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The Economics of Notaries

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Abstract

In Civil Law legal systems notaries fulfil two crucial roles, acting as both law enforcers and court officers, and as facilitators and enforcers of private transactions. In these countries, notaries achieve economies of scope by simultaneously providing private and public services and substituting both parties' lawyers. This arrangement is subject, however, to serious conflicts of interest that could prejudice the provision of public services that have attributes of externalities, as well as the notary's independence from all parties to the transaction. This paper shows how this notary system may be efficient in this context. Focusing on the Spanish case, it analyses the legal and economic nature of the services, the incentives that control their provision, and the cost in terms of competitive restraints that could be generated by the organizational patterns making up such incentives. Supporting empirical evidence is also provided.

Keywords:

Notaries, professions, careers, quasi-rents, self-selection, civil service.

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I. Introduction

Notaries in Civil Law countries provide a varied and complex series of services that include not only official authentication of documents, or *fides publicae*, but also a measure of control over the legality of contracts and assistance to the parties to them¹. Notaries thus perform a large part of the public functions accomplished by *ex-post* law enforcement mechanisms and the courts, and of the private functions performed mainly by lawyers in Common Law countries. There are also notaries in these later countries. However, these so-called “notaries” have nothing in common with Civil Law notaries except for the name — in some cases they are not even law professionals, they just act as qualified witnesses and they neither assist the parties nor contribute authenticity to contracts but only to their signature and questions of capacity. Furthermore, in the USA in particular, the guarantee provided by notaries and land registration is replaced by title insurance. As an illustration of the differences in nature and cost between both legal structures, Table 1 below summarizes the composition and amount of the legal costs associated with the purchase and sale of real estate in the USA and Spain. That US notaries provide very few services makes it possible for them to be much cheaper. On the other hand, the value added by Civil Law notaries and the land registry is implicitly shown by the absence of lawyers in the transaction, as well as by the patently lower total cost. The differences between the two systems are so great and the functions of Common Law notaries so residual that hereinafter I will tend to use the term “notary” to refer only to the Civil Law type of notary².

¹ The Civil Law system of notaries, which is frequently called the “Latin” system, based on public documents, encompasses the Roman-Germanic area — Germany, France, Italy, Spain, Belgium, Holland, Luxembourg, part of Switzerland, Portugal, Austria and most Latin American countries.

² This is not to say that in other legal systems some of the notaries’ functions are taken by other professionals who are organized not very differently from notaries. Hybrid figures, which play both public and private functions and act as a double agent for his clients and for the state, also exist in Common Law legal systems. It has been argued, e.g., that British barristers act to some extent as agents of the court (R. A. POSNER, “The Future of the Law and Economics Movement in Europe,” Address to the XII Annual Conference of the European Association of Law and Economics, Bern, September 7th., 1995). It is worthwhile

In addition to the full array of services they provide, the common structure of Civil Law notary systems has other well-defined characteristics — such as barriers to entry and regulation of the profession, compulsory demand and fixed prices — even if some minor details differ from country to country. The main features of the Spanish notary system include the following, for example: (a) in terms of the organization of *supply*, notaries are public officials and become notaries only after passing a stiff competitive examination process; their professional activities are governed by detailed rules; throughout their careers they can choose successive “postings” or specific positions depending on their length of service and the results obtained in competitive examinations from amongst a series of positions defined by regulations; (b) with respect to *demand*, this has a largely regulated origin as the involvement of notaries is one of the legal requirements applicable to several types of contractual arrangement; clients, however, are free to choose their notary and the latter may not refuse them his or her services; (c) with respect to *fees*, these are laid down by regulations based on the type of document and the amount involved in the transaction; the income of individual notaries will thus vary with the demand for them and their individual costs with no compensation from the government for the public services they provide.

The structure of Civil Law notaries is hence made up by a series of patterns which can be seen as competitive restraints — restricted entry into the profession, a captive demand, fixed prices and a long list of rules governing their functioning. Some years ago, an economic evaluation of such restraints would have merited little attention. Economists would have tended to condemn them outright because they suffered from the defects inherent in monopolies and/or their regulation. Until recently, monopoly was in fact the predominant economic explanation for organizational patterns that did not fit into the perfect competition model. The criticism of Ronald H. Coase was then valid when he said that “if an economist

pointing out that the remuneration profile of barristers is similar to that of notaries — they earn substantial quasi-rents only after a long initial investment period. The remuneration of American federal judges is also heavily backloaded through a generous pension scheme (R. A. POSNER, “What Do Judges Maximize”, in *Overcoming Law*, Harvard University Press, Cambridge, MA, 1995, pp. 109-144.

finds something—a business practice of one sort or other—that he does not understand, he looks for a monopoly explanation. And as we are very ignorant in this field, the number of ununderstandable practices tends to be rather large, and the reliance on a monopoly explanation is frequent”³. As it happens, the panorama has substantially changed and the new contractual economics has been capable of explaining a large number of organizational patterns in terms of efficiency which were earlier considered to be the outcome of monopoly. This paper reaches a similar conclusion with respect to the organizational structure of Civil Law notaries.

Examination of the notary system will begin by considering the particular nature of the product and the requirements that all organizations must meet in order to be capable of producing it. The economic nature of notary activities and products will therefore be analysed in Section II along with their production technology. This will illustrate the importance of the externalities. Section III examines the main organizational patterns and explains the functioning of the complex system of incentives which ensures effectiveness in the production of these notary services, particularly in terms of their externalities. Section IV then deals with the costs of such an incentive system, which arise out of the competitive — perhaps rather more *organizational* — restraints required for its operation. In short, Section III shows how a special type of monopoly ensures the effectiveness of notaries by incentives and self-selection and Section IV analyses why the costs arising from these organizational restraints may not be very substantial. Finally, Section V presents a short summary of the conclusions of the work and proposes possible extensions of the analysis to other areas of professional services and public administration.

³ R. H. COASE, “Industrial Organization: A Proposal for Research”, in V. R. Fuchs (ed.) *Policy Issues and Research Opportunities in Industrial Organization*, NBER, Cambridge, 1972. Reproduced in R.H. Coase, *The Firm, the Market and the Law*, University of Chicago Press, Chicago, 1988, p. 67.

II. Notary Products and Technology

Decisions about organizational design are basically conditioned by the type of product desired and the production technology available at any time. The services notaries are entrusted to provide in Civil Law systems can be classified as public or private, depending on who benefits from them⁴. The public services pose a serious economic problem, resulting from their nature as externalities. The private services, for their part, can be subject to difficulties arising out of the asymmetry of information that generally exists between supplier and customer. Furthermore, the provision of both services by the same professional leads to potential economies of scope, but they are difficult to achieve, because such joint production might engender a serious conflict between private incentives and public functions. Similarly, the geographical dispersion of the demand and the need to achieve economies of scale in some functions require a dual technological structure with decentralised production units that are difficult to monitor. It will be shown in subsequent sections how the current organizational structure of notaries is capable of providing a satisfactory solution to all these problems simultaneously.

a) *Public services.* The public services provided by notaries are to a greater or lesser extent external effects in such a way that providing them generates benefits to third parties who are not parties to the transaction in which the notary is involved. As it is not possible to appropriate such benefits, it is likely that market forces do not provide sufficient incentive for their production to reach optimum levels from a public point of view. Two types of externality can be distinguished, “legal” and “judicial.”

⁴ This hybrid character of notary functions, which places them at a mid point between the public official and the professional person, has been repeatedly analysed in the legal literature. See, for example, A. RODRIGUEZ ADRADOS, “El Notariado: función privada y función pública. Su inescindibilidad”, *Revista de Derecho Notarial*, 1980, pp. 255-409; and, amongst the more general studies, that of E. GIMENEZ ARNAU, *Derecho notarial español*, (3 volumes), Universidad de Navarra, Pamplona, 1964; and that of J. L. MEZQUITA del CACHO, *Seguridad jurídica y sistema cautelar*, (2 volumes), Bosch, Barcelona, 1989. An analysis of notary functions more from the point of view of economics is provided by C. PAZ-ARES, “Seguridad jurídica y sistema notarial (Una aproximación económica)”, in M. RODRÍGUEZ-PIÑERO, A. SCHWACHTGEN, R. EVERLING, C. PAZ-ARES, L. PAREJO, L. DÍEZ-PICAZO and J. BURDIEL, *La fe pública*, Consejo General del Notariado, Madrid, 1994, pp. 73-154.

The external effects of a *legal* nature arise because notaries have to monitor the legality of the documents they authenticate. This type of involvement, in which the notary acts as a “gatekeeper,” is an essential part of the strategy adopted to enforce the law *ex ante* in Civil Law countries. This strategy is justified by the deficiencies involved in the *ex post* enforcement of the law by penalties and consequent dissuasion or prevention. This use of “gatekeepers” to fulfil the law consists in imposing a liability on a third party — the *gatekeeper* — who, as a result of his other functions, in this case private, is in a good position to withhold his co-operation or “ministry” and thus prevent conduct that does not comply with the provisions of the law⁵.

