United States Healthcare:
the Need for a More Comprehensive Approach

A treatise on the failings of United States healthcare, the importance of equity and goals other than efficiency, and the inadequacies of economic analysis in the healthcare market

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Abstract:

This paper discusses the relationship between two threads of social science research: traditional analysis of healthcare market failures and criticism of the narrow assumptions economic models make. The results that the American healthcare system produces are relatively poor compared to other developed countries at significantly higher cost. The best economic approach to improving the system could be achieved through either a private or public production system, but there is substantial theoretical and empirical evidence that heavy regulation of the system is required in either situation. A deeper question, however, is about what a market distribution (efficient or otherwise) actually gets us beyond the maximization of the narrowly and circularly defined economic concept of utility. When some assumptions of the Arrow Debreu model are relaxed, we can no longer presume the market outcome is efficient for a given set of endowments and preferences. Further, presuming the supremacy of existing preferences is naïve; preferences change and utility curves are not constructed in a social vacuum. Healthcare not only exhibits qualities of a public good and not only suffers from considerable imperfect information problems; it is a good that is heavily embedded within moral and ethical considerations. Economic theory has little to say on such matters other than the presumption that what individuals want has real value. The theory argues for pure income transfers as the most efficient way to solve inequities, but this presumes people make wise decisions. Further, it ignores that there is already considerable paternalism coming from other social structures that are much more difficult to control. Let government be a force of good in society; through government, well reasoned collective decisions on the social pressure we place on one another can be actively made, rather than made for us by the more nebulous and organic process of the formation of social norms and the influences of market players with considerable market power.
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Introduction

Discussions of healthcare and the best way to provide it in society have come to the forefront of policy discussion. Over the past 40 years the debate on public or private provision and finance of the healthcare system has grown more and more intense. In this thesis, I argue that the empirical evidence on the effectiveness of public healthcare versus private healthcare shows the public route to be less expensive and more effective at controlling rising healthcare costs than the private one. Also, there are compelling economic arguments for more strictly regulating the healthcare market in some way (given various principal-agent problems, this is more likely to be achieved through direct government intervention in the market than expensive oversight).

However, I also make the argument that economic theory does not translate to reality well in many markets because imperfect information cannot realistically be included in the model without modifying our assumptions of human behavior; the rational actor model does not represent reality well, and theoretical conclusions of this model under imperfect information are misleading. Because of this, presuming that addressing problems of information, externalities, and public goods will be sufficient to allow actors to achieve efficient outcomes is false; private decisions are and always have been influenced by social pressure so arguing against government involvement on its inefficient paternal nature is somewhat naive. Because a utility function is not something developed in social isolation\(^1\) and individuals are not as adept at calculating true costs and benefits as we would hope, we can and need to influence people to make healthier and better choices somehow; we need to make an effort to change the food culture in our country, which is

\(^1\) Our circular definition of utility is so in order to be able to approach the problem from an economic standpoint. It does discourage us from asking a question that is outside the economic box, however. Do people’s choices in the market reflect their real preferences? Can we influence decisions so that they better reflect their real preferences? Can we influence what their preferences will be?
having such negative consequences for people’s health, for example. The argued choice that
should be made for people is forced participation in a government financed healthcare system. After demonstrating this, I argue that questions of morality really do matter when, as shown, people act on normative orientations and values other than solely instrumental rationality. Further, aside from the probable gains toward efficiency to be had, there is a moral imperative on equal opportunity grounds to cover the uninsured, because of imperfect information. Public finance of healthcare will help in this regard by more closely aligning the economic incentives for government, and even other social pressures, to get involved more sincerely in markets that have so much effect on the our nation’s health.

**Structure of the US Healthcare Market**

The US market runs primarily on the managed care model. This is a system where healthcare is privately produced and (for the most part) privately financed, “subject to extensive management and regulation” (Barr, 283: 2004). The Health Management Organization (HMO) is the dominant model in the United States of these managed care systems. In an HMO, consumers pay a lump yearly sum to a firm of doctors for the promise of certain agreed upon kinds of healthcare services during the year. Theoretically, this merges the insurance company with doctors; however, in practice, the managers of the HMO are seldom doctors themselves, rather trained and experienced in business and administration. Incentives for efficient care are still aligned between doctor and insurance company in this system, but this is only on the aggregate level within an HMO. Further, management policies need to be enforced upon the doctors within the HMO to ensure they make cost efficient decisions on the individual level\(^2\). There is evidence that the HMO and other managed care systems put downward pressure on prices, but that

\(^2\) For example, a doctor could derive more utility than his associates in the firm from a higher level of care provided to his patients. Because of imperfect information and internal difficulties in the HMO bureaucracy, he may not bear the full cost of this greater (inefficient) level of care provision.
pressure is slight. Another model is the Preferred Provider Organization (PPO), which gives patients incentives to choose a doctor from a selective list. Doctors compete to be chosen for this preferred provider list theoretically exerting downward pressure on price. Barr (2004) also cites an interesting and very rare plan in the United States, the “Stanford Plan”. The university contracts some insurance providers and lays out several conditions\(^3\) that work together to solve many of the problems of the healthcare market. However, these contract agreements place considerable limits on individual choices of both provider and consumer and show that “adressing the problems of actuarial medical insurance leads inescapably to institutions with the major characteristics of social insurance” (Barr, 285:2004).

