

**Public Hospital Corporatization and Innovation in Lebanon and Chile: Agency and Decision Rights Approaches**

by

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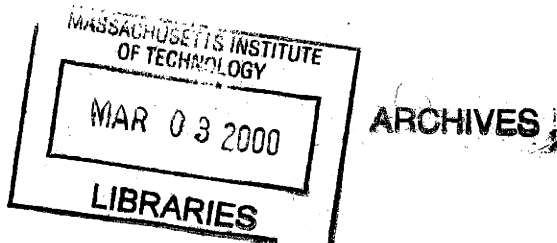
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## **ABSTRACT**

As the term “bureaucracy” has acquired increasingly negative connotations, one important set of problems concerning both scholars and policy makers interested in the public sector relates to incentives and institutions that are conducive to good performance. Recent developments in agency and contract theory shed some new light on old questions about public sector performance, of which I address three in this dissertation. The first question has to do with the manner in which institutional design in general, and decision rights allocations in particular, affect performance. The second has to do with the design of boards of governance in semi-autonomous, corporatized public agencies and how that affects incentives for performance. The third question has to do with incentives that drive innovation in the public sector, and encourage managers to create value in their work.

I address the first two questions in empirical papers drawing on the recent experience in public hospital reform in Lebanon. In one paper, I develop a framework that analyzes decision rights evolutions in an innovative, quasi-legally corporatized public hospital. In another, I use the multi-tasking common agency model as an analytical lens to understand board member (principal) appointments and decision rights on corporatized hospital boards. I draw lessons from these two papers for the reform of the public hospital corporatization law in Lebanon. My final paper explains innovation in municipal finance in Chile, using the incomplete contracts approach. In each of the papers, I draw lessons for institutional design.

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## OVERVIEW

Skeptics abound when it comes to using theories that explain firm behavior to understand the public sector. Such applications are problematic, skeptics argue, because the government's objective function is more complex than that of a firm since the former reflects a multiplicity of agents and conflicting goals, ranging from those of politicians, to civil servants, to citizens. However, skepticism should not deter effort in this area, for two main reasons.

First, since the early 1980s, an increasing number of economists have opened the "black box" firm that was the basis of analysis in the neoclassical tradition. Inside this box, organization economists have found problems of information, influence, and incentives, which produce a more variegated objective function than what was assumed earlier. These economists are concluding that often, rational, self-interested agents in firms behave in ways that are inefficient, informal, and "bureaucratic", much like the ways of the public sector (Holmström 1989; Aghion and Tirole 1997; Aghion 1995).

Second, there is an increasing number of case studies that document good performance in the public sector, driven by incentives and motivations, interest in efficiency and cost-effectiveness, career concerns and pressures for accountability (Barzelay 1991, 1992; Clark 1994; Eid 1996, 1999; Moore 1996; Osborne and Gaebler 1993). There is a subset of these cases that discusses good performance resulting from financial distress. Such cases are fascinating because they resemble, both in process and in outcomes, the experiences of firms that were forced to improve their financial management when they underwent leveraged buy-outs in the 1980s. These experiences

in the private sector have been studied by Baker (1990), Holmström (MIT 15.946), Jensen (1988) and Kaplan (1997).

My research contributes to this conceptual and empirical convergence by exploring the extent to which the same theoretical frameworks can be used to understand both the public and the private sector. I do this by focusing on two approaches designed to understand the firm: the decision rights approach and the agency approach. I examine the models' validity as general "models of organizations" -- an application the designers of these theories have advocated with varying degrees of qualitative and quantitative rigor. In doing this work, I have taken a closer look at conclusions about the firm -- such as the importance of properly aligned incentives, institutional structures, decisions rights allocation, and optimal organizational form -- that are often referred to in the literature on the public sector. I respond to questions raised by public sector scholars (Wilson 1989; Moore 1996; Barzelay 1991) interested in the insights of economic models, and to calls by economists interested in applying their models to the public sector (Tirole 1994; Aghion and Tirole 1997; Williamson 1997; Dixit 1996). The empirical units of analysis of my three papers are drawn from the public sectors of Chile and Lebanon.

The first two papers are on Lebanon. In one paper I use the decision rights approach to understand the manner in which institutional design in general, and decision rights allocations in particular, affect performance. I develop a framework that analyzes decision rights evolutions in an innovative, quasi-legally corporatized public hospital. The main spenders within health care systems internationally, public hospitals have come under increased scrutiny as fiscal pressures have led to the need for improved expenditure allocation and operational efficiency. In a bid to achieve this, many governments have

resorted to corporatization -- a hybrid organizational form that grants hospitals varying degrees of managerial and financial autonomy but retains public sector ownership. Among the difficulties in designing corporatization are those related to proper decision rights allocations and incentive alignment. In this first paper on Lebanon, I analyze how a quasi-legally corporatized hospital designed its own decision rights allocations in a “bottom-up”, demand-driven manner. I find that there are important elements of this design that have been neglected/omitted in the formal/legal design that grants autonomy to all public hospitals in the country.

The second paper on Lebanon studies the design of boards of governance in corporatized public agencies and how that affects incentives for performance. I use the multi-tasking common agency model as an analytical lens to understand board member (principal) appointments and decision rights allocations on corporatized hospital boards. I find that the model explains some important elements in board design that can inform our understanding of corporatization. I also find important elements in the empirical case that the model cannot explain. I draw lessons from both papers on Lebanon for the amendment of the national legislation on public hospital corporatization, which this research has promoted. I also develop ideas for further conceptual research in applying theories of the firm to the public sector.

The third paper is based on empirical work carried out in Chile on an innovative municipal finance program. It draws on the incomplete contracts approach to explain what motivates some mayors to incur the risks of innovation and create value in their work, and others not. I offer explanations for when we might expect innovation in the



public sector, what drives it, and how long we can expect it to last. In all three papers I offer ideas for public sector institutional design.

## **Understanding good institutional design in hospital corporatization**

### ***1. Motivation for this paper***

To understand some elements of good design in hospital corporatization, I provide an in-depth analysis of an innovative and successful case in Lebanon, Hôpital Dahr El-Bachek (HDB), a hospital that acquired its own autonomy quasi-legally beginning in 1989. Methodologically, this paper can be read as a case study in the development of the property rights approach for analyzing institutional design.

Corporatization is a hybrid organizational form that grants public hospitals (varying) degrees of financial and managerial autonomy, through a corporate board, but retains public sector ownership of the hospitals. Lying mid-way along a continuum of hospital organizational boundaries, ranging from budgetary units to privatization, corporatization has become an increasingly common reform in response to changes in medical technology, know-how, and cost. Today, numerous industrialized and developing countries are experimenting with the separation of funding from provision functions, with the aim of improving efficiency. These changes have resulted in two prominent trends worldwide, vertical disintegration and horizontal integration (Robinson 1996, 1999). In response to these changes, hospital boards have evolved from the “caretaker” board to the “strategy-oriented”, “corporate” board. Traditional hospital

governance was mostly hospital focussed and internally oriented. Since the late 1980s, it is increasingly healthcare focused and externally oriented, with the board governing complex interdependencies with market actors (Shortell, 1989).<sup>1</sup>

The design of corporatization is difficult. Among the issues being grappled with worldwide are:

- Consistency between the proclaimed objectives of corporatization and organizational design, i.e., where on the gamut between administrative units and performance contracts the system lies;
- Whether key stakeholders are represented on hospital governing boards and how much influence they wield;
- Requisite alignment of the incentives of the hospital manager with those of the board, as well as the alignment of the objective function of the hospital with that of the sector – a coordination problem that impacts both the quality and cost of service provision;
- Adequacy of the power of incentives given intended outcomes.<sup>2</sup>

In Lebanon, HDB's experiment with autonomy was watched and emulated over a period of seven years. In 1996, a law was passed to corporatize all public hospitals in the country by granting them boards of directors and financial and managerial autonomy. However, partly because of its quasi-legal status, and partly for political reasons, very few design lessons from HDB informed the drafting of the 1996 legislation, and

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<sup>1</sup> A range of hospital governance models has accompanied these changes over the past 30 years, summarized in Appendix A.

<sup>2</sup> A related paper (Eid 1999b) draws on lessons from the HDB case and agency theory to analyze system-wide problems in the legal structure of corporatization in the case of Lebanon.

important opportunities were missed to draw lessons from the successes and shortcomings of the HDB experiment. Meanwhile, implementation difficulties experienced by recently corporatized hospitals have revealed numerous design problems in the new legal structure (Implementation Decrees) governing autonomous hospitals, and the Ministry of Health (MOH) is looking to amend the decrees. The final section of this paper will seek to draw some lessons from the HDB experience to inform the amendment of the hospital corporatization decrees.<sup>3</sup>

In light of reform efforts in Lebanon today, it is important to understand how HDB transformed itself into a better hospital. I do not seek to evaluate how well HDB has been doing, neither in comparison to some average in the private sector, nor to any other benchmark. The focus of this analysis is to show *how HDB transformed itself* into a corporatized hospital, with the objective of understanding how its new institutional design allowed it to improve its performance. In analyzing the design of HDB, the “strategy-oriented”, “corporate” model of hospital governance will be used as a benchmark, given that the reforms underway in Lebanon seek to place public hospitals in a position to function as modern competitive hospitals (Interview with Roger Sfeir, advisor to the Minister of Health).<sup>4</sup>

The main findings of this research relate to incentives and risk transfer, areas where micro/organization economics has made important contributions (Holmström

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<sup>3</sup> In a separate policy note (Appendix B), I have analyzed the Law on Public Hospital Autonomy and its Decrees of Implementation in Lebanon, and recommended the amendment of the decrees. The new minister of health, who took office in November 1998, has launched this process.

<sup>4</sup> Appendix A summarizes the evolution of hospital governance over the past 30 years and provides a profile of the “corporate” model. This profile was submitted to the Ministry of Health as a basis for the drafting of the Internal Organization Decree, the last of five decrees, yet to be prepared for ratification by the Council of Ministers.

1979). Given the inevitability of designing systems, laws included, “top-down”, useful lessons can be drawn from demand-driven, “bottom-up” experiences like HDB. Among these lessons is the importance of designing systems that provide hospital management with a return that is commensurate with risk - the essence of providing high-powered incentives. In the public health sector, this first entails ensuring the some risk is in fact transferred to the corporatized entity, which is seldom the case. Appropriate risk transfer can then be achieved through careful attention to institutional design, particularly decision rights allocations that join residual claimant with residual control rights where feasible.

Section 2 explains the choice of HDB as a case study, offers a profile of the hospital and describes the background and setting it operates in. Section 3 discusses the assumptions and application of the property rights approach and describes the research methodology I have used. Section 4 analyzes the pre-corporatization decision rights setting that governed all public hospitals in Lebanon prior to 1996. The focus of Section 5 is two-fold: it identifies the bundle of decision rights HDB created for itself as it designed its own autonomous structure, and it analyzes the evolution of these decision rights allocations. Section 6 draws lessons from HDB for the amendment of the legal structure governing corporatized hospitals in Lebanon today using the “strategy-oriented”, “corporate” model of governance as a benchmark.

## **2. *Why HDB is an interesting phenomenon***

After 15 years of war, the Lebanese Ministry of Health had severely limited financial and technical capacities to operate its public hospitals. During the last two years of this war, and over a period of 7years, HDB began to transform itself from a 15-

bed hospital providing small surgery and basic medical treatment, to a 110-bed hospital that offers a range of services, from physiotherapy to plastic surgery. HDB became touted as the “best” hospital in the public sector. Although no detailed comparative studies have been carried out, patient demand, as well as basic quality and productivity figures confirm that HDB deserves the reputation it has come to enjoy. The success of HDB is due to three important factors: (1) the devotion of those who headed, lead, and supported it over time; (2) the contributions of its patients who were mostly of the lowest socio-economic background in the country and; (3) donations of NGOs and international organizations, solicited by HDB patrons (HDB records).<sup>5</sup>

Prior to 1996, patients were not obliged to pay for treatment received at public hospitals in Lebanon<sup>6</sup>, nor were hospitals allowed to place funds in commercial bank accounts. Public hospital funds, along with all MOH budgetary allocations, were held by the Treasury. Under the leadership of an innovative director, and a supportive minister of health, HDB set up a nonprofit association, the *Association Libanaise de Soutien Médico-Hospitalier* (ALSM), whose 7 members came to function as a board of directors for the hospital.<sup>7</sup> Among the roles it took on, the ALSM became a repository for funds collected through cost recovery and funneled back into the hospital to supplement operating and capital expenditures. The revenue-raising capacity that HDB created for itself was at the

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<sup>5</sup> Eid (1999a) for a summary of HDB’s trajectory toward success.

<sup>6</sup> Although patient “contributions” were recommended, according to the text of Decree #325 (1971) which amended the original decree defining the Organization of the Ministry of Health (#8377, 1961), the practice was for public hospitals to provide what services they were capable of providing, free of charge.

<sup>7</sup> The founding members of the ALSM were Edouard Abboud (*ex officio* member and Director of HDB at the time, an ophthalmologist), Ramez Awad (an orthopedic surgeon and Dean of the Lebanese University Medical School at the time), Bechara Hatem (current president, a lawyer), Michel Matta (a pediatrician), Tony Menassa (first president, a business man), Nicolas Sassine (a pharmacist), Georges Sfeir (an engineer), and Joe Saleh (a bank manager).

heart of the experiment because it allowed the hospital to make decisions rapidly and independently of the central administration over a range of areas of hospital finance and management.<sup>8</sup> Fees charged to patients (“contributions”) were placed in the ALSM’s bank account, which then made “contributions” to supplement HDB’s operating and capital expenditures.

When the topics of politics and public service delivery are discussed together, it is usually to illustrate the corrupt influence politicians have on the public sector.<sup>9</sup> The case of HDB is an interesting counter-factual where political influence was crucial to the improvement and continuity of service delivery and, instead of corrupting the experiment, served to protect it. Perhaps the most important political champion of the experiment was the Minister of Health at the time who, knowing all too well the inadequacies of his sector, turned a blind eye to the informal aspects of the budding experiment, allowed the hospital to thrive, and flaunted its achievements.<sup>10</sup> The high profile acquired by HDB helped to immunize it from corruption.<sup>11</sup> During his tenure from 1991 till 1996, the Minister of Health visited the hospital at least 11 times, attended the ALSM’s social and fundraising events, held press conferences from HDB and invited

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<sup>8</sup> The inclination to innovate, when agents are given (or take) local control is a universal phenomenon that has been shown in theory and in practice. In a separate paper (Eid 1996) I show how an innovative municipal finance program in Chile can be explained using the same conceptual approach applied in this paper.

<sup>9</sup> A tradition of literature on rent-seeking in the developing world is replete with such examples (see, e.g., Krueger 1974).

<sup>10</sup> Interviews with Michel Tabet and Walid Ammar, former and current Directors General of the MOH, respectively.

<sup>11</sup> See, e.g., Geddes (1994, 1990) on the importance of insulating public sector reform initiatives from politics.

one Swedish and two French ministers of health to showcase visits of HDB while they were in Lebanon.<sup>12</sup>

Interestingly, what little political pressure HDB was subject to came in the form of requests to the HDB director to sign off on forms allowing patient admissions to private hospitals, under the MOH subsidy system.<sup>13</sup> The director would sometimes have to sign off on these requests despite the fact that the treatment being sought could be provided by HDB.<sup>14</sup> This preference for private sector treatment was, of course, based on the conviction that the public sector was not “good enough”, and in most cases it was not. Political pressures created a perverse public sector competition that indirectly hurt HDB and resulted in a decline in its admissions rates beginning 1995, as productivity figures will show. As far as direct intervention in HDB activities, none of the local political leaders thought it worth their while, thereby sparing the HDB experiment as it grew.

## ***2.1 Profile and setting***

HDB has a long and interesting history (Sabbagh, 1987). Founded in 1909 as a tuberculosis sanatorium on a beautiful hill overlooking the coast of Beirut, it was among the first of its kind in the Middle East. HDB came to exist thanks to a land donation by the Menassa family, and the efforts of a foundation created and led by a group of Lebanese and American philanthropists at a time when American missionary activity had initiated many important projects, including the American University of Beirut. Dahr el-

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<sup>12</sup> Interview with Marwan Hamadé, former Minister of Health (13.VIII.98) and ALSM Minutes of Meetings.

<sup>13</sup> This was an emergency measure passed during the war. Reform efforts are underway today because 90% of MOH expenditures go toward private sector cost reimbursement. The consequences have ranged from complaints, to over-billing on the part of hospitals, to pressure on the MOH from private sector pressure groups, to arrears on the part of the MOH to the tune of USD400,000,000.

<sup>14</sup> Interview with Edouard Abboud, former director of HDB.



Bachek means "Peak of the Sparrow-Hawk". Home to this particular specie of birds, this peak is one of many in mountainous Lebanon.

Pillaged by Ottoman troops during World War I, the sanatorium resumed its activities and expanded their scope thanks to the contributions of its patients, many of whom came from affluent families in the Middle East and the Gulf, and the commitment of its patrons, including a non-profit foundation started in Boston in the late 1920s by Lebanese and Syrian immigrants. This foundation made continuous in-kind and financial contributions to the sanatorium over a period of 20 years, including equipment donated by the Ford family. This was a time when the rate of recovery from T.B. did not exceed 25% and T.B. was a little understood and highly feared social as well as medical problem.<sup>15</sup>

By the 1960s, T.B. recovery rates had risen to 95% and a declining number of affluent patients came to the sanatorium as the average recovery period dropped from 20 months in the 1940s to four months in the 1960s, and as T.B. was no longer feared and home care became possible. By the late 1960s the sanatorium was no longer able to cover its costs and was donated to the government which transformed it into a public hospital in 1971.

The war in Lebanon started in 1974 and until 1990, this period resulted in a progressive deterioration in human and capital resources in the public sector. Several

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<sup>15</sup> The history of the sanatorium was also colorful. An important component of the cure was meat. It was delivered to the sanatorium on a donkey that the butcher would ride and tie to a tree in the forest adjoining the sanatorium. The butcher would only accept remuneration for the meat in the form of coins in a sack tied to the donkey's neck, which he would empty into soap water once he led the donkey back to the shop. Once the directors of the sanatorium ensured the continuity of supplies by fearful locals, they would focus their energies on organizing poetry readings and national and regional holiday celebrations that the affluent and intellectual patients of the sanatorium had proclivities for.

local and international humanitarian agencies took an interest in HDB during this time, most notably the French Médecins du Monde which made several capital donations to reconstruct damaged buildings. In terms of the trajectory of HDB since the late 1980s Médecins du Monde's most important contribution was the smallest in financial value and the largest in sustainability. It was a grant of \$127,000 that made possible the creation of a rudimentary one-time bonus system for staff to encourage them to brave the bullets and come to work. The idea of creating the ALSM to continue and perfect the system came about at this time. During the tail end of the war (1989-90), as the Médecins du Monde project was being implemented, the region surrounding HDB was suffering the worst of Lebanon's war experiences, and HDB doctors often slept at the hospital in order to keep up with the treatment of casualties admitted (Interviews with Edouard Abboud, former Director of HDB).

HDB is located in an area that experienced rapid population growth and industrialization during the war years (1974-90). This northern suburb of Beirut is densely inhabited, and its small industries mostly employ manual workers such as carpenters, mechanics, tailors and leather workers. These tend to be uninsured and often undeclared employees (of the informal sector). In addition, a large proportion of HDB patients constitute Sri Lankan, Egyptian, Ethiopian servants laborers working in Lebanon. Many of these tend to be uninsured. Finally, in 1994, 15.15% of HDB's patients lived in remote areas like the Kesrouan (3%), Byblos (3.3%) and the North Metn (3.1%) and in the South (3.09%) and in Baalbek and the Bekaa (2.64%), regions that had their own public hospitals (Jabbour, 1994). Such patients most certainly came to HDB because they could not find better treatment at a lower cost elsewhere. HDB's war year

experiences, combined with this clear demand for its services went far in motivating the ALSM founders to improve the hospital.

### **3. *Analytical approach and research methodology***

The property rights approach derives from a large body of literature on agency theory and transaction costs which began to explore alternatives to the neoclassical, “technological” view of the firm as a production function (see, e.g., Chandler 1990). Among the important issues the neoclassical approach is silent on are incentive problems within the firm, the hierarchical, decision-making and authority structures that govern organizations, as well as their boundaries. Over the past 20 years, agency theory has made important contributions to explaining incentive problems within organizations (Hart & Holmström 1987; Holmström 1994; Laffont & Tirole 1993). The transaction cost literature starting with Coase’s famous 1937 paper has been developed by Williamson and others and has contributed the important distinction between a theoretical contract and a real, incomplete contract. Building on the idea of contractual incompleteness, the transactions costs approach resulted in explorations of the costs and consequences of renegotiation, asset specificities and the hold-up problem (see e.g. Dewatripont 1989; Klein et al. 1978; Fudenberg & Tirole 1991; Meyerson & Satterthwaite 1983 and Joskow 1985).

The property rights approach contributes an explanation of organizational change, namely what happens when firms merge or de-integrate. Because of its focus on the micro-dimensions of organizational change, this approach has the potential of shedding new light on old questions about the public sector, such as why and when decentralization is desirable, and what exactly happens to incentives and performance

when a public agency is decentralized. Crémer, Estache and Seabright (1995), Tommassi & Saiegh (1999), and Schwager (1999) are among the new explorers of this vein of the property rights literature to understanding public sector organization. Eid (1996) was written with the same objective.

The property rights approach assumes that all contractual arrangements are by definition incomplete because it is impossible to account, *ex ante*, for every possible contingency. Given contractual incompleteness, “residual control right” allocations are critical.<sup>16</sup> A basic premise of the property rights approach is that organizations work well when they allocate the authority to make decisions to the agents best informed to make them. Incentives also have to be correctly aligned, between principals and agents, otherwise those with the information can make decisions that are in their interest, but not necessarily in the interest of the organizations to which they belong. Key to aligning incentives is the pairing of control rights with claimant rights -- the entitlement to receive any net income that a given asset (or firm) produces. Typically, the asset owner is entitled to the income that remains from revenues after all expenses, debts and other contractual obligations have been paid off. This net income is the “residual return” (Milgrom & Roberts 1992). If the residual claimant also has residual control, then he/she will be led to make efficient decisions just by maximizing his/her own returns. When decision rights are paired in this way, decision rights allocations are said to be “optimal”

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<sup>16</sup> ‘Residual control rights’ over an asset are defined by Hart (1995) as “the right to decide all usages of the asset in any way not inconsistent with a prior contract, custom, or law ... possession of residual control rights is taken virtually to be the definition of ownership ... in contrast to the more standard definition of ownership, whereby an owner possesses the residual income from an asset rather than its residual control rights” (pp.30). Residual control rights are also referred to as ‘decision rights’ by Holmström (1995), Milgrom and Roberts (1992), and Kreps (1992). The latter, shorter term is used more frequently in this paper.

for maintaining and increasing the value of the asset or organization in question.<sup>17</sup> Changes in organizational boundaries, say from centralization to decentralization, are accompanied by changes in formal and informal rules that allocate control rights. These allocations, in turn, distribute power within organizations, and affect the incentives agents have to perform and innovate.

Although the property rights approach offers an interesting analytical lens for understanding organizations, few empirical tools have been developed to draw on the insights it offers. There have been even fewer applications of this approach to the public sector despite the importance of the issue (Hart, 1995). I return to this in Section 5.5 and suggest that the study of hybrid organizational forms like corporatization offers an opportunity to focus on some important dimensions of ownership in the public sector.

This paper develops a framework for applying the property rights approach and uses HDB as a case study<sup>18</sup> to show how this hospital selectively adopted the decision rights necessary for it to improve its performance over time (as demonstrated through its productivity and activity figures). The study compares decision rights allocations before and after HDB was corporatized. To get at the full picture, this analysis will also show how some decision rights would have been desirable, but were not adopted because it would not have been “optimal” for HDB to adopt them at the time, because of systemic, process, and capacity constraints:

- (a) It would have been unrealistic to do so given systemic constraints such as unpredictable public sector financing, contradictory MOH policies, the absence of public transportation to the hospital. These factors contributed to fluctuations

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<sup>17</sup> For a discussion of the relevance of this approach to health, see Harding & Preker (1999).

in HDB's liquidity, a conservative financial policy, the lack of an aggressive expansion strategy, and a weak nurse employment strategy. Had it not been for systemic constraints, the ALSM could have been more aggressive about creating/retaining and executing decision rights in these areas.