The external effects of a *judicial* nature derive from the consequences that the involvement of notaries have on the functioning of the judicial system. By publicly authenticating and monitoring their legality, notaries give those documents in which they are involved a special evidentiary value as a result of their nature and uniformity. This produces valuable information that enables contract costs to be cut down, both private and public, as a result of

⁵ For a general treatment of gatekeepers, see R.H. KRAAKMAN, “Gatekeepers: The Anatomy of a Third-Party Enforcement Strategy”, *Journal of Law, Economics and Organization*, Vol. 2, 1986, pp. 53-105. It has been argued recurrently that with the current system of notaries this public function is performed in a supposedly less than optimum manner. On this basis, it has been recommended that notaries be fully integrated into the civil service. (See, for instance, R. STÜRNER, “Der Notar-unabhängiges Organ der Rechtspflege?”, *Juristen Zeitung*, 1976, pp. 154-60). There is some evidence, however, that under this arrangement notaries would provide a suboptimal level of private services. In Portugal, the 1940 and 1967 reforms changed a traditional system of Civil Law notaries to an administrative or state type. As a consequence, new professionals have appeared who advise on, draw up and prepare documents which notaries now simply authenticate (see T. R. FERNANDEZ and F. SAINZ MORENO, “La naturaleza de la función notarial”, Report to the Notaries’ Association Council, Madrid, December, 1988, pp. 174-5). Recently, a new regulation has been proposed which, if approved, would re-privatise notaries. Moreover, the decision by the *Länder* of the former Democratic Republic of Germany to choose the notary system most similar to the traditional Civil Law stereotype from among the three available in Germany does not speak well of the system of civil-servant notaries (*Beamtnotariat*) specific to a part of the German region of Baden-Württemberg. In fact, the *Beamtnotariat* system was not even considered, judging from the references in the literature, which are either inclined in favour of the *Anwaltsnotariat* (G. ROHDE, “Plädoyer für das freie Anwaltsnotariat”, *Zeitschrift für Rechtspolitik*, no. 12, 1991, pp. 452-4), or the *Nurnotariat* (C. SCHELTER, “Plädoyer für das freie Nurnotariat”, *Zeitschrift für Rechtspolitik*, no. 8, 1992, pp. 311-2), without even mentioning the *Beamtnotariat* possibility. See also H. LEUTHEUSSER, “Anwaltsnotariat oder Nurnotariat”, *Zeitschrift für Rechtspolitik*, no. 6, 1993, pp. 231-2. (The variety of German notaries is interesting because the same series of notary services — federally regulated — are provided under one of three different organizational structures in different *Länder*. Thus, 50% of German notaries are *Nurnotars*, conforming to the general Civil Law pattern described in the text; 40% are *Anwaltsnotars* who can simultaneously work as notaries and lawyers — on different issues, however — and constitute in fact a variant of the *Nurnotars*; and only the remaining 10% are *Beamtnotars* who act under a fully civil servant status [figures taken from SCHELTER, *op. cit.*, 1992, pp. 311-2]).

the effect on the tendency to litigate, or “litigiousness” and the production costs of judicial services.

Firstly, it is likely that the notary system reduces the litigiousness and this is desirable from a public point of view. The basis for this is that there are no guarantees, rather the opposite, that private interest in itself will lead to an optimum solution in terms of the degree and quality of contractual formalization from the public point of view. The causal factor is that operation of the judicial system is subsidised and this may therefore generate an excessive level of litigation and a high degree of congestion, at least in some areas of the law⁶. In this context, the notary’s involvement produces a positive externality by reducing the demand for judicial services and contributing to the “legal peace” which lawyers normally consider to be a desirable public value⁷ and which from the economic point of view can be classified as an externality. It is similarly felt in the legal world that the quality of notary information reduces litigation⁸. It is stated for example that it enables the optimism of the parties to be reduced along with a reduction in the possibilities for strategic behaviour and variations in judicial decisions, which discourages the parties from litigating and positively encourages them to comply⁹. A recent statistical study agrees with this assessment, concluding that litigation seems to increase more in those areas of law where notaries are not involved than in those where they are¹⁰.

⁶ As to judicial congestion and the imbalances seen in this respect in Spain between different branches of the law, see S. PASTOR PRIETO, *¡Ah de la justicia! Política judicial y economía*, Cívitas, Madrid, 1993.

⁷ This is in fact the most widespread justification of the so-called “form standards” and, in particular, the public document. See for example, L. DIEZ-PICAZO, *Fundamentos de derecho civil patrimonial*, 4th ed. Madrid 1993, volume I, pp. 249-250.

⁸ This point was clear to XIX century authors at a time when the notary system was being designed, as testified to by a famous and frequently recalled sentence of J. Costa: “Notaría abierta, juzgado cerrado” or “Notary Open, Court Closed” (see J. COSTA, “Reorganización del Notariado, del Registro de la Propiedad y de la Administración de Justicia”, *Obras Completas*, 2nd ed. Madrid 1917, volume XIII, p. 205).

⁹ See C. PAZ-ARES, *op. cit.*, 1994, p. 89.

¹⁰ S. PASTOR PRIETO, “Intervención notarial y litigiosidad civil”, Universidad Carlos III, *mimeo*, Madrid, 1994, pp. 157, 158, 160 and 166. The conclusions from this study would be substantially strengthened if the causal factor which operates in an opposite manner to that analysed was eliminated from the correlations found; in other words cases where the decision to litigate gives rise to a certain notary involvement which is a *requirement* of the judicial process. This is the case with powers of attorney for representation in litigation and also to some extent with protest certificates, the only notary involvement in which a positive correlation was

Furthermore, judicial costs are reduced if notary services —both private and, in particular, public— have uniform basic features. This standardization enables transaction costs to be reduced at two stages. First, prior to notary authentication, in existing relationships between clients and also between clients and the notary. Second, at a later stage in respect of relationships between clients and the third parties who contract or deal with them. The latter category includes not only private contracting parties but, in particular, the judicial system and also other branches of government such as the tax, planning and foreign investment authorities. The utility of uniformity in notary services is highlighted even more when it is taken into account that the standardization affects not so much, or not only, *final* goods or services but *intermediate* services which are used in subsequent contractual processes. This input rather than output nature minimises the potential advantages of alternative forms of organization which allows for services of a variable quality. The importance of applying principles of standardization in industrial development a century ago is well known, when it made it possible to increase the efficiency of industrial processes by the use of interchangeable parts and by specialization. The evidentiary standardization of notary documents not only has a similar effect in judicial processes — clearly because of the privileges which they enjoy — but also in contractual processes subsequent to the notary's involvement in which the document concerned plays some role. (In this respect it does not seem to be purely by chance that the modern development of notary systems coincided historically with the integration of national markets at the end of the XIX century). In this area it should be emphasized that the absence of qualitative differences may be a value in itself. In the circumstances we are concerned about, we are not solely or basically dealing with typical consumers but also with a judicial system — with respect to judicial

detected in the study between the involvement of notaries and litigation. This is unavoidable as Spanish legislation requires that the parties grant a notarial power of attorney to their *procurador* (Spanish litigation agent) to represent them in legal proceedings. Similar considerations apply to protest and other certificates as a protest note from a notary is required as a consequence of or in anticipation of litigation — the only function of the certificate is to provide evidence, in many cases for litigation purposes.

externalities — and with anonymous contracting parties — with respect to legal externalities. In both of these cases “customers” value negatively any variation in quality¹¹.

b) *Private services.* Private contractual services refer to facilitative tasks, the purpose of which is to reduce transaction costs. Typical examples in this respect include advisory, conciliation, documentation and contractual design functions¹². The problems are not a question of externalities, as they are in the case of public services. This is because in this case the benefits are appropriated by the client. The difficulties lie in the possible asymmetry of information that exists, first between clients and notaries and, second, between clients themselves. (It should be made clear that the term “client” does not only refer here to those who deal directly with notaries but also to “clients of clients”, or rather to parties contracting with clients in the future. These latter clients will substantially value the control and standardization provided by notary involvement. This aspect is present in all contractual documents but it is particularly important in those that not only define a more complex “governance structure” but also create a legal personality, such as the incorporation of a company, which will be affected by or will be party to innumerable contracts with persons not present at the time of incorporation).

An effective solution for this asymmetry of information requires institutional safeguards which provide guarantees as to the independence and quality of notaries as well as *ex-ante* control mechanisms which overcome the problems posed by the fact that the quality will only be appreciated in the long term. This type of situation will favour the use of vertical restraints, now simply as a result of the problems of these private services, as well as organizational formulas proper to franchises. The problem posed in relation to private services of a transactional or facilitative type and, in particular, to the asymmetry of

¹¹ This demand for homogeneous services would not be satisfied under an alternative system characterised by competition amongst notary firms unless these firms were heavily regulated thus jeopardising the potential benefits of competition.

¹² For an attempt at classifying these functions from the point of view of transaction costs, see C. PAZ-ARES, *op. cit.*, particularly pp. 85-101.

information and conflicts of interest which make it difficult to contract them, will not be analysed here, however, as it is considered that they are capable of solution by the free organization of transactions¹³. Attention will be focused on the other hand on the public dimension in relation to externalities, a dimension which may in fact justify the adoption of an organizational structure such as that of Civil Law notaries.

c) *Economies of scope*. Even accepting the presence of externalities and the implied regulation, a separation could be proposed between the public services where these externalities are present, providing them under different organizational conditions, on a purely civil service basis for example, and the private functions, bringing them more into the realm of the liberal professions. However, this option would probably be inefficient, mainly because it would fail to take advantage of the economies which can be obtained by the combined provision of public and private notary services. These economies are of two types. First, there are those relating to *production costs* arising because both the public and private functions are performed in respect of the same acts and documents and most of the work of notaries is applicable to the two of them. For example, when notaries draft company articles in accordance with the wishes expressed by the shareholders, they will at the same time be drafting them in accordance with legal provisions in such a way that they are monitoring legality without incurring hardly any additional cost. There are similar economies in the multiple private and public functions of notaries¹⁴, the most important perhaps being that the intervention of a single independent notary will, in many cases, replace the involvement of

¹³ In this respect two observations should, however, be made. Firstly, although asymmetry of information does not *in itself* justify the exclusivity enjoyed by notaries, it does help to explain the existence of vertical restraints, including price fixing. It is true that informational asymmetry is a problem which can be solved by contractual safeguards freely designed by private competing organizations. It is instructive, however, in understanding the circumstances with which we are concerned, that these organizations use internal formulas similar to those applicable to notaries in their configuration in order to motivate their members or agents to correctly attend to poorly informed customers. These formulas, along with prices imposed from a central unit, generally include remunerating employees by quasi-rents, compulsory retirement and crossed subsidies between units. In addition, and although the existence of the economies of scope in public and private services, which are examined in Section II, gives an additional competitive advantage to notaries, it is obvious that such economies would not exist if there were no public services, which leads to thinking that the organizational structure of notaries rests more on its public functions — externalities — than on private functions — contractual facilitation.

¹⁴ See C. PAZ-ARES, *op. cit.*, 1994, p. 143.

lawyers acting for all the different parties. Second, there are economies of scope in *contractual costs*. These arise from the fact that both functions, public and private, are subject as mentioned to substantial problems of incentives and informational asymmetry. The efficient solution to these problems in both cases requires the presence of safeguards in the form of guarantees and incentives which ensure the provision of public services and the quality of private services. The economies of scope in this case arise because a single system of safeguards — the construction and operation of which are far from being cost free — enables both sets of functions to be efficiently provided¹⁵.

d) *Economies of scale and technological dualism.* The existence of economies of scope between public and private services is not the only determining technological factor in the organizational structure of notary activities. Similar consequences — in terms of the difficulties in control which it causes and the organizational solutions suitable to overcome them — also result in a dualism arising from the fact that the provision of these services on the one hand requires that their direct providers are geographically dispersed but, on the other hand, there must be a centralized production unit. This central unit is essential to achieve economies of scale in certain functions, mainly the selection of members of the profession, the quality control of services, informing and training members of the profession, monitoring the competitive restraints which if not complied with could wreck the uniformity of the service, the preservation of documents and the external relations of the system as a whole. This *dual technology* is typical of a large part of the service sector, from banking and restaurants to hotels and consultants. Their efficient organization requires patterns which introduce substantial vertical restraints on competition, such as resale price maintenance, tied sales, territorial exclusivity and subsidies between centres. Until a few years ago these practices were pursued by the authorities responsible for monitoring competition in markets but today are tending to be acknowledged as essential in order that a single organization can

¹⁵ The fact that notaries are not required to disclose attempted misconduct (“whistle blowing”) avoids potential diseconomies of scope between public and private services. The consequences of whistle blowing are dealt with by KRAAKMAN, *op. cit.*, 1986, pp. 58-60.

provide uniform quality of services in multiple locations and exercise effective control at a cost which is not prohibitive¹⁶.

