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**Markets for public services:
Less might be more**

Benito Arruñada

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Benito Arruñada¹

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Abstract

This article suggests that the partial but strong incentives that characterized privately valuable public services in the classical ‘liberal’ state might be more effective than the comprehensive but weak incentives introduced by the ‘internal markets’ created when reforming the welfare state. The article compares three organizational forms: (1) the bureaucratic expense center used to provide privately valuable services such as healthcare through the organizations created by the welfare state; (2) the internal markets introduced to reform them; and (3) the hybrid solutions that have been used by the liberal state since the 19th century to provide such privately valuable services. This comparison suggests that market forces may play a better role in organizing public services when they are limited to a few variables, which makes stronger incentives possible and, at the same time, reduces the need for extensive planning and supervisory staff.

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¹ Pompeu Fabra University and BSE. E-mail: benito.arrunada@upf.edu. This work has greatly benefitted from exchanges with Jürgen Backhaus, José Manuel Freire, Fernando Méndez, Stephen Hansen, Cándido Paz-Ares, Yannick Perez, Carlos Rodríguez Braun, Jérôme Sgard, Barry Weingast, as well as the support of the Spanish Government, through grant PRESP05121-PID2020-115660GB-I00. Usual disclaimers apply.

1. Introduction: The Organization of Public Services

Most public services are now organized as what the literature of Managerial Accounting calls “discretionary expense centers” (Kaplan and Atkinson 1989:531-33), so that each supplying unit receives a budget with which it has to provide services, usually unpaid, to other departments or end users. When the performance of such units is evaluated, if ever, this is usually based on subjective judgment and grossly incomplete information. Many of the decisions on what to produce, for whom and even how are usually centralized or subject to detailed decision-making procedures.

In business firms, the use of expense centers is usually limited to areas in which it is difficult to measure their activities, not only in terms of efficiency but also of effectiveness, and in which it is not only difficult to link the resources used with the services rendered but also to define and evaluate the degree to which the objectives are achieved. Such characteristics can be found, especially, in central departments and in the actual general management of firms. The extent to which it is difficult to make such measurements usually depends on the type of resources and technology used and the services provided. The resources may be difficult to evaluate because of their high human capital content and because the costs are shared amongst or can be allocated to a wide range of users and products. In addition, many of the production processes may present a low degree of standardization and provide a wide range of services to other departments within the same organization or to external customers. Finally, many services are of an intangible nature so, though their quality is very important, it is difficult to evaluate because subjective elements are involved. It is often the case that only the users are aware of the quality and this knowledge is difficult to pass on to the person who has the authority to take corrective action. In the worst possible case, not even the users are aware of the real quality. This is especially

so when activities are intensive in human capital so their quality can only be evaluated by qualified personnel.

In public services, technology also limits the possibility of measurement because many activities present the same characteristics. This is especially the case in the production of public goods for which there is no rivalry and exclusion is impossible (mainly, those characteristics of the “liberal state,” such as national defense or the police). It is much less difficult to measure the services that constitute the core of the “welfare state,” such as health, education or pensions and other types of insurance. These are privately valuable services in which it is possible to exclude people from consuming them (except for their external effects, which are of varying importance and could be handled in many other ways apart from direct state provision). However, in spite of their private utility, they have often been provided free of charge by state agencies which have been financed by taxes unrelated to consumption. Moreover, in many cases it was also decided that discretionary expense centers should be responsible for their own organization, with a budget being allocated to the civil servant or the department rendering the service without paying them according to performance. These two patterns differ from to the earlier system used for public services with private benefits. In the 19th-century liberal state, services like justice, registries, pharmacies, and, to some extent, education were highly regulated. Yet, users paid explicit fees, and suppliers received strong incentives. In some cases, professionals were even treated as public franchisees and compensated with the residual profit of their unit, after paying for any other resources for which they were responsible.

Recent reforms in public services, long provided free by expense centers, seek to recreate a market by introducing user choice and supplier incentives, mainly through increased competition between suppliers. It is not a question of “inter-organizational” competition between different organizations but rather of the “intra-organizational” competition among

the divisions or departments of a single public organization. Such intra-organizational competition within the Administration is similar to that which often exists in large corporations. The problems it creates are not completely new but they are more complex (Arrow 1970:229).

