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Decentralization of health systems in Ghana, Zambia, Uganda and the Philippines: a comparative analysis of decision space

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This study reviews the experience of decentralization in four developing countries: Ghana, Uganda, Zambia and the Philippines. It uses two analytical frameworks to describe and compare the types and degrees of decentralization in each country. The first framework specifies three types of decentralization: deconcentration, delegation and devolution. The second framework uses a principal agent approach and innovative maps of 'decision space' to define the range of choice for different functions that is transferred from the centre to the periphery of the system. The analysis finds a variety of different types and degrees of decentralization, with the Philippines demonstrating the widest range of choice over many functions that were devolved to local government units. The least choice was transferred through delegation to an autonomous health service in Ghana. Uganda and Zambia display variations between these extremes. There was insufficient evidence of the impact of decentralization to assess how these differences in 'decision space' influenced the performance of each health system. The authors suggest that this is a major area for future research.

Key words: decentralization, health sector reform, performance of health systems, local governments

Introduction

Background

In the last two decades, health sector decentralization policies have been implemented on a broad scale throughout the developing world, usually as part of a broader process of political, economic and technical reform (Litvack et al. 1998). This process has been fuelled by new efforts of democratization and processes for the 'modernization' of the state. These movements combined to promote accountability to local preferences, as well as to introduce competition and cost-consciousness into the public sector and develop a new role for the state in 'enabling' and regulating rather than replacing private sector activities. In the health sector, this initiative has been reinforced by many donor supported projects of USAID and other bilateral agencies, as well as multilaterals like the World Bank, regional international banks, WHO, PAHO and UNICEF. The movement for health reform, including an emphasis on decentralization, was promoted actively in the *World Development Report 1993: Investing in Health* (World Bank 1993).

Decentralization, involving a variety of mechanisms to transfer fiscal, administrative, ownership and/or political authority for health service delivery from the central Ministry of Health (MOH) to alternate institutions, has been promoted as a key means of improving health sector performance (World Bank 1993). It has usually been argued that the benefits of such policies include:

- improved 'allocative' efficiency by allowing the mix of services and expenditures to be shaped by local user preferences;
- improved 'technical' efficiency through greater cost consciousness at the local level;
- service delivery innovation through experimentation and adaptation to local conditions;
- improved quality, transparency, accountability, and legitimacy owing to user oversight and participation in decision-making; and
- greater equity through distribution of resources toward traditionally marginal regions and groups.

The preliminary data from the field, however, indicate that the performance of decentralization has been mixed, at best. In some poorly designed and implemented decentralization programmes, there has been some evidence of breakdowns in services and in loss of gains that had been brought by centrally funded priority programmes, such as immunizations and family planning. In some cases, these limitations have resulted in a backlash against the reforms and initiatives for 'recentralization'. We believe that this rejection of decentralization is often premature or misplaced. The issue is not whether or not to decentralize but rather how to design and implement better decentralization policies to achieve national health policy objectives.

One of the major problems with contemporary discussion of decentralization is a tendency to view the process in simplistic terms. Usually decentralization is seen as a single activity of granting authority from the central national governmental agencies to other institutions at the periphery of the national system. The predominant framework for this analysis was pioneered by Rondinelli (1981) and applied to the health sector by Mills (1994), and contributes to this simplistic view by proposing a four category typology which categorizes decentralization as *deconcentration*, when the shift in

authority is to regional or district offices within the structure of the Ministry of Health; *devolution*, when the shift is to state, provincial or municipal governments; *delegation*, when semi-autonomous agencies are granted new powers; and *privatization*, when ownership is granted to private entities. This typology, while useful for identifying the institutional location of the newly transferred powers, tells us little about the crucial aspect of decentralization; namely, the range of choice that is granted to the decision-makers at the decentralized levels. The typology tended to view decentralization as one event that transferred power at one time and in one quantity to the new institutional location. It did not account for the variations and changes that do occur over time in the process of decentralization and masked the fact that decentralization is a dynamic relationship of changing powers between the centre and the periphery; not a granting of full powers to the periphery.

The first author of this article has developed a new approach to decentralization, which focuses on the range of choice allowed in the decentralization process (Bossert 1998). This approach, called the Decision Space Approach, is grounded in principal agent theory and uses a comparative analytical tool called the 'decision space map'. This article is an application of the Decision Space Approach to a secondary analysis for four recent experiments in decentralization. It is designed to show how the approach improves our understanding of the decentralization process and to review existing secondary evidence of the performance of decentralized health systems in these countries. The objective of this exercise is to use the Decision Space Approach to begin to draw lessons about how to design more effective processes of decentralization.

This article provides a preliminary comparative analysis of health sector decentralization reforms in Uganda, Ghana, Zambia and the Philippines. In recent years, these four countries have implemented decentralization policies that represent a broad range of strategies and tools. They are the only low-income countries in Africa and Asia that had significant experience with decentralization for which there was available secondary literature. Latin American countries with similar experience are the subjects of primary research by the authors that is to be presented in future articles.

Our analysis begins with an overview of the decentralization reforms of each country, including the local government system, Ministry of Health and civil service. Using the Decision Space Approach we then undertake a cross-country examination of the ways in which the reforms affect local health sector decision-makers and the range of choice available to them in the various spheres of health sector management. We also explore the influence of the reforms on civil society, non-governmental actors and popular participation. Finally, with the limited evidence available, we attempt to evaluate the impact of decentralization on performance of the health system in achieving objectives of equity, efficiency, quality and financial soundness. In the concluding section, we will reflect on the early lessons provided by the various strategies and tools used by these four countries, and on the needs for further research and innovations.

Decision space analytical framework

Our analytical framework for the evaluation of decentralization is based on a principal-agent approach. In this

Table 1. Standard decision space map

	Range of choice		
Function	Narrow	Moderate	Wide
Finance			
Sources of revenue	⇒	⇒	⇒
Allocation of expenditures	⇒	⇒	⇒
Income from fees and contracts	⇒	⇒	⇒
Service organization			
Hospital autonomy	⇒	⇒	⇒
Insurance plans	⇒	⇒	⇒
Payment mechanisms	⇒	⇒	⇒
Contracts with private providers	⇒	⇒	⇒
Required programmes/norms	⇒	⇒	⇒
Human resources			
Salaries	⇒	⇒	⇒
Contracts	⇒	⇒	⇒
Civil service	⇒	⇒	⇒
Access rules			
Targeting	⇒	⇒	⇒
Governance rules			
Local government	⇒	⇒	⇒
Facility boards	⇒	⇒	⇒
Health offices	⇒	⇒	⇒
Community participation	⇒	⇒	⇒

Source: Bossert (1998)

Table 2. Decentralization of the health sector in Ghana, Zambia, Uganda and the Philippines

Country	Basic type of decentralization	Year initiated	Levels	Special elements
Ghana	*Delegation* to autonomous Ghana Health Service (GHS) and to semi-autonomous Budget Management Centres (BMC).	1996 – Ghana Health Service and Teaching Hospital Act.	10 Regional Health Administrations; 110 District Health Administrations; Sub-districts.	GHS overseen by a National Governing Council and retains relatively centralized control over its regions and districts.
Zambia	*Deconcentration* to Regions and Districts and *delegation* to Central Board of Health (CBoH).	1993 – Health Sector Reform Program.	Four regional Directorates; 72 District Health Boards and District Health Management Teams (DHMT); 20 Hospital Management Boards.	DHMT annual work plans approved by the Central Board of Health. Budget transfers to districts contingent upon satisfactory performance audits by the Regional Directorate.
Uganda	*Devolution* to elected District Councils.	1993 – Local Government Statute.	45 District Health Committees (DHC) and a District Health Team (DHT); 214 Health Sub-districts.	Local government has taxation powers. Salaries paid by block grant from MOF.
Philippines	*Devolution* from Department of Health (DOH)[a] to Local Government Units (LGU).	1991 – Local Government Code.	77 provinces; 60 autonomous cities; 1548 municipalities; 42000 Barangays (neighbourhoods).	Fiscal devolution through Internal Revenue Allotment (IRA). Local Government Assistance and Monitoring Service (LGAMS) at DOH, monitors and supports LGUs.

[a] Department of Health is the Philippine Ministry of Health.

perspective, the Ministry of Health, as 'principal', sets the goals and parameters for health policy and programmes. This principal then grants authority and resources to local 'agents' – municipal and regional governments, deconcentrated field offices, or autonomous institutions – for the implementation of its objectives.