III. Control by Automatic Incentives

Following the scheme set out in the Introduction, this section will examine the effectiveness of the organization of notaries when they perform the functions analysed in Section II.

III.1. The Incentive Structure: Quasi-rents, Variability and Self-Selection

The effective functioning of a system of notary intervention and, in particular, of monitoring legality, means that a structural conflict of interest must be solved. This conflict arises from the fact that, when exercising the control over legality, notaries must occasionally refuse to provide some services, therefore losing the fees associated to them. The difficulty of this problem might explain that from amongst the variety of *gatekeepers* in the legal system in its widest sense, some are ineffective and serious problems have recently arisen with others, as is the case with auditors¹⁷. The relative effectiveness of Civil Law notaries stands out in the face of these difficulties. Their organization ensures notary performance and productivity, both in a static and a dynamic sense. Firstly, the system ensures notaries perform their gatekeeping duties, withholding cooperation to wrongdoers. Thus, it leads to a high degree of security concerning the uniform quality of the services provided, both public and private. This standardization of quality relates in particular to the absence of fraud and is essential for

¹⁶ The importance of the cost of monitoring dispersed establishments is highlighted in the empirical studies into the organization of franchise companies. The average distance between central offices and franchise establishments is far higher than that between the latter and establishments managed directly by the franchiser and, in addition, establishments managed directly predominate in areas of high population density in which an agglomeration of establishments is more common (J. A. BRICKLEY and F. H. DARK, "The Choice of Organizational Form: The Case of Franchising", *Journal of Financial Economics*, Vol. 18, 1987, pp. 401-20).

¹⁷ In recent years, the number and amounts involved in cases where auditors' wrongdoing is alleged seem to be increasing. It has been suggested that this increase is leading some of these firms to limit the liability of their partners. See, for example, "Auditors Liability: If the Cap Fits" and "Partners in Pain" (*The Economist*, 26 February 1994, p. 89; and 9 July 1994, pp. 63-4, respectively).

generation of the externalities examined in Section II — monitoring of legality and reducing litigation. Secondly, productivity is motivated by the residual nature of notaries' remuneration. Moreover, performance and productivity results are also achieved in a dynamic sense in connection with new public services notaries are often compelled to provide¹⁸. Empirical evidence on these achievements is inevitably soft, however. It consists of sparse data, such as that presented below or the fact that when the notary system is criticized, proposals for reform are generally justified in terms of its allegedly high cost, rather than in terms of its effectiveness.

This effectiveness of the Civil Law notary system rests on a complex structure of incentives which in turn causes two types of consequences. It directly provides an automatic guarantee of effectiveness. Indirectly, it generates a process of self-selection of professionals with the appropriate qualifications and preferences in terms of the objectives aimed at when choosing a strategy of *ex-ante* law enforcement such as that of notaries¹⁹.

3.1.1. Incentives. Notaries' financial incentives are based on two main characteristics of their remuneration system: remuneration by quasi-rents and variability of individual income. Firstly, notaries receive quasi-rents. This means that they are remunerated during a large part of their professional life at above their opportunity income, generating a quasi-rent of an

¹⁸ Notaries are extremely compliant when it comes to providing these services, even if they are generally costly and are provided free of charge, which contrasts remarkably with the difficulties politicians face when implementing policies via pure civil servants. A case in point in Spain is provided by the full enforcement of building regulations since Royal Legislative Decree 1/1992, when the new law required notaries to check if new buildings had all necessary permits before passing them on to the land registry. Enforcement by the authorities had been incomplete for decades. (This is not to say that building regulations are efficient, however).

¹⁹ In addition, two other mechanisms should be mentioned regarding notary performance, even though their treatment is beyond the scope of this work. Firstly, notaries' effectiveness as gatekeepers also benefits from the existence of a second control of legality by the land and commercial registries, which greatly reduces the incentives for potential wrongdoers to shop around for an accommodating notary. (On the possibilities raised in this context by multiple contracting of gatekeepers, see generally KRAAKMAN, *op. cit.*, 1986, p. 73, n. 60). Registrars are public officials also organised under a system based on quasi-rents and self-selection. However, their incomes are not subject to variability, as they enjoy territorial monopolies. This feature — even if it might cause more than optimum enforcement and deterrence — clearly acts against notaries' pliability. Secondly, neither will attention be focused on the moral mechanisms although their nature, even though not directly economic, is in fact susceptible of rationalization in economic terms. See, for example, R. C. O. MATHEWS, "The Economics of Professional Ethics: Should the Professions Be More like Business?", *The Economic Journal*, July 1991, pp. 737-50.

amount equal to the difference between their actual income and their maximum alternative income²⁰. For the most part, this quasi-rent provides a return on previous investments made during preparation for competitive examinations and during the initial years of practice. To some extent they also constitute an economic rent defined by the structure of the entry restrictions and the heterogeneous nature of potential entrants²¹. The threat of losing these quasi-rents directly stimulates honest and competent behaviour in providing both public and private services. Several factors might help to explain why misconduct does not have special incidence in the final years of professional practice when, near the point of retirement, the

²⁰ Studies into how the expectation of obtaining a flow of quasi-rents in the future provides an automatic incentive for producers to maintain the quality of products and services which they provide were initiated by G. S. BECKER and G. J. STIGLER, "Law Enforcement, Malfeasance, and Compensation of Enforcers", *Journal of Legal Studies*, Vol. 3, January 1974, pp. 1-18; and developed by B. KLEIN and K. LEFFLER, "The Role of Market Forces in Assuring Contractual Performance", *Journal of Political Economy*, Vol. 89, August 1981, pp. 615-41; O. E. WILLIAMSON, "Credible Commitments: Using Hostages to Support Exchange", *American Economic Review* Vol. 73, 1983, pp. 519-40; and C. SHAPIRO, "Premiums for High Quality Products as Returns to Reputations", *Quarterly Journal of Economics* Vol. 98, November 1983, pp. 659-79; and were applied in the labour field in the models for the use of remuneration by length of service to motivate performance, avoiding "moral hazard" problems, initiated with the work of E. P. LAZEAR, "Why Is There Mandatory Retirement?", *Journal of Political Economy*, Vol. 87, December 1979, pp. 1261-84; and, more recently, in the literature on "efficiency wages" begun by C. SHAPIRO and J. E. STIGLITZ, "Equilibrium Unemployment as a Worker Discipline Device", *American Economic Review*, Vol. 74, June 1984, pp. 433-44. The operation of quasi-rents can also be expressed in terms of "specific investments". Aspiring notaries and notaries themselves during their first years of practice, make a *specific* investment in human capital in as much as the value of this capital largely depends on their continuity and success as a notary. (Basic work in this field comes from B. KLEIN, R. G. CRAWFORD and A. A. ALCHIAN, "Vertical Integration, Appropriable Rents, and the Competitive Contracting Process", *Journal of Law and Economics*, Vol. 21, no. 2, October 1978, pp. 297-326; and O. E. WILLIAMSON, *Markets and Hierarchies: Analysis and Antitrust Implications*, Free Press, New York, 1975, and "Transaction-Cost Economics: The Governance of Contractual Relations", *Journal of Law and Economics*, Vol. 22, 1979, pp. 233-61). Nevertheless, this approach runs the risk of undervaluing the incentives which in terms of quasi-rents affect notaries as it concentrates attention on the historic cost of the investment and not on its value, leaving out that part of the quasi-rent which does not remunerate previous investment, i.e., notaries' *rents*.

²¹ A large part of what at first glance appears to be the abnormal profits of notaries is in fact subsequent remuneration for their earlier investment, mainly of an educational and productive nature. In this respect, the difference between the concepts of "rent" and "quasi-rent" applies. "Rent" normally refers to the excess price above that which would be necessary to *attract* a resource for a particular purpose, whilst the term "quasi-rent" alludes to the excess price above that which would be necessary to *retain* it. Pursuant to this usage, the rent of notaries only refers to those notaries whose total remuneration associated with their professional career exceeds that which would be required to attract them to the career, with the rent equal to the difference between the two remunerations. These same notaries may receive quasi-rents in an amount equal to the difference between their income as notaries over a particular period and the minimum that would be necessary to keep them in the notary's profession, a minimum that would be equal to their maximum opportunity income. All rents are quasi-rents but not all quasi-rents are rents, however, and therefore quasi-rents are always higher than rents. In the case with which we are concerned, the confusion of quasi-rents with rents sometimes leads to mistakenly evaluating competitive situations and remuneration as uncompetitive. This occurs frequently as a consequence of forgetting that a large part of notaries' income remunerates the investments in training which they have made before qualifying and during the first years of practice.

financial incentives seem to lose some of their effectiveness. One main element is the high transaction cost of collateral bribery.²² In this way, corruption will only occur in the context of a substantial ongoing client-notary relationship. Obviously, this later possibility is less valuable the shorter the horizon of the fraudulent relationship.²³

Secondly, notary remuneration is highly variable. This results from the freedom of choice of notary by the client and the variable speed of promotion. Thus, the remuneration system provides residual income that varies with individual performance and productivity. In the first place, this stimulates the maximization of revenues and the minimization of costs in notaries' offices. The variable and residual nature of their remuneration motivates notaries to control costs in their offices, maintain their own skills and provide good private services. In addition, income variability also motivates mutual monitoring of notaries' performance with respect to public services, at least in the most profitable districts with several notaries' offices. The incentive to monitor colleagues' conduct arises from the fact that individual income largely depends on the activities of other notaries in the same district. This mutual supervision provides automatic monitoring in dimensions that are of value to the public as a whole. The reason is that as the total income in each district is virtually fixed, possible opportunism by one notary — particularly by sacrificing control over legality in exchange for increased personal income — would reduce the income of the rest as well as jeopardizing the position of notaries as a whole (unlike this second effect on the “political” position of notaries, which is diluted between all notaries in the country generally, the first is concentrated amongst notaries in the particular district). This variability in the distribution amongst notaries of the total quasi-rents associated with a given set of supply and demand constitutes an important difference compared with the remuneration systems that are

²² On this, see J. TIROLE, “Hierarchies and Bureaucracies: On the Role of Collusion in Organizations”, *Journal of Law, Economics and Organization*, Vol. 2, 1986, pp. 181-214.