The large multi-divisional corporations have extensive experience in dealing with it and have developed many formulae for this purpose. Like the Public Administration, such corporations are constantly suffering from the tendency for administrative units to grow excessively and to provide services inefficiently to the other divisions. At root, such failures can only be remedied by changing the incentives of the two parties involved. Firstly, those of the internal users, making them pay for the services they acquire from the expense center and, secondly, those of the internal suppliers, taking from them their monopoly for the provision of such services. Sometimes, an attempt is made to create a sort of “internal market” within the firm.² The general management of the organization then has to act as regulator of the competition that arises among its internal divisions.

This work examines the difficulties arising when elements of this type of internal competition are introduced in Public Administration and suggests that the role of market forces may be more productive if limited to a few variables. This seems to make stronger incentives possible while reducing the need for extensive planning and supervisory staff.

The rest of the article proceeds as follows. Section 2 describes how public services commonly organized as budgetary or ‘discretionary expense’ centers, which do not charge users, tend to be too large and inefficient. Section 3 examines the possibilities and difficulties

² I use the term “internal market” to describe a system aimed at boosting efficiency through supplier competition and user choice, while maintaining regulatory oversight. This differs from the EU law’s “internal market,” which is a unified economic area allowing goods, services, capital, and people to move freely without internal barriers.

arising from the transformation of such expense centers into units that are to some extent subject to market forces, with users facing opportunity costs and suppliers being subject to competitive pressure. Section 4 analyzes solutions that have been used since the inception of the liberal state for organizing legal and judicial services in the Spanish public sector. These solutions involve strong incentives with little management, suggesting that most effective solutions may be based on relatively automatic management of strong incentives with only a few key performance variables. Section 5 concludes.

2. The Pathology of Bureaucracy

Whether located in the public or the private sector, expense centers tend to be chronically inclined towards oversizing and overspending (Niskanen 1968, 1971). This is partly the result of circumstances associated with the incentives of producers and users and with the lack of information available to the person in charge of controlling the activity.

With regard to incentives, it usually happens that the remuneration, power and promotion prospects of those responsible for the expense center—and, in general, for all those working within it—increase when the center's budget increases, which means that they all have a common interest in enlarging it. Moreover, when users do not pay for the goods and services they acquire or when what they do pay does not vary in line with their level of consumption, most of them tend to demand them beyond the optimum level, that is, the level at which the cost would be the same as the marginal value for the organization or group. Obviously, this possibility is greater for goods or services that show positive utility.

The person in charge of allocating and controlling the use of resources finds it difficult to determine the budget for expense centers as there is no information indicating what is

valuable or not in the consumption of the services rendered by the centers. Even if each expense center's budget were set at an optimal level, evaluating how the funds are used would still be challenging. For example, neither a deficit nor a surplus in an expense center signals waste or efficiency, since the center's outputs are not measured. And the managers of expense centers are interested in maintaining the informational disadvantage of the person responsible for the budget. They will, therefore, resist any policy aiming to measure the amount or quality of the services. For the same reason, they will tend to conceal the availability of idle resources and are unlikely to present a budget surplus as this might be interpreted as meaning they have excess resources. They are more likely to spend all available resources, even on purchases offering limited utility. In a similar way, users will tend to exaggerate the value of what they consume.

Because of these information asymmetries, the most that can be expected is that the problem will be contained within sustainable limits, using palliatives of doubtful efficiency, such as supervision and budgetary reviews. An incremental procedure is often adopted, focusing not on volume or resources but only on any new budget allocations or cutbacks. In practice, attempts to draw up new budgets starting from zero and reviewing all expenditure are both costly and inefficient. Since expense centers have this tendency to overspend, they often find their budgets cut when the organization they belong to is going through hard times (Neuman 1975), whether it is a company, a town council or a government. Such cutbacks entail certain problems. It is often not known in which areas a reduction of expenditure would be most effective or, even if this is known, it may be impossible to apply cutbacks in one area and not another. Crises often lead to overall cutbacks, perhaps to contain the costs generated by the actual budgetary battle, when their effects are anyway likely to be temporary. The problem is likely to reappear soon, because cutbacks do not solve the root of the problem which lies in the interests of the centers and their clients and is aggravated by the information

difficulties suffered by the person responsible for the budgetary allocation. It may even occur that the cutbacks do not reduce expenditure as they come up against all sorts of restrictions and defense strategies on the part of those affected. The threat of dumping dead bodies in the manager's office has been used so often that it features as a category in some texts on hospital sociology.