This approach acknowledges that local agents often have their own preferences for the mix of activities and expenditures to be undertaken, and respond to a local set of stakeholders and constituents that may have different priorities than the national-level principal. Local institutions, therefore, may have incentives to evade the mandates established by the central government. Moreover, because agents have better information about their own activities than does the principal, they have some margin within which to 'shirk' centrally defined responsibilities and pursue their own agendas. The cost to the principal of overcoming this information 'asymmetry' is often prohibitively high. Within this context, the central government seeks to achieve its objectives through the establishment of incentives and sanctions that effectively guide agent behaviour without imposing unacceptable losses in efficiency and innovation. Diverse mechanisms are employed to this end, including monitoring, reporting, inspections, performance reviews, contracts, grants, etc.

One of the major mechanisms that the principal may use to influence the agents is to selectively broaden the formal 'decision-space' or range of choice of local agents, within the various functions of finance, service organization, human resources, targeting and governance (Bossert 1998) (Table 1). The central principal voluntarily transfers formal authority to the agents in order to promote its health policy objectives. The degree and nature of this transfer differs by case, and shapes the functioning of the principal–agent relationship and the characteristics of the decentralized system as a whole. The case studies presented in this article do not seek to quantify formal decision-space, but rather to offer a preliminary characterization of its range – narrow, moderate and broad – within an array of health system functions. The nature and extent of decision-space is presented through 'maps', which are complemented by an analysis of the history and context of decentralization reforms.

Overview of country strategies

Each of the four countries studied has undertaken major decentralization programmes during the past decade, and all have attracted significant attention in the literature. The reform strategies and tools utilized vary considerably, and thus provide a useful basis for comparison. Two of the countries examined, Ghana and Zambia, are in the process of

'delegating' health sector management to semi-public institutions and 'deconcentrating' authority to regions and districts, while Uganda and the Philippines have undertaken programmes of 'devolution' of health service delivery functions to local governments. Within these two overarching decentralization 'tracks', however, each country has employed a distinct mix of policy tools constituting a distinct strategy. It is also useful to note that the unique character of each nation's history and political system, which are difficult to take into account in the comparative analysis, limits cross-national comparisons. We have assessed four low-income countries with democratic governments and have focused on variables that seem directly related to decentralization, but we have not been able to assess the full range of variation among countries. The data sources for this study were drawn from secondary sources after an extensive review of available literature and reports.

Table 2 summarizes the basic elements of each country's health sector decentralization.

Comparative analysis of local decision space

Introduction

What have been the results of the different strategies discussed above in terms of the decision space afforded to local actors? The general answer to this question is summarized in the following decision maps and will be discussed in depth in this section.[1]

Overall, the Philippines represented the case of the greatest range of local decision space, followed by Uganda, Zambia and Ghana in descending order. Table 3 points to this conclusion, but it should be emphasized that the 'ranges' identified are not quantitative and that not all functional categories are equally important. Uganda and Zambia had the same number of functional categories in each range of decision space, indicating a rough equivalence of local decision space. Ghana had clearly more limited range of choice over many more functions.

In comparing the two devolution cases, the Philippine local governments enjoyed a greater degree of local autonomy than the Ugandan District Councils, indicated by a 'narrow' range of local choice in fewer categories and a 'broad' range in more categories. This was primarily the result of their greater fiscal and administrative capacity, the larger and less earmarked transfers they receive, and the comparatively limited influence of international donors and central vertical programmes.

In the two delegation cases, there was a significant distinction to be made between the unified bureaucratic hierarchy implied by the Ghana Health Service, and the more pluralistic and potentially independent system of central and district health boards established in Zambia. The Ghanaian system's centralization was indicated by a 'narrow' range of local choice in two-thirds of the categories and a broad range of choice in none. Although the autonomy of the Zambian District and Hospital Boards of Health was somewhat

Table 3. Comparative decision space for Ghana, Zambia, Uganda and the Philippines

	Range of choice		
Functions	Narrow	Moderate	Wide
Financing			
Sources of revenue	Zambia	Ghana, Uganda	Philippines
Expenditures		All four	
Income from fees		Ghana, Zambia, Uganda	Philippines
Service organization			
Hospital autonomy	Ghana, Zambia	Uganda	Philippines
Insurance plans	Ghana, Uganda		Zambia, Philippines
Payment mechanisms	Ghana, Uganda	Philippines	Zambia
Contracts with private providers		Ghana, Zambia, Philippines	Uganda
Human resources			
Salaries	All four		
Contracts	Ghana	Philippines	Zambia, Uganda
Civil service	Ghana	Zambia, Uganda, Philippines	
Access rules	Ghana	Zambia, Uganda, Philippines	
Governance			
Local government	Ghana, Zambia		Uganda, Philippines
Facility boards	All four		
Health offices	Ghana, Philippines	Zambia, Uganda	
Community participation	Ghana, Uganda	Zambia, Philippines	
Country totals			
Ghana	11	4	0
Zambia	5	7	3
Uganda	5	7	3
Philippines	3	7	5

hampered by the central appointment of board members, the opportunities for independent decision-making and civil society and local government influence on health sector management were greater than in the Ghanaian case.

As to general trends for different functional areas, the comparative decision space map shows that for some functions all four countries were concentrated in one range of choice. The range of choice for local authorities for allocations of expenditures was moderate and it was narrow for salaries and for choices about facilities boards. Overall, the trends were for moderate choice for financing functions and narrow choice for governance functions.

For a more detailed look at the differences in local decision space afforded by the four decentralization models, we turn to a comparative analysis of the fundamental factors of health system management.

Health sector finance

Levels and vertical distribution of health spending

We first analyze the allocation decisions made by the central authorities toward the decentralized entities. In our framework, these are largely decisions by the 'principal' to assign more resources to the 'agent'. The proportion of public sector spending allocated to the health sector under decentralization reforms varied somewhat among the countries studied. While there were increases in all systems, it was only in the Philippines that we observed a significant transfer of resources to local governments.[2]

In Ghana the percentage of public sector health resources allocated to district health services increased from 22.8% in 1996 to 34% in 1997, and that of the regional health services from 17 to 25%. This increase was achieved by a corresponding decrease in resources allocated to tertiary care from 31.3 to 22% (MOH 1998). At the same time, district recurrent expenditure had risen from approximately US$25 million to US$32 million between 1996 and 1997, a 5% real increase (MOH 1998). In Zambia, the share of health sector public resources allotted to primary care through district health services had also expanded significantly, from 29.9% in 1992 to 47.7% in 1996 (Mbanefoh 1997).

The two 'devolution' cases saw a more radical redistribution of expenditures from central to sub-national levels. In Uganda, the government decided to completely devolve the health sector budget to local governments through a block grant system, with the significant exception of personnel salaries. The system for central transfers to local governments was based on two distinct budgetary categories referred to as 'recurrent' and 'development'. The recurrent budget included salaries, hospital maintenance costs and district administrative costs, whereas the development budget was partially comprised of capital expenditure, although it also incorporated recurrent costs associated with vertical programmes. The development budget was over 90% donor-financed and provided over 50% of the total health budget (Hutchinson 1998). Beginning in 1993, the recurrent budget was fully decentralized to the District governments, first by means of earmarked transfers, and then by block grants. Meanwhile, the decentralization of the development budget was expected to be implemented in all 39 districts by FY 1999/2000 (Hutchinson 1998). In 1999, secondary and tertiary hospitals continued to receive delegated funds directly from the Ministry of Health (MOH), but this budget was likewise expected to be decentralized in subsequent years. The 1995 Constitution also called for the establishment of an equalization grant to promote inter-governmental horizontal equity, but as of 1999 this had not been implemented. The decision to decentralize the recurrent budget before the development budget was indicative of the extent of 'devolution' in Uganda. In other countries with administrative 'deconcentration', it was more common for minor portions of the development budget to be decentralized first, while the central government retained control over the core of recurrent spending (Kasfir et al. 1996).

Similarly, in the Philippines a major fiscal decentralization programme accompanied the devolution of central government functions to local governments. Local government expenditures increased by 10.7% in 1992 and again by 51.9% in 1993 (Diokno 1995). This was particularly significant for the health sector, given that health services account for 66% of the total cost of devolved national government functions (Perez et al. 1995). The primary mechanism for fiscal decentralization was the central transfer mechanism known as the Internal Revenue Allotment (IRA). Prior to the Local Government Code 1991, the Local Government Unit (LGU) share of the IRA was equal to 20% of total taxes collected, with distribution based on a formula incorporating population, land area and equal sharing elements. Following decentralization, the LGU share of the IRA was expanded to 40% of total revenues collected, with a 3-year lag. The previously existing National Assistance to LGUs programme was abolished, but the expanded IRA allotment was augmented by a one-time P 4 billion allocation for the initial cost of devolution. The code specifically adopts a vertical allocation formula for the IRA, which assigns 23% to provincial tier governments, 23% to city governments, 34% to municipal governments and 20% to barangays. The formula for the horizontal distribution of these resources to individual LGUs within a given tier is calculated on the basis of 50% for population, 25% equal share to all and 25% by land area (Miller 1998).