- (b) HDB was limited by process constraints, most important of which was the fact that the director had appointed the ALSM, while the process tends to be the reverse in normal boards. As a result, the ALSM had limited power over the director, and many decision rights that it sought to adopt and implement were diluted, and the ALSM allowed them to be reallocated or abandoned.
- (c) HDB and the ALSM had capacity constraints that precluded them from adopting the full set of decision rights originally envisioned. For example, HDB had weak middle management capacity. The ALSM had weak business/finance strategy capacity that precluded the implementation of decision rights related to market positioning and financial planning.

As this discussion shows, HDB's "optimality" was subject to systemic constraints, process constraints, and capacity constraints, and the secret to HDB's sustainability was in reaching an equilibrium that maximized HDB's objective function subject to these constraints. Violation of these constraints risked tipping the delicate balance that allowed this hospital to prosper. In turn, lack of careful consideration of such constraints and others have resulted in problems in the implementation of the centrally designed, national public hospital structure under Law #544, as will be discussed in section 6.

### **3.1 *Research methodology***

This research is based on structured and open-ended interviews, analysis of documents, minutes of meetings and legislation, as well as some financial analysis based on annual reports and financial statements from HDB and other hospitals. Between March and September of 1998, I benefited from permission to take part in weekly meetings of the MOH Task Force on Public Hospitals as a participant observer.<sup>19</sup> My presence in these meetings was crucial to understanding the sectoral and macro dimensions of public hospital reform in Lebanon, and the day-to-day obstacles encountered in implementation. During the summer of 1999, I benefited from permission to accompany the MOH Ratings Commission to inspect public and private hospitals and assess their standards, HDB included.

During the summer of 1997, a first round of introductory, then open-ended interviews was carried out with 5 of the seven founding members of the ALSM and some HDB and MOH employees as I was exploring doing this work. Along with many other things, the tradition of serious research on the public sector disappeared during the war in Lebanon. Introductory interviews were important to laying the groundwork for substantive discussions, which would typically only begin with a second meeting. I conducted another series of interviews was carried out with all six members of the ALSM during the summer of 1998 and the summer of 1999, this time using the Decision Rights Analysis Interview Framework I had developed during the Spring of 1998. These interviews lasted three hours on average, and began with an explanation of the approach and with definitions of decision rights and decision rights allocations to ensure that

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<sup>19</sup> See Pomper (1991) and Jorgensen (1989) for a review of the benefits and constraints of participant observation as a qualitative research method.

interviewees had a uniform understanding of both the approach and the questions. Two criteria were used to determine who held a decision right:

- (a) If the director held the decision right over a given area, he could make changes, either without informing the ALSM at all, or by informing them only after changes had been made;
- (b) If the ALSM held the decision right, they would make decisions during ALSM meetings, and the director could not proceed in implementing anything related to the decision without having received the result of the discussion by the ALSM.

Typically, the director was party to all discussions as *ex officio* member of the ALSM, so he can be considered to have been a co-holder of most rights, some more strongly than others depending on how much influence he had over final decisions made, and whether he abided by decisions taken. He was the sole-holder of most decision rights internal to the management of the hospital.

To track the evolution of decision rights allocations over time, each of the boxes in the Decision Rights Analysis Interview Framework was divided into three rows representing the periods 1991-1992, 1993-1995, and 1996-1997, respectively. To determine the degree of influence each of the actors in the columns (ALSM (SC), HDB Director, MOH, Other) had over the decision right (and ultimately who held the decision right), one, two, or three pluses were placed in the row. For example, if the interviewee believed that the director co-held the decision right with the ALSM over a certain matter with equal influence, I wrote two pluses on each side, for the period at hand. If the interviewee felt that the director was a fairly weak co-holder, and the ALSM had more



influence over a given issue (i.e., the ALSM could proceed with the decision even if the director disagreed), I wrote one plus in the box for the director, and two or three pluses in the box for the ALSM, or vice versa.

Interestingly, for 95% of decisions rights analyzed, all seven interviewees were in agreement over who the principal holders were, and how the right evolved over the 7-year period. Where there were contradictions in answers, I conducted two sorts of follow-up interviews. One with other members of the ALSM who disagreed on either the decision rights allocation or its evolution, and one with an HDB staff member who interacted with the ALSM and the Director on the issue at hand. For example, if the contradiction arose with respect to an area of finance, I interviewed the HDB accountant to explain the difference – an approach sometimes referred to as “triangulation” (Yin, 1994). My objective was to try to understand whether the contradiction was due to a data-gathering failure or to the idiosyncrasies of personalities and differential perceptions and experiences on the part of interviewees. In all such cases, I was able to refine the manner in which the data were collected either by re-posing the question or by posing it differently, or to attribute the contradiction to personality and temperament. The total number of interviews carried out with ALSM members was 24, averaging three hours in duration.

The second most important source of data were seven years of minutes of meetings that took place twice per month during the first 4 years, and with decreasing frequency after that. A total of 143 documents averaging three typed pages in length (excluding annexes), these minutes were methodically and professionally kept, and constitute a rare and valuable window onto the evolution of public sector institutions.

Each set of these minutes begins with a list of members present, then lists an agenda, then itemized discussions of the agenda, and concludes with a financial report from the treasurer. Similarly methodically kept were a treasurer's ledger, purchase orders, and files of receipts, all of which were used to produce audits and annual reports by a professional accounting firm. The ALSM also kept detailed personnel rosters and employee absence information. Also used in this paper were various reports written by HDB and MOH/World Bank staff on HDB and on other public hospitals.

In addition, I conducted a total of 25 interviews with HDB middle managers, the former and current director, and doctors and nurses currently or previously connected with HDB. I carried out 20 interviews with MOH central administration staff from the Procurement, Public Hospitals, Medical Care, Accounting, and Directorate General divisions. Finally, I interviewed the two former and current Ministers of Health and a total of 4 of their advisors.

In Lebanon, there are 17 public hospitals in all, of which six are being corporatized. Because implementation of the reform only began last year, and because of lack of data in public hospitals in general, experimental design using HDB as a "control" is not feasible. Instead, my examination of HDB's trajectory is designed as a "reflexive comparison" that compares HDB to itself before and after its self-induced corporatization program, using time-series quantitative and qualitative data from 1988 till 1997. Given that HDB was the leading edge of change in the Lebanese public hospital sector -- by definition a non-representative case -- the objective behind this research is neither to suggest that the case be replicated nor to generalize from the case to the population. Instead, this research seeks to discern key elements that can inform the theory, and to

generalize from case to concept (Yin 1994), in particular the institutional design as defined by Law #544 and its Implementation Decrees. Part 6 analyzes insights from the HDB experience that are important to the amendment of the legal structure.<sup>20</sup>

#### ***4. Mapping of pre-corporatization decision rights allocations for all public hospitals***

For the four main areas of hospital management and finance (Finance, Human Resource Management, Procurement, Service Delivery). A set of pre-corporatization (centralized) decision rights allocations governed all public hospitals in the country until 1996. Each of the sections below will map out the principal set of decision rights, discuss who their holders and co-holders were, and what the implications of the institutional design were on the operation of public hospitals in Lebanon. This analysis will show that most decision rights were held by administrative units above the level of public hospitals, and that the latter had little leeway to adapt to, or respond to changes in local demand for public health delivery.

##### ***4.1 Finance***

The principal holder of decision rights over all matters related to finance in public hospitals is the Ministry of Finance, in particular the Treasury Department and the Budget Office. These decision rights are allocated through two principal institutions: The Public Accounting Law and the annually promulgated Budget Law<sup>21</sup>.

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<sup>20</sup> This paper adopts North's (1990) distinction between "institutions" and "organizations". Institutions are the formal and informal rules that shape interaction. They range from constitutions, to laws, to common practice to corporate culture (Kreps 1993). Organizations are groups of individuals bound by some common purpose to achieve a given set of objectives. They include political, economic, social and educational bodies. In this paper, a hospital is an organization. The law and decrees governing the operation of the hospital are a set of institutions.

<sup>21</sup> The Public Accounting Law is defined by Decree #14969 (1963). Section #2 of this decree specifies the procedures for the preparation of the annual Budget Law.

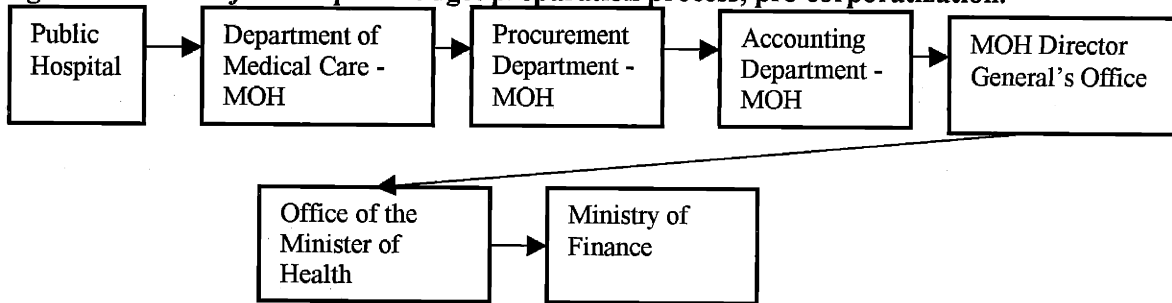
The Public Accounting Law defines the procedures for the formulation of the government budget, and spells out its main components. The Budget Law supplements it, specifying the details of the budget by sector and by item. These laws govern all government agencies, public hospitals included. They determine:

- Expenditures, ranging from allocation to disbursement;
- Revenues, including taxation and other extractive instruments and collection of owed and outstanding public fiscal obligations.

As far as public hospitals are concerned, the co-holders of decision rights over finance within the MOH are the Department of Medical Care and the Procurement Department. According to the letter of the law, the Department of Medical Care receives proposed budgets from public hospitals, aligns and incorporates them with its own budget, and submits them to the Procurement Department. The Procurement Department then makes further adjustments to proposed budgets based on allocations in previous years, and forwards them on to the Accounting Department for final incorporation into the sectoral budget proposal. The law does not provide for instances where budgets proposed by public hospitals are not found acceptable by the Department of Medical Care because, in practice, there is no negotiation between these two parties over the budget under this system. The fact that no formal mechanism is defined in the law for agreement on a final budget between the Department and the hospital leaves the final decision up to the discretion of the Department of Medical Care and to the Procurement Department – equal co-holders of this decision right. Hence, although public hospitals have administrative units in charge of budget formulation, these units, in fact, have little say over the size or composition of the budget that the hospitals end up receiving. Given this

situation, the tendency on the part of public hospitals is, naturally, to over-budget, while the tendency on the part of the Department of Medical Care and of the Procurement Department is to assume that this is occurring and to base its budget decisions on the amounts and allocations granted the year before. Furthermore, in practice, some hospitals (along with other MOH units) have had the capacity and discipline to submit budget proposals and others have not. The result is that the system did not ensure careful consideration of real changes in demand. The budget preparation process of a public hospital is defined by the law as being the following:

**Figure 4a. The *de jure* hospital budget preparation process, pre-corporatization.<sup>22</sup>**



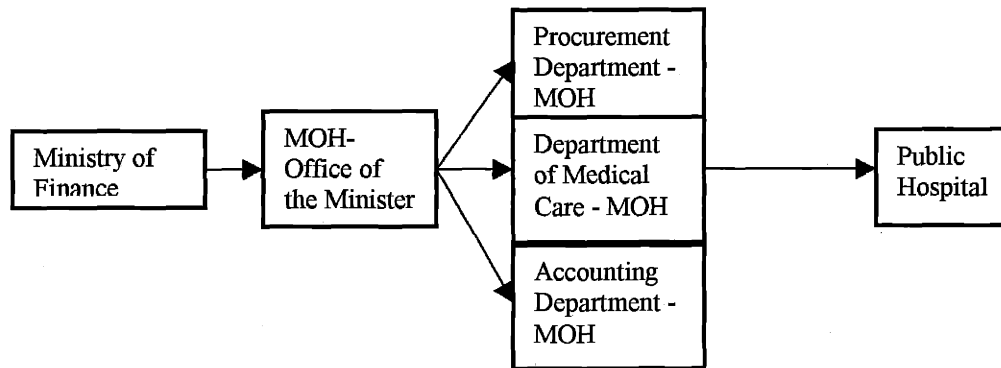
In practice, information obtained through interviews indicates that the system described here has been even more centralized in practice than it is *de jure* for the following reasons. More often than not, partly because of emergency and crisis-management exigencies during the war and a gradual loss of public sector capacity for planning, sectoral expenditure ceilings are pre-set by the Ministry of Finance without careful consideration of need in each sector. In the case of the MOH, for instance, once

<sup>22</sup> The nuances between directorates, departments, divisions and services within the public administration have not been translated from Arabic, because the hierarchies they denote do not provide significant additional information to the discussion. Instead, the term “department” has been used for all offices. Readers familiar with the Lebanese public sector will know the differences. This, and the following figures in Section 4 were compiled with the help of Hasan Hteit, Riad Khalifé and Abdallah Ajouz, from the Ministry of Public Health, Lebanon.

the Minister's office receives the budget figures for the sector, an *ex post* allocation of expenditures is made to the various budgetary units in the sector, hospitals included.

The process was not only irregular and granted few decision rights to public hospitals, it also tended to be even more centralized, granting a constrained set of decision rights over finance to the MOH itself, and is better schematized in the following way:

**Figure 4b. The *de facto* hospital budget preparation process, pre-corporatization.**



#### **4.2 Human resource management**

The Decree on Personnel<sup>23</sup> defines eligibility, grades and pay-scales for all public sector employees. This decree defines a basic set of public service responsibilities, guidelines for the disbursement of remuneration, bonuses, family and expense allowances, promotion criteria, disciplinary measures, completion and termination of employment severance pay, and retirement for both career appointments and fixed-term employment (i.e. of contractuels, seasonal workers and casual wage workers).

<sup>23</sup> Decree #112 (1959), defining the Organization of Personnel in the public sector.

The decree allocates all decision rights over such matters to the Civil Service Board, a central body that hires, assigns, promotes, disciplines and terminates civil servants. Co-holders of these decision rights, with varying degrees of influence are sectoral ministers, who formally recommend appointments. Ministers' decisions are, in principal, based upon recommendations of the their directors general (or "DG" -- the administrative heads of the sectors) and/or division directors (middle managers). In practice, the DGs are a fairly weak co-holder of this decision right because the amount of influence they wield is partly determined by their relationship with the Minister, and the politico-sectarian determinants of the DG's appointment. The MOH Decree also delegates some decision rights over personnel to the Department of Medical Care, but none to hospitals. Hospitals, like all other budgetary units, can make requests and recommendations for personnel matters, but they cannot make decisions in this area. All hospital recommendations and requests can be superceded by the hierarchy beginning with the Department of Medical Care and ending with the Minister of Health, the Civil Service Board and the Council of Ministers.

Given this centralization of decision rights over personnel, sectoral legislation is limited to determining the number and type of employees to be hired in various units, including hospitals. Although relatively minor in the overall scheme of things, this role of the MOH in personnel matters adds to the rigidity of the system. For example, the decree<sup>24</sup> that sets the organizational structure and functions of the MOH, determines the exact number of positions and specializations for each public hospital in the country, beginning with the hospital director down to hospital drivers and housekeeping staff. All

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<sup>24</sup> Decree # 8377 (1961) defining the Organization of Ministry of Health (also referred to as the MOH Decree in this paper).

personnel matters in the MOH are handled by a Personnel Section that is part of the Office of the Minister (*Diwan*). However, the Personnel Section's decision rights have more to do with the processing of information and the documentation of recommendations than with policy formulation and decision-making based on this information.<sup>25</sup>

### **4.3 Procurement**

The MOH Decree also provides for a Procurement Daira, whose functions epitomize the centralization of the ministry. ALL decision rights over the procurement of non-labor inputs used by public hospitals in producing health services are held by this department. These inputs range from high-tech laboratory and surgical equipment to the provision of maintenance services, to the procurement of stationary and pencils. In addition, this department also holds decision rights over six extremely important areas, among others:

1. The review, adjustment, and final submission of all budget proposals made by MOH administrative units, including public hospitals, as discussed earlier.
2. The estimation and request from the Civil Service Board of all stationary, printed materials, and uniforms to be used by MOH units. This includes pens and pencils...
3. The processing of supplementary purchase orders for urgently needed inputs not available in central stock.<sup>26</sup>
4. The management of two important MOH central stocks and of their deliveries. These are (a) the capital inputs depot, including medical equipment and supplies, and; (b)

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<sup>25</sup> The prerogatives of this section, as laid out in the MOH Decree, are the following: (a) the reparation of staff documents civil status; (b) the organization of personnel files, and; (c) the preparation of personnel rosters.



the medicine depot, which supplies all drugs for all uses in public health provision in Lebanon. All inputs are centrally procured and stored in these units before they are distributed to relevant units in the public health sector.

5. The contracting of construction, equipment, and maintenance of all MOH buildings including all related inputs.

#### **4.4 Service delivery**

Similarly, decision rights over the organizational structure and functions of all public hospitals are held by the central administration of the MOH, as determined by the MOH Decree. This decree defines the internal organization, service mix and number of beds for each public hospital in the country. Needless to say, how well the actual state of affairs approximates what is laid out in the law is variable and random. For example, the Decree mandates that the Tripoli hospital should have 190 beds, while the Sidon hospital should have 150 beds. In reality, today the Tripoli hospital has 175 Beds and the Sidon hospital has 150, of which only about 30 are operational.<sup>27</sup>

Although a global vision for the sector is important, writing all of it into law *ex ante*, is not necessarily the best way of accomplishing it, especially not when laws are not frequently revised and updated, for both political and capacity reasons. Today, the development of instruments such as the National Health Map (*Carte Sanitaire*) is an example of how a global vision can be achieved and implemented through strategy, as opposed to legislation, and through mechanisms that facilitate adaptability and flexibility in response to demand.

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<sup>26</sup> In 1990, the ceiling for individual purchase orders was increased to 3 million Lebanese Pounds. This amounted to USD3,563.00 in 1990, and amounts to USD1,989.00 in 1999.

<sup>27</sup> Information obtained from the Directorate of Medical Care, MOH, July 1999.

Table 4.4 summarizes the centralized decision rights allocation that prevailed in the MOH at the time when HDB launched its corporatization experiment. Under each of the four areas of hospital finance and management discussed above, the table details the principal set of relevant decision rights, and identifies their holders. The column “Not Held” refers to areas where the decision right did not exist altogether.

**Table 4.4: Centralized decision rights allocations governing public hospitals pre-1996**

	<i>Ministry of Finance</i>	<i>Civil Service Board</i>	<i>Ministry of Health</i>	<i>Public Hospitals</i>	<i>Not Held</i>
<b><i>Finance</i></b>					
Solicitation of outside funds					χ
Allocation of outside funds					χ
Fee setting for services					χ
Exemption policy					χ
Fee collection			χ*	χ*	
Allocation of fee revenue					χ
<b><i>Human Resource Management</i></b>					
Hiring		χ			
Promotion		χ			
Discipline		χ			
Firing		χ			
<b><i>Procurement</i></b>					
Medical consumables			χ		
Other consumables			χ	χ	
Major medical equipment	χ		χ		
Other fixed equipment	χ		χ		
<b><i>Service Delivery</i></b>					
Range of services			χ	χ	
Quality control			χ	χ	
Community outreach					χ
Coordination with other hospitals					χ

Note: The presence of two χs in one row indicates that a decision right was co-held. This decision right existed (and was co-held) but was generally not implemented.

Source: Author’s construction based on Law #14969, Decrees #112, #8377, #325 and the discussion in Section 4.

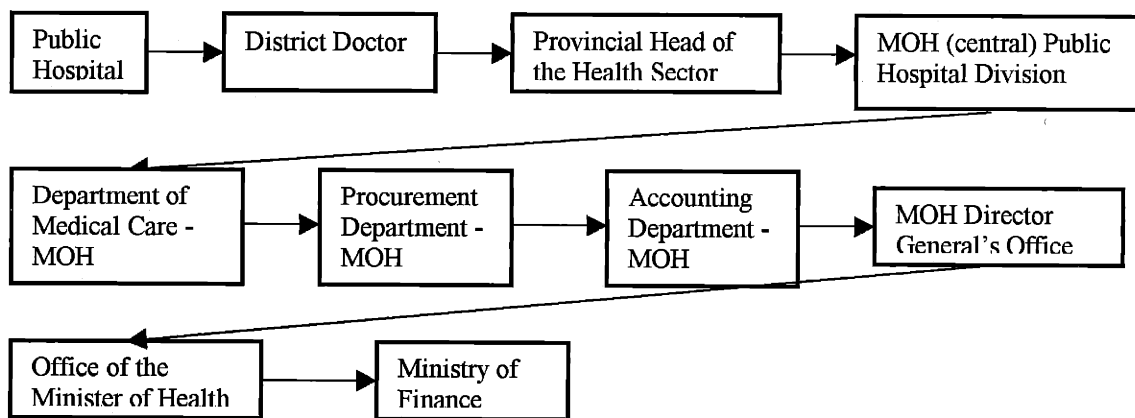
### 5. *Mapping of HDB decision rights reallocations, post-corporatization*

For each of the areas below, this section will describe: (i) the decision rights allocations adopted by HDB in order to improve its operation, and; (ii) the manner in which decision rights were distributed between the director and the ALSM -- or HDB’s

“decision rights equilibrium”. This part of the analysis will take into consideration decision rights changes considered, but not adopted and will evaluate why this occurred.

A procedural simplification characteristic of HDB’s trajectory was one of the first breaks given by the Minister of Health to the hospital. This simplification came in the form of an official exemption from some centralized administrative procedures. Through a special decision, the Minister of Health allowed HDB to skip two levels of regional bureaucracy and to conduct its business directly with the central administration of the MOH (Interview with Edouard Abboud, August 1999). The administrative process described in section 4, is even more centralized if schematized in its full detail:

**Figure 5. The detailed *de facto* schema of hospital budget preparation process, pre-corporatization.**



The unitary State of Lebanon is divided into 6 Provinces (*Muhafazat*) and 20 Districts (*Qazas*). At the level of each Province and each District are appointed representatives for each sector to which local sectoral units are accountable. In the case of health, for example, in the past, if the director of HDB wished to submit a request for procurement of syringes, he would need to submit the request to the District Doctor, who would clear, then forward the request on to the Provincial Head of the Health Sector, who would then submit it to the Hospital Division (yet another unit) within the Department of

Medical Care, and through the remainder of the chain above. In 1991, the Ministry of Health exempted HDB from having to go through the District and the Province for its business – a step that paved the way for the close relationship HDB developed with the MOH under the governance of the ALSM.

Inasmuch as it is possible to generalize over a period of 7 years, the first two years of HDB's experiment with autonomy were anomalous. Because of their novelty, these years were surrounded by much enthusiasm and motivation from all those involved in HDB. During this period of "super-normal" zeal, the ALSM used to meet every other Monday, and follow up in between through meetings with public sector officials and donor agencies, and smaller (subcommittee) meetings that would sometimes take place on Sundays. Also during this period, the wives of ALSM members were invited to form a Ladies Auxiliary. They would wear their specially ordered aprons and alternate carefully scheduled shifts to ensure all-day presence in running the hospital cafeteria they had re-opened. They would also carry out hygiene spot checks in hospital wards. During this period, a large number of decision rights were created, some of which were not fully adopted, and others were reassigned and/or diluted over time because their initial allocation was not tenable. HDB's equilibrium for decision rights allocation was reached approximately three years after the ALSM began its work, for two reasons:

1. The fact that the HDB experience developed through what might best be described as "tatonnement": there was no model or pre-determined design for autonomy, nor were the limits and constraints predictable or constant;
2. The only legitimacy the experiment enjoyed emanated from the undeniable improved productivity of the hospital and its concomitant reputational effects,

and from the credibility of the individuals involved, and the good relations they forged with the Ministry of Health.

