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**Roadblocks to Reform:
Beyond the Usual Suspects**

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ABSTRACT

Real reforms attempt to change how health care is financed and how it is rationed. Three main explanations have been offered for why such reforms are so difficult: institutional gridlock, path dependency and societal preferences. The latter posits that choices made regarding the health care system in a given country reflect the broader societal set of values in that country and that, as a result, public resistance to real reform may more accurately reflect citizens' personal convictions, self-interest or even active social choices. "Conscientious objectors" may do more to derail reform than previously recognized.

INTRODUCTION

There is considerable dispute about whether national health care systems converge (see, among many others, Brown 1998; Cutler 2002; Jacobs 1998; Paris, Devaux, and Wei 2010; and Tuohy 2012). Yet, there is near universal agreement that, when there is convergence, it is invariably slow. National institutions or characteristics of health care systems die hard.

Health care systems are renowned for being resistant to "real reform," namely, reforms altering the basic rules through which individuals contribute to the financing of health care or through which care is delivered to patients (nonfinancial rationing). This definition of the basic rules of a health care system follows Pauly's (2002a) definition of such a system as a rationing tool.

Resistance to change is not inactivity: the Health Policy Monitor (2010) reports 1,300 reforms over a period of eight years in twenty countries, or an average of eight reforms annually. Despite these efforts, the main institutions survive essentially intact.

The most prominent explanations for the failure to implement real reforms in health care suggest some kind of procedural dysfunction that prevents a given country from reaching what it sees as a better health care system (see Oliver and Mossialos 2005 for a recent survey).

One such procedural dysfunction is institutional gridlock (Immergut 1992): for instance, the need for supermajorities in the United States (U.S.) favor the status quo in general (Brady and Kessler 2010) or other gridlocks allow interest groups to block or slow down the political process (Contandriopoulos and Brousselle 2010). Depending on the organization of their political decision-making processes, some countries will succeed in implementing real reforms while others will fail repeatedly (Immergut 1992).

A second interpretation is path dependency (Light 2011; Bevan and Robinson 2005): countries made certain choices in the 1960s that constrain their current opportunity set. This is a typical "trap"

mechanism, based on the idea that transitioning out of the inherited situation would cost too much. Path dependency can be overcome (windows of opportunity) and it requires strong political will to carry out real reform during these windows. However, once the reform is implemented, chances are low that it will be overturned.

A further explanation why health care innovations often fail is that special interests manage to preserve the status quo because the extant situation is somehow “preferred” to the post-reform situation. It is not so much a procedural obstacle that prevents the health care system from reaching what experts see as a better outcome, but rather a complex set of institutions and values in which the health care system is embedded (Burau and Blank 2006). This line of reasoning could account for reforms that fail after they pass the initial procedural hurdles, through counter-reform (Toth 2010) in the face of growing dissatisfaction (Cutler 2002).

This study explores the role of societal preferences as a plausible cause for opposition to health care system reform. It examines the often overlooked but important role of the “public” in public health systems and postulates that a country’s citizens can be either agents of, or deterrents to, change. Even the most ground-breaking academic research and best-informed public policies may have little impact if the proposed changes take for granted what people want rather than reflect their deeply-held convictions and preferences.

The next section lays out a conceptual framework for thinking about resilience. The third section presents the data, methods, and results, and the final section discusses and concludes.

SECTION 2 – CONCEPTUAL FRAMEWORK

Public Resistance to Reform

This paper lays out a conceptual framework for thinking about public resistance to change.

Before detailing the framework, it draws the normative consequences of resistance to health care system reform by societal preferences.

If we believe that a reform does not succeed due to institutional roadblocks, we consider that the failure entails a welfare cost—the country as a whole and its population would be happier on average had the reform been successful. In the path-dependency story, there would be a short-term cost to leaving the trap of history, but this would be more than offset by the long-term gain of a better health care system. However, if we believe that a reform failed because it was going against the rules governing the country that attempted the reform, we might see the failure as a rational, potentially welfare-enhancing reaction (at least, it would protect the well-being of a plurality of the population). A failure to reform the basics of a health care system would not always be welfare detrimental, but would simply correct a well-intended attempt at transforming the system in a way that is rejected by a substantial portion of the population¹.

One could still argue that broader institutions, such as those governing the labor market, taxation or public governance, are manipulated by vested interests in what could be termed a broadened path dependency. Once political and economic institutions have been set, it becomes impossible to reform the health care system even though that might be for the best. However, many (including quite a few economists) would argue that it is difficult to imagine that institutions and values ruling a country at large could go against some kind of weighted sum of individual preferences of that country's population, at least in liberal democracies. As a result, if health care reforms fail because of the resistance of existing institutions and values, it is reasonable to interpret such a failure as a rational public choice made by the population (Oliver and Mossialos [2005] call this “rational institutionalism” and path dependency “historical institutionalism”).

This is what I suggest in the following pages: real health system reform may be difficult to achieve because the way health care systems are organized reflects some combination of individual preferences within a given society².

