2010

Blood Tests on Capitol Hill?

Colin Jennings
University of Redlands

Follow this and additional works at: https://inspire.redlands.edu/cas_honors
Part of the Medicine and Health Sciences Commons, and the Public Affairs, Public Policy and Public Administration Commons

Recommended Citation

This work is licensed under a Creative Commons Attribution-Noncommercial 4.0 License
This material may be protected by copyright law (Title 17 U.S. Code).
This Open Access is brought to you for free and open access by the Theses, Dissertations, and Honors Projects at InSPIRe @ Redlands. It has been accepted for inclusion in Undergraduate Honors Theses by an authorized administrator of InSPIRe @ Redlands. For more information, please contact inspire@redlands.edu.
Blood Tests on Capitol Hill?

Colin Jennings
Honors Thesis
Department of Economics
University of Redlands

Academic Year 2009-10
TABLE OF CONTENT

Introduction 3

Chapter 1: 9
An Economic Framework for Government Intervention in The Health Care Market

Chapter 2: 16
Public Health Insurance Systems in Germany and Great Britain: a Comparative Study
  2.1: First Case Study: Germany 16
  2.2: Second Case Study: Great Britain 20
  2.3: Conclusion 23

Chapter 3: 25
The Current Health Care Reform Proposals in the United States
  3.1: The House Bill 29
  3.2: The Senate Bill 32
  3.3: Other Proposals 34
  3.4: Conclusion 36

Chapter 4: 40
The Value of Government Participation in the Health Care Market
  4.1: Review of Relevant Literature 41
  4.2: The Econometric Model 48
  4.3: Conclusion 57

Conclusion 59

Bibliography 62
INTRODUCTION

In 2001 there were over 41 million Americans who were not covered by any form of health insurance. This was 14.6% of the population at that time. There were 5 states that had only 8% of the population uninsured, and Texas, one of the largest states by population, had the highest number of uninsured at 24%, almost a quarter of its population. (Kaiser Family Foundation) These numbers have been increasing every year since then, and one of the main causes of such phenomenon is that the cost of health insurance has been growing at an alarming rate. While there is a political constituency in support of the idea that healthcare should remain de-linked from collective responsibility and thus from the government’s duties, it is my personal inclination that everyone should have some kind of health insurance, and thus also that any individual should be able to access medical care without having to pay more than he or she can afford. This thesis is informed by such socio-political and ethical perspectives.

Looking at the legislature’s aggressive attempts to change the sad situation that characterizes the American health insurance, it is obvious that change is something people want—including those who believe that healthcare is a private, not public, matter. The fundamental question boils down to what the best way to fix the problem might be. In this project I proceed with an investigation of two alternative ways to fulfill the intent of rationalizing healthcare in the United States: 1) with the government as one of the healthcare providers; 2) without the government as one of the healthcare providers, that is, with a government that maintains the sole role of setting rules and subsidizing the healthcare needs of the poorest segments of the population.
The difficulty of identifying ways and extent to which the government should intervene to eliminate the "uninsured" from the American landscape is the main reason that has prevented changes from already occurring. Part of the population seems to think that a government's direct participation in health care provision would not only offer people another option (the so called *public* option) in their choice of what health insurance plan to use, but would also increase the depth of market competition, thus contributing to the rationalization of the costs of private health insurance plans --as the insurance companies would need to be competitive vis-à-vis the government's option to stay in the market-. Others however fear that the government may be unfairly competitive in comparison to private health insurance companies, thus becoming a *de facto* monopolist; and that a government-run health plan would end up looking like one of the country's inefficient public agencies. Those who believe that change in the health insurance market of the United States is long overdue, and yet think that the public option would not be an appropriate course of action, tend to lean more towards the second alternative, in which the government is solely a rule-maker and a subsidizer.

This is not the first time that the United States has considered health care reform: at the beginning of another democratic president's term, the Clinton administration made a strong move to try to reform the healthcare insurance market. Clinton and his administration crafted the legislation and brought it to Congress, as opposed to President Obama's method of encouraging the Houses of Congress to design the legislation themselves. The Clinton administration's attempt at healthcare reform was grandiose to say the least, as it attempted to overhaul the entire industry from top to bottom. Ultimately, "Clintoncare" or "Hillarycare," as the proposed legislation came to be known,
was a huge failure that produced no change in the healthcare system. The main reasons the Clintons’ attempt failed all related to the fact that they proposed radical change in the way the health insurance functioned, encountering opposition from all sides: insurance companies, pharmaceutical companies, and the population itself. Too dramatic of a change, people thought. The hope now, for those so inclined, is that President Obama’s plan to reform the health care system will not scare the business world and the population in the same ways.

As mentioned above, the point of departure of this thesis is the assumption that a healthcare reform is necessary, and that accessibility of medical care by the entire population of the United States, one of the wealthiest countries in the world, is a right that people have acquired. Approaching the question of which alternative embeds the highest promise in effectively tackling the healthcare problem ceases to be a mostly ethical, moral, and political enterprise, and becomes a relevant economic question, that can be analyzed according to multiple lenses. In order to perform any meaningful analysis on alternatives that, at their core, are distinguished by the entry or non-entry of the government in the healthcare market, one needs to become familiar not only with the effects on competition that the entry of the government in a market might cause, but also with the specifics of each alternative model, that are contained in the currently proposed healthcare reform legislation. The first two chapters of the thesis address these preliminary and essential aspects, and in some fundamental way take the role of the literature review that typically introduces the more analytical portion of an essay.

The first chapter of the thesis lays a basic economic framework for the work that is done in subsequent chapters of the thesis. When looking for answers to policy
questions it is always essential to first acquire an understanding of the theoretical background on the basis of which the questions are asked. In this case, as an economist, it is important that before proposing any policy option the economic rationale beneath our questioning is clarified. This chapter is an attempt to show some of the structural issues that are present in the health care market, including the high price of health insurance. And finally there is discussion of the nature of the service itself that may create a need for the government to get involved.

The second chapter surveys the healthcare insurance systems of Germany and Great Britain, two countries in many ways comparable to the United States, in which both provision and administration of healthcare include a significant involvement of the government. Germany and Great Britain are just two of the many other industrialized countries in which healthcare and health insurance markets are substantially different than those of the United States. The second chapter provides a brief breakdown of these countries' healthcare systems to see whether there is any objective reason for which other countries are able to have sustainable public healthcare systems that are perceived unfeasible in the United States. Is it a matter of efficiency? What is different in terms of effectiveness and efficiency of delivery of healthcare when the government is the main provider versus when there is minimal interference of the government in the healthcare market? Perhaps the system adopted in other industrialized countries can act as inspiration for the evolution of the United States healthcare system. The two case studies developed in the second chapter may allow for a less alarming approach to the possibility that the government of the United States might administer healthcare insurance for its
entire population, without, because of that, being charged of murder of the whole capitalistic system.

The third chapter of this essay moves the lens towards the United States, and attempts a schematization of the current legislative proposals on healthcare reform. As mentioned earlier, the legislation proposed to reform the American healthcare system has taken different and very specific forms, and a survey of the various proposed paradigms is necessary in order to gain an understanding of what’s to be evaluated. Thus the third chapter of the thesis reviews as factually as possible the healthcare legislation under current debate on Capitol Hill. Because journalistic news are often subject to some degree of political bias and are typically embedded in commentaries, chapter three refers directly to the main actual legislative proposals, outlining the fundamental differences among them. The goal of such survey is not only to accurately present the possibilities of healthcare reform under scrutiny in the United States’ Congress and Senate, but also to gather sufficient ground to formulate meaningful questions that will frame the analysis developed in the fourth chapter.

The fourth chapter of this thesis offers a mostly empirical analysis of the government’s increased participation in the health care market, accompanied by an extensive literature review. The first and most relevant question raised in the fourth chapter in relation to the importance of the government’s direct intervention in the healthcare market, looks at whether the existence of a public option in the insurance market may improve the quality of health (life expectancy, mortality, etc.) in the country. The econometric model utilized to approach this question is the well-known ordinary least squares (OLS), through which a set of variables that should reasonably have an
effect on the health outcomes of a country is discussed and implemented. The goal of this econometric analysis is to evaluate the likelihood that the quality of health in a country improves as government involvement in the health care market increases.

A final concluding chapter rewinds back to the fundamental question raised in this essay, that is, whether the current healthcare reform proposal in the United States should add a public plan to the health insurance system. In some ways, this thesis responds to a sense of civic duty --the duty of asking the question- that should arise in each citizen of a country. The United States health insurance landscape is clearly below par, is likely to significantly change in the near future, and this essay --together with all Americans-- tries to figure out the best course of action to improve the health of our nation.
CHAPTER 1
AN ECONOMIC FRAMEWORK FOR GOVERNMENT INTERVENTION THE HEALTH CARE MARKET

The purpose of this chapter is to delineate an approach to the opportunity for government intervention in the health care market specifically from an economic point of view. In economics, there are specific rationales that support the choice between government intervention and government regulation. *Laissez-faire* economics assumes that markets --and therefore the firms that operate within them-- function efficiently and thus with the flexibility required to reach equilibrium. Whenever a market does not operate efficiently, does not take into consideration all costs and benefits, or does not contain the necessary flexibility to achieve equilibrium, we say that there must be a level of *market failure*. This chapter lay a basic framework of some economic terms and ideas that show that the healthcare market is not operating at an efficient or equilibrium level, and thus that there is appropriate economic reason to approach the question of whether the government should step in. The chapter proposes an analysis of the market through the lenses of market structure, cost analysis, and the nature of the good itself.