Key to the manner in which HDB arrived at its decision rights equilibrium was the distribution of its created rights between the ALSM and the director. During its first two years, the ALSM adopted a very ambitious and aggressive strategy of designing various committees and quality control functions that sought to create a quasi-managerial/supervisory role for the ALSM. These steps were taken in reaction to severe lacunae in managerial and productive capacity at HDB at the time, especially in middle management capacity. As a result, like a graft that does not “take”, many decision rights were slowly reallocated or abandoned.<sup>28</sup>

The formal justification/explanation of shifts in decision rights allocations during this period centers around a personality clash between the hospital director and the president of the ALSM.<sup>29</sup> However, careful analysis of data and minutes of meetings dating back to the years 1990-1993, combined with information obtained through structured interviews using the decision rights analysis framework, bring to bear a more complex picture. My analysis of decision rights reallocations, in particular, reveals that some of the roles the ALSM tried to take on (such as supervisory and management roles) were not tenable, despite the fact that they were necessary. These rights were not tenable because HDB did not have the middle management necessary to implement them, as will be explained in more detail below. Nor did some of the decision rights the ALSM tried

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<sup>28</sup> Overkill is not an uncommon phenomenon when private sector actors take it upon themselves to improve the public sector. Out of good intention and enthusiasm, such people often seek to design a Ferrari when a Fiat would have been enough of a first replacement to the Broken Bicycle (see, e.g., Fuhr (Forthcoming, 2000).

<sup>29</sup> All ALSM members, including those who were party to the conflict gave consistent reports of this personality clash during interviews (Interviews with Edouard Abboud, Antoine Menassa, Bechara Hatem).

to acquire square with the conventional functions of even the most aggressive of hospital boards (Appendix A). Interestingly, by 1993, the equilibrium reached at HDB was very much along the lines of the “corporate” hospital board. The director was in charge of day-to-day decisions. The ALSM set the total envelope for HR expenditures, discussed and cleared senior staff HR matters such as new appointments, bonuses and contract renewals and terminations.

On the other hand, my analysis of decision rights adopted also makes clear that some important functions were not adopted because the informality of the experience precluded their implementation. For example, while most boards can wield authority over the director partly because he was selected and employed by them, at HDB the situation was the reverse. The director had personally invited each and every member of the ALSM to serve on the board. Instead of being determined *ex ante*, the distribution of decision rights between the ALSM and director was the result of negotiations that waned, but continued almost until the very end. Typically, in struggles between the director and the ALSM over decision rights allocations and the exercise of decision rights throughout the seven-year period, the informational advantage of the director dominated (Interviews with ALSM members). Also, this tenure was a long one by most measures, and it was fairly intense at the beginning and near the end -- periods of dis-equilibrium in decision rights allocations. As a result most members of the ALSM had progressively less energy and time to allocate to HDB, which resulted in their gradual ceding of many decision rights to the HDB manager, and ultimately in their departure once there was a cabinet reshuffle and a new Minister of Health was appointed. By this time, the ALSM was functioning more like a caretaker/benevolent board. Very few important policies were

initiated or implemented, despite the fact that they would have been desirable.<sup>30</sup> The departure of the Minister of Health at the end of 1996 coincided with the HDB director reaching retirement age and the appointment of a new director by the new Minister. These changes caused decision rights to be reallocated anew, a costly and tiring process, which accelerated the departure of the ALSM from HDB in December 1997, after an attempted period of accommodation with the new director (Interviews with ALSM members).

### ***5.1 Decision rights over finance***

Once the ALSM was formed, both the manager and the ALSM members rapidly created and adopted a set of decision rights that were crucial in allowing the hospital to supplement the revenue coming from the MOH. These rights, created in the area of finance, gave HDB the option of recovering costs from its patients and the flexibility in allocating these funds toward capital and operating expenditures in rapid and flexible response to demand on the hospital. The impact on HDB's admissions rates was immediate. The average number of admissions per month jumped from 55 to 259 between 1988 and 1991. Part of this increase was due to the escalation of hostilities during the last year of the war (1990). However, the secular increase in hospital admissions after the end of the war in October 1990 was evidence of an increase in demand due to quality improvements and to the increase in HDB's (staff and capital) capacity to receive patients. The increase in revenue also allowed an expansion of HDB's service mix (and hence admissions rates) as will be shown in the section on service delivery (5.4).

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<sup>30</sup> There are a total of 28 references to organizational and restructuring initiatives recorded in the minutes of meetings, of which 8 are discussions of major hospital restructuring plans.

Table 5.1 summarizes HDB’s decision rights allocation in the area of finance. “Rights created” are ones that neither HDB, nor the central administration possessed before the HDB experiment was launched. In all four areas of hospital management and finance I examined, rights that were “created” were exercised alongside existent MOH rights, i.e., they supplemented them. None of the newly created rights were meant to overrule old rights – one of the secrets to the ALSM’s success. “Rights appropriated” are ones that HDB *de facto* transferred down to its own level, despite their being *de jure* held by central administrations of the public sector, such as the MOH, the MOF and the Civil Service Board, as discussed in Section 4.

**Table 5.1. HDB’s Decision Rights Equilibrium in Finance**

Rights Created	Solicitation of outside funds Fee setting for services Exemption policy Fee collection Allocation of fee revenue
Rights Appropriated	None

Source: Author’s construction based on results from the Decision Rights Analysis Framework (Appendix A).

In matters related to finance, by far the most important decision right HDB created was the right to collect fees for health services delivered – included in Table 5.1 under “solicitation of outside funds”. Also included in this category are cash grants, gifts, and in-kind contributions secured by ALSM members and the HDB director through their personal and professional contacts – very much along the lines of the traditional “community notable” type board (Appendix A).

Between 1991 and 1997, an average of 66% of the ALSM’s contributions to HDB went toward HDB’s wage bill, in the form of salaries and bonuses to non-civil service (private sector) employees and income supplements to civil service employees. The



remaining 33% went toward various capital and operating expenditures (ALSM financial statements)<sup>31</sup>.

The pillar of HDB's increased expenditure capacity was the creation of the cost recovery decision right. The idea was to keep HDB rates at around 1/3 of private sector rates (Interviews with Edouard Abboud, Michel Matta and Bechara Hatem). Fees were set in 1990, and adjusted periodically, depending on inflation and on the increase in HDB's expenditure requirements. Among the interesting comparisons Table 5.1 reveals are costs of inpatient care at HDB, when compared with private sector hospitals of the same quality range. For example, while HDB charged USD22.96 per day in the surgery ward (for the first five days) and the private sector charged USD12.50 per day, the latter figure only accounted for room and board while the HDB figure included the full treatment. To illustrate, in 1990, an appendectomy involving a five-day stay cost an average of USD400.00 in the private sector when doctor's fees and hospital hotelling and pharmacy charges were factored in. At HDB, the cost of an appendectomy was USD56.88 (USD11.38\*5) in 1990, 14% of the fee charged in a private sector hospital of equivalent quality. By 1997, cost of care at HDB had gradually increased to an average of 50% of private sector care.

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<sup>31</sup> Over time, the ALSM's capacity to cover HDB's expenses became so well recognized and relied upon by the MOH that the ALSM was asked to settle a bill for laundry services on behalf of the MOH. Given the collaborative relationship between the MOH and the ALSM members at the time, the request was fulfilled and the amount of LL18,000,000 (USD13,891) was paid off (ALSM Minutes of Meetings, 28.VII.95)

**Table 5.1. Comparisons of HDB Fees with Average Third-Class Private Sector Rates in 1990 and 1994.**<sup>32</sup>

	HDB/ALSM Rates (1990)	Average Private Sector Rates (1990)	HDB/ALSM Rates (1994)	Average Private Sector Rates (1994)
<b>Outpatient Care</b>				
Minor surgery	11.38	14.00	K <sup>33</sup> + 12.14	36.00
Minor surgery (emergency room)	5.69	25.00	K + 6.07 <sup>¶</sup> 15.18 <sup>¶¶</sup>	20.00
Plaster service	5.69	25.00	9.11	20.00
Emergency consultation	2.28	16.70	4.86	22.28
Regular consultation	1.14	12.50	4.86	16.5
X-ray	1.14	14.00	R <sup>¶</sup> = 0.12	16.00
E.C.G.	1.14	12.00	3.04	15.00
Laboratory	0.57 per analysis	2.00* 17.00-25.00**	L <sup>¶</sup> = 0.08	3.30* 25.00-37.00**
<b>Inpatient Care</b>				
Medical Ward		12.50/Day***	15.18/Day	22.00/Day***
Maternity Ward	5.69/Day	12.50/Day***	18.21/Day	22.00/Day***
Newborn nursery		10.00/Day***	6.07/Day	15.00/Day***
Surgery	11.38/Day	12.5/Day***	K = 1.21	22.00/Day***
Gynecology		12.5/Day***	15.18/Day	22.00/Day***
Intensive Care	11.38	60.00/Day***	15.18/Day	100.00/Day***

All figures are in US Dollars, converted using the exchange rates of the respective years. In 1990 the Lebanese Lira was 879.00 to the US Dollar. In 1994, LL1647.00 = One USD. In 1999, LL1508.00 = One USD. Exchange rates were obtained from the Central Bank of Lebanon, courtesy of Youssef El-Khalil.

\* Minimum cost per single test.

\*\* Range for standard pre-operative/diagnostic tests.

\*\*\* Figures are for room and board only.

<sup>¶</sup> Fee if operation was carried out by surgeon. <sup>¶¶</sup> Fee if operation carried out by intern or resident.

<sup>¶</sup> Rs (for *Radiologie*) and Ls (for *Laboratoire*) are set and used in the same way as Ks. Different x-ray and lab procedures have different R and L values.

Source: Author's construction combining data from HDB and MedNet Liban.<sup>34</sup>

<sup>32</sup> In private sector hospitals, the cost of second-class service (B) is equivalent to the cost of third-class service (C) + 60%. First class service (A) = C + 180% (MedNet Liban estimates).

<sup>33</sup> The K system is determined by the Social Security Administration and the Lebanese Order of Physicians. It classifies each medical procedure as being equivalent to a certain number of Ks (for each of three classes of service). The idea behind the system is to achieve some consistency and equity in billing and remuneration for health care. For example, a third-class appendectomy and normal delivery are valued at 50K for all hospitals, throughout the country. Today the third-class K is valued at LL8,000 (USD5.30), and the scales are updated periodically.

By 1994, HDB's fee system had become more sophisticated and closer to the system in the private sector. For example, the price of an appendectomy, with a five-day stay, can be calculated from Table 5.1 in the following way. An appendectomy is valued at 50 Ks. While the private sector charged USD3.30 per third-class K in 1994, HDB charged USD1.21, amounting to USD60.50 for a 50K operation. Added to this charge were hospitalization and hotelling fees in the medical ward, amounting to USD15.80 per day. Taking five days as an average length of stay, the total cost of an appendectomy at HDB in 1994 was USD139.50 (or  $[1.21*50] + [15.80*5]$ ). For comparable third-class private sector treatment, the patient would have paid USD570.00 in 1994.

A final, important source of capital HDB received was in kind, and was made possible through the creation of the decision right to solicit outside contributions. Most notable among these is an ophthalmology ward that is the most advanced in the public sector, donated by Lions International. The cost of this ward was USD350,000.00. Another such contribution was the hospital library, financed by USAID at a cost of USD24,000.00.

#### *Explaining HDB's decision rights equilibrium in finance*

This section will analyze how HDB's new decision rights were shared between the director and the ALSM, and how this distribution evolved over time. The information in this, and similar sections below was obtained through the Decision Rights Analysis Interview Framework (Appendix A).

In finance, two areas of decision rights were constant over time. These were "fee collection" and "exemption policy". The allocation of the decision right over the

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<sup>34</sup> MedNet Liban is a third-party administrator that assists insurance companies in providing quality care at affordable costs. Access to MedNet Liban data was generously provided by Mounir Kharma and

organization of “fee collection” was very much along the lines of what one expects to see in a modern competitive hospital. The ALSM helped the director set up the system at the outset, then he took it over and made administrative and procedural changes over time. The ALSM would periodically raise questions when there appeared to be slippage.

Mostly a hospital board function, the setting of fee “exemption policy” was held by the director of HDB. When asked why this occurred, the director explained that he needed to retain this decision right because he was the one in touch with the day-to-day workings of the hospital and because he needed to make decisions quickly, often based on whether people “looked like” they could afford to pay or not. However, the director’s holding of this decision right, and its *ad hoc* implementation, were symptomatic of HDB’s inability to formulate and apply broad policies, and grow beyond its “small hospital mentality”. Most hospitals of HDB’s size employ a social worker who implements board policy in granting exemptions. HDB eventually hired a social worker, however initially, the ALSM co-held this decision right in a very weak manner, by preferring that total exemptions not exceed 1%. As this analysis will show, there were not many illogical decision rights distributions between the director and the board at HDB, however when they did occur, they resulted from the predominantly “crisis-management” style of operation at HDB. Curiously, the ALSM experiment was begun in response to a financial and service delivery crisis in the sector, but its informality prevented it from moving beyond the “make-do” mode into the establishment of long-term thinking in management and finance.

Two areas of decision rights appear to have evolved. The first and most important of these was the decision right over the “allocation of fee revenue”. During the

first two years, partly due to enthusiasm, partly due to the liquidity of its funds, the ALSM was involved in lengthy and lively debates on how funds should be allocated. By 1993, these debates had stabilized into discussions of recommendations made by the director, and decisions based on these recommendations that included prioritization of expenditures and disbursements to settle accounts payable, very much along the lines of the modern board. However, by 1996, ALSM revenues were hardly enough to cover the wage bill and there was very little room left for prioritization of expenditures; the ALSM became mostly a repository of funds. The reason why this occurred is partly due to HDB's inability to plan and implement a long-term strategy, partly due to stiff competition it faced from the MOH, its tutelage sector, and partly due to the changes in the economy and gradual decrease in time allocated by ALSM members to fundraising. In the area of "solicitation of outside funds", the ALSM started out by being a strong holder and exerciser of this decision right. It gradually lost interest and the capacity to carry out this role, and near the end, there was very little activity in this area.

As for the decision right over fee setting, it is clear from the data that the initial work done in setting fee schedules was spearheaded by the support committee, and that the first set of adjustments were as well. It is not entirely clear what happened later. When questioned, two ALSM members said that the ALSM continued to set fees for the hospital until the very end, upon the recommendation of the director. Two others said that once the system had been established, by 1993, the ALSM spent little time on this issue, and adjustments suggested by the director were cleared by the ALSM. The director himself recalls having always shared equal decision-making power with the ALSM over this area, from the beginning until the end. And one ALSM member refrained from

speaking to the issue because he did not attend meetings regularly. Unfortunately, the minutes of meetings provide no conclusive evidence here.

The informality of the experience was both a boon and a bane. To illustrate, the ALSM considered adopting an important decision right that boards normally enjoy, but it did not succeed in doing so. This was the right to design long-term financial policy. During its first year of operation, an effort was made to produce a budget forecast, but this was abandoned for two reasons: (1) the only ALSM member with a finance background stopped participating two years into the experiment; (2) the informal status of the ALSM never allowed it to think about long-term horizons.<sup>35</sup> Indeed, in all areas of hospital management and finance discussed in this paper, the ALSM was weakest on the planning and strategy side, largely because of its informality but also because of its skill mix and because of its preoccupation with accommodation as a pillar of the ALSM's survival. This accommodation was of two sorts, one between ALSM members, including the *ex officio* director who had appointed the members, and one with Ministry officials. This need for accommodation came at the expense of bold development and strategic moves, and it did not allow the ALSM to develop and exercise a full governance role. In addition, the legal liability of its members prevented the ALSM from pursuing aggressive investment strategies.

## **5.2 *Human resource management***

By the late 1990s apathy was prevalent among employees in the Lebanese public sector. The main cause was the war from 1975-1990. During this period, people had difficulty getting to work, public sector wages were eroded by inflation and compressed,

public sector arrears in wage disbursement were common. When salaries were disbursed, they sometimes went to dead people because personnel rosters were not updated periodically. These factors encouraged moonlighting, absenteeism, and/or the establishment of private businesses alongside public sector jobs.

To motivate its staff HDB created decision rights in the area of human resource management that allowed the hospital to emulate the private sector. Some of the decision rights HDB created granted bonuses to MOH hospital staff, and others allowed the hospital to hire its own (non-Civil Service Board/MOH) staff, compensate them according to market rates, then discipline and fire them for inadequate performance. Table 5.2 summarizes HDB’s bundle of decision rights in the area of human resource management.

**Table 5.2. HDB’s Decision Rights Equilibrium in Human Resource Management**

Rights Created	Hiring (of non-civil service staff, including compensation) Firing (of non-civil service staff) Internal organizational decisions (committee formation, etc.)
Rights Appropriated	Promotion (bonuses to civil service employees, and pay increases for private sector employees) Discipline (mostly through financial incentives, this was an under-exercised function of the central administration and Civil Service Board)

Source: Author’s construction based on results from the Decision Rights Analysis Framework (Appendix A).

Using the decision rights created above, HDB designed the following incentive program. Given that public sector staff often earned their pay without coming to work, HDB staff, including doctors who were civil service employees, received an income supplement if they came to work and fulfilled the service equivalent of the pay they were already receiving from the MOH. For physicians, this service equivalent was calculated using the system of Ks described in footnote 31. For example these standards valued

<sup>35</sup> There were continual calls to shut down all SC-like activities by central government inspection agents during the 7-year tenure of the ALSM at HDB. The experience of another innovative program, the

normal deliveries and appendectomies at 50K, and the fee for a single third –class K was set at USD2.50 in 1990 in the private sector.<sup>36</sup> HDB valued the K at USD1.14, i.e. less than half of what the physician would get in the private sector per K. MOH salaries of civil service doctors were divided by USD1.14 to derive the base number of Ks they “owed” the hospital, and they would get income supplements for any additional Ks they delivered at HDB. The idea was twofold: to encourage staff to come to work, and to encourage them to work more and earn “bonuses”. For example, in 1990, Nurses hired from the private sector received salaries of LL120,000 (USD414.00) per month, and nurses who were civil service staff received an income supplement of LL70,000 (USD241.00) per month to compensate for the difference. A similar incentive pattern was followed, and updated over time for administrative staff, technicians, drivers, housekeepers and guards at HDB. This compensation policy was the ALSM’s most significant investment in HDB, and allowed the hospital to hire an average of 50% of its staff from the private sector, and to expand service delivery and service mix. Table 5.2a shows the proportion of ALSM expenditures going toward the wage bill for the period 1991-1997.<sup>37</sup>

**Table 5.2a. ALSM Human Resource Expenditures as a Proportion of Total Expenditures**

<i>Year</i>	<i>Salaries &amp; Bonuses</i>	<i>Total ALSM Expenditures</i>	<i>% of Total</i>
1991	205,076,500	350,815,030	58%
1992	402,432,500	712,284,489	56%
1993	634,120,000	1,029,437,181	62%
1994	896,305,500	1,225,381,642	73%
1995	1,060,616,000	1,537,154,132	69%
1996	1,078,964,000	1,488,575,505	72%
1997	1,535,747,000	2,179,684,701	70%

Source: Author’s construction using HDB financial statements. Figures are in Lebanese Lira (LL), unadjusted for inflation.

Fondo de Desarrollo Vecinal in Chile was similar (Eid 1996, 1999c, 2000).

<sup>36</sup> Today the third-class K is valued at LL8,000 (USD5.30).

<sup>37</sup> Because of the surplus of doctors in Lebanon, this incentive system worked less well for doctors at HDB than it did for paramedical, administrative and support staff.



As a result of the gradual improvement in the number and quality of its staff, HDB saw a decline in the average length of stay (ALOS), an increase in the number of patients admitted, an increase in average birth rates, and an increase in the number of lab tests carried out.

**Figure 5.2b. HDB Productivity Indicators**

	<i>Patients Admitted</i>	<i>ALOS*</i>	<i>Lab Tests</i>	<i>X Rays</i>	<i>E.C.G**</i>
1988	657	6.4	3,893	6,237	779
1989	1,355	5.6	15,442	8,562	747
1990	2,372	5.3	38,566	16,025	1,249
1991	3,109	4.4	47,648	18,756	2,479
1992	3,799	3.8	53,330	22,535	2,692
1993	3,540	3.9	55,207	22,930	2,713
1994	3,220	3.9	60,832	22,580	2,763
1995	3,248	3.7	65,076	21,825	2,314
1996	3,037	3.5	54,769	19,018	2,028
1997	3,949	4.0	88,112	25,303	2,763
<i>Avg</i>	<i>2,302</i>	<i>3.7</i>	<i>39,915</i>	<i>14,795</i>	<i>1,711</i>

\* Shorter average lengths of stay (ALOS) are considered rough measures of improved efficiency.

\*\* Ecocardiographs (ECGs) are routine tests carried out before most operations to examine the heart. Because they are routine they are good proxies for hospital activity.

Source: Author's construction using HDB data.

### *Explaining HDB's decision rights equilibrium in HRM*

By 1993, HDB had settled into a strong and logically allocated set of decision rights in HRM. An initial attempt to give the ALSM a screening and oversight role in the hiring of all staff was resisted by management. By 1993, only senior administrative staff and attendant doctor HRM matters were cleared by the ALSM. The remaining decisions in hiring, promotion, discipline, and firing were taken by the director, who would inform the ALSM of his decisions *ex post*.

The director was also granted some important decision rights in internal organizational matters. For example, the process of streamlining and organizing the

stockroom, the pharmacy, and the kitchen involved the stripping of decision rights from one area of the administration and their reallocation to different, more appropriately trained staff members. The director enjoyed strong decision rights in this area and the ALSM supported him.

Among the rights considered, but not fully adopted, was the use of incentive pay as a fine disciplinary measure. According to interview data I collected, the intention was to grant bonuses only when they were deserved. For example, an attempt was made by the ALSM to implement a system of monitoring physician hours spent at the hospital, and minutes of meetings mention consideration of purchasing a device for this purpose (Minutes, 15.V.95). However, the hospital director, a physician himself, did not allow the ALSM to exercise this decision right. He resisted this change because he felt it was impossible and unreasonable to try to monitor physicians in this way (Interview with Edouard Abboud). Regardless of whether this particular measure was reasonable or not, the director's resistance to drastic measures in implementing reform at HDB was very much characteristic of his style of management throughout the seven-year life span of the ALSM at HDB. By 1996, HDB staff had come to see the income supplement policy as a right, and it was no longer producing the productivity effects that helped transform HDB in the early 1990s. In addition, the decline in HDB's revenue weakened the power of incentive schemes the ALSM was able to offer through salaries. It also weakened the *raison d'être* of the ALSM, and further reduced its leverage over the director.

### **5.3 Procurement**

All reports on the state of public hospitals by the end of the war in Lebanon point to severe mis-matches between inputs required and inputs available (asset non-

complementarities) that precluded the hospitals from responding to demand in health service delivery (Jabbour 1994). This situation was due to delays in central administration financing and procurement, exceedingly complicated processes for the delivery of inputs to public hospitals (as described in section 4 above), inadequate information processing, etc. Table 5.3 summarizes HDB's decision rights allocation in the area of procurement. HDB's creation of decision rights in procurement complemented its HRM decision rights in allowing the hospital to behave like a private sector hospital. If it ran out of certain types of drugs, needed syringes, sutures, or maintenance services, HDB was able to make the decision to purchase them from the market immediately, instead of going through the process of requesting them from the MOH central stock. As such, HDB slowly developed a reliable and loyal supplier base in the market for hospital inputs. HDB suppliers were so pleased at the timeliness with which accounts payable were settled, that they often made donations to HDB functions and provided discounts or inputs at no charge (Interview with Bechara Hatem).

**Table 5.3a. HDB's Decision Rights Equilibrium in Procurement**

Rights Created	Implementation of local competitive bidding
Rights Appropriated	Medical consumables Other consumables Major medical equipment Other fixed equipment

Source: Author's construction based on results from the Decision Rights Analysis Framework (Appendix A).

Table 5.3b presents a comparison of HDB procurement financed by the ALSM versus HDB procurement financed by the public sector, for a six-month period at the height of the HDB experiment in 1994. The figures show that 50% of the cost of HDB procurement was covered by the ALSM, while 48% came from the MOH.<sup>38</sup>

<sup>38</sup> Because some of the items procured for HDB by the public sector are sent to the hospital without information about their cost, Table 5.3b required extensive efforts to compile, especially in gathering cost information for centrally procured items and services delivered by the MOH and the

**Table 5.3b. Sources of Finance of HDB Procurement**

Goods and Services Procured	ALSM	MOH	Ministry of Public Works	Other
<i>Salaries and bonuses</i>	432,395,500	258,184,406		
<i>Food items</i>	5,993,895	28,500,000		
<i>Fuels</i>	4,012,235	19,273,240		
<i>Oxygen and anesthetic products</i>		14,670,000		
<i>Maintenance of premises</i>		6,851,600	6,000,000	
<i>Equipment maintenance</i>	14,339,085	2,147,770		
<i>Furniture</i>		3,000,000		
<i>Stationery</i>	4,976,320			
<i>Miscellaneous supplies</i>		64,650,000		4,536,000
<i>Drugs</i>	115,394,900	146,337,495		6,341,562
<i>X-ray film</i>	956,710	19,923,120		
<i>Lab supplies</i>	9,994,245	14,665,490		
<i>Maintenance products &amp; parts</i>	1,449,555	12,097,250		
<i>Water transport</i>	9,315,000			
<i>Miscellaneous</i>	13,444,215			
<i>Total</i>	612,271,660	590,300,371	6,000,000	10,877,562
<i>Grand Total Expenditures</i>	1,219,449,593			
<i>% of total HDB expenditures</i>	50.2%	48.4%	0.5%	0.9%

Source: Author's construction, based on report produced by hospital administrator, Elias Nasr in 1994. All figures are in Lebanese Lira, unadjusted for inflation.