²³ It could also be argued that the lack of special incidence of misconduct before retirement shows the strength of the self-selection process and, within it, the significance of variables not directly economic in nature, e.g., the importance of family reputation and social links. A contributing factor of a different character is the continuity of staff after the notary retires.

common in the civil service. Even when these are also efficiently structured by means of quasi-rents, they are bound to engage in more collusive behaviour because of the egalitarian distribution of total quasi-rents, this being due to the total dependence of individual quasi-rents on length of service.

3.1.2. Self-selection. The structure of the systems governing the selection, promotion and remuneration of notaries makes it more likely that people with suitable characteristics for practising as a notary prepare for and pass the competitive entry examinations and rise up the seniority ladder. In other words, preparing for and passing the competitive entry examinations is a “signal” that the person is particularly productive in terms of notary functions²⁴. In this case, productivity may include subjective attributes such as integrity or a readiness to adopt the mutual monitoring patterns of the profession along with pure professional competence. The self-selection of persons of a particular kind is thereby achieved: disciplined, persevering, studious and, perhaps most importantly, capable of self sacrifice and patience, the latter property being translated in economic terms by saying that they have a low discount rate and therefore are less concerned about short term gain.

These personal attributes are particularly valuable for simultaneously exercising the double function of notaries, which requires a readiness to monitor the legality of private transactions and, at the same time, facilitate them, as was examined in Section II. Considering just the most important aspects, notary functions will be accomplished with higher certainty by those individuals whose preferences incline them towards (1) according a greater value to future remuneration; (2) belonging to a social group with characteristics such that the social sanction mechanisms can operate more effectively; (3) constant study of positive law and (4) hard work.

²⁴ Many self-selection mechanisms have been studied since the pioneering work of A. M. SPENCE, *Market Signalling: Information Transfer in Hiring and Related Processes*, Harvard University Press, Cambridge, MA, 1973.

The current system of selection and promotion ensures a process of self-selection that favours the entry and promotion of individuals with these four characteristics²⁵. The most distinctive and important element of the system is that the total remuneration in respect of the investment in human capital associated with the notary's career is postponed for a substantial time. As a result, this favours the entry and self-selection of individuals with a low discount rate. This effect is particularly positive in the exercise of a profession where most improper activities or lax application of standards would result in short term gains set against a possible loss of income and/or reputation in the future. In other words, a legally doubtful decision places the practising notary in a dilemma with consequences in terms of remuneration similar to those he himself will have faced in deciding whether or not to prepare for the competitive entry examinations. Both sets of consequences will be slanted in the same direction, favouring the future rather than the present. As a result, given that at the time he will have shown a preference for the future, or rather he will have applied a low discount rate to the postponement of future remuneration, it is likelier that he will decide in the same way when exercising his profession and will therefore behave with propriety.

In addition, three other aspects should be mentioned. Firstly, a large part of the incentives in favour of performing the tasks of controlling the legality of documents and mutual quality are based on the existence of close personal ties between notaries themselves. The creation of these ties is certainly favoured by the similarity of personal characteristics that results from the toughness and particular nature of the competitive entry examinations. Secondly, as the entry examinations and internal competitive promotion examinations are based on a knowledge of law, proper training is guaranteed. Furthermore, the examinations's emphasis on positive law favours objective selection and appeals to objective candidates. For the same reason, those individuals will tend to present themselves for both types of competitive examinations who have a greater capacity for learning and, therefore, are predisposed to

²⁵ Analysis of competitive examinations for notaries using a mathematical model provides evidence which is consistent with these conclusions, particularly in two such essential variables as those relating to qualification and candidates' discount rate. See Ch. VI in B. ARRUNADA, *Análisis económico del notariado*, Madrid, 1995.

update their knowledge, a task that has considerable importance in a changing legal environment. (It must be borne in mind that notaries have to be aware of new legislation even before it comes into force because their responsibility is not affected by the fact that legislation is new.) Finally, the exercise of notarial tasks requires continuous work in reviewing and drawing up legal documents. This characteristic is also favoured in a system of competitive examinations and promotion that requires considerable effort of a similar type. Furthermore, it seems likely that individuals who prefer ordered and independent work will be attracted to notarial work²⁶. On the same lines, notarial work requires considerable effort as shown by the frequent voluntary retirement and the fact that productivity declines after 31 years of practice, corresponding to some 60 years of age (Section III.3, below).

These selection processes and criteria, as well as the self-selection they help to induce, avoid the perverse effects of an alternative system of “franchise bidding,”²⁷ where entry into the notary profession was simply put up for auction. This arrangement was common in the early regimes, until the XIX Century, and even now the French system keeps some vestiges of it, as it is the nomination by each notary of his own successor. The history of Spanish notary systems provides interesting evidence of the inadequacies of such arrangement. Under the so-called “office alienation” system (*enajenación de oficios*), various political and administrative authorities granted or sold not only the alienable right to act as a public officer, in this case as a notary, but also exemptions from professional duties and requirements such as the minimum working age, the right to be excluded from inspections and the right to appoint a substitute. This system, widespread in the Kingdom of Castile, led

²⁶ Professional prestige is the reason why most notaries apparently select their profession (51.3%), far ahead of remuneration at 25.97% and ahead of the objectivity of the access system at 33.77%. See: NOTARIES’ Association Council, *Simposio Notarial 83*, Madrid, 1985, pp. 75-76.

²⁷ See, among its early proponents, the works of H. DEMSETZ, “Why Regulate Utilities?”, *The Journal of Law Economics*, Vol. 11, no. 55, 1968, pp. 55-65; G. J. STIGLER, *The Organization of Industry*, Irwin, Homewood, IL, 1968; and R. A. POSNER, “The Appropriate Scope of Regulation in the Cable Television Industry”, *Bell Journal of Economics*, Vol. 3, 1972, pp. 98-129; as well as the critique —referred to repeated bidding for monopolies with substantial physical assets— by O. E., WILLIAMSON in “Franchise Bidding for Natural Monopoly—In General and with Respect to CATV”, *The Bell Journal of Economics*, Vol. 7, Spring, 1976, 73-107 (revised in *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*, The Free Press, New York, 1985, 326-364).

to a spectacular increase in the number of notaries and clerks and, at the same time, in their specialization, given that all authorities created new monopolies in order to sell them and swell their coffers. This caused, supposedly, lower professional standards, both in terms of education and fraud, at least from the XVI to the XVIII centuries. It is worthwhile mentioning that these problems did not affect the notary systems developed by Spanish regions with home rule due to their rigorous entry examinations and other requirements such as minimum capital, practising periods, ethnic purity and decency²⁸.

III.2. Efficient Combination of Seniority and Variability

The promotion patterns of Spanish notaries are mainly based on length of service, which makes it possible to remunerate them efficiently through quasi-rents. However, these patterns also allow for substantial variability in the speed of promotion and, therefore, in their remuneration. This latter aspect provides allocative benefits and increased incentives for the best notaries. This Section explains how the system works and Section III.3 will provide empirical evidence relating to the system.

A basic feature of professional careers is the postponement of remuneration, which normally occurs by linking income to length of service. By situating a large “prize” at the final part of the professional career, remuneration by length of service provides a disincentive for very poor performance or fraudulent conduct, provided that the likelihood of a penalty and consequent loss of this prize is not nil²⁹. This remuneration by length of service essentially

²⁸ See GIMENEZ ARNAU, *op. cit.*, 1964, pp. 96-100. Office alienation implied the allocation of alienable property rights within an organization. It therefore constituted an revealing anomaly in the common organizational practice consisting of delegating decision rights without the right to sell them (see on this M. C. JENSEN, “Organization Theory and Methodology”, *Accounting Review*, Vol. 50, no. 2, April, 1983, pp. 319-339; and M. C. JENSEN and W. H. MECKLING, “Knowledge, Control and Organizational Structure”, *Seminar on Analysis and Ideology*, Interlaken, 1984; and, particularly, “Specific and General Knowledge, and Organizational Structure”, in L. Werin and H. Wijkandere, [eds.], *Contract Economics*, Blackwell, Cambridge, MA, 1992, pp. 251-274).

²⁹ In this respect, see the works of E. P. LAZEAR, *op. cit.*, 1979; L. CARMICHAEL, “Firm Specific Human Capital and Promotion Ladders”, *Bell Journal of Economics and Management Science*, Vol. 14, Spring 1983, pp. 251-8; and R. HUTCHENS, “A Test of Lazear’s Theory of Delayed Payment Contracts”, *Journal of Labor Economics*, Vol. 5, October 1987, pp. 153-70.

means postponing the return on the investment in human capital made by notaries. In this way it constitutes a central element in the generation of the quasi-rents on which the fundamental financial incentive of the profession is based. (It should be emphasized that one type of non-performance to which incentive systems linked to remuneration by length of service are of particular application relates to non-performance which, as in the case of notaries, provides a high return and has a low probability of detection³⁰. Such a remuneration pattern can be likened to those used in the case of permanent employees in large Japanese companies and those used by firms providing professional services such as auditing or consulting).

The use of length of service criteria in the specific shape of the seniority ladder for promotion decisions — and, as a result, of remuneration decisions to the extent that the two are linked —, as well as originating quasi-rents, provides a second benefit because it dramatically reduces the number of decisions to be taken and therefore the influence costs. Nevertheless, this usage can be inefficient if strictly applied. In a static sense, it allocates personnel with total independence of their ability, causing a cost as a result of inefficient allocation of human resources, in as much as each promotion also constitutes an appointment^{31,32}. In a dynamic sense, it would probably result as a consequence in excessive uniformity in notary qualification — given the absence of incentives for learning after passing the open examination — and higher entry standards. However, the inefficiencies

³⁰ One theme of the article by BECKER and STIGLER mentioned previously was how to prevent police corruption.