The actual market transaction for healthcare in the United States is more diverse. In Medicare and Medicaid, the government pays for eligible individuals’ consumption of private healthcare. Individuals who do not qualify for those programs pay fully out of pocket or through an HMO. Consumers purchase insurance with HMOs and PPOs either on their own at higher costs or through employers at lower costs. The breakdown of healthcare finance in 2005 is as follows: 34% by federal government, 11% by state and local government, 36% by private healthcare insurance, 15% out of pocket, and 4% by other private funds (NCHS: 2007). Note that the amount financed out of pocket may be misleading due to co-pay structures of insurance plans that cause some payment for services purchased through an HMO or PPO to be partially financed by out of pocket funds to prevent certain insurance market failures. The actual supply of

\(^3\) (a) The university contracts with a small number of insurers, mainly HMOs. (b) As a condition of joining Stanford’s ‘club’, each insurer offers a policy with three elements: an agreed core package of health care; a structure of premiums that may differ with family size, etc., but must be unrelated to a person’s medical risk; and agreement to accept all applicants. (c) The university operates a redistributive pooling arrangement such that schemes with a worse-than-average risk group receive transfers. (d) Employees can choose which scheme to join. (e) The university contributes a fixed sum to each person’s package, broadly equal to the cost of the cheapest of the approved policies. (Barr, 285: 2004)
healthcare is entirely privately produced.

**Previous Economic Assessments**

In this section, I discuss much of the empirical evidence and purely economic theoretical arguments for public finance and/or provision versus private finance and/or provision. The actual empirical evidence for the relative greater success of public systems is fairly strong, but always limited by the base state of a country’s health, different taste structures that have varying consequences on health, and uncertainty regarding the source of those factors (does a public system encourage people to eat right better than a private system?). The economic theory for the greater success of a public system centers on the nature of healthcare as a kind of public good along with the probably greater ability of a public system to address many of the information problems present.

Arrow’s (1963) seminal paper began the economic discussion of the healthcare market about forty years ago. He highlighted many facts about the healthcare market that make it particularly likely to fail under imperfect information. First and foremost is the nature of the expenses for the individual; they are large, relatively infrequent, and unpredictable, making healthcare a prime candidate for insurance and all of the problems that kind of market has under uncertainty: adverse selection (people who benefit more from insurance are the only people who buy, driving up the costs for insurance companies over time and pricing more and more people out of the market at the margin), moral hazard (people with insurance coverage take more health risks than they would otherwise, raising costs beyond what was expected by insurance companies), and difficulties associated with calculating and recalculating risks when individuals gain healthcare coverage, lose it, and gain it again (how do we grant coverage at birth when the presence of a severe birth defect makes the expected cost of coverage astronomical? The point of
insurance is to share risks between individuals). Then, there are potential principal-agent
problems between doctor, patient, and insurance company. It cannot be assumed that doctors act
in both the patient's and insurance company's interests. There is also a problem of product
uncertainty; medical problems are very complex and the outcomes of different treatments on
different individuals are often very difficult and costly to predict accurately. There are supply
constraints currently in place that limit labor access to the healthcare market through licensing of
doctors. There are significant nonmarketable qualities of the market and large external impacts: a
healthier population surrounding an individual makes that individual less likely to contract
disease, and reduced dislocation costs of illness reduce costs of production in other markets.
There are increasing returns to a point due to large sunk costs and fixed costs of some kinds of
medical equipment and staff; it is more efficient to have a leading rare disease specialist or an
MRI machine in a large city hospital instead of a smaller rural one. And, finally, administrative
costs for large plans are lower as a percent of total cost of care than they are for smaller and
individual plans.

It is because of these points that the outcome of a purely free market is likely to be quite
inefficient. In theory, moral hazard, selection bias, licensing, administrative transaction costs,
and the positive externalities put pressure on healthcare production to be below an efficient level.
The effects of principal-agent problems are ambiguous depending upon the structure of the
market. If doctors and patients bear less of the cost of healthcare than insurance companies,
overproduction is likely to occur and vice versa. Increasing returns to scale favors
overproduction in heavily populated areas and underproduction in sparsely populated areas.

There is also the worrisome market structure of healthcare in the United States (Gaynor
and Haas-Wilson: 1999). The market is very concentrated in a few major insurance organizations.
Inefficiencies resulting from an oligopolous supply side extracting consumer surplus and producing below efficient levels to put upward pressure on prices are legitimate concerns. The lower cost of buying health insurance through a company rather than on your own is likely due in part to differences in bargaining power between the individual and a large company along with the risk sharing that occurs in covering groups over individuals. I propose that a quick way to eliminate this additional mark up that an oligopolous market can extract from price-taking consumers and simultaneously take advantage of reduced administrative costs for large group plans is to make government the sole representative consumer of healthcare for its citizens in the same way a company is the sole consumer for its employees. Further, given its success and the way it neatly solves economic theoretical problems, I propose we model the government insurance program on the Stanford Plan. Government would purchase group policies for all individuals in a region from the regional provider that offered the lowest price; individual participation in these group plans would be made mandatory by levying taxes, similar to Medicare taxes, on the entire population. Monopolize the demand side of the healthcare market in a loose way. Because the government is subject to the governed, if it makes poorly informed decisions or decisions that do not jive with its citizens’ preferences, votes can restrict the ability of government to skimp on cost effective service and use tax revenues elsewhere or do a poor job of making decisions and attempt to save too much money by collecting little information and making incomplete analyses. The government failure is still not to be ignored; but, the failure that results from an oligopolous market is likely to be more severe and less subject to change than one resulting from possible government incompetence or corruption. Taking this full public finance approach also has the advantage of avoiding some serious dislocation costs that are likely to arise from nationalizing the healthcare production system in place.
Barr's (2004) assessment of the success of the UK's more highly regulated system versus the US's system is quite positive. He notes first and foremost that the empirical results of both systems are heavily in the National Health Service's (NHS) favor. Costs as a percent of GDP and per person in US dollars are lower in the UK (7.6% and $1992) than in the US (13.9% and $4887) (Barr, 275: 2004). Furthermore, Canada and Germany, which have systems of public finance with limited total spending and private production, also compare favorably to the United states (9.1% and $2,792 for Canada and 10.7% and $2,808 for Germany) (Barr, 275: 2004). Health results are also slightly in favor of the public systems. The gap in coverage in the United States probably plays a very large role in the poor performance of the healthcare system despite such high levels of spending.