### *Explaining HDB's decision rights equilibrium in procurement*

All results from the Decision Rights Analysis Interview Framework point in the same direction. Decision rights over procurement reached a quick equilibrium after the first year of the ALSM's operation and did not change much after that. In the areas of medical and other consumables decision rights were exclusively held by the director,

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Ministry of Public Works. Both the former and current director of HDB have estimated that the share of non-ALSM expenditures in HDB procurement has continued to decline over time, and that the hospital was virtually completely financially independent by the time it was legally corporatized in July, 1999 (Interviews with Edouard Abboud and Edouard Chalouhi, former Director of HDB).

whose decisions the ALSM would discuss and disburse on *ex post*. This system was essential in giving HDB the flexibility it needed to respond to demand, and the results in service delivery were clear. In the area of major medical and other fixed equipment, the decision right was held by the ALSM, which would explore alternative investments and seek prices based on recommendations made by the director for expansions in HDB's service mix. This decision rights allocation was also in conformance with the operations of today's competitive hospitals. There is some evidence that the director had more influence over the procurement of non-medical (other) fixed equipment than the ALSM had, but this is not entirely clear given the data at hand.

Despite the great leap forward HDB made in procuring the inputs it needed to operate, this hospital and its ALSM were not as successful in establishing systems and long-term planning capacity in the area of procurement. For example, the ALSM tried several times, but failed to adopt decision rights necessitating local competitive bids before procurement transactions were undertaken (Minutes 4.I.91; 10.VII.96). Several reasons were given for why these rights were not adopted. The director agreed that food procurement contracts would have been preferable, but said that the nuns in charge of the kitchen were used to asking the hospital driver to go out and buy food everyday, and he was not able to impose a different system on them, especially given the expansive powers they had enjoyed in running HDB until recently. A member of the ALSM said that procurement of generic low-cost medicines was resisted by physicians who practiced at HDB and wanted their own name brands of medication. The hospital administrator said that LCB could not be practiced because they were never sure of demand, and that they preferred getting special breaks from suppliers they knew... All of these statements point

to the same direction: due to lack of middle management capacity general uncertainty, HDB had a difficult time looking beyond the short term.

**5.4 Service delivery**

When HDB first embarked on its autonomy path, it was able to offer minor surgery if patients brought their own sutures and medicines. The sterilization equipment it had dated back to the 1940s (World Bank survey). At this time, HDB was able to offer limited ophthalmological care, had an average of 10 births per month, treated war emergencies and had the capacity to carry out simple lab tests and x-rays. There was no systematic quality control, and HDB staff had little contact with the community. The little contact HDB had with other hospitals occurred when patients were referred away from HDB because it did not have the capacity to treat them. Table 5.4 summarizes HDB’s decision rights allocation in the area of service delivery.

**Table 5.4. HDB’s Decision Rights Equilibrium in Service Delivery**

Rights Created	Quality control, medical services Community outreach Coordination with other hospitals, including int’l ones Coordination with MOH
Rights Appropriated	Determination of range of services Quality control, other services

Source: Author’s construction based on results from the Decision Rights Analysis Framework (Appendix A).

By the end of 1997, HDB had expanded its service mix to include orthopedic surgery and plastic surgery, chemotherapy and physiotherapy and had developed a fully equipped up-to-date intensive care unit. These services, in addition to abdominal and pelvic ultrasound, gastroscopic, and broncho-fibrosopic tests, changed the service and fee schedule used as an example in Table 5.1 into a longer and more sophisticated list. By this time, HDB had carried out at least two quality control initiatives and two customer satisfaction surveys which yielded satisfactory results (Minutes 3.X.94;

28.X.96). It had received visits from at least three public hospitals that had come to learn about the ALSM's accomplishments at HDB.

In the area of relations with other hospitals, HDB had established "twinning" (*jumelage*) agreements with two hospitals in France, Hôpital de Chartres and Hôpital Quinze-Vingts, with which it exchanged staff and from which HDB received advice on expanding and improving its service delivery.

*Explaining HDB's decision rights equilibrium in service delivery*

All ALSM members concurred on the distribution and evolution of decision rights in this area. Decision rights over the range of services and quality control (medical and other services) were held by the director for the majority of the period. For example, the director would propose expansions in service mix to the committee, but his informational advantage gave him significant influence in convincing the committee of what was feasible and reasonable at the hospital at the time. There is some evidence that during the first two years of the experience the ALSM took more initiative than during the latter period in promoting new services and in ensuring quality control through the administration of surveys, especially in medical areas. As did others, these decision rights were diluted over time and stabilized into a less interventionist role for the ALSM. There is some evidence that near the end, the ALSM had too little intervention in service delivery and quality control in the hospital, as no surveys were carried out and efforts to start a pediatric department came to naught.

Community outreach work was mostly carried out by the ALSM, a logical allocation of decision rights. This involved social functions and some distribution of leaflets about the activities of the hospital (Interview with Michel Matta). Coordination

with other hospitals and with the Ministry of Health was equally shared between the ALSM and the director for some time, then changed. As the World Bank project to reform the health sector was launched, the ALSM's close relations with Director General who managed the project strengthened its decision rights in this area. These relations also placed the ALSM in a good position to share its achievements with other public hospital patrons and support committee members in Lebanon. Coordination between the director and hospitals with which HDB had established exchange agreements, such as Chartres and Quinze-Vingt remained the prerogative of the director.

### ***5.5 Taking stock of HDB's institutional design***

HDB's distribution of decision rights in the four areas of hospital finance and management discussed above was by-and-large logical, and conforms with the conventional wisdom on strategy-oriented corporate hospital boards (Appendix A). Conceptually, part of the secret to HDB's success was in its ability to couple residual claimant rights with residual control rights in key areas, approximating "optimal allocations" of decision rights (Milgrom & Roberts 1992). Hansmann's (1996) insightful discussion of hybrid organizational forms in The Ownership of Enterprise helped frame the following preliminary ideas, which constitute the basis of a separate paper.

Before launching its experiment with autonomy, HDB was a typical centralized public sector agency, where the manager had no residual claimant rights and hardly any control rights, as Table 4.1 shows. Under the governance of the ALSM, HDB created three important types of residual claimant rights.

The first of these rights was in the area of finance. With the creation of the ALSM, HDB became a residual claimant of its own, newly created revenue. None of this



revenue was claimed (nor was it technically “claimable”) by the MOH, despite calls by doubtful central inspection and regulatory agencies to put a stop to all support committee-type activities. While this revenue could not be redistributed among the leaders (owners) of the innovation -- the ASLM members and the HDB director -- they were free to determine its redistribution within HDB.

These rights were a source of power, and they constituted an intangible, non-pecuniary but distributable surplus that combined a sense of satisfaction with pride at having made positive changes to the public hospital the ALSM members adopted. This was a second type of claimant right. When this non-pecuniary surplus dried up as the informality of the experience became more of a liability than an opportunity, the ALSM resigned.<sup>39</sup> The HDB experience points to the necessity of having some surplus accrue to board members and to the importance of considering incentive plans for board members, a complex issue, precisely because these are best kept largely non-pecuniary. Incentive plans for directors, on the other hand, have been widely applied. For example, the salaries of some corporatized hospital directors are partly a function of the hospital’s profit margin.

Finally, HDB informally pioneered an incentive contract for its director by granting him an income supplement that increased as the hospital’s cash flow augmented. Interestingly, this scheme was closer to a re-distributable surplus than to an incentive plan because it was never contracted for. The director was made a partial residual claimant of HDB’s surplus, a third way in which HDB achieved a paring of claimant and control

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<sup>39</sup> Indeed what is remarkable about this experience and the limited experience with corporatization in Lebanon to date is that there is no dearth of people interested in improving the operations of the public sector, given the right conditions and incentives. If well designed, corporatization of hospitals has enormous potential in Lebanon, especially given entrepreneurial skills present.

rights. Although an interesting aspect of the HDB experiment, this claimant right might be difficult to replicate or generalize.

6. *Policy lessons: Generalizing from the HDB experience*

The benefit of studying innovation, is in the ability to discern key elements that can inform the theory, and in the opportunity to generalize from outlier to concept instead of from case to population based on a random sample (Yin 1994). The remainder of this discussion benchmarks the HDB experience against trends in hospital governance to draw lessons for the amendment of the public hospital corporatization decrees under Law #544. Table 6 expands on work developed by Shortell (1989). The original table in Shortell (1989) compared industry boards with traditional hospital boards in order to highlight the differences and suggest ways in which hospital boards might evolve in the face of market competition. The more recent literature on boards confirms that the direction suggested ten years ago was in fact viable, and has proven to be necessary (Taylor, Chait & Holland 1996).

**Table 6: Comparison of Hospital vs. Contemporary Industry (Corporate) Boards**

<b>Traditional Hospital Boards</b>	<b>Industry Boards</b>	<b>HDB ALSM</b>	<b>Corporatized Boards Provided for under Law #544 in Lebanon</b>
Large (14-50)	Small (7-10)	Small (7)	Small (5-9)
Broadly representative	Expertise focused	Expertise focused, but inadequately	Politically representative. Possibly inadequately expertise focused.
Long terms of office	Short term of office	Long term of office	Short, but renewable with no limits
Many committees	Few committees	Few committees	No committees provided for by design
Monthly meetings	Quarterly meetings	Weekly and Bi-monthly meetings	Bi-monthly meetings, or more
2-3 hour meetings	6-8 hour meetings	2-3 hour meetings	(No pattern yet)
Cumbersome decision making	Rapid decision making	Rapid decision making	Cumbersome decision making
Consensual orientation	Pragmatic orientation	Consensual orientation	Unclear orientation, elements of conflict to date due to differential political leverage and lack of definition of prerogatives
Stewardship orientation	Growth/Risk orientation	Mostly stewardship orientation Growth/risk orientation at the beginning	Unclear orientation to date. No fiduciary or legal responsibility to mitigate risk-taking
Process orientation	Results orientation	Results orientation	Unclear pattern to date. Legal structure is very process-oriented in key areas
Members seldom paid	Most members paid	Members not paid	Members paid

Adapted from Steven Shortell, "New Directions in Hospital Governance," *Hospital Governance* 34:1 Spring 1989.

Table 6 reveals good news and bad news about the Implementation Decrees under Law #544 in Lebanon. The good news is that boards are small in size, their meetings are relatively frequent, and their members are remunerated (although the real incentive may in fact be of a more important, non-pecuniary currency). The bad news about hospital boards in Lebanon is that the law does not guarantee that they be expertise-focussed at a time when expertise has become the single most important asset a board member can

bring to a hospital (see Appendix A, Eid 1999b). In addition, the system places no limits on board term renewal, risks allowing politicized boards, transfers very little financial risk to the hospital manager and board, and results in cumbersome decision-making because of excessive *ex ante* controls (Eid 1998; Mubarak 1999). Furthermore, the system does not yet define the distribution of decision rights between the board and the director, a problem that has led to costly periods of decision rights dis-equilibrium in some cases, similar to the HDB experience at the outset. Nor does the system define a clear orientation in management or a system of committees for the board. The default direction could become a process orientation (Table 6).

In contrast, despite its many points of weakness, HDB under the governance of the ALSM did not have a politicized board, it enjoyed flexible decision-making, and it assumed the full financial risk from its decisions. Furthermore, by 1994, HDB had settled into a clearly and logically allocated distribution of decision rights between the director and the board, as Section 4 showed, and it had a clear results-oriented direction, although at times it could not fully implement it. HDB also had a fledgling system of committees.

This work does not seek to paint HDB as a model by any means. Instead, it seeks to underscore that HDB's institutional design is worth understanding because it was demand driven – i.e., it was designed by HDB locally, (not by the MOH) in reaction to market and systemic forces, somewhat like a firm in a market adopts the structure that maximizes its chances of survival and success. In contrast, the current legal structure is supply-driven in the sense that hospitals are receiving, top-down, decrees that determine their decision rights allocations, and to which they are unable to conform fully before the

decrees are amended. The risks of supply-driven institutional design are being brought to bare through slow and irregular implementation and perverse incentives. At the same time, systems are by definition centrally designed. Curiously, the fact that good systems must benefit from local knowledge is rarely applied, despite the fact that it is common knowledge.

Both the success and the limits of the HDB/ALSM design offer important lessons when designing a system top-down. For example, in all areas of decision rights, hospitals must have a clear distribution of prerogatives in order to avoid negotiations and the constant need for accommodation, processes with significant opportunity costs. This is true both at the level of relations between the director and the board, and at the level of relations between the hospital and the MOH and the MOF. In Lebanon today, this can be partly achieved through the drafting of the Internal Administration Decree, and partly through the elaboration and clarification, to hospital staff and management, of the model of hospital governance that the reform is looking to bring about. Similarly, decision rights in areas of design and implementation of broad hospital policies are important to define and stabilize early on, to ensure alignment of the hospital's objective function with those of the MOH and the MOF, for example. Board member term lengths and conditions for term renewals are important to clarify in ways that ensure continuity without compromising energy and enthusiasm.

In the area of human resource management, the HDB experience has shown the importance of designing remuneration as an incentive, and of using incentives as performance and disciplinary measures, instead of allowing them to become public sector entitlements or political rights. The new system in Lebanon creates this opportunity, but

the legal structure does not ensure it will come about. Most notable, and least well defined is the remuneration of the key position of the hospital director. For hiring below the level of the director, the Decree on Personnel has been found to be too rigid and constraining, while an important aspect of adapting to demand entails human resource flexibility. HDB's approach was to periodically review and set hospital staff needs at the level of the board (ALSM), depending on demand for services. A capacity constraint of HDB, and possibly of the new system is in middle management. At HDB, this was due to constraints discussed in Section 5. In the new system, it is likely to result from politicization in hiring practices absent the eye of a benevolent minister.

This discussion also points to broader, systemic issues in satisfying the objectives of corporatization. For example, coherence in intra-sectoral policies is key. Among the market forces that HDB was unable to adjust to was a perverse price signal that resulted from the MOH subsidy of private sector treatment. Because the system of obtaining permission for cost-reimbursement was simplified and had become widely publicized by the 1995, patients could obtain private sector care in return for a co-payment averaging 15%, while they were required to "contribute" close to 50% at HDB. This extreme example illustrates the importance of sector-wide planning and strategy. Among the important next steps in reform today, is an analysis of how financially tenable corporatization is system-wide. Such a study would include forecasts of demand and revenue and estimates of profitability across public hospitals as a group, not just on an individual basis, and would be key to determining the extent to which the MOH can be expected to subsidize corporatized hospitals for a determined period of time.

At the hospital level, the capacity to carry out strategic and financial plans, requires more than a provision in a decree. Based on the HDB experience, neither the recognition that such tools were important, nor the desire to carry them out was missing. What lacked was capacity -- a problem we risk seeing once more under Law #544. Careful selection of skill mixes on boards, but perhaps more importantly training and continuing education for board members are some ways of promoting good performance in this area.

A number of other policy lessons can be drawn from this analysis. To conclude, it is worth emphasizing the importance of risk transfer to the level of hospital managers and directors, and of performance targets and mechanisms for sanction in case of non-compliance with targets. These are elements of hard budget constraints – a main objective when we attempt to reform the public sector.

A set of research and policy conclusions follow from this research. On the research side, in addition to further exploring the nature of hybrid organizational forms and ownership in the public sector, the use of decision rights analysis as an empirical tool requires further refinement and broader application to more than one case. Such work would shed additional light on the way we understand ownership, incentive provision and performance in the public sector.

On the policy side, priority areas in amending the Implementation Decrees under Law #544 are of two types. One is to improve the institutional impediments to the operation of existing hospitals by relaxing constraints in some areas of the decrees and clarifying ambiguities in other areas. Another priority area on the policy side is to establish a system that would function beyond the presence of benevolent dictators and

altruistic leaders interested in improving the sector. This stage is otherwise understood as the process of “institution building”, a recurrent phrase in Lebanon’s policy rhetoric today.



## 7. *Appendix A: Functions of Boards and Directors in Corporatized Hospitals*

### 1. *Overview*

This note provides a brief background on different types of hospital boards and enumerates the functions of the model most prevalent and most successful in health care delivery today.

The oldest, most traditional type is the “caretaker/benefactor – philanthropic” board, composed of community notables who used their influence to raise funds for their hospitals. Members of such boards perceived the hospital as an extension of their social interests and derived a significant degree of prestige from their role.

Another type of board is the “representative” board, which became popular in the 1960s, but has now been abandoned in many countries. Members of this type of board were popularly elected, sometimes on an electoral ballot alongside municipal elections. The reason why this type of board has proven ineffective is twofold: (1) local elections do not necessarily guarantee the selection of “the most knowledgeable” in hospital management. Instead, they result in the election of the most “popular” at the local level, who may or may not be the most “knowledgeable” in health matters. (2) The issues that tend to attract local votes, such as the addition of a new wing to a hospital, do not necessarily improve quality and/or access, and may even hinder such goals.

Still another type of board is the “alternative career” board. Typically, these boards were dominated by individuals who saw their board involvement as a way to further their own careers – whether as local banker, newspaper publisher, or real estate agent. Often, such board members would become overly involved in the details of hospital operation – much to the chagrin of the hospital manager. This type of board is similar to what is sometimes described as a “management” board.

None of these types of boards necessarily existed in pure form – often combinations would exist. What is certain is that the benign, non-competitive environment in health care delivery allowed these forms to exist and many hospital managers felt not pressure to change them. Today, this is no longer true as hospitals attempt to reposition themselves to face the difficult challenge of meeting efficiency and profitability requirements in competitive markets without compromising quality and equity.

The model most hospital boards are converging toward today is that of a strategic director, “corporate” board. Members of such boards are a collection of relevant areas of expertise, mentors, evaluators and risk-takers. Rather than being overly concerned with process issues, today’s boards must think and act strategically. Issues must be prioritized quickly, linked interdependently and always considered in relation to the competition. Rather than just being a caretaker with influential links to the community, today’s board

must include expertise in marketing, finance, law, accounting, economics, medicine and related areas to guide and oversee the strategic direction of the hospital. Instead of board membership as an alternative career, today's board members must see their involvement as a term that is limited in time, during which they provide mentoring to the director without micro-managing him or her, hold the hospital accountable for its behavior and evaluate the director's performance. Finally, instead of being overly concerned with structure and process, today's boards must spell out and continually update roles and responsibilities based on the hospital's mission and strategic plan, and not on an artificial and rigid separation of board, management and professional staff functions. The definition of roles and responsibilities should not preclude members of these three groups from working as a team, with a sense of shared responsibility and credit for the success of the hospital. In sum, the emphasis needs to be more on expertise, accountability, vision and strategic direction, external focus and the ability to compete, and innovation coupled with rapid decision-making. With some amendments, the autonomous structure granted to public hospitals in Lebanon today will allow for all of this.

Some broad lines for the definition of prerogatives. These lists are meant to be suggestive, not comprehensive or prescriptive.

## **2. *Functions for the board***

- The establishment and continual adaptation of the broad strategy and long-term direction of the hospital taking into account the macro and local competitive environment, as well as sectoral priorities based on the ministerial directives and instruments such as the *Carte Sanitaire*;
- The establishment and periodic updating of the organizational structure of the hospital;
- The appointment of senior positions in the hospital, upon the recommendation of, and in consultation with the director;
- The oversight of hospital management by the director through jointly agreed upon targets for performance;
- The development of a business plan/"*projet d'entreprise*"/"*mukhattat tawjihi*" for the annual (short-term) implementation of the hospital's long-term strategy, with a view to ensuring the financial viability of the hospital. The development of this plan should be the responsibility of an ad hoc committee jointly represented by some board members and some hospital senior staff, including the director. Adoption of the plan is to be subject to a board vote.
- The monitoring of hospital performance, through careful periodic analysis of the following areas:
  - (a) Finance: audited annual reports and budget projections (taking into consideration financial targets set by the board);
  - (b) Human Resource Management: periodic staff satisfaction surveys, staff performance and productivity measures and ratios, including the director;

- (c) Procurement: periodic monitoring of purchasing effectiveness and the relative (market) costs of hospital inputs;
- (d) Health Care Delivery: periodic revisions of the mix of services provided, possibilities for expansion or the need for contraction depending on the environment, monitoring of quality through patient satisfaction surveys and periodic spot audits in hospital wards.

In none of areas a. - d. is it recommended that board members actually carry out the functions described. The role of board members is in the planning, definition, timing, contracting out, and subsequent revision and evaluation of results from reports requested.

- The setting of fee exemption policies;
- Community outreach work, including contacts with philanthropic and corporate sponsors;
- Coordination with the Ministry of the Health, through the Ministry Delegate;
- Coordination with other hospitals, with the hospital director's participation.

### **3. *Functions of the director***

- Broadly speaking, the director is accountable to the board for execution of board decisions and for the overall performance of the hospital according to jointly agreed-upon targets, financial and otherwise. To do so, the director is empowered by the board to make all decisions relevant to this role, enumerated below. As such, the organization of hospital administration is the prerogative of the director and constitutes a very important "tool" the director uses to produce the output agreed upon with the board.
- Finance: Ensuring reliable fee collection (no leakage) and accounting for revenues, through the proper assignment of responsibilities for these functions within the hospital administration. If not taken care of through annual budget discussions, the making of expenditure decisions below thresholds agreed upon with the board. These decisions range from petty cash to routine disbursements to emergency purchases. Thresholds are a function for hospital and budget size.
- Human Resource Management: Within agreed upon budget envelopes, the director makes all decisions related to the hiring, reallocation, promotion, discipline and firing of non-senior staff. Decisions related to senior staff require a board vote. The director makes these decisions based on prior agreement with the board as to what constitutes senior staff. Policy issues such as the strength of incentive pay (bonuses) and the aggressiveness of hiring policy are also subject to board discussions, and so are internal organizational decisions involving HRM, such as the formation of staff committees, etc.
- Procurement: Again, below agreed-upon expenditure thresholds, the director should have the flexibility to procure categories of medical consumables, non-medical consumables, minor medical equipment and some fixed equipment. Also below certain thresholds the director has the prerogative to procure maintenance services, especially if they are of an emergency nature.

- **Health Care Delivery:** Quality control, both in medical and non-medical services is the function of the director. The evaluation of quality control practices is the function of an outside reviewer commissioned by the board, as outlined above. Decisions on the range of services provided, as well as the relative emphasis of services provided are to be made jointly by the director and the board, with careful consideration of the director's recommendations. The evaluation of the choice and range of health care provision, as outlined above, is to be carried out by an outside reviewer commissioned by the board and agreed upon by the director.

8. *Appendix B: Policy Note*

**ASSESSING THE MOH'S PROJECT TO CORPORATIZE PUBLIC HOSPITALS**

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**1. *Overview and policy issues***

The health sector is among the most complex and pressing aspects of administrative reform in Lebanon today, not only because of the urgency of curbing the excessively high costs of the sector, but also because the reform proposes new legislation which is to form the basis of an institutional structure changing the operation of all public hospitals in the country. The objective of the new institutional structure is to improve quality of service in public hospitals (and cut costs in the sector) by granting hospitals a degree of managerial and financial autonomy from the Ministry of Health (MOH). Of great currency worldwide but faced with mixed results, this type of reform is being referred to internationally as "corporatization" and is understood as a middle ground between public sector ownership and management, and privatization.

This note summarizes preliminary findings based on work carried out on to date, and makes recommendations on how to proceed. The work entailed (1) analysis of the decrees of application under Law 544 governing public hospital autonomy; (2) interviews with ministry officials and hospital staff and users, and; (3) site visits. The questions I asked through this work have to do with:

- The appropriateness of the new structure given macro considerations in the health sector and given lessons learned from the experiments with autonomy that preceded the new Law #544 governing public hospital autonomy;
- Progress and obstacles in implementation given the experiences to date of two hospitals, Nabatiyye and Tannourine, and of Dahr el-Bashek, a hospital that attempted autonomy through a public-private association, before Law #544 was passed.