³¹ This is a particular case of the general problem posed by using promotion as an incentive: the criteria which maximize the motivation generated by the possibility of promotion — in cases like this, length of service; in the tournament promotion systems, past performance — may be inconsistent with the allocation or appointment decision implicit in every promotion — anticipated future performance. This problem has been dealt with by P. G. BAKER, M. C. JENSEN and K. J. MURPHY, “Compensation and Incentives: Practice vs. Theory”, *Journal of Finance*, Vol. 43, no. 3, July 1988, pp. 599-604.

³² Another cost of this system is that it encourages a very high rotation, making it necessary to restrict mobility: Article 95 of the Notaries’ Regulations (NR) (Decree of June 2, 1944, as amended by Royal Decrees 1126/1982 of May 28 and 1209/1984 of June 8) requires that a year must pass after occupying a position before entering further competitions and Article 96 of the NR extends the minimum period to three years for those occupying an urban or district notary’s office before moving within the same town or city. Overall, there is a high degree of rotation: in 1983 practising notaries had served in an average of 6.55 offices (NOTARIES’ Association Council, *op. cit.*, 1985, pp. 74-75).

induced by the system of promotion based on length of service are reduced in the case we are concerned with. Firstly it is likely that they will in general be lower when the resources to be allocated are relatively interchangeable, as in the case of notaries (at least in terms of effectiveness, if not of productivity)³³. In addition, promotion by length of service can also be seen here as an allocation of the best notaries to the most difficult positions, to the extent that in a stable legal environment length of service also ensures better training. Finally, this cost is reduced by corrections applied to the automatic nature of the seniority ladder, which results in substantial differences in the speed of promotion. Two correction formulas are used for notaries. First, the importance given to the position obtained in the open competition for entering the system. Second, the existence of a mechanism that implies that those who pass a second examination restricted to notaries — supposedly the best qualified — can make a single “jump” up the seniority ladder, the length of which will vary depending on the assessment obtained in the examination.

This system, peculiar to the profession of notaries, known as “double rota” and based on the internal restricted examinations, alleviates the main defect of systems based exclusively on length of service, which is that they usually lead to a defective allocation of personnel. In addition, considering the empirical evidence provided in Section III.3, this seems to constitute a fundamental factor in the distribution of total income amongst notaries. It also directly constitutes a substantial part of the incentives and also forms a basic characteristic of the different positions, with a subsequent indirect impact on the self-selection process.

Under this “double rota” system vacant notaries’ offices in each group or category are alternately allocated to one of two seniority rotas (Article 88 NR). Thus, in the “career” seniority rota simple length of service in the notary’s profession is used as the criterion. In the “class” seniority rota, length of service is used within one of the three classes or categories into which all notaries’ offices are placed based on demographic criteria (Articles

³³ To the extent that efficiency of the system depends on uniformity, the absence of uniformity makes it less suitable for application in fields such as university teaching or public health which is characterised by relatively heterogeneous posts.

77 to 79 NR). This dualism is complemented by the existence of examinations restricted to notaries that enables them to improve themselves in terms of both, class (jumping from lower to upper classes, from third to second or second to first class) as well as seniority within each class (up to ten years of seniority in the first class for the two most successful examinees)³⁴. Therefore, promotion can in fact be achieved by simple length of service or by competitive examinations amongst notaries.

Some circumstances of this promotion by merit, as well as the restrictions affecting it, can be explained in terms of efficiency. Clearly, it seems sensible to use the level of training of candidates as a criterion in deciding on promotion by merit. First, training is crucial for properly carrying out notary functions, particularly in large population centres with a greater contractual variety and complexity. Second, it substantially reduces the net cost of rent-seeking, as notaries have to complete their training, in particular during the first years of professional practice, and their examination for a second time during such years therefore involves little cost. Third, the internal competitions generate a powerful incentive for training during these initial years, which makes them more suitable than an alternative system that could accord greater importance to the assessment achieved in the open competitive entry examinations. (It should also be noted that by encouraging the investment in training to be concentrated during the initial years, its value is maximized by extending the period of return on it.) Similarly, the limitation to a single jump up the seniority ladder prevents the system of promotion by length of service from being rendered ineffective — and with it the incentives that are generated by the fact that a large part of remuneration is linked

³⁴ Part 3 of the NR regulates competitive examinations restricted to notaries, which must be held at least every two years for a number of places equal to 3% of the first class and 4% of the second class notaries' offices. A first class pass entitles the notary to a credit of a number of years of service in this class depending on the grade obtained: the two most successful in the pass list are entitled to ten years length of service if they have obtained a minimum of 60 points, those who obtain a minimum of 50 points and do not exceed in number half the first class places in question receive two years and the remainder one year. Furthermore, those passing at second class level are entitled to a credit of three years length of service in that class. These examinations restricted to notaries are apparently fairly tough. Not only is there strong self-selection as 57.22% of those practising in 1983 had not attempted them, but of those who did try, less than half passed, just 46.34% (NOTARIES' Association Council, *op. cit.*, 1985, pp. 73-74).

to pure length of service³⁵. It also contains the cost of rent-seeking, as with more than one jump this cost would be possibly increased insofar as that preparation for repeated competitions provides less training benefits. Furthermore, repeating the competition would perhaps add little information as to the value of candidates³⁶.

III.3. Empirical Evidence

The remuneration of notaries increases substantially with length of service. The statistical analysis of notary output demonstrates the existence of a remuneration pattern that links length of service in their career to much of the output of each notary and, therefore, their income. On average, the typical notary spends some four years preparing for competitive examinations, studying some fifty hours a week³⁷. After passing, he has to spend between one and two years idle before occupying the first notary's post and three or four years in rural notaries³⁸, before earning income above the opportunity income that would probably be within the reach of a graduate with the same qualifications and personal circumstances from the outset and with less effort. As it is shown by the empirical data, notaries move gradually towards notaries' offices with an increasing amount of activity³⁹. This activity grows on average until approximately 30 years of service when it begins to fall.

³⁵ The fact that the seniority credits gained in an examination among notaries are only valid for one promotion contest after the examination has a similar consequence.

³⁶ Likewise, the practice of reserving the pass obtained in the first two exercises of the open examination to those candidates who fail but who would have obtained marks in excess of the average (Article 20, NR) avoids them repeating a part of the preparation which would certainly not increase their productivity.

³⁷ According to a survey carried out at the end of 1983 (NOTARIES' Association Council, *op. cit.*, Madrid, 1985, p. 72).

³⁸ The return on which will often not cover their needs, which has given rise to professional association subsidy formulas — the so-called notary *congrua* — as well as compensatory salaries. The wastage from underutilising the human capital of young notaries operating in rural notaries' offices with little work is probably low for two reasons: Firstly, they can spend these initial years improving their education, preparing for restricted competitive promotion examinations. Secondly, the potential problem only affects those who have been successful in the initial entry competition. Furthermore, this low initial remuneration facilitates the postponement of compensation during the professional career, increasing the incentive to perform.

³⁹ In order to confirm the shape of the remunerative function, the following statistical model has been estimated:

$$\text{SHEETS} = 1,315.77 \text{ Years} - 20.96 (\text{Years})^2$$

In order to examine the impact of the corrective mechanisms on the promotion and remuneration of notaries, a study has been carried out into the factors determining the production and, indirectly, the income of each notary. To this end, the following model has been estimated by least-squares regression:

$$\begin{array}{rclcl}
 \text{Sheets} & = & 3.8646 & & + 0.7690 \text{ LS} \\
 & & + 8.8396 \text{ C1} & & - 0.4598 \text{ LS*C1} \\
 & & + 15.3939 \text{ CMB} & & - 1.3075 \text{ LS*CMB} \\
 & & - 1.5565 \text{ AE*CMB1} & &
 \end{array}$$

where the dependent variable, **Sheets**, is the logarithm of the number of document sheets dealt with in each notary's office during 1992⁴⁰. As independent variables a measure of position on the seniority ladder has been used along with different variables indicating the type of notary's office and the interaction between the type of office and length of service. Specifically, **LS** is a measure of the length of service as a notary expressed as a logarithm of the complement of the position of each notary on the seniority ladder on January 1, 1993, in relation to the corresponding number in the ladder of the most recent notary (2,062) — so that a notary occupying position number 60, for example, would have a number equal to 2,062 - 60 = 2,002. Two variables are used to indicate the type of notary's office: **C1**, which has a value of one for notaries in the first category or class and zero in all other cases, and **CMB**, which is also a dummy variable that has a value of zero for all notaries' offices except those in Madrid or Barcelona.

where the variable **Sheets** is the number of sheets authenticated in each notary's office during 1992, which is the best available measure of notary production and, therefore, of income, to the extent that the two variables are related, and **Years** is the number of years of practice of the notary in charge of the notary's office in question on 31 December 1992. The model has been estimated from a random sample of 335 notaries. The estimated function increases during the initial years, reaches a maximum value of 20, 649 sheets at 31.39 years of practice and decreases during subsequent years. All the coefficients have a 99.9% significance, with the **t** statistics being 21.46 and -10.50; and **F** = 314.50 and **R**² = 0.485.

⁴⁰ No data on income is available and therefore production data has been used as an indirect indicator, measured by the number of document "sheets" authenticated in each notary's office. The capacity of the variable "sheets" — as well as that of "instruments" or authenticated documents — to represent income is high, as illustrated by the fact that both are used by notaries themselves when selecting positions in competitions to cover vacancies. In addition, the number of sheets has a close correlation with the number of the three main instruments or types of notary product and the total number of instruments.

Three variables reflect interactive effects. The first interactive variable, **LS*C1** is the product of the logarithm of length of service and the variable **C1** and is zero for all notaries' offices except those in the first category, in respect of which its value is the logarithm of length of service. The second one, **LS*CMB**, is the product of the logarithm of length of service and the variable **CMB** and is therefore equal to the logarithm of the length of service for notaries in Madrid and Barcelona and zero in other cases. Lastly, **AE*CMB1** is the product of the logarithm of the age of entry into the profession and a new dummy variable indicating the notary has an office in Madrid, Barcelona or a first category city. **AE*CMB1** therefore has a value of either the logarithm of the age in which the notary in question joined the profession — when he occupies a first class office or one in Madrid or Barcelona — or zero in all other cases⁴¹.