Both systems have some pretty significant problems. The United States’ markets developed the HMO in an attempt to help curb rapidly increasing costs, and that has probably not been very successful; there is evidence that some kind of total expenditure regulation is necessary to achieve the degree of price control that the UK or even Canada and Germany have (Barr, 2004). HMO’s partially overcame the problem of physicians bearing little to no cost of providing additional care to healthcare plan members, but still impose no hard budget on the system as a whole. The total amount spent on healthcare is simply limited to how much individuals are willing to spend. One thing in common among Germany, Canada, and the UK is the implementation of some kind of strict budget limit to the entire healthcare system (a fixed budget allotment by the government for example) generating incentives to produce results at the

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4 2008 estimates of Life Expectancy (US at 78.14, Germany at 79.1, Canada at 81.16, and UK at 78.85) and Infant Mortality Rate (Infant deaths/1000 births) (US at 6.3, Germany at 4.03, Canada at 5.08, and UK at 4.93). (CIA World Fact Book: 2008)
lowest costs possible rather than highest profit margin possible\textsuperscript{5}. Further, there are considerable efficiency arguments to be made to increase the extent of healthcare coverage in the United States. The NHS has problems with being overburdened (which would be better solved by higher public investment in the system rather than privatization, given the poor cost effective performance of the US private system relative to public ones).

Rowland, Pollock, and Vickers (2001) attacked the Labour government’s stance on privatization of NHS. They cite statistics that demonstrate little difference in efficiency between private and public hospitals, much higher administrative costs in privatized systems like the US’s, and evidence that the inclusion of the profit motive into the healthcare market often raises prices unnecessarily. The phrase, “the policy can only be justified with reference to the theoretical assumption that the markets work best” demonstrates a point I will discuss more fully in the next section.

Hollingsworth, Hanneman, Hage, and Ragin\textsuperscript{6} (1996) had some interesting findings on the effect of state intervention in the healthcare market. Public and private investment in the medical labor market (measured as physician human capital) had significant and large cost efficient reductions in mortality rates\textsuperscript{7}. Increased specialization seems to have cost inefficient reductions in mortality rates. State control over prices and personnel had the unambiguous effect of

\textsuperscript{5} There is a difference and this will be discussed in greater detail in the next section.

\textsuperscript{6} The age of the study’s data provokes some concerns. Much of the recent increases in costs are due to rapidly advancing technology. The cost data from before 1970 is likely not affected by this circumstance nearly as much as it would be now. Another study like this with more recent data would provide some interesting information.

\textsuperscript{7} This can take the form of private development of medical schools and alumni donations to those schools etc. or government subsidy that results in similar outcomes, greater production of qualified doctors and greater demands for entrance to medical schools with subsidized reduced prices.
lowering mortality rates and reducing costs. There is an interesting condition in their further analysis in the truth table, though. High levels of specialization are necessary to achieve low mortality rates unambiguously. This finding likely reflects the increasing marginal costs of reducing mortality rates because, as they showed, increases in specialization are socially inefficient. The two paths to low mortality (Hollingsworth et al, 474: 1996) along with high specialization are either high variable values of state control of prices and personnel and finance or low variable values of control of prices and personnel and high physician density. Thus, we can see why there are similar health outcomes for the British and United States health systems.

The analysis of socially efficient mortality reduction (Hollingsworth et al, 475: 1996) shows that state control of prices and personnel is necessary along with either high levels of state financing and high levels of specialization or low levels of state financing and low levels of physician density. Unfortunately, neither set of criteria is true for America. We have high levels of specialization and high physician density and little control of prices and personnel. The implications of this paper are that to achieve more socially efficient low mortality rates, we need to institute price controls in some way and, given our high physician density, the easier of the two routes would be to institute higher levels of state financing.

Economic arguments on public medicine are not fully conclusive, partly because of lack of information on the real effectiveness of both formats and partly because of the different base states of different countries' lifestyle decisions. Barr (2004) admits that the UK’s favorable comparison with the United States could be entirely due to different levels of health problems (Barr, 276: 2004). Similarly, Hollingsworth, et al (1996) do not adequately control for different health circumstances in different countries. For example, the authors noted higher mortality rates throughout the period for France. This could be due to the French lifestyle and not its healthcare
system. When discussing the optimal format of healthcare in the United States, this fact is especially relevant, because the United States is so unique in many aspects of the lifestyle decisions of its citizens and the structure of its healthcare system. Obesity rates (and therefore related heart disease and type 2 diabetes rates) are significantly higher in the US than elsewhere, and this is primarily due to lifestyle.

We can certainly get closer to solving the problems of imperfect information in the healthcare market through better designed systems. The Stanford Plan works out very well in theory in respecting rational incentives, correcting for inefficient behavior rooted in imperfect information, and even addressing moral qualms we have with the extensive lack of healthcare coverage as a fringe benefit (over 40 million people (NCHS: 2007)). The moral qualms are theoretically addressed by transferring endowments in kind in this case in a market that all individuals need at least some access to. This brings up concerns of the paternalistic nature of transfers in kind, but these concerns are addressed by questioning the validity of some economic assumptions.