When considering the structure of the market in health care it is important to recognize the structure of the health insurance delivery system. At the current time and after the new health care reform bill takes full effect, health insurance companies offer different insurance policies in different states; some states have different health insurance companies than other states. What this creates is a situation that substantially limits the degree of competition in the market, leading to an oligopolistic market structure. An oligopoly is a market in which there are only a few competitors that provide services to a large group of consumers. Because of the limited degree of competition among firms
(insurance companies), this market structure creates a situation in which each firm’s profit is maximized by providing less service at a higher price—than in more competitive market forms—. Oligopoly protects firms from the risk (a certainty in long-run perfect competition) of being out-competed by other firms whenever the price is higher than the average cost. In this situation we would see that even in the short-run the supply curve for the oligopoly is much steeper than the supply curve that would prevail in perfect competition, crossing the demand curve at a higher equilibrium price and lower equilibrium quantity than the supply curve of the perfectly competitive firm. This can be seen in the graph below:

Thus, the market operates inefficiently due to the fact that the oligopoly is undersupplying health care to the consumers and that the price is higher than it would be in perfect competition. The cost this represents to the consumer—and thus society—, which is directly related to the degree of market power these companies have, can be shown by the size of the Deadweight Loss (DWL). This is done by looking at the difference between the perfectly competitive and oligopoly equilibrium levels of price...
and quantity. This can be seen in the graph below where the shaded region is the total amount of DWL that arise when a perfectly competitive market becomes an oligopoly:

![Graph showing demand and supply in a perfectly competitive market versus an oligopoly market.]

While the total value (a dollar amount) of this area will not be quantified here, what the DWL shows is the inefficiency (cost) to society produced by the specific market structure health insurance companies are characterized by: it thus provides a measurement of market failure: some of the benefits society could obtain from a more competitive health insurance market are lost.

While this could be in itself a sufficient reason for government intervention, that is, for a reform of the health care system by adding a public insurance option and increase the level of competition in that way, the current reform does not contain remedies to the limited number of firms that operate in each state market. The government has instead stipulated ways to bring the affordability of health insurance under control by using subsidies, and by making the existing markets function more efficiently both institutionally and by looking at costs. Why are healthcare costs so high? One of the most important reasons beneath the fact that healthcare has become so expensive over the last
few decades has been the increase in quality-improving technology in the health care delivery system (Gruber, p. 467). There has been in fact a vast improvement in the quality of medical procedures and increased accuracy in the tests that are being done for diagnostic purposes. Most if not all would admit that this is a good thing overall, but these new tests and procedures definitely cost more than the now obsolete ones. And while more recently the cost of these newer procedures and tests has decreased, the total amount of healthcare spending has increased. How could this be? The answer is that these tests have been used much more frequently than before: thus even if the cost (and price) decreased, the quantity has increased, producing an overall increase in spending. While it seems obvious that this increase in spending needs to be studied more deeply, it is hard to imagine that a containment of spending could be achieved by decreasing the use of the best available medical procedures. Along the same lines, administrative costs are also good candidates for downward revision, and there is reason to believe that such a revision could be promoted by government participation in the healthcare market. Because the higher administrative structure for healthcare is already in place in the government—through the Department of Health and Human Services—, the typically very high costs of top management in very large private companies would be spared, thus giving a government-run option a competitive edge that would push private companies to reduce their own administrative costs.

The possible ability of a government-run health program to introduce relatively cost-effective practices in the market may be a good story to link government intervention to more affordable healthcare insurance, but none of the arguments presented provides an economic justification for high prices. There is actually reason to believe that
prices *should* not be much lower than they are. This has to do with the particular nature of the service in question: health insurance, and thus health care, is a service that does not limit its benefits to the private individual: there is good reason to believe that there is a moderate amount of social benefit arising from health insurance and so healthcare. One can look at this situation as one that is affected by positive externalities, that is, *social* effects that are not included or represented in the equilibrium price. In this case, the externality is the benefit that others receive from the fact that an individual receives healthcare: such benefit that goes beyond the specific healing effect the person receives is called social benefit. Examples of these "external" effects of healthcare abound. Suppose that someone at your school has a cold, and does not have health insurance: she/he will likely not receive treatment or medicine to fix the health problem. Thus, you now are much more likely to catch that cold and miss days of school because she/he did not have access to proper care. This is clearly an easy example of the social benefit of health care. Using the same example while imagining it at a work place, the employer would benefit greatly from the fact that her/his employees have health insurance: by receiving proper treatment they will miss fewer days of work and the firm can be more productive. There is also an immediate monetary social benefit in health insurance: when an individual is without health insurance and yet in need for care, her/his only option is to go to the emergency room and receive urgent care, which does not require payment to people with no means. While there is no direct cost to any other individual, think of what does happen next. Someone must pay for the emergency room's supplies and the doctor's time: the hospital pays the doctor and buys more supplies. Then the hospital must charge the insurance company for the cost of those items. And how does the insurance company
make up for the extra costs? Clearly by increase the insurance premiums of those who do have health insurance. Increasing the number of insured people clearly has a number of both private and social benefits.

These external effects of wider health insurance can be seen through economic modeling., in the graph below:

We now clearly have a dilemma. On one side we have already identified the need to substantially decrease the excessively high costs of health insurance. On the other, by including the positive externality produced by health insurance we end up with an equilibrium price higher than that of a perfectly competitive market (because it now represents not only private but also social benefits). How should this situation be approached? The appropriate policy in an economic sense is that something needs to be done to decrease the monopoly power of firms (insurance companies) and drive the oligopolistic equilibrium into a competitive one (another competitor perhaps?). This, together with regulation that reduces discriminatory practices in granting health
insurance, would increase the total number of insured and would maximize social benefit. And then there must be some sort of subsidization of the excess price that would be charged to reach this higher number of insured. It seems obvious that in this situation there needs to be some sort of intervention by the government. There is a level of market failure and there is a social benefit that is not being taken into account by the competitive equilibrium. We can’t at this point conclude that therefore a public option is needed; perhaps astute regulation could achieve the same results. But what we can certainly conclude is that there is a strong economic rationale to proceed with this analysis, and study the possible scenarios that may materialize in the United States once the healthcare reform takes place.
CHAPTER 2
PUBLIC HEALTH INSURANCE SYSTEMS IN GERMANY AND GREAT BRITAIN: A COMPARATIVE STUDY

The health care models in countries culturally and economically comparable to the United States are substantially different from the American one. Why is it that in every other industrialized country the government directly provides health insurance and health care to its population while the United States continues to almost exclusively maintain a private system of provision of health services? This chapter looks in some detail at the healthcare systems of two other industrialized countries to shed light on their differences, benefits, and possible shortcomings: the German public healthcare system is possibly the oldest in the world; and the British National Health Service (NHS) is often considered the closest vis-à-vis the United States’ one.

2.1 First Case Study: Germany

Germany implemented its current national health care system in 1883, and has had mandatory health insurance since that time. The German health care system is organized as a blend of decision-making and administrative responsibilities held by both federal and regional public agencies. At the federal level, the Ministry for Health and the parliament control five specific areas of the national healthcare system: administration and international relations; pharmaceuticals/medical products and long-term care; health care and statutory health insurance; protection of health, prevention and containment of disease; consumer protection and veterinary care. (European Observatory, 22)
The regional level guarantees effectiveness and functionality of the overall national system. Thus, states (Länder) are required to secure health insurance to every citizen and to ensure the implementation of the following general principles: all hospitals treat all citizens; all physicians see all citizens; state-wide “sickness funds” (the German equivalent to something like insurance “co-ops”) are open for contract with any citizen; and freedom of choice across all physicians, hospitals, and sickness funds of the state of residence is maintained for the whole population. Sickness funds are modeled on one of the oldest insurance institutions of the western world: perhaps the “credit union” is the closest type of institution in the United States. The “funds” operate as non-profit agencies, each governed by elected members of fund itself. They raise financial resources through required collections from their members, and the collection rates are decided by each fund on the basis of the projected health needs of the members. All sickness funds are overseen and regulated by both the federal government and their respective Länder.

In addition, the Länder governments are often organized in regional ministries that are responsible for the administration and regulation of a number of health-related categories, including public health services and environmental hygiene; health promotion, prevention and AIDS care; state-owned hospitals and hospital planning; supervision of health professions and corresponding professional institutions; psychiatric services and illegal drugs; pharmaceuticals and supervision of pharmacists and their professional institutions (European Observatory, 25).

There are also important corporate aspects in the German healthcare system. Physicians’ and dentists’ legal associations and the sickness funds mentioned above are
all organized as corporations, and these corporate institutions provide each group with political and legal representation whenever necessary.