**2. *Overview of findings to date***

What follows is a summary assessment of the reform:

1. There exist various gaps in the decrees of application, such as lack of clarity on lines of accountability between public hospital boards and the Ministry of Health, and between hospital directors and hospital boards.

2. There are implicit contradictions in the spirit of the law. For example, while some provisions in the decree on finance are clear in the establishment of numerous MOH controls over revenue and expenditure decisions of hospitals and hospital boards, other provisions appear to grant virtually free reign over the transfer of use and ownership of the physical assets of public hospitals.
3. The new autonomous structure is vulnerable to political influence, which appears to have affected implementation in the case of two hospitals, Tannourine and Nabatiyye. Politicization derives partly from the manner in which hospital boards are appointed, the size of hospital boards and their terms, the mechanisms of coordination between the MOH and hospital boards (through the person of the ministry representative), and various insufficiently defined oversight functions of the MOH.
4. Lack of clarity on the objectives and implementation details of autonomy. Among the important actors that remain unclear about the reforms are Ministry of Health middle managers and those below them, public hospital managers and those below them who are not yet fully aware of the content of the decrees of application of the new law governing autonomous hospitals.
5. Insufficient exploitation of lessons learned from the “informal” experience in public hospital autonomy prior to Law No. 544. For instance, one important conclusion from the analysis of the experience of the Support Committee of the Hospital of Dahr el-Bachek is that the five-member board, meeting twice a month, had hardly enough time to address all important policy matters facing the hospital. Given this statement by various members of the retired Support Committee, it is not clear how a board of three members for hospitals of under 100 beds (the majority of hospitals in the country) is expected to be sufficient.
6. Furthermore, and related to point 5., preliminary findings point to the fact that in most countries where public institutions are vulnerable to “political capture”, boards are constituted such that a number of spots are reserved for “political” appointments, while a number of other spots is reserved for “technocratic” appointments, guaranteeing a balanced mix between important political interests and rational policy decisions. Implementing such an idea is not beyond reach for a country like Lebanon.
7. Finally, the above, in addition to readings of the decrees lead to the conclusion that the conceptual underpinning, or model for the proposed reforms is unclear. Information I have been provided through interviews indicates that the French and Tunisian models might have been drawn upon. It is not clear why these in particular would have been selected, nor is it clear that any other lessons learned from international experience have been exploited in conceptualizing the Lebanon reforms.

### 3. *Why not just do away with public hospitals?*

The reason why total privatization of health delivery should not be an option in Lebanon goes beyond the standard public good/equity considerations. The linchpin of an effective system of private delivery of public services is strong regulatory capacity, which we lack in Lebanon. Instead, the Lebanese public sector has proven to be vulnerable and fertile ground for the politicization and corruption of individual

transactions, especially when they are relatively small and numerous, which is the reason why expenditures on the cost reimbursement system in the MOH increased exponentially in the past 7 years. The granting and oversight of contracts under a privatized system requires a regulatory system that is accountable, and that benefits from reliable quality and performance measures. Given the existing regulatory weakness of the MOH, it is not clear that such a system will be instituted and can be effective.

On the other hand, bad public health provision will cast further doubt on the capacity of Lebanese public hospitals to deliver such services, and will strengthen the rationale for privatization. Seen from this perspective, a strong and carefully crafted set of decrees of application governing autonomous hospitals is crucial. To achieve this, an interim revision and restructuring of the current decrees is of priority today. Continuing with the decrees we have recently passed will not only create weak and difficult-to-regulate public hospitals, it will also put in place and entrench local interests that will be difficult to remove once we have even clearer evidence of the structure's weakness, probably two years into implementation.

#### **4. *What remains to be done***

- A fresh reading of the decrees of application in view of the uncertainties, complications and obstacles on the ground to date. As I suggest this, I acknowledge the great deal of work that has clearly been put into the current versions of the decrees of application. What is unfortunate is that the few weaknesses they contain happen to be key determinants of success under the new regime.
- A review of most relevant international experiences in this area to date, and incorporation of appropriate lessons of this experience into the refining and implementation of institutions of autonomy in the public health sector in Lebanon. Many of the questions currently being posed in Lebanon have already been posed and resolved elsewhere. While it is important to pay attention to the particularities of the Lebanese case, there is no need to "reinvent the wheel" for all aspects of the reform.
- The above review would need to be carried out in tandem with discussions/revisits of current macro-considerations in the sector, knowing that such considerations might have evolved since the initial discussions of Law #544. To illustrate, it makes no sense trying to adjust details of the governance and operation of a public hospital without ensuring that such adjustments are in line with a clear and well-articulated strategy that accounts for the public hospital implementation constraints we are encountering on the ground.

9. *Appendix C: Decision Rights Analysis Interview Framework*

<b>Decision Right</b>	<b>Holder of Decision Right</b>			
	<i>Support Committee</i>	<i>HDB Director</i>	<i>MOH</i>	<i>Other</i>
<b>Finance</b>				
<i>Solicitation of Outside Funds</i>				
<i>Allocation of Outside Funds</i>				
<i>Fee Setting for Services</i>				
<i>Exemption Policy</i>				
<i>Fee Collection</i>				
<i>Allocation of Fee Revenue</i>				



### Decision Rights Analysis Interview Framework

Decision Right	Holder of Decision Right			
	Support Committee	HDB Director	MOH	Other
<b>HRM</b>				
<i>Hiring</i>				
<i>Doctors</i>				
<i>Nurses</i>				
<i>Admin</i>				
<i>Support</i>				
<i>Promotion</i>				
<i>Doctors</i>				
<i>Nurses</i>				
<i>Admin</i>				
<i>Support</i>				
<i>Firing</i>				
<i>Doctors</i>				

<i>Nurses</i>				
<i>Admin</i>				
<i>Support</i>				
<i>DiALSMipline</i>				
<i>Doctors</i>				
<i>Nurses</i>				
<i>Admin</i>				
<i>Support</i>				
<i>Internal Org Decisions</i>				

### Decision Rights Analysis Interview Framework

Decision Right	Holder of Decision Right			
	<i>Support Committee</i>	<i>HDB Director</i>	<i>MOH</i>	<i>Other</i>
<b><i>Procurement</i></b>				
<i>Medical Consumables</i>				
<i>Other Consumables</i>				
<i>Major Medical Equipment</i>				
<i>Other Fixed Equipment</i>				

## Decision Rights Analysis Interview Framework

Decision Right	Holder of Decision Right			
	<i>Support Committee</i>	<i>HDB Director</i>	<i>MOH</i>	<i>Other</i>
<i>Service Delivery</i>				
<i>Range of Services</i>				
<i>Relative Emphasis on Services Provided</i>				
<i>Quality Control - Medical Services</i>				
<i>Quality Control - Other Services</i>				
<i>Community Outreach</i>				
<i>Coordination with Ministry of Health</i>				
<i>Coordination with Public Hospitals</i>				

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**Paper 2.**

**Governance and incentives in corporatized public hospitals:  
The case of Lebanon**

**1     *Introduction***

Corporatization is a hybrid organizational form, between government ownership and privatization that seeks to improve efficiency and reduce transfers (and costs) in a publicly owned public sector. Corporatization is a brand of decentralization in that it reallocates decision-making authority from the central administration to lower levels of the public sector. After a brief overview of decentralization and corporatization in public health, this paper analyzes the role of governance and incentives in corporatized hospitals. The analysis focuses on the design of public hospital corporate boards, the institutional lynchpin of such systems. Drawing on Dixit's (1996) multitasking common-agency model as a conceptual lens, I propose a manner of assessing the institutional design of corporatized hospital boards. I analyze the extent to which the Dixit model explains factors salient to such boards, and point to other factors that come into play. I

conclude with some policy implications for the reform of the public hospital law in Lebanon.<sup>1</sup>

In part 2, I discuss the role of decentralization and corporatization in public health reform to indicate the institutional structure that has recently been promoted in a number of countries. In part 3, I introduce the multitasking common agency model and map it onto the problem of hospital board design. I also describe the initial data collected to carry out the analysis. I introduce the case of Lebanon in part 4 and discuss the objectives of the reform as well as the principal features of the institutional structure governing corporatized hospitals. In parts 5 and 6, I discuss the coordination and agency problems emanating from the design of corporatized hospitals in Lebanon and offer some ideas for the reform of the system.

## **2      *Decentralization in public health care provision***

There are three possible types of government involvement in health: regulation, finance and service provision. Regulatory functions include decisions on the rules of system configuration and the definition of respective roles for the public and private sector. Finance functions determine the extent of universal health coverage using public funds. The government may also be involved in direct provision of services, as the owner and manager of hospitals and primary care services. The limits of private initiative in the delivery of public goods and political constraints on privatization are the two main factors behind public health provision.

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<sup>1</sup> Passed in 1996, analysis of this law (Eid 1998) revealed that its design is weak in some key areas that make it difficult to implement. In a policy note addressed to the Ministry of Health, I recommend its amendment - a project currently underway. See Appendix A.

Two principal schools of thought have developed in answer to the question of how to increase efficiency in public service provision, health included. On the one hand, it is argued that efficiency and performance are more important than ownership, and that good management is key (e.g., Moore 1996; Barzelay 1992). As such, hiring innovative managers with the right technical and leadership skills and introducing the appropriate (“private sector-like”) management systems improve efficiency. On the other hand, it is argued that the public sector has inherent inefficiencies due to the nature of the goods it provides and to the limited power of incentives it can offer, and that the size of the public sector is better reduced to a minimum through the transfer of responsibilities to the private sector where possible (Wilson 1989, Kikeri, Nellis & Shirley 1992; Schleifer 1998). From this perspective, privatization is the preferred option for better service delivery. Advocates of corporatization take a middle ground as a point of departure, namely that both the public sector and the market are capable of failure, necessitating the search for organizational forms that reduce inefficiencies on both sides. In designing such organizational forms, incentives and coordination are key levers.

Public ownership implies, in practice, various constraints on the management of facilities. Personnel are usually civil servants and procurement procedures are subject to system-wide rigid rules. Therefore, an inevitable effect of public ownership is less flexibility in adapting to local conditions, and ‘low powered’ incentives. Tirole (1994) considers four reasons why the ‘power’ of incentive schemes tends to be ‘low’ in public sector agencies: a) the multiplicity of goals and the difficulty of their measurement; b) the unavailability of benchmarks for comparisons; c) the heterogeneity of owners; and d) property dispersion. Holmström (1994) arrives at similar results with respect to large

organizations: in developing systems to manage diverse sets of activities, they tend to dampen incentives and quell innovation.

Coordination issues are also extremely important when agents have low-powered incentives, since discretionality and autonomy can lead to poor performance, such as shirking. Resolving coordination issues relates to institutional design.<sup>2</sup> A central element of design is the allocation of residual control rights (or decision rights), between centralization and decentralization.<sup>3</sup> An inevitable trade-off exists between centralization and lack of efficiency, and decentralization and lack of monitoring. Coordination seeks to minimize this trade-off.

Studies of organizational boundaries consider two elements in the decentralization of decision rights (Holmström 1995; Hart 1995; Milgrom and Roberts 1992; and Kreps 1992). First, those with authority must also bear the responsibility for their decisions because the alignment of authority and responsibility creates incentives for optimal decision making. Second, coordination is important in ensuring that organizations allocate the authority to make decisions to the agents best informed to make them. The benefits and costs of decentralization have been well studied.

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<sup>2</sup> Throughout this paper, I use North's (1990) distinction between "institutions" and "organizations". Institutions are the formal and informal rules that shape interaction. They range from constitutions, to laws, to common practice to corporate culture (Kreps 1993). Organizations are groups of individuals bound by some common purpose to achieve a given set of objectives. They include political, economic, social and educational bodies. In this proposal, a hospital is an organization. The law and decrees governing the operation of the hospital are a set of institutions.

<sup>3</sup> 'Residual control rights' over an asset are defined by Hart (1995) as "the right to decide all usages of the asset in any way not inconsistent with a prior contract, custom, or law ... possession of residual control rights is taken virtually to be the definition of ownership ... in contrast to the more standard definition of ownership, whereby an owner possesses the residual income from an asset rather than its residual control rights" (pp.30). Residual control rights are also referred to as 'decision rights' by Holmström (1995), Milgrom and Roberts (1992), and Kreps (1992). The latter, shorter term is used more frequently in this paper.

**Table 1. Benefits and costs of decentralization**

<i>Benefits</i>	<i>Costs</i>
Better use of information at the local level	Agency costs
Lower response time in adapting local conditions	Coordination costs
Increased motivation of managers	Costs of communication between central and local units

Source: Brickley, J. et al. 1997. *Managerial Economics and Organizational Architecture*, Irwin.

In health service delivery, organizational boundaries are in flux throughout the world, because of changes in medical technology, know-how, and costs, resulting in differential changes in transaction costs (Robinson 1996). Organizational boundaries have also been in flux because policy-makers have deliberately experimented with new organizational forms to solve the agency and coordination problems outlined above. In the US private health sector, for instance, vertical disintegration and horizontal integration have been the two prominent trends in managed care (Robinson 1999). Numerous industrialized and developing countries are experimenting with the separation of funding from provision functions, with the aim of improving efficiency (Govindaraj & Chawla, 1996). One of the main institutional responses to this effort has been the corporatization of public hospitals.

### ***2.1 Corporatization and its implications in public hospital reform.***

Corporatization seeks to retain public sector ownership of hospitals, but to reduce their cost by: (a) granting them revenue-raising capacity, and; (b) changing the incentive structure at the local level, including the level of risk incurred by hospitals. By

transferring decision rights over finance and management to the level of hospital managers, corporatization also seeks to improve the quality of public health provision. However, unlike what happens in private health provision, corporatization cannot achieve a complete transfer of risk to the provider (hospital). Because financial risk continues to be consolidated at the level of the national public sector, among the difficult issues in the design of corporatization is the decentralization of decisions rights in a way that transfers a sufficient degree of financial risk to the corporatized entity, to improve performance.

Under corporatization, public hospitals are generally required to develop a revenue-raising capacity through user fees. However, the incentive to raise funds depends on the role and structure of health insurance coverage. Under universal coverage, hospitals receive a transfer from the public budget. The design of hospital finance options ranges from (a) an allocation estimated based on transfers made in previous years, and (b) a performance contract. In the former case, the hospital is designed as an administrative unit similar to any arm of the central administration. In the second case, when establishing a performance contract, the central administration or sector aims at setting the goals and expected budget and empowers decisions and responsibility at the level of the hospital (Harding & Preker 1999).

The impact of performance contracts has been mixed (World Bank 1995; Shirley 1999). Since there is no significant transfer of risk, the real effect on incentives depends on multiple factors that go beyond the definition of the contract. As an example of the range of options under this arrangement, the hospital manager reports to the Minister of Health in some cases, while he/she reports to a board of directors in other cases. Further complicating this sort of arrangement is the difficulty of monitoring hospital directors and

board members in the presence of political intervention. As a result, especially when performance contracts are present, the design and effectiveness of hospital governance institutions are key, and depend on the following types of factors, currently being grappled with.<sup>4</sup>

- Consistency between the proclaimed objectives of corporatization and organizational design, i.e., where on the gamut between administrative units and performance contracts the system lies;
- Whether key stakeholders/principals are represented on hospital governing boards and how much influence they wield;
- Requisite alignment of the incentives of the agent, or hospital manager, with those of the principals, and, by extension, alignment of the objective function of the hospital with that of the sector – a coordination problem that impacts both the quality and cost of service provision;
- Adequacy of the power of incentives given intended outcomes.

In what follows, I discuss the relevance of some agency models to understanding incentives and coordination in the institutional design of corporatized public hospitals.<sup>5</sup> I

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<sup>4</sup> These questions are of special interest given the international trend toward decentralization and corporatization of the public sector, and given the apparent difficulty of designing effective public hospital boards in both industrialized and developing countries (Govindaraj & Chawla, 1996; Barnum & Katzin, 1993; Shonick & Romer, 1983, Savage et. al., 1997; Schleifer & Vishney, 1997; Gertner & Kaplan, 1996). It is curious that despite the wide interest in this topic, there is little theory that informs it.

<sup>5</sup> I use the terms institutions, institutional structure, institutional design, laws and their decrees of application interchangeably in this paper. A comprehensive treatment of institutions would normally cover problems of implementation, enforcement, and monitoring in addition to issues of design (structure) (Polenske 1999). For the sake of narrowing and deepening the scope of this research, I focus on issues of design, which are most amenable to the analysis of decrees – an important component of my data and policy problem. I will bring in issues of implementation, enforcement, and monitoring insofar as they enlighten the problem of design, but they will not be the focus of the discussion.

then evaluate the incentives that the system in Lebanon has provided for hospital boards of directors to be responsive to the objectives of their stakeholders, of which there are at least two sets -- the health sector's regulators of public hospitals and community members/hospital users in their areas.

### ***3 Conceptualizing the corporate governance of public hospitals***

Dixit's formulation of the problem of governance in the public sector builds on two seminal models in the field of organization economics. The first is the multitasking model, developed by Holmström and Milgrom (1991). In this model, an agent has several tasks that compete, at least partly, for the agent's attention and effort. Because the agent's priorities over tasks are not certain to correspond with the principal's, the latter devises an incentive scheme to influence the agent's allocation of effort. The choice of incentive scheme depends on the degree of observability of inputs and outputs, and on the differences in values between the agent and the principal. Two important results derive from the Holmström/Milgrom model: (1) If the output from one task is poorly observable, compared with output from a competing task, then the incentive scheme for the competing task must have lower power (i.e., the reward must be less) to avoid excessive diversion of effort from this task to the more observable one(s); (2) If some tasks are primarily of value to the agent (as compared with the principal), and can be controlled by being prohibited altogether, then it may be preferable for the principal to prohibit them, rather than attempt to provide stronger incentive schemes for the performance of other tasks.

Bernheim and Whinston (1986) consider the problem of one agent with more than one principal. The agent may work on the basis of explicit delegation by principals, or by



intrinsic assignment (when the agent takes decisions that affect several principals). If principals cooperate, or agree on goals and coordinating incentives, the result is similar to having a single principal. If principals do not agree on goals, then actions by the agent may be biased to those principals providing greater incentives, otherwise the mean behavior by the agent would be to satisfy all principals at the same level.

Dixit combines the two models to show that the combination of multiple principals and multiple tasks results, perforce, in low-powered incentive schemes. His model is based on the intuition that in such situations, each principal will try to free ride on the incentives provided by the other(s). The multitasking common agency model predicts that given unobservable effort, an agent will exert second best effort if the principals are united and third best effort if the principals do not act cooperatively. Under non-cooperative arrangements, even though a given principal  $j$  may not be concerned with any other components of the agent's output but those of interest to  $j$ , principal  $j$  would prefer that the agent exert less effort in other dimensions because that would induce the agent to make more effort in the dimension that benefits  $j$ . In equilibrium, a situation with multiple principals and multiple tasks yields low-powered incentive schemes because some of the incentive provided by principal  $j$  to the agent results in benefits to other principals as well. This "leakage" makes it much less desirable for principal  $j$  to offer a powerful incentive scheme. Given unobservable effort, improving on this outcome involves better coordination of principals, an important potential lever in the design of public sector organizations, especially given the difficulty of providing high-powered incentives.

### *3.1 Mapping the model onto the problem of hospital board design*

In applying the multitasking common agency model, we consider the hospital manager or CEO as the agent. This agent has several principals (stakeholders) such as the MOH (tutelage sector) on one end and the community on the other, as well as doctors, licensed employees, unions, etc... some or all of whom can be represented on the hospital board. To simplify, we take a case where the manager has two principals, and assume they are the MOH and the community. The MOH's primary objective is to reduce the costs of the sector given minimum standards of quality -- a goal partly achieved through reductions in transfers for public health provision. The more a hospital gets its financial house in order, through cost-recovery and cost-effective service provision, the closer the MOH gets to fulfilling this objective. The communities dependent on public hospitals have different and potentially conflicting objectives. Public hospital users, or "stakeholders" (Savage et. al., 1997), want the best possible care at the lowest possible price, especially since the previous system provided the possibility of universal coverage.<sup>6</sup> Prima facie, the objectives of these two principals are in conflict under the new law in Lebanon.

A further dimension is the agent's tasks. To simplify, we assume that the hospital manager under the new law has two main tasks: to control costs and to improve the quality of health care provision. The former of these tasks is easily measurable while the latter is not, but has important equity implications. A similar question about the incentive tradeoffs between prospective payment and cost reimbursement systems in the United

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<sup>6</sup> The idea of considering hospital users and/or the "community" in general as "stakeholders" or principals is fairly prevalent in the healthcare literature. Among the possible hospital stakeholders

States has been analyzed by Ma (1994) using the multitask agency approach (Holmström & Milgrom 1991). In this model, the hospital allocates its efforts between cost reduction and quality enhancement. Along similar lines, this approach allows for an analysis of the extent to which hospitals in Lebanon, in having to internalize their production costs once corporatized, risk resorting to excessive cost reduction, and compromising quality. A desirable objective of design would be for corporatized hospitals to internalize the benefit of quality as well.

For any given public hospital, it is clear that controlling costs will be a more measurable task than the improvement of the quality of health care provision. It remains to be established whether principals are united in their demands on the agent or not. In a micro-organizational setting such as a public hospital, this task is more difficult than for the macro-policy-making example of GATT, illustrated by Dixit (1996). Determining the degree of principal coordination can be done by looking at the principals' channels of influence, in terms of (1) appointment rights, i.e., rights principals possess because of the manner in which they came to occupy their positions, and; (2) decision rights or the formal and informal prerogatives of principals once they are appointed to a board, defined by law and convention. To simplify, the main difference between rights (1) and (2) is that the former yield power that emanates from the person, while the latter yield power connected with the position. Empirically, this difference is important as I will illustrate.

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enumerated by Savage (1997) and Tucker & Burr (1990) are patients and local communities, state and local governments, health plans, professional/trade associations, physicians, and employers.

Take the example of appointment rights. There are cases, where the strength of appointment rights granted, differs. For instance, a local political appointment to a hospital board will enjoy a more powerful appointment right than a politically unconnected community member. A political nominee to the board would also enjoy a more powerful appointment right than a physician who sits on the board representing medical staff in the hospital, but who is not affiliated with the local political leadership in the area.

There are other cases, where a principal is not granted a decision right all together, as the following example illustrates: By definition, any public agency has at least two sets of principals, the governmental body (or sectoral tutelage) in charge of it, and its taxpaying beneficiaries (or community). If both principals are present on the board, they may or may not be coordinated. When a public hospital board does not contain a member of the community, it cannot be representative of it. Therefore, by virtue of the fact that an important principal (in this case a community representative) does not sit on the board, the board would not embody the interests of both principals. In such a case, principals can be considered to be un-coordinated because an important principal does not enjoy an appointment right at all.

Such cases from Lebanon shed interesting light on how the manner in which stakeholder representatives come to sit on a board influences the decisions they are able to make. This case also offers an opportunity to analyze the *currency of influence* behind the differential capacity of principals to provide incentives to the agent, and the

circumstances under which a given principal may choose to exert influence<sup>7</sup>. I analyze the institutional design implications of the Lebanese system in section 5 of this paper.

By analyzing the problem of public hospital board formation in Lebanon using this approach, I try to answer the following questions:

- If the key principals of public hospitals can be considered to be “uncoordinated”, what sorts of outcomes can be expected, and how well does the empirical evidence to date corroborate predicted outcomes?
- What can be done about the structure, prerogatives, and manner of appointment of a board to increase coordination among principals?
- To what extent is better coordination of principals likely to improve the system?
- Dixit’s model assumes equal power on the part of the principals to influence the agent. Empirically, we observe significant differential powers to influence the agent, both through appointment rights and (post-appointment) decision rights allocations. Can the design of governance institutions (boards) account and correct for skewed distributions of power?

