity, in order to identify a model of coordination for national governments that ensures the most regional equity in their health financing systems. From the theory, three models were identified: the hierarchy, the market and the network. The health care systems of three case countries; the United Kingdom, Spain and France, were analysed and key-characteristics were identified as belonging to one of these models. The results of this study will be discussed by analysing the sub-questions as posed in 1.4.2. in the following paragraphs, followed by recommendations in paragraph 8.7.

8.1. Models of coordination

Chapter 2 of this thesis discussed the first research question posed in 1.4.2.; “Which models of coordination could be used to coordinate the allocation of resources?” A government is not the only player in the policy field. Therefore, in order to meet objectives, it has to find ways to coordinate between the different actors. The theory made a distinction between three models of coordination: the market, the hierarchy and the network. One of the advantages of the market model is the economically efficient allocation of resources. However, on political grounds, the hierarchy would be a better alternative, as it distributes resources more equitable. The third model discussed - the network -, seems to form a compromise as it is based on ‘softer’ means as negotiation and cooperation in stead of competition or regulation. The characteristics of the three models are summarised in table 2 in chapter 2.

The choice for one model does not exclude the possibility to include elements of other models. To the contrary, in some cases it might even seem necessary. A market system for example cannot function without the presence of the other modes of coordination. The hierarchy for instance provides for the collective agreement on for instance property rights. The network ensures the trust that is necessary to let the market function efficiently. Musgrove (1996:1) suggested that:
“There does not seem to be a sharp peak of ideal public and private relations rising above the plateau. The most important conclusions or recommendations for public policy then have to do with assuring a place on the plateau and avoiding the numerous chasms that surround it. These chasms, which represent failures of various kinds, result from too much, too little or the wrong kind of state intervention.”

The choice between hierarchy, market or network could therefore not be defined as a “which”-question, but more as a “when, where and to what extent?”-question.

8.2. Health financing systems

Following the theoretical framework, the scope of this thesis was limited to health care and health care financing in the third chapter. In this chapter, third sub-question was discussed: “What are the characteristics of the health systems and health financing systems and what is their relationship with equity?”

One can distinguish many different arrangements and actors in health care systems. Differences strongly reflect underlying norms and values of the specific societies. Differences of opinion as to what parts of health care could be defined as collective goods, and therefore a task for public organizations, are likely to exist. Furthermore, health care systems are based on “fairness”. The definition of “fair” is also to a large extent culturally defined. Three general models of health care systems were defined: the Bismarck model, the Beveridge model and the liberal model.

Furthermore, Kutzins (2001) model of health care financing was discussed, dividing the financing process in four functional flows, as is visualised in figure 5 in chapter 3.

8.3. Health care reform

The third chapter of this thesis discussed the practical situation of public management reform by answering the second sub-question; “What were the reasons for the public administration and health care reforms in the last two decades and what where the theoretical assumption behind these reforms?”

Urgent financial problems as well as an academic impulse for change and a change in the public opinion urged policy makers in many Western countries to reform their public administration systems. Two public administration reforms were briefly discussed: marketisation and decentralisation. Both reforms implied a change in the institutional setting of the state. Not only should policy improve, but the governmental organisation itself should work more efficiently and effective. The use of private managements styles would help to perform more efficiently, and therefore: to do more with fewer resources. Decentralisation to lower levels of governments would increase local autonomy, which would lead to more responsiveness to local needs, effectiveness and accountability.

Both reforms implied the involvement of more actors in the policy process. Moreover, these actors were granted more financial and political autonomy. Therefore, these reforms could be defined as a step in the direction of coordination by means of a market mechanism or a network instead of a hierarchy.
8.4. Health care systems in the UK, Spain and France

After the theoretical and conceptual framework, chapter 5, 6, 7 summarised the main empirical findings in the United Kingdom, Spain and France. The first sub-question related the third chapter on health care and health financing systems to the situation in these three countries: “What are the characteristics of the health systems in the United Kingdom, Spain and France and what did the health care reforms in these countries imply?”

The United Kingdom

The English health care system is structured as a universal Beveridge system. It was founded on principles as equality of access and collective responsibility. Until the 1990’s, the health care system has been managed in a hierarchical way. Under the Thatcher government, the NHS was reformed into an internal-market model. Subsequently in 1997, the Labour government proposed a “third way”, in many ways similar to the network model. Contracts were replaced by long term service agreements. Furthermore, the new system would be based upon trust and earned autonomy.