Health care regulatory and planning responsibilities are specified and assigned to the federal government, the Länder, and the corporations, by the so-called Social Code Book. The central government regulates and administers the following aspects of the system: mandatory and voluntary membership in sickness funds; content of the sickness funds’ benefits packages; goals and scope of negotiation between the sickness funds and health care providers; organizational structure of sickness funds and their associations; financing mechanisms including risk compensation schemes across funds; tasks and organization of medical review boards; collection, storage, use, and protection of data; special regulations for the eastern part of Germany (European Observatory, 30). Maintenance of hospitals’ infrastructure, public health services such as hygiene and monitoring of transmissible diseases, and medical educational curricula are instead within the scope of the Länder’s responsibilities. Finally, it is the corporate aspect of the sickness funds that negotiates fees, quality, and quantity of insured services on behalf of all members, and that collects and manages funds. The medical and dental corporate associations are responsible for the provision of all personal health care services, including ambulance services. While these corporations have substantial decisional power in the administration and delivery of health care, there is a clear web of regulations administered by public entities, including the Federal Ministry of Health that contains and oversees their decisional freedom. Clearly, the organization of the health care system in Germany is public and highly decentralized, with most of the administrative and delivery responsibilities carried on by the regional districts (Länder).
The basic benefits included in the public plans are prevention, screening, and treatment of disease, and transportation. There are also private health insurance companies, even though they cover only 7.1 million individuals, less than 10% of the 72 million covered by the government's program and the sickness funds.

The socio-economic breakdown of the participation in the healthcare system is also of particular interest. Because individuals with sufficient income can effectively choose whether to receive health care through public or private insurance, sickness fund membership is only required for people below a certain income level. Thus, 88% of the population participates in the governmental system, 9% use private health insurance, 2% are public employees with free health care, and only 0.1% of the population is uninsured (European Observatory, 39). The financial means of the sickness funds come from members' contributions, and such contributions are based on members' income and not on members' risk levels. Their contribution also covers non-working spouses and dependent children. For the employed, the employer and the employee split the contribution to the fund evenly. Sickness funds are responsible for paying members for missed work (80% of income) after the first six weeks during which employers are required to pay regular salary (100%). While statutory insurance is the main source of funding for health care in Germany, taxes are also used; finally, private funds finance the relatively small private insurance market.

One area of the public system that has been recently under particular scrutiny and that will require adjustments and reforms is the containment of the overall excessive cost of health care. In this regard the German government has already initiated change, such as a budgeting process for sectors or individual providers; reference price setting for
pharmaceuticals; restrictions on high cost technology equipment and number of ambulatory care physicians per geographic planning region; and increased co-payments (European Observatory, 107-108). These decisions have already proven effective in moderating the growth of costs in the health care sector, and have begun to stabilize the contribution levels in the sickness funds.

2.2 Second Case Study: Great Britain

The United Kingdom operates under a national, government run and regulated system called the National Health Service or NHS. The program was established in 1948 but has undergone substantial changes ever since. Unlike the German health care system, the NHS is a program that is run completely by the central government. The NHS is what is known as a single-payer system: this means that one institution, in this case the central government, is responsible for paying for all health care. In the United Kingdom, care from the NHS is free to all participants, because it is completely paid for through tax revenues. While the federal government regulates the NHS, specifics of the system slightly vary across England, Wales, Scotland, and Northern Ireland. In this section the focus will be on the English branch of the NHS.

The NHS defines itself as a universal service for all, based on clinical need rather than ability to pay. Its core values are outlined in its mission, which includes providing a comprehensive range of service; shaping its services around the needs and preferences of individual patients, their families, and their caretakers; responding to different needs of different populations; and working continuously to improve the quality of services while consistently minimizing errors; supporting and valuing its staff; using public funds for
healthcare solely for the benefit of patients; and finally embracing proactive behaviors to keep people healthy and reduce health inequality.

The NHS is a highly bureaucratic system, with overlapping regulations that come from a hierarchical ladder of public institutions and agencies. The highest level of control over the operations of the NHS comes from the national Parliament. The Acts of Parliament (that involve both houses) are the primary way in which legislation is passed on the health services in England and Wales. While there is constant debate on how involved the government should be in the health care system, there is an implicit limit on how disengaged the national government can be from the administration and regulation of the healthcare system, and this is due to the fact that funding of the NHS relies on tax revenues, the use of which is responsibility of the Parliament. (Rivett)

The next level of the regulatory ladder is occupied by the Secretary of State for Health. This position is part of the cabinet of the Prime Minister and is responsible for all actions that pertain to the Department of Health, which is the main governing body of the National Health Service. The Department of Health oversees the modernization of the NHS and maintains responsibility over the general health of the country. Its roles can be summarized as: setting overall direction and leading transformation of the NHS and of social care; setting national standards; securing resources and making major investment decisions to ensure that the NHS and social care have the capacity to deliver; working with key partners such as the so-called Strategic Health Authorities and the Care Quality Commission to ensure a minimum quality of health services. (Rivett)

The Strategic Health Authorities manage the NHS in their designated areas of the country. These Strategic Health Authorities are the key link between health services and
the Department of Health. In fact, they can be considered agencies of the Department of Health that carry out the Department’s directives. Their responsibilities include developing plans for improving health services in their local areas; making sure local health services are of a high quality and are performing well; increasing the capacity of local health services so that they can provide more services; making sure that national priorities (for example, programs for improving cancer services) are integrated into local health service plans (NHS, 2010). The Strategic Health Authorities also oversee the different branches of the NHS in their assigned geographical areas; such branches are known as “trusts,” which are further subdivided depending on the specific services provided. There are five different types of trusts: Primary Care Trusts, Acute Trusts, Ambulance Trusts, Care Trusts, and Mental Health Trusts.

The Primary Care Trusts are local organizations that are supposed to effectively recognize all of the community’s health care needs. They are responsible for providing primary care and community services, and they may commission specific tasks to outside organizations. Primary Care Trusts set their own budgets and priorities vis-à-vis the larger goals set by the Department of Health and the Strategic Health Authority of their region. These trusts are responsible for employing the physicians in the area and making sure that the number of primary care physicians is appropriate for the population. Primary Care Trusts currently control approximately 80% of the NHS budget. (NHS, 2010).

Acute Trusts are responsible for, regulate, and oversee public hospitals. They are responsible for the quality of health care services provided by the hospitals of their jurisdiction, for their effective and efficient use of funds, and for development planning
of individual units. Acute Trusts are the largest employers of all trusts, and are responsible for hiring all nurses, doctors, pharmacists, etc., that are employed in the hospitals of their geographical areas. (NHS, 2010)

Ambulance and Mental Health Trusts are self-explanatory, while Care Trusts have generic tasks that typically combine activities also performed under the auspices of Primary Care and Mental Health Trusts. There are very few Care Trusts in England. (NHS, 2010)

The NHS is very much intended to be a system that is “free at the point of delivery.” This means that members of the NHS pay nothing when they actually receive service, because they have theoretically paid for it already through taxes. Tax revenues are allocated by the Department of Health to the Trusts, and then Trusts are responsible for all disbursements to physicians and others that directly provide health care. While taxpayer money is the main source of funds for the NHS, the government also uses additional sources to further fund the national health care system, such as car park fees and charges for specific prescriptions. Finally, private health insurances are also available, to the discretion of the more well-off portion of the population.

2.3 Conclusion

Both the German and British health care systems guarantee care to all individuals; the way they achieve universal coverage however reflect the level of federalism that characterize their governments. Germany has a strong federal structure, with political and administrative power clearly layered between central and regional governments: correspondingly, the German public health care system is based on decentralization of
administrative and regulatory responsibilities. The British political system is highly centralized in Westminster: correspondingly, it is the Parliament and the Prime Minister's cabinet that maintain most of the regulatory and administrative power for public healthcare. The British system thus is based more on delegation than decentralization.

Both public health care systems were established a relatively long time ago, and the private health insurance market developed with a strong public system already in place. This makes the comparison between these systems and the American system quite complex, as the U.S. faces opposite circumstances: a well-established market of private health insurance companies, and a still-to-be-born public system. The challenge is such that an American public system may never find sufficient economic and political support. Yet, even though well-established, the American private health care system reveals a major shortcoming that the current administration is determined to repair: a vast number of citizens who cannot access health care. In the next chapter, the two main reform proposals currently discussed in Congress will be outlined. One resembles in many important ways the genuinely European systems outlined in this chapter, while the other would superimpose a stricter regulatory system to the existing structure, which would remain fundamentally unaltered.
CHAPTER 3

THE CURRENT HEALTHCARE REFORM PROPOSALS IN THE UNITED STATES

The United States is the only industrialized country in the world that does not guarantee health care coverage to all its citizens. The goal of this chapter is to illustrate the main reform plans proposed in the United States legislature to rectify this fundamental shortcoming. What is presented here is fact: the statements and information contained in this chapter come directly from the bills that the House of Representatives and the United States Senate respectively produced in their committees. The hope is to shed some light on the very complex web of reform proposals and sub-proposals, and on some of the effects that different options may have on the American health insurance market and on the “health” of the country, a topic that will be more specifically explored in the third and final chapter of this thesis.