Admittedly, this description simplifies the conduct of expense centers at least in two dimensions. First, it describes privately valuable services better than purely public services. The theory therefore tallies with the argument whereby bureaucracies tend to provide too many private goods and too few public goods (Breton 1974). Second, bureaucrats often focus more on leisure than on growth (Peacock, 1983), and may aim to increase not the whole budget available but only those items which provide greater personal utility (Dunleavy 1985, 1991). Moreover, it assumes a degree of autonomy that only exists in certain administrations, especially in the USA (Peters 1996:26-27). However, this criticism pays greater attention to formal autonomy and its short-term effects than to the actual autonomy which creates the information asymmetry and, especially, the implicit collusion between suppliers and users, as well as the long-term effects which are similar, irrespective of the degree of formal autonomy. Certainly, many expense centers in public administration have little formal discretion. However, they have an information advantage that grants them considerable informal discretion for allocating resources internally and manipulating central decisions on resource allocation and choice of procedure. For the more professional services, formal regulation of production processes is usually very detailed but officials still have considerable discretion over their own quality and productivity.

3. Internal Competition as a Solution to the Problems of Bureaucracy

As an alternative to such palliative treatments, a more radical way of dealing with expense centers is to change participants' incentives, so that users incur some cost when they demand services and suppliers are paid for their performance. Ideally, this should provide an automatic control of quantity and quality of service, eliminating surplus demand and utilizing the information of users and suppliers on utility and cost, without any need to transfer this information to the unit responsible for the budget. Ideally, the system should play the informational role of the market (Hayek 1945).

3.1. Users and Suppliers' Incentives

The most basic requirement for motivating users so that their decisions help to achieve better allocation of resources is that their consumption of the service should incur a positive opportunity cost. They will then reveal their evaluation of the service and, provided that other conditions are met, the supplier will be encouraged by the competition.³

There are many possibilities for reform. The most obvious way of generating an opportunity cost is to charge a real price for internal transactions. In addition, the payment of a real price usually provides a powerful incentive. However, instead of real prices, nominal prices are often used with the corresponding accounting entries in the accounts of suppliers. In the public sector, such nominal charges usually take the form of vouchers with which users

³ It is debatable if paying internal prices without any freedom of choice regarding either the number of services or their price also generates incentives for control, as argued by Zimmerman (1979).

can purchase services from specific public or private suppliers. The use of nominal prices reduces user motivation but will not necessarily destroy it altogether, provided that such nominal prices reflect real opportunity costs, as when users are able to obtain other services with these resources or, at least, the same services but from different suppliers.

Under any circumstances, in order to be an efficient control mechanism, the supplier should be in a situation of competition or, at least, users should be able to use their resources for other purposes. If, for example, each department in a university is allocated 100,000 USD to be spent only on photocopying, such departments would not have much motivation for controlling a single internal supplier. If, however, they are allowed to spend this amount on other things, they would implicitly be controlling the supplier by moving their demand elsewhere even though, by so doing, they would be complicating the budget problem.

Regarding suppliers, the most important general options are in theory represented by the different possibilities of divisional organization of expense centers in the form of cost centers, revenue centers, profit centers and investment centers and even franchises, the latter being a hybrid formula between organization and market. As decisions are increasingly delegated to the center in question, the performance indicator will have to be increasingly global (Kaplan and Atkinson 1989:529-33). This means that the person in charge of a cost center usually decides how resources should be used but not how many units should be produced nor their quality, and this person is evaluated by some sort of indicator of production cost. In revenue centers, those in charge are evaluated by turnover or revenue, and a decision is freely taken on the amounts sold or the selling price, but not on both variables. A profit center manager must maximize some type of divisional accounting profit and is usually free to decide not only how resources should be used but also about production, quality and product prices. In investment centers, in addition to the attributes of profit centers, there is also freedom and responsibility regarding the use of larger amounts of resources as these include the capital

used by the center. Finally, a franchise provides a hybrid solution in which the franchisee owns a large proportion of the assets and is paid from the profits of the local outlet.

The remuneration of whoever is in charge of such a center has to be linked to some sort of performance indicator so that they show interest in using their resources optimally. For example, the director of a school that has managed to raise demand for places or to improve students' academic performance could be rewarded with an annual bonus or promotion. And vice versa, if the performance indicators drop, not only would the director see a drop in income and fewer chances of promotion but the school might lose its independence or a substitute director might be called in to turn it around.