This model supports the hypothesis that the production of each notary is not only related to his position in the seniority ladder but also to his capacity and willingness to gain access to the two better remunerated categories (capacity which, given the promotion rules, largely depends on competitive examinations amongst notaries, and his ability to pass the open examinations). The model also shows that the results of the latter — measured by age at entry — provide a good prediction of professional success — measured by the number of sheets. The age of entry would reveal itself as an even more important factor if the

⁴¹ All coefficients in the model have a significance of at least 97.6%, with **t** statistics being as follows: 17,24; 21,42; 4,27; 4,71; -2,87; 2,27; -3,78; and **F** = 173.23 and **R**² = 0.76. The residuals of the model are also well behaved. A random sample of 355 notaries was taken. The data comes from the 1992 Yearbook of the Directorate General for Registries and Notaries (Ministry of Justice, Madrid). The sample was constructed from the "List of Notaries (Practising and On Leave) in Order of Seniority" of 31.12.92. This selection was made by a simple random sampling without repositioning. The six notaries who were on leave were excluded as were the two who were Counsel for the Directorate General on that date, and they were replaced by others selected by the same procedure. As the population universe consisted of 2,062 individuals, the sample size resulted in a confidence level of 95% and a sampling error of ±5%. Other variables were discarded, both continuous variables as well as indicator and interactive variables as they did not have sufficient statistical significance. This was the case with (a) years in practice which, although they could replace length of service — measured as in the model by the complement of position on the seniority ladder — would adversely affect the overall significance of the model, even though retaining the conclusions; (b) the age at entry, which has little correlation without distinguishing its effect by category; (c) the category of second class notaries' offices, which are thus merged with the third class for the purposes of the model; and, finally (d) the interactive variables between the age at entry and second and third class notaries' offices which, as they have little significance — although their coefficients have a negative sign they only achieve a level of confidence of 90% — reveal that the effect of the latter may not be related to the age of entry.

remuneration were considered in terms of return on the initial investment in human capital. In this case, the productivity effect shown in the model would be reinforced by the fact that an early entry permits remuneration as a whole to be anticipated and the professional career lengthened.

In order to analyse the coefficients of these variables, the meaning of each of them must be clarified. Thus, length of service was measured by position on the seniority ladder, which basically takes in the effect of actual length of service but is also affected by the position obtained by each notary in his entry examinations as candidates enter the ladder in the same order that they appear in the list of those passing the examinations. The sign of the coefficient associated with the position in the seniority ladder — **LS** — simply reveals, as was predictable, that notary production increases as they rise up the seniority ladder. Likewise, when interpreting the coefficients of the variables associated with the Madrid and Barcelona offices — **CMB** — and first class offices — **C1** — it must be taken into account that access to these better category offices is affected by the length of service, the results of internal examinations and the willingness of notaries to move. Their high statistical significance in different model specifications in which, as in this one, length of service is included by another variable, suggests the relevance of these two latter aspects — internal examinations and willingness. The positive sign of the coefficients associated with occupying offices in Madrid and Barcelona and first class offices indicates that these have a substantially higher level of activity than those of second or third class. Nevertheless, the negative signs of the coefficients associated with the interaction of the two variables with length of service — variables **LS*CMB** and **LS*C1** — reveal that this positive effect diminishes as the length of service increases. In other words, the effect of working in Madrid or Barcelona or in first class notaries' offices is positive but reduces with length of service. In the case of offices in Madrid and Barcelona this negative effect of length of service (-1.3075) dominates the effect common to all categories (0.7690), which means that for this category, length of service negatively affects productivity and, in the terms of Figure 1, the function has a negative slope in this section, contrary to that relating to first class offices. (In

graphical terms, variables **CMB** and **C1** displace the point of origin upwards on the Y-axis and simultaneously reduce the slope of the regression line that positively relates notary production with the length of service variable.)

— Figure 1 —

Finally, the significance of the negative interaction between the age of entry into the profession and the fact that a first class or Madrid or Barcelona office is occupied is revealing — variable **AE*CMB1**. One interpretation compatible with this result is that those who enter younger have a greater capacity or qualifications and this is associated with greater productivity, not in second or third class offices but in first class or in Madrid and Barcelona.⁴² This feature can be explained by the differences between the two types of office. It seems likely that in the lower categories both the complexity of the documents and the competition between notaries are reduced. (Concerning the latter, it should be borne in mind that they are mainly areas with a single notary's office.) In the upper categories, on the other hand, both the complexity of the documents and competition between notaries are probably greater and therefore the most qualified or hard working notary can make more profitable use of these qualities. Figure 1 graphically illustrates the importance of the effect of age of entry for two hypothetical notaries who enter at 25 and 30 (the average age of entry is 28.85).

⁴² This conclusion is valid insofar as, on average, all notaries with the same length of service *in the profession* have the same length of service *in the category*. This is not completely true, since those notaries who pass the promotion examinations that are restricted to notaries can move up to higher categories —and therefore can arrive earlier to first class or to Madrid or Barcelona—, arriving to posts that could not get according only to their length of service in the profession. If this phenomenon be widespread, the significance of the parameter associated to the age of entry would say not more that the system pays more to those notaries who simply are good at passing the examinations, independently of their other characteristics. (E.g., it could then be possible to argue that those who pass the restricted examination simply arrive earlier to good offices. This allows them to build a clientele and show greater productivity than colleagues with the same length of service in the profession but shorter tenure in the category, without actually being more productive.) In any case, the eventual problem would only come from differences due to the internal examinations, given that the effect of the post obtained in the open examinations is taken into account by the length of service scale.

IV. Costs of the Current Organizational Design

The nature of the positive externalities generated by the involvement of notaries in terms of monitoring legality and “legal peace”, and the organizational patterns that guarantee their production have been shown in the two previous sections. The notary system operates as a monopolistic regime, however. For this reason, it could generate substantial costs and these costs could be greater than the value of such externalities. In order to approach an analysis in terms of efficiency, comparing costs and benefits, this section is concerned with the costs that may be incurred by the competitive restraints that make up the organizational patterns governing notaries. In doing so, it will be taken into account that these costs can derive from three factors: (1) a sub-optimum level of production if prices exceed those of a hypothetical competitive scenario, (2) a possible increase in costs if producers have less incentives to minimize them and (3) a potential waste of resources in activities aimed at capturing and retaining rents.

IV.1. Direct Welfare Loss

The welfare loss derived from a less than optimum production level as prices exceed those in a competitive scenario merits two types of comment. These are aimed at indicating firstly the inadequacy of a conventional analysis and, secondly, noting the irrelevance of the problem even in the framework defined by it.

4.1.1. Inadequacy of the conventional analysis. In this field, the conventional type of analysis suffers from a tendency to apply the perfect competition model outside its logical context. In this respect it is false or at least superficial to say that the prices are monopolistic. In fact, they are only seen as such from the methodological abstraction of this model. On the contrary, when its assumptions are relaxed, particularly that of perfect information, the overpricing and quasi-rents they give rise to cease to be a necessary consequence of the monopoly. They can, on the other hand, be seen as a requirement or organizational design element needed to achieve a productive equilibrium which is efficient

under actual conditions — not the simplified conditions of perfect competition (the mistake of using the perfect competition model as a basis is highlighted when it is seen that notary functions are not even required in it: the model assumes perfect information and, as examined in Section II, notaries produce a *sui generis* type of information)⁴³.

As an extension to this argument, for a uniform and high level of quality to be provided in these activities, whatever the type of organizational design, prices will always be higher than marginal cost. The reason is that only such overpricing will enable (1) to recover the inevitable costs which those practising professionals must incur — specific investment in training and reputation; and, in particular, (2) to structure an efficient system of motivation and control. One piece of evidence in this respect is the predominant use of “efficiency wages” — those in excess of market or opportunity salaries — in very different types of businesses which provide professional services in competitive markets. In fact in businesses devoted to tasks such as consultancy or auditing and legal firms, all of them activities which are intensive in terms of human capital and in which confidence and the relative inviability of direct supervision is a predominant factor, employees pursue a professional career in which large increases in remuneration are linked to promotion and/or seniority⁴⁴. In other words, generalizing the argument, it is possible that left to its own devices, the market would produce other organizational mechanisms — except perhaps as far as controlling legality is concerned. Nevertheless, such mechanisms would probably include competitive restraints very similar to those of the current design, such as high remuneration premiums linked to seniority and the centralised establishment of a price fixing policy for “branches” in order to avoid free-riding at the cost of the firm’s reputation⁴⁵. The reason is that factors of a

⁴³ See C. Paz-Ares, *op. cit.*, 1994 §4.

⁴⁴ Amongst many others, see R. J. GILSON and R. H. MNOOKIN, “Sharing Among the Human Capitalists: An Economic Inquiry into the Corporate Law Firm and How Partners Split Profits”, *Stanford Law Review*, Vol. 37, 1985, pp. 313-92; and J. CARR and F. MATHEWSON, “The Economics of Law Firms: A Study in the Legal Organization of the Firm”, *Journal of Law and Economics*, Vol. 33, October 1990, pp. 307-30.

⁴⁵ It should be noted that this argument accounts for the internal organization of such firms by the use of patterns such as those dealt with here. However, it does not justify the fact that competition between them has to be restricted. The argument for restricting competition among these hypothetical “franchised notary

technological nature concerning the activity would continue to be the same: dual technology and geographical dispersion, and these lead to considerable difficulties in supervising the quality of the service⁴⁶. These difficulties make it essential to have a control which is special, automatic, professional, compatible with decentralization, mutual, capable of qualitative evaluation and based on confidence. It is likely as a result that the sector would in any event be structured by organizational patterns which mix elements belonging to franchising businesses and professionals. The two have a very similar underlying motivational structure to that of the current notary structure — by paying an initial fixed royalty and making specific investment, the franchisee “acquires” a future quasi-rent from the franchiser.

4.1.2. Lack of relevance. Despite the above, the situation should also be rationalised from the traditional point of view in which prices are considered as the simple outcome of a monopoly. Such a point of view is equivalent to not understanding the organizational nature of the institution of notaries, the design of which is geared to producing externalities. Under these circumstances the main phenomenon to be taken into account — and this was often the only point of view adopted when discussing the organization and fee scales of notaries — is a possible reduction in the amount of services, the marginal utility of which exceeds their marginal cost but is below the regulated price. Even from this point of view, however, it should be noted that the extent of the problem depends, firstly, on the price elasticity of demand for each type of document and, secondly, on the ability of the authorities to regulate the profession without being “captured” themselves by the notaries. Furthermore, a look at the empirical data on fees reveals that the Civil Law system of notaries appears to result in seemingly *lower* legal costs than the Common Law system.

organizations” would have to be based on the need for ensuring a uniform control of legality and standardizing inputs into the judicial process.