The legislative bills that are being proposed and discussed in the House of Representatives and the Senate to address universal health care coverage in the United States embody a variety of approaches and ways of achieving similar ends. While one proposal may include a certain restriction on the private health insurance market, another may not find that restriction necessary. Two bills are currently under scrutiny: “America’s Affordable Health Choices Act of 2009” (HR 3200) in the House of Representatives, and “America’s Healthy Future Act of 2009” in the Senate. Also in the mix is the bill that President Barack Obama endorsed as a way to signal Congress his view of the content of the legislation he would like to see passed by both House and Senate.
The complexity and the economic and political nuances of the proposals currently on the table require detailed scrutiny. Focusing on the two healthcare reform proposals currently at the House and at the Senate, the following pages provide a review of the fundamental objectives of each proposal, paying particular attention to key differences between the two bills and to the highly debated possibility for the government to enter the healthcare market as a competitor of private insurance companies.

At the current time there is no public health insurance plan in the United States for individuals who are not disabled, significantly impoverished (Medicaid), or under the age of 65 (Medicare). It is possible that one or both of these plans could be expanded to include all Americans; however, it has long been the expectation in the United States that the working age population would be responsible for its own health insurance, unless there is some factor that keeps individuals from doing so. Also, a large portion of the population of the United States has long identified with a purely capitalist system, and there does not seem to be a significant percentage of the population who would like this to change. Because of this system, it would be very difficult to remove the health insurance for-profit market, because it would deprive private companies of the acquired right to sell health services in a private market. Thus, any public health insurance plan that may be developed would likely be based on something new, not an extension of a program that is already in place. One fundamental topic is the so called “public option,” which in May 2009 has been described by the Senate Finance Committee as conceivable according to three different models. The public option consists of the addition of another health care provider to the health insurance market, and it would be run by the federal government. This brings up many topics of discussion and disagreement as some believe
that an expansion of the government would be a shift toward socialism and also that a
government operated health insurance system would be necessarily inefficient. Others
however think that this change would be extremely beneficial in that it could help to
control the ever rising health insurance costs in the United States.

The first version of the public option would be a Medicare-like plan: the plan
would be run and governed by the Department of Health and Human Services, and thus
would be a source of insurance that would come directly from the government.
Healthcare providers would be reimbursed according to the same methods followed for
Medicare. This public option would operate within the health insurance exchange that
the private plans would operate in. This exchange is a market that would be set up to
group all of the options, whether public or private, so that consumers can see all of the
options side by side and select the one that is the best for them. The public plan would be
held to all of the same rating rules that the private health plans would be held to in the
insurance exchange. Thus, other than because of its government administration, the
“public option” would likely be identical to the private insurance options also offered
through the insurance exchange. This plan is what we will see in the proposal from the
House of Representatives.

The second proposal for a public option would be structured according to a third
party administrators idea. This would be a plan that, although functionally identical to
Medicare, would be run by regional non-governmental third party administrators rather
than by the Department of Health and Human Services. The third party administrators
would therefore operate independently, and would report back to the government. The
reimbursement structures would be arranged between third party administrators and
healthcare providers as relationships are established. Differently from the Medicare-like plan discussed earlier, these third parties would be required to maintain reserve funds. The Medicare-like plan is de facto a government-run insurance; thus, whenever the plan pays more than it receives in premiums and co-pays, the government would directly bail the plan out. Non-governmental third parties would instead be required to have sufficient funds as the government would not be directly involved in, nor responsible for, balancing their budgets.

The third version of public option, which would not necessarily guarantee the creation of a public health insurance option in every state, consists of state-run health insurance plans. In this case the federal government would determine specific characteristics and criteria of the public insurance plans, but both set-up and administration of each plan would be completely left to state governments. Similarly to the case of Medicaid, the federal government would be responsible for most of the funding. Some states may choose not to offer such public plans. This plan has the potential for the federal government to make the provision of public health care insurance an option to states and not mandatory. According to this proposal, states may also have the option to extend existing state-employee insurance plans to non-employees rather than establish a newly created public healthcare insurance.

The remainder of this chapter offers a description of what each reform proposal contains. In the bill from the House of Representatives, a proposal that includes a public option is outlined, fitting the description of the Medicare-like plan. Then, in the Senate bill, a different proposal that does not include a public option but establishes alternative ways to increase the number of insured people in the United States is outlined.
3.1 The House Bill

The first proposal on Capitol Hill is the public health insurance option outlined in the House of Representatives’ bill known as “America’s Affordable Health Choices Act of 2009” (H.R. 3200). The bill states, “The Secretary of Health and Human Services…shall provide for the offering of an exchange-participating health benefits plan that ensures choice, competition and stability of affordable, high quality coverage throughout the United States…” (H.R. 3200, pp. 116) This statement may represent the first step in the provision of universal healthcare in the United States: there is a clear statement of purpose, which is the provision of affordable quality healthcare to all, without necessarily mandating the government to become neither the only provider nor one of the providers of healthcare insurance. Thus, the above statement per se does not make the public option a viable, feasible reform action. For a public option to be viable and effective there need to be sufficient regulation and specific guarantees of efficiency. H.R. 3200 also states that the public health insurance option must “comply with requirements that are applicable…to an exchange-participating health benefits plan, including requirements relating to benefits, benefit levels, provider networks, notices, consumer protections and cost sharing.” (H.R. 3200, pp. 116-117) Thus, according to this bill, a public healthcare insurance would act like a private insurance that participates in the healthcare insurance exchange. The insurance exchange would provide individuals with reliable information on different quality insurance plans, and therefore with effective comparison tools. To be eligible to operate within the health insurance exchange, a plan would have to meet the specific criteria that, according to H.R. 3200, characterize a “Qualified Health Benefits Plan” (QHBP). The bill specifies regulations on what levels
of plans may be offered (basic, enhanced, etceteras), what events may cause the
expulsion of a QHBP from the exchange, and how any affordability credits would be
dispersed to the plans acting in the exchange (how the government would reimburse
QHBPs for insuring impoverished individuals).

The great majority of the American population would purchase insurance through
the exchange program. The operational requirements outlined in the bill suggest that the
public insurance option would have to abide by the same rules that apply to private
companies. This set up clearly establishes a leveled playing field between public and
private insurance companies, and suggests the intention to maintain a high (potentially
higher) degree of competitiveness in the health insurance market.

Administration and funding of the House's public healthcare insurance proposal
are among the most debated aspects of the plan itself: in H.R. 3200, the official provider
(company) responsible for the public option and its operation within the insurance
exchange market would be the Secretary of Health and Human Services. When
compared with the other public insurance options described earlier in this chapter, this is
what makes this proposal very similar to Medicare, as the Federal government would be
directly in charge of operation and service. The funding of the program also requires
detailed scrutiny: would premiums be set so low that the federal government would have
to make up the difference through other budgetary sources? How would the start-up costs
be financed? The House's bill clearly describes start-up funding, which would be
financed by 2 billion dollars of non-appropriated Treasury funds and by the expected
value of 90 days worth of claims that would be made against the plan prior to the
collection of the first premiums. This means that the government would front the money
for the plan to pay for the care of its customers for the first 90 days, and after that the plan would be required to use the collected premiums to function. Thus, start-up costs for this public plan are evaluated to be well beyond the $2 billion benchmark, and an important question to ask is whether these funds are actually available and affordable for the United States at this time.

Operational costs, instead, should be mostly financed through premiums: the bill states that premiums will be established geographically by the secretary in a manner “that complies with the premium rules established...for exchange-participating health benefit plans” and “at a level sufficient to fully finance the costs.” Thus the bill seems to suggest overall revenues from premiums sufficient to cover operational costs, even within the scope of the initiative to provide healthcare insurance to all. A Treasury account would be responsible for disbursements out of deposits received and formally appropriated start-up government’s funds described above. In addition, H.R. 3200 mandates that reimbursement rates for services provided under the plan shall be set to rates similar to those currently paid to providers under Medicare parts A and B, which are the sections on hospital insurance and health insurance (doctor visits, tests, etc.)

The House bill details specific criteria for affordability credits. First of all, affordability credits given by the government may be used only to purchase basic coverage plans through the exchange described in the bill. Any further coverage that an individual eligible for affordability credit wishes to purchase must be paid directly by that individual. The bill mandates that affordability credits would be available to individuals with incomes at or below the “400% of the federal poverty level” benchmark; individuals with income sufficiently low so that they would qualify for Medicaid must enroll in
Medicaid and will not be given affordability credits. Affordability credits would also not be made available to illegal immigrants. The following table reports the categorization of affordability credits according to the HR 3200:

<table>
<thead>
<tr>
<th>Level of Poverty</th>
<th>% of coverage paid for in affordability credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>133%-150%</td>
<td>97%</td>
</tr>
<tr>
<td>150%-200%</td>
<td>93%</td>
</tr>
<tr>
<td>200%-250%</td>
<td>85%</td>
</tr>
<tr>
<td>250%-300%</td>
<td>78%</td>
</tr>
<tr>
<td>300%-350%</td>
<td>72%</td>
</tr>
<tr>
<td>350%-400%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Individuals who are eligible to affordability credits would have access to two different forms of credit. The first is the affordable premium credit, designed to help the eligible individual afford the premium on the basic plan that would be purchased from an insurance provider that participates in the exchange. The second would be an affordable cost-sharing credit. This credit would be designed to help individuals pay the amount they would be required to pay at the time of their visit (co-pay), based on the basic plan that they have purchased from an exchange participating health insurance plan.

Finally, in order to encourage wide provider participation in the plan, rates would be increased by five percent during the first 3 years. The bill also establishes requirements, conditions, and specific qualifications for physicians and providers, character of services included in the plan, and conditions, rules, and procedures for claims of fraud, abuse, etceteras.

