Unravelling the Global Health Crisis: Comparing Health Systems of 15 Countries

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1 Introduction

Concern for health policy, it would seem, has gone global. Increasingly, a range of health issues is asking difficult questions of tried-and-tested health strategies. Some policy-makers worry about emergent and transboundary health threats such as SARS, pandemic influenza, HIV/AIDS or bio-terrorism[WHO, 2007c]. Globalisation and its associated patterns of mobility mean that any new infectious disease has a potentially global impact. Others point to generic pressures such as demographic ageing, increasing health care costs and rapid socio-cultural change that are challenges for health policy-makers everywhere. Either way, it seems as if purely national health strategies are unlikely to protect populations from contemporary direct and indirect health threats.

Ironically perhaps, emergent *global* health threats focus attention on local[1] health systems. After all, local health systems are the first line of defence in any outbreak of one of these emergent diseases. It is these local health care capacities that shape the way the disease progresses and spreads. For example, in the case of pandemic influenza, health system capacity in places such as Indonesia, China, Thailand or Vietnam impinge everyones health risks in very significant ways. And that, many policy-makers believe, is a cause for some concern.

Inevitably, this focus reminds us of the substantial differences in health status around the world. The life expectancy for a girl born in Africa today is 50 years provided, of course, that she is not one of the 165 per thousand who never see their fifth birthday. She can expect to live 42 of these 50 years relatively free of disease and disability. Had this girl been born in Europe, she could expect to live to 77 years, 68 of them in good health. Infant mortality in Europe is just over a sixth and child mortality just over a tenth of the figure in Africa [WHO, 2007c]. These figures suggest rather disparate levels of health system capacities.

One task of global health governance, it would seem, is to understand what these differences mean for global health threats. There can be little doubt about the reason for these discrepancies: rich countries spend considerably more on health care than poor countries. The WHO notes that health expenditure in OECD countries makes up 90% of global health spending for only 20% of

[1] "Local" in the sense of not "global": the term local here refers to local, regional and national health systems.

the world population [WHO, 2007c].[2] Health, as Philip Musgrove and Riadh Zeramdini point out, is a luxury good [Musgrove and Zeramdini, 2001, p.6].

But understanding *that* poverty impairs health care capacities is not the same as knowing *how* resources shape health system capacities. In order to understand how local health systems impinge on global health security, we need to understand how different levels of income and development shape health system capacities. One way of doing this is to compare institutional arrangements of health care provision or, to use the WHOs term, health systems – across a wide range of countries.

In what follows, then, the paper compares health systems of an socio-economically, geographically, and politically diverse group of countries (see Box 1. Doing so, the paper pursues two interrelated goals. First, the paper maps the institutional landscape of global health care provision. Here, the paper placing different health systems in a common context by comparing their institutional features and characteristics. Second, the paper looks at ways in which this comparative institutional approach can provide insights about global health issues.

The paper is exploratory. The analytical framework integrates a number of institutional approaches. Since not all of these approaches have been designed for comparing health care provision, the paper explores the feasibility of adapting these frameworks for the study of global health issues. The approaches that are specifically health-care related, in turn, were designed to compare countries in the developed world. Further, the study relies on secondary sources. By definition, the following analysis will rearrange and compare what is already know about these countries in the hope of providing some insight into relative strengths and weaknesses of health care systems.

Section 1 of the paper develops a tentative vocabulary for identifying and comparing the institutional aspects of health care provision. The framework conceives of health systems as three interrelated functional subsystems: delivery systems, financing regimes and governance structures. The links and dependencies between these spheres create institutional spaces in which health policy actors find the organisational, personnel, and financial resources to provide health care services.

Sections 1 uses the framework to compare the health systems of the fifteen different countries listed in Box 1. By comparing delivery systems, financing regimes and governance mechanisms, the paper maps the institutional landscapes in and between these countries.

[2] This is something the WHO evocatively calls the 20/90 syndrome.

Box 1: Countries in the Comparison

- Canada
- Japan
- Germany
- Italy
- Singapore
- Portugal
- South Africa
- Malaysia
- Brazil
- China
- Philippines
- Indonesia
- India
- Bangladesh
- Tanzania

In the final section, the paper compares the 15 different health systems as a whole. Specifically, the paper compares how different ways of relating delivery systems, financing regimes, and governance structures give rise to distinct institutional identities. These identities are differ along both a vertical dimension defined by relative resources scarcity and a horizontal dimension defined by historical pathways of evolution.

Three Institutional Subsystems: Delivery, Finance and Governance

This section outlines the framework used for comparing 15 national health systems. The framework draws on two recent strands of analysis in the social sciences. First, the framework relies heavily on the model of health systems outlined in the WHOs World Health Report of 2000. Here, the WHO conceives of health system in terms of the following functional spheres: service provision, resource generation, funding and stewardship (p.xi). The WHO looks at the interaction of these subsystems to measure health system performance. This model has generated comprehensive and mostly qualitative surveys of national health systems (c.f. the European Observatory on Health Systems and Policies). While preserving the complexity of health systems faithfully, these studies are unwieldy for comparing multiple health systems. Second, the framework draws on the broad church known as welfare state regime analysis (WSA) [Esping-Andersen, 1990, Bonoli and Palier, 2000]. Here, researchers compare general institutional arrangements for welfare provision in terms of a limited number of ideal-types. The research explores how institutional identities shape reform strategies in welfare states. The WSA draws much of its analytical clout

from radically simplifying elaborate institutional arrangements. Since complexity is a defining aspect of health systems, this makes WSA less suitable for a systematic comparison.

The following framework builds on the strengths of both strands. It does so by breaking down health systems into three interrelated spheres: delivery systems, financing regimes, and governance structures. Each of these spheres fulfils a certain function. Delivery systems provide capacities by organising primary and secondary health care. Financing regimes pool economic risks of health care through mechanisms for revenue-collection and purchasing. Governance structures diffuse political power by shaping the political contexts in which players interact across different levels of governance. The institutional identity of each individual health system emerges from the characteristics in each sphere as well as the nature of interaction between the different spheres.

Delivery Systems

In this functional sphere, health policy actors provide actual health services by managing the flow of personnel and material through health systems. These services, in turn, aim to ensure that the population is in good health[3] In this framework, primary and secondary health care together make up the overall level of provision. Commentators generally distinguish types of care in terms of the nature of health services as well as the organisational setting in which these health services are provided [Blank and Burau, 2004].[4]In this model, primary care refers to general health services provided in an ambulatory setting. Secondary care, in turn, describes more specialised health services provided in a stationary environment such as a hospital.

In the framework, the nature of and balance between the two forms of care determines the character of any given delivery systems. Two variables, the capacity and ownership of health care resources, determine the nature of primary and secondary provision. The term capacity describes the means of producing health care services: the personnel (physicians, nurses, community health workers, traditional healers, technicians, administrators, etc.) as well as the equipment (drugs, diagnostic equipment, consumables, ambulances, etc.) that enable the production of health services. It is these health care resources that delimit the potential for achieving good health in the population [Bank, 1993, WHO, 2000, Gottret and Schieber, 2006]. The second variable – ownership – depicts the relations of production in health care provision. Ownership, that is whether control over specific health care resources is private or public sector hands, shapes allocation and rationing decisions resource management and deployment patterns of health resources [Moran, 1999], 2000; [Blank and Burau, 2004].

[3]This corresponds to the WHO's goal of health systems [WHO, 2000].

[4]What is and what is not to count as primary care is somewhat of a contested issue with distinct political overtones. For example, the Health For All movement, a collection of activists pursuing an avowedly egalitarian health policy agenda, define primary care in very broad terms. Not only does primary health refer to the provision of health services, it also encompasses democratic rights to citizen participation in the production and regulation of health care services. Others, such as the WHO, prefer to focus primary care on health care provision only [WHO, 2000]. Others still (c.f. European Observatory on Health Systems and Policies or [Blank and Burau, 2004] reduce the definition to the ambulatory provision of health care by office-base health professionals.

As the framework is primarily exploratory in nature, the designated indicators provide only a rough sketch of delivery systems.[5] Ownership refers to the proportion of health resources owned by *private providers* compared to resources operated by *public* health providers. For secondary care, this indicator generally refers to the ownership of hospitals. In primary care, the private sector comprises all practitioners who are not salaried employees of a public health care provider. The indicators for capacity in the primary care dimension predominantly measure personnel resources. Where the data are available, primary health care capacity refers to the density of general practitioners, community nurses, traditional healers, community health workers and pharmacists. Where available, the capacity also includes data for primary health care facilities. Secondary health care capacity is measured by the density of specialists as well as the density of hospital beds.

Financing Regimes

Financing regimes generate and regulate the flow of financial resources in health systems. In this way, they define and distribute the financial risks of health care provision.[6] The framework breaks down financing regimes into mechanisms for revenue-generation and purchasing.[7] Revenue-generation describes the way financing regimes appropriate funds for health care provision. Purchasing, in turn, depicts the mechanisms for directing and deploying these funds.

The relationship between revenue-generation and purchasing defines the identity of financing regimes. In the framework, the degree of individual responsibility for financing health care and the level of health care funding determine the character of revenue-generation and purchasing mechanisms. The level of individual/ collective responsibility shapes the way financing regimes expose individual households to risks of financing health care. The more any given financing mechanisms shift the responsibility for generating revenues and purchasing health services to households, the less risk and resource pooling takes place. The level of funding defines the extent to which financing regimes succeed in raising and deploying financial resources for health care.

In terms of indicators, the framework distinguishes between *collective* or *individual* modes of revenue-generation and purchasing. Since revenue-generation and spending are directly related, the framework uses the same indicator to measure the degree of individual responsibility for each. A predominantly collective mode of revenue-generation and purchasing implies a level of public sector spending on health at or above 65% of all health expenditure.[8] Conversely, the

[5] This also acknowledges the inherent difficulties of comparing countries with widely diverging perceptions and definitions of primary and secondary health care.

[6] This also corresponds to the WHO goal of fairness of financial contribution [WHO, 2000], p.xi).

[7] This varies a little from the WHO's approach. The WHO breaks down financing functions into resources-generation, risk pooling and purchasing. In our framework, risk pooling is the institutional effect or, if you will, implication of the choices made for revenue-collection and spending. In effect, our framework assumes that choosing any means of collective revenue-generation (that is tax, social insurance contribution or commercial insurance premium) and any collective purchasing arrangement will inevitably give rise to some form of risk pooling. Arguably, choosing the mode of revenue-generation will in practice prejudice a health care regime towards risk pooling [WHO, 2000].

[8] A more sensitive analysis could look at the discrepancy between revenues collected or budgeted for health care provision and the actual spending on health care provision.

framework defines a predominantly individual mode of revenue-generation and purchasing to comprise a level of out-of-pocket spending at or above 65% of all health care expenditure.[9] Health care expenditure that falls in between these two poles points to a mixed financing regime. In terms of funding, total health care expenditure gauges to the level of resources created by specific mechanisms of revenue-generation.

Governance Structures

Health care systems are also arenas for politics. Analogously to the other two subsystems, governance structures generate and direct the flow of political power through health systems. By diffusing or concentrating political power, governance structures shape the responsiveness of health systems to citizens demands.[10] In this framework, governance structures diffuse power in both a horizontal and vertical dimension. In the horizontal dimension, governance structures disperse political power across different policy actors. In the vertical dimension, health systems diffuse power down levels of governance.

Again, the relationship between the horizontal and vertical dimensions of power determines the character of individual governance structures. In both dimensions, the flow of political power though a policy subsystem depends on the level of inclusiveness and the degree of political contestation in the policy subsystem [Dahl, 1971, Ney, 2006]. The more inclusive or open are health policy subsystems, the more pluralist the membership of the policy network. This, in turn, increases the potential for widely diffusing political power. Conversely, the less accessible is a policy subsystem, the less diverse the membership. As a consequence, the system has less potential for widely distributing power over policy-making. Yet, presence alone says very little about impact on the policy process. For this reason, the framework looks at effective contestation in policy health subsystems. The higher is effective contestation, the more political power is diffused. Conversely, if political contestation in a health policy subsystem is more subdued, political power is likely to be concentrated.

The framework defines horizontal inclusiveness in terms of accessibility to the policy subsystem. The diversity of the organisational ecology gauges of the degree of horizontal accessibility. The more diverse a policy subsystem is in terms of the *type* of policy actors (i.e. public, private or tertiary sector actors), the more accessible and inclusive is the health policy subsystem and vice versa. The framework assesses contestation in the horizontal dimension in terms of the degree of institutionalisation and regulation of actor relationships. The higher the degree of institutionalisation, the more regulated is political conflict between divergent policy actors. In the vertical dimension, the framework uses the degree of formal devolution as a measure of inclusiveness. The more decentralised a policy network, so the reasoning goes, the larger the policy space and the more populous the policy community. Again, not only is the ostensible degree of devolution in the health care system significant, the level of contestation between actors at different levels of governance determines health policy. Since devolution is always formally institutionalised in one form or another, the equivalent variable for institutionalisation of relations in the vertical dimension

[9] These are arbitrary thresholds chosen for purposes of presenting the data.

[10] This closely corresponds to the WHO‘s goal responsiveness to the expectations of the population [WHO, 2000, p.xi].

is accountability. An (admittedly) crude approximation of accountability is the level of perceived corruption in a particular country. The higher the level of perceived corruption, the lower is accountability.

Interdependence of the Three Spheres

The relations between the three functional subsystems determine the institutional identity of health systems as a whole. The shape of delivery systems determines the number and types of policy actors in the health system. This also significantly shapes the supply of health care services. Financing regimes generate and distribute the financial resources for health care provision. The specific mode of financing also impinges on the types of required regulation and oversight. Governance structures provide organisational and normative means for mediating the conflicts between policy actors as they strive to secure resources for health care provision. In this way, features in one sphere constrain policy options and choices in the other two. In this model, the combination of subsystem features constitutes the overall institutional identity of the health system.

Yet, these interdependencies merely stylise the real complexities of health care provision. The three functional spheres are analytical distinctions. The institutional subsystems rarely correspond exactly to real-life organisations and processes. For example, in countries social insurance financing mechanisms, such as Germany or Japan, the particular financing mechanism is enshrined in actual organisations called statutory sickness funds. Yet, as we shall see, financing is only one of the many functions of these real-life organisations: sickness funds are also deeply implicated in governance and planning of health care provision. In essence, then, the three spheres are ways of looking at and understanding the complex interaction of health care provision. Concentrating on delivery systems focuses attention on the management aspects of health care provision. Looking at financing regimes means foregrounding the economic activity of the same set of organisations and actors. Likewise, analysis of governance structures emphasises how the organisational ecology of health care provision constrains policy-making.

Table 1 provides an overview of the comparative framework.

Delivery Systems

Delivery systems provide the services that distinguish health care from other forms of social welfare. The structures and practises of delivery systems coordinate a myriad of physicians, nurses, pharmacists, dentists, but also the suppliers of drugs and medical equipment, managers, accountants and administrators. This, then, is what makes health care such a complex undertaking.

How, then, do different countries go about coordinating this plurality of actors?

Primary Care

Figure 1 shows how the capacity for primary care provision relates to the ownership of health resources. In the countries located along the bottom row of

Subsystem	Component	Indicators
Delivery Systems	Primary Health Care	Ownership (private/mixed/public)
		Capacity (high/medium/low)
	Secondary Health Care	Ownership (private/mixed/public)
		Capacity (high/medium/low)
Financing Regimes	Revenue	Mechanisms (collective/mixed/ individual)
		Spending (high/medium/low)
	Purchasing	Mechanisms (collective/mixed/ individual)
		Spending (high/medium/low)
Governance Systems	Horizontal	Access (low/medium/high)
		Institutionalisation (low/medium/high)
	Vertical	Devolution (low/high/medium)
		Corruption (low/high/medium)

Table 1: Overview of the Analytical Framework

the table, private sector providers dominate primary health care. The table shows that private sector primary health care provision is compatible with high, medium and low levels of primary health care capacity.

Almost all countries with high primary health care capacity feature predominantly private provision of general health services. In Canada, Germany, Italy and Japan independent physicians operating under market-like conditions provide primary and ambulatory health care [Ikegami, 2005, Marchildon, 2005, Donatini et al., 2001, Busse and Riesberg, 2004b]. In all cases, a wider range of public, quasi-public and professional institutions regulates the provision of primary care. For example, in Germany, regional medical associations alone hold the mandate for negotiating with the social health insurance on behalf of physicians: in 2004, 96% of physicians held contracts with one of the sickness insurance funds [Busse and Riesberg, 2004a, Busse and Riesberg, 2004b]. Notably, private provision of primary health care not only dominates the corporatist health states of Germany and Japan, but also the secure command-and-control health states in Canada and Italy. Unlike in corporatist countries, the universal single payer systems contract independent physicians, mostly general practitioners, to act as gatekeeper for more specialised care.