Spain

The initial Spanish system - under the regime of Franco - was a Bismarckian system. During the period of democratic transition, the system converted to a Beveridge system of universal coverage and financing out of central taxation. Moreover, a fair amount of authority was being devoluted to the Autonomous Communities.

France

Although France is known as a very centralistic state, the French health care system was founded as a Bismarckian system. This implies funding by relatively independent insurance organizations and several private as well as public service providers. Confronted with many of the same problems as the rest of Europe; rising health care costs and a need for more quality as well as equity, France sought its solution in more centralization in stead of market forces. The Juppé reforms of the 1990’s implemented several features of the more universal and centralistic Beveridge system. Moreover, these reforms implied more state control over prices and budgets. Hospital planning was regionalized, but stays under direct supervision of the Ministry of Health.

The political landscape and culture of a country is crucial in a reform process. We have seen three European countries confronted with largely the same problems - financing deficits, a public dissatisfaction on the quality of the care and inequities - react in complete different ways. The United Kingdom implemented extensive marketisation reforms under the Conservative Party. In Spain on the other hand, emphasize lay on decentralisation and more autonomy for the regions after the nationalistic and centralistic reign of Franco. France, traditionally having a Bismarckian system, tried to overcome its problems by allowing the central state to play a larger role, especially in health financing.
It can be concluded that in two out of the three cases, Spain and the UK, the national government seems to have indeed been granting other actors in the policy field more autonomy. France on the other hand, implemented measurements to gain control over actors.

8.5. Coordination and policy in the UK, Spain and France

The fifth research question linked the theoretical framework in chapter two to the empirical information: “How do Spain, France and the United Kingdom coordinate the distribution of resources in the health care sector and to what extent do they still take into account regional differences in this process?”

The United Kingdom
In the UK, health care funds are part of general taxation. The Treasury allocates the collected funds to the Department of Health by means of a fixed annual budget. The Department then allocates resources to the regional actors; Strategic Health Authorities. This allocation process involves a formula based on health care needs. The SHA establishes service agreements with Primary Care Trusts and NHS trusts.

Although the system might be decentralised, there is still a strong tie with the centre. Financially, the SHA are completely dependent on the budget they receive from the Department of Health. This budget is determined ex ante. The SHA’s might be responsible for their own policy - and so for how they spend the budget - but they have to comply with the National Service Framework.

Spain
The Spanish health system is financed mainly out of general taxation and social security contributions. By means of an allocation formula based upon demographic characteristics, resources are allocated to the Autonomous Communities. On top of this general taxation, the AC are allowed to raise own taxes to a certain extent. Purchasing and provision arrangements vary from region to region, but a lot of general characteristics are shared. Services are in most of the cases purchased by regional purchasing agencies. Provision of services is to a large extent public, but some services can also be private.

The Spanish coordination model can be seen as a network with some hierarchical features. The political power of the regions is large. Still, they are financially for a large part dependent of the central state. Moreover, the state is trying hard to get some grip on the regions, for example by the introduction of the Cohesion and Quality Law. The AC hold considerable political power, as well as some financial autonomy, as they are allowed to collect some own taxes. The allocation process is being characterised by much political debate and negotiation. Also, the centrally set ex ante budget is often ex post replenished.

France
The French health care system is financed by insurance contributions of employers and employees, as well as a general social contributions payed via taxes; CSG. The Ministry of Health allocates the resources collected out of the CSG to the insurance companies and the Regional Hospital Agency -ARH -. Insurance companies pool their collected funds, which are being balanced by an adjustment scheme. The patient buys services directly and is being reimbursed by the insurance company after an amount is deducted for co-payment. The
hospitals are additionally funded by the ARH, on the basis of population, health needs and hospitals’ efficiency. Provision is based on a fee-for-service basis. Prices are set by means of negotiation between the provider and insurance funds and have to be approved by the government.