3.2 The Senate Bill

On October 13, 2009, the Senate Finance Committee finally passed its own healthcare reform bill that was then proposed to the Senate for a vote. The bill is clearly
meant to increase the overall coverage of healthcare insurance in the United States, but
does not include a public option or public healthcare insurance plan. More precisely, the
bill focuses on making healthcare insurance in the country more affordable and accessible
rather than on foreseeing ways in which the federal (or state) government might directly
intervene in the provision of healthcare insurance to all. This is a bill that, through the
already established tax credits and insurance exchange, would reform the healthcare
insurance private market by making healthcare generally affordable. Interestingly,
according to the Finance Committee’s proposal the insurance exchange would be run at a
state rather than national level, with the consequence that individuals in different states
most likely would have access to different plans. State exchanges would be given initial
funding from the federal government but would then be expected to function solely on
the basis of the revenues received from the participants in the exchange itself.

The main novelty of the Senate Finance Committee’s proposal consists in
establishing guidelines for the possible development of Consumer Operated-Oriented
Plan programs, known as CO-OP. These programs are meant to introduce non-for-profit,
member-run health insurance companies in the market. The bill calls for the allocation of
$6 billion in government assistance to finance CO-OPs’ start-up costs, and establishes
strict rules on profit reinvestment, that has to be targeted towards making health
insurance policies more affordable and therefore should have the effect of lowering
policy premiums. Regulations would be set so that these insurance companies would not
enjoy any specific advantage in their market operations.

Also the Senate bill is quite explicit in regard to affordability credits that in this
case would take the form of tax credits awarded to the individuals. Thus, eligible
individuals who have paid the full premium to the qualified (not necessarily exchange participating) insurance plan, can then claim the amount paid in their income tax return for that calendar year. The other option for the consumer to obtain this credit is for the individual to send their portion of the premium to the Treasury and then the Treasury sends the full premium to the insurance company. The bill mandates that these credits would be available to all individuals whose modified gross income lies between 133% and 400% of the poverty level. This bill clearly allocates affordability credits to fewer individuals than the house’s bill. Individuals with an income at 134% of the poverty level would be responsible for a share of the premium capped at 2% of their income; individuals with higher incomes would be responsible for shares of the premium established according to a sliding scale that reaches a maximum for those with an income at 400% of the poverty level, who would be responsible for premiums capped at 12% of their income. In addition to the premium tax credit there is also a subsidy in this bill that would help to pay for the cost-share required by the health plan. In this case, the subsidy would only be available for those who are at 200% of poverty or lower. The Senate bill also includes a tax credit for small businesses as an incentive for them to provide their employees with an insurance option. Finally, also the Finance Committee’s bill excludes illegal immigrants from eligibility for the federal healthcare tax credit.

3.3 Other proposals

As said earlier, the Senate Finance Committee did not include a public option clause in its reform bill. There were however a number of public option proposals that were submitted in conjunction with the Finance Committee’s plan. An interesting
amendment was proposed to the Senate Finance Committee by Senator Jay Rockefeller, who brought forth the idea of an exchange-qualified health benefit plan that would operate “on a level playing field” with private insurance companies already operating in the exchange. The public plan would be required to offer the same policies and abide by the same rules as their private competitors would be required to. Senator Rockefeller’s proposal is almost identical to the public health insurance option outlined in the House of Representatives’ bill, including premium costs, appropriations to fund set-up costs, and all the regulations outlined in HR 3200. With eight votes in favor and fifteen votes against it, this amendment was voted down by the Finance Committee. The other public option amendment proposed to the Senate Finance Committee was brought forth by Senator Charles Schumer.

Another proposal brought to the Finance Committee resembled a public option plan, but embodied a different set of guidelines. This plan, proposed by Senator Olympia Snowe, was called “trigger option.” This plan has two ways to make sure that an affordable plan is available to 95% of people in a state through that state’s exchange program. Whenever this percentage of affordable plans is not met, an additional non-profit, government-run plan would be “triggered” with the intent of providing a safety net available to all individuals. It is important to recognize that, within the guidelines of this bill, this public health insurance option would only be available in those states that do not meet the 95% affordability, and thus a government-run insurance plan would not be necessarily operating in every state. This plan could have had enough support to gain the 60 votes necessary to break a filibuster by Republican senators.
Whatever bill passes the majority in Congress and Senate will then have to be signed into law by the President. The President has the power to veto any bill that falls short of some fundamental content that in his opinion should characterize the healthcare reform bill, and in such case the bill would return to Congress for further revision. A few main points from the President’s plan include: development of an exchange that would allow individuals and small businesses to compare plans and find competitive rates; tax credits to help people and small businesses buy insurance; creation of a public plan that would provide a real alternative to individuals who cannot afford plans in the exchange; immediate creation of a “high risk” pool meant to keep affordable premiums for people who may have pre-existing conditions; elimination of all healthcare insurance discriminations based on pre-existing conditions, gender, or age; and establishment of caps on out-of-pocket expenses for individuals.

3.4 Conclusion

Given the complexity of each bill, a schematic summary of stylized facts of the health care reform bills of the House and the Senate may be helpful:
<table>
<thead>
<tr>
<th>House</th>
<th>Senate</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Continues to promote a public option</td>
<td>- Would not offer a public option</td>
</tr>
<tr>
<td>- Insurance exchange is nation-wide</td>
<td>- Insurance exchanges would be state-by-state</td>
</tr>
<tr>
<td>- Subsidies would be available to people at 400% of the poverty level</td>
<td>- Subsidies would be available to people at 400% of the poverty level</td>
</tr>
<tr>
<td>and lower</td>
<td>and lower</td>
</tr>
<tr>
<td>- Basic plan covers 70% of costs and has a $5,000 out-of-pocket limit</td>
<td>- Basic plan covers 60% of costs and has a $5,950 out-of-pocket limit</td>
</tr>
<tr>
<td>- Removes anti-trust exemption currently held by health insurance</td>
<td>- Would not remove the anti-trust exemption but regulations within the</td>
</tr>
<tr>
<td>companies</td>
<td>market are greatly increased</td>
</tr>
<tr>
<td>- Children can remain on their parents insurance until age 26</td>
<td>- Children may remain on parents insurance until 25</td>
</tr>
<tr>
<td>- Illegal immigrants may by insurance through the exchange but may</td>
<td>- Illegal immigrants are completely prohibited from purchasing insurance</td>
</tr>
<tr>
<td>not receive federal subsidies</td>
<td>through the exchange</td>
</tr>
<tr>
<td>- Bill would cost $1.052 trillion and would reduce deficits by $139</td>
<td>- Bill would cost $871 billion and reduce deficits by $132 billion</td>
</tr>
<tr>
<td>billion</td>
<td>- 31 million people would gain insurance and 23 million would remain</td>
</tr>
<tr>
<td>- 36 million people would gain coverage with just 18 million</td>
<td>uninsured</td>
</tr>
<tr>
<td>uninsured</td>
<td>- 40% tax on over-priced health plans, fees from participants in the</td>
</tr>
<tr>
<td>- Taxes high-income people and the sale of medical devices to pay for</td>
<td>insurance market, $483 billion from Medicare growth, increase in</td>
</tr>
<tr>
<td>plan, along with $404 billion coming from projected growth in</td>
<td>Medicare payroll tax rate, and a tax on indoor tanning services</td>
</tr>
<tr>
<td>Medicare</td>
<td></td>
</tr>
</tbody>
</table>

Many tides of change and counter-change on the healthcare reform proposals have come and gone since this thesis began, and facts, nuances of each proposal, and information have continued to change on a daily basis. On March 21, 2010, the United States House of Representatives passed a reconciled version of the Senate bill, and sent a comprehensive health care reform bill to President Obama to be signed into law. This
means that the House of Representatives has chosen to accept the Senate version of the bill --with minor changes that the Senate passed right away--. Projections of the new law suggest that 32 million Americans previously without health insurance will be able to obtain quality affordable coverage. Health insurance exchanges will be created so that Americans can have more bargaining power vis-à-vis insurance companies. Insurance exchanges will be set up on a state-by-state basis, as the Senate proposed, and separate exchanges will be created in each state for small businesses so that they also may more easily manage health insurance costs. States would also receive federal funding to operate these exchanges until 2015. Subsidies for low-income Americans will be available to those individuals between 100% and 400% of the Federal Poverty Level (FPL). In order to qualify for subsidies, individuals may lose eligibility for Medicare and Medicaid, and cannot be covered by an employer. Eligible individuals will receive premium credits and there is a sliding scale that limits out of pocket expenses. Currently, the FPL is $22,050 for a family of four. The subsidies operate according to the table below:

<table>
<thead>
<tr>
<th>Percentage of Poverty</th>
<th>Initial Premium Percentage</th>
<th>Final Premium Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 133%</td>
<td>2.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>133% up to 150%</td>
<td>3.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td>150% up to 200%</td>
<td>4.0%</td>
<td>6.3%</td>
</tr>
<tr>
<td>200% up to 250%</td>
<td>6.3%</td>
<td>8.05%</td>
</tr>
<tr>
<td>250% up to 300%</td>
<td>8.05%</td>
<td>9.5%</td>
</tr>
<tr>
<td>300% up to 400%</td>
<td>9.5%</td>
<td>9.5%</td>
</tr>
</tbody>
</table>
Three changes to the federal tax structure are introduced to pay for the additional spending caused by the new bill. Families with income above $250,000 will now pay a 3.8% tax on investment or unearned income. Also, insurance companies will be required to pay a 40% tax on “Cadillac” plans, and finally, there will be a new 10% tax on indoor tanning. There will be major changes to the Medicare prescription “donut hole,” closing the gap by 2020. Medicaid will be expanded to include individuals with income up to 133% of the FPL, and will also begin to cover childless adults. Also, Medicaid will not cover illegal immigrants, and the United States government will cover newly eligible individuals through 2016.