In the medium-range of Figure 1, China and Singapore feature private primary health care. However, both health systems are very different. Health care provision in Singapore, in terms of access, quality, and, most importantly, outcomes, is at a standard of high income countries [Barr, 2005]. Just like the countries in the high capacity and high income region, private physicians provide 80% of primary health care in Singapore [of Health, 2007]. Like in Canada and Italy, general practitioners control access to more costly specialist provision [Barr, 2005].[11] Coupled with effective government control over the costs of provision, this has meant that the Singaporean health policy-makers can squeeze a high-level of performance out of mid-range capacities. The current Chinese health system has also evolved from a public sector provision model; one, however, based on the Soviet model of health care provision [Bloom, 2005]. Since the transition to a market economy, health system development has mirrored the uneven overall socio-economic evolution in China. Whereas coverage and quality of health provision in urban areas is developing apace, health care provision in rural areas is patchy and unreliable [Bloom, 2005, Liu et al., 2006]. Liu et al. argue that the government is still reluctant to fund and support private health care provision [Liu et al., 2006]. However, 70% of facilities for ambulatory care are located in the private sector. Furthermore,they contend that most private practitioners are located in rural areas.[12]

India and Malaysia feature low levels of primary health capacity in the context of predominantly private sector provision. In India, commentators argue, the dominance of private provision reflects the poor quality, staffing and equipment of public sector facilities [WHO, 2007c]. Here, it would seem, a lack of viable alternatives drives patients, including the poor, to private sector health care providers: the WHO suggests that less than 20 percent of the population, which seek OPD [Out Patients Department] services, and less than 45 percent of that which seek indoor patient treatment, avail of such ser-

[11] This betrays the command-and-control origins of the Singaporean health care system inherited from the British.

[12] To what extent this means that primary care provision is predominantly private is an open question. For this reason, China also appears in the top row.

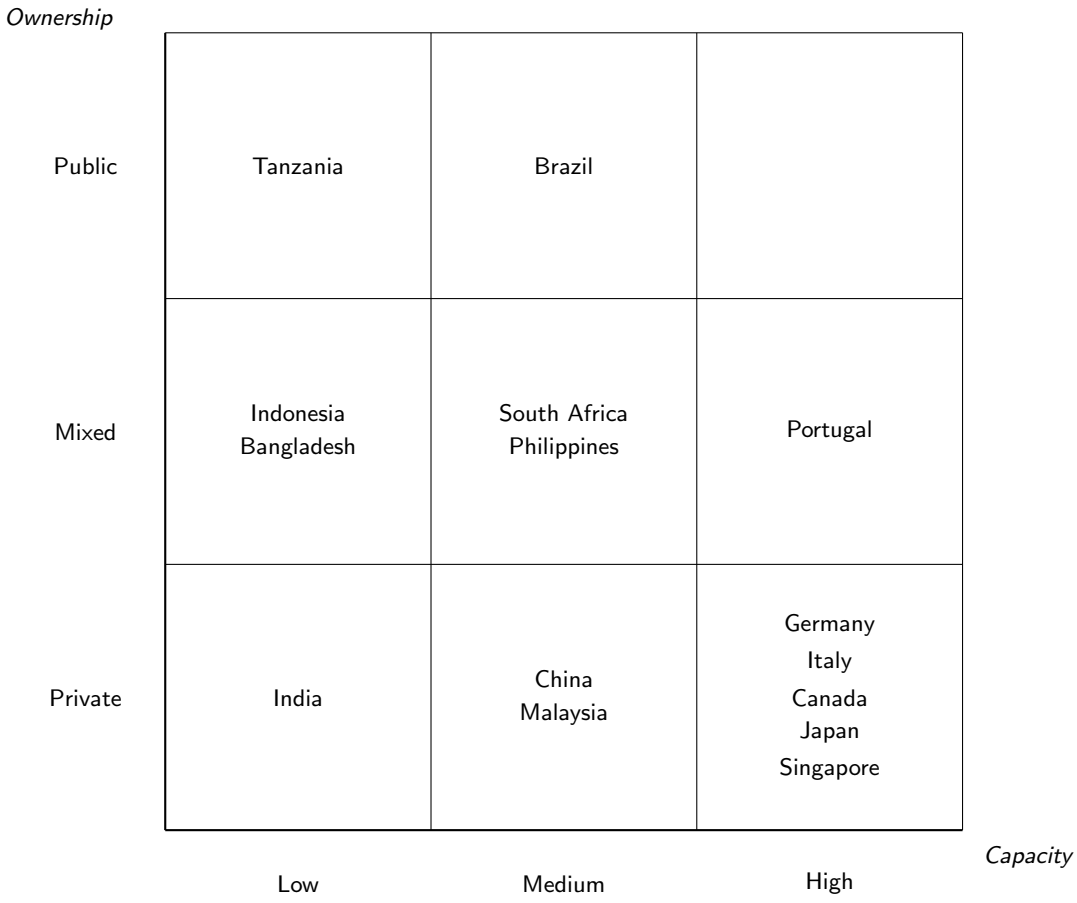

Figure 1: Ownership and Capacity of Primary Health Care Provision

vices in the public hospitals [WHO, 2007a, p.11]. In Malaysia, private sector physicians provide most of the primary health care. The exception here are rural areas where government health centres often are the only health care providers available [Ramesh, 2007]. However, like Singapore, Malaysian health providers produce respectable health outcomes with parsimonious inputs [Ramesh, 2007, Leng and Barraclough, 2007].

The middle row depicts health systems with a roughly balanced mix of public and private primary health care provision. In each of these countries, primary health care provision divides into a well-developed but costly private sector[13] and a less developed but more affordable public sector. For example, in 2005 the Portuguese national health system provided primary health care through 351 Public Care Centres. Parallel to the public system, a wide range of private sector physicians and other health professionals also offer primary health care [Barros and de Almeide Simões, 2007, p.93]. Similarly, the South African public sector provides integrated primary health care at local level through the recently established District Health Care System. However, Bloom and MacIntyre claim that in 1992/93 59% of all physicians, 93% of dentists and 89% of pharmacists operated in the private sector [Bloom and McIntyre, 1998, p.1532]. This, they argue, makes up a well-developed network of private general practitioners and between 350000 and 500000 traditional healers. In Indonesia, the so-called health subcentres (*puskemas pambantu*), part of the public delivery system established during the Suharto-era, are ostensibly responsible for providing primary care at local level [Kristiansen and Santoso, 2006]. At the same time, commentators identify a growing private capacity for primary health care provision [WHO, 2007c, Kristiansen and Santoso, 2006, Hotchkiss and Jacobalis, 1999]: Hotchkiss and Jacobalis point to the introduction of voluntary managed health care plans as evidence of growth of private primary health care provision [Hotchkiss and Jacobalis, 1999].

The countries in the middle row differ in the quality and accessibility of public sector provision. In Portugal, public sector provision is generally of a reasonably high quality. In South Africa and the Philippines, management issues notwithstanding [Bloom and McIntyre, 1998, Obermann et al., 2006], the systems mobilise significant resources for primary health care. Public provision in Indonesia and Bangladesh, however, lacks physical and human resources to be effective[WHO, 2007c, Kristiansen and Santoso, 2006]. In the countries with mixed ownership of primary health care resources, the quality of public provision is significant because it determines patients choices for primary health care [WHO, 2000]. In Bangladesh and Indonesia, like in India (see above), the lack of a viable public sector alternative constrains choice of primary health care [WHO, 2007a].

The top row of Figure 1 depicts countries in which the public sector provides the majority of primary health care. In Brazil, the public sector operates the largest network of primary health care providers: 98% of basic primary health care units are in the public sector [Lobato, 2000]. Brazilian health policy actors can draw on a health resource capacity in the upper mid-range of the selection, much like in South Africa and the Philippines. In 1990, Brazilian patients could consult primary health care providers in 20 487 facilities [Lobato, 2000].[14]

[13] For which any specific data is scarce.

[14] These include so-called Basic Units and Health Centres. The latter are facilities that

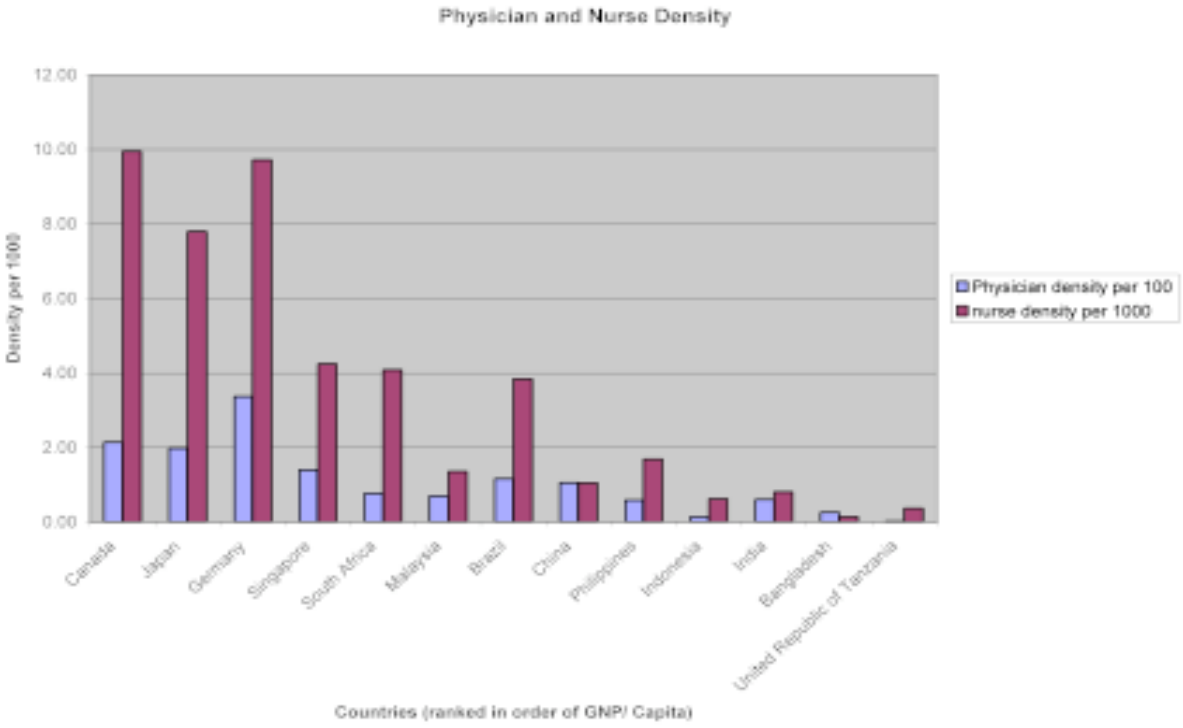

Figure 2: Human Resources for Health

Moreover, as Figure 2 shows, the density of physicians and nurses.[15] in Brazil is relatively high compared to the other middle income countries of the selection (China, South Africa, and Malaysia).

In Tanzania, the Ministry of Health and Social Welfare reports that of the 2652 dispensaries that provide primary health care services, about half were in the private sector [of Health and Welfare, 2007]. About half of these non-public sector dispensaries, however, are non-profit organisations. In 1999, 2652 public and 1305 private dispensaries (of which just over half were non-profit) provided primary health care in Tanzania. Here, health care providers lack both basic physical and human resource for health [Gilson, 1995]. As a rule, nurses and partially trained health workers rather than physicians staff the dispensaries [Gilson, 1995]; [Benson, 2001]. In her systematic review of Primary Health Care in Tanzania, Lucy Gilson assembles a catalogue of lacunae including inefficient HR use, weak maternal services, a lack of drugs as well as basic equipment such as mattresses, fuel, surgical equipment, laboratory supplies [Gilson, 1995].

Secondary Care

Figure 3 shows the way ownership of secondary and tertiary health resources relates to hospital capacities in each country. The overall situation in secondary

provide integrated primary and secondary health care [Lobato, 2000].

[15] Albeit for both primary and secondary care.

and tertiary care differs from primary provision in two basic ways. First, high national income does not necessarily translate into corresponding hospital capacity. Except for Germany and Japan, most high-income countries cluster in the middle column of Figure 3. Second, secondary and tertiary care providers tend to be predominantly located in the public sector.

Countries located in the top row of Figure 3 operate the majority of secondary care facilities in the public sector. Many of the high-income countries huddle in the centre region of Figure 3. As Figure 4 shows, the density of hospital beds in these countries ranges from 28 beds per 10000 in Singapore to 41 beds per 10000 in Italy. In 2001, 61% of public sector hospitals in Italy provided 81.5% of the available beds. In Singapore public hospitals made up about 73% of all secondary and tertiary capacity in 2006 [of Health, 2007]. In China, about 88% of all hospitals are in the public sector and are concentrated in urban areas [Liu et al., 2006].

Low-income countries with predominantly public provision of secondary health care include South Africa, Indonesia and Bangladesh. In South Africa, a well-developed network of public hospitals ranging from basic community facilities to sophisticated teaching hospitals delivers secondary care
[Bloom and McIntyre, 1998]. In 2004, this network consisted of 382 hospitals that provided 100147 beds [Ijumba and Padarath, 2006, p.446]. Private hospitals in South Africa only provided just over a third of the capacity (35830 beds) of public sector hospitals (Sahr, 2006, p.446). In Indonesia, regional health centres (puskemas) and public hospitals provide secondary care
[Kristiansen and Santoso, 2006]. Although Indonesian private hospitals provided 34% of all health care as early as 1985 [Hotchkiss and Jacobalis, 1999], much of the scarce hospital capacity is operated in the public sector [WHO, 2007b]. Similarly, public sector secondary facilities in Bangladesh outnumbered private sector hospitals by 645 to 158. Significantly, these public sector hospitals provided 29106 hospital beds compared to the 6213 beds in private hospitals in 1997 [Bank, 2005]. This quadrant also contains Malaysia with its low hospital capacity somewhat untypical for a middle-income country. Ramesh (2007) argues that, like Singapore, the public sector dominates secondary health care provision: the public sector makes available 77% of all hospital beds [Ramesh, 2007, p.74].

The central row of Figure 3 shows countries in which ownership of secondary and tertiary health care resources is mixed. In Germany, alone at the high end of the capacity distribution, just over half (54%) of hospitals are operated by the public sector (usually regional governments and local authorities) while 38% are owned by non-profit organizations and only 8% profit-making enterprises. Portugal is located in the middle of Figure 3. Here, hospital ownership is evenly split with 89 public and 82 private hospitals in 2004 [Barros and de Almeide Simões, 2007]. At the lower end of the capacity spectrum, we find the Philippines and Tanzania. In Tanzania, resources for secondary care were evenly matched between the private and public sector: in 1999, beds in public sector numbered 16359 compared to the 13257 in the private and civil society sector.[16]

The bottom row depicts health systems in which the private sector controls most of secondary health care resources [Ikegami, 2005]. In Japan, due mostly

[16]Of the 13257 beds, 12021 were located in non-profit hospitals.