Income sources and fiscal autonomy

The second financing question is how much authority did the decentralized 'agents' have over raising their own revenue and assigning it to health. Despite the increased proportion of resources spent at the sub-national level, own-source revenues were comparatively small and local institutions remained heavily dependent on central transfers in all of the countries studied. Even in the Philippines, where local governments had significantly greater fiscal capacity than in the African cases, increased central transfers brought about decreased dependence on local sources.

In Ghana, user fees (internally generated funds, or IGF) constituted approximately 19% of MOH expenditure in 1997

Table 4. Ghana, influence of user fees on allocation of resources

Recurrent expenditure by level	1996 expenditure	1997 actual (%)	
	(%)	MOH	MOH + IGF
Headquarters	28.1	29.4	*19*
Tertiary institutions	31.5	21.9	*27*
Regional	17.1	14.8	*10*
District	23.3	33.9	*44*
Total	100.0	100.0	*100.0*

(MOH 1998: 33). Drug sales accounted for 46% of IGF revenues, while service charges, including consultation and hospital fees, provided the remaining 54%. IGF revenues were generally used by facilities to cover non-wage operational costs, and tended to redistribute overall health sector resources away from headquarters and the Regional Health Administrations and toward the tertiary institutions and District Health Administrations that provided care directly, as demonstrated in the Table 4 (MOH 1998: 38).

Zambia also made use of user fees, but the income generated was much less significant than was the case in Ghana. Fees were very minimal in comparison with costs, but were argued to provide greater user 'ownership' of health service delivery and to promote accountability in health facilities. Official regulations stipulated that districts receive 25% of user fees collected, but the lack of transparent accounting procedures made evaluation of this policy difficult. Fee levels and cost-recovery rates varied widely between districts, the latter ranging from 1 to 20% of total operational costs excluding salaries and drugs (Daura et al. 1998).

In the Ugandan case, own-source revenue in the form of taxes accounted for 6.5% of district income (Hutchinson 1998), but it was unclear how much, if any, of this was devoted to health sector spending. Uganda had a tax collection rate of only 6–8% of GDP, significantly lower than the 18–20% average for the region, making this a dubious prospect for improved local fiscal autonomy, particularly in rural areas where the formal economy is minimal.

In the Philippines, total local government income receipts expanded from 1.7 to 3.4% of GNP between the 1985–91 and 1992–97 periods, respectively, but the percentage of these receipts accounted for by own-source revenues declined from 50 to 35%. This was still significantly higher than in any of the African cases, but not surprisingly, the increase in local government dependence on central transfers led to a corresponding increase in substitution effects of central for local resources (Loehr and Manasan 1999). Philippine local governments' share in taxes was expanded under the decentralization programme primarily through increases in real property tax. However, the revenue collection rate was below 55% and the cost of collection often exceeded revenues.

Table 5. Zambian budget ceilings by cost item

Cost item	Maximum % of total budget
Allowances (salaries)	20
Emergency drug purchase	4
Fuel	15
Capital	15

Local discretion in expenditure decisions

One of the central issues of decentralization is to assess how the 'agents' or local authorities make the decisions to allocate the resources under their control, what allocation choices they make and whether they seem to be different from, and better or worse than, centralized decisions in terms of producing better performance along observable dimensions of equity, efficiency and quality. Some see this as the core of decentralization. If local decision-makers are allowed to allocate their funding, will they make better decisions than central decision-makers? Because local health institutions are so heavily dependent on central transfers, the degree of 'earmarking' of these transfers by the centre is an important means by which the 'principal' can shape the decisions of the 'agent'. The nature and degree of discretion provided varied considerably among countries in this study, from the extremely limited choice under the hierarchical Ghanaian system to the comparatively wide choice in the Philippine case. Even in the devolution cases, where programmatic set-asides are less prominent, continuing central control of salaries severely limited local fiscal autonomy.

The measure of expenditure discretion provided by the Ghanaian system was limited to what was achieved by lower level Budget Management Centres (BMCs) in the budgeting process. Within the BMC hierarchy, the MOH and Ghana Health Service (GHS) assigned the various Regional Directors with budget ceilings for regional, district and sub-district BMCs. The Directors then allocated budget ceilings to BMCs on the basis of district population, number of health facilities and distance from the regional capital. BMCs prepared their own budgets, except with respect to salaries and capital investment, which were centrally determined. As of 1998, lower level BMCs were required to establish service performance contracts with the supervising BMCs, specifying the resources to be provided from above and the health services to be rendered (MOH 1998).

Table 6. Zambian set-aside requirements by level of service delivery

Level	Minimum (%)	Maximum (%)
District office	5	15
First referral hospital	20	40
Health centres	45	60
Community	2	5

Source: Feilden and Nielsen (1998) from District Planning Guide 1998.

Under the Zambian system the district health offices received direct transfers to their own bank accounts, and were given authority to develop and manage budget plans with central approval. Drug, supplies, vehicle and equipment purchases were generally made through the central procurement apparatus, though there was evidence of some independent local procurement of smaller equipment, such as refrigerators (Feilden and Nielsen 1998). Centrally approved annual work plans and budgets are monitored through quarterly performance auditing. Moreover, central guidelines specify limits on administrative and capital investment spending (see Table 5), as well as set-asides for different levels of the district health system (see Table 6).

The centrally defined Essential Package of Health Services was considered too expensive for the districts to fund under existing allocations. This may have exerted some constraint over expenditure allocations or may have provided increased latitude, depending on the mode of policy implementation and enforcement. In several districts, rural health centres were given revolving petty-cash funds for maintenance and supplies, but there was still evidence of 'bottle-necking' of funds at the district level, preventing health facilities from having adequate control over 'decentralized' resources (Foltz 1997).

As was mentioned above, Uganda's fiscal decentralization through block grants was fairly radical by African standards. However, it should be emphasized that the real magnitude of fiscal decision space granted to district governments was limited. Because delegated salaries and vertical programme funding comprised such a large percentage of the funding transferred to the districts, the actual amount of discretionary funding was fairly minimal, corresponding to approximately 25% of the funds in district annual work plans (Hutchinson 1998). It should also be mentioned that international donors accounted for around 60% of government health spending and 66% of primary care spending in Uganda (Okuonzi and Macrae 1995). Many of these resources were expended through vertical programmes, such as the Uganda National Expanded Program on Immunization (UNEPI) and the Essential Drugs Management Program, meaning that local governments had little or no discretion concerning their use. Moreover, a recent survey of district health officials suggested that the inclusion or exclusion of items in the district annual work plans was primarily based on the likelihood of securing external funding for these items rather than on the basis of their merit as cost-effective health interventions (Hutchinson 1998). Uganda's district expenditures of transfers are summarized in Table 7.

As mentioned above, the fact that delegated salaries and vertical programme funding comprised such a large percentage of the funding transferred to the districts meant that the actual amount of discretionary funding was fairly minimal, corresponding to approximately 25% of the funds in district annual work plans. Approximately 10% of these discretionary funds were allotted to health, making it a considerably lower budgetary priority than education or feeder roads (Hutchinson 1998). The relative shortage of discretionary funds available to local governments made the allocation of these funds somewhat less significant, but nonetheless indicative of tendencies within the decentralization reforms. One of the major issues in the Ugandan health system was a bias toward urban and curative care, with over 50% of recurrent costs being spent on hospitals, half of which went to the major national referral hospital (Smithson 1995). Seventy per cent of trained health staff were urban hospital based, despite the fact that nearly 90% of the Ugandan population lived in rural areas (Okuonzi and Lubanga 1995). While Uganda made some investment in local health committees and community health workers, the expansion of health services into rural areas was primarily based on the construction of district hospitals (Macrae et al. 1996).

Decentralized district expenditures on health appeared to perpetuate this bias in favour of curative care. While there was a 110% increase in the overall district expenditure on health between FY 1995/6 and FY 1997/8, this was accompanied by an 8% *decrease* in the allocation to primary health care (Hutchinson 1998). While, to a certain extent, this decrease was to be expected given the political attractiveness of capital investment and curative care, it remained an area of major concern for the health sector, particularly as the development budget was likewise decentralized. Ministry of Finance grants were structured to provide incentives for a focus on primary education and feeder road construction as of FY 1996/7, and more recently a conditional grant was established to encourage spending on primary health care as well. Originally, this grant was equivalent to only 0.9% of total district recurrent expenditures, or 10% of overall district spending on primary health care, at which level conditional grants were unlikely to have much impact (Hutchinson 1998). In FY 1998/99, however, the PHC conditional grant was to be expanded from Ush 1.7 billion to Ush 6.358 billion, which could significantly improve its effectiveness.