The French system is only partly decentralised. Its hospital planning is regionalised and although their interests are being represented at the regional level, insurance funds stay operating mainly at a national level. Especially the financing system could be typified as hierarchical. Insurance premiums are set by the Ministry of Health. Negotiated prices have to be approved by the parliament and a ceiling is set to total health expenditures. Coordination of the actors is being carried out by the top of the hierarchical pyramid: the Ministry of Health. The ARH can be seen as regional agencies of the Ministry, organised units of specialised planners. Actors as the insurance companies and the GPs are, although more and more subject of government regulation, independent. These parties keep on maximising their own welfare by offering opposition to government intervention. The objectives for health policy are set centrally by the Ministry and they are reinforced by regulation.

Table 6 matches the information on health care systems with the theory on coordination in chapter two.

From the analysis in paragraph 8.4, it can be concluded that in two of the three cases, there is indeed a trend of decentralisation. However, as some tasks were being decentralised, ties with the centre were being strengthened in other aspects. Especially when the scope is narrowed down to the financing process, a (re)centralisation process can be perceived. The UK strengthened ties with all actors while implementing a quasi-market at a very local level. It also only started to create a national framework of standards and monitoring institutions from this period on. In Spain, administrative authority was completely devoluted to the regional level. The AC are however still to a large extent financially dependent of the central government. Moreover, also Spain has only recently developed a national framework of standards. Therefore, using the rhetoric of decentralisation and marketisation processes, the national governments simultaneously also partly recentralised.

All three countries recentralised, some more directly than others and some in combination with decentralisation or marketisation. The recentralisation measurements were all taken out of reasons for equity. The three countries have all struggled with differences in access and quality, and tried to resolve them by using instruments as frameworks to assert an amount of control over the actors.
8.6. Regional differences in the UK, Spain and France

The last research question examines the health supply in the case countries: “What regional differences in health care can be perceived in Spain, France and the United Kingdom and how could they be explained?” Equity is a complex and multi-dimensional concept. The limitations to this study as discussed in chapter one must be kept in mind, as the indicators used are not completely satisfactory.

The United Kingdom
The observed inter-regional inequalities in England seem not to be very significant. Literature on geographical equity in the English system tends to concentrate on the problem of intra-regional inequalities. These inequalities seem to be linked to socio-economic inequalities and especially the discrepancy between rural and urban communities.

The current allocation formula, although very detailed, seems to strengthen rural-urban inequities. The specific indicators used in the English formula seem to measure urban deprivation, which differs from rural deprivation. (Haynes 2000). Also, inequities seem to

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>UK</th>
<th>Spain</th>
<th>France</th>
</tr>
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<tbody>
<tr>
<td>Organizational from</td>
<td>Partly decentralised</td>
<td>Decentralised</td>
<td>Partly decentralised</td>
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<tr>
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<td>Top of the hierarchy</td>
<td>Negotiation</td>
<td>Top of the hierarchy</td>
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<tr>
<td>Actors in the coordinating process</td>
<td>Organized units of specialized planners</td>
<td>Rationale, welfare maximizing regions</td>
<td>Organized units of specialized planners, but also rationale, welfare maximizing actors</td>
</tr>
<tr>
<td>Approach to relationships</td>
<td>Competitive</td>
<td>Competitive</td>
<td>Competitive</td>
</tr>
<tr>
<td>Kind of relationship</td>
<td>Compulsory</td>
<td>Compulsory</td>
<td>Compulsory</td>
</tr>
<tr>
<td>Driving force</td>
<td>Rationality and the common interest</td>
<td>Mutual dependency</td>
<td>Rationality and the common interest</td>
</tr>
<tr>
<td>Objectives envisaged</td>
<td>Designed and consciously organized</td>
<td>Designed and consciously organized as well as spontaneously generated</td>
<td>Designed and consciously organized as well as spontaneously generated</td>
</tr>
<tr>
<td>Planning</td>
<td>Ex ante</td>
<td>Ex post and ex ante</td>
<td>Ex ante</td>
</tr>
<tr>
<td>Instruments</td>
<td>Set of rules</td>
<td>Trust and cooperation</td>
<td>Set of rules</td>
</tr>
</tbody>
</table>

Table 6 Characterisation of the case countries
occur on a specific local scale. A previous lack of national standards has created large differences in the quality of the health care. (Baker 2001)

“Formula fever has distracted attention from the now more important issue of how the allocated resources are spent. Health authorities and general practitioners should focus their attention on whether current spending patterns reinforce socially produced inequalities and, if so, doing something about this at local level” (Sheldon, 1997)

Spain
Also in Spain, regional inequities seem to be linked to socio-economic inequities. The literature did not find any clear evidence on inter-regional inequities. Also the short case-study concluded that health care facilities seem relatively equally distributed, although there seems a tendency to concentrate in economic more prosperous regions. In the research of Doorslaer and Masseria however, strong regional influences on socio-economic inequities were found. This means that due to the diversity in health care systems, the differences in health care utilization between the well off and the deprived are in some regions larger than in others.