1 The substantial portion does not have to be a majority, or even a plurality, as shown by Pauly (2002b) in the case of health policies in the United States: one-third of the population prefers the current situation (voluntary private insurance), one-third prefers universal public insurance, and one-third favors a mandate to buy private insurance. If the proponents of each reform (public insurance and mandate) prefer the status quo to the other reform (e.g., proponents of the mandate prefer voluntary private insurance to public insurance), no reform will be successful even though only a third of the population is happy with the status quo.

2 Mainstream economists would describe such an attempt at linking the organization of a specific institution to

Resistance Rooted in Self Interest

A given country's institutions and values constrain the basic choices that the country can make regarding its health care system. Basic choices refer to the rules governing how revenues are collected to finance health care (risk adjusted, flat rate, or based on ability to pay) and how health care is rationed on the delivery side (based on need or willingness to pay).

The relationships between the basic characteristics of a society—the sociodemographic composition of the population, income inequalities, level of trust in society or quality of public governance—on the one hand, and the characteristics of its health care system—the progressivity of financing or rules rationing the delivery of care—on the other may predict the public's willingness to embrace change.

These factors can be seen as conditioning the preferences and values of a society toward the way the health care system should be organized and financed. What is important about these characteristics is that they cannot be changed easily, they are usually not influenced by health policy makers and they constrain the choices made on health policies (Grignon 2009). The only known study that attempts to empirically test such relationships between societal characteristics and social policies is Cutler and Johnson (2001). However, they limit their model to explaining the timing of the birth of health insurance (and public pensions) rather than real characteristics of health care systems, such as redistribution and rationing.

The simplest such relationship is the one suggested by the public choice approach (Besley and Gouveia 1994; Gouveia 1997; Jacob and Lendin 2005). In this model, individual voters are not only consequentialist but also selfish; the only outcome they worry about is after tax income. The model is built to predict the proportion of total health care spending covered by public insurance and predicts that the way revenues for the health care system are collected will be affected by the concentration of the income distribution.

In this simple (and certainly not very realistic) model, voters decide on a coverage rate and the corresponding tax rate to cover public spending on health insurance. Public insurance is implicitly assumed to raise revenues as a proportion of income.

Individuals derive well-being from insurance (public or private) through a reduction of uncertainty (of income) and contribute to public insurance in proportion to their income. Therefore, the decision becomes one of pure redistribution: those who benefit more from the reduction in uncertainty than they

individual preferences of rational and consequentialist voters as the political economy of health care. Unfortunately political economy has very different meanings in other circles, and I therefore refrain from using it in this study. Interestingly, the Marxists would also agree that health care systems are embedded in a set of institutions, but they would disagree with the idea that these institutions reflect preferences; they would instead reflect the distribution of power among classes.

contribute financially will support public insurance; those, usually richer, who will have to pay more than they benefit will reject it. A given rate of public coverage will be accepted if more voters benefit from than lose from it. This obviously depends on, among other things, the inequality of the income distribution. If income is highly concentrated, a small number of rich individuals are net losers and their loss helps a large number of middle-income individuals to be net gainers. As a result, the basic model predicts that societies with higher levels of earning inequality will vote for redistributive policies such as public health insurance.

Table 1 provides a simple illustration of full public insurance and health care spending at 10 percent of gross domestic product (GDP) (assuming that the benefit derived from health insurance is exactly 10 percent of average income for all).

In Country 1, earnings are not concentrated (as shown by a Gini index of 0.16), and 4 deciles out of 10 vote for full public coverage. Public insurance is rejected. In Country 2, where the last decile concentrates 64 percent of total income, all deciles gain from full public coverage except the first and last. Public insurance wins an overwhelming majority of popular votes.

Table 1: Simple Illustration of the Link between Earnings (Pretax) Concentration and Rational Choice of Public Insurance

Country 1	Share of total income	Gain or Loss	Votes		Country 2	Share of total income	Gain or Loss	Votes
Decile 1	1	0.09	0		Decile 1	0	0.10	0
2	3	0.07	1		2	1	0.09	1
3	5	0.05	1		3	2	0.08	1
4	7	0.03	1		4	3	0.07	1
5	10	0.00	1		5	4	0.06	1
6	12	-0.02	0		6	5	0.05	1
7	13	-0.03	0		7	6	0.04	1
8	14	-0.04	0		8	7	0.03	1
9	15	-0.05	0		9	8	0.02	1
10	20	-0.10	0		10	64	-0.54	0
	100	0.00	4			100	0.00	8
Gini	0.16		Rejected		Gini	0.33		Accepted

Source: Author's calculations

This simple model is, as noted, not very realistic and should be considered a what-if rather than a description. If individuals are selfish and consequentialist, we should observe a higher level of public coverage in countries where earnings are more unequally distributed.

Of course, the U.S. comes immediately to mind as evidence that this prediction is invalid. Earnings seem to be more unequally distributed in the United States than in many other countries, yet it is the country where public spending on health care as a share of total spending is lowest among all OECD countries. That said, the history of financing reforms in Germany and the Netherlands shows that considerations of net gain or loss (benefit minus contribution) seem to play a crucial role.

The creation of an equalization fund for sickness funds in Germany was delayed for several years by the resistance of richer Länder (states) that did not want to subsidize the poorer parts of the country. In the Netherlands, the creation of flat rate premiums to competing private insurers was accepted only at the cost of heavily subsidizing those who could not afford the premiums, to the extent that 60 percent of the population now receives subsidies to purchase insurance. It seems clear from these two examples that voters take notice of changes in the redistributive effect of contributions to health insurance.