The Philippine central transfer system was relatively unburdened with earmarking, set-asides and other expenditure constraints. LGUs were required to spend at least 20% of the IRA on 'development' projects, and although LGUs were to furnish the Department of Interior and Local Government (DILG) with copies of their development plans, this categorization was relatively fungible (Perez et al. 1995). A further 5% of the IRA was to be set aside for disaster relief efforts, and no more than 45–55% (depending LGU revenue class) of LGU regular income was to be spent on personnel

Table 7. Uganda: total district public expenditure by category – all districts

Item	1996/7 Amount ('000 Ush)	1996/7 %	1997/8 Amount ('000 Ush)	1997/8 %
Unconditional grant	*45 317 604*	*25.7*	*48 111 003*	*24.5*
Salaries				
Teachers' salaries – primary	61 514 949	34.8	69 196 998	35.2
Teachers' salaries – secondary	22 833 000	12.9	25 407 334	12.9
Staff salaries	6 249 669	3.5	6 879 998	3.5
Medical workers lunch allowance	–	0.0	5 149 999	2.6
Subtotal	*90 597 618*	*51.3*	*106 634 329*	*54.3*
Delegated (non-wage)				
District hospital services	8 020 648	4.5	6 447 000	3.3
Referral hospitals	5 500 110	3.1	4 020 000	2.0
District NGO hospitals	–	0.0	1 000 001	0.5
Health training schools	489 240	0.3	1 543 001	0.8
Transfers to local authorities/sec. ed.	4 290 000	2.4	4 299 998	2.2
Subtotal	*18 299 998*	*10.4*	*17 310 000*	*8.8*
District urban administration	*3 400 000*	*1.9*	*3 672 001*	*1.9*
Conditional grants				
Transfers to primary education	14 000 000	7.9	13 999 997	7.1
Transfers to road maintenance	4 900 000	2.8	4 990 003	2.5
Transfers to primary health care	–	0.0	1 700 000	0.9
Subtotal	*18 900 000*	*10.7*	*20 690 000*	*10.5*
Grand total	176 515 220	100	196 417 333	100

From Hutchinson 1998: p. 39.

(Diokno 1995). These minimal requirements actually left significant latitude to Philippine LGUs in expenditure decisions.

A major limitation to this discretion, however, was the requirement that local governments retain all devolved personnel and that they adhere to a unified civil servant payscale. These requirements and the personnel benefits stipulated by the 1992 Magna Carta for Health Care Workers (MCHCW) essentially functioned as 'unfunded mandates' on the LGUs. While the national government assumed responsibility for these costs in 1993/4, the LGU share of the costs was to increase to 45% in 1995 and 90% by 1997 (Perez 1998). In 1994, however, President Ramos decreed that benefit payments be frozen until the LGUs were capable of paying for them, effectively permitting LGUs to evade the payments. No figures were available concerning LGU expenditures on MCHCW benefits, but they were generally considered to be low (Perez et al. 1995). Due to the growing clamour among health care workers, the central government intervened to finance some of the mandated benefits and salary increases. In 1994, the central government provided P 50 million in 'augmentation funds' to the Department of Health (DOH) for this purpose. Furthermore, the DOH used end of year savings to implement salary increases for devolved health workers, and approximately 5% of current DOH expenditures were allocated to the payment of MCHCW benefits (Perez 1998).

In the Philippines, increased local government autonomy with respect to public services decision-making was evident in the shifts recorded in local government expenditure patterns since 1993 and the increased variation in the service mix among different local government units (Miller 1998; Loehr and Manasan 1999). In 1993/4, LGUs spent four times the amount necessary to sustain 1991/2 real expenditures (allowing for inflation and population growth) on education, reflecting local government's high preference for spending in this sector even though it remained nationalized. Spending on social welfare did not keep pace with inflation and population growth, while health spending declined in 1993 and rose again in 1994 to keep pace with inflation and population growth. Changes in local government expenditures on health are summarized in Table 8.

LGUs' expenditure preferences in agriculture tended to emphasize commercialization and marketing, in contrast to the national government's focus on food security. Moreover, it is interesting to note that in areas with good health indicators, resources were shifted away from health toward other sectors, whereas the reverse occurred in areas with poor health indicators (Loehr and Manasan 1999).

Service organization

Hospital autonomy

In the service organization sphere, the comparative picture of the four cases was more heterogeneous and less clear than in the case of finance. Hospitals were not fully autonomous in any of the cases examined, though the modes of facility level management varied. Unfortunately, there was relatively little

Table 8. Philippines: local government health expenditures after devolution

	Local government health expenditures (in millions of pesos)			
	Total	Provinces	Municipalities	Cities
1993 actual	5233.0	2488.9	1746.5	997.6
1993 level needed to maintain 1991 real per capita[a]	5744.1	2977.7	1894.3	872.1
% difference	*–8.9%*	*–16.4%*	*–7.8%*	*+1.4%*
1994 actual	6534.7	3046.9	1980.3	1507.5
1994 level necessary to maintain 1991 real per capita[a]	5744.1	2977.7	1894.3	872.1
% difference	*+13.8%*	*+2.3%*	*+4.5%*	*+72.9%*

Adapted from Loehr and Manasan (1999), Tables 6a. & 6b.
[a] Adjusted for inflation and population changes.

information about the effects of these differences on resource availability and decision-making processes at the facility level. This was a significant gap, given that decision space at the level of direct service provision units may have been at least as significant as that of the local governments, health boards or district-level offices that oversaw them.

Ghana represented the extreme case of centralization, with hospitals continuing to be directly controlled by the MOH/GHS. In Uganda and the Philippines, most hospitals were managed directly by local governments, but there was little information regarding what decision space the hospital administrations had *vis à vis* these governments. In Uganda all hospitals (except two tertiary teaching facilities) were to be directly administered by the District Councils through the Deputy District Medical Officer for curative services. Hospital directors were supposed to sit on the District Health Committees and hospital management had ostensibly been delegated to the committees, but the continuing centralization of personnel management limited the significance of this arrangement (Okuonzi and Lubanga 1995). The Philippines appeared to represent somewhat greater latitude in local government management, with the majority of hospitals almost completely autonomous from the DOH and administered by the provincial (for provincial, component city and municipal hospitals) and city governments (for city hospitals in highly urbanized areas). The DOH maintained direct control of regional hospitals, medical centres and specialized health facilities, and regulated and monitored all locally administered hospitals.

Structurally, Zambia's system had the potential for the greatest *facility level* autonomy among all the cases, with major hospitals (more than 200 beds) being managed by Hospital Management Boards composed of health workers and community representatives. However, these boards were centrally appointed, and facility action plans and budgets were prepared with technical support from the centrally directed District Health Management Teams and had to be approved by both the District Board of Health and the Central Board of Health. In 1998, the Minister of Health dismissed two hospital management boards amidst allegations of financial mismanagement. It is unclear what the significance of this crisis would be for the long-term autonomy of the boards but it certainly raised some concerns.

Insurance and payment mechanisms

The range of choice over insurance and payment mechanisms on local decision space was also varied. In Ghana the levels and mechanisms of payments for providers were centrally determined, and there was no evidence of experimentation with insurance or prepayment mechanisms. Uganda represented the opposite case, with higher levels of autonomy at the district and facility level, and some evidence of prepayment schemes (Katabarwa 1999).

Although it generated considerably fewer resources than Ghana, Zambia's cost-sharing system is much more decentralized, allowing districts to set user fee levels and define exemption policies. Many districts permitted user fees to be paid in-kind, usually with maize or chickens (Daura et al. 1998). Meanwhile, there were some initial experiments with prepayment schemes undertaken in urban centres, but these were shown to provide incentive for users to bypass primary facilities in favour of hospitals (Mbanefoh 1997). Consequently, general outpatient facilities at these hospitals were closed and prepayment schemes were shifted to the districts. At least five districts operated some kind of prepayment scheme, although these schemes did not cover all facilities. Where prepayment schemes were operating, user fees were generally higher in order to increase level of participation in the scheme.

The Philippines had the most highly developed insurance system among the four countries. Its Medical Care Commission was one of the first compulsory health insurance systems in the developing world, and its Medicare I programme covered all government employees and private sector non-owner wage employees and their dependents. As of 1988, this programme was reported to cover some 38% of the population (Solon et al. 1992). Following devolution, provincial governments were permitted to establish and administer their own insurance plans, but there was no information in the

literature as to the extent to which these schemes were implemented.