### 3.2 *Data*

The conclusions of this paper are based on open-ended and structured interviews, analysis of documents, and draft and published legislation. Hospital budgets, accounts and strategic plans (where available) were also drawn on in the analysis. Between March and September of 1998, I benefited from permission to take part in weekly meetings of the Ministry of Health (MOH) Task Force on Public Hospitals as a participant observer.<sup>8</sup> My presence in these meetings was crucial to understanding the sectoral and macro

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<sup>7</sup> Aghion and Tirole’s (1997) work on the difference between formal and real authority in organizations describes similar empirical outcomes.

dimensions of public hospital reform in Lebanon, and the day-to-day obstacles encountered in implementation. During the summer of 1999, I benefited from permission to accompany the MOH Ratings Commission to inspect hospitals and assess their standards. Because these visits included public and private hospitals, they were central to understanding the uniform vision for quality and performance that the MOH has for both types of hospitals under the new, corporatized regime.

During the summer of 1997 and the Spring of 1998, two rounds of introductory, then open-ended interviews were carried out. These were with the Director General of the Ministry of Health, the Minister's advisor in charge of legal matters, four middle managers in the MOH in charge of public hospital management and finance (the Directorate of Medical Care), procurement (the Procurement Division) and accounting (the Accounting Division), and a total of 6 directors and board members of the three first hospitals slated for corporatization – Nabatiyye, Tannourine and Qartaba. Along with many other things, the tradition of serious research on the public sector disappeared during the war in Lebanon. Introductory interviews were crucial in explaining my professional affiliations, and establishing a rapport with my interviewees. Substantive discussions would typically begin with a second meeting.

Another series of interviews was carried out during the Spring and Summer of 1999, with 11 board members and directors of newly corporatized hospitals, this time using a specific set of questions developed based on Provision #14 of the Decree on Finance and based on Provisions #9-11 of the Decree on Personnel. These interviews lasted two hours on average, and began with an explanation of the approach, including

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<sup>8</sup> See Pomper (1991) and Jorgensen (1989) for a review of the benefits and constraints of participant observation as a qualitative research method.

definitions of decision rights and decision rights allocations to ensure that interviewees had a uniform understanding of both the approach and the questions. Some of the interviews were carried out in two parts or supplemented with an additional interview for clarifications. Also interviewed were the current Minister of Health, Karam Karam and his advisors in charge of public hospitals.

Implementation of Law #544 began in 1998, once the decrees were drafted. To date, only four out of 17 public hospitals have begun to function under the new regime. These cases form the empirical evidence this paper is based on. Because of the dire need for public health provision in Lebanon, the nomination of further boards of directors for public hospitals is underway, and more hospitals are expected to adopt the system in the next year. However, the intention of the MOH is to amend the hospital corporatization decrees. In the meantime, some of the information I have obtained on the weaknesses of the system and used as empirical evidence in this paper, constitutes criticism of sectoral structures and policies by people employed in the sector, and can compromise the professional positions of its sources. As a result, the names of both individuals and their affiliations are kept confidential in this version of the paper, as the reform proceeds. The hospitals corporatized to date are Nabatiyye, Qartaba, Dahr el-Bachek, and Tannourine. The eleven board members and directors interviewed are from these hospitals, but their names are referenced in this paper as numbers (1-11), and their affiliations are omitted.

The objective of this paper is not to arrive at incontrovertible conclusions about the system in Lebanon, nor are such conclusions possible given the limited sample of hospitals corporatized to date. Instead, this paper seeks to explore ways of understanding the problem of board design, in anticipation of a time, in the near future, when the

empirical evidence from Lebanon and elsewhere will be richer and both the application of models and the conclusions can be more definitive.

#### **4      *The case of Lebanon: Background and policy reform***

The Lebanese public hospital sector experienced a period of deterioration in coverage, quality of service and financial management during the war from 1974-1990.

By 1990 the sector was providing a set of perverse incentives. For instance:

- Incentives for uninsured patients to seek expensive private care because the quality of care at public hospitals was low and provision was erratic. The Ministry of MOH had begun to reimburse uninsured patients who sought private care during the war in order to ensure that all those in need of health care were able to get it without having to travel during battles. Given that the uninsured constitute 44% percent of the population, this policy resulted in a rapid escalation of public health expenditures, 77% of which went toward the purchase of medical services from the private sector in 1994, when the reform was launched (MOH reports and data).

- Incentives created by the cost reimbursement system, for physicians to choose to hospitalize patients for interventions that could be provided on an outpatient basis, and for hospitals to use high-cost interventions when lower-cost treatments would be sufficient. Not surprisingly, cost reimbursement also created incentives for over-billing, especially given expected and actual arrears on the part of the MOH.

- In the public hospitals, eroded public-sector wages and compressed pay scales. These created incentives for public hospital staff to absent themselves from their positions, and seek employment in the private sector in order to supplement their income.



- Weak incentives and meager means for hospitals to gather and use information that would improve their performance, and an even weaker regulatory capacity at the level of the Ministry of Health to oversee the operation of public hospitals.

- No consumer protection policies, and therefore weak incentives on the part of hospitals to ensure that they were satisfying community needs and equity considerations. Despite the possibility of government reimbursement, poor patients have difficulty accessing private hospital services, and when they do receive care, they are often asked for significant co-payments. Those who were most politically connected benefited most from the cost reimbursement system.

#### ***4.1 The declared objectives of the reform***

As part of the effort to restructure the public health sector, a law was drafted to corporatize public hospitals by granting them a degree of fiscal and managerial autonomy. Corporatization grants public hospitals their own governing board, thereby delegating some of the regulatory authority of the MOH, but retains the MOH as residual claimant on the hospitals. As part of their autonomous status, hospitals have the right to charge patients for their services to develop a revenue base that would gradually replace transfers received from the MOH. The objective of the law on public hospital autonomy is to provide:

- Incentives for hospitals to improve the quality of care they offer while keeping costs under control, thereby satisfying the health sector's equity objective of providing good quality affordable health care for low-income and uninsured patients;

- Incentives for hospital management to be responsive to the sector's cost reduction priorities. Making hospitals financially autonomous reduces (and eventually stops) the need for transfers;
- Incentives for hospitals to be more attuned and responsive to specific local needs, especially in preventive and basic health care.

Central to how well hospitals achieve these objectives is hospital board effectiveness in regulating the activities of their hospitals. The design and prerogatives of hospital boards, discussed later, are therefore key.

Under the new, corporatized system, hospitals sign a service contract with the MOH, civil service bureaus (e.g., the army and internal security administrations), insurance companies and other private purchasers. Hospital own-source revenue is raised through private sector purchases and through patient contributions to the price of treatment partly covered by the MOH. Under the new cost-sharing rules, uninsured (MOH) patients are required to pay 5% of the price of treatment at public hospitals, while the MOH contributes the remaining 85% – effectively “purchasing” services from its own hospitals.<sup>9</sup> The new system continues to provide universal insurance for the time being. Eventually, benefits (or MOH contract privileges) will become means-tested in the sense that public hospitals that do not break-even will cease to operate.<sup>10</sup> Hospitals are to prepare and agree upon an annual Strategic Plan with the MOH, which constitutes a basis for the MOH's continued purchasing of services from the hospital. To encourage use of public hospitals, the MOH insurance scheme is available to only 15% of private hospital bed capacity, while it covers 75% of public hospital bed capacity. Today, hospitals are

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<sup>9</sup> The remaining 10% is to be covered from the hospitals' profit margins.

receiving a one-time transfer ranging from 300 million to three billion Lebanese Pounds (USD199,000.00 to USD1,989,000.00) depending on their size, to help jump-start their autonomous operations. The years 1999 and 2000 are being considered by the MOH as trial periods for the reform, with the objective of reaping lessons of experience and improving the system (Interview with Roger Sfeir, Advisor to the Minister of Health).

#### ***4.2 Describing the institutional design: Principal features of the legal structure governing corporatized hospitals***

Law #544 mandating the “Establishment of Public Enterprises for the Management of Ministry of Public Health Hospitals” was promulgated in 1996. The simple three-page document outlining this law is followed by five Implementation Decrees that lay out the technical details and instructions for applying the law. Laws are voted on in Parliament. Implementation Decrees are drafted by the ministry concerned, in consultation with legal, administrative, and financial experts in the various sectors, including the Ministry of Finance, and then submitted for ratification by the Council of Ministers.

Law #544 mandates the following<sup>11</sup>:

1 A public enterprise (also, “public health enterprise”, or “public hospital board” in this paper) is to be founded to manage each public hospital in the country. Public health enterprises are to enjoy financial and managerial autonomy, subject to the supervision of the Ministry of Health. Such enterprises are subject to regulation by the Ministry of Finance, the General Accounting Office, and the Central Inspection Office.

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<sup>10</sup> Given the geopolitical nature of public hospital care provision in Lebanon, the closing down of unprofitable hospitals would be rationally desirable, but politically difficult.

2 The revenues of such public enterprises are constituted of: (a) central government transfers; (b) fees for services; (c) other sources.

3 The Ministry of Health's responsibilities include the definition of sectoral strategy, the coordination of health provision at the national level and the rationalization of the sector.

4 The drafting of five Implementation Decrees defining: (a) The Appointment of Boards of Directors and Ministry Representatives; (b) Financial Regimes for Public Hospital Enterprises; (c) Personnel Matters; (d) Compensation; (e) Internal Administration of Public Hospital Enterprises.

5 The determination of fees for services, patient contributions to fees and budgetary matters, including MOH transfers to public hospitals.

6 The Minister of Health's responsibilities and prerogatives in establishing collaborative agreements among public health enterprises, and between public health enterprises and medical schools domestically and internationally.

7 The determination of the size of boards of directors for public enterprises.

8 The establishment of a consultative committee to study the impact and implementation of public hospital autonomy.

The law contains two additional Items, 9 and 10, mandating the drafting of the five Implementation Decrees defined in Item 4 above, and activating Law #544 upon its publication in the Official Journal, respectively.

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<sup>11</sup> The following items are translated from the Arabic text of Law #544.

#### 4.3 *The lynchpin of the system: The Governance Decree and its implications*

The decree outlining conditions for The Appointment of Boards of Directors and Ministry Representatives (henceforth, the “Governance Decree”) determines the size, composition, prerogatives and MOH representation on/oversight of public health boards. The detailed content of the decree underscores the centrality of the board to the operation of corporatized hospitals, and the importance of its governing mechanisms in advancing or retarding the goals of efficiency and coordination. Some elements of the Governance Decree are important to examine in light of Decree # 4517 (1972) -- the legal underpinning which defines the establishment and operations of all Public Enterprises and Autonomous Agencies. The following discussion draws on both decrees to analyze salient aspects of the institutional design of public hospital governance. The particular elements that are important in this context include:

- *Stakeholder (principal) mix*

The decree stipulates that board members should have a background in medicine, business administration, finance, law, or public health. However, apart from listing a restricted set of possible specializations, the decree does not ensure that board members have the required skills to represent (at least the most important and obvious) stakeholders, such as the user community, medical staff in the hospital, the MOH, ...etc. Hence, the focus is more on defining eligibility to the board, than on ensuring representativeness on the board.

- *Manner of appointment of board members (principals)*

The process of selecting board members is highly ambiguous. Provision #2 stipulates that the board is appointed upon the recommendation of the MOH through a decree to be ratified by the Council of Ministers. Among the important issues to clarify are: how the MOH forms the list to be submitted for ratification, what the criteria used are, and how immune from adverse political influence the system is, keeping in mind that responsiveness and accountability to political demands are desirable features. Empirical and implementation evidence to date point to unclear/inadequate criteria in the selection process, as well as politicization in the choice of candidates, which have led to the administrative paralysis of some newly inaugurated and much needed hospitals. One important reason for this paralysis has been the lack of coordination between board members. The system places a large onus on the Minister of Health to select the right people and negotiate their appointment.

- *The hospital manager (agent)*

The manner of appointing hospital managers is unclear. Although the decree does state that the hospital manager is to be appointed by the hospital board, it contains no further detail on the selection and appointment process.<sup>12</sup> Furthermore, the practice has ranged from the board making recommendations that the MOH may or may not accept, to a local political leader submitting one name to the Minister of Health, who then recommends the appointment without consulting with Ministry cadres nor with the hospital board, nor with the MOH division in charge of public

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<sup>12</sup> Decree #4517 states that the director is to be appointed by the Council of Ministers upon the recommendation of the relevant sectoral ministry, in this case the MOH. This Decree also stipulates that the salary of the director is set by the Council of Ministers.

hospitals. The hospital manager sits on the board of directors *ex officio* and is responsible for the day-to-day running of the hospital. Because of his/her informational advantage, he/she has the potential of wielding important influence on the board, despite his/her non-voting position.

- *The extent of MOH regulatory responsibility decentralized to the board*

In sharp contrast to the weak structure described above, the responsibilities of the board are fairly significant. The board and hospital manager's responsibilities range from setting the policy and administrative direction of the hospital, to overseeing inpatient and outpatient service provision, quality control, cooperation and collaboration with educational organizations, setting policy and strategy for various departments within the hospital, setting the annual strategic plan and budget for the hospital, and overseeing contracts and collaboration with the private sector (Translated from the Governance Decree).

Although, as this list shows, the board has extensive responsibilities, there are few areas in which the board and management can make decisions without clearance from higher level authorities. In only four out of twenty decision rights/areas of responsibility devolved to the board by the Finance Decree, can the board actually make decisions without clearance from either the MOH or the Ministry of Finance, or both (Mubarak, 1999). These are instances of transfer of responsibility without the transfer of full authority, and they weaken incentives for optimal decision making.

- *Sectoral oversight, or accountability between MOH and hospital*

The MOH oversees the day-to-day operation of the hospital through its principal and voting member of the board – the ministry delegate (or representative). This principal's objective is to influence the operation of the board, by aligning the hospital manager's incentives with those of the MOH, thereby ensuring that sectoral standards and priorities are satisfied at the hospital level. The MOH's oversight and regulatory functions, carried out partly through the MOH delegate, are well laid out in Decree #4517.

- *Appointment of MOH delegate*

Similar to the ambiguity surrounding the appointment of the hospital director, it is not clear how the MOH delegate is appointed. Provision #10 in the decree only defines two aspects of this appointment: the five-year term and the requirement that the delegate be a MOH civil servant of a certain grade or above. Crucial issues such as how this person is selected, how close to some key functions of the administration such as finance and procurement he/she can be, what his/her relationship to the local and/or political community should or should not be, or at least, his/her area of specialization, receive no mention. As a result, despite the fact that all MOH delegates to hospital boards enjoy the same set of decision rights and one vote on the board, some of them can exert an excessive degree of influence on the hospital, and others not enough.

- *Risk transfer*

Similar to the ambiguity surrounding the appointment of board members, a degree of ambiguity surrounds the degree of risk borne by board members, the hospital director and the MOH delegate for the performance of the hospital. Apart



from defining board member remuneration per meeting, the decree makes no mention of the consequences of bad performance. As a result, both in regards to term renewal and in regards to compensation, the financial risk of hospital insolvency on the hospital board appears to be zero. Given local conditions and the unfavorable reputation of the public sector in Lebanon today, the reputational consequences that hospital managers and board members bear can also be relatively minor.

In summary, the institutional structure of corporatization in Lebanon is strong in some areas and weak in others. It is strong (and ambitious) in that it seeks to deconcentrate a significant degree of administrative, fiscal and regulatory responsibility from the central administration of the MOH down to the hospital level. Reallocating decision rights down to the level of agents with the information needed to make decisions is a way of improving organizational output. On the other hand, the design of the Lebanese system is weak because it is replete with ambiguities that allow for much variance in outcomes depending on the personalities in place. This is particularly apparent in the choice of principals, the choice of the agent and the definition of their decision rights.

#### **4.4 *Examining partial empirical evidence***

The following discussions are based on two illustrative provisions from two decrees: the Decree on Finance and the Decree on Personnel. I analyze the provisions to understand whether the extent to which the system in Lebanon can generate Dixit's third best, how much of this is due to lack of principal coordination, and to point to other

factors that might be at play.<sup>13</sup> For the purposes of this analysis, we take Dixit's conclusions on the making of economic policy as a point of departure: the difficulty of achieving good performance in government is due to the fact that principals tend to be uncoordinated, incentives weak, and outcomes third best. The question then becomes how uncoordinated principals on Lebanese hospital boards are in practice, and what can be done to improve the equilibrium.

In Table 2 below, the "expected outcome" listed in the second column, corresponds to the "policy action" in the same row, mandated by the decree. I treat the expected outcomes as hypotheses for how the system can be expected to behave, and provide, following the table, a discussion of the degree to which the empirical evidence to date supports the hypotheses. The Policy Options presented in the first column of Table 2 are taken from Provision #14 in the Decree on Finance, which mandates the possible actions a manager can take in case of hospital budget deficit. The Policy Options (1-5) constitute recommendations that the hospital manager can make to the board, to cut/control costs (Translation from the Decree on Finance, Provision #14). Provision #14 was selected for this analysis because it touches upon a broad range of management and finance decisions, and because the policy options it offers are amenable to analysis as hypotheses about the behavior of the system.

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<sup>13</sup> Using the Decree on Boards of Directors as a baseline, a similar analysis can be carried out on the remaining decrees.

**Table 2: Identifying outcomes based on the Decree on Finance**

Policy Options for Hospital Boards	Expected Outcome and Brief Reasoning	Empirical Findings
<i>1. Recommending an increase in fees</i>	<p><u>Expected</u>: Excessive fee increases.</p> <p><u>Reason</u>: No community representative on the board.</p>	<p>Outcomes 1. and 2. have occurred in some hospitals, but not in others. They have <u>not</u> occurred where board members are also members of the community, originating <u>and</u> residing in the community.</p> <p>On the other hand, these policy options <u>have</u> been a problem where none of the board members are selected from the community, especially not the hospital director.</p>
<i>2. Recommending an increase in patients' contributions to fees</i>	<p><u>Expected</u>: Patient contributions could be set too high.</p> <p><u>Reason</u>: No community representative on the board.</p>	
<i>3. Deciding to increase fees charged to insurance agencies.</i>	<p>This coordination problem is resolved at the level of the central administration of the MOH, which sets rates to be charged to insurance companies by all public hospitals. In practice, because policy option 3 is difficult (and impracticable) to implement at the level of a hospital board, it is a very weak (or "hollow") decision right. The author of policy option 3 assumed an imperfection in the insurance market that is resolvable through regulation at the level of the public hospital board. The MOH's retention of a central decision right over such an issue, if a market imperfection indeed exists, is a good idea for a small country like Lebanon where regional idiosyncrasies and the need to adapt to differential market conditions are relatively minor.</p>	
<i>4. Deciding to increase first-class hospital fees.</i>	<p><u>Expected</u>: Frequent implementation of this option.</p> <p><u>Reason</u>: Lack of community representation on the board.</p>	<p>Decision right not implemented in any of the hospitals to date. Reasons are fear of social sanction and the reticence to develop a reputation of being expensive, while the goal is to encourage use of public hospitals..</p>
<i>5. Recommending to MOH and MOF that the deficit be covered through reserve funds.</i>	<p><u>Expected</u>: Strong influence of MOH delegate on the board could rule this out every time, even when necessary. Weak influence of the MOH on the board could ratify such recommendations, when they are not necessary.</p> <p><u>Reason</u>: Possible randomness with which MOH delegate is selected.</p>	<p>Although none of the corporatized hospitals have resorted to this policy option to date, interviewees have mentioned and expressed concern for influence in both directions, depending on the MOH delegate appointed.</p>

It is interesting to note that policy options 1 and 2 did not result in the expected outcomes in hospitals where board members are also members of the community served by the hospital. Social sanction, reputation, and a degree of altruism have prevented board members from raising fees (Interviews with board members 1-7). In the case where the hospital director and board members are not from the community, complaints have been filed by patients that hospital fees are too high. These results shed interesting insights on the way we might think of principals and principal coordination. The Lebanese hospital boards do not include a community representative, while in other countries such as Columbia and France, the boards include an elected or appointed community representative (Discussions with health policy experts from New Zealand and France, 1997/1998). However, as the case of Lebanon illustrates, the physical presence of a community representative is not necessary if community “interests” are represented. This is an especially interesting proposition if the objective is to keep boards small, for reasons I will discuss below.<sup>14</sup>

Policy option 3 presents an example where the presence of a principal is not necessary if the coordination problem is resolved at a higher level in the administration. Hence, although insurance companies are important stakeholders in a hospital system (Savage, et al., 1997),, the case of Lebanon provides an example of their interests being represented through means other than a principle, further reducing the need for principle coordination on a board.

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<sup>14</sup> Furthermore, if we are exclusively concerned with coordination, it appears preferable to exclude the community from the board, such that the agent (hospital director) is certain to respond to the MOH’s incentive to reduce cost. The agent’s problem then becomes that of fulfilling the right social welfare function (because they are not alerted to community needs), but the board would be more coordinated.

Policy option 4 presents a decision right that has not been exercised to date, and is unlikely to be exercised because public hospital users are by definition those who seek to pay the lowest possible prices for health care, even if they can afford to pay higher rates (Interviews with board members 1-6 & 8). On the rare occasions when first class service has been requested, the MOH recommendation for first class fees has been applied because the community members of the hospital board have not wanted to be seen as trying to exploit patients who could otherwise afford to seek private sector care. They have also done this in order to encourage people to use public hospitals. Again, social sanction and reputation have played an important role to date, and good business skills have certainly contributed. The reticence to exploit this provision is an indication that in some instances, the manner in which principals are appointed has contributed to controlling the price of care charged to patients.<sup>15</sup> Policy outcome 4 raises questions similar to those discussed above, with respect to how one might define who the principals are, and how important it is for all of them to influence the agent directly.

For policy option 5, the closer the MOH delegate is to the treasury and finance functions of the MOH, the more influence he/she can wield in this very important area (Interviews with board members 1-11). The amount of finance a hospital has partly determines the degree to which the hospital can pursue aggressive development and capital investment strategies. Access to finance and a tight reign over use of finance are necessary for survival in the face of stiff private sector competition. A similar (predicted) result also applies to two other decision rights not listed in the table: the right to request a treasury loan (option 6) and the right to request a private sector loan (option 7). None of

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<sup>15</sup> The reticence to charge high fees may also have a positive impact on equity considerations, although this work cannot substantiate it.

the hospitals corporatized to date have attempted to exercise these rights, however interviewees expected the same type of influence to result from the mix of principals present on the hospital board.<sup>16</sup>

#### **4.5 *Placing the evidence in perspective***

Over a decade ago, as the health care market became more competitive and accelerated the drive toward organizational forms that split purchaser from provider functions, the literature on hospital board effectiveness in US markets listed a number of challenges (Shortell, 1989). As hospitals moved from relatively benign to competitive environments, they needed smaller, more nimble and risk-taking boards, composed of members that were focused on strategy, specific expertise, evaluation and accountability. These boards are closer to the boards of competitive firms than to the benevolent, community notable-type boards of hospitals in previous, less demanding market environments (Shortell, 1989; Kovner 1985; Delbecq & Gill 1988; Weiner & Alexander 1993). Since the late 1980s, non-profit boards across sectors have moved in the direction outlined then, and the focus continues to be on smaller-sized boards with fewer insiders, and responsibilities related more to the ratification and monitoring of policy, than to direct involvement in specific operations (Taylor, Chait & Holland 1996) Hospitals in Lebanon are facing a similar set of challenges, among them:

- Managing diverse groups of stakeholders (principals);
- Involving physicians in the management and governance process;

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<sup>16</sup> The analysis carried out based on Table 2 can be extended to other areas of hospital board decisions using the remainder of the Finance Decree in addition to the Internal Administration, Personnel, and Compensation Decrees, to a larger and more detailed survey design, from which I expect broadly similar findings. Extensions of this work would be helpful in substantiating testable hypotheses, and in developing a method for analyzing the institutional design of hospital boards.

- Responding to the needs of hospital restructuring;
- Meeting the challenges of diversification;
- Understanding and carrying out strategy formulation;
- Balancing equity and efficiency considerations.

The design of Lebanon's public hospital boards is similar to the "new" hospital board in some ways, and different in other, important ways. It is closer in its small size, focus on strategy, and representation of stakeholders. It is further in its capacity to assume risk and carry out evaluation and in its accountability. The examples discussed in Table 4 bring the capacities of the Lebanese boards to bare in ways that I expand upon below.

For example, despite the fact that public hospital boards in Lebanon do not include a member who is officially appointed as "community representative", community representation is not compromised because some board members fulfill a dual function of, for example, "doctor" and "community representative." This manner of selecting board members resolves part of the principal coordination problem while helping keep the board size to a minimum. In moving toward more technocratic boards, it is important to ensure that the community continue to be represented on the board in some manner, without expanding the size of the board significantly. In a similar manner, policy option 3 illustrates that keeping some decision rights at the level of the central ministry serves to unify policy and reduce costs of principal coordination, contributing to the nimbleness of the system.