Most importantly, insurance companies will no longer be able to deny coverage based on pre-existing conditions, and children may stay on their parent’s insurance until the age of 26. Abortion will not be paid for through federal funds, but there is no provision as to whether insurance exchange participating plans may or may not offer coverage for abortion. There will be an individual mandate that will begin in 2014 that will require all individuals to purchase insurance or face a $695 penalty, with some exceptions for low-income Americans. The bill does not introduce any employer mandate. Finally, illegal immigrants will not be allowed to purchase insurance through an exchange, even if they pay entirely out of pocket.

Even though this bill will have the effect of greatly expanding the percentage of the population able to purchase quality health insurance, it still falls short of providing universal health coverage to all individuals. The absence of a public option will still leave a few million Americans without the guarantee of receiving health care when needed.
CHAPTER 4

THE VALUE OF GOVERNMENT PARTICIPATION IN THE HEALTH CARE MARKET

One of the most important points in the health care debate that the previous chapter has hopefully clarified refers to the fundamental decision of whether or not the U.S. government should be acting as a competitor in the healthcare markets. The split in the population’s preferences in this regard is fairly sharp: some believe that it is necessary for the government to step in and provide the public with a health insurance option, while others think that this would be too much, as there are fears that the government could possibly out-compete private insurance companies. The more conservative portion of the population wants the government to simply take action in regulating health care so that prices are controlled and quality of service may increase.

This chapter explores the key variables that affect the overall health of a nation (statistics and ratings that grade the health of individuals in a country: life expectancy, mortality rates, etc.) vis-à-vis government participation in the health care system. The fundamental questions asked are: Does the amount of health care that is provided by the government make a difference in the health of the nation, and is there a threshold beyond which the government might be providing too much? Is the relationship between the amount of government involvement in health care and overall health really based solely on the overall well-being of a country as measured by the Gross Domestic Product? Is education, that is, the ability of the population to make informed, educated decisions about health, more fundamental than who administers health services and under what conditions these services are provided? This chapter approaches these questions
empirically, using data and statistics collected from studies performed by the United Nations and the World Health Organization, with the hope to find econometric evidence of whether there is a significant relationship between government involvement and health.

The dependent variables examined in this econometric analysis are: the health outcome index published by World Health Organization in the 2000 issue of the World Health Report, which is based on data from 1997; life expectancy (at birth), and mortality rate (probability of dying between 15 and 60 per 1000 population) for 169 countries, based on data since 2006 published by the World Health Organization’s Statistical Information System. Corollary data was also collected from the United Nations’ Human Development Reports.

4.1 Review of Relevant Literature

Important scholarly literature has already been published on the topic. In the article “Does Public Insurance Crowd Out Private Insurance?” (1996), David Cutler and Jonathan Gruber discuss the fundamental question that seems to be preventing the public insurance option from passing in Congress right now: they emphasize that the problem that could come from an increased amount of public insurance is that if many people were to drop their private coverage in favor of a public insurance option; the public insurance could lose some of its “bang for the buck” (391). In their paper, Cutler and Gruber “provide evidence of the effect of public health insurance eligibility on private insurance coverage” (392), by describing theoretically and showing empirically the amount of crowding out that would ensue from an increase in public healthcare
insurance. Their findings and conclusions show that the addition of more public coverage will significantly crowd out private insurance, and most of this will come from employees dropping the (private) coverage provided by their companies for the less expensive public plan. The assumption that drives the conclusion is that the public plan turns out to be cheaper than private ones.

In the article “Reorganizing the Health Insurance Market,” published in 1992, Peter Diamond offers a preservation scheme that would reorganize the health insurance market to make health care affordable and available to everyone in the United States. He points out that the existing private health insurance market is subject to characteristics that cause the market to lack competitive equilibria (1237). He emphasizes the fact that private insurances reject potential customers on the basis of pre-existing conditions, making it difficult for a large fraction of the population to obtain quality affordable health care. He recommends that people should be able to select any insurance at one price for a plan, no matter their health situation. Diamond proposes that the government creates large groups of population, which are identified geographically; each group would purchase health insurance as a unit. This would give these groups more bargaining power, and force health insurances to offer one price to each entire group. Even though such proposal was written in 1992, it still fits very well into the current reform plans, as it is a sort of insurance exchange. In Diamond however the government would not act as a health insurance provider, but as the overseer of the healthcare companies, to make sure they provide coverage in a fair, affordable, and universal way. This plan would be particularly effective in avoiding crowding out of the private insurance companies, and would be creating a way in which the companies could be regulated and monitored.
The report, "Public and Private Roles in Health: Theory and Financing Patterns" (1996), published by the World Bank, also provides an extensive look at how the government should operate in the health insurance market. Similarly to Diamond's article, the report recommends that the government focus on regulating the insurance companies; if and whenever regulation does not resolve the problem of adverse selection, the government should step in and directly finance and administer health insurance. The report also recommends that the government subsidize insurance for the poorest portion of the population, either through minimum healthcare or by subsidizing private companies so that they would provide coverage. The report makes it clear that the government should take actions so that public revenues obtained from the cross-section of the population (such as income taxes) subsidize coverage for the wealthiest citizens. Also, the government should not act in ways that may lead to outcompeting private insurances, and should let competition between public and private insurance be based on anything other than cost and quality. To both contain public-private competition and avoid likely abuse of cheap or free-of-charge public healthcare services, the report recommends that the government limit the range and scope of healthcare services that would be publicly provided. The government should be promoting competition by providing competitive services to the public and/or by regulating the private companies.

Many scholars believe that the change in health care in the United States should start from learning from those who actually provide care (doctors, etc.) what exactly should be done. In the article "A National Health Program for the United States: A Physicians Proposal" published in 1989, the two medical doctors David U. Himmelstein and Steffie Woolhandler lay out a new and radical health care program for the United
States. Their plan include six fundamental ideas: "(1) fully cover everyone under a single, comprehensive public insurance program; (2) pay hospitals and nursing homes a total (global) annual amount to cover all operating expenses; (3) fund capital costs through separate appropriations; (4) pay for physicians’ services and ambulatory services in any of three ways...; (5) be funded, at least initially, from the same sources as at present, but with all payments disbursed from a single pool; and (6) contain costs through savings on billing and bureaucracy, improved health planning, and the ability of the national health program, as the single payer for services, to establish overall spending limits"(102). According to their analysis, such multi-faceted and quite subvertive plan would effectively eliminate financial barriers to health insurance and simplify hospital administration, making more resources available for direct care. All private insurance companies would be eliminated in such plan, and the government would be the only provider of health insurance in the country. The economic justification they provide for their plan would be in the substantial savings that American businesses and corporations would have to sustain to extend healthcare benefits to all employees.

Schoen, Davis, and Collins lay out a less dramatic overhaul plan that would still achieve universal coverage in the United States, by using a mixed public and private health insurance structure. In the recent article “Building Blocks for Reform: Achieving Universal Coverage with Private and Public Group Health Insurance” (2008), the authors propose a plan that is in many ways similar to the healthcare reform proposal currently debated in Congress. The article, for instance, calls for a health connector that has functions similar to the insurance exchange market. It recommends a “play-or-pay” rule for employers, making them pay a tax if they choose not to offer insurance coverage to
their employees. The authors recommend creating a Medicare-like option for people under 65 to increase total coverage in the United States. They also, very helpfully, outline the spending changes that would result from the implementation of their plan. They conclude that the total spending on healthcare would increase by less than one percent from where it was in 2008, being offset by cuts in provider reimbursements and lowered administrative costs.

Other scholars have based studies and reform proposals on comparative analysis of differences between other countries’ healthcare systems and the United States’ one. A fundamental regularity results from all these comparative studies: the United States spends much more on health care than any other country in the world. In “U.S. Health Care Spending In An International Context,” (2004) Uwe Reinhardt, Peter Hussey, and Gerard Anderson attempt to explain such phenomenon. Even after one controls for the American ability to spend more on healthcare because of the relatively high GDP per capita, there is still a gap in health care spending of more than $1000 per capita. The authors attribute this difference to a variety of factors. First, people pay more for the same services in the U.S. than in other industrialized countries. This comes from the high reimbursement rates for physicians in the United States, and the fact that, because health insurance is purchased on an individual basis, insurance companies have more bargaining power than in other countries where contracts are signed either by groups or by government agencies. Another reason has to do with the complexity and inefficiency of the American administration and bureaucracy of health. Also, the United States has less effective control on the costs of pharmaceuticals, and the high costs of prescription drugs comparatively increases the cost of health care for many Americans. The authors use this
analysis of high costs of health care to discuss the fact that so many Americans remain uninsured. The bottom line is that many Americans cannot afford the cost of health insurance and are priced out of the market. Within the same tradition of comparative studies, in “Does universal health insurance make health care unaffordable? Lessons from Taiwan,” (2003) Lu and Hsiao analyze the National Health Insurance (NHI) implemented in Taiwan in 1995 by addressing two basic questions: “Did the NHI cause Taiwanese health spending to escalate to an "unaffordable" level? What are the benefits of the NHI?” They point out that prior to the implementation of the NHI, 57% of the Taiwanese population had health insurance through three different providers; by the end of 1995, 92% of the population was enrolled and receiving health care; by the end of 1996 such percentage had risen to 96%. They report that Taiwan was able to control the costs of health care by reducing transaction costs, and also by introducing tools and information deemed necessary to keep health insurance costs under control. The authors come to a conclusion that emphasizes the benefits of a government healthcare program, in terms of controlled costs and quality, and of course of a much higher percentage of the population with appropriate coverage.