Independent contracting

All of the African cases represented examples of experimentation with independent contracting with non-governmental health service providers, primarily mission hospitals. Ghana, for example, had initiated contracting with the Churches Hospital Association of Ghana (CHAG), an association of mission health providers. In Zambia, the Ministry of Finance signed a memorandum of agreement with the Churches Medical Association of Zambia (CMAZ), whereby select mission hospitals were eligible for funding equivalent to 75% of that received by MOH hospitals (Mbanefoh 1997).

In Uganda, district governments were permitted to contract out services to non-governmental organization (NGO) and mission health providers. NGOs managed nearly a fifth of all health facilities in Uganda and their already significant influence was expected to grow as decentralization permitted service contracting. This practice was adopted in West Nile, where an NGO hospital was contracted to supervise health centres (Feilden and Nielsen 1998). It was generally agreed that there was a marked difference between governmental facilities and their NGO counterparts, the latter providing higher quality care at lower cost (Hutchinson 1998). This difference in performance was apparently quite pronounced at lower level primary care facilities (Okello et al. 1998). In 1990, NGOs provided 38% of Uganda's hospital beds, but accounted for 54% of inpatient bed-days. NGO bed occupancy rates were approximately 90%, compared with about 40% for public hospitals. One survey showed that NGO facilities treat approximately three times more outpatients per professional employee than government facilities (CIHI 1996).

In contrast to the African cases, the Philippines represented the only system surveyed in which the for-profit private sector was an important element of the health system. Private facilities provided nearly half of the country's hospital beds through some 1180 hospitals (Solon et al. 1992). NGO health service providers were common as well, but there was no evidence in the literature as to whether or to what degree local governments made use of independent contracting of health services.

Human resources

Not surprisingly, control over human resource management in the health sector is a major factor in local decision space that has far reaching effects on other health sector functions. Because such a large percentage of health sector resources in developing countries goes to salaries and because personnel management has a strong effect on local decision-making, centralization of human resource management tends to significantly undermine local decision space provided in the financing and service organization spheres discussed above.

Ghana and Zambia's 'deconcentrated' human resource management schemes were more centralized than those of the 'devolution' cases of Uganda and the Philippines. The Ghanaian MOH/Health Service had a unified and hierarchical personnel structure in which decisions on salaries, contracting, hiring and firing authority and civil service benefits was completely centralized. It was expected that the delegation of human resource management to the GHS would provide greater flexibility than the national civil service in this area. The Zambian District Health Boards were expected at some point to be given decentralized authority to hire and fire, but salaries and conditions of employment were likely to continue to be centrally determined. Beginning in mid-1998, the Zambian system had experienced a series of work slowdowns, protests and strikes organized by the Zambian National Union of Health Workers (ZNUHAW) in protest at the deterioration of health facilities, lack of supplies and long delays in payment of salaries and benefits. These upheavals may have militated against further decentralization of human resource management to the health boards.

In the Philippines and Uganda, local governments had been given authority to hire and fire devolved personnel and there had been a de-linkage of local government and the national civil service. However, in both cases the political influence of public sector health workers brought about central imposition of salary levels, benefits and employment conditions. This represented a major constraint on local decision space, not only in human resource management *per se*, but also in an indirect effect on control of financial resources since human resources represent a high percentage of recurrent costs and budget allocations.

The transfer of staff hiring and firing decisions to the district governments through the District Service Commissions was considered to be one of the cornerstones of the Ugandan reforms. Districts were also given a mandate to create or abolish positions, or to contract out to non-governmental institutions (Feilden and Neilsen 1998). However, in actual implementation, the nature and extent of decentralization was significantly limited. Under the new scheme, district-based MOH personnel became district employees salaried under delegated block grants. Differentials in district vs. central government pay scales were 'harmonized' prior to devolution, and the district governments are required to adhere to a unified national pay scale, although they may set their own benefits and allowances. Hospital workers, meanwhile, were not decentralized, but continued to be salaried under directly delegated transfers from the Ministry of Finance. These centrally paid hospital workers were more likely to receive their full salaries on time, while locally hired staff could go for months or even years without being paid.

The large-scale transfer of health personnel from the DOH to local government employment in the Philippines (approximately 46 000, or 62% of the DOH's 70 000 employees) brought an extremely adverse reaction among health personnel, particularly as the DOH had been excluded from the formulation of decentralization policy until relatively late in the legislative process (Perez 1998). At least initially, decentralization appeared to have brought a significant deterioration to the employment conditions of devolved health care workers. Salaries of devolved workers decreased

relative to central government employees (by one-fifth to one-third on average), and civil servant vertical career mobility was interrupted by the fragmentation of the public health system (Tapales 1992; Miller 1998). Following the 1991 reforms, health care workers engaged in public protests and rallies and lobbied strongly before the Philippine Congress for re-centralization and/or the passage of legislation guaranteeing their employment conditions. This pressure resulted in an executive order requiring the LGUs to absorb all devolved central government positions, and making dismissal of public health workers virtually impossible. Moreover, in the face of opposition to devolution, Congress passed the 1992 Magna Carta for Health Care Workers (MCHCW), which guaranteed a unified national pay-scale for health care workers, as well as special benefits such as hazard-pay, subsistence allowances, etc. This defused some of the opposition within the DOH, but as detailed above, it significantly limited the financial decision space originally given over to local governments (Perez et al. 1995; Perez 1998).

Access rules

Access rules identify targeted populations that have priority or free access to a defined minimum benefits package of health services or to subsidized social insurance coverage. Targeting and health service programming was moderately decentralized in all cases, with notable differences in the mechanisms used for central control. Ghana and the Philippines both utilized performance contracting as a means to determine access rules, but in Ghana's case this took place within a vertical command-control framework, whereas in the Philippine case it was more an incentive mechanism to encourage autonomous local governments to follow national priorities. As of 1998, lower level BMCs in the Ghanaian system are no longer required to submit plans with their budgets, but are required to establish service performance contracts with supervising BMCs. These contracts specify the services to be provided by facilities, which are centrally determined.

In the Philippines, performance contracting with local governments was accompanied by discretionary grants in order to promote provision of preferred health service programmes. Under the Comprehensive Health Care Agreements established between the DOH's Local Government Assistance and Monitoring Service and the LGUs, the latter agree to undertake, support or assist health programmes, while the DOH provides services, technical and financial assistance to augment LGU resources (LGAMS 1997). The core programmes targeted by the Comprehensive Health Care Agreements are maternal and child health, tuberculosis, hospital management and institutional capacity building, which may be supplemented by core regional programmes determined jointly by the DOH regional offices and the LGU. By 1994, 94% of all provinces and cities had signed a Comprehensive Health Care Agreement with the DOH, and it was reported that the establishment of the Local Government Assistance and Monitoring Service and the advent of Comprehensive Health Care Agreements brought greater collaboration between the DOH and the LGUs (Perez 1998). It remains to be seen whether the use of performance contracting can be effective in systems with low capacity to develop and monitor these contracts.

Health programming in both Zambia and Uganda was guided by a centrally defined package of essential services, but there appeared to be some degree of local latitude over the delivery of this programme. Zambia's Essential Health Package (EHP) was based on calculations of Zambia's burden of disease and the relative cost-effectiveness of health interventions (Feilden and Nielsen 1998). The EHP specified those primary care services which were to be offered to all users of the public sector health system, including: child health, reproductive health, AIDS and STDs, treatment of tuberculosis, malaria and drinking water/sanitation. However, as was mentioned above, the cost of the package exceeded available district resources by US$7–20 per capita (Sukwa and Chabot 1997; Feilden and Nielsen 1998). It was unclear what effects this disproportion between responsibilities and resources had on district decision-space. The Ugandan Ministry of Health had, likewise, defined an Essential Package of Health Services, but the associated guidelines appeared to be only loosely enforced in the block grant programme. The Ministry of Finance provided 'shadow' budgets, but District Councils retained significant discretion over the use of non-wage funds, and the government established conditional grants to encourage spending on primary health care.

Governance rules and popular participation

Health sector governance and popular participation at the local level are important elements of decentralization because the influence held by various stakeholders over decision processes could express local priorities at variance with national priorities and can be a means of holding the local health staff accountable for higher quality care. An important distinction is often made between the role of participation in 'devolution' cases, where local government directly manages health service delivery, and in 'deconcentration' cases in which there is no formal participation of the local government. The degree of community participation, however, may be important in both types of decentralization.