3.2. The Nature and Costs of Control

In theory, there are many possibilities for this type of transformation of expense centers but the essential characteristics are defined by just two variables: freedom and responsibility. Freedom refers to the degree of discretion that participants are given in their decisions. Responsibility refers to the mechanisms used to evaluate and compensate their performance. Together, these give rise to a wide range of possibilities from which reformers must choose (Table 1).⁴ Freedom is introduced by redistributing decision rights: decisions that were previously centralized are delegated to users and suppliers. Responsibility, once based on vertical control to ensure compliance rather than performance, now includes a mix of

⁴ This analysis of the elements of organizational control is based on Arrow (1964) and, especially, Jensen and Meckling (1995). Arrow formulates organizational control as the interaction of operating rules and enforcement. Jensen and Meckling express these operating rules as the allocation of decision rights (freedom) and distinguish two phases in enforcement (responsibility)—evaluation and compensation for performance.

horizontal and mutual control: users influence suppliers through purchasing choices, and suppliers shape user behavior through pricing policies.

The presence of horizontal control does not lessen the need for vertical control; instead, it redefines its purpose: vertical control must now ensure that mutual control between users and suppliers works effectively, preventing selfish behavior and promoting socially beneficial interactions. The agency responsible for both users and suppliers must preclude that they use their freedom to serve only their own goals, sacrificing the common interest. Given that users and suppliers now enjoy more discretion and stronger incentives, vertical control must, in fact, be more effective (Milgrom and Roberts 1992:226-28).

Ideally, reform should re-create market mechanisms, which is why terms like “internal markets” are used (Enthoven 1991). It aims to introduce competition, both among suppliers and among the ways in which users might allocate their resources. It might even go so far as to change the nature of the supplying unit, converting it into a profit center or even a franchise. However, such a radical solution usually requires considerable investments and expenditure for planning and managing the whole process (Arruñada and Hansen, 2015). Its effectiveness, therefore, is doubtful. In fact, in order to supervise the reform and manage the internal market, a giant planning apparatus is often set up, a “Gosplan” which, in turn, has all the characteristics and defects of an expense centre (Arruñada 1997). An internal market is only a market in name, as there are no property rights, and all prices are administered (Hayek 1945).

4. The Organization of Privately Valuable Services in the Liberal State

An alternative, seemingly more modest, solution is to apply just some market mechanisms, or just in some dimensions, but more forcefully. The patterns followed by the traditional organization of public services in the liberal state were often of this type, combining partial discretion by decision makers (limited, e.g., to certain dimensions such as the choice of supplier by the user or the tenure-based choice of specific jobs by professional civil servants) with powerful incentives (based, e.g., on user fees and pay for performance, a solution commonly found in the organization of notaries, registrars, judicial clerks or family doctors).

In order to illustrate the arguments, I review below three solutions adopted in the 19th century for judicial and quasi-judicial services in the Spanish Public Administration: notaries, registries and courts. These solutions differ sharply from both standard expense centers and internal markets in four ways: introducing user fees, restricting user choices, providing strong incentives for suppliers, and relying on automatic controls rather than extensive planning. In contrast to the standard expense center, services are financed with user fees and at least some suppliers are paid for performance. In contrast with the internal market, incentives are much stronger, as users pay real money and suppliers are paid real bonuses. However, they are characterized by the limited size of the planning or supervisory agency. Instead of aiming for a complete artificial market, too costly to achieve, these admittedly suboptimal—in Simon’s (1956) terms “satisficing”—solutions seem to provide a better alignment of a few key dimensions of participants’ behavior.⁵

⁵ Arruñada and Hansen (2014) compare two of these solutions in depth.

User fees. Court users paid fees which financed a substantial proportion of costs. Elimination of these judicial rates in 1986 put an end to this system. This resulted in congestion, rationing, frivolous litigation, capacity increases and greater delays in civil than in criminal cases (Pastor, 1993). User fees were reintroduced for commercial cases in 2002 and generalized in 2012 (Gómez, Celentani and Ganuza 2012). In contrast, both notaries and registrars are paid explicit, regulated fees by one of the parties, and these fees finance services fully. Both notaries and registrars have shown considerable flexibility in adapting to drastic swings in market demand, caused by the real estate bubble in the period 2000-2007 and the adaptation of corporation law a decade earlier.

Limited user choice. Free choice of supplier is allowed only for essentially private services such as notaries' services (Arruñada 1996), but not for registries and courts. Since the notary mainly serves the parties to the contract, it makes sense for them to freely choose the notary. It is also understandable that notaries tend to be flexible regarding the wishes of the parties, interpreting legal restrictions in the way that best suits them. Conversely, for courts and registries, freedom of choice would endanger their impartiality and their basic function of protecting third parties: e.g., free choice of land registry would not protect parties such as future land purchasers, who are unknown at the time of choosing (Arruñada 2003).