The two contributions that most directly speak to the specific content of this essay are the article “Government Intervention in Health Care Markets and Health Care Outcomes: Some International Evidence,” published by Santerre, Grubaugh, and Stollar in 1991; and the paper “Government and Health Outcomes” published by Michael Grossman in 1982. Santerre, Grubaugh, and Stollar measure the degree of intervention of the government in the healthcare market by looking at the significance of the amount the government spends on healthcare as a percentage of the total amount spent on health care.
in the country. The authors analyze data of 20 countries that belong to the Organization for Economic Cooperation and Development, and conduct their research both theoretically and empirically. Theoretically, the paper argues that there is little evidence that the government can efficiently run a health care program for all Americans. Examples of failure such as the postal system and local public schools are used to undermine the validity of national public service programs. The authors run two separate regressions that use infant mortality as the health outcome, and in both instances they discover that the proportion of health care spending that is done by the government is not significantly related to the identified health outcome. Because of this analysis, the authors ultimately conclude that the original hypothesis that increased government intervention in health care would improve overall health, must be rejected.

Michael Grossman's article emphasizes the role of education in the achievement of higher health outcomes: according to Grossman, many studies have been conducted on a variety of variables that may affect health outcomes, and education has been widely considered the most significant (often statistically significant at the .05 confidence level or better). While the author does not explicitly suggest a causal relationship between health outcomes and education, he repeatedly presents evidence to show that there is a significant relationship between these two variables, and that the educational effect on health outcomes cannot be ignored when trying to explain why a country may have higher life expectancy or lower mortality rate than others. Grossman's argument is convincing both from a theoretical and empirical perspective: education appears to have a strong explanatory role in the differences of a number of health indexes across countries.
4.2 The Econometric Model

This section presents an econometric model drawn in the spirit of the analysis conducted by Santerre, Grubaugh, and Stollar. The model considers a larger number of countries (169 countries from all over the world, rather than the 20 OECD countries considered in their paper) and more recent data, and includes education among the explanatory variables, as Grossman suggests.

Three different equations will be ultimately tested, that result from a mostly basic linear model constructed for Ordinary Least Squares regressions. The basic set up of the model is:

\[
\text{Health Outcome} = \beta_0 + \beta_1 (GDP) + \beta_2 (HC/GDP) + \beta_3 (Govt/HC) + \beta_4 (Govt/HC)^2 + \beta_5 (ED) + \epsilon
\]

where:

- Health Outcome: dependent variable, for the data from 1997 this is the WHO's health index. For the 2006 data, we will look at both life expectancy at birth and mortality rate;
- GDP = per capita gross domestic product of a country in the year in question;
- HC/GDP = percentage of gross domestic product that is spent on health care;
- Govt/HC = percentage of total health care spending that is done by the government;
- ED = a measure of education in a country. For both 1997 and 2006, this is a health index that was constructed by the United Nations.
The reason that a Govt/HC^2 variable is being used is because it seems reasonable that at some point, as the government provides more and more health care, the system could become what the authors of the first article mentioned, a failure of the government to effectively and efficiently run a public program, and no longer provide the better quality care that would help to improve the health outcomes in the country. Thus, we add the square of Govt/HC to account for a downturn in health outcomes as the variable takes larger and larger values. Coefficients for all of the above variables will be estimated using OLS by running the computer program *Stata*; the model’s coefficients will then be tested for statistical significance and the model will be evaluated for its fit to the seven classical assumptions.

The data set that was constructed for this analysis contains 5 categories of variables, with at least two separate observations for each as we are looking at both 1997 and 2006. There are a total of 169 observations for each variable and the summary statistics of each is reported here below.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Observations</th>
<th>Mean</th>
<th>St. Deviation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health index 97</td>
<td>169</td>
<td>0.676</td>
<td>0.202</td>
<td>0.08</td>
<td>0.992</td>
</tr>
<tr>
<td>GDP 97</td>
<td>169</td>
<td>7644.5</td>
<td>8013.97</td>
<td>396.71</td>
<td>42872.83</td>
</tr>
<tr>
<td>HC/GDP 97</td>
<td>169</td>
<td>5.72</td>
<td>2.3</td>
<td>1.7</td>
<td>14.7</td>
</tr>
<tr>
<td>Govt/HC 97</td>
<td>169</td>
<td>55.45</td>
<td>19.94</td>
<td>7</td>
<td>92.5</td>
</tr>
<tr>
<td>Ed 97</td>
<td>169</td>
<td>0.739</td>
<td>0.204</td>
<td>0.14</td>
<td>0.99</td>
</tr>
<tr>
<td>Mortality 06</td>
<td>169</td>
<td>225.91</td>
<td>142.34</td>
<td>58</td>
<td>751</td>
</tr>
<tr>
<td>Life Expectancy 06</td>
<td>169</td>
<td>67.1</td>
<td>10.82</td>
<td>40</td>
<td>83</td>
</tr>
<tr>
<td>GDP 06</td>
<td>169</td>
<td>13512.8</td>
<td>14934.54</td>
<td>390.16</td>
<td>87825.46</td>
</tr>
<tr>
<td>HC/GDP06</td>
<td>169</td>
<td>6.05</td>
<td>2.33</td>
<td>1.5</td>
<td>15.3</td>
</tr>
<tr>
<td>Govt/HC 06</td>
<td>169</td>
<td>58.2</td>
<td>18.8</td>
<td>12.3</td>
<td>93</td>
</tr>
<tr>
<td>Ed 06</td>
<td>169</td>
<td>0.794</td>
<td>0.175</td>
<td>0.282</td>
<td>0.993</td>
</tr>
</tbody>
</table>
For a quick look at the individual relationships that each key variable has with health outcomes, we examine the following scatter plots. This first graph shows GDP and the health index. There is a definite positive relationship, however heteroskedasticity could be prevalent.

This next graph is one of the health indexes and the percentage of GDP spent on health care. In this situation there is obviously little to no relationship between the two variables.

In the third plot, we display the relationship between the percentage of health care spending that is done by the government and the health index. Looking at this graph, there is a very clear positive correlation between the two.
The final graph that is to be examined is the relationship between education and the health index. A very strong positive relationship is revealed, and while there are a few observations that do not fit the trend, it seems rather obvious that education has positive effect on health outcomes.

The equation outlined earlier was run in Stata three different times, once with the 1997 data, once with the 2006 data with mortality as the dependent variable, and once more with the 2006 data but with life expectancy as the dependent variable. Using a simple linear regression model, Stata produced the coefficients presented in the following tables:
1997 Data

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficients</th>
<th>t-stats</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP 97</td>
<td>1.00e-05***</td>
<td>4.95</td>
</tr>
<tr>
<td>HC\GDP 97</td>
<td>0.00613</td>
<td>1.09</td>
</tr>
<tr>
<td>Govt\HC 97</td>
<td>-0.00206</td>
<td>-.63</td>
</tr>
<tr>
<td>Govt\HC 97^2</td>
<td>2.24e-05</td>
<td>.76</td>
</tr>
<tr>
<td>Ed 97</td>
<td>0.227***</td>
<td>2.88</td>
</tr>
<tr>
<td>Constant</td>
<td>0.433***</td>
<td>4.48</td>
</tr>
</tbody>
</table>

| Observations   | 169                |
| R-squared      | 0.339              |

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

2006 with Mortality as Dependent Variable

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficients</th>
<th>t-stats</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP 06</td>
<td>-0.00256***</td>
<td>-3.75</td>
</tr>
<tr>
<td>HC\GDP 06</td>
<td>-0.340</td>
<td>-.09</td>
</tr>
<tr>
<td>Govt\HC 06</td>
<td>2.910</td>
<td>1.11</td>
</tr>
<tr>
<td>Govt\HC 06^2</td>
<td>-0.0242</td>
<td>-1.04</td>
</tr>
<tr>
<td>Ed 06</td>
<td>-401.5***</td>
<td>-6.42</td>
</tr>
<tr>
<td>Constant</td>
<td>502.5***</td>
<td>6.92</td>
</tr>
</tbody>
</table>

| Observations   | 169                |
| R-squared      | 0.442              |

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
The various results of these estimations are at the same time surprising and to be expected. First of all, in all three cases two variables have coefficients that are statistically significant at all levels of significance: education and GDP per capita. This was clearly to be expected: as Grossman suggested in his article, there is strong evidence that the relationship between health outcomes and education would be strong and positive (in the sense that it would improve the outcome, so negative for mortality). The results for GDP also make sense: the more economically strong a country is, the greater the level of health enjoyed by its population should be. These two coefficients clearly fit
expectations and are significant, so one can safely assume that GDP per capita and education are important explanatory variables of the level of health achieved in a country.