The problems caused by imperfect information that have been discussed have something very neat about them. We can predict what the impact of imperfect information on different parts of decision making in different theoretical situations will be. We may not be able to predict relative magnitudes and, thus, the sum movement of healthcare provision above or below the efficient quantity, but, we can methodically analyze the different effects putting a price tag on information has. This is possible because of how we define the decision making process; think like a rational actor and you can guess the outcome of different constraints on that actor. The problem is the rational actor assumption is questionable.

**The Rational Actor Problem**
In this section, I discuss the rational actor motivation assumption and its validity. The effects of relaxing this assumption are very complicated, because the formation of norms that influence social behavior are organic and difficult to analyze. Once one theorizes an established norm, it becomes easier to predict outcomes of the norm in the market. However, it is difficult to understand what the consequences for the norm itself are. The implications of this discussion are that economic arguments against paternalism are on shaky ground and government involvement in society can influence the creation of norms, hopefully with good intentions.

Often, economic arguments take the format of first positive analysis and then normative analysis. They rely on other moral judgments like fairness to make a fuller and more coherent argument about particular policy paths, especially in healthcare. However, positive and normative economics are at the root extremely difficult to separate. Positive economics has its own kind of implied moral outcome; analysis in terms of efficiency is very difficult to do using truly neutral language. The word, efficiency, itself carries connotations that are difficult to shake even in a strictly economic theory setting. There is no waste and individuals maximize "utility" given constraints; economics implicitly highlights efficiency as a moral value that the system achieves. It does not seem to be as amoral\(^8\) of a science as we would like to contend when arguing about its universal ability to have Pareto efficient consequences for all kinds of people, depending upon their resource allotments. Positive analysis is not impossible, but it is very difficult to do for very good reason; there is no reason to argue about how to achieve an efficient outcome if we place no value in that efficiency. Economics inevitably has a greater goal than producing stuff, and, so, strictly positive analysis is superficial and purely an intellectual exercise with no practical application to reality. This implicit good that economics presumably achieves

\(^8\)Thus, it has the ability to be applied in all cultures with all kinds of moral codes without the value in efficiency being undermined by other moral values.
becomes a bit problematic when we simultaneously introduce imperfect information and other motivations into the system, however, because there is sufficient doubt that Pareto efficient outcomes occur in this situation.

Especially relevant to the discussion of how effective a free market is in achieving efficiency ends in healthcare is a discussion of the assumptions that we make as economists and the problems that arise when several assumptions are relaxed. First, we assume that individuals are instrumentally rational. His or her preferences are complete, transitive, and nonsatiable. Then, he or she maximizes his or her utility subject to his or her budget constraint. This is certainly partially true. However, problems arise when we try to accurately include the influence of society and culture on individual decisions and the reciprocal but smaller effect of individual decisions on that same social influence. Furthermore, it will be shown that, when imperfect information is included in our model, rational behavior does not necessarily lead to efficient outcomes. The constraints of the market do not necessarily bind actors to achieve efficiency. We assume perfect information to circumvent this problem of rational exploitation. Relaxing the perfect information assumption unambiguously throws the market off of efficiency. It makes information costly to obtain and there have been many interesting models of imperfect information markets that have an equilibrium that is always inefficient. However, these models still do not fully address the problem of exploitation and why it does not occur on such a large scale as predicted in reality.

Let us first look at the outcomes of rational behavior under perfect information. In the Arrow-Debreu model with perfect information, all of the conclusions are robust: markets clear, prices reflect the actual cost of manufacturing goods, and efficiency is achieved. Everyone has access to the same perfect information, so any attempts to game the market and charge above
cost plus economic rent prices are undercut by other firms entering the market to correct the inefficiency. If isolated individuals do not act rationally as we characterize it, they only hurt themselves. They are forced out of the production market or accept lower income or nonmaximized consumption. In short, they do not matter. Alternatively, we can also reduce known social influences on taste and constraint (and more importantly, predictable changes in those influences) to exogenous effects on prices and distribution in the economy. When information is perfect, the external effects on an individual’s decision making process are known by that individual and other individuals in the system. These two approaches make some sense but they are both wrong, because social norms introduce the possibility of different constructions of utility functions and different decision rules into society on a large scale. Social norms effect more than a few isolated individuals, because they can develop out of great masses of individuals as well as small tightly knit groups. Further, they can affect the very nature of economic decision making in the form of reciprocity rules or even just arbitrary demands a social groups places on an individual to not enter a specific market (the sex industry for example). The demands that social relationships place on an individual are a part of outcomes in the market, and, contrary to imperfect information, the outcome of the inclusion of different norms is ambiguous and quite difficult to analyze. They can cause market activity to overproduce or underproduce or overprice or underprice, just as imperfect information can. However, they can even move individuals’ utility in directions that are contradictory with moving closer or further away from true efficiency by changing the nature of their utility functions.

Imperfect information complicates the rational actor scenario significantly as well. Because efficient equilibriums are not reached, there is room for anti-competitive behavior. In fact, as we speak of enlightened rationality, anti-competitive behavior can provide competitive
edges. Trust is necessary for business when things are uncertain, because the cost of obtaining
certainty on the factors of a decision is very high. Prudent business practices like installing safety
measures in products even when the external cost imposed on others of forgoing the measure is
lower than the cost of inclusion often pay off in the long run. On the other end, there is
considerable room under uncertainty to exploit other's ignorance. And here is where our
assumption of human behavior would lead us to false conclusions. Rational people can and will
exploit information advantages even in equilibrium. The constraints of the market are not strong
enough when uncertainty is present; and they become weaker as the market grows more
uncertain. This is why oversight of behavior or intervention into market failure is necessary.
Rational selfish people cause uncertain markets to fail constantly without some form of serious
constant oversight. The key here is part of this oversight comes from social relationships and not
solely from an authoritative and all powerful government.