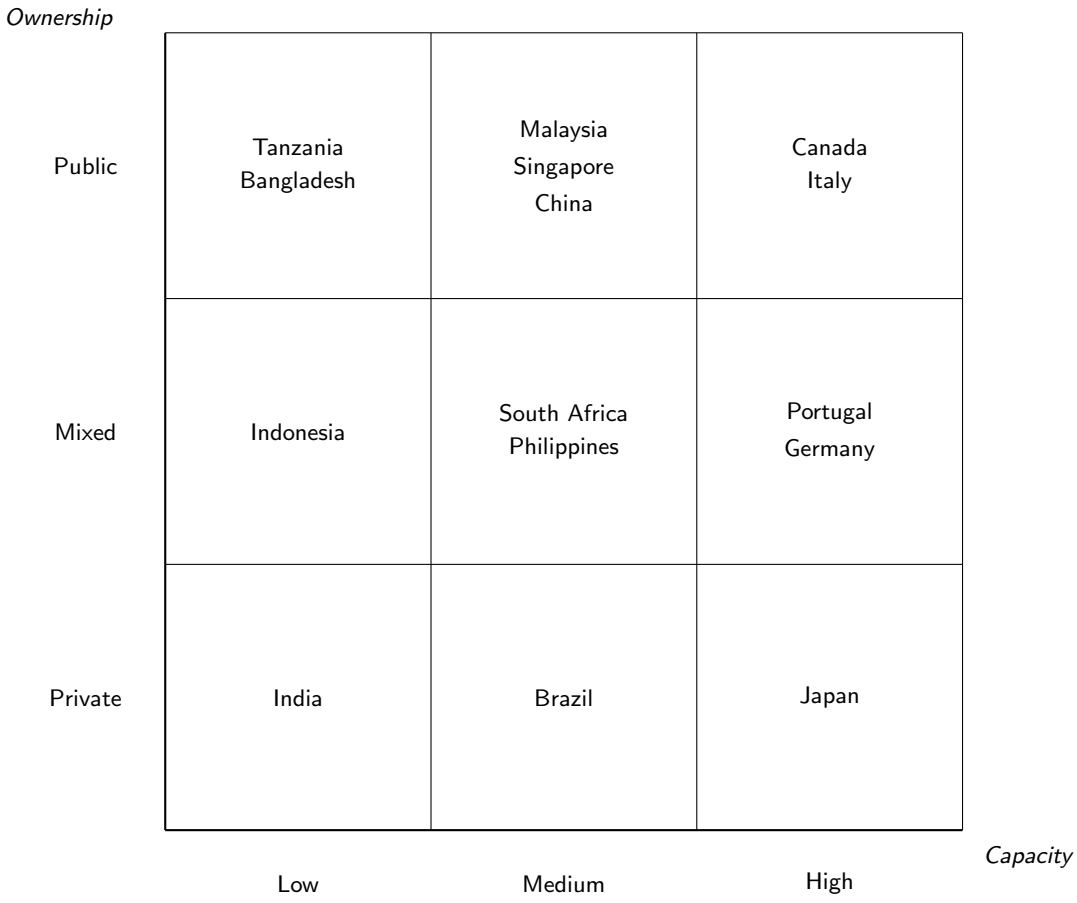

Figure 3: Ownership and Capacity of Secondary Health Care Provision

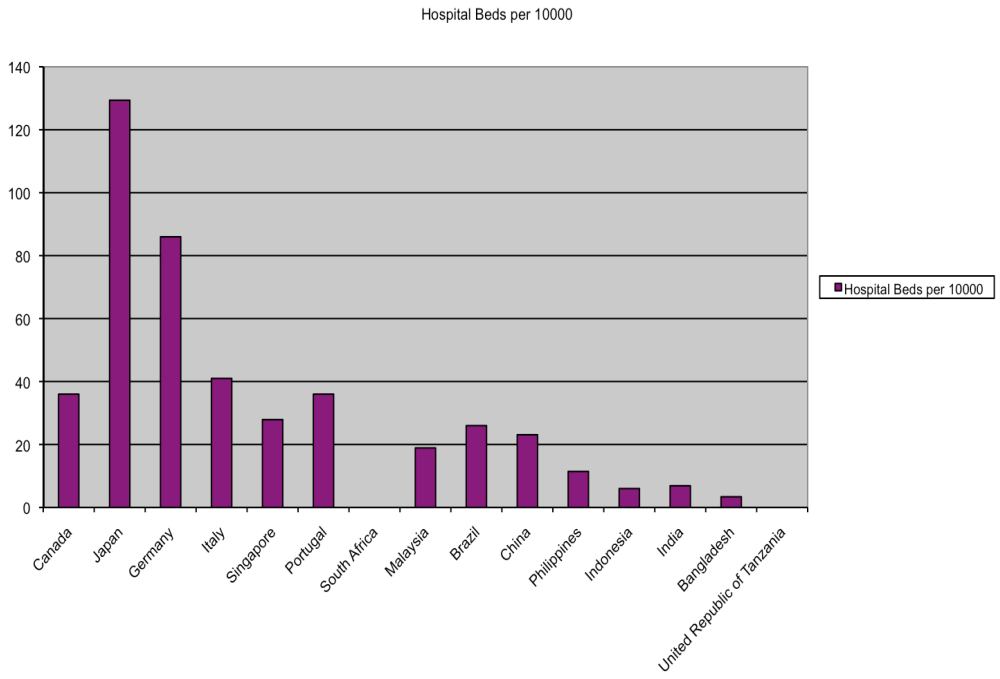

Figure 4: Hospital Capacities

to historical accident, individual physicians own a majority of secondary care facilities [Ikegami, 2005]. In 1999, 79.9% of hospitals and 67.1% of beds were provided by the private sector [Jeong and Hurst, 2001]. While the government-run social insurance programmes also provide secondary care in their own hospitals and NGOs (such as the Red Cross) operate specialist high-tech hospitals, secondary care is essentially an outgrowth of the individual private practices [Ikegami, 2005]. The private sector in Brazil provides the majority of secondary health care. Lobato shows that 75.5% of poly-clinics and 79% of hospitals were located in the private sector in 1990 [Lobato, 2000].[17] Last, although Indian health care provision features an elaborate public hospital system, public capacities remain far below demand [WHO, 2007a].

Figure 3 suggests two general observations. First, significant public sector involvement in secondary health care provision is nearly ubiquitous across the selection. With the exception of Brazil and Japan, the public sector owns at least half of all facilities and provides at least half of the hospital beds in all countries of the sample. Second, higher levels of public ownership and control seem to enable policy-makers to constrain the growth of secondary health care capacity [Moran, 1999]; [Bonoli and Palier, 2000]; [Blank and Burau, 2004]. In spite of similar levels of income, hospital capacities in Canada, Italy and Singapore, are two to three times lower than in the density of hospital beds in Germany and Japan. In fact, hospital bed density in Canada, Italy and Singapore is not much higher than in middle-income countries such as China and Brazil. Further, the untypically low level of secondary health care resources in Malaysia suggest that public control of secondary health resources encourages a similar sort of frugality there.

Delivery Systems and the Flow of Material Resources

Figure 5 shows the ownership of primary and secondary health care resources (without taking into account differences in capacity). The pattern of ownership and management relations in Figure 5 points to three groups of delivery systems: delivery systems of the sample are composed of either complementary sectors, parallel sectors or a single sector.

Complementary Sectors

In this group, ownership and management of primary care differs from the relations of production for secondary care. Although organised along different lines, the two sectors complement each other by performing different types of health services. As a rule, complementary sector delivery systems provide a high degree of coverage and accessibility. The countries in this group include all high-income countries (except Portugal) as well as Malaysia and Brazil.

Although Germany and Japan appear to feature a much larger share of private secondary provision, most private secondary facilities are run on a non-profit basis. In Germany, all hospitals that provide acute care, including private sector hospitals, are listed in the so-called hospital plans of the respective regional governments; in effect, the public sector manages and regulates these hospitals like public sector facilities. Similarly, most of physician-owned hospitals in Japan operate on a non-profit basis and are subject to tight regulations

[17] 65,5% of emergency facilities, however, were operated by the public sector.

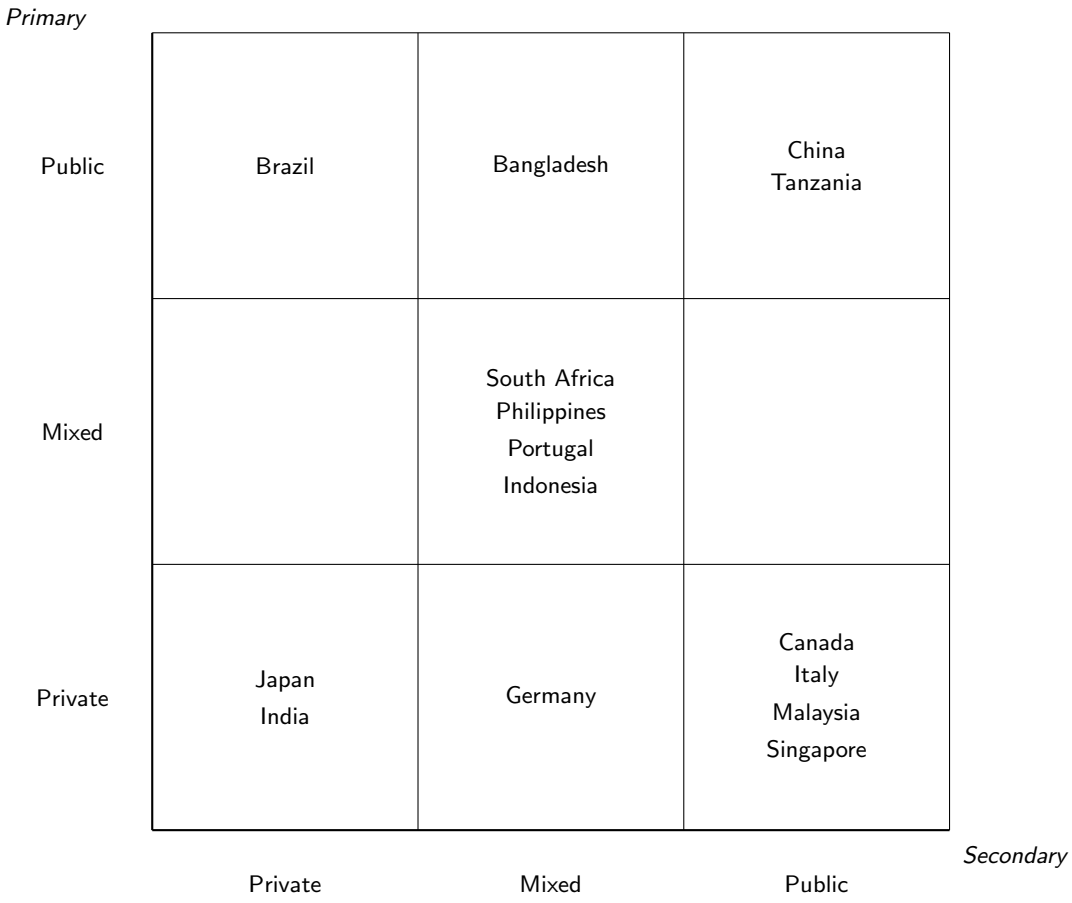

Figure 5: Ownership of Primary and Secondary Health Care Provision

[Jeong and Hurst, 2001].[18] Thus, the relationship between these private sector hospitals and health care regulators in Germany and Japan is closer to that of autonomous public hospitals in Italy or Canada than, say, for-profit secondary care in India (or the USA).

Due mainly to historical accident, Brazil is at the opposite end of the institutional map from most high-income countries: while the public sector provides most of the primary care, hospital capacity is mostly in private hands. During the phase of rapid growth of the Brazilian economy in the 1970s, financial incentives created a boom in private hospitals. After the transition to democracy in the late 1980s, an avowedly egalitarian health policy community need to make good on their commitment to PHC for all within a predominantly urban and hospital-based delivery system. Brazilian health policy-makers solved this problem by creating the primary health units and integrated health centres [Haines, 1993, Lobato, 2000].

Across the selection of countries, complementary sectors seem to offer favourable conditions for high levels of health care capacity. By the same token, complementary sectors seem to generate considerable cost pressures. In most countries in this group, cost concerns have been on the top of the policy agenda for the past decade or so [Freeman, 1998]; [Moran, 2000]; [Blank and Burau, 2004]. However, successful control of capacity growth in both Singapore and Malaysia show that complementary sectors need not translate into spiralling costs.

Parallel Sectors

In the second group, both the public and the private providers are involved in primary and secondary care. Unlike the complementary sectors, parallel sectors differ in the coverage, accessibility and quality of health services. In general, private sector provision caters to the more affluent parts of the population. Poorer people rely on public sector health services that are usually of a lower quality.

The countries in this group span a wide geographical, economic and sociocultural space. Countries include Portugal, South Africa, China, the Philippines, and Indonesia. Significantly, patients and policy-makers of all countries in the middle row face similar health system problems. Coverage and accessibility of primary health care is unevenly distributed in all countries. In Portugal, a relatively affluent country, density of primary health care facilities in the more affluent northern and central regions by far exceeds capacity in the poorer southern regions [Barros and de Almeide Simões, 2007].[19] In geographically dispersed countries such as Indonesia and the Philippines, health facilities tend to be located in urban centres and are largely inaccessible for the poorer rural population. In China, much of the capacity for primary and secondary health care is located in urban regions leaving rural areas desperately undersupplied [Liu et al., 2006, Gu, 2001, Bloom, 2005].

Furthermore, in all countries with mixed primary health care ownership, referral systems are not very effective. In these countries, patients tend to be

[18] The legal status of these physician-owned hospitals is the so-called *Iryo Hojin* (medial legal person) [Jeong and Hurst, 2001], p.11). A more sensitive analysis would differentiate between public sector and the non-profit sector.

[19] Incidentally, this is also true for Italy where health care coverage in the affluent north is better than in the poorer regions of the *Mezzogiornio* [Donatini et al., 2001].

somewhat (and often justifiably) suspicious of the quality of public primary sector care. In all countries, patients tend to circumvent primary care provision at lower levels. At 3.8 contracts per person per year, Portuguese use outpatient facilities far fewer than their European compatriots in Germany (7,3 contacts per person per year) or Italy (6.0 contacts pp/pa). In South Africa, lack of coordination and administration between sectors means that sophisticated teaching hospitals often fulfil the function of a general hospital in urban areas [Bloom and McIntyre, 1998]. This leads to an inefficient deployment of health resources as patients overutilise expensive hospital resources.

Single Sector

In the countries of this group – India, Bangladesh and Tanzania – both primary and secondary care provision is dominated by a single sector. As we have seen, the private sector provides most of both primary and secondary care in South Asia. Although central and state governments in India provide public health care facilities, low levels of funding and staffing as well as a lack of effective management structures mean that these facilities fall short of meeting demand by a very long way.[20] Conversely, the public sector is the most important health care provider in Tanzania. Private sector provision has grown slowly since the government relaxed restrictions on private health care in 1993. Private health care facilities tend to target to urban populations, thereby worsening the relative coverage of health care services for the rural poor [Benson, 2001].

In sum, relations of health service production are not a very strong indicator of capacity and health outcomes. The analysis shows that the most powerful delivery systems tend to encourage private sector provision of primary care and reserve a strong public sector role for secondary/ tertiary care. However, there is considerable variation within these limits. For example, Germany and Japan feature a high proportion of non-profit hospitals relative to other high-income countries with similar health outcomes. Moreover, similar structural features do not necessarily imply the same level of health care capacity or health outcomes. Although the Malaysian delivery system resembles high-income health primary and secondary provision, capacities are very low (with, however, relatively good health outcomes). Even more striking are Japan and India; while the private sector in both countries provides most of primary and secondary care, capacity and health outcomes could not be more different. Similarly, although the delivery systems of Portugal and the Philippines share broad structural characteristics, health care capacity and health outcomes differ widely. Having said that, the analysis has also shown that similar delivery systems also seem to suffer from similar problems and challenges. Delivery systems with mixed primary and/ or secondary provision tend to exhibit disparities in coverage as well as ineffective referral systems. Notably, this seems to be true for relatively affluent countries such as Portugal as well as very poor nations such as Bangladesh or Indonesia albeit to differing degrees.

[20] Admittedly, this finding is not based on robust data. Numbers concerning facility and capacity ownership have been hard to find. The WHO country profile for India asserts that the private sector dominates both dimensions of care [WHO, 2007a]. However, it does not provide any evidence to support the claim.

Financing Regimes

Comparing the ways financial regimes channel the flow of funds through health systems makes up a considerable portion of social research into health systems [WHO, 2000] [Bank, 1993] [Gottret and Schieber, 2006]
[Musgrove and Zeramdini, 2001][Musgrove et al., 2002]. How, then, do different countries finance health care provision and how do these financial arrangements distribute the financial risks of health care provision?

Revenue Generation

Figure 6 compares revenue collection mechanisms and per capita spending on health care in the countries of the sample. In countries with predominantly collective means of revenue-generation, spending on health care is at least in the upper mid-range. Conversely, countries with mixed or individual modes of revenue-generation uniformly spend less on health care. With the exception of Brazil, low spending on health goes hand in glove with mixed or individual means of raising funds for health care.

Significantly, all countries with a high level of health care expenditure rely on collective means of revenue-generation. Yet even within this group expenditure varies considerably. For example, Germans spend more than three times as much per person on health than Singaporeans and about twice as much as Portuguese.

As the breakdown of spending in Figure 7 indicates, the countries in the top right-hand area of Figure 6 use different mechanisms for raising revenues. In Germany and Japan, contributions to social insurance provide revenues for health care. In line with the Bismarck model, health care finance in Germany relies on the statutory health insurance (gesetzliche Krankenversicherung). Here, individuals choose from competing sickness funds (Krankenkassen) that are legally obliged to contract all applicants [Busse and Riesberg, 2004a]
[Busse and Riesberg, 2004b]. Similarly, Japan operates a threetiered mandatory social insurance. In both Japan and Germany, membership in the social health insurance is tied to labour market participation. In both countries, the government subsidises the social health insurance, usually to finance non-contributory health care services (i.e. to dependents, etc.).

In Canada and Italy, spending patterns are typical for "Beveridge"-type health care systems.[21] The proportion of social insurance spending is negligible and general government spending dominates total expenditure, Here, the main source of health care revenue is general taxation. The Italian and Canadian governments (both central and local) collect taxes and determine health care spending priorities in the context of general budgeting processes. Government then transfers designated funds to the responsible executive agencies (Provinces and Regional Health Authorities in Canada, Regions and Local Health Units in Italy) in order to fund health care provision.

Despite a national health system similar to the Canadian or Italian model, the composition of health care spending in Portugal is less coherent than in the other high-income countries. In particular, the level of out-of-pocket expenditure in Portugal exceeds that of comparable countries. This is why Moran

[21] Or, using Morans terminology, "entrenched command-and-control health state" [Moran, 1999, Moran, 2000].