Consistent with its overall character of 'decentralized centralism', the Ghanaian health system provided little or no mechanism for local governance or popular participation in health sector decision-making. The District Administrations were relatively undemocratic (Herbst 1993; Ayee 1996; Mohan 1996) and did not play a significant role in health sector governance. While the District Administrations had some representation on the District Health Committees, their role was intentionally limited to one of advising the Ghanaian Health Service and was minimal at best (Mensah 1997). The GHS itself, while deconcentrated, had a centralized governance structure. The National Governing Council and Director General of the GHS were appointed by the President, and they in turn appointed the Regional Health Administrations, District Health Administrations and hospital management. Meanwhile, though there was some investment in the training of community health workers and traditional birth attendants, there had been no attempt to directly

introduce local participation in health sector governance. The 1997 review of the 5-year programme of work indicated that the functioning of participation was 'cumbersome' and that, in general, the interface between health sector providers and beneficiaries was 'weak' (MOH 1998: 57–8). A policy options paper was drafted on this subject, but no steps were taken to implement any specific mechanisms of participation (MOH 1998).

On paper, Zambia had a rather impressive structure of citizen participation from the facility to the district level, but these mechanisms had only been implemented to a limited degree and their viability and effectiveness was not yet clear. The popularly elected Neighbourhood Health Committees (NHCs) were responsible for health outreach and promotion of environmental health at the community level. They were only partially established, and the 1997 Comprehensive Review found mixed results from their activities (WHO/UNICEF/World Bank/Zambian Ministry of Health 1997). Health Centre Action Committees (HCACs) were even less common than the NHCs, and their impact was difficult to evaluate. In the Mongu district, the HCACs directly managed user fee revenues, and significant improvements in service quality and drug availability were attributed to community participation (Daura et al. 1998). Their effectiveness was apparently predicated on the long-term investment that had been made in community involvement through the Primary Health Care Program in West Province. The District Health Boards that oversaw local health policy, although originally conceived as an important mechanism of popular participation, were not democratic in character. Provision for local representation was primarily through constituent Area Health Boards, but few of the latter were constituted and it was not clear how representative they could be of civil society and popular interests.

In comparison, Uganda had much more democratic local institutions, but mechanisms for participation in health sector governance appeared weak. Community participation in health service delivery and administration was supposed to be promoted through a number of means. Sub-county and village health committees ostensibly served to provide local representation equivalent to the District Health Committees. Sub-county Health Committees had been established in most districts, but the 1997–2001 Health Plan Frame's call for the nationwide establishment of Village Health Committees had yet to be implemented (Hutchinson 1998). Little information was available as to the effectiveness of these recently established institutions. Another potential avenue for popular participation was the Health Unit Management Committee (HUMC). These are nine-member committees which were elected, appointed or named *ex-oficio* to oversee health facility personnel, inspections, expenditures, construction and maintenance concerns, and to decide how revenue from user fees would be used by facilities at the district level. Hutchinson (1998) noted numerous problems with the HUMCs, particularly with the issue of revenue management. In districts surveyed, it was found that HUMC members generally perceived themselves as financial administrators and overseers, but not as representatives of or liaisons for local communities. Moreover, although user fees were supposed to be used to improve quality of care through the purchase of drugs and supplies, for instance, it was found that the majority (62.9%) of revenues in the sample were directed to staff salaries and incentives. Districts with stronger administrations, in which more resources were invested in training and oversight of the HUMCs, showed significantly lower levels of revenue expenditure on staff (13–37%). In general, however, the HUMCs had not been associated with any noteworthy improvement in service quality, and in fact had been accused of complicity in drug leakage and other abuses (Hutchinson 1998).

The Philippines provided for ample citizen participation not only through elected local government, but also through representative sectoral institutions and NGOs. Under the Philippines' local government system certain higher income cities were autonomous, while the remainder were 'component' cities or municipalities under provincial supervision. Each level of government – provincial, municipality and city – was governed by a chief executive (governor, mayor) and a legislative council known as the *Sanggunian*. The barangays were represented by barangay 'chairmen' who were delegates to the *Sanggunian*. The Local Government Code (LGC) of 1991 also provided for a number of local sectoral boards and councils, including local health boards, at the provincial, city and municipal levels. They were chaired by the local governor or mayor and vice-chaired by the local government health officer, and their membership included a representative of the *Sangunnian* (chair of the *sanggunian* health committee), a representative of the DOH, and a representative of the private sector or a local health sector NGO. A dramatic expansion in the number of NGOs and the level of their involvement had occurred since the shift to democracy in 1986 and there was extensive NGO participation in health service delivery in rural and under-served areas. Miller (1998) reported that more than 17 000 of the country's 52 000 NGOs had been approved by the *Sanggunian* for participation in local government activities under LGC 1991. The health board proposed the annual health budget, advised the *Sanggunian* on health matters, and created health committees to advise local health agencies.

Conclusions from comparative decision space maps

The detailed analysis of differences in the decision space afforded to local authorities in the four countries provides us with a preliminary assessment of some of the complex factors that are likely to contribute to the effectiveness of decentralization. We see first that there was considerable variety in the overall range of choice allowed the local authorities in the different countries. Some countries granted more choice over more functions than had other countries. The range of choice also varied for different functions. Some countries granted more choice over financing than they did over human resources while others granted more choice over governance than financing. Finally, the range of choice appeared to change over time with some governments granting more authority and others granting less.

This analysis adds a richness to the simple typology of 'deconcentration' and 'devolution', allowing us to

distinguish different ranges of choice within and between these categories. For instance, both Uganda and the Philippines were cases of devolution; however the choice granted to local governments in the Philippines was overall greater than that granted to local governments in Uganda. For the functions of choice over payment mechanisms and contracting, the 'deconcentrated' system in Zambia had more authority than did the 'devolved' systems in the Philippines and Uganda.

In the following section we attempt to assess the impact of these differences on the performance of the health systems. With this combined assessment we hope to provide insight into the ranges of choice over different functions that might contribute to more effective decentralization processes. Our ability to do this is limited in this exploratory analysis by the limited number of cases and the limited types of data available. This is an initial attempt, which is expected to point ways to future research using the same approach.

Comparing performance

Efficiency and financial soundness

What does the foregoing analysis of the different ranges of choice ('decision-space') and the strategies and tools used by the central authorities ('principals') to shape the incentives of the local entities ('agents') mean in terms of health sector performance? What decision space and what incentives work better in terms of efficiency, financial soundness, equity, and quality and impact on health outcomes? Ideally the answers to these questions would form the largest section of this article. We would want to look not only at the amount and vertical distribution of health sector resources and decision space discussed above, but also at the outputs. We want to know how these resources were used by local service providers at what cost and with what effects, as well as what factors influenced decisions as to the mix of services and their distribution. Unfortunately, little comparative information is available concerning the relationship between decentralization policies and performance.

This lack of information and analysis is most striking with respect to the effects of decentralization reforms on efficiency and the financial soundness of the health system. Quite simply, none of the research undertaken to date in these countries has examined whether or not there has been any change in health sector outputs per dollar as a result of decentralization. Neither has there been any study of whether the reform programmes have improved fiscal discipline in the health sector.

We do have scattered observations such as the following:

- In Ghana, the number of MOH employees at the central level was dramatically reduced through the establishment of the Ghana Health Service. While the new GHS Central Board of Health had only 118 employees, the old MOH central office staff was simultaneously reduced by 333, from 400 to 67 (Feilden and Nielsen 1998). When combined with increased funding to the health sector, such staff reductions suggested improved efficiency. It is unknown whether corresponding advances had been made under Ghana's delegation scheme.
- In the Philippines, by contrast, there was evidence of a 'creeping re-centralization' in government finance. Despite a massive devolution of functions and personnel, central government spending between 1992 and 1994 only decreased from 11.6 to 11.4% of GNP and by 1998 it had actually increased to 13.2% of GNP (Loehr and Manasan 1999). Continued high levels of government spending had been noted particularly in the two agencies affected most by devolution, the Department of Health and the Department of Agriculture (Miller 1998). This suggests that, for political reasons, the government was 'double-spending' on health, thus losing the potential gains in efficiency and financial soundness from decentralization.
- On the other hand, Philippine local governments had demonstrated markedly superior production efficiency in school and transportation infrastructure construction, in comparison with central government agencies (Loehr and Manasan 1999).

While interesting, such observations are not systematic enough with respect to any of the cases to allow us to draw useful conclusions regarding any given reform programme as a whole, nor to make meaningful comparisons between them. They point the way to the need for future research discussed below.

Equity

Even where there appear to be gains in efficiency, decentralization policies often come in for criticism because of their effects on equity. It is, therefore, important to understand what has been the effect of decentralization reforms on the vertical and horizontal patterns of resource distribution. Unfortunately, the answer to this question is only slightly better understood than that of efficiency and financial soundness, and again only minimal data are available to us.