Societies have varying success with market capitalism with varying amounts of
regulation, because the other social institutions present affect the economic situation. The former
Communist countries have had some poor performing free market economies (Flemming)
because they have not had many of the social institutions that Western societies have had for as
long as the West has had them. Our established systems of law, property protection, and political
democracy help considerably in easing the tensions between selfish individuals that imperfect
information in free market theory would introduce. Further, established moral norms (the very
social constraints and tastes) governing good conduct and respect for others is an even more
important and elusive factor in the success of free market capitalism. It is the best economic
system we have thought of so far, but it works not because individuals are strictly selfish. It
works because the specific background, the fabric of society, helps alleviate its vulnerabilities
under uncertainty. This fabric is subject to change, and it does so slowly. Former Communist countries will likely change enough for capitalism to work better, and the presence and building success of the free market institution itself helps change society as well. Free market capitalism is itself one of the systems present that influences the way people interact and the values they hold. A market requires you to be selfish to be successful, so it reinforces those motivations in people regardless of whether or not they are intrinsic to human nature. But, there are limits to what the market can do in this regard on its own. Many former Communist leaders in these new free markets still hold prominent positions in the economy, and this is out of line with market values; the free market may be an official institution, but those who directed the command economy still direct the market economy (often for similar unfair personal gains that were accrued under the corrupt bureaucracies of the Communist governments). Furthermore, the market cannot make itself successful on its own. Thinking of tort law and social contract theory as public goods, one can easily see why many of the institutions that make market transactions feasible would never be supplied by the market itself in the first place.

Here is an example of the need for social structures that correct for the problems of rational behavior under imperfect information. Theft is a kind of opportunistic behavior, and there are a whole host of other theft like strategies, manufacturers’ lies about quality for example, that can be employed (in fact rational actor models state they will be employed) in the face of imperfect information. These strategies persist even under competition when the perfect information assumption is dropped just like discrimination in labor markets, etc. The point about this is Locke and Adam Smith argued that the only purpose for government was to protect property rights and, therefore, enforce contracts, because the invisible hand would take care of all else; they make the tacit assumption that some authority is limiting the very selfish behavior
that is shown to best produce efficiency. Access to perfect information for the government, when enforcing property, must be assumed for this ideal outcome to take place in the goods markets as well as the much more difficult, in terms of contract enforcement, labor market. Of course we need to protect property rights! Otherwise we have a state of nature and no society at all. The point is, under an assumption of actors as instrumentally rational, protecting property rights, or another way, enforcing perfectly explicit contracts perfectly, not just the seemingly simple task of protecting property, is impossible when information is imperfect. And, indeed, there is substantial evidence that people are not instrumentally rational to this vicious degree; they do not simply steal whenever the expected benefit is greater than the expected cost.

A problem of order arises in goods markets when perfect information is no longer assumed; how do we prevent the strong, the wealthy, and the better informed from taking advantage of the disadvantaged. Let us look at a goods market example, theft, to try and understand what kind of normative orientations and external influences competitive systems are likely to require and desire. First of all, who benefits from theft? The thief, obviously. Who loses? This is much more complicated. It depends upon the elasticity of demand and supply in the market of the stolen good and upon the competitive nature of the market. If demand is inelastic and firms are not completely price takers, producers can easily charge higher prices to recoup the losses from theft, and it is consumers who bear the burden of theft through higher prices. If we take as given the situation where capitalists are just profit maximizers and competition is not over efficiency, but over capital accumulation and by extension market share, firms will always have the ability to absorb the cost of theft up to at least a certain point where profits are zero and we have a quasi perfectly competitive market through the ‘regulation’ of theft. It is important to note though that even with this ‘regulation’ the consumer surplus that
would have extracted capitalist is instead reappropriated by the thief. The difference is in who loses from the theft’s action, not who gains unless the thief is a ‘Robin Hood’ and gives the stolen goods to the needy.

But as soon as capitalists stop giving ground and pass the cost of theft onto consumers, the thief is in part a ‘saboteur’ and no longer fully a ‘Robin Hood’. This can happen in any number of ways but it is important to note first that because of imperfect information there is a varying lag in the response to theft. Indeed, sometimes through glitches in inventory systems, for example, there could be no response to certain thefts. Capitalists make decisions that increase costs directly and minimize the imposed cost of theft with only imperfect information of the current theft, past patterns of theft, and ultimately weak and vague projections regarding theft in the future. What arises from this situation is a macro model of “reduced productivity”, a certain level and sort of goods are ‘removed’ post production but pre market, where real medium run aggregate supply, \( Y(n) \), is reduced and there are losses that likely extend to everyone else in the economy in the form of higher prices. However, we do know from looking more closely at the micro level decision that reduced productivity or theft imposes different distributions of the burden on the capitalist (increased costs) and consumers (decreased efficiency) as a whole based on market characteristics, and, further, the benefits of those goods do not fully disappear, but are simply unfairly allocated by the market’s standards.

One can conclude that, although decreased costs do not necessarily equate to increased efficiency and vice versa, because of asymmetries of power and information, there is probably some efficiency loss due to an increase in opportunistic behavior and the very existence of opportunistic behavior itself. We do not know for sure how much stealing or shirking hurts consumers, i.e. everyone, but we know there is a reason grounded in imperfect information for
consumers in aggregate (but not individual by individual) to want to eliminate opportunism. Since the instrumental rationality model implies that opportunism is endemic to the system under imperfect information, the only solution to reduce the excess costs that result from bad behavior is to correct people’s instrumental rationality. The construction of social values and the creation of other normative orientations that people in the society would adopt along with instrumental rationality must occur to achieve a greater level of efficiency. These new normative orientations must be ones that specifically correct the problems that instrumental rationality cause.