We need to go beyond these examples and test the statistical relationship at the country level between earnings inequality and public insurance.

This simple model makes two major assumptions: first, all individuals benefit similarly from being insured for health care (whether through public or private insurance); and, second, individuals value health insurance for the financial protection it offers and do not really worry about with whom they are pooled in the insurance fund.

Diversity a Key Determinant

If the model allows for heterogeneity in preferences or if individuals prefer not to be pooled with anyone, public insurance is less likely to be preferred, all else being equal. The reason is that public insurance imposes one-size-fits-all coverage, leaving both those who want more (highly risk averse or value health and health care more) and those who want less (low risk aversion or willingness to spend on health) frustrated. It also imposes a very wide insurance pool rather than leaving individuals to choose with whom they want to be pooled.

The more heterogeneous a population, the higher its preference for private, voluntary forms of health insurance—including the right not to be covered. Moreover, if heterogeneity in preferences correlates positively with inequality in earnings, the effects will go in opposite directions and will partially offset each other.

One measure of heterogeneous preferences is the level of population segmentation (Pauly 2002b; Cutler and Johnson 2001). A society in which subgroups live almost separate lives is more likely to

show heterogeneous tastes for health and aversion to uncertainty. Thomasson (2002) shows that in the U.S. during the period 1931–1955, a one percent increase in the proportion of blacks in a state's population decreased the demand for health insurance by seven percent. One reason could be that whites in these states were deterred from pooling into insurance when the probability of being pooled with blacks increased. It is also possible that the Scandinavian model of social protection was implemented in ethnically and religiously homogeneous societies.

The relationship between social homogeneity and preference for a universal and possibly egalitarian health insurance scheme leads to the same conclusion as the previous one: more fragmented societies are less likely to trust national insurance and universal coverage and prefer to rely on local charities or employer-sponsored plans. The prediction is that fragmentation within the population correlates negatively with measures of public insurance.

A Matter of Trust

Algan and Cahuc (2007) suggest a slightly different version of the local versus universal pooling argument (see Aghion et al. 2008 for a version of the same argument in English): In countries with a high level of trust in the fairness of society (individual merit and effort are rewarded), individuals can safely rely on local institutions and do not need the regulation and bureaucratic control of central institutions operating at a higher level.

In countries with a low level of trust in the workings of society, bureaucratic control will be seen as a guarantee that some level of fairness can be maintained. Algan and Cahuc (2007) develop the idea that trustful societies are less bureaucratic and can afford more flexible solutions to the problem of financing health insurance. In these societies, moreover, the need for income redistribution is less strongly felt (since earnings reflect skills and effort), and flat rate private insurance is seen as a good solution.

National insurance is not only about redistribution of income but also about government intervention in the delivery of care (Bundorf and Fuchs 2007). The level of trust in the ability of collective institutions to intervene positively in economic life can be a determinant of the kind and level of rationing in health care. If individuals in a given country perceive that public governance is of good quality and that public institutions can be relied on, they will be more likely to trust a single payer to manage health care efficiently. But if they perceive that bureaucratic involvement in the economy is always a source of waste and is more likely to penalize activity and growth, they will reject the idea that a central institution should ration care and will prefer a more decentralized rationer (the local and sectoral sickness funds, the employer plan, or a private plan they choose themselves).

This follows the idea of Abelson, Miller, and Giacomini (2009) that trust in public institutions, rather than in society in general, is a strong determinant of support for public insurance and for the single-payer system in Canada. Because single-payer systems are, in general, better able to ration care (control supply and limit access to resources) than are multiple-payer systems, this pathway predicts that countries with better perceived quality of governance will be more willing to ration care on the basis of need rather than ability to pay.

The perceived quality of governance conditions the willingness of societies to trust the intervention of public administrations in the delivery of care. However, universal, quasi-public systems can also be managed by corporatist institutions such as sickness funds.

Hall and Soskice (2009) show that OECD countries can be categorized as liberal market economies or coordinated market economies. In the former, wage setting and bargaining as well as discussions on working conditions take place mostly at the firm level. In liberal economies, professions do not need to engage in general bargaining for their fees or accept being regulated by a national body.

In coordinated market economies, in contrast, unions representing a whole sector of the economy, or a substantial proportion of employees and firms, take part in these discussions with the aim of coordinating the economy (across firms and sectors). When the economy is coordinated, all businesses and professions, including health care providers, must take part in one way or another in the coordination process.

Kenworthy (2000) suggests a measure of the degree of coordination in the economy (rather than a three-class categorization) which he calls “corporatism.” This is a composite measure of objective variables, such as the degree of concentration and centralization of bargaining or the role of unions in economic policy making at the national level. The theoretical framework suggests that more corporatist societies will regulate their medical professions more heavily and, consequently, will be more likely to ration care in a coordinated fashion.

To summarize, the theoretical framework suggests the following plausible relationships, that I will now assess (in an unsophisticated way) using empirical data:

- Countries with higher earnings inequalities, less fragmentation, or lower levels of trust are more likely to support national insurance and redistribution.
- Countries with better governance or more corporatist economies are more likely to support a single-payer system and public rationing of health care.