In Ghana, for instance, the level of income from user fees varied considerably by region, from approximately US$1.9 million annually in Greater Accra to around US$200 000 in the Upper East. Likewise, there were variations within intra-regional allocations, with wealthier regions allocating a considerably greater percentage of resources to the sub-district level than poorer regions (MOH 1998). This latter trend may have been the result of greater concentration of resources in the regional and district hospitals within poorer regions. The lower-income regions exhibited greater limitations in management capacity of lower level administrative units and primary care facilities, and hence may have been more prone to internal fiscal centralization than wealthier regions.

For Zambia, there is even less information on the equity of resource distribution. Daura et al. (1998) indicated that there was significant variation in the quality of service between districts and facilities. These observations, while useful, are neither comprehensive nor quantitative, and in any case it is unclear to what degree these inequities were attributable to decentralization reforms or not.

The formula for block grant distribution in Uganda has come in for both praise and criticism, considered by some to be equitable and by others to provide perverse incentives to perpetuate high infant mortality rates (Hutchinson 1998). Sub-county own-source revenues varied dramatically, from US$4000 to US$200 000 per year, and it could be expected that this would negatively affect horizontal equity in non-transfer resources available for the health sector (Villadsen and Lubanga 1996). Moreover, there were significant equity and quality issues associated with changes in human resource management. As the MOH system was no longer nationally unified, district health professionals no longer had the same geographic mobility and access to promotion, making it significantly more difficult for poorer, rural districts to attract qualified personnel. Different levels of resources and prioritization of the health sector tended to lead to non-uniformity in the training and capacity of district health personnel. Moreover, wealthier urban districts provided better amenities, as well as opportunities for complementary private sector employment (Okuonzi and Lubanga 1995). DDHSs surveyed noted that hiring and firing decisions were susceptible to tribalism and clientelism which contribute to a deterioration in staff quality (Hutchinson 1998).

The Philippines case provides somewhat more information than do the others. There, it had been recognized that the benefits and costs of decentralization had not fallen equally on all LGUs or on all levels of government. Loehr and Manasan (1999) found that while the IRA was sufficient to cover the devolved functions in aggregate, the barangays and cities had been fiscal net winners and the provinces and municipalities net losers as a result of LGC 1991. While the provinces and municipalities received 57% of revenue transfers, they bore 92.5% of the costs of devolution. The cities and barangays, for their part, received 47% of the transfers and bore only 7.5% of the costs (Eaton 1998). In the health sector, for example, the tertiary hospitals devolved to the provincial governments constituted the most costly element of devolution to local government, but the cost of these services had not been accounted for in the formula for the IRA. The resulting shortfall was particularly problematic because the provinces had such a limited tax-base. As a result, by the end of 1997 at least four of the 72 provincial hospitals devolved to provincial governments had been returned to the DOH and a further 10 were under consideration for re-centralization (Perez 1998). In an effort to rationalize the distribution of central transfers, the government developed the Devolution Financing Burden, an indicator that categorized LGUs according to their fiscal capacity to assume devolved functions.

In terms of horizontal equity, Miller (1998) indicates that per-capita allotments from the Philippine IRA varied by a factor of 23 between the top and the bottom province. Per capita own-source revenues were even more disparate, varying by a factor of 83 among provinces. While Miller (1998) contends that the revenue distribution system as a whole was mildly regressive, Loehr and Manasan (1999) state the IRA *per se* was mildly equalizing, though not intentionally so. This was due to the high weighting (25%) of land area in the IRA distribution formula, which tended to favour the more extensive, low population density, rural LGUs, which also tended to be the poorer areas.

Quality

To an even greater extent than with the foregoing indicators, observations regarding the effects of decentralization on the quality of health care provided through the public sector are scattered and anecdotal.

In Zambia, the initial results of the decentralization reforms on health sector performance were mixed. As discussed above, the degree of fiscal decentralization had been considerable, and some analysts consider this to have significantly improved service delivery at the local level (Visshedijk et al. 1995). In the context of the 1997 independent review of the Zambian health reforms, Foltz (1997) identified a notable improvement in the districts as a result of the reforms, specifically with respect to facility maintenance and health care worker morale. As mentioned above, Daura et al.'s (1998) analysis of cost-sharing, appears to contradict these favourable reports, indicating that there was considerable variation in the service quality between districts and facilities, and that in many districts service quality, drug and supply availability, and worker motivation remained quite low.

Reviews have been mixed concerning the quality of service provided by Philippine local governments. There have been ongoing problems with health service quality and civil servant morale in the aftermath of decentralization. Poor availability of drugs in comparison with the period prior to devolution has also been noted (Perez et al. 1995). Miller (1998) contends that, in general, hospital care quality declined with devolution, but the quality of other health services improved. There has been ample anecdotal evidence of increased innovation and decreased corruption in local governments as well (Markillie 1996; Miller 1998; Loehr and Manasan 1999).

Conclusion: comparing performance, lessons learned and the need for future research

Lessons learned

The first conclusion to draw from the above analysis is that we do not have sufficient evidence to demonstrate the effectiveness of decentralization even in four countries with significant periods of decentralization and with considerable secondary research on the issue. This situation is both understandable and deplorable. It is understandable because it requires major research effort to gather relevant data in a systematic manner over time to evaluate the equity, efficiency and quality of a health system. It is deplorable because there have been ongoing debates about the advisability of decentralization which have been based on theory and anecdotal evidence rather than systematic studies.

Based on the partial evidence presented above, we can, nevertheless, draw some tentative conclusions related to the decision space allowed. Reviewing the decision space allowed to local governments and districts in the four countries we can conclude that the range of choice over different functions

may have contributed to the successes and failures suggested by the few studies carried out. In the following sections we review each of the major functions of the decision space map.

Financing functions

The general range of choice over financing issues that was allowed in all four countries was in the moderate to wide range for almost all sub-functions. Only the Philippines had wide choice at the local government unit levels over sources of revenue and income from fees. In this function all countries were able to increase resources available at the local level. Most have accomplished a corresponding reduction in spending on central bureaucracies, though it would appear that those countries that have delegated responsibility to a leaner quasi-governmental agency have achieved greater savings than those pursuing devolution. However, the increased level of expenditure at the local level has not been accompanied by any significant increase in local resource generation. Among the devolution cases, Philippine LGUs raised significantly more taxes than Ugandan districts, but collection rates and efficiency in both cases were extremely low. User fees were utilized in all cases, but did not represent a significant base of own-source revenue in any case, with the possible exception of Ghana. Dependency on central transfers may not have been bad in itself, but may represent a limit on increased local cost-consciousness and financial soundness.

The evidence available suggests that the Philippines had the most difficulty on financing issues, since the allocation to local governments was not in accord with responsibilities – the provinces which were responsible for the most expensive hospital care gained the least, while the municipalities and barangays with the least expensive care gained the most. This problem, however, was not due to the local choice but rather was an error in the central design of the allocation formula.

We do find some evidence that local choices on expenditures in the Philippines and Uganda resulted in allocations to curative care rather than the national priority of primary care. This is consistent with a principal–agent problem, which identifies the potential for local preferences differing from those of the central government, unless the central authorities provide appropriate incentives or effectively enforce limits on local choice. In Uganda, we observed a tendency to move health resources toward curative care at the expense of primary care. This type of response is predictable, to some degree, given the different political incentives faced by local governments. Spending on curative services is more visible, and often favours better organized constituencies, making it a more politically rewarding investment for district governments. Alternatively, this focus may also reflect a ‘division of labour’ whereby local governments compensate for what they perceive as a primary and preventative care bias in national and donor-supported vertical programmes.

In the Philippines, on the other hand, we saw that local governments gave uniformly high priority to education, but LGUs differed with respect to the priority given to health spending. Where health indicators were higher, spending declined, and vice versa. To the extent that these data are accurate, it would seem to indicate that local governments may allocate health resources according to marginal return. If this is the case, LGUs may be making more efficient use of resources on the basis of greater information concerning local needs and priorities.

Whatever the conclusion regarding the appropriateness of local allocation decisions, it is important to note the apparent effectiveness of the variety of tools deployed to help guide such decisions, including performance contracting, ‘shadow’ budgets, and budgetary allocations within limited maximum and minimum ranges. Interestingly, such tools function within radically different overall decentralization strategies. For example, performance contracting was employed by both the Ghanaian and the Philippine systems. In Ghana these contracts were essentially a means of vertical control within the Budget Management Centre hierarchy, while in the Philippines they were an incentive mechanism to promote local government investment in national health priority areas. In both cases, performance contracting provided an incentive-based mechanism that appeared to function positively. In Uganda, where ‘shadow’ budgets and the Essential Health Package were the only guidelines for health programming, it was necessary to establish a conditional health care grant in order to encourage investment in primary care. Zambia permitted districts to develop and manage their own budget and annual work plans, and controlled them through central approval and quarterly performance auditing.