Bruno Frey (1997) has discussed a very interesting concept of intrinsic versus extrinsic motivation. It fits well into the economic framework, but it also makes assumptions about actors that are not fully realistic. He does not discuss how these intrinsic motivations develop and seems to take it as granted that what determines whether or not a regulation or monetary incentive "crowds out" or "crowds in" is fixed in the human psyche. This is part of a greater debate between psychologists, nature versus nurture, that I am not fully prepared to discuss completely. Human psychology and psychological reactions to stimuli are not simply something innate; there is certainly some socially defined component of them. Different societies will encourage different levels of intrinsic motivation in its members and make different kinds of extrinsic motivation socially acceptable. In a 'greedy' society, for example, one that fully applies rational actor thinking in every situation, paying even a friend for dinner could be seen as socially acceptable and have no effect or even a strictly positive effect on intrinsic motivation (Frey, 7-8: 1997). It is certainly important to consider intrinsic motivation, but systematically subsuming it into economics is not the most accurate way to do it, because economics has not meaningfully addressed the fact that market structures make rational actor approaches more successful, encouraging the adoption of that orientation; in Frey’s terms, market structures
encourage the adoption of attitudes that extrinsic motivation should be acted upon and intrinsic
motivation should not.

**Social Norms and Healthcare**

After outlining the importance of the rational actor assumption and questioning its
validity above, I discuss, in this section, the favorable consequences a public system has in the
presence of other norms and the moral value of a higher level of intervention into the healthcare
market place.

So, how does this point apply to healthcare? For one, social influences on rationality are
real. Dismissing the moral horror those ‘illogical moralists’ feel at the large number of people in
the United States without healthcare coverage is shortsighted. Normative and positive economics
are extremely difficult to separate. Discussing market efficient levels and extent of healthcare
spending and coverage is easily conflated with the normative judgment that efficiency is the
most important goal. As we can see from John Broome's, although problematic, discussion of
quality adjusted life years as a measure of cost efficient allocation of healthcare spending, the
largest per dollar increase in qalys can very easily clash with one's sense of fairness. Even the
most morally obtuse economist would be horrified by a simple expansion of Broome’s
discussion of efficiency versus equality: an even more cost and benefit efficient allocation of
medical spending would be one where the highest return on the increase in qalys is taken into
account. Curing an investment banker of a disease instead of a beggar is easy to justify, but it

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An arbitrary value is assigned to varying degrees of health below healthy. Even though Broome
says that it does not depend on the utility of the individual, utility and state of health are
inextricably linked. Assigning a value that relates the state of the necessary removal of an arm
with the healthy state makes an implicit judgment about the utility lost. This utility varies from
individual to individual; a pitcher would lose considerably more than a soccer player, for
example. An econometric study could be done to determine the average lost utility to find an
appropriate value, but such a study's results could change drastically over different periods as
the tastes of individuals change and the highly demanded kinds of work change.
takes the same reasoning to justify curing a poor person instead of a rich person generally. What is the virtue of fairness then if as Broome says "The fundamental problem is that fairness is not really about maximizing anything. It is about equalizing, not maximizing."

(Broome, 86: 1995)? The presence of imperfect information makes the future contributions of both the beggar and the banker to society uncertain. No one knows what potential each individual really has. This is a strong argument for government to ease access to human development goods like education and healthcare so that disadvantaged individuals with untapped potential have a fair shot at developing it. Moralists and their ascription to forms of behavior other than simple rationality have a real effect on the economy, because they often limit the ability of what would be purely rational individuals to exploit each other under imperfect information and even influence what things people value in society. Other social structures shape the rules by which the market system works beyond "greed is good" and its unfortunate outcomes under imperfect information. The basic example has already been mentioned, laws that protect private property; some kind of regulation (through government or social convention) is always necessary under imperfect information, and even other kinds of market failure that persist under perfect information (public goods).

Fairness is a public good. There is no reason for the individual to desire fairness (it harms efficiency) unless they gain from it. Even then, it limits the potential gains of all individuals, misaligning incentives from the economist’s viewpoint. Further, the Second Welfare Theorem dictates that after an efficient outcome is achieved we can improve equality with income transfers to pacify our moral sentiments while achieving a different, but still Pareto efficient, market outcome. But the lack of an initial efficient equilibrium brings this logic into question. Efficiency is not achieved either way, so an assessment of one’s values is more important;
individuals make decisions based on morals as well as self interest in uncertain situations because of knowledge of the unpleasant outcomes in society that widespread self interest can easily cause. Further, because an individual cannot predict his or her future economic position, the idea of fairness, equal access to opportunity for self-improvement (education and healthcare at the forefront) and a social safety net become much more attractive.

An example directly relevant to healthcare is ample evidence that attitudes of nurses are more altruistic. Many who work in that labor market do so out of reasons of job satisfaction and a sense of doing good in the world. In an article about wage’s effect on retention of nurses, Ahlburg and Mahoney (1996) found that an increase in wages for nurses to 10% over the next best alternative only raised the likelihood of retaining a nurse by 2 percentage points. This article is relevant because NHS’s ability to monopolize the labor demand market is one of the factors that is probably making the NHS cheaper than a private system. The NHS can keep wages down because of its market power (sole consumer of healthcare labor). The modest increase in the ability to retain nurses (of which there is a serious shortage in the United States) from increased wages suggests that the risk of losing a large portion of the nursing labor force if we switched to publicly funded healthcare is fairly low. I suspect one of the reasons for the low effect wage increases have on people’s desire to be nurses is that being a nurse has perceived social rewards. You become a nurse partially because you want to do good. This choice is obviously not simply a matter of income (and frequently argued, by proxy, utility) maximization calculus.