SECTION 3: EMPIRICAL ANALYSIS MEASURING CORELATIONS BETWEEN SOCIETAL ENVIRONMENTS AND BASIC INSTRUCTIONS OF THE HEALTH CARE SYSTEM

Method

I collect data on institutions outside the health care system (on earnings inequality, ethnic fragmentation, the level of trust in society, the quality of governance, and the level of corporatism) and measure their correlation with characteristics of the health care system such as the importance of public insurance or the ability to ration care. Because I want to compare comparable countries, I limit myself to OECD countries. However, because country-level data on these societal institutions and characteristics of health care systems are not available simultaneously for a large number of countries, running an econometric analysis with one characteristic of the health care system as the dependent variable and all societal institutions as the independent variables would reduce the number of available observations so much that no robust conclusion could be drawn. I therefore run simple correlations between pairs comprising one characteristic of the health care system and one institution outside the health care system. Using a spreadsheet, I calculate the linear correlation coefficient (across countries) and the slope of the linear relationship between these two variables and plot the scatter of observations in cases where the calculated correlation seems to indicate some interesting link between the two variables. I then run some very simple sensitivity checks, dropping outliers—countries with extreme values that seem to drive the relationship too much—in order to check that the apparent correlation is robust.

Moreover, the kind of data available, and the type of research question, would necessitate a truth table analysis rather than a statistical one. The simple correlations are only a way to check which theoretical relationships seem to hold water and which ones should be abandoned.

Data

I start with a description of variables I use to characterize the health care system. As mentioned previously, real reforms are those that attempt to change the redistributive impact of contributions to health care spending or to change the way patients access health care services (rationing). I therefore look for measures (or proxies) of how national health care systems raise revenues and ration care. For both dimensions (redistribution and rationing) I rely as far as possible on measures of outcomes rather than measures of processes.

Redistribution should be measured as the effect of the distribution of contributions to health care spending (taxes, payroll contributions, flat rate contributions, private insurance premiums, and out-of-

pocket spending) on the concentration of income. I use one such measure, the Kakwani index, measured as the difference between the Gini index of the income distribution before revenues are raised for health care spending and the Gini index of the income distribution once health care spending on all these sources is subtracted (under the assumption that everyone faces the same tax schedule). The Kakwani index is a measure of financing outcome (the progressivity of health care financing in a given country). Because calculating a total financing burden at the individual level for several countries is demanding, such a measure of progressivity is not produced on a routine basis. Van Doorslaer et al. (1999) provide such a measure for the late 1980s and early 1990s on a set of twelve OECD countries.

Because the Kakwani index is available for a limited set of countries, I tried to complement it by using process variables to characterize the redistribution dimension of health care systems (proportion of total health care expenditure that is public, and public health care spending as a share of GDP), but these are crude proxies of only the redistributivity of health care financing, and the only reason to add them to the analysis is that they are available for a larger set of countries and for more years.

The outcome of the rationing process should be captured as follows: how much does need determine the utilization of health care services relative to ability to pay? This is a measure of the horizontal level of income-related inequity of health care utilization. In a system that rations through user charges or variable levels of coverage based on willingness and ability to pay, one should expect a higher level of income-related inequity. In a system that rations through a central organization (single payer using uniform rules based on clinical decisions), utilization should be determined mostly by need and less so by income. Equity is often presented as a “natural” objective of any health care system, and measures of inequity are seen as measures of system performance. Here I adopt a more agnostic view of the true objectives of the health care system and posit that societies with a preference for individual choice over collective coordination will also prefer a less equitable (i.e., need-driven) distribution of health care utilization. I use the most recent estimates of the horizontal inequity (HI) index on twenty-one OECD countries from van Doorslaer, Masseria, and OECD 2004: the HI index is based on the concentration index (CI) of utilization. A CI is calculated as the concentration of utilization when individuals are ranked according to income. It is a synthesis of the shares of total utilization that can be attributed to each quantile in the distribution of income and is comparable to a Gini index, except that it can take negative values (if the poor use more than the rich). The HI index is the difference between the crude CI and the need-standardized CI. It is positive if the rich use more of a service than they should based on their medical need. Need is measured (imperfectly, but this is all that is available in individual-level surveys) as a combination of age, sex, self-assessed health, functional limitations, and chronic conditions. Utilization is measured for all types of services (general practitioners [GPs], specialists, and inpatient) and is usually calculated separately for the probability of any contact within a year and the total number

of contacts during the year. The reason for calculating these HI indexes separately for probability and total is that the former is largely patient initiated whereas the latter is the result of joint decisions by patients and providers (and because of that is more indicative of rationing processes).

As in the case of the Kakwani index, I use the HI index to measure health care system rationing (the degree of need-based rationing is determined by how equitable the system is). Also as for the Kakwani, pragmatic reasons (the HI index is available for one year only on a limited set of countries) lead me to supplement the HI index with process measures of rationing. One standard process for rationing is waiting lists: in a system with need-based rationing, resources are set first and patients access treatments based on their need, assessed by their doctors (who act as system gatekeepers). In a system with rationing based on ability to pay, resources in the health care system usually increase with demand, and waiting lists are not as common. I use a recent study from the Commonwealth Fund (Schoen et al. 2010) to measure perceived wait for access to specialist care and elective surgery.