Strong incentives to suppliers. Incentives to notaries and registrars are as strong as they can be, as both notary's offices and registers function as public franchisees. Each notary and registrar run their own office, hires their own staff, and manages resources independently. They are paid, along with senior staff, from the office's residual profit, after covering costs and compensating less skilled employees. Conversely, judges are paid a fixed salary with substantial increases linked to tenure and promotion, a typical characteristic of judicial careers (Posner 1995). However, in a system that remained in place in many courts until the 1980s, though it was being phased-out since 1947, courts' clerks were paid substantial

bonuses linked to processed cases.⁶ This motivated paperwork productivity without damaging the quality of court decisions. Court clerks controlled judges' productivity because, if the latter did not deal with cases expeditiously, they did not receive the full variable remuneration; and judges (who were often paid worse than the clerks so felt a degree of rivalry that was not always negative) controlled the quality of the office's administrative work which, since it tended to be done fast, was not always as it should be. In all cases, the key elements of quality control were the deferred nature of remuneration and personal liability in professional decisions. This latter aspect is especially important for registrars, who are subject to a standard of strict (i.e., non-negligent) liability.

Role of automatic control. Instead of specialized control by a supervisory bureaucracy, incentives are arranged in a way that favors mutual control by participants. Not only users control suppliers and suppliers control users, but complementary suppliers control each other (e.g., registries control notaries, and vice versa, and, similarly, court clerks and judges control each other). Such controls between complementary suppliers are enhanced by using different compensation functions. For instance, both notaries and registrars are paid with net user fees; however, notaries are chosen by users and compete with each other while registrars enjoy territorial monopolies. Consequently, notaries strive to satisfy their clients while registrars strive for legal quality and the protection of third parties different from notaries' clients. Similarly, court clerks were paid a variable fee for performance, motivating them to speed up case paperwork while judges were paid a fixed salary and worried about possible appeals that might damage their reputation and chances of promotion. In both cases, opposite

⁶ In 2004, to deal with court congestion, the Government introduced short-term performance targets, which caused an increase in average measured productivity and reduced the productivity of top performing judges (Bagues and Esteve-Volart 2010). They were opposed by judges' associations and may have damaged professional morale.

compensation functions create tension between complementary suppliers, providing some degree of automatic control as well as two sources of competitive information for regulators. A similar formula was used in the regulation, administrative appeal and inspection of notary's offices and registries by concentrating these supervisory tasks in the hands of a tiny and specialized body of civil servants at the General Directorate for Registries and Notarial Offices. These civil servants were paid a fixed salary below the variable compensation of the notaries and registrars they were inspecting, so they tended to be stern about any slackness.

5. Conclusion

This chapter compares three ways of organizing the provision of privately valuable public services: budgetary bureaucracy, comprehensive internal markets and traditional hybrid solutions based on partial market incentives and first used by the liberal state in the 19th century. These hybrid solutions, which have survived for many decades and produced relatively effective outcomes, contrast starkly not only with those of standard bureaucracy but also with those found in modern internal markets. Whereas internal markets strive to develop comprehensive measures of performance but provide weak incentives, these liberal-state solutions rely on partial measures of performance but provide strong incentives. Moreover, instead of requiring large staffs to manage suppliers and their interaction with users in the internal market, such hybrid solutions work in a regime of "automatic management" and are therefore frugal in their use of planning and supervision resources.

The main contribution of this chapter is to call attention to the difference between these two organizational solutions, both of which, for different reasons, are considered close to the market. Internal markets claim to be, and are usually seen as, attempts to introduce

competitive forces in bureaucratic public services. They are often considered the result of “neoliberal” policies but in fact they differ widely from those used in the liberal state, which followed a minimalistic and high-leverage approach, with little bureaucracy but strong incentives. The chapter also suggests the need for further analysis based on wider evidence and considering solutions in other services and countries: e.g., examining traditional hybrid solutions adopted for healthcare in those continental European countries which have opted for private provision of publicly financed healthcare. Lastly, it would also be of interest to identify which factors determined the choice between the expense center and the hybrid solutions as the organizational form for providing the typical services of the welfare state. If still present today, these factors might inform us as to the true nature and prospects of internal market initiatives. In particular, they might tell us if there is any prospect of such internal markets developing into real markets instead of just remaining giant bureaucracies.

6. References

Arrow, K. J. (1964), “Control in Large Organizations,” *Management Science*, 10(3), 397-408.