A free market structure influences behavior in ways that sometimes counter other social structures. Teaching doctors and nurses to behave as profit maximizers by placing their actions directly into a free market structure encourages opportunistic behavior. This is at odds with the
spirit\textsuperscript{10} of the Hippocratic Oath to do no harm (which Arrow (1963) highlights as a major source of the resolution of principal-agent problems between doctor and patient). Encouraging prospective patients to maximize utility generally, ignoring for the moment bounded rationality affecting the immediate decision's consequences for the future, can result in the externalities of lack of healthcare easily through health insurance's high costs relative to its private benefits.

Constraining insurance companies to be competitive in the market leads to unfair strategies being employed by all firms under imperfect information (offering insurance only to low cost individuals, etc). It is dangerous to teach people to act strictly rationally when the outcomes of the Arrow-Debreu model have not yet been fully replicated theoretically and empirically when the assumption of imperfect information is relaxed. It has been empirically demonstrated by Robert Frank that economists act more 'rationally' than graduates of other disciplines and the public generally (Brittan 8: 1995); "If [economics students'] textbooks tell them that that is how people act for the most part, they will be afraid of looking like suckers if they act differently. They may also believe that the results of such motivation will in the end not be too bad for the others, appearances to the contrary notwithstanding". Markets are the best device we have developed so far to allocate resources, but it is important to keep in mind that they actually require much more regulation than we theorize and consciously acknowledge, and, further, that much of this regulation comes from the softer and more slowly but fluidly changing constraints of social relationships.

**The Need for Economic Logic with Sociological and Psychological Consideration**

Other social institutions that influence behavior cannot be ignored. As Frey has tried to do, we need to consider what "irrational" behavior is present in a market and the effect of and on

\textsuperscript{10} A doctor could conceivably do no harm and charge extortionary prices while following the oath.
policy changes on and of the "irrational" behavior. It is important to recognize that economics has its own kind of morality to it when the market works. Efficiency is achieved and the greatest return to society in aggregate is produced at the lowest cost possible. There is no waste and allocations are fair in terms of individual’s contributions to the economy and starting resource allocations. This system is sometimes supported by other systems in place that direct behavior in the most efficient way possible. Sometimes it damages its support network. Robert Lane summarizes the weakness of using economics as the only tool of analysis very nicely with this quote: “Coeteris paribus is the analyst’s crutch that protects us from harm, keeps up going – and prevents us from learning to walk straight.” (Lane, 7: 1991). The most important thing to do, given the inadequacies of strictly economic thought, is to include psychological and sociological thinking and analysis when analyzing real economic and social problems.

We need to approach complex problems with complex solutions. As Arrow mentioned in his article, the effectiveness of healthcare often depends on extra-market lifestyle decisions. Not only do we need to solve the problems of market healthcare, we need to better influence healthy choices. We need to do more than ‘5 a day ads’ competing (pathetically) with the slew of manipulative Nabisco junk presented on children's television. Recent studies have shown that moderately intense exercise is equally effective in fighting mild to moderate depression as pharmaceutical methods; yet, our culture has seemingly cultivated an attitude where the often more expensive quick fix drug is preferable to living a healthier life. We need to emphasize consumption less and moderation more in our culture. While it is certainly difficult to accurately assess the effects of any policy plan we design, we can start with instituting socialized medical insurance. This creates a much stronger incentive for government to regulate not only the costs of healthcare, but also these other markets and nonmarkets that are having severe consequences
for health in our society. If government represents all consumers with mandatory participation, it has stronger incentives to provide more thorough and intense education on lifestyle decisions that have serious impacts on health. The current situation with a fractionalized market with frequent plan changes by individuals (getting a new job and changing your healthcare plan based on new offerings by a new employer) erodes incentives for companies to invest in preventive care when the benefits that are manifest down the line may only be realized for a competitor. There is also the issue of profitability being a private company’s primary concern and the effect it has on the offering of insurance policies to different individuals in a free imperfect market; healthier individuals who live healthier lives more frequently get access to healthcare and require education of healthy lifestyles less frequently. Furthermore, by making consumers think more about responsibility to society when choosing whether or not to eat better food and whether or not to exercise more, we can put greater pressure on individuals to police their own moral hazard. Using a pervasive government financed approach creates a more powerful symbol\textsuperscript{11} that aids in pressuring individuals to do so than treatment of healthcare as just another commodity.

Preventive care reduces the demand for more expensive and drastic procedures. When information is imperfect with likely asymmetries in favor of insurance organizations in concentrated supply markets, incentives can be poor for the provision of extensive lifestyle education and preventive care when more expensive procedures down the line can yield higher profits. The market within the greater healthcare market for drastic and complicated surgeries exhibits greater character of monopoly markets and fewer options for the consumer when his or her life is immediately on the line.