I also use crude measures of rationing, such as the availability of resources (practicing physicians and hospital acute care beds per one thousand population) as well as measures of utilization per capita (number of visits and length of stay in hospitals) as crude indicators of rationing processes. These process measures are less satisfactory than HI to characterize need-based rationing, but they are available in the OECD health database (OECD 2011) for most years and countries in the most recent period.

I now turn to the description of societal institutions.

Earnings Inequalities. I use data compiled by the United Nations under the world income inequality program (UNU-WIDER, various years). This data set provides values for (among others) the Gini index for various definitions of income and as many years as are available in most countries of the world. I selected measures of earnings inequality or before-tax income (except for Canada, where disposable income was the only variable available) for the latest year available in almost all OECD countries. In some countries the latest year available is as old as 1971 (the most recent is 2006). The choice of a given year is somewhat arbitrary but does not affect the findings to a large extent because earnings inequalities tend to correlate over time within a given country.

Ethnic Fragmentation. I use data collected in 1964 by the Soviet Academy of Sciences, known as the Atlas Narodov Mira and reported in Taylor and Hudson (1972). This measures the probability for an individual in a given country to meet someone from a different ethnic background or race. The data have been validated and used by previous studies, including Cutler and Johnson's (2001). Although things have certainly changed in some countries (e.g., Canada) since 1964 due to immigration,

unfortunately this is the only measure of ethnic fragmentation that I am aware of that is available in a comparable and standardized fashion for a large set of countries. Immigration statistics are available, but they do not tell much about how heterogeneous a population is (e.g., immigration in European countries can be from other members of the European Union or from countries with a different ethnic background).

Trust in Society. I use the 1999 International Social Survey Programme (www.issp.org). This survey queried random samples of the population in twenty OECD countries (for a total sample of 32,000 respondents, from 500 to 1,500 per country). I use two variables: the proportion who think that social origin matters for success in their country (strongly agree and agree) and the proportion who think that effort is rewarded in their country (strongly agree and agree). The former indicates trust in the way society works and the latter measures distrust.

Governance. I use five of the six governance indicators of the World Bank: voice and governance (freedom of association and the press), government effectiveness, rule of law, quality of regulation, and control of corruption (I do not use political stability due to the fact that most OECD countries are stable). The indicators are estimated for several years between 1996 and 2006, but the 2006 indicators are based on significantly more data sources than the 1996 ones and are therefore more precisely estimated (hence of better quality). In 2006 the median number of sources per country is between eight (political stability) and thirteen (rule of law), and 8 percent of countries rely on only one data source. I use the values for 2006, and I checked that the correlation was high on each dimension across years.

Corporatism. I use the Hicks-Kenworthy composite index of corporatism that aggregates seven types of economic cooperation: business centralization, wage-setting coordination, cooperation between government and interest groups, tripartite neocorporatism (the Lijphart-Crepaz corporatism measure and the Hicks-Swank corporatism measure), cooperation between investors and firms, and cooperation between labor and management. I take the latest year available for each country.

RESULTS

Correlation coefficients and slopes of the linear relationship are presented in tables 2–5. Tables are organized as follows: table 2 presents results for the Kakwani index and its correlation with earnings inequality, ethnic fragmentation, and trust in society; table 3 shows results for the HI index and its correlation with governance, trust, and corporatism; table 4 illustrates results for the process measure of rationing (wait times) and its correlation with governance; and table 5 contains results for the other

process measures of rationing (resource availability) and its correlation with governance and corporatism.

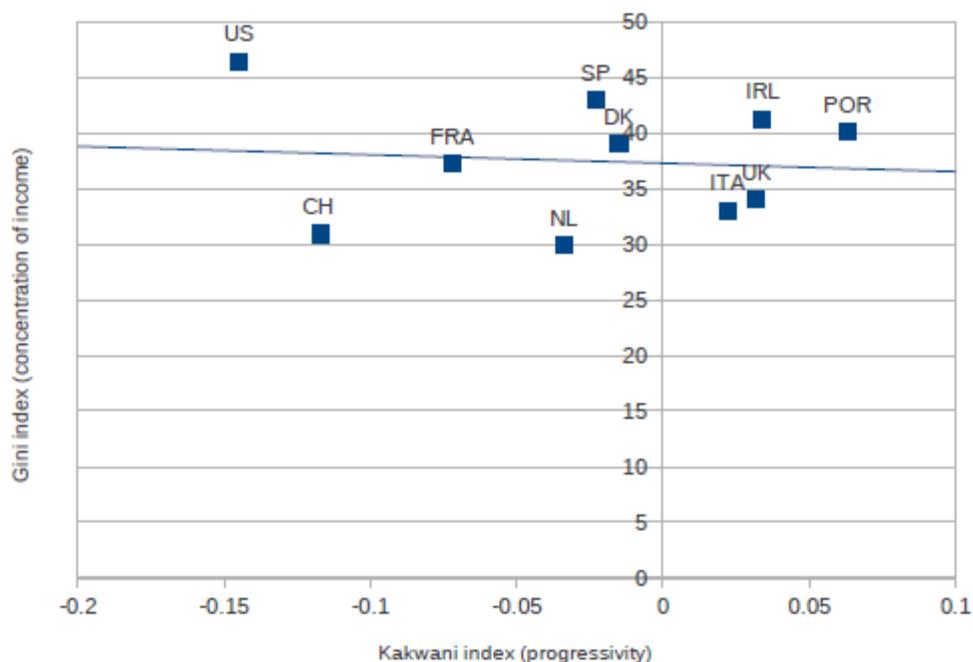
Table 2 shows that the concentration of earnings never correlates strongly with the ability of the government to redistribute via health insurance, and the weak correlation goes against the prediction of rational choice–median voter models: the median voter in unequal societies seems to prefer less rather than more redistribution, even though he or she could have the upper deciles pay most of the cost. Figure 1 shows that the correlation is very weak and that the concentration of earnings in a society does not condition the progressivity of payments to health care. Because the Kakwani index assumes that everybody faces the same tax schedules, some prefer measuring redistributivity through the redistributive effect (RE) index (simple difference between Gini indexes before and after contributions). Results (not presented here but available on request) are the same based on the RE.