Human resources

Human resource policy is a particularly contested area of local decision space. While in no country did local authorities have significant control over salaries, there was variation among the countries over contracting individual providers and over hiring and firing. This area is important for at least four reasons. First, because salaries and benefits are usually the largest single budget line item, control over number, types and salaries of staff has a dramatic effect on the distribution of decision space between central and local actors. We saw this is in a particularly dramatic way in the Philippines and Uganda cases. In the Philippines, health care workers were able to push through legislation requiring unified national salary and benefits scales that exceeded central transfers to local governments for health personnel. These requirements operated essentially as ‘unfunded mandates’, which significantly reduced local governments’ discretion over the resources they receive. In Uganda, despite the large and relatively unburdened block grants apportioned to local governments, delegated salaries helped reduce the amount of discretionary resources to 25% of the funds in district annual work plans.

Secondly, the allocation of hiring, firing and supervision authority has a strong influence on health sector governance and the real range of decision space at any given administrative level. This issue was evident in nearly all of the cases studied, but was particularly exemplified by the Zambian case. Here the District Health Management Teams (DHMTs) were established before the District Health Boards, consisted of medical personnel, and exerted a controlling influence due to

their technical proficiency in health sector policy and issues (Foltz 1997). While the Boards were ultimately supposed to be the employers of the DHMTs, according to the 1997 independent review they were generally considered to have an advisory role. As of mid-1998, the Boards were scheduled to be given the power to hire and fire district health staff. Tension between the Boards and the DHMTs has been reported, as the DHMT questioned the technical capacity of the Boards and express anxiety regarding employment issues (Foltz 1997). It remained unclear what authority the Boards were ultimately to have over salaries, benefits and career structures for health personnel. Accounts of direct hiring of hospital personnel by the Minister of Health (Foltz 1997) and recent strikes over salaries and working conditions would seem to indicate that human resource policy and management remains firmly in the hands of the MOH. Tellingly, one union leader involved in the strike at the University Teaching Hospital (UTH) was quoted as saying: 'What we want is the Government, which is our employer. What can we discuss with the UTH management? They don't handle the conditions of service' (Times Reporter 1998).

Thirdly, the management of health sector personnel is a highly politicized issue and may have dramatic effects on the viability of decentralization reform programmes. Health care workers are often well organized, and may face significant losses as a result of decentralization. The Philippine case is an excellent illustration of organized health care workers who pressed strongly for re-centralization. Failing this, they obtained concessions that significantly reduced local government decision space, and may detract considerably from some of the efficiency gains to be had from decentralization. This is a factor to be carefully considered in the design and development of reform programmes.

Finally, there is a tension between the objective of increasing efficiency and local government autonomy, on the one hand, and the quality and equity benefits of a uniform national service cadre with vertical mobility, on the other. In Uganda, for example, differentials in district vs. central government pay scales were 'harmonized' prior to devolution, and the district governments were required to adhere to a unified national pay scale. Districts, however, were allowed to set their own benefits and allowances, a policy which was said to have contributed to the deterioration in conditions for non-hospital health care workers after decentralization (Okuonzi and Lubanga 1995; Hutchinson 1998). Hospital workers, meanwhile, were not decentralized, but continued to be salaried under directly delegated transfers from the Ministry of Finance. These centrally paid hospital workers were more likely to receive their full salaries on time, while locally hired staff often went months or even years without being paid. The resulting disparities and the deterioration of quality of care may accompany an increase in local decision space.

Innovations in service organization and popular participation

One of the noteworthy findings of the present study was the degree of innovation in policy tools, particularly among the African countries studied. All three of these countries permitted private contracting of health services, either mission health providers (Ghana and Zambia) or NGOs (Uganda). Moreover, each of these countries has shown considerable innovation in the development of user fees and prepayment mechanisms.

With respect to mechanisms of popular participation, there is not yet enough information to make generalized conclusions about their effectiveness. However, both the Zambian and the Ugandan cases seem to support the observation that participatory institutions are significantly more effective where greater investment is made in their training and development. It is important to note that merely legislating a role for committees at the facility or higher levels will not, in and of itself, provide the greater oversight, accountability and channel for expression of user preferences which is hoped for. It appears, not surprisingly, that these institutions must receive long-term training and technical assistance to be truly useful.

Assessing future research needs

The survey of existing studies presented in this article has allowed us to make some valuable, if fragmentary, conclusions about the successes and failures of decentralization policies in the four countries studied. Equally important, however, they provide us with a road map for future research.

First, if policy-makers are to understand how to refine existing decentralization programmes and better design those of the future, we must first have more detailed information on what precisely local agents are doing with health resources. What degree of variation is seen among local agents within a given country in patterns of health spending? What factors are responsible for these variations? Country-wide comparative analysis of local agent workplans and budgets would be extremely helpful in gaining a more comprehensive picture of just what local agents are doing with the greater resources channelled through them as a result of decentralization. Consistent and routine reporting systems for finance, utilization and health outcomes is more important under decentralization than under centralized systems.

Secondly, we need to better understand the factors that drive local decision-making processes. In many cases, local agents are simply thought of as 'black boxes'; resources are transferred to them and controls exerted over them, but it is not clear exactly what factors influence their choices. What tools or factors are most likely improve local agent compliance with national objectives? To what degree are democratic institutions and/or civic participation relevant to effective local decision-making? Investment in selective case studies of local agents would be extraordinarily helpful in refining the mechanisms by which governmental principals attempt to guide local agents through sanctions, incentives and investment in popular participation.

Thirdly, the focus of the decentralization programmes studied has been primarily on shifting resources and authority, in some measure, to management institutions in a position somewhere between the central government and the facilities at which care is provided. It is notable, however, that

relatively little is reported in the literature about the effects of this transfer on facility level management. It is quite possible, for instance, that under a regime of decentralized expenditures the same difficulties experienced with the central government will be reproduced at the district level. These may include overspending on bureaucracy, lack of fiscal discipline, inappropriate allocation of funds between curative and preventative health, and inequitable distribution of resources between urban and rural areas. The research surveyed does not provide sufficient basis for strong conclusions about the relationship between local authorities and local facilities.

Fourthly, and perhaps most importantly, we must have more information tracking the effects of decentralization on health sector performance. In particular, systematic quantitative studies of proxy variables for efficiency, quality, equity and financial soundness are necessary. How have sector outputs per expenditure changed, if at all, as a result of decentralization reforms? What degree of variation among local agents do we see in the levels of expenditure, utilization and the quality of service provided? What factors account for this variation? There has been some research initiated in this area but it is far from sufficient to draw general conclusions (Angeles 1999; Atkinson 2000).

Fifthly, it will be important over the long term to try to assess the impact of decentralization on health status outcomes. While decentralization may not have an immediate impact on health status, except perhaps on some specific disease interventions that are vertically run, it is still important to assess any of the system reforms in terms of its impact on the major objectives of a health system – improving health status.

None of the foregoing is easy.[3] Data availability and the very complexity of these questions poses limits to such research, but national level data analysis can orient the selection of detailed case studies necessary for performance evaluation and recommendation. This work is essential to a proper understanding of the functioning of decentralization policies and their effective design and refinement over time. Such investment is more than justified by the amount of resources now dedicated to decentralization programmes, and far more importantly, the potential gains and losses at stake in millions of people's quality of life.

Endnotes

[1] For detailed 'decision space' maps see Bossert et al. (2000).

[2] In Ghana, the proportion of government recurrent expenditure directed to the health sector rose from 7 to 8.4% between 1996 and 1997; however, inflation eroded the value of expenditure so that, in real terms, expenditure remained constant. Zambia's health allocations show a more positive trend, though within a generally dismal situation. While by 1994 social expenditures declined to a mere two-thirds of their 1980 levels, the health sector's share of overall government spending increased from 5.3% in 1991 to 10.9% in 1995 (USAID 1995). Uganda posted gains in the proportion of government spending dedicated to health in the late '80s, but since the 1993 implementation of health sector devolution, expenditure levels have remained relatively steady at around 9–10% of total public spending (Okuonzi and Lubanga 1995). In the Philippines local governments received increased funds through decentralization, but the proportion of these funds spent on health were relatively constant in the post-decentralization phase (Loehr and Manasan 1999) and overall health expenditures remain low at approximately 2% of GNP (Herrin 1992).

[3] The authors are engaged in on-going research in four countries to attempt to address some of these issues. The research is still limited by available primary data; however, some advances are being made. The results of the studies of Chile, Colombia, Bolivia and Zambia will be the subject of future articles.

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