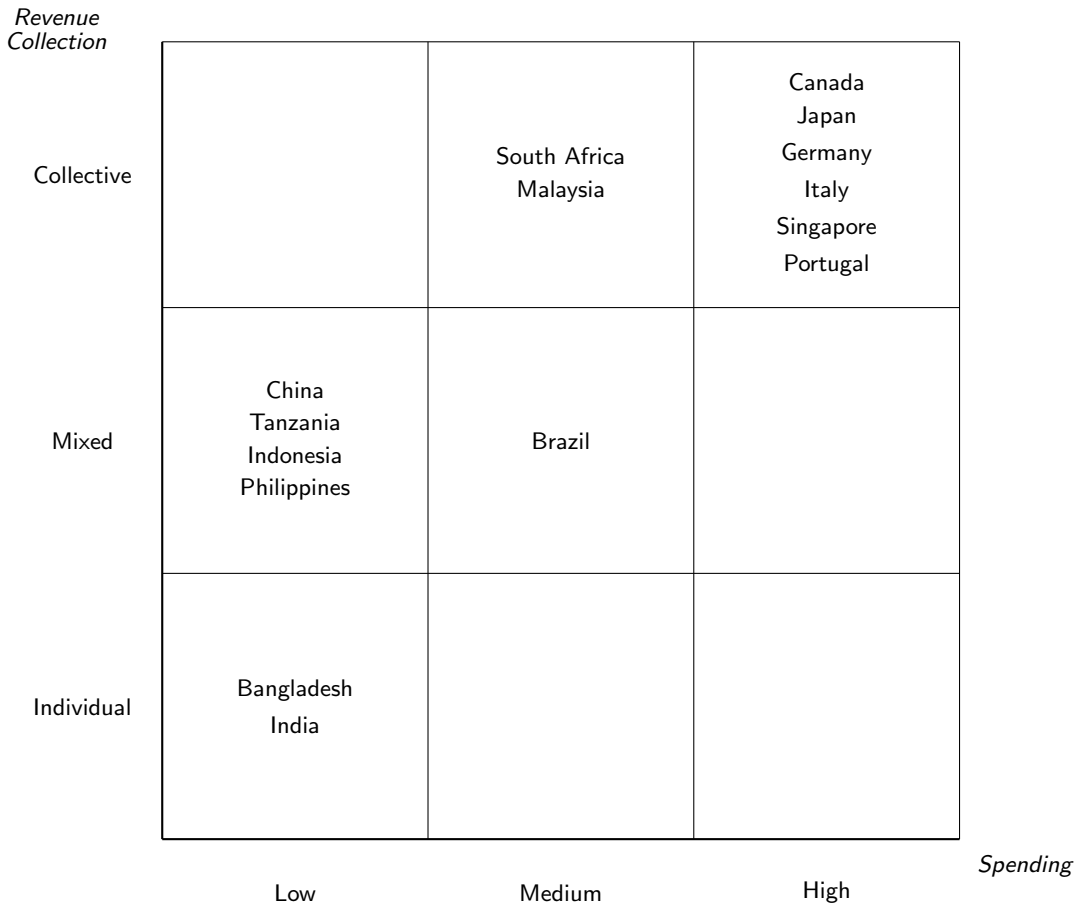

Figure 6: Means of Revenue Generation and Spending on Health Care

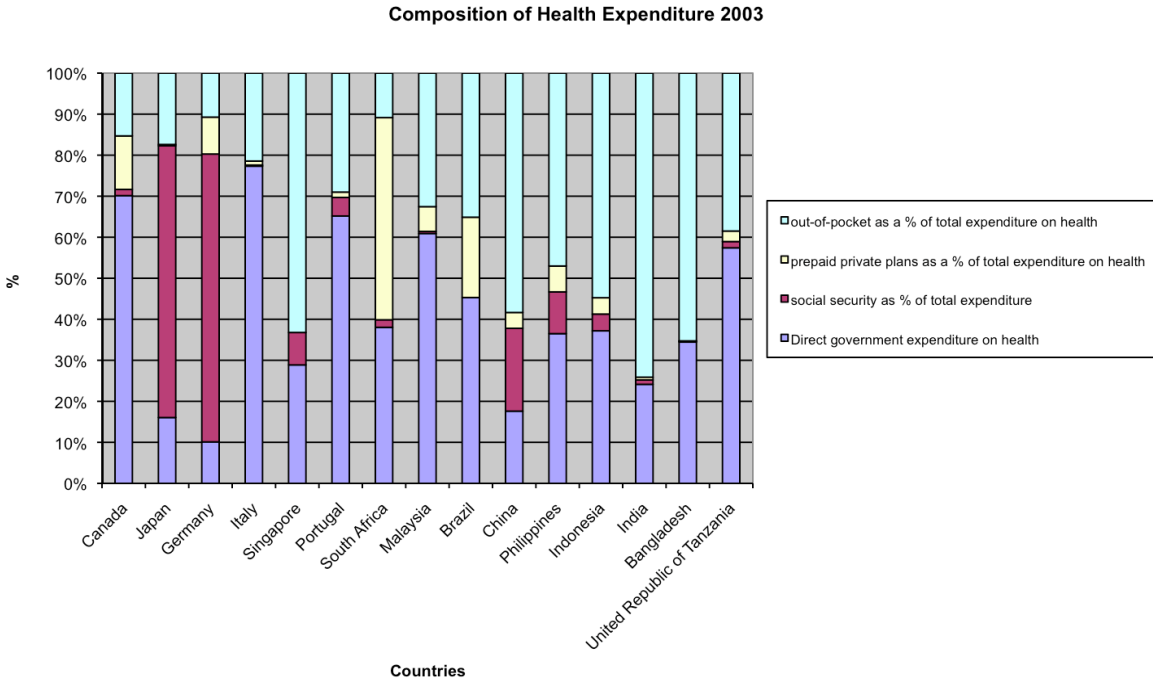

Figure 7: Composition of Health Care Expenditure

labels Portugal an "insecure command-and-control health state": the national health system has neither displaced the significant private sector component in the delivery system nor has it fully brought private sector provision under public financial control [Moran, 1999, Moran, 2000]. In Portugal, then, a mixed delivery system contributes to mild fragmentation of health care financing.

At first glance, it would seem as if revenue generation in Singapore individualise financial risks of health care. Yet, the figure is somewhat misleading. Unlike other Asian countries of the sample, prepayment finances much of the out-of-pocket expenditure in Singapore. In order to save for medical expenditure, Singaporeans are obliged to contribute to mandatory individual accounts (the MediSave and MediShield programmes). The social insurance institution, the Common Provident Fund (CPF), administers these individual accounts and collects contributions through payroll taxes [Barr, 2005]; ISSA, 2005). Since Singaporeans use these funds to pay for health services of any kind and these funds are in effect individual savings, the Singaporean government counts this as out-of-pocket expenditure.

While South Africa and Malaysia also rely on collective forms of revenue-generation, the volume and pattern of spending differs considerably. In South Africa, which spends nearly twice as much as Malaysia[22] due to the HIV/AIDS epidemic, nearly half of all health care spending is made up of private sector health insurance. About two thirds of these prepaid plans are operated by non-profit risk sharing associations while private insurance covered only about 15.2% in 2002 [Bloom and McIntyre, 1998, Ntuli and Day, 2004]. General taxation makes up 94% of the funds the Department of Health uses to finance primary (11%) and secondary care (76%) [Bloom and McIntyre, 1998]. Notably, the level of out-of-pocket expenditure in South Africa is among the lowest of the entire sample. Malaysia, in turn, relies mostly on general tax revenues and out of pocket expenditure to finance expenditure on health. Although, like their Singaporean neighbours, Malaysians also save for medical expenditure in mandatory savings accounts, these accounts are a marginal source of health care funding as are private sector insurance plans [Ramesh, 2007].

The middle row of Figure 6 depicts countries in which no single mode of revenue-generation dominates. Despite a constitutional right to health care, the Unitary Health System (SUS) in Brazil covers only about 70% of the population [Lobato, 2000]. The so-called supplementary medical system, a voluntary contract system accounting for about 20% of total health spending, finances the most of the private sector provision in Brazil [Lobato, 2000]. A possible reason for out-of-pocket expenditure (35%) exceeding private pre-payment could be the different patterns of purchasing: while the affluent buy health services from physicians, poor Brazilians then to buy OTC medicines from pharmacies [Haines, 1993, p.504].

Low levels of health spending in China, Indonesia, the Philippines, and Tanzania also draw from a variety of revenue-generating mechanisms.[23] In China, cities have experimented with social insurance systems that raise about 50% of public health expenditure. Despite differences in details, all urban social insurance schemes distribute contributions into individual accounts and a risk-

[22] As a proportion of GDP, South Africans spend more on health care than the Japanese (8.4% compared to 7.9%) [WHO, 2007c].

[23] Notably, external resources from donor organisations contribute towards health spending in all these countries except China.

pooling fund. In the case of sickness, an individual must draw a substantial amount from the individual account before becoming eligible for social funds. Insuring an estimated 11.5% of the urban population [Gu, 2001], the coverage of these schemes is neither wide (i.e. the exclusion of the rural population) nor deep (exclusion of dependents from social insurance schemes). This and the fact that health care provision in China features considerable co-payments explain the 55% share of out-of-pocket expenditure [WHO, 2007c, Bloom, 2005].

The Philippines, in turn, introduced a national health insurance scheme (PhilHealth) in the mid-1990s. Like the counterparts in the high-income countries, health spending revenues are made up contributions from employers, employees as well as government subsides [Obermann et al., 2006]. Unlike near universal health insurance coverage in Japan or German, PhilHealth covers about 75% of workers enrolled in the formal sector (which only makes up 65% of the entire labour force). Community-based micro health insurance schemes provide some, albeit rather volatile, coverage for the very poor in remote areas. In 2003, PhilHealth accounted for just over 20% of government spending while non-social insurance public spending about 35% of total health spending [Obermann et al., 2006, WHO, 2007c].

In Indonesia, the two health insurance schemes, PT Askes and PT Jamosteks, together cover about 30% of the population [Kristiansen and Santoso, 2006]. As a result, general government and out-of-pocket spending dwarfs the social insurance contribution to total health spending. The very low levels of spending in Tanzania are composed, in more or less equal parts, by general government and out-of-pocket expenditure. Although a social insurance scheme exists in Tanzania, it pays for less than 1.5% of health spending.

The bottom left-hand cell of Figure 6 depicts the situation in the South Asian countries of the selection. In both India and Bangladesh, patients rely mostly on health care services provided by the private sector [Islam and Tahir, 2002]. In both countries, the coverage of the existing social insurance schemes is as negligible as the coverage of private health insurance. Given the absence of effective forms of prepayment and the low public investment health care provision in both countries, Indians and Bangladeshis have little choice but to finance the majority of health care service through out-of-pocket payments [WHO, 2007a].

Purchasing Mechanisms

Figure 8 reveals that purchasing practices are far more heterogeneous than mechanisms for revenue-generation.[24] Most countries of the sample feature a mix of different purchasing arrangements. In general, however, more affluent countries tend to rely on a wide range of purchasing mechanisms while fee-for-service payments predominate in middle- and low-income countries.

In Germany, these sickness insurance funds use global budgets and fee-for-service mechanisms to pay for primary care. German health care purchasers use a dual system for funding secondary health care: infrastructural costs are funded by regional governments using budgets while the sickness funds finance operating costs using prospective payment methods [Busse and Riesberg, 2004a]. In

[24]Eventually, I would like to contrast purchasing mechanisms with utilization rates. So far I have no reliable data on utilization rates. Hence, I am assuming that health resource utilization increases with income. I suspect (and the WHO says as much) that strategic purchasing of health services enables more effective price negotiation with health care suppliers.

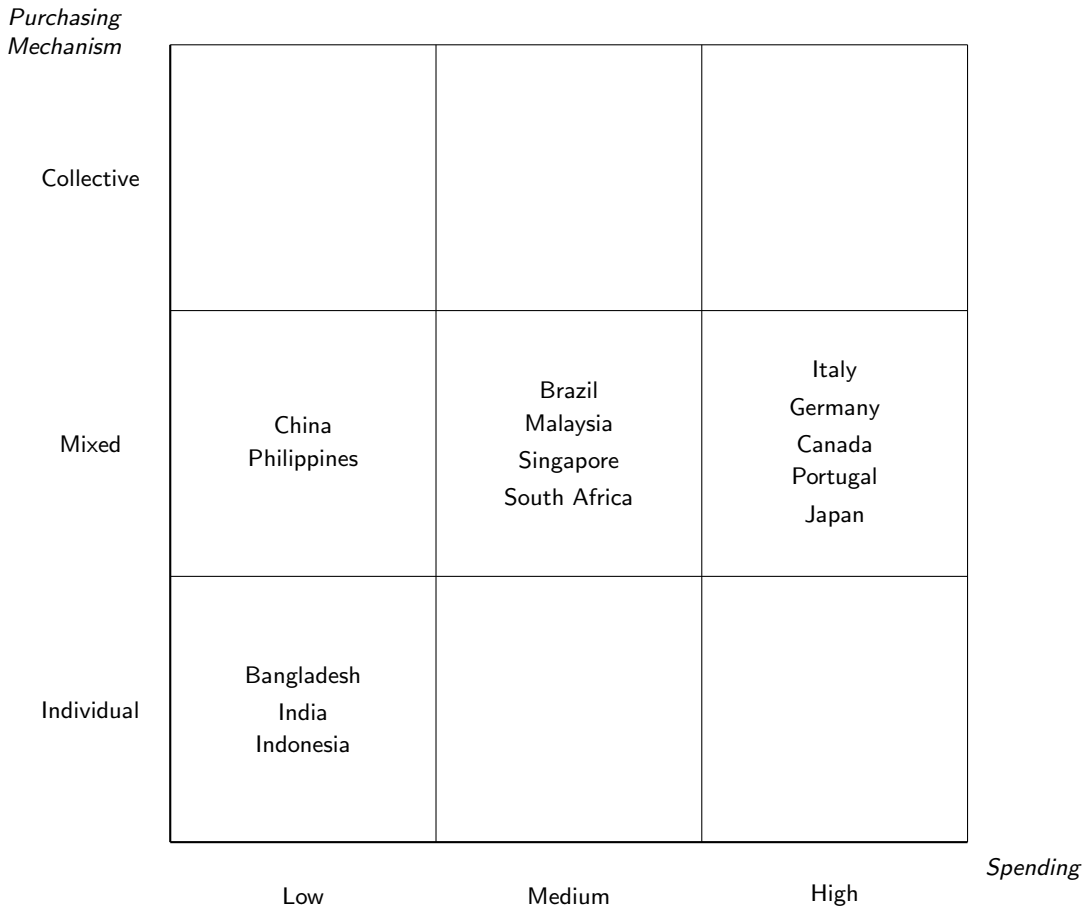

Figure 8: Purchasing Mechanisms and Spending on Health Care

Japan, social insurance institutions fund both primary and secondary health care in terms of a fee-for-service system. Since either individual physicians or the government own hospitals in Japan, most medical professionals are usually salaried employees. The so-called Unified Fee Schedule, a catalogue of services and prices that policy actors annually renegotiate in detail, enables purchasers to exert considerable control on costs as well as provision.

While funds for primary and secondary care in Canada flow from the same source, the single-payer health care purchasers use different models of expenditure. In general, public health care purchasers pay for primary health care on a fee-for-service basis after negotiation with the relevant professional association. Secondary care, in turn, is usually financed in terms of global budgets or capitation.[25] In Italy and Portugal, purchasing mechanisms for primary and secondary care are similarly diverse. In Portugal, all NHS employees (including physicians, nurses and other medical professionals) are salaried employees. This applies both to public sector professionals in health centres providing primary care and hospital physicians [Barros and de Almeide Simões, 2007]. However, physicians will often supplement their income by treating private patients on fee-for-service basis. In Italy, the health service recompenses primary care providers on the basis of a capitation formula. Payment for specialist ambulatory care in Italy occurs in a three-tiered scheme: a fixed part based on capitation, a variable part based on fee-for service and an additional which is essentially a reward for efficient resource use [Donatini et al., 2001]. The National Health System in Portugal purchases hospital care using global budgets. However, since public hospitals became autonomous trusts in the 1990s, the budgeting process has been based on DRG information as well as non adjusted outpatient volume. Similarly, Italian hospitals, autonomous units since the mid-1990s, are financed in terms of a prospective payment mechanism. Outpatient services are recompensed in terms of predetermined national rates for specified procedures. While these rates allow regions some flexibility in determining prices, regional prices may not exceed the national rates. Inpatient services are purchased using a DRG scheme [Donatini et al., 2001].[26]

Figure 8 shows that health policy-makers in middle-income countries also use a variety of purchasing mechanisms. In terms of health spending, the Brazilian SUS operates a dual-system: direct transfers are supposed to develop health care capacities while a prospective payment system finances operative costs [Lobato, 2000]. Similarly the Filipino national health insurance, PhilHealth, is a public contractor of health services; both primary and secondary care is financed in terms of a prospective payment model. The experimental social insurance systems in Chinese urban areas, in turn, recompense primary and secondary health care providers in terms of a fee-for-service system. Yet, as we saw in the previous section, poor coverage of these schemes means that a large degree of health services in these countries are purchased on the basis of fees-for-service and financed out-of-pocket [Musgrove and Zeramdini, 2001].

At the low-income end of the distribution, health policy-makers have little leeway in the choice of purchasing mechanisms. Public and voluntary health

[25] Although this does vary from one province to another.

[26] There are some exceptions to this general pattern. The national health service purchases long-term care and rehabilitation using the older bed-per-day method. Moreover, the implementation of prospective payment practices has not been uniform across all Italian regions with southern regions lagging behind.

care providers in Tanzania offer health services for free at the point of delivery [Gilson, 1995]; [Benson, 2001]. This suggests that physicians and health workers are salaried employees. In the growing private health care sector, patients purchase health services on a fees-for-service base. In India and Bangladesh, private sector provision operates almost exclusively on a fees-for-service basis.

Financing Regimes and Risk Pooling

Figure 9 compares the way financing regimes match revenue and purchasing mechanisms. The distribution clusters around four types: *coherent regimes, fragmented regimes, pillared regimes* or *asystemic regimes*.

In countries with *coherent financing regimes*, a single institutional arrangement generates the majority of funds for health care. While other forms of revenue generation exist, they are complementary to the dominant mechanism. Countries in this category include Canada, Japan, Germany, Italy, Singapore, Portugal and Malaysia (see also [Musgrove and Zeramdini, 2001]). The mechanisms for generating revenues differ widely: Germany, Japan and Singapore prefer social insurance contributions while Canada, Portugal, Italy and Malaysia raise revenues predominantly through taxation. Notably, the specific model of revenue generation seems to have little impact the ability to pool risks of financing health care. Despite different institutional modes of revenue generation, health care coverage is near universal in each of the countries in the top row of Figure 9 [Gottret and Schieber, 2006, Musgrove and Zeramdini, 2001, WHO, 2007c]. In terms of purchasing mechanisms, all countries deploy a wide range of different purchasing arrangements; policy-makers in all countries use budgeting tools, prospective payment schedules and fees-for-service payments in different, often rather creative ways. With the exception of Malaysia, health care expenditure in all countries in this group is relatively but not uniformly high. As a result, risk pooling is most robust in the countries with coherent financing regimes.

The second group comprises countries featuring *fragmented financing regimes*. Here, the majority of funds for health care originate from various public and private sector sources. Spending on health care in fragmented regimes is considerably lower than in countries with coherent financing regimes
[Gottret and Schieber, 2006] [WHO, 2000]. Significantly, the share of out-of-pocket expenditure of the total of health spending ranges from about 30% to 70%. Coverage and access to health services in these countries is disparate and inequitable. Although fragmented financing regimes can enable some risk pooling, a large number of households always remains exposed to considerable financial risk. Countries here include Brazil, China, Philippines, Indonesia, South Africa and Tanzania.