Table 2: Linear Correlations between Characteristics of Health Care System and Societal Institutions: Progressivity of Contributions to the Financing of Health Care and Their Correlations with Earnings Inequality, Ethnic Fragmentation, and Trust

	Kakwani Index	Public Share of Health Care Spending	Public Health Care Spending as Share of GDP
Income concentration	<i>-0.04</i>	<i>-0.35</i>	-0.06
Ethnic fragmentation	-0.48	-0.33	-0.02
Trust (1): Effort	-0.48	-0.43	+0.28
Trust (2): Social origin	-0.71	<i>-0.34</i>	-0.67

Sources: International Social Survey Programme 1999; OECD 2011; Taylor and Hudson 1972; UNU-WIDER; van Doorslaer et al. 1999

Notes: Bold = correlation coefficient greater than 0.5; italics = result contrary to theoretical predictions; GDP = gross domestic product

Figure 1: Progressivity of Contributions to Health Care and Concentration of Income.

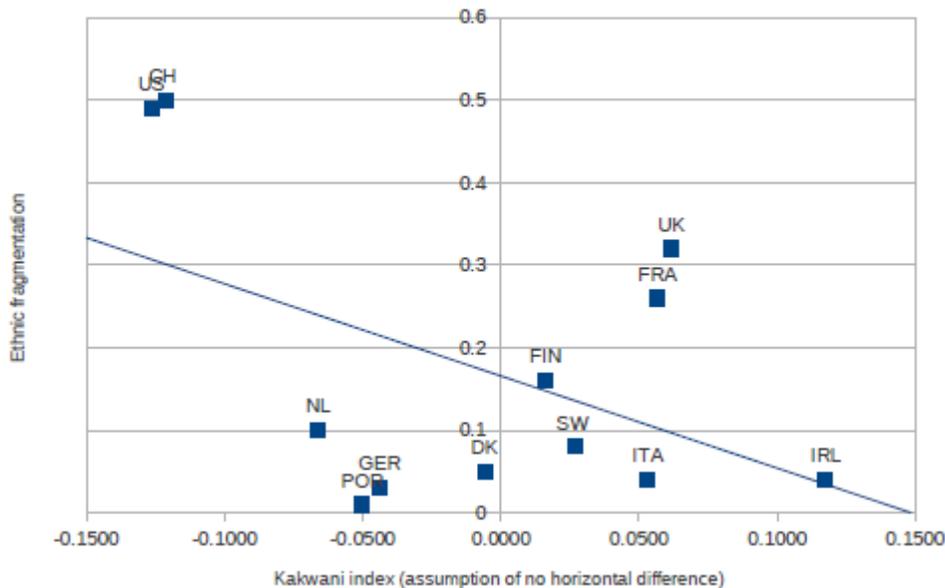
Sources: UNU-Wider; van Doorslaer et al. 1999

Note: See coding list in appendix for names of countries.

Results on the correlation between trust and redistribution are hard to interpret. When individuals believe that effort is rewarded, they vote for less progressive health care contributions and a smaller share of public spending in total health care expenditures (which follows the prediction); however, when they believe that social success is linked to social origin, they also want less progressive contributions and less public spending as a share of total spending, which runs contrary to the theoretical prediction.

The main result here is that ethnic fragmentation correlates strongly and negatively with the progressivity of payments to health care: the ability of the government to intervene in the redistribution of income through health care contributions seems to be greater when the population is homogeneous. The correlation and the slope are robust to removing each country from the table, one at a time, and figure 2 shows that countries spread close to the trend line.

Figure 2: Progressivity of Contributions to Health Care and Ethnic Fragmentation of Society



Sources: UNU-Wider; van Doorslaer et al. 1999

Note: See coding list in appendix for names of countries.

Table 2 also shows that process measures of redistribution (public share of total expenditures and public spending as share of GDP) do not correlate with societal environments, pointing toward the Kakwani index (or any such measure of progressivity) as the most promising avenue for research in comparative health policy analysis.