⁴⁶ The fact that traditional competition policy does not pursue such practices but it does pursue some of their equivalents amongst productive units which from a legal point of view are considered “firms”, results from a partial understanding of economic reality in which the internal aspects of the business are separated from that which relates to the market by legal and formal rather than economic criteria.

In the first place, in the case of notaries, demand elasticity is probably very small, both because of the legal requirement for notary involvement in many documents and acts and, in particular, because there are no available substitutes. On many occasions the client is not legally obliged to use a notary but is in “judicial” terms to reduce the transaction costs *ex-post*, as the involvement of the notary is the only effective safeguard for the transaction. For these reasons, it is possible to assume that the cost is drastically contained by an eventual reduction in the amount of services provided. The effect of the monopoly could thus be translated into higher prices, monopoly rents and their dissipation, but not into inefficiency as a result of sub-optimum production.

In the second place, it should be borne in mind that notary prices and activities are subject to detailed regulation and are therefore the outcome of political decisions. In this respect, the information conditions under which this regulation occurs seem currently inappropriate for the “capture” of the regulator by the regulated. In fact, there is some risk in the opposite direction. This is derived from the potential inclination of those regulators who have a short term horizon towards taking decisions which are opposed not only to the interests of practising notaries but also to the incentive structure of the profession, by way of expropriating notaries’ quasi-rents⁴⁷. Such inclination is reinforced by the poor knowledge of the public with respect to notaries’ earnings, leading to two mistakes. Firstly, earnings are usually considered as monopoly rents when in fact they are quasi-rents relating to return on the prior investment in specific human capital if they are not actual operating expenses⁴⁸. Secondly, people tend to over-assess notary income because the fees of registries and taxes

⁴⁷ This expropriation can be achieved in several ways. During the last decades two policies were implemented which share these properties. The first one consisted of increasing the services notaries provide free to the State. The second one is less explicit. It results from a simultaneous reduction of the real fees charged by notaries and the increase —mainly through changes in the tax base— in the taxes they collect for the Government without the public generally understanding the final destination of the funds collected.

⁴⁸ The percentage of gross income of notaries’ offices representing expenses is put at between 50% and 60% before taxes, depending on the type of notary’s office (NOTARIES’ Association Council, “Informe sobre el Arancel Notarial”, *Mimeo*, Madrid, 24 January 1992, p.7),

that are withheld or collected by notaries' offices are seen as part of such income⁴⁹. The effect of this asymmetry of information in terms of hindering regulatory capture is reinforced by the separation of regulators and those regulated, with for example the Ministry of Finance — and not the Ministry of Justice as was the case up until Act 8/1989 on Public Prices and Levies— being the body which has a more determining role in fixing notary prices. (In order to evaluate different institutional arrangements, it must be pointed out that one of the information problems that makes it difficult to regulate prices — knowing what the actual costs and revenues are — can be considered solved. This privileged information position could enable regulators to establish prices based on a profitability objective compatible with preserving the incentives on which the profession is based). The information conditions and the regulatory institutions are thus not favourable to capture by notaries⁵⁰. This is consistent with the empirical evidence which shows a fall in real prices and an increase in capacity. The freezing in recent decades of a nominal scale of charges and the regressive nature of its fundamental element — that linked to documents of value — has meant a substantial reduction in the real price of notary services⁵¹. Furthermore, the change brought in by the Public Prices and Levies Act of 1989 to the effect that notaries must charge in accordance with the value ascertained for tax purposes — or in the absence thereof at the declared value — and not at the actual value, has also meant a substantial reduction in income to the extent

⁴⁹ Half of those using notaries state that most if not all of the money paid over to the notary is for his fees. Only less than 10% of users know that the majority goes for other purposes. For a summary of the annual surveys carried out by DEMOSCOPIA, see “La opinión pública sobre el Notariado: Séptimo barómetro de opinión” (Notaries' Association Council, Madrid, October 1995, particularly p. 24).

⁵⁰ These are conditions relating to the “supply” of regulation. With respect to its “demand”, there are contradictory signs. On the one hand, their small number, the amount of their investments and the very process of self-selection should give notaries a good base to act in the political market. However, they also suffer from internal divisions. Thus, for example, notaries of different ages have conflicting interests with respect to decisions affecting the distribution of the total amount of quasi-rents, such as the opening of new notaries' offices in big cities and their mandatory retirement age.

⁵¹ This reduction has been estimated in the case of sales and purchases at 58% between 1971 and 1989. In this respect see E. BRANCÓS NUÑEZ, “El arancel notarial a diez años vista”, *Gaceta de los Notarios*, no. 8, October 1989, p.4.

that values continue to be declared below actual values⁵². On the other hand, regulators have increased the capacity by creating new notaries' offices, mainly in large cities⁵³.

In the third place, it is appropriate to add some evidence as to the relative efficiency of the different systems of notaries, analysing the total legal cost of a single transaction under different systems. In this respect, it should be emphasized that from the available data on the legal costs of European real estate transactions,⁵⁴ notary services appear to be *substantially cheaper* in countries with Civil Law notaries than in countries with Common Law notaries. Although no general conclusions can be extracted from this data due its fragmentary character, both the direction and amount of the differences in favour of the Civil Law system are remarkable — not easily explicable by differences in the relative cost or nature of the services. It is true that this relates to a single type of transaction but this is perhaps the most important and common transaction.

IV.2. Costs Due to Monopoly

It has often been put forward that monopolies have less incentive to reduce costs than competitive firms⁵⁵. The most popular justification at the present time along these lines centres on the case of large companies and relates to the fact that the relative absence of competitive references makes it difficult to control their management and, consequently, to solve all contractual problems. This is consequently applied to firms in which there is

⁵² On this subject see NOTARIES' Association Council, "Informe sobre la incidencia práctica del Arancel en la retribución de los servicios notariales entre 1990 y 1992", Madrid, April 1993.

⁵³ As a consequence of Royal Decree 3301/1983 the number of notaries increased 25,06% from 1,604 in 1983 to 2.006 in 1993. More recently, Royal Decree 2038/1994 has created 180 new notary posts, equivalent to 8,97% of the number of notaries in 1993. Being concentrated in larger cities, these increases probably are causing substantial changes to the supply of services and the distribution of quasi-rents.

⁵⁴ ANDERSEN CONSULTING, "Analyses des coûts de la transmission immobilière dans la CEE: Honoraires des intervenants juridiques lors de l'acquisition immobilière", 1993, p. 28.

⁵⁵ The idea, in a famous criticism of A. SMITH (*An Inquiry into the Nature and Causes of the Wealth of Nations*, Oxford University Press/Liberty Press, Indianapolis, 1981 [Original edition 1776] pp. 163-4) was taken up again in the 1960's by H. LEIBENSTEIN, "Allocative Efficiency vs. 'X-Efficiency'", *American Economic Review*, Vol. 56, no. 3, June 1966, pp. 392-415, arguing that the monopolist has less motivation for reducing costs.

specialization in ownership and control in the hands of shareholders and management respectively⁵⁶.

Without entering into a discussion on the validity of this argument for other monopolies, it should be emphasized that it is not relevant in the case we are concerned with. The reason is that for each notary's office there is a relatively perfect individual definition of ownership of the residual rent. The incentives to maximize it are therefore great. This close identification of residual economic rights has two consequences. First, it avoids the possible dissipation of rents within each notary's office and, second, combined with the competitive restraints on the profession, it forces the notary to concentrate his management efforts on reducing costs.

4.2.1. Internal dissipation. Firstly, with respect to the possible internal dissipation of rents, there is a variety of evidence that employees in notaries' offices are highly paid and have been enjoying relatively good working conditions. This data can be interpreted as a result of notary quasi-rent capturing activities by employees — a possibility which would involve a certain waste of resources. Alternatively, it could be explained as efficiency wages which, both in themselves as well as through the process of self-selection they tend to generate, favour employees being subject to automatic mechanisms which provide an incentive for their performance and honesty. This second hypothesis seems more credible for several reasons. Firstly, the fact that these employees have worked under a system of virtually no security of employment (Decree of 21 August 1956) even during decades of great labour corporatism. Secondly, it has been observed a real increase in the number of employees in the last decades. However, if quasi-rents were being expropriated, we would expect a decrease in employment. Against this efficiency hypothesis, the relatively slow rate of

⁵⁶ The subject has been dealt with, amongst others, by O. E. WILLIAMSON, *The Economics of Discretionary Behavior: Managerial Objectives in a Theory of the Firm*, Prentice Hall, Englewood Cliffs, NJ, 1964, p. 2; and M. FRIEDMAN, "The Social Responsibility of Business Is to Increase Its Profits", *New York Times Magazine*, 13 September 1970. Cf, however, M. C. JENSEN and W. H. MECKLING, "Theory of Firm: Managerial Behavior, Agency Costs and Ownership Structure", *Journal of Financial Economics*, Vol. 3, no. 4, October 1976, pp. 329-30, and, for a view which accords a larger role to the market for products as the controller in the final instance, M. C. JENSEN, "The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems", *The Journal of Finance*, Vol. 48, no. 3, July 1993, pp. 831-80.

increase in employee productivity could be mentioned. Nevertheless, this slow rate is more apparent than real as it is affected by a substantial fall in the level of qualification of the average employee as a result of a major change in staff composition. This change came about because the initial situation in which the typical notary's office only employed one senior assistant and a clerk has changed to one where some three clerks are employed⁵⁷.

4.2.2. Cost containment. Secondly, in notaries' offices, the combination of powerful incentives to maximize residual rent and rigid restrictions as to which variables can be used to achieve this, concentrates management efforts by notaries on reducing costs. This concentration on costs is a very common organizational pattern which is seen, for example, in networks of franchised establishments in which, with discretion abolished in terms of commercial variables — prices, advertising, etc. — all management efforts are directed towards containing costs and controlling quality⁵⁸. In a similar manner, within firms, internal control systems and divisional decentralization also normally make use of “cost centres” for divisions whose responsibility only extends to organizing resources but not to commercial variables and investment. These two responsibilities are included in the respective domains of “profit centres” and “investment centres”. It is revealing that the main criteria for recommending that a unit be organized as a cost centre is the possibility of external quality control. If this external quality control is not possible, the organization as a cost centre usually fails, as costs are minimized with quality sacrificed. This makes it necessary to internalize this consequence and one way of achieving this is to make the centre responsible for a profit that includes the effects of variations in quality⁵⁹, such that customer decisions have a direct repercussion on their suppliers. When applying these patterns to the

⁵⁷ The average number of employees per notary of 2.31 in 1960 increased to 4.12 in 1992, according to data provided by the General Council of Notaries.