The exception here is South Africa. Despite predominantly collective means of revenue-generation, health outcomes are poor and access to health services is highly inequitable [Bloom and McIntyre, 1998]. Yet, unlike the high-income countries where either contributions or taxation dominate in any given health system, South Africans rely on insurance premiums (or private sector contributions) and general taxation. It would seem that the institutional legacy of *apartheid* has created two largely independent *pillars* of health care financing: one pillar to cater for the health needs of the rich, predominantly white population and one pillar to meet the growing demands of the middle-classes and

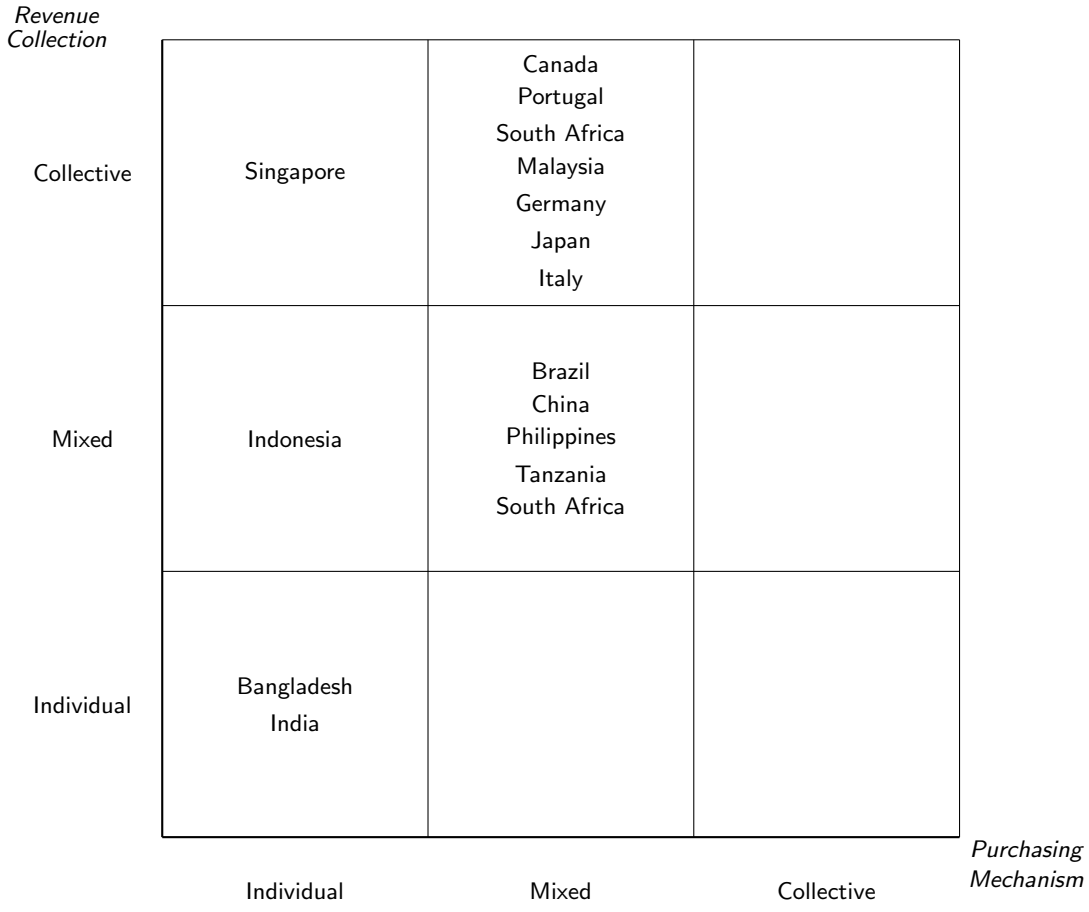

Figure 9: Revenue Collection and Purchasing Mechanisms for Health Spending

the very poor [Bloom and McIntyre, 1998]. Pillared financing regimes lie somewhere between coherent and fragmented financing regimes.

The last group contains countries with *asystemic financing regimes*. In these countries – India and Bangladesh in our sample – institutional financing mechanisms account for a small part of health care expenditure. Instead, out-of-pocket expenditure by households makes up more than 70% of health care spending. In these countries, aggregate health spending is invariably low with access to health services as inequitable as the distribution of good health outcomes.

Governance Structures

Governance subsystems shape the politics and administration of health policy. They not only determine who gets involved in health care policy, governance structures also lay down the rules of policy engagement. In this way, governance subsystems channel the flow of political power through the health system.

Horizontal Distribution

Figure 10 maps the ways health care systems institutionalise access to health policy-making and competition between different types of policy actors.

The left-hand column maps health care systems that feature extensive regulation of horizontal relations. Germany and Brazil are located at the top-left corner: here, a plurality of policy actors can access the subsystem, but extensive institutionalisation of competition concentrates power among the accredited insiders of the process. On the one hand, German patient organisations now have a seat in the German Federal Joint Committee that decides on the medical package to be financed by social insurance. On the other hand, negotiation and bargaining between purchasers, providers and users of health care is strictly regulated by law at both federal and *Länder* level. In Brazil, the so-called intermanagement commissions, health councils and secretariats provide patients and civil society organisations with a real voice [Lobato, 2000].

Countries with regulated relations within a less plural health policy community are located in the left-most quadrant of the centre-row. Countries here include Japan, Singapore, China and the Philippines. In Japan, the three-staged process of negotiating the Unified Fee Schedule tightly choreographs negotiations between government and the Japanese Medical Association. This negotiation process empowers the JMA and ministry to the detriment of other actors in the health care subsystem [Ikegami, 2005]. Similarly, while both state and market sector actors are involved in the health policy process in Singapore, the government retains tight control over the policy process. In China, the dominance of state provision, the suspicion towards private health care providers as well as the dearth of health care NGOs reflect the restricted access to health policy subsystems [Liu et al., 2006, Bloom, 2005].

The countries in the centre column of Figure 10 feature some formal provisions for regulating policy interaction. Here, the dominant player is the national health system. Unlike corporatist systems, national health systems do not formally incorporate other types of policy actors. In South Africa and Canada (the top quadrant), access to the health policy subsystem is most open. In South

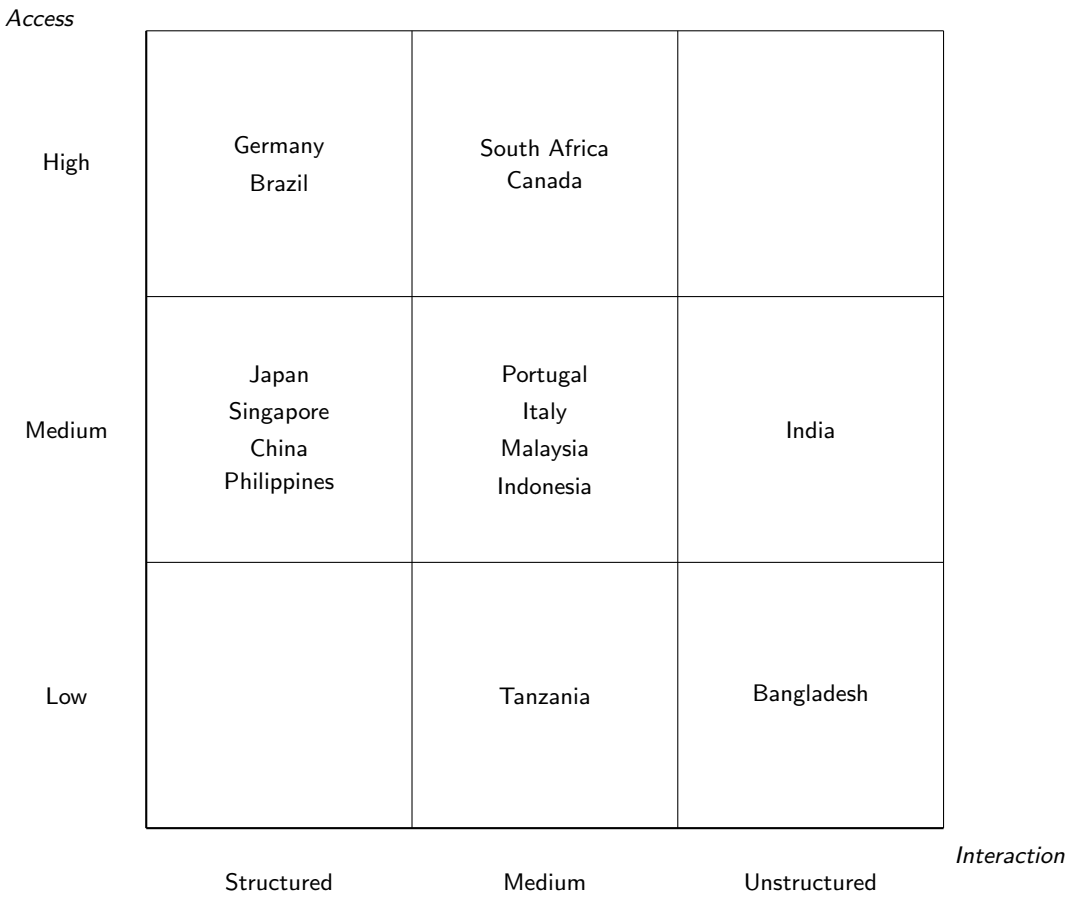

Figure 10: Horizontal Distribution of Political Power across Health Policy Actors

Africa, the District Health System in South Africa reflects policy-makers commitment to stakeholder-driven primary health care [Bloom and McIntyre, 1998, Ntuli and Day, 2004]. For this reason, South African health policy-making includes a wide range of policy actors and stakeholders. The integrated nature of state provision of health care in Canada, in turn, precludes extensive institutionalisation of horizontal relations [Blank and Burau, 2004]. However, so-called intergovernmental management committees on a range of issues provide access points for a wide spectrum of policy actors [Marchildon, 2005].

In Portugal, Italy, Malaysia and Indonesia, located in the centre of Figure 10, access to health policy-making is limited to state and market actors. Although health-related NGOs and patient representation exist in all three countries, they can only access the health policy system indirectly via the macro-political sphere[Donatini et al., 2001] [Ramesh, 2007] [Leng and Barraclough, 2007] [Barros and de Almeide Simões, 2007][Kristiansen and Santoso, 2006].

Tanzania is positioned at the bottom of the central column; here, lacking political mobilisation as well as ineffective institutional contexts for policy contestation undermine access to health policy-making.

In the right-hand column of Figure 10 depicts health care systems featuring unfettered competition between policy actors. This means that the rules-of-the-game are mostly informal and plastic. While formal venues for policy-making may exist, they play a marginal role in health policy formulation and implementation. Unlike the more extensive regulatory regimes, horizontal power relations between policy actors are based on differences in resources and capacity. In India, widespread corruption undermines and weakens formal health policy structures. In the bottom right-hand corner, Bangladesh features a very limited range of policy actors and the regulation of competition between these actors is low. Effectively, this means that policy actors with privileged access to the health governance system (i.e. the state and international organisations such as the World Bank) face little or no competition that could call their actions to account.

Vertical Distribution

Figure 11 depicts vertical distribution of power down levels of governance. The two dimensions that gauge the vertical diffusion of power are degree of formal decentralisation in the health care system and the level of perceived corruption in the country. While the devolution of health governance diffuses power across different levels of governance through procedures of accountability and control, corruption will tend to undermine these vertical mechanisms of accountability.

Figure 11 shows that most countries have devolved the provision of health care. This reflects trends of the past two decades towards more decentralisation in public administration and public management
[Hood, 1999, Pierre and Peters, 2000]. Many countries in the sample, most middle-income countries such as the Philippines, Indonesia, Brazil and South Africa but also high-income countries such as Italy and Portugal, have decentralised governance in general (including health care) of at some point in the last two decades. Other countries, such as India, Germany, Canada and Japan, have been federal states since their inception. China, again, is an exception: although it is not a federal state in the sense that, say, Germany or Canada are, formal responsibility for health care provision rests with the provinces.

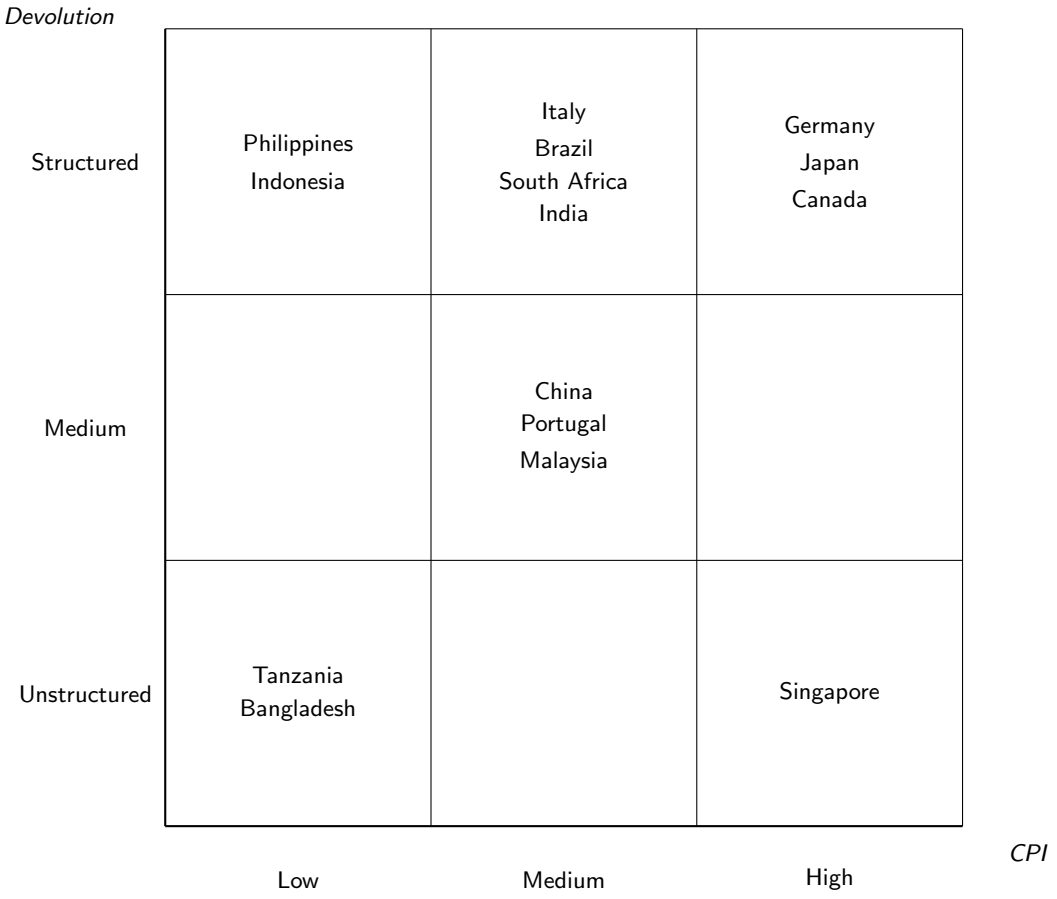

Figure 11: Vertical Distribution of Political Power across Levels of Governance

Only Singapore, Bangladesh and Tanzania feature centralised administrative structures: whereas Singapore has the governance capabilities but little need for decentralised administration, Bangladesh and Tanzania are geographically diverse but lack the governance capability for effective regional rule.

All health care systems in the top row of Figure 11 have devolved considerable responsibilities for health care provision and regulation to subnational levels of governance. The general theme, with minor national variations, is that federal or central government is responsible for overall governance and general oversight, national standards for provision, care or pharmaceuticals, and the broad regulation of health care policy actors [Donatini et al., 2001] [Marchildon, 2005] [Bloom and McIntyre, 1998] [Busse and Riesberg, 2004a] [Ikegami, 2005] [Islam and Tahir, 2002] [Hotchkiss and Jacobalis, 1999][Lobato, 2000]. In Canada, Italy and South Africa, central government is responsible for general health policy as well as setting and regulating national standards [Marchildon, 2005] [Ntuli and Day, 2004] [Donatini et al., 2001].
In social insurance countries, notably Japan, Germany and the Philippines, the general regulation of social insurance carriers and well as the framework for competition between corporatist actors is a central responsibility [Ikegami, 2005, Busse and Riesberg, 2004a]. In some countries, notably India and Brazil, lacking regional capacity mean that the federal government also provides health care services; for example, central and state governments in India share responsibility for implementing programmes on the so-called concurrent list [WHO, 2007a]. This, incidentally, is also the case in Japan, where the central government administers and provides health services for the government insurance scheme [Ikegami, 2005].

In all of these countries, subnational governance is responsible for the provision and administration of health care services. In Canada, provinces have a wide remit: they are responsible for service delivery, financing, home care, the administration of the drug prescription plan, as well as resource allocation and planning [Marchildon, 2005]. Indeed, often provincial governments will further devolve policy-making and delivery capacities to autonomous, arms-length Regional Health Authorities[Marchildon, 2005]. Similarly, so-called Local Health Units (LHUs) and tertiary hospitals are autonomous units within the Italian national health system [Donatini et al., 2001]. In Germany, the *Länder* provide health care. While *Länder* administrations have direct control of planning and policy-making for hospital care, the social health insurance carriers are responsible for purchasing (and thereby also planning) primary care. The *Länder*, in turn, administer and regulate corporatist actors. The same applies, at least in principle, to the middle- and low-income countries of the selection. In Brazil, Indonesia, Philippines, and South Africa, recent reforms have devolved responsibility for service provision to the regional level [Kristiansen and Santoso, 2006]: in the Philippines and Indonesia, for example, local government units at regional level have been responsible for health care provision and administration since the early 1990s.