Arruñada, B. (1996), “The Economics of Notaries,” *European Journal of Law and Economics*, 3(1), 5-37.

Arruñada, B. (1997), “Internal Markets in the Reform of the Spanish NHS: A Comment on the Planners’ Latest Fantasy,” in J. G. Backhaus, (ed.), *Essays in Social Security and Taxation*, Metropolis, Marburg, 429-44.

Arruñada, B. (2003), “Property Enforcement as Organized Consent,” *Journal of Law, Economics, and Organization*, 19(2), 401-44

- Arruñada, B. (2012), *Institutional Foundations of Impersonal Exchange: The Theory and Policy of Contractual Registries*, University of Chicago Press, Chicago.
- Arruñada, B., and S. Hansen (2015), “Organizing Public Good Provision: Lessons from Managerial Accounting,” *International Review of Law and Economics*, 42, 185-91.
- Bagues, M., and B. Esteve-Volart (2010), “Performance Pay and Judicial Production: Evidence from Spain,” *Working Paper*, June.
- Breton, A. (1974), *An Economic Theory of Representative Government*, Aldine, Chicago.
- Dunleavy, P. (1985), “Bureaucrats, Budgets and the Growth of the State,” *British Journal of Political Science*, 15, 299-328.
- Dunleavy, P. (1991), *Democracy, Bureaucracy and Public Choice*, Harvester Wheatsheaf, Brighton.
- Enthoven, A. C. (1991), “Internal Market Reform of the British National Health Service,” *Health Affairs* 10(3), 60-70.
- Gómez, F., M. Celentani and J.J. Ganuza (2012), “A vueltas con las tasas judiciales,” *Nada es gratis*, December 18.
- Hayek, F.A. (1945), “The Use of Knowledge in Society,” *American Economic Review*, 35(4), 519-30.
- Jensen, M. C., and W. H. Meckling (1995), “Specific and General Knowledge, and Organizational Structure,” *Journal of Applied Corporate Finance*, 8(2), 4-18.
- Kaplan, R. S., and A. A. Atkinson (1989), *Advanced Management Accounting*, 2nd ed., Prentice-Hall, Englewood Cliffs, NJ.
- Milgrom, P., and J. Roberts (1992), *Economics, Organization and Management*, Prentice-Hall, Englewood Cliffs, NJ.

- Neuman, J. L. (1975), "Make Overhead Cuts that Last," *Harvard Business Review*, May-June, 116-26.
- Niskanen, W. A. (1968), "Nonmarket Decision Making: The Peculiar Economics of Bureaucracy," *American Economic Review*, 58(1), 293-305.
- Niskanen, W. A. (1971), *Bureaucracy and Representative Government*, Aldine Atherton, Chicago.
- Pastor Prieto, S. (1993), *¡Ah de la justicia! Política judicial y economía*, Madrid, Cívitas.
- Peacock, A. T. (1983), "Public X-Inefficiency: Informational and Institutional Constraints," in H. Hanusch, (ed.), *Anatomy of Government Deficiencies*, Springer, Berlin, 125-37.
- Peters, B. G. (1996), *The Future of Governing: Four Emerging Models*, University Press of Kansas, Lawrence.
- Posner, R. A. (1995), "What Do Judges Maximize", in *Overcoming Law*, Harvard University Press, Cambridge, MA, 109-44.
- Simon, H. A. (1956), "Rational Choice and the Structure of the Environment," *Psychological Review*, 63(2), 129-38.
- Zimmerman, J. L. (1979), "The Costs and Benefits of Cost Allocations," *Accounting Review*, 54(3), 504-21.

Table 1. Design dimensions: participants' freedom and responsibility

	<i>Freedom: Decision-making rights of participants</i>	<i>Responsibility: Performance evaluation and incentives</i>
Users	<p>Choice of supplier:</p> <ul style="list-style-type: none"> - Where: inside or outside the organization - By whom: the users, a representative, a gatekeeper 	<p>Opportunity costs:</p> <ul style="list-style-type: none"> - Shadow invoice - Voucher - Price - Co-payment
Suppliers	<p>Discretion for:</p> <ul style="list-style-type: none"> - Organizing the activity - Transacting internally - Transacting externally 	<p>Divisionalization:</p> <ul style="list-style-type: none"> - Responsibility centers (for profit, cost, investment) - Franchised administration (units' managers hold property rights, hire employees and are paid with the unit's profit) <p>Individual compensation function:</p> <ul style="list-style-type: none"> - Pay for performance - Professional career - Units' profits (in franchised administration)