France
In the French case, inequities seem as a consequence of the relative freedom of the GPs. The French government seems only partly capable of stimulating GP’s to set up practices in less favoured regions. Concerning hospital care, the French government is using extended planning tools to ensure equity. The quantitative hospital planning by means of the carte sanitaire ensured the availability of any medical treatment within a reasonable distance. Socio-economic inequities seem to arise when local hospitals are not able to provide a certain level of quality. This problem might be solved in the coming years, as health plans seem to focus more and more on quality and efficiency objectives.

From the case studies conducted, only in the French case significant inequities could be perceived, relating to the spread of physicians. However, this could be due to the methodology used in this study and its limitations - see chapter 1 -.

The literature shows that the geographical problem is not necessarily inter-regional inequity, but intra-regional inequity, strongly linked to socio-economic inequities. The deprived are in some regions worse off than in others, probable because they are less able or prepared to travel farther to get better health care. Decentralisation is therefore nor the solution nor the problem; the intra-regional differences in quality and socio-economic circumstances are based on an individual level. It appears to be a problem of a lack of national standards on quality and especially a lack of instruments to ensure that national standards are lived up to.

8.7. Conclusion
After the discussion of the research questions in the previous paragraphs, the central question of this thesis will be answered in this paragraph: “Which instrument of coordination would be most optimal for national governments to realize the most geographical equity between regions in their health financing systems?”
By implementing different reforms, the central governments of the case-countries discussed seem to have had the same objective: asserting the grip on the actors in the field. In all three cases, it was concluded that there was actually a lack of national standards and guidance causing all sorts of problems as inequities, but also poor quality and inefficiency. Many (re)centralizing measurements were implemented to end regional inequities, as for example the Nationals Service Framework in the UK, the Cohesion and Quality Law in Spain and the foundation of the ARH in France. It seems that there is definitely a role for the hierarchy to play when it comes to equity.

The hierarchy gives the government instruments as legislation to ensure that values as equity are preserved. For example, the centrally managed NHS can steer GPs by payment to, for instance, move to area’s where health care facilities are sparser. In the French system, it proved to be very hard to encourage the independent GPs to “serve the common interest” and work in areas deprived of primary health care, as the GP’s are not directly payed by and accountable to the French government.

Moreover, it is not proven that less hierarchical structures will help save costs in all situations. For example, the French system, allowing actors the more autonomy than for example the British system, is known as a big spender. The autonomous GP’s in France are notorious for over-prescription and waste.

However, extended planning could have its negative effects. As was already discussed in chapter 2, it is very hard to plan ex ante, especially when it comes to a multi-dimensional concept as “health need”. Also, the importance of efficiency should not be forgotten. It has no use redistributing resources when a lot of resources get “lost” during the process.

The decentralisation process does not seem to be solution nor problem to the interregional situation on equity. From the literature it could be concluded that inequities in health care are closely related to socio-economic inequities. Therefore, differences in access to and quality of health care will seize to exist within and amongst regions as long as socio-economic differences will exist.

8.8. Recommendations

From these conclusions, a few recommendations can be derived.

In choosing between instruments of coordination, it seems that governments should make informed decisions on how and when to intervene. (Scott 2001). According to Okun: “The market needs a place, and the market needs to be kept in place” (1975:119). The introduction of small scaled market mechanisms and business techniques as a means to safe costs and take advantage of the positive sides of the market seems good. However, this may not be accompanied by a lack of government steering and control. In order to ensure a value as equity, there should be national - or even international - standards on quality. Moreover, it should be ensured that also deprived areas have sufficient health care facilities of good quality. This can only be realised by hierarchical intervention.