The practical implementation of decentralised health care provision distinguishes the countries of the top row. In the top-left hand corner are located the Philippines and Indonesia, both countries that are newly decentralised with high levels of corruption. In both the Philippines and Indonesia, decentralisation has received decidedly mixed reviews from commentators. For Indonesia, Kristiansen and Santoso argue that decentralisation has resulted in a dramatic

reduction in public health spending [Kristiansen and Santoso, 2006, p.248]. In both countries, regional governments were not sufficiently prepared and health care providers not sufficiently protected from attempts by prominent local politicians to appropriate health care resources for private gains. As commentators for Indonesia and the Philippines point out, vertical mechanisms of accountability are ineffective and, as a result, the quality of health care provision has declined [Obermann et al., 2006, Kristiansen and Santoso, 2006]. In the Philippines, central government had even floated the idea of recentralising health care provision [Solon, 1999].

Moving rightward across the top row, we find devolved health care systems suffering from moderate to high levels of corruption. This is where most of the middle-income countries of the selection cluster. Although these countries and their health systems differ quite considerably, the governance problems they face are broadly similar. In all countries, whether newly decentralised (like Brazil, or South Africa) or established federal systems (like India), the lack of adequate management skills at regional and local levels as well as poor policy coordination across levels of governance undermine effective health care provision. In Italy, decentralisation of health care provision has been patchy: in particular, parts of the *mezzogiorno*, regions suffering from high levels of corruption, have not fully implemented LHU and hospital autonomy.

The top right-hand corner depicts decentralised health systems with low levels of corruption. Here, we find countries such as Canada, Germany, and Japan where reasonably well-functioning institutions provide for upward and downward accountability across different levels of governance.

In the centre of Figure 11, China, Portugal and Malaysia all feature deconcentrated health care systems and a moderate level of corruption. Although China is not formally a federal political system, the geographical and cultural diversity of the country makes some form of regional and local autonomy unavoidable [Bloom, 2005]. In the Chinese health system, Bloom argues that weak financial accountability through Communist Party channels results in highly incremental and iterative glacial policy processes [Bloom, 2005]. What is more, difficulties in coordinating health policy across levels of governance are creating regional health care imbalances [Bloom, 2005]. In Portugal, decentralisation seems to be more rhetoric than reality: Barros and Simes argue that while decentralised structures are in place, health care management practices remain largely centralised [Barros and de Almeide Simões, 2007].

The bottom row of Figure 11 shows centralised health care systems. In the bottom-left corner, these centralised systems are afflicted with high levels of corruption. In the bottom-left hand quadrant of the diagram, health care governance is centralised at ministerial level. Due to administrative irregularities, however, the health policy process is opaque and unaccountable. The Singaporean health care system is located at the bottom right-hand corner of the diagram. Singapore, a small island city-state, centralises health care governance in the national Ministry of Health. What is more, the CPI for Singapore is the highest in the sample: Singaporean government successfully combines a decisive policy style with a high degree of perceived probity in public affairs.

Horizontal and Vertical Flows of Political Power

Figure 12 collapses the four dimensions into a two-dimensional space. The vertical axis depicts the diffusion of power across levels of governance and the horizontal axis charts the diffusion of power across contending policy actors. Figure 12 shows that institutional space of policy subsystems is more fractured and distributed than the maps of the two other functional subsystems. Four loose clusters of health policy subsystems scatter across the institutional space.

Devolved Pluralism

The first group includes countries in which health policy subsystems are characterised by *devolved pluralism* (high devolution, high contestation). In these countries, that include Canada, Germany, South Africa and Brazil, policy-making competences are strongly devolved across levels of governance. Additionally, health policy processes involve and integrate a wide range of state, market and civil society actors.[27]

In Canada, South Africa and Brazil (all three very large and geographically dispersed countries), the core competences for health care policy-making and service provision sit at regional and local levels. In all three countries, health policy subsystems provide a range of formal and informal access points into the health policy debate [Marchildon, 2005] [Ntuli and Day, 2004]
[Bloom and McIntyre, 1998] [Lobato, 2000]. German health policy-making takes place within a Bismarckian social insurance system. However, participation in the formal venues that characterise these systems has continuously expanded both in terms of policy actors as well as in terms of policy debate
[Busse and Riesberg, 2004a]).

Devolved pluralism generates two countervailing tendencies. First, effective contestation in the horizontal dimension and subsidiarity in the vertical dimension imbue the health policy subsystem as a whole with a large degree of autonomy: strong institutional identities protect health policy domains from interference of other policy subsystems or the macro-political system. In short, devolved pluralism means that designated health policy actors determine health policy. A relatively populous policy community means that policy debate is vibrant, lively and conflict-ridden. Second, subsystem autonomy also implies relatively robust constraints on any particular policy actor who ventures into the domain. Bringing about change in a pluralist and devolved policy subsystem requires that would-be reformers convince a wide range of actors of the benefits of proposed reforms. In this way, these types of system limit the autonomy (or power) of any particular policy actor. The upshot of this contradictory interaction is robust but also rather inert health policy processes. Policy-making is robust in the sense that it provides stable and predictable policy contexts. Yet, this characteristic also means that policy change is typically slow, piecemeal and incremental.

Devolved Corporatism

In the second group, health policy subsystems are best described in terms of *devolved corporatism* (high devolution, medium contestation). In countries such

[27]Note, however, that in all of these countries, relations between health policy actors are relatively institutionalized. Figure 10 has no countries in the upper right-hand corner.

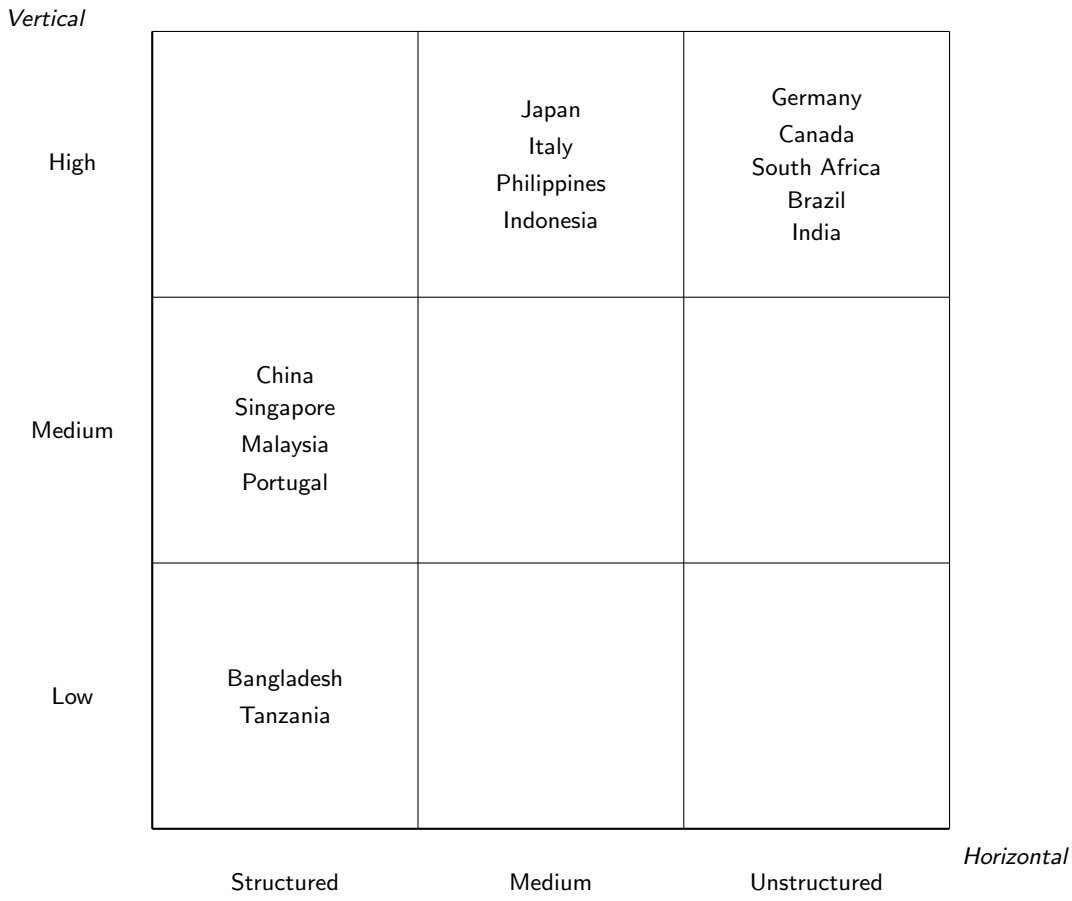

Figure 12: Distribution of Political Power Across the Horizontal and Vertical Dimension

as Japan and Italy, regions and localities are responsible for a large degree of policy formulation and service provision. However, unlike devolved and pluralist subsystems, the boundaries into health policy domains are less permeable. As we have seen, the Japanese and Italian systems restrict access to few accredited policy players. This group also includes the recently devolved systems in Indonesia and the Philippines, In principle, social insurance mechanisms at different levels of governance provide formal venues for social partners to participate in health policy. In practice, a weak tradition of political debate on the one hand and wide-spread corruption on the other severely limit policy contestation [Kristiansen and Santoso, 2006].

Devolved corporatist subsystems also feature a relatively high degree of autonomy. However, here autonomy reflects the ability of dominant policy players, mostly physicians, to insulate health policy subsystems from unwanted outside interference. These players control access to the policy subsystem, define the rules-of-the game and shape the terms of the policy debate.In countries such as Japan and (to a lesser extent) Italy, these structures and processes are reflected in formal organisational structures as well as institutional practices. In the Philippines and Indonesia, these processes of control and influence take place at a safe distance from the glare of public scrutiny. In general, actors avoid policy conflict beyond the institutionalised bargaining processes by carefully controlling health policy agendas. This leads to policy-making limited to incremental changes that do not threaten the institutional status quo. Change, when it does come about, generally originates outside health systems and precipitates a fundamental reorganisation of the subsystem.

Deconcentrated Statism

The third group includes countries in which health policy systems are characterised by a *deconcentrated statism* (medium devolution, medium contestation). Here, ownership of health policy remains firmly at the political centre although service delivery is decentralised.

In countries such as Singapore, a small island city-state, decentralisation has more in common with cost control than subsidiarity. Decentralisation transfers the financial responsibility for health policy decisions taken by central government in an attempt to create incentives for cost savings. In Portugal and Malaysia, the rhetoric of decentralisation has brought about changes in the organigram of health care systems without having much affected health policy practices [Leng and Barraclough, 2007]; Barros and Simoes, 2007). In China, the situation is reversed: formally a centralised state run by a single-party, a large and disparate population means that Chinese health policy-makers cannot avoid decentralisation.

In all countries of this group, inclusion in health policy-making is limited, albeit for different reasons. In Singapore, Malaysia and China, governments are generally suspicious of western-style pluralism and, consequently, public conflict about health policy is rare. While Chinese health policy-makers emphasise stability and consensus[28], the Malaysian and Singaporean government prefer a more decisive policy style. Given the relative weakness of constestation, errors in

[28]In China, however, policy-makers are far more consensus-seeking than the concentration of power would suggest. This leads to a rather cautious and incremental pace of change in health care policy [Bloom, 2005].

judgement potentially lead to costly policy failure [Barraclough and Leng, 2007, Ramesh, 2007, Barr, 2005]. In Portugal, possibly due to the legacy of the Salazar dictatorship, the health care system does not encourage the participation of market actors and civil society groups
[Barros and de Almeide Simões, 2007].

As a result, the autonomy of these health policy subsystems is at a medium to low level. Unlike the more devolved and pluralist systems, the state determines health policy with relatively little external consultation. To the extent that they can position themselves within the state apparatus, physicians are relatively successful in maintaining some professional autonomy in deconcentrated statist systems. As a rule, these systems feature a resolute and efficient style of decision-making. Yet, in all countries, except perhaps Singapore, implementation suffers from the common ailments of top-down command-and-control policy-processes: the effectiveness of implementation decreases with increasing distance (institutional, temporal and spatial) from the policy centre.

Concentrated Statism

In Bangladesh and Tanzania, governance subsystems are characterised by *concentrated statism*. In both countries, health policy-making and service delivery are managed by central government. Additionally, the prevailing political structures and culture undermine broad-based involvement in health policy-making. First, the lack of resources in both countries obstructs the type of political mobilisation required for effective participation in health policy. On the one hand, citizens have neither the cognitive or financial resources required for effective political mobilisation. On the other hand, health systems in the two countries lack the resources required to stage effective policy participation. Second, the policy process in Bangladesh and Tanzania is strongly elite-driven. Local elites staff and run the health policy subsystem itself while the international elites of the donor agencies and international organisations dominate policy consultation.

In these countries, the autonomy of health subsystems is very tenuous. Dependent on outside resources, these health care systems cannot develop a distinct institutional identity. Therefore, forces outside these policy subsystems determine pace and direction of health policy change. This can lead to the adoption of generic and unsuitable policy solutions (i.e. decentralisation or privatisation) simply because there is no voice to articulate local needs and wants.

Health Systems

In the preceding sections, the paper has dissected health systems and compared their component parts. In this section, the paper puts these components back together and asks how different types of subsystems shape health systems as a whole. Figure 2, then, depicts different health systems in terms of the characteristics of their functional subsystems. Here, the institutional identity of the health system emerges from the different characteristics of the individual subsystems.

The comparison of health systems allows us to make three general observations. First, the health systems of the fifteen countries in the sample make for a rugged and fractured institutional landscape. Second, within all health

Country	Delivery System	Financing Regime	Governance System	*Basic Architecture*	*Health State Regime*
Canada	Complementary Sectors	Coherent	Devolved Pluralism	*Cohesive*	*entrenched command-and-control*
Japan	Complementary	Coherent	Devolved corporatism	*Cohesive*	*Corporatist*
Germany	Complementary	Coherent	Devolved Pluralism	*Cohesive*	*Corporatist*
Italy	Complementary	Coherent	Deconcentrated statism	*Cohesive*	*Corporatist*
Singapore	Complementary	Coherent	Decocentrated statism	*Cohesive*	*East Asian?*
Portugal	Parallel	Coherent	Deconcentrated Statism	*Imbalanced*	*Insecure command-and-control*
South Africa	Parallel	Coherent (pillared)	Devolved Pluralism	*Imbalanced*	*Insecure command-and-control*
Malaysia	Complementary	Fragmented	Deconcentrated Statism	*Imbalanced*	*Insecure corporatism*
Brazil	Complementary	Fragmented	Devolved pluralism	*Imbalanced*	*Insecure command-and-control*
China	Parallel	Fragmented	Deconcentrated statism	*Imbalanced*	*Insecure Corporatism*
Philippines	Parallel	Fragmented	Devolved corporatism	*Imbalanced*	*Insecure corporatism*
Indonesia	Parallel	Fragmented	Devolved corporatism	*Imbalanced*	*Insecure corporatism*
India	Dominant	Asystemic	Devolved pluralism	*Impaired*	??
Bangladesh	Dominant	Asystemic	Centralised statism	*Impaired*	??
Tanzania	Dominant	Fragmented	Centralised statism	*Impaired*	??

Table 2: Reaggregation of Health Systems

systems policy-makers enjoy considerable choice in health policy tools. Last, in all countries of the sample, the political and policy-making culture significantly shapes health systems.

We will discuss the findings in turn.

Fractured Landscape: Architectures and Regimes

The institutional landscape of health systems unfolds along two distinct dimensions. The first dimension captures broad institutional characteristics associated with different levels of organisational capacity and health outcome. We can call any particular relationship between institutional characteristics and the level of organisational capacity an *institutional architectures*. In this dimension, the health systems line up vertically: higher positions on the dimension are associated with more capacity in health policy-making and better health outcomes. The second dimension depicts institutional differences associated with similar organisational capacities and health outcomes. We can call these organisational configurations *health state regimes* (following Michael Moran [Moran, 1999, Moran, 2000]). Since health state regimes implement a specific institutional architecture, we can think of the distribution of health systems in this dimension as horizontal.

Institutional Outcomes: Basic Architectures

Figure 2 outlines three clusters of institutional architectures. In the first group, health systems feature a similar architecture. Delivery systems in all high-income countries are organised into complementary sectors with the private sector providing primary health care and the public (or voluntary) sector secondary and tertiary health care. Financing regimes in this cluster are coherent and, mostly, rely on a single institutional mechanism for generating revenues. Conversely, purchasing practices vary widely. Similarly, there is no clear pattern concerning health system governance. All governance structures, however, have in common that they are relatively autonomous and that corruption is perceived

as being low. Further, health policy-making in all high-income countries is devolved across levels of governance and provides access to a wide range of policy actors. These institutional architectures, then, are *cohesive health systems* in which the functional subsystems produce robust health outcomes. As Figure 2 suggests, this group consists exclusively of high-income countries.

The second cluster of health systems features different architectures that, however, vary around a common theme. In the basic institutional architecture, health care delivery takes place in parallel sectors. Fragmented financing regimes expose households to considerable financial risk. While governance systems vary, high levels of corruption undermine governance capacity and subsystem autonomy. This architecture describes *disjointed* health systems (Type A). Here, the fractured nature of each subsystem precludes effective interaction leading to inefficiency and, as a result, relatively poor health outcomes (albeit with some variation between countries). Countries with *disjointed* health systems include China, the Philippines, and Indonesia.