Table 3 shows that the ability to ration according to need (as opposed to ability to pay) is a (weak) function of the quality of governance and that the direction of the relationship depends on the type of service. Overall, better governance is linked to more pro-wealthy (less need-driven and more income-driven) utilization of GP services and less pro-wealthy (more need-driven and less income-driven) utilization of specialist and inpatient services. The latter supports the prediction that better functioning governments can intervene more in the distribution of health care and its rationing.

Table 3: Correlations between Inequity of Utilization for Various Types of Services (Both Probability of Any Visit in a Given Year and Total Number of Visits in a Year) and Various Measures

	GP Visits (Probability)	GP Visits (Total)	Specialist Visits (Probability)	Specialist Visits (Total)	Inpatient (Probability)	Inpatient (Total)
Income concentration	-0.22	-0.21	+0.15	+0.15	+0.10	-0.01
Ethnic fragmentation	+0.19	<i>-0.203</i>	<i>-0.27</i>	<i>-0.38</i>	-0.60	-0.28
Trust (1): Effort	-0.08	-0.00	-0.03	0.00	-0.47	-0.10
Trust (2): Social origin	+0.41	-0.12	+0.64	+0.63	+0.55	+0.15
Governance (1): Voice	<i>+0.49</i>	<i>+0.30</i>	-0.01	+0.07	-0.30	-0.39
Governance (2): Effectiveness	<i>+0.19</i>	+0.05	-0.44	-0.40	-0.49	-0.35
Governance (3): Quality	<i>+0.14</i>	-0.08	-0.24	-0.12	-0.06	-0.15
Governance (4): Rule of law	<i>+0.21</i>	<i>+0.15</i>	-0.34	-0.28	-0.56	-0.41
Governance (5): Corruption	<i>+0.38</i>	<i>+0.27</i>	-0.20	-0.09	-0.31	-0.36
Corporatism	-0.33	+0.02	<i>+0.22</i>	<i>+0.16</i>	<i>+0.22</i>	+0.01

Sources: International Social Survey Programme 1999; OECD 2011; Taylor and Hudson 1972; UNU-WIDER; World Bank 2006; Hicks-Kenworthy composite index

Notes: Inequity of utilization indicates the degree to which rationing is based on ability to pay as opposed to need. Bold = correlation coefficient greater than 0.5; italics = result contrary to prediction; GP = general practitioner

Societies with lack of trust are more likely to ration specialist and inpatient services by ability to pay and GP services by need. This time the correlation on GP services supports the theory but the one on specialist and inpatient services does not.

Corporatism is very weakly correlated to equity characteristics, and the sign suggests that less coordinated economies are more likely to ration according to need than are more coordinated ones, which goes against the predictions of the theory.

Table 4 indicates an interesting distinction within dimensions of governance: effective and good-quality

governance (and to a lesser extent rule of law) lead to shorter wait times, whereas control of corruption and ability to voice concerns correlate with longer waits. The latter confirms the theory’s prediction that countries with more transparent governance can ration through medical decisions (wait times) rather than by ability to pay. The former seems to indicate scope for the ability of governments and sickness funds to manage hospitals and doctors in the reduction of waiting times. Overall, longer wait times can be the result of poorer management or stricter rules linking access to need (which in a sense signals fairer management).

Table 4: Degree of Need-Based (as Opposed to Ability to Pay–Based) Rationing, Measured as Various Wait Times, and Its Correlation with Five Measures of Governance and Corporatism Index

	Specialist, Short	Specialist, Long	Surgery, Short	Surgery, Long
Governance (1): Voice	-0.28	0.23	-0.30	0.12
Governance (2): Effectiveness	<i>+0.35</i>	<i>-0.34</i>	<i>+0.07</i>	<i>-0.17</i>
Governance (3): Quality	<i>+0.38</i>	<i>-0.34</i>	<i>+0.34</i>	-0.09
Governance (4): Rule of law	<i>+0.18</i>	<i>-0.18</i>	+0.01	<i>-0.14</i>
Governance (5): Corruption	-0.19	0.21	-0.36	+0.47
Corporatism	-0.04	-0.04	-0.09	-0.03

Sources: Schoen et al. 2010; World Bank 2006; Hicks-Kenworthy composite index

Notes: Specialist, short = proportion who waited less than four weeks to see a specialist; specialist, long = proportion who waited more than eight weeks to see a specialist; surgery, short = proportion who waited less than one month to get elective surgery; surgery, long = proportion who waited more than four months to get elective surgery. Bold = correlation coefficient greater than 0.5; italics = result contrary to prediction

Finally, table 5 shows that better governance and corporatism are linked with more (rather than fewer) resources and higher (rather than lower) levels of utilization on average. The weak relations between utilization and governance or corporatism are driven by a small set of countries (Japan in the first place, which is an outlier in number of visits and length of stay, and Mexico and Turkey to a lesser extent). The relations between resources and governance or corporatism are stronger and are not driven by a specific country (see figure 3).