When trying to answer our main research question of whether or not a larger government involvement in health care would improve the overall health of a country, the output from Stata does not produce the answer a progressive economist would have liked or even expected. Both the govt\hc and the govt\hc^2 variables (percentage of government spending on healthcare) are statistically insignificant at all levels of significance. This would seem to state that the amount of healthcare provided by the government is not as valuable when it comes to improving the health of a country. Also, it was my assumption that govt\hc would have a negative relationship up to a point, and then improve the country’s health outcome (such was the reason for including the squared variable): in my expectations, govt\hc would have had a negative coefficient and the govt\hc^2 would have had a positive coefficient, producing a u-shaped regression. In the estimation, these variables had opposite signs than expected, suggesting that a higher amount of government involvement affects health outcomes negatively after a certain point, producing a hump-shaped graph.

Some parts of the regressions may be violating some of the classical assumptions that make OLS the best estimator for the models, and corrections may be necessary. The first assumption that should be further analyzed is whether the model is linear, correctly specified, and has an additive error term. When looking at the model, one variable could clearly take another functional form. When evaluating GDP it may be more valuable to look at a percentage change in GDP rather than its unit change: this would switch GDP to ln(GDP). The following table shows the output for 1997 obtained by using ln(GDP):
<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficients</th>
<th>t-stats</th>
</tr>
</thead>
<tbody>
<tr>
<td>lngdp97</td>
<td>0.124***</td>
<td>7.61</td>
</tr>
<tr>
<td></td>
<td>(0.0164)</td>
<td></td>
</tr>
<tr>
<td>hcgdp97</td>
<td>0.00601</td>
<td>1.16</td>
</tr>
<tr>
<td></td>
<td>(0.00519)</td>
<td></td>
</tr>
<tr>
<td>govthc97</td>
<td>-0.00458</td>
<td>-1.52</td>
</tr>
<tr>
<td></td>
<td>(0.00301)</td>
<td></td>
</tr>
<tr>
<td>govthc972</td>
<td>4.13e-05</td>
<td>1.52</td>
</tr>
<tr>
<td></td>
<td>(2.72e-05)</td>
<td></td>
</tr>
<tr>
<td>ed97</td>
<td>-0.0105</td>
<td>-.12</td>
</tr>
<tr>
<td></td>
<td>(0.0844)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.285**</td>
<td>-2.34</td>
</tr>
<tr>
<td></td>
<td>(0.122)</td>
<td></td>
</tr>
</tbody>
</table>

Observations 169  
R-squared 0.439  

Standard errors in parentheses  
*** p<0.01, ** p<0.05, * p<0.1

In this situation, the new specification of GDP actually improved the overall fit of the model and made the govt\hc variables more significant, but not so much to become statistically significant.

One of the classical assumptions is that the error term has a constant variance (no heteroskedasticity). The high variability in GDP and in its effects at low levels, and then less variability at higher levels, suggests the existence of positive heteroskedasticity: this again should be corrected to make the hypothesis tests more reliable. A Park test with respect to GDP has been run by using an intuitive proportionality factor. The following graph reports the residuals of GDP.
This graph presents clear evidence of heteroskedasticity as the residuals are clearly not constant. The following table is the output from Stata resulting from the running of the Park test.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficients</th>
<th>t-stats</th>
</tr>
</thead>
<tbody>
<tr>
<td>gdp972</td>
<td>-1.47e-09**</td>
<td>-2.81</td>
</tr>
<tr>
<td></td>
<td>(6.75e-10)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-4.745***</td>
<td>-26.39</td>
</tr>
<tr>
<td></td>
<td>(0.180)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>169</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.028</td>
<td></td>
</tr>
</tbody>
</table>

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Given the higher t-statistic on GDP, there is definitely some level of heteroskedasticity in the model. The p-value that the output reports is .031, which means that at the heteroskedasticity is only existent at lower levels of significance. It seems unnecessary to adjust our regression because of this level of heteroskedasticity.

The econometric analysis is useful, but is clearly not without possible flaws. The basic econometric limitations of OLS have been already discussed, but there are other
possible flaws that could have an effect on the outcomes of the analysis. For example, in the econometric measurement, it is seen that education has a substantial explanatory power on health outcomes. That is valuable information but it can also cast a shadow over the rest of the variables in the model. With such strong correlation with education, the model tends to stick to that variable’s path, and may blur the extent to which the inclusion of government in healthcare actually affects the outcomes of health. Also, among the many factors involved in the explanation of the possible effects of a government intervention in healthcare on the health of a country, an important one is the level of industrialization of the country. A question that should be further explored is: if industrialized countries tend to have better health because of their high per capita GDPs, does that mean that GDP is more important, or does the high health for those countries with high GDPs and low levels of government involvement cause the data to be skewed?

4.3 Conclusion

Unfortunately the econometric study reported in this chapter has not provided the results a progressive economist would have hoped for. The only conclusion that can be safely drawn is that GDP per capita and education clearly explain health outcomes. Nothing however can be said about the role of government participation in the health care system (that is, some form of public option) on health outcomes. Yet, this econometric analysis is only one first step in the vast range of specifications and data that could be used to dig deeper in the analysis of my hypothesis. This may sound like an excuse, a non-scientific way to accept results. But it is also true that this econometric model was construed and analyzed with severe time constraints, and that much more explanatory power could be found in more nuanced specifications, different estimation models and
techniques, a richer set of observations, and so on. While it is easy to accept that income per capita and education support the general health of a country, it remains implausible to me that the lack of health insurance for a large percentage of the population does not reveal fundamental explanatory power on health outcomes. Lots of work for further studies!
CONCLUSION

This research project began in the summer of 2009, a time in which Washington became entrenched in levels of dialogue and political conflict on healthcare reform never seen before. Most politicians seemed to endorse some variety of healthcare reform proposal in the lobbied competition to climb the steps of Capitol Hill. The thesis reviewed the two main proposals finally endorsed by the House and the Senate during fall 2009, together with the health care systems already in place in two countries economically and culturally comparable to the United States: Germany and the United Kingdom. A comparative evaluation of the German and British systems, the existing American model, and the proposals discussed in Congress, clearly told two very different stories of the evolution of healthcare across the Atlantic: while our European cousins began their healthcare system with a public model then later added private insurance companies, the United States developed a private market for health insurance, and is now debating whether to add a public option.

The public option was an element of the House’s proposal, but on March 21, 2010 the House voted to endorse the Senate plan, which does not contain the provision that would have introduced the government as an active participant in the healthcare market. But on March 21, 2010 the United States took a masterful legislative step, and since then the healthcare system of the United States has changed. The number of uninsured individuals will greatly diminish in the course of the next few years, and insurance companies will encounter greater bargaining power in their clients because of the introduction of state-by-state insurance exchanges. The plan passed by the House, now law, was born from the Senate proposal reviewed in the second chapter of this essay.
Main variations introduced on the original Senate proposal by the House consist in maintaining sons and daughters’ coverage in the parents’ plan until they reach the 26th year of age, and increasing the funding burden on families with incomes in the highest tax bracket. But there is not be a public option, and not all Americans will have coverage. Most will.

The thesis concludes with an econometric analysis according to which only income per capita and education have significant explanatory power on health outcomes, defined in terms of the World Health Organization’s health index, life expectancy at birth, and mortality rate. The analysis unfortunately does not show that an increase in government involvement in health care spending has a significant effect on the overall health of a country. This would seem to be a statement that puts the fundamental question of this essay to rest. Yet, not only the econometric analysis shows that while the overall effect of government involvement in health care is not significant, there is a positive relationship between health spending by governments and health outcomes; but also the question asked is characterized by such degree of complexity to be hardly disposed by one econometric attempt or specific result. Do these results prove that the addition of a public health insurance option would not still improve quality or affordability of health care? The first chapter offers a comprehensive explanation of why there should be intervention in the market due to failures of the market to operate at its most efficient and beneficial level. The econometrics analysis performed in the fourth chapter has some utility, especially to delineate further empirical work needed, but so do the scholarly opinions and analyses provided by others, which range from “subversive”
(only public) health care models suggested by medical doctors to strategies to avoid adverse selection by insurance companies.

With all of this said, I cannot see how the United States can achieve its goal of making health care affordable to everyone without the addition of a public health insurance option. *Universality* is a public rather than private concept; it is a concept that emanates from the Constitution rather than the statutes of private companies. While the econometric analysis shows that health outcomes may not be improved by a public health system, scholarly contributions reviewed in the third chapter and the effective and successful examples of public health care systems reviewed in the first chapter of this thesis make a strong case that the best way to accomplish the goal may still be to add a public health insurance option.
BIBLIOGRAPHY


Light, Donald W. "Universal Health Care: Lessons from the British Experience."


<http://www.nhs.uk>.


United States Census Bureau. [http://www.census.gov/]


World Health Organization. WHO Statistical Information System