Figure **??** suggests two variations on this basic institutional architecture. First, architectures in Brazil and Malaysia resemble disjointed health systems in which, however, two complementary sectors deliver health services. Although financing regimes remain fragmented, collective forms of revenue generation more effectively shelter households from financial risks than do the counterparts in disjointed systems. Despite considerable variation in the systems of health governance between the two countries, governance capacity is moderately high (meaning corruption is relatively moderate) (Type B). Second, in Portugal and South Africa, coherent but institutionally separate financing regimes fund services in parallel sectors. Governance systems in these two countries vary[29] while perceived corruption and governance capacity are roughly comparable: since health care provision and financing takes place in two largely independent sectors, we can call this architecture a *pillared* health system (Type C).

Overall, the variations of institutional architectures in middle-income countries has in common that they leave health systems *imbalanced*.

The last group consists of health systems with a similar institutional architecture. In these countries, patients rely on health services delivered by a single sector (either the private sector, as in India and Bangladesh, or the public sector, as in Tanzania). Effective systems of collective financing in India and Bangladesh do not exist for the vast majority of the population. The relatively large share of public sector health care provision suggests that even the most elementary of health service may be far beyond the financial means of many Tanzanians. Again, governance systems vary but uniformly feature a high level of corruption. Poverty and corruption undermine the autonomy of health systems and expose health policy-making to external forces. For these reasons, health systems of this type are fundamentally *impaired*.

Organisational Configuration: Health Regimes

How do institutional features of health systems with similar architectures and health outcomes differ?

[29] *De jure* both countries operate a devolved statist system. While South Africa has strongly devolved governance both vertically and horizontally, Portugal has yet to implement much of the decentralization mandated by recent reform.

The institutional identity of cohesive health systems emerges from the particular financing regime and its impact on delivery systems [Moran, 2000]. In corporatist countries, as we have seen, social health insurance schemes protect almost everyone from financial health care risks. Delivery systems in corporatist health states, such as Japan, and Germany, enable significant patient choice in health care provision although statutory health insurance corporations steer the flow of patients (and costs) [Busse and Riesberg, 2004a, Ikegami, 2005]. In entrenched command-and-control countries, in turn, health policy-makers rely on general taxation and the budgeting processes. Countries such as Canada and Italy have traditionally restricted patient choice of primary and secondary health care providers. While, as we have seen, primary health care providers are independent, they act as gatekeepers to secondary and tertiary health provision.

For imbalanced systems the variation within architectures is considerably less pronounced than the differences between basic architectural structures. The pillared health systems of Portugal and South Africa (Type C) resemble what Moran has called an insecure command-and-control health state. Despite a single-payer financing regime, parallel sectors delivery health services. In both countries, the public sector has not been able to subsume significant private sector capacities. However, Portugal and South Africa do differ in the institutional means of pooling the risks of financing health care: while in Portugal a universal single payer reimburses much of the private sector health care costs, the majority of these costs are covered by private (albeit non-profit) health insurance in South Africa.

The disjointed health systems of the sample, China, Indonesia and the Philippines, feature similar financing mechanisms. All three countries are experimenting (with varying degrees of success) with social insurance financing mechanisms. Since coverage is low, social insurance institutions have been, as yet, unable to develop the regulatory and governance impact on the parallel delivery systems. In all these countries, governance capacity is relatively low (meaning perceived corruption is relatively high). Extending Moran's terminology for health states, this cluster seems to contain only "insecure corporatist" health states.

Type C architectures in Brazil and Malaysia diverge significantly from other imbalanced health systems. As we have seen, health care financing in Brazil fragments across a single-payer institution (SUS) with, albeit, limited coverage, private insurance and considerable out-of-pocket payments. Like Portugal, commentators point out that egalitarian health care reforms of the 1990s have not brought private sector health care under control of the SUS. In this sense, then, Brazil resembles an insecure command-and-control health state. In Malaysia, in turn, health care financing is fragmented across direct government expenditure, Singaporean-style medical savings accounts, a growing private insurance sector and large out-of-pocket expenditures. While both countries feature complementary sectors, primary health care in Brazil is predominantly provided by the public sector while secondary and tertiary health care is controlled by the private sector. More in line with cohesive health care systems, the private sector provides most primary health care in Malaysia. In Malaysia, commentators contend, the government has been aiming to divest itself of health care provision responsibilities by privatization on the one hand and the creation of social health insurance on the other. Thus, Malaysia resembles an insecure corporatist health state. In both countries, perceived corruption is at a moderate level.

Last, impaired health systems also differ in the organizational articulation of their basic architecture. While the private sector dominates health care provision in the two South Asian health systems, the public and non-profit sectors provide the majority of health services in Tanzania. Similarly, while households in Bangladesh and India pay for the majority of health care provision out of pocket, health care financing in Tanzania is fragmented across general government expenditure and out of pocket payments. In all three countries, the population perceives corruption to be very high.

1.0.1 Implications

The rugged and fractured the institutional terrain of health care provision means that health policy challenges are just as involved and fractured as this landscape. While it may be possible to state and describe health policy problems in quantitative and decontextualised terms, the cause and, by extension, solutions to these challenges are qualitative and institutional.[30] The analysis suggests that, as the WHO suspects, health systems that is the institutional realities of health care delivery, finance and governance matter at two levels.

The first level refers to the capacity and resources within each subsystem. Health systems, and this should come as no real surprise, need a minimum of organizational, financial and human resources to function at all. Health professionals operating in *impaired* health systems that lack basic supplies of fuel, clean water, electricity, let alone drugs or other medical supplies find providing even the most basic of health services a challenge.

Resources are necessary but not sufficient for providing adequate coverage and quality of health care. The second level refers to governance and management requirements. As health subsystems develop and grow more complex, so too do the management and governance requirements. The issues faced by policy-makers in *imbalanced* health systems suggest that in addition to subsystems and resources being in place, subsystems need to interact effectively if they are to provide adequate health care coverage. Dysfunctionality in any one subsystem percolates through the other subsystems to undermine health care provision as a whole. What is more, multiple dysfunctionalities feed off and reinforce each other to institutionalize poor practices and performance.

We can use the analytical framework to depict these interdependencies. Countries with fragmented financing regimes, such as the Philippines, Indonesia, Brazil and even India, have the institutional means for providing coherent financial protection. The problem is, however, that these institutions do not function as effectively as they could because of weaknesses in the governance practices (symbolized in the analysis above by perceived corruption). For example, the SUS in Brazil or PhilHealth in the Philippines are struggling to bring private providers fully under their regulatory purview. Poor coverage, which undercuts the political and governance leverage of these institutions, makes this task all the more difficult. As a result, policy-makers cannot use the financing regime to steer delivery system development. Thus, delivery systems remain imbalanced, with public provision perceived (often accurately) as of lower quality than the more expensive private facilities. The wealthy avoid public health care systems in favour of private alternatives and since weak governance systems are

[30] This is what Alvin Weinberg called a transcientific problem: a problem that can be stated in scientific terms but cannot be solved by science alone [Weinberg, 1972].

incapable of compelling the rich to contribute, the public systems are starved of funds and remain unattractive.

The upshot is that, in countries with imbalanced health system architectures, health policy issues are messy and convoluted. What, then, are health systems in countries like Brazil, Indonesia, China or the Philippines ultimately suffering from? Is it poorly organized delivery systems, a lack of financing or poor governance? The analysis suggests that the difference between impaired and imbalanced systems is that the latter suffer from problems in all subsystems at the same time. What is more, issues in one subsystem reinforce, reproduce and sustain problems in another without, however, causing the system as a whole to collapse. It would seem, then, that imbalanced health systems are not broken versions of cohesive systems. Rather, it would seem as if they are viable and functional, albeit undesirable, forms of institutional practice. Poor practices and poor performance, then, are institutionalized in viable and, more importantly, self-reproducing processes.

Messy problems require messy solutions [Rhodes, 1997]. Simple injunctions such as enhance choice in health care [Bank, 1993, Hansen, 2007], strengthen stewardship [WHO, 2000] or decentralize primary health care [Movement, 2000] hide from the view the involved institutional and socio-political realities that health policy-makers must negotiate to achieve these policy bjectives. At the very least, policy solutions and reform packages will need to address issues in several subsystems.

The main problem here is not that the community of global health policy observers is unaware of the complex and multi-sectoral nature of health system development. Indeed, organisations such the WHO, the World Bank or the OECD have explicitly acknowledged the complex nature of health care provision and health system reform [WHO, 2000, Bank, 1993, OECD, 2004]. What they do not agree on, however, is what exactly complexity means for policy-making or how best to go about reforming these complex and imbalanced systems. In simplified form, while the World Bank sees financing regimes as the key to unraveling health system problems, the WHO suspects that reforms to governance systems will provide real reform leverage [Bank, 1993, WHO, 2000]. When the activists of the Peoples Health Movement demand multi-sectoral approaches to health care, they imply the wholesale reorganization of the present socio-economic and political world order [Movement, 2000, Narayan and PV, 2003, Movement et al., 2005].

This analysis suggests that neither is likely to be right or wrong everywhere and at all times. Rather, the messiness of health problems means that successful strategies will be highly contingent on very local institutional and environmental circumstance. The challenge becomes how best to retain institutional suppleness to not only switch strategies when needed but to recognize the need to switch strategies.

On this view, then, we can think of different health system challenges as follows.

- Impaired health systems: In the poorest country of the sample, the immediate concerns of health policy-makers is the creation of organizational capacity at subsystemic level.
- Imbalanced health systems: In the middle-income countries of the sample, the general challenge is to develop functioning management skills and

practices to bring about functional integration and interaction of subsystems. At the same time, policy-makers need to find ways of stopping gaps in many of the subsystems.

- Cohesive health systems: In the high-income

Health system challenges, then, are messy.

Governance Practices versus Governance Structures

The analysis points to a somewhat surprising[31] role for governance systems in institutional architectures. The degree to which governance structures disperse or centralise the flow of power seems to have far less of an impact on the architecture and basic health outcomes than the simple fact *that* In short, actual practices are more important than formal structures. This seems true both in the vertical and the horizontal dimension.

In terms of the vertical dimension, Figure 2 shows that different types of governance structures are compatible with different institutional architectures. For example, governance systems in Canada, Brazil and India are relatively open and highly decentralised. While devolved pluralism is compatible with cohesive health architectures in Canada, societal participation in health policy has been unable to overcome fragmentation in Brazilian health care provision [Lobato, 2000]. In India, in turn, devolved pluralism is compatible with an impaired health system architecture. The same holds for the more restrictive governance systems Japan on the one hand and China, the Philippines and Indonesia on the other. In Doall three countries, governance systems restrict access to the health policy subsystem Similarly, restricting access to health policy-making and centralising decision-making has had no obvious detrimental effect on Singapores cohesive health system. In Tanzania and Bangladesh, however, centralised decision-making has done little to prevent a badly impaired health system architecture.

In terms of the horizontal dimension, the way different governance systems distribute power seems considerably at odds with what health state regime analysis would lead us to expect. First, the findings suggest that all cohesive health systems diffuse political along horizontal and vertical dimensions to a considerable degree. Figures **??** show that, with the possible exception of Singapore, the governance structures of all cohesive health systems provide at least a medium level of access and decentralization. Second, not only is the variance in governance system structures less than expected, the different patterns of access and devolution do not conform to the overall health state regime. For example, one would expect Germany to feature a corporatist pattern of horizontal participation, similar to Japans tightly controlled and choreographed health policy process. In Italy, in turn, governance systems should encourage more pluralist participation. However, as we have seen, the reverse is the case. A possible explanation is that the corporatist character of the general welfare state in both countries has impinged on health policy-making in different ways. Successive changes to German health policy communities have incrementally transformed a formerly corporatist policy network into a more broadly-based policy subsys-

[31] at least to a political scientist

tem. In Italy, in turn, the overall corporatist flavour of social protection seems to have structured policy making in the national health system.

Governance practices, in turn, seem to have a more robust impact on institutional architectures in the vertical dimension. All countries with cohesive health systems have a relatively high CPI; in the high-income countries, perceived (and actual) corruption is relatively low. Countries with imbalanced health system architectures feature at least a moderate to high level of perceived corruption. Incidentally, different types of imbalanced systems roughly group together in terms of perceived corruption (see Figure 13. In our sample of countries, high levels of perceived corruption indicates impaired health systems.Musgroveetal2002I would like to extend this line of argumentation using the World Banks governance indicators.

In terms of the horizontal dimension, the relationship between governance practices and health state regimes is more tenuous. In all high-income countries, perceived corruption is roughly at the same (i.e. low) level. This analytical framework cannot identify the effect growing or imperfect governance capacity may once have had on the development of todays health state regimes in developed countries. The analysis does allow us to point out that no particular health state seems more prone to corruption than any other. In countries with imbalanced systems, a faint pattern emerges from the analysis. It would seem as if citizens in insecure command-and-control regimes (SAF, Portugal, Brazil, Malaysia) perceive their societies to be less corrupt than countries featuring what we have called insecure corporatist systems.

This finding points to a number of implications for health policy-making. First, if governance practices really are more important than governance structures, then decentralisation and devolution in itself is no failsafe remedy for poor health system governance. As we have seen, decentralisation and devolution is compatible with the full range of institutional architectures and outcomes. By the same token, decentralisation and devolution in themselves are not the underlying problem. The relationship between decentralisation and good health outcomes (institutional or otherwise) is less obvious and of a more circumspect and strategic nature. This analysis suggests that the aims of governance reforms must be to create and foster effective governance practices. The question then becomes what types of governance structures are best suited to develop and incubate these practices. Whether centralised and authoritarian structures provide a more fertile institutional soil for nurturing effective practices (as, no doubt, Singaporean policy-makers would argue) or whether pluralist and decentralised structures encourage probity and effectiveness (as some South African policy-makers would argue) is an empirical question.

Second, the findings suggest that health systems are exposed to the local policy environments and political cultures. Health policy subsystems in almost all countries have not been very successful in insulating health policy processes from other policy subsystems and the macro-political system. Observations from countries such as Canada and Germany, South Africa and Brazil, or the Philippines and Indonesia seem to provide some support for this interpretation. As we have seen, the pluralist health policy subsystems in Germany and Canada seem to be in tune with a strong federalist political culture in both countries. In South Africa and Brazil, policy-makers see health system reform as an integral part of an overall process of democratisation in both countries. In the Philippines and Indonesia, in turn, administrative decentralisation seems to

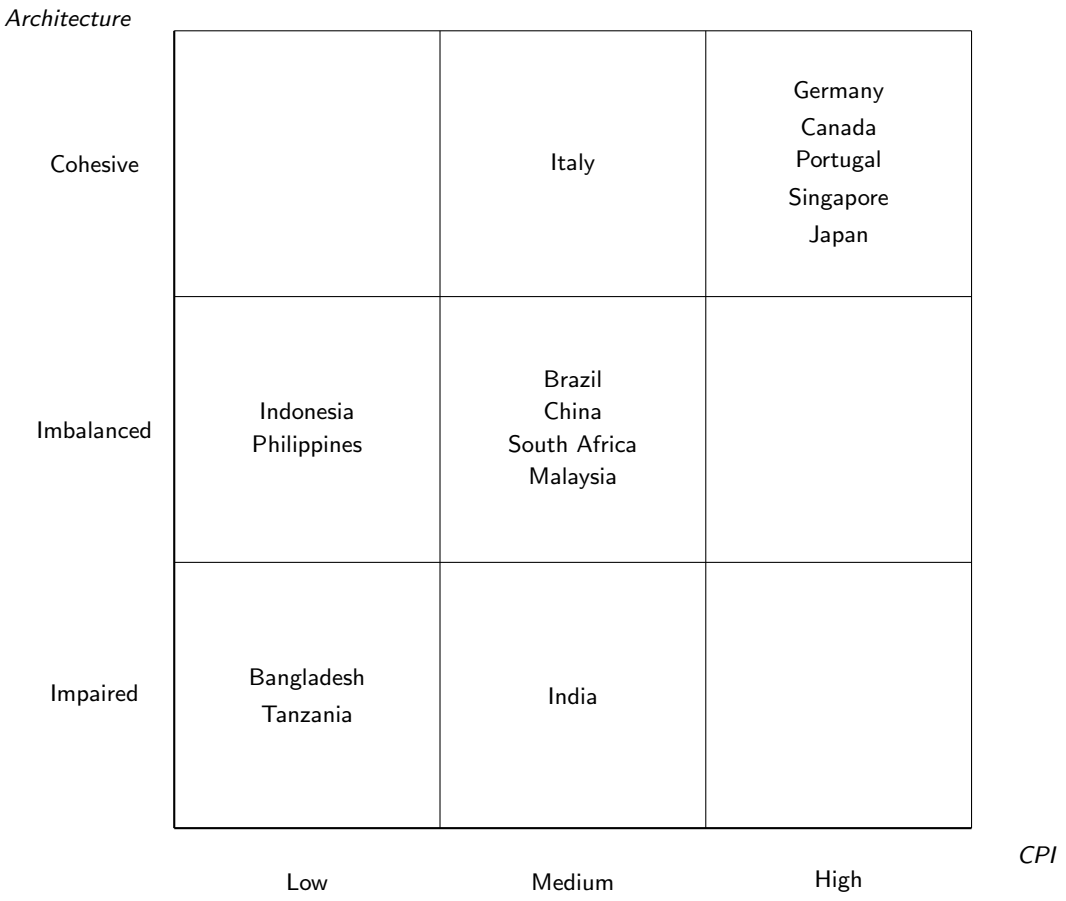

Figure 13: Perceived Corruption and Basic Health System Architectures

have exposed health care provision to unsavoury political practices at the local level.