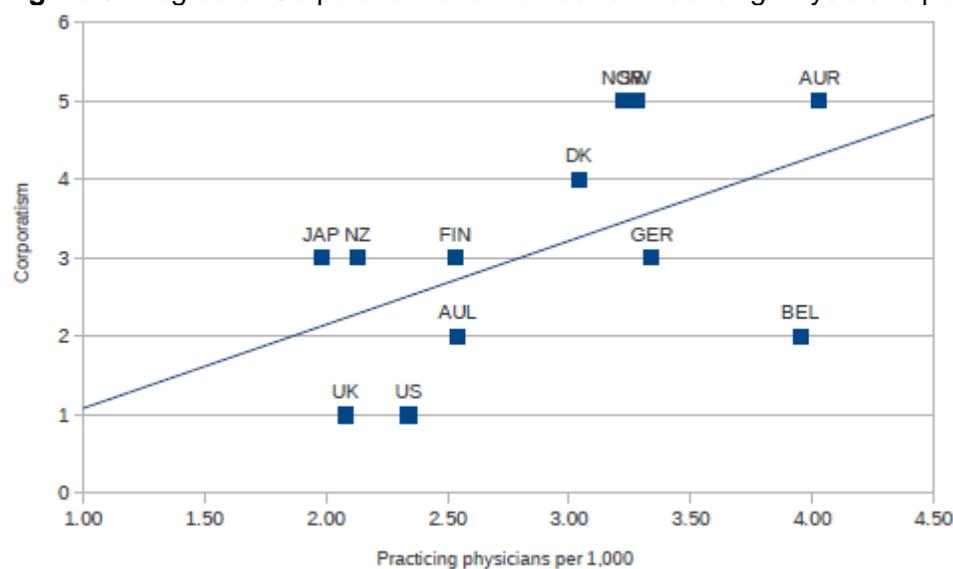
Table 5: Degree of Need-Based (as Opposed to Ability to Pay–Based) Rationing, Measured as Various Resource Density Measures (for Various Types of Resources), and Its Correlation with Five Measures of Governance and Corporatism Index

	Practicing Physicians/1,000	Beds /1,000	Visits/Year	Average Length of Stay
Governance (1): Voice	+0.58	<i>+0.24</i>	<i>+0.24</i>	+0.01
Governance (2): Effectiveness	+0.54	<i>+0.31</i>	<i>+0.29</i>	+0.05
Governance (3): Quality	<i>+0.31</i>	-0.10	-0.14	-0.26
Governance (4): Rule of law	+0.52	<i>+0.39</i>	<i>+0.39</i>	<i>+0.16</i>
Governance (5): Corruption	<i>+0.45</i>	<i>+0.22</i>	<i>+0.21</i>	+0.01
Corporatism	+0.52	<i>+0.21</i>	+0.02	-0.06

Sources: OECD 2011; World Bank 2006; Hicks-Kenworthy composite index

Notes: Bold = correlation coefficient greater than 0.5; italics = result contrary to prediction

Figure 3: Degree of Corporatism and Number of Practicing Physicians per 1,000 Population



Sources: OECD 2011; Hicks-Kenworthy composite index

Note: See coding list in appendix for names of countries.

CONCLUSION

This article is a tentative first step suggesting a possible explanation for why real reforms are so difficult. Health care systems are embedded in, and partially determined by, a web of national institutions outside the health care system, such as the degree of corporatism in the economy or the quality of public governance, as well as societal characteristics, including the level of trust in society or ethnic fragmentation. Changing the rules of the health care system might go against these institutions or societal characteristics and, as a result, would be detrimental to the well-being of a majority or plurality of the population.

Even in the (rare) case in which all health economists agree that a reform would improve the efficiency or equity of the health care system and should be enacted, countries in which such a reform would go against institutions outside the health care sector could “rationally” make the choice not to enact it. This does not mean that reform is impossible or should not be attempted but that it presupposes changes elsewhere in society. For instance, better racial integration might help the U.S. attain national health insurance, or better governance might help some countries ration care on the basis of need rather than ability to pay.

To summarize, this can be explained by the following theoretical relationships:

- **Less ethnically fragmented countries, or countries with lower levels of trust are more likely to support national insurance and redistribution.**
- **Countries with better governance or higher level of confidence in government, or more corporatist economies are more likely to support a single-payer system and public rationing of health care.**

These characteristics cannot be changed easily, usually are not influenced by health policy makers and generally constrain health policy choices.

The empirical work presented here is preliminary, tentative, and suggestive only and should be read as such. I invite and welcome discussion and refutation of my empirical conclusions on the basis of better-quality data. I also invite discussion of more plausible pathways derived from the political economy of health care systems. The usual call for more research and better data seems more warranted than ever.

Coding List for Countries in Figures 1–3

AUL	Australia
AUR	Austria
BEL	Belgium
CAN	Canada
CHI	Chile
CZ	Czech Republic
DK	Denmark
FIN	Finland
FRA	France
GER	Germany
GRE	Greece
HUN	Hungary
ICE	Iceland
IRL	Ireland
ISR	Israel
ITA	Italy
JAP	Japan
KOR	Republic of Korea
LUX	Luxembourg
MEX	Mexico
NL	Netherlands
NZ	New Zealand
NOR	Norway
POL	Poland
POR	Portugal
SLOK	Slovak Republic
SLON	Slovenia
SP	Spain
SW	Sweden
CH	Switzerland
TUR	Turkey
UK	United Kingdom
US	United States

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