On the other hand, randomness in outcomes based on important policy options 5, 6 and 7 indicates that the system is weaker on the financial management side, perhaps

including the financial accountability side, although more evidence will be required to establish this. What is certain is that the politicization of boards has resulted in some loss of transparency and some non-technocratic decision-making and strategy formulation. This suggests that public hospitals in Lebanon today may not be in the best position to respond to the needs of restructuring and adaptation to a competitive market.

#### **4.6 Further evidence from the Decree on Personnel**

A reading of an example from the Decree on Personnel serves to illustrate the importance of issues other than principal coordination in the design of hospital governance institutions. These include simple agency and information problems that could result in collusion, political pressure and graft.

In provisions #9-11, the decree states that applicants for hospital vacancies must be ranked based on performance on an exam. The hospital board holds the decision right to arrange to carry out the exam. By virtue of his *ex officio* position on the board, the hospital manager is a co-holder of the decision right. Given that the decree does not specify any details with respect to the manner in which the exam or examiner is to be selected, the ambiguity has resulted in solutions inferior to first best. A first best outcome could be characterized as one where the hospital board, taking into consideration manager(s) recommendations, short-lists a set of possible examiners, and in consultation with experts in the field, selects the best possible one, ensuring proper screening in its recruitment process. Agency and information problems (but not coordination problems) likely to prevent this first best outcome from occurring include collusion between some board members and the manager at the expense of other board members. This could influence the choice of examiner, in the absence of criteria for this



choice. The influence could include political pressure through one of the principals on the hospital board to favor applicants from specific political or religious backgrounds.

Under this scenario, outcomes inferior to first best include instances where the decision is made to grant the contract to an examiner with a lower benchmark for “successful” performance. In this case, an exam would have been carried out, but the pool of applicants from which the final choice of employee will be made is of lower average quality, and criteria other than performance on the exam will carry larger real weight. Another outcome inferior to first best could be one where both the choice of examiner and the choice of exam are determined in ways that maximize chances of success for less competitive applicant profiles. In this case, the use of an exam as a screening device would have failed.

Empirically, there have been three different applications of these decision rights to date. In one case, the hospital manager and some board members agreed to disregard the examination requirement and established their own point system for the ranking of applicants for positions. This system has not served the hospital well, and has resulted in a number of physicians it wishes to dismiss because of malpractice, and one law suit as a result of a dismissal. Among those who were hired, there is evidence that the powerful political appointees to the board had an overwhelming degree of influence on the final choice of candidates (Interviews with board members 2-5).

In another hospital, the director of the board is wondering how many competitors he is likely to have for the positions the distant rural hospital is looking to fill. When asked about whether and how his board will comply with the requirement to carry out an exam, he said that they would probably put together a *pro forma* writing and interview

exam for those who do apply, to be evaluated by the board (Interviews with board members 6-7). A third hospital has selected an outside screening committee that is likely to achieve an outcome closest to first best. At the time of this writing, the hiring process was just beginning and no further information was available.

Mechanisms that would improve this outcome include amending the Decree on Corporate Boards to minimize the chance of collusion between board members and the hospital manager(s), and to minimize pressure for political appointments. This would affect appointment rights as well as decision rights. However, given the inevitable presence of some political interference in multi-confessional countries like Lebanon, and differential powers on the part of principals to influence the agent, minimal criteria for the selection of the examiner and exam would move the outcome closer to first best. But if a net improvement in the allocation of decision rights is not feasible at this level, a possible solution would be to reallocate the decision right over exams to a regional or central level, where transparent and technocratic selection of examiners can be carried out. Principals represented on the board would then retain decision rights over other aspects of screening that are related to local specificities and needs, even political preferences within technocratically circumscribed limits. The local choice of candidates would be made from a short list compiled at the national level. The short listing of candidates would effectively provide two levels of screening and scrutiny which, combined with visibility and transparency, would prevent egregious errors from occurring. Countries such as New Zealand and the UK have resorted to similar solutions for the appointment of staff to corporatized entities.<sup>17</sup>

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<sup>17</sup> Yet another solution could be to do away with the examination requirement all together, as is done in the private sector, and replace it with screening instruments set by each hospital individually. The

## 5. *Problems emanating from the system's institutional design*

In this section, I synthesize the evidence to date in answer to questions the theory can help inform. I underscore the importance of Dixit's model to some areas, and show how simple agency, influence and information costs are inherent to institutional design in other areas. I also offer some preliminary answers to the questions raised in section 2.1 about the design of corporatization.

### *Representation of key principals/stakeholders*

On the one hand, there is some evidence that the main principals, are fairly well represented on Lebanese public hospital boards *de facto*, even if they are not represented *de jure*. The size and composition of the board parallels fairly well what is suggested in the empirical literature on new, strategy-oriented boards in hospitals. There arguably is some room for enlarging the Lebanese boards slightly, from an average of four members to six, which is closer to the average in non-profit hospital boards internationally. Enlarging the size of boards would allow for a stronger presence for some principals, and/or broader representation of principals.

On the other hand, the lack of strict criteria in the selection of principals and differences in appointment rights and power can affect outcomes in a significant way, and are problems of design beyond the principal coordination problem. The result is that even when the important principals are represented *de jure*, the coordination problem is still not necessarily resolved because of the differential capacity of principals to exert influence over the agent.

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experience with the point system in one public hospital however indicates that the easy politicization of what are still considered "public sector jobs" may preclude the proper operation of market-like hiring practices in a country where the religio-political map is still expected to be reflected in the distribution of public sector jobs.

### *The currency of influence*

In the case of Lebanon, three currencies of influence appear to determine the power of principals over the agent. Although this appears to be changing today as the new presidential administration accelerates the push for public sector reform and accountability. The order in which the currencies are discussed reflects their relative importance. The first is political. Appointees of political leaders have tended to wield the most significant influence by any measure. The second is informational, a result found by Aghion and Tirole (1997) in private organizations. The third is technocratic, granting those with skills and experience some leverage over the direction of policy on the board.<sup>18</sup>

Two aspects of the manner in which currencies of influence work in hospital boards in Lebanon are important. First, combinations of two types of currencies are what tend to empower principals most. As such, political and informational currencies combined have wielded virtually uncontested influence over the agent. Combinations of political and technocratic currencies have also been fairly powerful. The informational and technocratic currencies on their own have yielded fairly low-powered incentive schemes. The relative importance of these two has been a function of the personalities in place. The political currency on its own has been an important source of influence, but this may be changing today. The relative importance of currencies of influence is a good proxy for the relative influence of appointment rights that principals have when they act on the board.

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<sup>18</sup> The analysis of power wielded through property rights (decision rights) is not a new subject. See Polenske (1999) for an insightful discussion of the relationship between different types of power, property

### *Decision rights*

Some decision rights are expansive, while others are fairly circumscribed. For example, by virtue of the fact that they are minimally defined, decision rights over hiring transfer all authority over hiring to the hospital board, thereby devolving a significant degree of power to the board. On the other hand, while the responsibility over procurement is devolved to the board, the authority devolved to board members is circumscribed by virtue of the fact that decision rights are co-held with the MOH and Ministry of Finance, through a series of controls, mostly *ex ante*. Such “weak” devolution of decision rights might have been intended as a mechanism of controlling agency problems when board members do not bear the risk of procurement decisions, but it is not clear that this indirect mechanism will achieve its objectives without compromising others, such as agility and adaptability to demand. Instead, some level of direct financial risk (and benefit) might be transferred to the level of the hospital manager and board, further strengthening the power of the MOH to influence the hospital on the cost control side.

### *Improving the coordination of principals*

The types of policy measures that can improve the coordination of principals, and consequently the outcomes, have to do both with appointment rights and decision rights. More homogeneous appointment rights can decrease the variability of the power of incentive schemes that principals can exert over the agent. Such measures can range from a more transparent, technocratic and systematic screening and selection of board members, to the development of a public sector corporate culture combining the

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rights and development strategies. Contributors to this topic, discussed by Polenske, range from Marx (1967 [1888]) to Parsons (1963) to Poulantzaz (1973) to Weber (1978), and Bowles & Gintis (1986).

Weberian and Krepsonian notions. While it is important not to overestimate the degree to which the “personality effect” can be controlled, some reduction in arbitrariness is clearly possible in the case of Lebanon. This could either be achieved through benevolent and enlightened top-down selection of candidates for positions (as the government is attempting to do today) or through the establishment of institutions that guarantee a minimum degree of continuity across political regimes.

In the area of decision rights allocations, withdrawing some decision rights all together from the level of the hospital board, and reallocating them to the level of the central administration or some other third body can serve to decrease the need for coordination among principals. For example, in instances where unanimity (or at least a super-majority decision) is desirable but cannot be guaranteed by the board, decisions are perhaps best taken outside the board.

#### *The proclaimed objectives of corporatization*

From the case of Lebanon, there is evidence that the cost-quality coordination problem is difficult to resolve. In cases where the cost of care has been kept low, there have been complaints about quality. In cases where quality has been improving over time, evidenced by demand for the hospital’s services, there have been complaints that costs are too high. This may well be a perennial problem for hospital management worldwide. The data collected for this paper does not allow for stronger conclusions about the situation in Lebanon.

What is certain is that the difficulty of achieving this balance in Lebanon is partly due to the lack of transfer of financial risk from corporatization. Although the law does specify that hospitals are to be financially solvent (after an initial transitional period), it

does not indicate what the consequences of violating budget constraints are for board members and the MOH delegate on the board. By default, the risk of financial default is assumed by the MOH, the recurrence of which would presumably cause the hospital to be shut down. There are no explicit financial incentives relating, for example, salary bonuses to cost containment that could improve the expected outcome. This is one of many design deficiencies outside the scope of the principal coordination problem, which will need to be handled through the amendment of the Implementation Decrees.

### *The power of incentives*

The power of incentives is high in terms of the agent's response to some principals in some cases. For example, hospitals whose board members are chosen from the community, tend to have boards that are sensitive to social sanction. This is not the case in hospitals whose boards are selected from outside the community, where increases in fees have been easy to implement, and have resulted in complaints from the community. In terms of the financial solvency of the hospital, incentives tend to be relatively low powered across the board for reasons discussed above. This outcome corroborates the low-risk, low power of incentives conclusion from the moral hazard model.

### **6. *Concluding remarks: from theory to practice and back***

This paper has proposed the common-agency multitasking approach as an analytical lens to understand the problem of board design in corporatized public hospitals. On the theoretical side, it has shown that while principal coordination is indeed a problem, a more detailed and variegated approach is necessary to understand problems of governance when the model is applied to a micro-organizational setting. In particular,

a closer understanding of differential capacities on the part of principals to influence the agent, and the various currencies of influence appear key to a more detailed modeling of the problem. On the empirical side, the application of the multi-tasking common agency model has raised questions that shed light on some ideas for the improvement of the institutional design of public hospital corporatization in Lebanon. These ideas are the subject of a different, policy-oriented paper. They have been partially included in summary form as part of Appendix B.



## 7. *Appendix A*

### POLICY NOTE

#### ASSESSING THE MOH'S PROJECT TO CORPORATIZE PUBLIC HOSPITALS

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#### 1. *Overview and policy issues*

The health sector is among the most complex and pressing aspects of administrative reform in Lebanon today, not only because of the urgency of curbing the excessively high costs of the sector, but also because the reform proposes new legislation which is to form the basis of an institutional structure changing the operation of all public hospitals in the country. The objective of the new institutional structure is to improve quality of service in public hospitals (and cut costs in the sector) by granting hospitals a degree of managerial and financial autonomy from the Ministry of Health (MOH). Of great currency worldwide but faced with mixed results, this type of reform is being referred to internationally as "corporatization" and is understood as a middle ground between public sector ownership and management, and privatization.

This note summarizes preliminary findings based on work carried out on to date, and makes recommendations on how to proceed. The work entailed (1) analysis of the decrees of application under Law 544 governing public hospital autonomy; (2) interviews with ministry officials and hospital staff and users, and; (3) site visits. The questions I asked through this work have to do with:

- The appropriateness of the new structure given macro considerations in the health sector and given lessons learned from the experiments with autonomy that preceded the new Law #544 governing public hospital autonomy;
- Progress and obstacles in implementation given the experiences to date of two hospitals, Nabatiyye and Tannourine, and of Dahr el-Bashek, a hospital that attempted autonomy through a public-private association, before Law #544 was passed.

#### 2. *Overview of findings to date*

What follows is a summary assessment of the reform:

1. There exist various gaps in the decrees of application, such as lack of clarity on lines of accountability between public hospital boards and the Ministry of Health, and between hospital directors and hospital boards.
2. There are implicit contradictions in the spirit of the law. For example, while some provisions in the decree on finance are clear in the establishment of numerous MOH controls over revenue and expenditure decisions of hospitals and hospital boards, other provisions appear to grant virtually free reign over the transfer of use and ownership of the physical assets of public hospitals.
3. The new autonomous structure is vulnerable to political influence, which appears to have affected implementation in the case of two hospitals, Tannourine and Nabatiyye. Politicization derives partly from the manner in which hospital boards are appointed, the size of hospital boards and their terms, the mechanisms of coordination between the MOH and hospital boards (through the person of the ministry representative), and various insufficiently defined oversight functions of the MOH.
4. Lack of clarity on the objectives and implementation details of autonomy. Among the important actors that remain unclear about the reforms are Ministry of Health middle managers and those below them, public hospital managers and those below them who are not yet fully aware of the content of the decrees of application of the new law governing autonomous hospitals.
5. Insufficient exploitation of lessons learned from the “informal” experience in public hospital autonomy prior to Law No. 544. For instance, one important conclusion from the analysis of the experience of the Support Committee of the Hospital of Dahr el-Bachek is that the five-member board, meeting twice a month, had hardly enough time to address all important policy matters facing the hospital. Given this statement by various members of the retired Support Committee, it is not clear how a board of three members for hospitals of under 100 beds (the majority of hospitals in the country) is expected to be sufficient.
6. Furthermore, and related to point 5., preliminary findings point to the fact that in most countries where public institutions are vulnerable to “political capture”, boards are constituted such that a number of spots are reserved for “political” appointments, while a number of other spots is reserved for “technocratic” appointments, guaranteeing a balanced mix between important political interests and rational policy decisions. Implementing such an idea is not beyond reach for a country like Lebanon.
7. Finally, the above, in addition to readings of the decrees lead to the conclusion that the conceptual underpinning, or model for the proposed reforms is unclear. Information I have been provided through interviews indicates that the French and Tunisian models might have been drawn upon. It is not clear why these in particular would have been selected, nor is it clear that any other lessons learned from international experience have been exploited in conceptualizing the Lebanon reforms.

3. ***Why not just do away with public hospitals?***

The reason why total privatization of health delivery should not be an option in Lebanon goes beyond the standard public good/equity considerations. The linchpin of an

effective system of private delivery of public services is strong regulatory capacity, which we lack in Lebanon. Instead, the Lebanese public sector has proven to be vulnerable and fertile ground for the politicization and corruption of individual transactions, especially when they are relatively small and numerous, which is the reason why expenditures on the cost reimbursement system in the MOH increased exponentially in the past 7 years. The granting and oversight of contracts under a privatized system requires a regulatory system that is accountable, and that benefits from reliable quality and performance measures. Given the existing regulatory weakness of the MOH, it is not clear that such a system will be instituted and can be effective.

On the other hand, bad public health provision will cast further doubt on the capacity of Lebanese public hospitals to deliver such services, and will strengthen the rationale for privatization. Seen from this perspective, a strong and carefully crafted set of decrees of application governing autonomous hospitals is crucial. To achieve this, an interim revision and restructuring of the current decrees is of priority today. Continuing with the decrees we have recently passed will not only create weak and difficult-to-regulate public hospitals, it will also put in place and entrench local interests that will be difficult to remove once we have even clearer evidence of the structure's weakness, probably two years into implementation.

#### **4. *What remains to be done***

- A fresh reading of the decrees of application in view of the uncertainties, complications and obstacles on the ground to date. As I suggest this, I acknowledge the great deal of work that has clearly been put into the current versions of the decrees of application. What is unfortunate is that the few weaknesses they contain happen to be key determinants of success under the new regime.
- A review of most relevant international experiences in this area to date, and incorporation of appropriate lessons of this experience into the refining and implementation of institutions of autonomy in the public health sector in Lebanon. Many of the questions currently being posed in Lebanon have already been posed and resolved elsewhere. While it is important to pay attention to the particularities of the Lebanese case, there is no need to "reinvent the wheel" for all aspects of the reform.
- The above review would need to be carried out in tandem with discussions/revisits of current macro-considerations in the sector, knowing that such considerations might have evolved since the initial discussions of Law #544. To illustrate, it makes no sense trying to adjust details of the governance and operation of a public hospital without ensuring that such adjustments are in line with a clear and well-articulated strategy that accounts for the public hospital implementation constraints we are encountering on the ground.

8. *Appendix B*

**PRELIMINARY IDEAS FOR THE REFORM OF THE PUBLIC HOSPITAL CORPORATIZATION IMPLEMENTATION DECREES UNDER LAW #544 IN LEBANON.**

1 To correct for problems of principal collusion and graft, revise the structure of boards and define prerogatives better. Perhaps rotate the presidency of boards to minimize concentration of power and collusion between board and manager. Also re-think length of terms and conditions for reappointment.

2 To improve probability of principal coordination, establish a system of Rules of Order for board meetings such that important policy matters are guaranteed due process in discussions. Incorporate a quorum requirement into Decree on Boards of Directors.

3 To resolve some collective action problems, ensure that certain decision rights are allocated to agents outside/above the board, especially when unanimity is important, but cannot be guaranteed through the board.

4 Institute training and continuing professional education for board members. This would contribute to the coordination of principals through the development of a common corporate culture.

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## **Chapter 3.**

### **Explaining Innovative Management in a Decentralized Public Sector: A Contract Theory Approach**

#### ***1 Introduction***

Recent developments in agency and contract theory shed some new light on two old questions about public sector performance. The first question has to do with the incentives that drive innovation in the public sector. As the term “bureaucracy” has acquired an increasingly negative connotation, one important set of problems concerning both scholars and policy makers interested in public sector performance relate to the conditions that encourage public sector managers to innovate and create value in their work.

The second question has to do with the relative merits of decentralization as an organizational form, when compared with centralization. Why and when decentralization is optimal are among the numerous questions that have returned to the fore as governments face fiscal pressures to improve performance and political pressures to provide more inclusive governance institutions.

Take the first question. While the literature on public sector innovation has focused on two main areas -- (1) the design and implementation of innovative policies and programs (Hosking and Anderson, 1992; Nijkamp, 1990; Merrit and Merrit, 1985; Nelson and Yates, 1978) and, (2) the diffusion and replication of innovations (Hopkins, 1994; Everett, 1983, 1962; Yin, 1979), much less attention has been paid to the incentives that motivate public sector agents to innovate. Meanwhile, developments in agency and contract theory in the past ten years have provided important insights into the way firms are organized, and the institutional arrangements that encourage their managers to innovate. Contract theory argues that the decentralization of large firms or their de-integration (whereby supplier firms are no longer owned and controlled by the parent firm) can increase the rate of innovation.<sup>1</sup>

Take the question on the relative merits of decentralization. As many developing and transition countries are establishing (or re-establishing) democratic government, including at municipal levels, there has been an explosion of new literature on decentralization since the late 1980's. This literature can be grouped into three main areas: (1) normative discussions of the relative merits of decentralization as an organizational form of administration, finance and macro-management (Bird, 1999; Shah,

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<sup>1</sup> Skeptics abound when it comes to the application of a theory explaining private sector organizations to understand the public sector. Such applications are problematic, skeptics argue, because the government's objective function is more complex than that of a firm since it reflects a multiplicity of agents and conflicting goals, ranging from those of politicians, to civil servants, to citizens.

However, since the early 1980s, an increasing number of economists have opened the 'black box' firm which was the basis of their analysis for over two hundred years. Inside this box, organization economists have found problems of information, influence and incentives which produce a much more variegated objective function than what was considered earlier. These economists are concluding that rational, self-interested agents in firms often behave in ways which are inefficient and "bureaucratic" and engender "influence costs", much like the ways of the stereotypical public sector. See Robert Gibbons (1996) for a review of the current status of the field.

1997) (2) positive, at times donor-driven studies of sectoral or macroeconomic country-level studies, or comparisons of groups of sectors or countries, reviewing the problems and potentials of decentralization experiences, as part of the objective of designing better reform policies (e.g. Perry, Dillinger & Webb, 1999; Bird and Wallich, 1993); (3) subnational (regional, or municipal) case studies of successes or failures in improving public service provision under decentralization (see, for example, Eid 1999a and 1999b).

Also since the late 1980's, developments in contract theory have reached important conclusions on the vertical boundaries of firms, drawing partly on property rights and transaction costs studies. Contract theory (specifically the "incomplete contracts" approach) finds that decentralization (versus centralization) is a more likely outcome the less specific firm assets<sup>2</sup> are and the more important the investment decisions of the manager of the acquired firm are, compared with the investment decisions of the manager of the parent firm. In the following sections, I explain in more detail the meaning and relevance of these ideas. The findings of the incomplete contracts approach focus attention on dimensions of the decentralization problem that have either been omitted, or left implicit: the nature of assets that agents control, the relative importance of information held by agents at various levels of an organization, and the concomitant decision rights necessary for optimal use of assets and information.

Questions about the organizational and incentive structure of an organization, studied by agency and contract theorists, are no less pressing for those concerned with public sector performance. In this paper, I explore the insights these theories offer to explain public sector innovation and organization in newly decentralized developing

countries. I apply theoretical readings to empirical observations from field research conducted for the World Bank in Chile (Eid, 1999a & 1999b). I address questions raised in the literature on fiscal federalism about why local officials innovate (Oates, 1990), and about the salience of institutional arrangements, especially property rights, to efficiency in a decentralized public sector (Dillinger, 1994; Bird and Wallich, 1994). Although there have been explorations of what agency theory and the property rights approach have to say about information asymmetries, jurisdictional boundaries and inter-jurisdictional coordination, earmarking of revenue, and accountability under decentralization (Crémer, Estache and Seabright, 1995; Seabright, 1994), there has been little, if any exploration of what theory has to say about innovation in a decentralized public sector and about the changes in the optimal allocation of property rights that bring about decentralization in the public sector.

The following section will summarize the approaches of Holmström and Hart to agency and contract theory, respectively. Part 3 will draw on the theories to explain innovation and decentralization in the public sector, taking Chile as an example. Part 4 presents empirical evidence based on field research in Chile. Part 5 concludes by pointing to some questions raised by this analysis.

### ***2.1 Agency costs, incentives and innovation***

Bengt Holmström (1989) draws on agency theory to explain why larger firms, relative to smaller firms, are poor innovators. In serving production and marketing goals, the large firm organizes in a manner that promotes relatively uniform activities, but restricts innovation and is amenable to bureaucratization. In its effort to ensure some

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<sup>2</sup> Assets are specific when investing in them pays off more if trade occurs (between the acquired

monitoring of performance (or accountability), the large firm restricts freedom through bureaucratic rules that attempt to control incentives indirectly. The result is more uniformity in both personnel and activities, both of which mute incentives for high effort and innovation on the part of managers (or agents).

Combining the multi-task agency models of Holmström and Milgrom (1990, 1991) and the common agency model of Bernheim and Whinston (1986), Dixit (1996) develops a simple formal model of political management of economic activity. The model presents “common agency” as the quintessential feature of public management, and concludes that where there are multiple principals that do not coordinate their activities, the result is a low-powered incentive scheme -- one where the agent’s incentive to exert effort are muted. The power of the incentive scheme is inversely proportional to the number of principals, if the principals do not coordinate their activities. This Nash equilibrium is “third-best”; it is worse than the “first-best” -- where effort is observable, but more importantly, it is worse than the “second-best” equilibrium -- where the principals cooperate.

## ***2.2 Property rights and innovation***

Oliver Hart (1995) draws on the notion of incomplete contracts to analyze the implications of the decentralization (or de-integration) of firms by focusing on the reallocation of power, and the concomitant changes in incentives, that result from shifting boundaries between firms. This approach also argues that decentralized organizational forms provide the types of incentives that can spur innovation.

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firm and the parent firm) than if trade does not occur.