The policy implication here is that lasting success in health system reform is probably predicated on wider governance issues. This, then, lends some support to policy actors who call for a more holistic and multi-sectoral approach to health policy-making. The most vociferous advocates of holism in health policy are supporters of the Primary Health Movement (c.f. "Health for All Now!" [Narayan and PV, 2003], 2003 but also the WHO [WHO, 2000]). Whether the intricate relationship of health governance practices and health outcomes really calls for direct democracy at the level of health care provision remains an open question. What this finding does, however, suggest is that the wider political landscape and policy-making culture needs to be a central variable in any health reform strategy. This finding also implies that the most effective health care reforms may be the least spectacular in terms of actual health outcomes. This, then, provides some analytical support (if indeed it were needed) to the contention that, for all measurable impact on health outcomes, disease-specific vertical health programmes are probably less effective in the medium and long-run than strengthening health system capacities. This is compatible with the WHOs confidence in the concept of stewardship which describes a set of norms and practices, rather than any particular governance structure [WHO, 2000].

Functionality and Flexibility

Institutional explanations of this kind usually paint a rather determinist and static picture. Institutional regimes, so the argument goes, secure continuity and militate against change. Past policy decisions and institutional choices create evolutionary paths that significantly constrain present policy options. This implies that institutional choices of the past foreclose the use of certain policy instruments in the future. For example, the institutional identity of a social insurance health system based on prior contribution is incompatible with a large share of tax-financed health care provision.

What is more, the vertical analysis of health systems implies that it is precisely this institutional inertia that generates the organisational cohesion associated with high health system performance. All high-income countries of the sample feature more or less distinct horizontal institutional identities based on compatible organisational choices[32] in each subsystem. By the same token, the analysis points to a possible relationship between the poor performance of health systems in middle-income countries and organisational incompatibilities at the level of health care subsystems.

Yet, while the incompatibilities of specific organisational instruments with certain health state regimes are fairly clear at the extremes, the analysis reveals a considerable grey area. Here, it would seem as if health policy-makers have considerably more room to experiment than institutional approaches would lead us to believe.

[32]The concept of choice is probably not really appropriate. I suspect the cohesion between different institutional subsystems is the result of an evolutionary process of mutual adaptation. There may very well have been a time where the interaction between different subsystems in cohesive health systems was far less effective than it is today. Over time, and within the protective confines of a closed economy, systems could adapt to each other to find functional modes of operation.

In terms of delivery systems, policy-makers in cohesive health systems have shown considerable creativity in the reorganisation of secondary care. For example, reforms in the hospital sectors of command-and-control health states (both secure and insecure) have released individual hospitals from immediate government control. Hospital trusts, an idea imported from Britains NHS, have provided hospital management with a significant degree of financial and managerial autonomy. Portugal, for example, has opened the management of primary care to the non-profit sector while involving the private sector in the provision of secondary care capacity [Barros and de Almeide Simões, 2007]. Health policy-makers in Japan are experimenting with so-called investor hospitals as an alternative to the traditional physician-owned hospitals [Ikegami, 2005]. In Germany, some health insurance carriers are beginning to experiment with so-called innovative managed care systems, an approach associated more readily with either the supply state or entrenched command-and-control systems [Busse and Riesberg, 2004a].[33]

In general, reforms and changes to financing regimes in the sample of countries have conformed more readily to the institutional path dependencies of health state regimes.[34] Nonetheless, coherent financing regimes are compatible with significant flexibility concerning purchasing mechanisms. Almost all countries employ some combination of general budgeting, capitation budgeting, DRGs, and fee-for-service. The variation between countries seems to depend far more on local political and policy-making culture than on regime-specific institutional characteristics (e.g. the payment of hospital physicians in Italy).

The development of governance systems, as we have already seen, seems to stray furthest from evolutionary pathways. Entrenched command-and-control systems, so the argument goes, are based on the centralisation of policy-making power and management capacity in the public sector. However, Canada and Italy (but not Portugal) have decentralised and devolved the health care provision, management and policy-making. The German health system, in many ways a paradigmatic corporatist health state, features the active participation of a wide range of policy actors. While corporatist policy practices provide some degree of political regulation, they have a far less restrictive impact on pluralist contestation than similar provisions in, say, Japan.

It would seem, then, that health policy-makers have been pushing at the boundaries of institutional regimes. In high-income countries, policy-makers have uniformly aimed at wringing more efficiency out of health systems in order to lower health care costs. In this way, health policy-makers in high-income countries have responded to perceived (but, as Freeman has noted, not always real [Freeman, 1998]) global pressures on health care provision. In almost all high-income countries, policy-makers have looked to increasing competition in the health care system (i.e. purchaser-provider splits in command-and-control systems or enhanced competition between health insurance carriers in corporatist systems).

The way these reform processes in cohesive health systems will play out is of considerable interest for policy-makers of imbalanced health systems. The

[33] Admittedly, these experiments have provoked a wave of furious protests from the medical profession [der Bundesärztekammer, 2003].

[34] This seems to support Morans criticism of welfare state regime analysis as being too focused on the consumption, i.e. financial, dimensions of welfare and health care provision [Moran, 2000].

main implication here is that institutional cohesion may be more forgiving in terms of subsystem compatibility than welfare state regime and health state analysis suggests. This would be good news for policy-makers in middle-income countries. The economic and socio-political conditions that made possible the evolution of todays cohesive health systems closed economies and nation-state integrity have simply disappeared. Health systems in the developing world will have to evolve under considerable economic, political and, not least, technological pressure. What is more, middle-income countries with imbalanced health systems face the somewhat paradoxical task of expanding access to health care provision to the poor while, at the same time, finding ways to curb the increase of health care costs for the burgeoning middle-classes. It seems unlikely that countries such as the Philippines or South Africa will reach levels of institutional cohesion prevalent in high-income countries such as Germany or Canada anytime soon.

It is for this reason that finding functioning institutional solutions in the grey area of health state regimes are important for the development of currently imbalanced regimes. Countries such as Portugal, Italy and Malaysia show that good or at least adequate health system performance is entirely within the realm of the possible without extensive institutional cohesion and integration of health subsystems. Further research, then, needs to address the following questions:

- How much flexibility in the choice and combination of organisational means of health care provision will institutional cohesion allow?
- How much imbalance between different subsystems is feasible

2 Conclusion

The preceding overview, admittedly more far more broad than deep, aimed at surveying the landscape of health care provision at something approaching a global level. The analysis has looked for systematic similarities and differences between institutions of health care provision. Analyses of this sort are far from new in the social sciences (c.f. Freeman, 1998; [Moran, 2000, Freeman, 1998, Bonoli and Palier, 2000, Gauld et al., 2006]. These approaches, however, compare divergent organizational means of deploying roughly similar health care resources: that is, using the terminology developed here, thse comparisons only take the horizontal dimension into account. Institutional comparisons across the vertical dimension, that is comparisons across the very significant discrepancies in health system resources and capacity, are less common.

Indeed, comparisons of developed and less developed health systems are usually limited to what this paper has called financing regimes
(c.f. [Musgrove and Zeramdini, 2001, Musgrove et al., 2002]. The implicit assumption, it would seem, is that institutional analysis based on concepts such as Esping-Andersens welfare states or Morans health states is irrelevant to developing countries. Welfare states, so the argument goes, are associated with high levels of national income and, on this logic, the absence of such levels of income simply rules out the relevance of this sort of analysis.

There can be no doubt that income distinguishes explains different levels of health systems performance. But this does not rule out institutional analysis. It

does mean that we need to ask different questions of institutional analysis. Research in the horizontal dimension usually compares how different evolutionary pathways generate different health policy processes. The main issue in the vertical dimension, however, is to understand what discrepancies of wealth mean for institutional structures, norms and practices. This, then, provides some measure of how income, or the lack of it, shapes organizational capacities for providing health services.

The comparative framework, based partly on the WHOs health system approach and partly on welfare state/ health state regime analysis, breaks health systems down into three interrelated subsystems [WHO, 2000]. All three subsystems generate and direct flows through the health system. The delivery system directs the flow of physical and human resources for health care provision. The financing regime generates and manages a stream of funds to pay for health care provision. Last, governance systems channel and manage the flow of political power through the health system. On this view, health systems emerge from the interaction between the three subsystems.

The paper then compares the 15 countries of the sample in terms of the three subsystems. In terms of delivery systems, the analysis identifies three general modes of organizing the flow of physical and human resources (corresponding closely, albeit not exactly, with levels of national income). Health care provision in the rich countries of the sample (Canada, Japan, Germany, Italy, Singapore) relies on *complementary sectors*: here, private sector or private sector-like practices dominate primary or ambulatory health care provision while the public sector either owns or manages the majority of secondary or stationary care. In the middle-income countries of the sample, delivery systems are mostly organized into *parallel sectors*: here, independent private and public sectors integrate both primary and secondary health care. Typically, the relationship between the two sectors is characterized by competition rather than cooperation. Last, the poorest countries of the sample feature delivery systems with a dominant sector: while people in South Asia rely on predominantly private health services, provision in Tanzania is predominantly public or at least non-profit.

The comparison of financing regimes also reveals three broad institutional patterns of risk coverage, again following differences in national income closely. Health care providers in high-income countries rely on a range of institutional mechanisms for collecting revenues. However, whether a financing regime is based on taxes, contributions or private insurance premiums, the effectiveness of collection and universal nature of coverage mean that a single form of revenue collection dominates: financing regimes in these countries, then, are *coherent* and provide a high degree of protection from financial health care risks. In middle-income countries, institutional mechanisms for collecting revenues are heterogeneous. While collective mechanisms of revenue generation exist, governance issues as well as a low level of coverage mean that access to health services requires considerable out-of pocket payments for a large part of the population in these countries: heterogeneity produces *fragmented* financing regimes. These regimes provide imperfect and inequitable protection from the financial risks of health care. Last, two South Asia countries of the sample feature *asystemic* regimes: here, out-of-pocket expenditure pays for the majority of health services exposing households to the risks of health care provision. In terms of purchasing practices, health policy-makers in high- and middle- income countries show

considerable flexibility and creativity. However, the analysis suggests that the more fragmented revenue-generation (specifically, the higher the share of out-of-pocket expenditure), the less there is room for policy-makers to experiment with purchasing mechanisms.

Last, the paper compared the way governance systems manage the flow of political power through the health system. Unlike the other two subsystems, the analysis reveals a much larger variance in governance structures. First, countries such as Canada, Germany, South Africa, Brazil and India feature systems that disperse political power horizontally (among different stakeholders) and vertically (to different levels of governance): these countries feature *devolved pluralism*. In Japan, Italy, the Philippines and Indonesia, governance systems regulate access and interaction of different stakeholders but provide considerable decentralization across levels of governance: these systems, then, resemble *devolved corporatism*. In countries such as China, Portugal, Malaysia and Singapore, governance systems restrict effective access for stakeholders to the policy subsystem but provide considerable regional decentralization: these systems, then, can be called *deconcentrated statism*. Last, in the poorest two countries, Bangladesh and Tanzania, health policy-making and implementation is concentrated at ministerial level with little involvement from other health policy stakeholders: this describes *concentrated statism*.

Comparing health systems as a whole enables three basic insights. First, the global institutional topography of health systems is complex and imbalanced. In general, health systems divide along at least two dimensions. One dimension (the vertical) distinguishes different institutional structures in terms of the capacity for providing health care. Another (the horizontal) dimension distinguishes the institutional articulation of similar health system capacities. Along the vertical dimension, the analysis suggests that health systems differ in terms of what we have called their basic institutional architectures.

The sample, it would seem, disaggregates into three broad groups. The high-income countries making up the first group feature similar institutional architectures. Health care provision in all high-income countries takes place in *complementary sectors* financed by *coherent financing regimes*. Since the interaction between all three subsystems reinforces functionality and capacity within the individual subsystems, these are *cohesive health systems*. Along the horizontal dimension, this group of countries differs according to the categories of welfare state regime or health state analysis: Germany, Italy, and Japan look and behave like corporatist systems while Canada and Italy are closer to the entrenched-command-and-control health states. Singapores health system places it firmly within the productivist or East Asian welfare state type [Holliday, 2000, Croissant, 2004, Aspalter, 2006].

The second group, consisting mostly of middle-income countries (with the exception of Portugal and Indonesia), features institutional architectures based on a common theme of health system *imbalance*. The basic pattern in middle-income countries is that health care provision takes place in *parallel sectors* funded by *fragmented financing regimes*. This basic architecture, a *disjointed health system*, describes health care provision in China, the Philippines, and Indonesia. In Portugal and South Africa, however, imbalance is articulated in terms of *parallel delivery system sectors* but *coherent financing regimes*. In Brazil and Malaysia, in turn, delivery systems feature *complementary sectors* while financing regimes are *fragmented*. In terms of the horizontal dimension,

each basic architecture does not feature a variety of health care states. Instead, there is an interesting variation of health state regimes across different architectures: as we have seen, Type C imbalanced systems (Portugal and South Africa) resemble insecure-command-and-control systems while Type A imbalanced systems (Philippines, China and Indonesia) feature what could be called insecure corporatist systems. Last Type B imbalanced health systems (Brazil and Malaysia) seem to contain both horizontal regimes.

Last, the poorest countries feature roughly similar basic institutional architectures. Here, delivery of health services is dominated by a *single sector* and large out-of-pocket expenditures render financing regimes *asystemic*.[35] These conditions hobble health care capacities to create *impaired health systems*. In terms of horizontal analysis, the analysis did not point to any obvious distinctions between the three systems. This may be due to the small sample size as well as to the poor data on institutional mechanisms in the three countries.

Overall, then, health systems in high-income countries differ very little in the vertical or quantitative dimension but show far more pronounced horizontal or qualitative differences. Health systems in low-income countries also resemble each other in the vertical dimension and in the horizontal dimension. Middle-income countries differ in both the vertical and the horizontal dimension. Not only do middle-income countries feature different institutional architectures, there is variation in the institutional articulation of within these architectures.

Second, the analysis has also shown that governance practices shape health systems more than governance structures. Basic institutional architectures and health care regimes seem compatible with different types of governance systems. In other words, cohesiveness or imbalance is not intrinsically associated with any particular distribution of power over the policy process. Instead, the analysis suggests that more general governance practices, such as probity and transparency, have a significant impact on basic institutional architectures. While cohesive health systems feature low levels of perceived corruption, imbalanced systems are characterized by moderate to high levels of perceived corruption. Impaired health systems uniformly feature very high levels of perceived corruption.

Third, although the analysis revealed distinct institutional regimes in the horizontal dimensions, these regimes seem to permit considerable leeway for experimentation with policy instruments. For example, many cohesive health systems are currently exploring different ways of organizing secondary care (i.e. trust hospitals). In almost all cohesive and imbalanced health systems, policy-makers have implemented the full spectrum of health care purchasing mechanisms.

Given the ongoing pressures to adapt health systems to new socio-economic and political realities, an important issue for future reforms will be the relationship between institutional cohesion (vertical) and health regime coherence (horizontal). Intuitive reasoning suggests that the vertical cohesion of health systems is related to a coherent horizontal institutional articulation of health states. However, the apparent flexibility of governance structures, health care purchasing mechanism and secondary care management structures suggests that

[35]Tanzania, however, features a relatively mildly fragmented financing regime. This indicates that there may be a sampling bias in the findings. A broader selection of poor countries could show that basic institutional architectures vary as strongly at the lower income scale as in the middle-income range.

some form of cohesion may be compatible with considerably weaker forms of horizontal health state coherence. What is more, countries such as Portugal, Italy and Singapore, none of which sit neatly in welfare state regime typologies, suggest that weak horizontal institutional identities may still be compatible with cohesive vertical health systems or, at least, with reasonably good health outcomes.

Many questions remain.

First, how can we use this analytical framework to understand institutional change and health system reform? The analysis provides a means of mapping the institutional space in which health care provision takes place across the globe. As we have seen, it maps this space with a vertical dimension (between levels of income and development) and a horizontal dimension (across similar levels of income and development). The next step, then, is to understand movement within this space. The relevant questions here are:

- How do health systems move up or down the vertical dimension?
- How do changes in the horizontal dimension bring about changes in the vertical dimension?
- How do institutional architectures and regimes affect health system reform options? Can we use this framework to outline potential pathways of reform? Or, less restrictive, can we use this framework to identify the barriers and opportunities of particular reform pathways and options?

Second, a related issue is the tension between what we here have called the vertical and horizontal dimensions of analysis. As we have seen, horizontal coherence seems to become relevant only after a health system crosses the high-income threshold. Yet, we have also seen that horizontal regimes, or at least key elements of these regimes, continue to influence health reform processes in developing countries. The relevant questions here are:

- How are the vertical and horizontal dimensions related?
- How do differences in basic institutional architecture affect the horizontal institutional identity of health systems?
- What is the relationship between secure and insecure versions of health states? Are insecure health states merely faulty versions of the entrenched instances? Or is the label insecure misleading because what we are dealing with is a completely different institutional architecture with its own defining practices and norms?

Last, the analysis has suggested that the relationship between health outcomes and governance practices is far from straightforward. In particular, the analysis implies that the specific design of governance structures has less of an impact on the cohesion of health systems than the nature of governance practices. The relevant questions here are:

- How are governance structures and governance practices/ culture related?
- How can health reform processes contribute to the transformation of political and policy-making cultures? What sort of policy debate is necessary?

- How can reforms enhance the autonomy of the health policy-subsystems?

This last set of questions also raises an issue that this paper has not addressed: the role ideas, debate and conflict in global health policy processes. Understanding processes of reform and change requires an analysis of the options and proposals on the policy agenda (or policy agendas). What is more, such an analysis will also need to address the way policy debate and conflict shapes the global health policy agenda.

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