\textsuperscript{11} One can look at the way politicians tip toe around Social Security and Medicare. It is not simply the danger of tampering with benefits that accrue to a very active constituency. People have powerful feelings about the existence of these safety net programs beyond rational cost-benefit calculus.
There are many things we can do to improve the health of our country's citizens and many of them are paternal in nature. We are familiar with the relative welfare improvements between cash transfers and good specific vouchers that criticize paternalism as not inefficient. However, because efficiency is not and should not be the sole goal of society, this argument against well reasoned paternalism is substantially weakened. Furthermore, the rigorous economic argument against paternalism is based on the inaccurate assumption of an individual’s rationality, and the way utility curves are actually developed\textsuperscript{12} Many readers may find this idea distasteful or see this argument as having potential to result in a serious curtailing of individual freedom. I do not advocate heavy handed government intervention, like, for example closing down Phillip Morris and its Nabisco subsidiary. Freedom and individuality should not be constrained by a central authority, but it is unavoidable for it to be constrained by the soft constraints of society. The methods of the government I advocate in the case of encouraging healthier eating are more along the lines of anti-smoking campaigns, argument and persuasion, and substantial childhood education and socialization. The reasons are similar to those for preferring tradable carbon emission credits to hard pollution caps and the earned income tax credit to minimum wages. Incentivizing good behavior is preferable in markets to setting an arbitrary lower or upper bound to production quantity or market price; and, encouraging people to make more enlightened decisions about food, smoking, and exercise is likely to be more effective than making healthier lifestyles compulsory either through enforcement on individuals or limiting supply options to

\textsuperscript{12} Utility functions do not simply fall out of the sky. There is already considerable social influence on the kinds of things we desire. Criticizing a policy as paternalist seldom takes into account how the policy could be poised to correct other paternalist influences in society that have negative consequences. Restricting many government hand outs to food, childcare, and housing also fights a consumer culture that exalts luxuries over necessities. It must be considered whether or not the paternalist influence is a benevolent one, not simply whether or not an influence is paternal.
only the healthy ones.

Robert Lane has written a very thorough book on this subject of a hybrid theory. When discussing money as more than a system of rational price cues (Lane, 79-136: 1991), he cites psychological evidence that those who have not are much more likely to develop attitudes towards money and goods that interfere with what he calls "insightful rationality", the maximization of enlightened preferences that the actor wants and are also good for the actor. Those who have little money have more psychological obstacles to overcome when they try to obtain what they really want. Because less well off households make up the main part of the gap in health coverage, alleviating stress on low income budgets by forced provision of healthcare (to prevent bad decisions regarding budget allocations for healthcare versus other commodities) through government will aid in advancing what Robert Lane sets out as our collective real goals, greater levels of human development and life satisfaction. Forcing healthcare upon those low income individuals in a pervasive way simplifies the consumption of healthcare (just go to the government financed local hospital) and saves cognitive resources; further, it assures that poor decision making does not prioritize less important material wants over health. Lane analyzes the market experience in terms of these goals, concluding that it has conflicting effects. Sometimes the market improves cognitive complexity through greater demand for it and sometimes not. Sometimes the market improves one’s sense of self-attribution (you have control over your own fate; this frequently results in higher self-esteem and higher life satisfaction) and sometimes it does not. He marks poverty as the major obstacle for market systems to overcome if they are to improve universally the development of humanity. Higher levels economic success are certainly correlated with higher levels of human development and life satisfaction, but this is severely tempered by whether or not a sizeable portion of society is plagued by inability to adequately
provide for themselves. It is also contingent on the work that people do to be economically successful being challenging and engaging rather a series of repetitive tasks. These changed axes in the discussion of the success of a market system are needed ones; what use would be a market that satisfies the material wants of unsatisfied automatons?

Sound and pervasive healthcare coverage in the United States is needed because of this. The financial disasters that can occur to even the most well off people without health insurance severely limit the ability of individuals to achieve the goals that Robert Lane lays out. The programs we have instituted in many states to cover all children regardless of ability to pay are a good example of aiding the development of human capital in early stages of life. But, later in life, we do little to continue that aid. Social programs did not originally come about solely because of self-interest; ideas and systems of morality played a major role in their institution. In order to allow the market experience to have even more benefits for human development in every income percentile, we need to make sure everyone has easy access to at least basic healthcare. Poor health seriously impedes an individual’s life satisfaction, further cognitive development, self esteem, and self attribution. We also need to encourage people to desire healthier things, to aid in the development of what Lane calls “ego-syntonic preferences”, preferences that are also good for the individual. The poor obviously express these preferences less often than the better off in the healthcare market\textsuperscript{13}. Paternalism is not only a valid approach, but also a needed one in this market.

\textbf{Conclusion}

\textsuperscript{13} Refer to the NCHS (2007) data on higher rates of better lifestyle decisions for those better off: 22\%-28\% of low income children versus 10\% of higher income children have high blood cotinine levels (marker for exposure to second hand smoke) and 34\% of higher income individuals versus 20\%-22\% of low income individuals exercise regularly (low versus high income is defined as 200\% of the poverty line)
The healthcare market is mired by many informational problems that prevent the free market from achieving efficiency. It is a prime candidate for government intervention because of this, given the success of significant intervention by other governments and the circumstances of the US healthcare market today. The best format of that intervention in America seems to be instituting government finance of all healthcare and some government control of prices while imposing a national budget constraint for healthcare in some way. We can model this plan on the Stanford Plan, for simplicity’s sake, to satisfy economic reasoning on the rational decisions that occur in the healthcare market. Furthermore, we need to consider effective ways to intervene in other markets that have significant negative externalities for health. These more effective methods are not likely to be heavy-handed, rather based in further education and persuasion of children and their parents and, also, other adults, and, possibly, in the restriction of the ability of suppliers to advertise unhealthy food and forms of entertainment to impressionable young children.

Furthermore, there is a severe lack of information that is collected from healthcare users and healthcare providers. The NHS, for example, has a golden opportunity to collect data on the effectiveness of treatments and doctors on a huge scale that would aid in making more informed decisions about cost effective treatment and cost effective healthcare management practices. This, in particular, is a running theme of the problems of healthcare in general. More and more useful data needs to be collected by every system. In a market where uncertainty on so many parts of decisions plays such a major role in the failure of one system or another, we need all the information we can get.
Reference List