In England, the emphasis has been for long on perfectionising the allocation formula. A shift of attention from pure quantitative formula-fever to more qualitative objectives, as advocated by Sheldon (1997) for the British case - and as seems to be actually happening in the French Regional Strategic Health Plans - seems recommendable. As has already been stated, it is very hard - if not impossible -, to determine the health need of a region ex ante to a very
exact extent. It would therefore be more realistic to build a mechanism in the allocation process that compensates potential losses on an ex post basis, as is already the fact in Spain.

Interregional and intra-regional inequities seem to comply with socio-economic inequities. A true improvement of the situation could therefore only be realised by equalising the total socio-economic situation within and between regions.
Bibliography


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Appendices
Appendix 1: Map of the British NUTS-regions
Source: Eurostat, 2006
Regional equity in health care systems
Appendix 2: Data for the English regions

<table>
<thead>
<tr>
<th>Geographical unit</th>
<th>GDP total</th>
<th>% of GDP</th>
<th>GDP per capita</th>
<th>Population total</th>
<th>Population %</th>
<th>Population density</th>
<th>Classification</th>
<th>Crude death rate</th>
<th>Physicians per 100.000</th>
<th>Beds per 100.000</th>
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<td>100%</td>
<td>26679.6</td>
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<td>urban</td>
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<td>-</td>
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<td>10.20%</td>
<td>23681.3</td>
<td>6731400</td>
<td>11.40%</td>
<td>475.6</td>
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<td>193.6</td>
<td>397.3c</td>
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<td>4967200</td>
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<td>urban</td>
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<td>4175200</td>
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<td>intermediate</td>
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<td>-</td>
<td>-</td>
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b: in 2000. source: OECD, 2006e
c: data over 1999
Appendix 3: Map of the Spanish NUTS-regions
Source: Eurostat, 2006
### Appendix 4: Data for the Spanish regions

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<tr>
<th>Geographical unit</th>
<th>GDP total(^a)</th>
<th>% of GDP(^a)</th>
<th>GDP per capita(^a)</th>
<th>Population total(^b)</th>
<th>Population %(^b)</th>
<th>Population density(^b)</th>
<th>Classification(^b)</th>
<th>Crude death rate(^a)</th>
<th>Physicians per 100.000(^a)</th>
<th>Beds per 100.000(^b)</th>
</tr>
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<td></td>
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<td>2725600</td>
<td>7.10%</td>
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<td>1.40%</td>
<td>101</td>
<td>intermediate</td>
<td>10.2</td>
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<td>19181.8</td>
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</table>

b: in 2000. source: OECD, 2006e
c: in 2001
Appendix 5: Map of the French NUTS-regions
Source: Eurostat, 2006
Appendix 6: Data for the French regions

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<th>Geographical unit</th>
<th>GDP total</th>
<th>% of GDP</th>
<th>GDP per capita</th>
<th>Population total</th>
<th>Population %</th>
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<th>Classification</th>
<th>Crude death rate</th>
<th>Physicians per 100.000</th>
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<td>Urban</td>
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<td>424.1</td>
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<td>22509.1</td>
<td>1339400</td>
<td>2.26%</td>
<td>52.3</td>
<td>Rural</td>
<td>9.4</td>
<td>262.6</td>
<td>770.5</td>
</tr>
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<td>2.51%</td>
<td>19405.2</td>
<td>1865800</td>
<td>3.15%</td>
<td>96.1</td>
<td>Rural</td>
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<td>21862.6</td>
<td>1786400</td>
<td>3.02%</td>
<td>145.2</td>
<td>Intermediate</td>
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<td>4.15%</td>
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<td>Rural</td>
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<td>812.2</td>
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<td>2.42%</td>
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<td>21045.5</td>
<td>1609300</td>
<td>2.72%</td>
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<td>Nord - Pas-de-Calais</td>
<td>74273</td>
<td>5.15%</td>
<td>18548.6</td>
<td>4013900</td>
<td>6.78%</td>
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<td>Type</td>
<td>Value 6</td>
<td>Value 7</td>
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<td>Pays de la Loire</td>
<td>69967.8</td>
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<td>4.33%</td>
<td>21170.3</td>
<td>4.99%</td>
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<td>19478.3</td>
<td>1.20%</td>
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<td>12.8</td>
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<td>24129.3</td>
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<td>5743600</td>
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<td>19911.4</td>
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<td>18311.5</td>
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<td>10.5</td>
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<td>5060.7</td>
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b: in 2000. source: OECD, 2006e