According to Hart (1995), larger (integrated) firms arise because of the difficulty of writing complete contracts.<sup>3</sup> He considers, for instance, the case of vertical integration where certain firms choose to acquire other (supplier) firms in order to guarantee receipt of their inputs. Under this ownership structure, the parent firm can better control and ensure the output of the acquired firm and keep the production line in order. This arrangement augments the residual control rights of the parent firm and reduces those of the acquired firm.<sup>4</sup> The result, however, is that the incentive for the acquired firm to invest in improving the quality or reducing the cost of its own output is low, because it is less likely to see a return on its efforts. Under an integrated organizational structure, the acquired firm faces partial or total expropriation of the value of its innovations. Because the acquired firm has fewer control rights than it would have had had it been autonomous, it receives a smaller fraction of the incremental *ex post* surplus created by its own investments. It follows that the manager of an acquired firm is less likely to invest in 'relationship-specific' improvements under an integrated ownership structure than he would when his firm is autonomous. Assets are 'relationship-specific' when investing in them pays off more if trade occurs (between the acquired firm and the parent firm) than if trade does not occur.

Hart proposes the following results:

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<sup>3</sup> This approach derives from the large body of literature on transaction costs which started with Ronald Coase's work (1937) and has been developed extensively by Oliver Williamson (1975, 1985) and others.

<sup>4</sup> 'Residual control rights' over an asset are defined by Hart (1995) as "the right to decide all usages of the asset in any way not inconsistent with a prior contract, custom, or law ... possession of residual control rights is taken virtually to be the definition of ownership ... in contrast to the more standard definition of ownership, whereby an owner possesses the residual income from an asset rather than its residual control rights" (pp.30). Residual control rights are also referred to as 'decision rights' by Holmström (1995), Milgrom and Roberts (1992), and Kreps (1992). The latter, shorter term is used more frequently in this paper.



- Relative to non-integration, the parent firm will tend to invest more in relationship-specific investments, while the acquired firm will tend to under-invest in relationship-specific investments;
- There are certain conditions under which property rights matter, and which determine what ownership structure is optimal: (1) If firm assets are complementary<sup>5</sup>, some integration is optimal; (2) If firm assets are independent<sup>6</sup> non-integration is a more likely outcome; (3) Integration is not optimal if the investment decisions of the manager of the acquired firm are important (i.e., yield a net social return) compared with the investment decisions of the manager of the parent firm.

### 3 *Explaining innovation in the public sector*

After a brief description of how the key terms used in Holmström and Hart can be applied to the public sector, in the remainder of this paper I explore the applications of the theories summarized above to the case of the decentralized administration of Chile. The case of Chile is particularly interesting because the return to democracy in 1991 after 17 years of dictatorship brought with it a reallocation of decision rights between the central and local levels of government. Although Chile had been undergoing a gradual process of decentralization which started before the Pinochet era, the system up until 1991, was

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<sup>5</sup> To illustrate the notion of complementarity, take two types of assets, a1 and a2 (located in firm 1 and firm 2 respectively). These assets are strictly complementary either if access to a1 alone has no effect on the manager of firm 1's marginal return from investment (i.e., if he needs a2 as well), or if access to a2 alone has no effect on the manager of firm 2's marginal return from investment (i.e., he needs a1 as well).

<sup>6</sup> Assets a1 and s2 are independent if access to a2 will not increase the manager of firm 1's marginal return from investment if he already has access to a1, and if access to a1 will not increase the manager of firm 2's marginal return from investment if he already has access to a2.

better characterized as 'deconcentrated'.<sup>7</sup> Even when mayors had been elected, prior to the Pinochet era, the decision rights conferred upon their position were limited. Municipal governments had little revenue-raising capacity and narrowly and strictly defined expenditure responsibilities. The reinstatement of local elections in 1990 after a 17-year hiatus, combined with the gradual increase in the fiscal discretion of the mayor provide a natural experiment, and an opportunity to observe the effect of the changed governance structure on incentives at the local level.<sup>8</sup>

### *3.1 Terminology and assumptions*

In this paper, the term 'decentralization' refers to the governance structure of Chile after the end of the Pinochet regime, implying local elections and increased local decisions rights over municipal fiscal management. From the perspective of Holmström and Hart, public sector decentralization is equivalent to a 'de-integrated' firm ownership structure where the manager of the supplier firm is accountable to his shareholders and his clients. The period prior to decentralization can be understood as 'integration' where the manager of the supplier firm is accountable to the managers of the parent firm above him.

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<sup>7</sup> There are various definitions of public sector 'decentralization' ranging from 'deconcentration', to 'delegation', to 'devolution' of the responsibility for public service provision to local authorities (Silverman, 1992).

Deconcentration is the most common form of decentralization in developing countries, especially in cases where local authorities are not elected. In such systems, selected functions are assigned to offices of sectoral ministries located at the subnational level. Under this type of arrangement, local governments have minimal discretionary authority over the use of municipal financial, human and material capacities. Despite the large presence of employees stationed at the local level to carry out the functions of line ministries, such a system tends to centralize authority. Because deconcentrated technical staff answer to their central offices, and since they tend not to be required to ensure horizontal integration of sectoral policies at the local level, their role can undercut local government authority and delay the development of 'in-house' technical capacities at the local level.

<sup>8</sup> However, the case of Chile is not unique in highlighting the effect of changes in organizational form on incentives in the public sector. Similar changes are taking place throughout the region of Latin America for reasons like those in Chile, as discussed in Campbell, Fuhr, and Eid (1994).

For simplicity, I assume there are two levels of government -- the central level and the local level.<sup>9</sup>

As an example of public service provision, consider the construction of roads. The final output of the central government (or firm 1) is the national roads network, while the output of the local government (or firm 2) is the local roads system. Firm 2 supplies a portion of the input into the final public good produced by firm 1. The choice of where to locate and how to prioritize construction of all local roads is important for economic development in the country.

A relationship-specific asset can be defined as the appropriate technology for efficient roads provision. Here, 'technology' is not used to mean only the engineering and planning know-how for roads construction. In addition to these, 'technology' in this context includes knowledge related to the capacity of the municipal administration to capture and respond to local demand. Mechanisms being used in Chile today include town-hall meetings, public information campaigns, extensive consultation with neighborhood associations, and municipal policies that seek to ensure the 'representativeness' of such associations.

The relationship-specific investment of the manager of firm 2 is equivalent to the level of effort a mayor expends to improve the appropriate technology for local roads provision. The specific knowledge of the manager of firm 2 is equivalent to the mayor's level of information about local road deficiencies, the local price and cost of providing needed roads, the quantity that should be provided based on residents' demand for them,

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<sup>9</sup> While there often exist three or four levels of government in a decentralized public sector, assuming two levels in the case of Chile is actually quite realistic. The intermediate (regional) level of

and the location and prioritization of roads construction based on local economic development needs.

The mayor's 'payoff' can be defined as his 'political office' or 'career' and it is a function of how well he 'pleases' those to whom he is accountable. A critical realignment of the mayor's (or the manager of firm 2's) incentives is caused by the change from a centralized (integrated) governance structure to a decentralized (de-integrated) governance structure. The mayor (or manager of firm 2) faces a multi-principal situation, similar to that described by Dixit (1996). For the mayor the principals are (1) the central government, which is interested in ensuring that good quality local roads, provided efficiently and transparently, are produced as inputs into the national roads network, and; (2) voters, who are capable of removing the mayor and members of the municipal council if they do not create local public value through, for example, a better local roads network. For the manager of firm 2, the two principals are (1) the downstream firm, or the procuror of inputs, whose interests ("customer satisfaction") are the responsibility of firm 2's managers and officers (the president, vice presidents, treasurer and secretary) who manage procuror contracts and the firm's market strategy, and; (2) shareholders who have the capacity to remove the firm's officers and managers from office.

Incentives for the mayor (manager of firm 2) to exert effort are strongest when his two groups of principals are coordinated -- for example, when both the electorate and the government require transparent book keeping. In general, the weaker the alignment between central government and voter interests, for example on matters of efficient, timely and transparent service provision - common in cases where the "voice" option has been

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government is purely administrative and its officials wield little power: they are appointed and their

suspended, or is non-existent (Hirschman, 1972) - the more muted are the incentives of the mayor to perform. Similarly for the firm, uncoordinated principals as in cases of board cronyism, influence activities and costs, excessive issuance of stock certificates by a firm secretary, or atomized and diluted shareholder voices can lead to muted incentives for performance among firm managers (Milgrom and Roberts, 1992; Brealy and Myers, 1991). In the language of the market, such firms risk being taken over, or having to file for bankruptcy. In the language of public sector governance, bankrupt government agencies are ordered into "receivership" (Moore, 1995) or their budgets suffer fiscal penalties or their managers suffer legal penalties.

To conclude this analogy, the mayor will perform best when the interests of his two principals are aligned and exert pressure on him in the same direction. Under centralization (integration) the mayor's principals were uncoordinated, therefore he could maximize his payoff by 'pleasing' those who appointed him in the central government and paying less attention to whose interests he is meant to represent. The literature on rent-seeking in the public sector is rife with examples of local officials currying the favor central government officials at the neglect of their "constituencies". Under decentralization, the mayor's principals are coordinated, at least on important policy priorities, and this creates incentives for the mayor to exert efforts that are observable to local constituencies and generate rewards from both local and central level principals.

The table below summarizes the comparison between the firm and the public sector.

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administrations have no revenue raising capacity.

the Firm	Parallels Between and the Public Sector
<ul style="list-style-type: none"> <li>• Parent firm.</li> <li>• Supplier firm.</li> <li>• <i>Production</i>: Car made of various types of parts.</li> <li>• <i>Relationship-specific asset</i>: a certain type of machine or technology.</li> <li>• <i>Relationship-specific investment</i>: the level of effort, technology or capital expended on a machine.</li> <li>• <i>Input of the supplier firm</i>: car part, such as the body, that goes into the production of a car.</li> <li>• <i>Payoff</i>, or <i>ex post</i> surplus from investment: 'profit'.</li> </ul>	<ul style="list-style-type: none"> <li>• Central government.</li> <li>• Municipal government.</li> <li>• <i>Production</i>: National roads network, made of various types of roads.</li> <li>• <i>Relationship-specific asset</i>: local know-how for roads construction, especially the capacity to capture local demand.</li> <li>• <i>Relationship-specific investment</i>: the level of effort a mayor expends to acquire better information and know-how related to municipal roads provision.</li> <li>• <i>Input of local government</i>: municipal road that goes into production of the national roads network.</li> <li>• <i>Payoff</i>, or <i>ex post</i> surplus from investment: votes, political 'office'.</li> </ul>

According to Holmström (1989), an agent such as a mayor in Chile prior to decentralization would have been difficult to compensate directly for innovative investment efforts. The reason for this is that the efforts that the mayor makes to innovate are difficult for the central government to observe. Making the mayor's compensation a function of measurable results may be too risky for the mayor to be acceptable. Municipal elections can be seen as an alignment of the interests of the two principals, which provide incentives for the mayor to innovate because he has the option of designing policies that make it easy for the local population to observe, measure and reward his efforts. We are also likely to see in decentralized local governments some of the organizational characteristics of small firms (especially newly created and competitive ones), as discussed by Holmström, such as fewer rigid rules and less bureaucratization, more discretion, flexibility and risk taking, and more innovation.

### 3.2 *Explaining decentralization and innovation in Chile*

According to the explanations for innovation offered by the agency and incomplete contracts models, the incentives of mayors in Chile to innovate by investing in relationship-specific assets (i.e., in the appropriate technology for public service provision) would have increased with decentralization for the following reason: mayors under decentralization face less or no expropriation of the value of their innovations. Because mayors have more control rights under decentralization relative to centralization, they receive a larger fraction of the incremental *ex post* surplus created by their own investments. This occurs as the local government (firm 2) is granted a relative degree of autonomy (more decision rights) from the central government (firm 1).

In addition, mayors under centralization faced uncoordinated principals in the sense that the input of the local constituency was not sought in local policy decisions. Principals were also uncoordinated in the sense that the central government was less concerned with the need to gage local demand in implementing local policy, and was also less concerned with local service provision in general -- national infrastructure, defined as large scale infrastructure such as highways was the priority. The equally important, but finer parts of the picture only became priorities with time. How and why local public service provision became a priority is related to changes in organizational form of the public sector, discussed in the next section.

According to Hart, there are two reasons why organizational form (decision right allocation) changes with time: one reason relates to changes in asset complementarities and the other relates to changes in the relative importance of investment decisions of the

manager of a supplier firm. Sections 3.2.1 and 3.2.2 show how these points apply to Chile.

### ***3.2.1 From complementary to non-complementary assets***

Take the example of local roads provision again. Prior to the 1980s, municipal and central government assets for roads provision can be considered to have been complementary relative to the period after the 1980s. Central government agencies and their traveling staff made decisions regarding the provision of roads throughout the country. This was feasible since over half of the population was located around the Santiago Metropolitan Area. However, as population grew, at varying rates throughout the country, infrastructure requirements increased and became more differentiated. Providing all such requirements from the center was no longer optimal as the assets (the appropriate technology for efficient public goods provision) became less complementary. The specific knowledge of the mayor (and his staff) increased in value.

### ***3.2.2 The changed relative importance of the mayor's investment decisions***

Before the 1990s, the decisions and information of local governments were "unimportant" relative to the central role they eventually came to play after the severe recession of 1982-83. The deconcentrated sectoral offices of the central government made most investment decisions at the local level under the centralized system of governance. Local governments, until the early 1980s, did not have a Planning Division -- the office responsible for the coordination of local investment policies. In reaction to the gradual increase in the level of poverty through the 1970s, which was exacerbated by the recession of 1982-83, the government designed an impressive poverty alleviation program that made local governments the centerpiece of data-gathering and relief-delivery



programs. It follows that by the early 1990s, the decentralization of decision rights became the optimal means of exploiting municipal governments' specific knowledge about poverty and related local development problems such as basic infrastructure.

Hart's explanation of why decentralization comes about underscores the importance of relating the ownership of decision rights (or power) to information in making investment decisions at all levels of an organization. The need to optimize such decisions is what drives decentralization in countries experiencing uneven levels of socio-economic development. Seen from this perspective, decentralization can be understood as a reallocation of decision rights over public policy in response to divergent growth rates across geographic areas in a country.<sup>10</sup>

#### **4 Empirical evidence**

I will now show how changes in asset complementarities and changes in the relative importance of investment decisions in Chile altered the optimal governance structure which, in turn, changed mayors' incentives and encouraged them to innovate. I also relate empirical findings from Chile to the agency costs of innovation, discussed in Holmström (1989).

##### **4.1 Cases of innovation in local government**

The Fondo de Desarrollo Vecinal (FONDEVE), or 'Neighborhood Development Fund' is one of many types of innovations being undertaken by mayors in Chile since 1990. The FONDEVE, financed from municipal own-source revenue, goes toward the construction of small neighborhood works projects such as local roads construction and

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<sup>10</sup> See Espinoza and Marcel, 1994, for a discussion of the relationship between divergent growth rates across regions in Chile and the process of decentralization.

improvement, parks and sports facilities, and meeting centers for community organizations.

The FONDEVE is innovative for the following reasons. First, it is a purely local initiative and is not governed by any national program. This is unusual in a country with a traditionally centralized structure of governance, where local policies tend to be designed and are often implemented by central government agencies. Second, the FONDEVE is innovative because it is funded from sparse municipal own-source revenue which is transferred to citizen groups -- an uncommon occurrence in a country whose public officials remain suspicious of foul play in public-private ventures. Third, the FONDEVE is innovative because it funds projects otherwise not funded, or only occasionally funded with residual funds. Finally, the FONDEVE is innovative because of the manner in which it has evolved. Since its founding, various aspects of the program have undergone both product and process innovation.<sup>11</sup> Three aspects of the FONDEVE are central to this discussion.

The first aspect relates to changes in asset complementarities that made decentralization optimal in Chile after the 1980s. The FONDEVE is participatory and demand-driven, i.e., funds are allocated and projects are constructed based on requests made by community organizations, not based on sectoral ministry plans. The FONDEVE operates in this manner because the information that community groups can provide about local infrastructure deficiencies is difficult for central government officials to collect. The

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<sup>11</sup> Utterback, 1994, describes a *product innovation* as the appearance of a new design or product. He defines a *process innovation* as the manner in which the producers of an innovative product learn how to make the product as efficiently as possible.

more specific to the locality this information becomes, the less complementary local and central government assets (or technologies) become.

The second aspect of the FONDEVE relevant to this discussion relates to the changed relative importance of the mayor's (manager of firm 2's) investment decision. The less complementary central and local government assets become, the more "important" the specific knowledge and investment decisions of the mayor and his staff become. This change provides the mayor with an incentive to incur costs on relationship-specific technology. The FONDEVE is a costly investment in many ways. It is costly for members of participant community organizations, or project beneficiaries, who are generally required to make a minimum cash and/or in-kind (cement, labor, etc.) contribution to the cost of projects they propose.<sup>12</sup> Perhaps more interestingly, the program is also costly for the mayor because it's yearly initiation entails a series of atypical and often contentious public discussions/debates of the municipality's finances, limits and possibilities, presided over by the mayor. These aspects of the FONDEVE reflect the cost of establishing the system of accountability, which aligns the interests of the two principals (local voters and the central government), and determines the size of the mayor's "payoff" under the decentralized governance structure. Once he acquires more decision rights, a mayor (like the manager of firm 2), will make the effort to develop and improve a relationship-specific technology that promotes local accountability. He has an incentive to do so because he is now certain to receive a portion of the incremental *ex post* surplus created by a good investment, in the form of votes.

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<sup>12</sup> One could argue that contributions by residents are a source of revenue, not a cost to the mayor. However, from a social welfare perspective, given that this revenue may not outweigh the resources

The third aspect of the FONDEVE relevant to this discussion relates to the agency costs associated with innovation, analyzed by Holmström (1989). The FONDEVE is unusual in that it entails the transfer of public funds to private hands (members of community organizations) - a process with various consequences, most interesting of which are two types of pressures that force the local government to constantly reevaluate, negotiate, and improve its management of the program. Both types of pressures have organizational impacts similar to the impact of debt finance on private firms.<sup>13</sup>

One source of pressure comes from community organizations. Once they have been invited to participate and contribute to the cost of public works, the members of these organizations are anxious to receive what they have paid for. Participants pay incessant visits to the municipality if the delivery of their good is delayed by factors such as bureaucratic red tape. To avoid such delays, mayors typically redeploy their most entrepreneurial staff into FONDEVE management positions, or hire outside consultants to run the FONDEVE, or assist its staff.

Another type of pressure, is exerted on the municipality from above, by the office of the Comptroller General and the Ministry of Finance, who fear foul play and scrutinize local books more closely as soon as they hear that public funds are being transferred to community groups ("some of which are not even 'officially registered'!", they say).<sup>14</sup> Finally, the management of the FONDEVE within some municipalities enjoys some of the

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incurred by municipal staff in soliciting and collecting such funds, it may very well be a cost. I make this observation based on interview data.

<sup>13</sup> See George Baker and K. Wruck, 1990, "Organizational Changes and Value Creation in Leveraged Buyouts: The case of O.M. Scott & Sons Company".

<sup>14</sup> The finance for the sunk and operating costs of the FONDEVE comes from the recently increased, but still sparse own-source revenue. The system still does not allow the mayor any flexibility in reallocating funds which originate from central government transfers.

flexibility and lack of bureaucratization characteristic of small firms, as they are described by (Holmström, 1989).

By choosing to invest in such a program, an elected local official incurs a risk and invites pressure onto his administration, surely because he feels that the payoff is high enough. In Chile today, the payoff from popular investment decisions can be a consecutive second term in office and a first step onto the hierarchy of elected posts in the country.

#### ***4.2 Cases of no innovation in local government***

By the end of 1996, the FONDEVE had diffused to approximately half of the 335 municipalities of Chile. However, while some mayors boast of a 95% project implementation rate (which is considered impressively high for infrastructure programs in developing countries), many mayors have invested in improving neither the product nor the process of the FONDEVE. In cases where the mayor has invested in perfecting the FONDEVE, the most notable, contentious and difficult improvement relates to ensuring that the largest possible number of residents participate in the program. This type of change requires that the municipality invite and guarantee the participation of groups other than the more established, legally registered ones that have traditionally interacted with the municipal government on local policy matters. This change entails a costly and difficult process of negotiation which, at least in one case, has led to the cancellation of the program for one fiscal year.

Why do some mayors make the effort and incur the resources to engage in improving the participatory dimensions of the FONDEVE and others not? Those whose payoff can increase from this type of effort will do so, others not. Mayors who belong to

new parties with weak (but growing) constituencies and populist ideologies will improve the FONDEVE. Others who draw their support from the types of parties that predominated under the military regime have formed a FONDEVE to pay lip service to the fashionable theme of participation, but have not invested in improving the program. Interview data suggests that in the latter type of municipality, FONDEVE investment decisions suffer from a lack of coordination with the municipal development plan and from poor and delayed execution because the mayor lacks the proper incentives to improve it. Preliminary research suggests that the mayors who are by far most enthusiastic about forming and perfecting a FONDEVE tend to belong either to the center-left party (PPD) or to the far right party (UDI), both of which were formed near the end of the military regime, played a key role in the transition back to democracy, and are growing fast.

##### **5 *Conclusions and questions for further research***

I have applied some of the insights of agency theory and the property rights approach to decentralization and innovation in the public sector in Chile. Four observations about decentralization and innovation in developing countries arise from the discussion.

First, the innovations taking place in countries like Chile today appear to offer interesting opportunities to understand what happens during transitions from one organizational form to another, a largely neglected topic both in institutional economics and in management studies. In Chile, if the rate of innovation is being driven by the changing governance structure which has given mayors new political territory to conquer, the supply of this territory is likely to diminish as the political system stabilizes into a more or less set number of political parties. This link between shifting partisan terrain,

transformations in governance, and incentives implies that we are likely to see less innovation in industrialized countries and in the least developed countries than in countries in 'transition'. If this hypothesis conforms with empirical evidence, it takes us a step further in answering questions raised by scholars and development agencies interested in anticipating and promoting innovation.

Second, if transaction costs continue to decrease with improved technology, then the cost of correcting for information asymmetries and the cost of writing better contracts will decrease as well. Hart argues that in such a world organizational form no longer matters. This implies that decentralization may be a less interesting and less relevant organizational form than it is currently being touted to be. In countries like Chile, improvements in information systems and in integrated financial management are a step toward lowering transaction costs in areas like tax administration. The computerization of local poverty indicators, and their real-time sharing between central, regional and local government agencies is a similar step in the same direction.

Third, if convergence theories are correct, then continued growth in a country will eventually decrease asset specificity once again, thereby reducing the value of the mayor's asset-specific knowledge. This may also render decentralization less necessary.

The final observation raised by this discussion relates to the nature of the government's objective function in contractual relations *with other governments*. For example, assuming the central government retains residual control rights over municipal governments, under what circumstances will the central government alter its commitment to the allocation of these rights? What levels of organizational, political and economic development would make it more difficult for the central government to do so? How does

the presence of other, intermediate levels of government alter the objective function and under what circumstances? Historical evidence shows that it is rare for the central government in an industrialized country to strip away the decision rights of local government. On the other hand this happens quite frequently in developing countries. Understanding the public sector's objective function is important in understanding the evolution of the distribution of property rights between various levels of government.



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**To Whom it May Concern**  
**in All Offices of the Ministry of Health**

I am pleased to introduce to you Ms. Florence Eid, a researcher and lecturer from The American University of Beirut.

Ms. Eid is in the process of carrying out research on public hospital autonomy and requires data from your offices in our Ministry.

I ask you to kindly make available to Ms. Eid all statistics, reports and interviews she is seeking in order to continue her research. Ms. Eid expects to complete her work by the end of January 2000.

**Dr. Karam Karam**  
**Minister of Public Health**

Association Libanaise de Soutien

Medico-Hospitalier

Fondée en 1991

Ref. 46/AD

جمعية دعم الصحة  
والاستشفاء في لبنان

تأسست سنة ١٩٩١

بتوجيه من عماد وحسن ٤٦/٤٦

Beirut, the 30 of September 1999

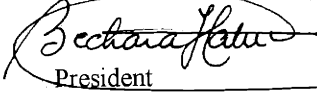
**TO WHOM IT MAY CONCERN**

In my capacity as President of the Association, I confirm having authorized Ms. Florence Eid to use all the documentation and statistics related to the Association for the purposes of fulfilling her research requirements.

The association welcomes any queries on the data that constitutes the basis of Ms. Eid's conclusions.

In witness whereof the present document was issued.

Bechara S. Hatem



President

Président

Association Libanaise de Soutien Medico-Hospitalier