⁵⁸ It has been noted that franchised establishments have higher profits and less labour costs than equivalent establishments operated directly by the franchisers. See A. B. KRUEGER, “Ownership, Agency and Wages: An Examination of Franchising in the Fast Food Industry”, *Quarterly Journal of Economics*, Vol. 106, 1991, pp. 75-101.

⁵⁹ See, for example, R. S. KAPLAN, *Advanced Management Accounting*, Prentice-Hall, Englewood Cliffs, NJ, 1982, pp. 431-49.

case of notaries, the special nature of quality should be taken into account and, in particular, the fact that one of its basic dimensions — the role of preventing transactions which do not pass through the legality control filter — may have a negative value to those paying for the services. As a result, internalization of the qualitative effects by, for example, liberalizing prices which in the context of this analysis would be equivalent to converting notaries' offices into profit centres, would be necessarily incomplete, favouring the provision of private services but prejudicing public services.

In support of the capacity of the notary system to control its costs, Table 2 presents data on the evolution of different labour productivity indices in several branches of the Spanish public sector⁶⁰. It can be seen from this data that the productivity of notaries has been almost the only case where there has been a substantial increase — with a cumulative average annual increase of 2.35% — in clear contrast to other public functions, particularly the judiciary — whose productivity has dropped by over 6% each year between 1984 and 1990 — and hospital nursing — also with a decrease of around 6%. There is also a contrast in the way the number of notaries has been contained compared to the spectacular increase in the numbers of hospital managers and clerks, data which can also be taken as an indicator of the greater capacity of the notary system for minimizing costs.

— Table 2 —

⁶⁰ Obviously, this data must be treated with caution, given the difficulties of measuring productivity and product quality in the service sector, but its significance is considerable. In the first place, the data on judges is reinforced by a possible quality decrease, as shown by the higher appeal rate; and the data on education, which might be the data apparently less relevant to productivity, is confirmed by abundant anecdotal evidence on decreasing quality. In the second place, the magnitude of the observed differences is substantial, and they are thus expected to maintain their sign after a more detailed analysis. Finally, with the exception of notaries, the other activities are organized in a purely civil service manner. This provides an indication when comparing this organizational form with mixed structures similar to the one which is typical of notaries as well as analyzing the impact of some recent experiences in the public sector (e.g. contracting teams of doctors or linking their remuneration and workload).

IV.3. Induced Loss of Welfare: Rent-Seeking

The rent obtained by a monopolist was usually considered in principle to be a mere *transfer* of the wealth of his customers. Nevertheless, in certain situations it amounts to a net *loss* of wealth. This occurs when the rent is dissipated in unproductive activities in order to achieve or maintain the monopoly position⁶¹. To estimate the extent to which this dissipation might occur, it is necessary to examine the conditions under which each specific monopoly is created and renewed⁶². In the case of notaries, it does not seem likely that all the rent is dissipated or that most capture activities are unproductive. Firstly, the costs of maintaining the monopoly are low thanks to the positional advantage of notaries. Secondly, the dissipation at entry is incomplete because the candidates have substantially different obtainment costs⁶³, in such a way that those who pass — except the marginal pass — earn rents in respect of those scarce resources which place them at an advantage in the competitive examination. In general, the degree of dissipation of rent depends on the method by which it is allocated. A simplified version of the problem as it arises in the case of

⁶¹ Work in this field begins with G. TULLOCK, “The Welfare Costs of Tariffs, Monopolies and Theft”, *Western Economic Journal*, Vol. 3, June 1967, pp. 224-32; A. O. KRUEGER, “The Political Economy of the Rent-Seeking Society”, *American Economic Review*, Vol. 64, June 1974, pp. 291-303; R. A. POSNER, “The Social Costs of Monopoly and Regulation”, *Journal of Political Economy*, Vol. 83, no. 4, August 1975, pp. 807-27; and J. N. BHAGWATI, “Directly Unproductive, Profit-Seeking (DUP) Activities”, *Journal of Political Economy*, Vol. 90, no. 5, October 1982, pp. 988-1002. Recent developments are summarised in D. C. MUELLER, *Public Choice II: A Revised Edition*, Cambridge University Press, Cambridge, 1989, pp. 229-46. See also J. M. BUCHANAN, R. D. TOLLISON and G. TULLOCK, (eds.), *Toward a Theory of the Rent-Seeking Society*, Texas A&M Press, College Station, 1980.

⁶² Relevant studies include G. TULLOCK, “Efficient Rent-Seeking”, in J. M. Buchanan, R. D. Tollison and G. Tullock, (eds.), *Toward a Theory of the Rent-Seeking Society*, Texas A&M Press, College Station, 1980, pp. 97-112; W. P. ROGERSON, “The Social Costs of Monopoly and Regulation: A Game-Theoretic Analysis”, *The Bell Journal of Economics*, Vol. 13, no. 2, Autumn 1982, pp. 391-401; A. L. HILLMAN and E. KATZ, “Risk-Averse Rent Seekers and the Social Cost of Monopoly Power”, *The Economic Journal*, Vol. 94, no. 373, March 1984, pp. 104-10; W. J. CORCORAN and G. V. KARELS, “Rent-Seeking Behavior in the Long-Run”, *Public Choice*, Vol. 46, 1985, pp. 227-246; R. S. HIGGINS, W. F. SHUGHART II and R. D. TOLLISON, “Free Entry and Efficient Rent Seeking”, *Public Choice*, Vol. 46, no. 3, 1985, pp. 247-58; A. L. HILLMAN and D. SAMET, “Dissipation of Contestable Rents by Small Numbers of Contenders”, *Public Choice*, Vol. 54, no. 1, 1987, pp. 63-82; E. KATZ and J. ROSENBERG, “Rent-Seeking for Budgetary Allocation: Preliminary Results for 20 Countries”, *Public Choice*, Vol. 60, no. 2 February 1989, pp. 133-44; and F. G. MIXON, Jr., D. N. LABAND and R. B. EKELUND, Jr., “Rent Seeking and Hidden In-Kind Resource Distortion: Some Empirical Evidence”, *Public Choice*, Vol. 78, no. 2, February 1994, pp. 171-85.

⁶³ In terms of the initial academic argument, the situation analysed by POSNER does not apply (*op. cit.*, 1975) but rather that dealt by F. M. FISHER in “The Social Cost of Monopoly and Regulation: Posner Reconsidered”, *Journal of Political Economy*, Vol. 93, no. 2, 1985, pp. 410-16.

notaries has been analysed using a mathematical model⁶⁴. Table 3 shows the results of a simulation using this model to estimate this degree of dissipation. The results indicate how with realistic parameters the percentage of dissipation as defined in the model does not appear to exceed *ten per cent* of the total quasi-rents^{65,66}.

— Table 3 —

Furthermore, in this case most appropriation activity has a social value and therefore not everything devoted to acquiring the rent is wasted, for different reasons. As far as candidates who pass are concerned, they have not only acquired training for the task they must perform but they have been self-selecting themselves on the basis of the organization and incentives generated by the patterns of entry, functioning and remuneration of the notary system, in such a way that they will be predisposed towards performing such work⁶⁷. (With respect to failed applicants, it is true that their specifically notary-based training is of less value⁶⁸, but this cost is discounted *ex-ante* motivating low-quality candidates not to prepare for the examinations).

⁶⁴ See ARRUÑADA, *op. cit.*, 1995, Ch. VI.

⁶⁵ It is likely that the dissipation of monopoly rents increases as the proportion that such rents represent of the initial wealth of candidates decreases, which reduces the possible effect of risk aversion. In this respect it has been estimated that if rents are equivalent to ten times initial assets and there are ten candidates, 23% of such rents will be dissipated (HILLMAN and KATZ, *op. cit.*, 1984, p. 108). Such assumptions do not appear to be far removed from the situation with notaries in which, as the rents represent a substantial portion of their wealth, the dissipation would be low.

⁶⁶ The model enables the impact of other characteristics of the selection system to be estimated; principally the specific nature of preparation for examinations can be seen to have several consequences. Firstly, the better candidates tend to prepare for them. Furthermore, a more specific nature directly reduces the percentage of dissipation and can even eliminate it, and has an effect on the way the degree of dissipation evolves when the amount of quasi-rent varies: if preparation is specific, the percentage of dissipation increases with the quasi-rent. A specific nature also means a greater incentive for those who are practising to avoid fraudulent conduct, as the value of their quasi-rents is a multiple of the difference between the remunerative premium from exercising the profession and the remuneration coefficient of candidates who fail.

⁶⁷ The examination design is biased in the sense of TULLOCK, *op. cit.*, 1980, pp. 109-12.

⁶⁸ In the opinion of practising notaries themselves, the possible consequences of not obtaining a position after a necessary period preparing for the notary examinations are a better preparation for professional practice (73.7%) and for other examinations (45.37%) as well as a certain frustration (61.20%), from a 1983 survey results of which appear in NOTARIES' Association Council, *op. cit.*, 1985, p.76.

It is worth mentioning that the rules governing the appointment and promotion of Spanish notaries can be explained in economic terms as an attempt to minimize the cost of “rent-seeking” and direct capture activities in a productive direction, that of learning the skills needed for working as a notary. The strategy is based on minimizing discretionary decisions and carefully programming the method and criteria used to make them. In particular, the use of a seniority ladder is an extreme example of automatic decision making in which discretion is eliminated in the allocation of resources and the distribution of quasi-rents. One main advantage of automating the decision, eliminating it as such in practice, is that of suppressing some perverse incentives. Otherwise, agents in more discretionary systems are tempted to devote resources to influencing decision makers and bias decisions in their favour. As a result, the patterns that automate the decision making process are particularly suitable when the large amount of quasi-rent would provide an incentive for greater waste, a factor that is present in the case of notaries⁶⁹. Minimizing influence costs also helps to explain the programming and caution with which the remaining discretionary decisions are taken, including the selection of new notaries. Firstly, decisions are made to depend on variables that can be relatively easily evaluated, such as knowledge and performance of a series of legal topics and exercises⁷⁰, and that provide incentives for candidates to compete in learning, literally buying their entry into the profession by an investment in human capital relevant to practise as notaries. In addition, there are group decision-making bodies for all decisions that involve some degree of discretion. Furthermore, the centralization of decision

⁶⁹ The theory of rent-seeking has been applied by P. R. MILGROM and J. ROBERTS to the organizational field. See P. R. MILGROM, “Employment Contracts, Influence Activities and Efficient Organization Design”, *Journal of Political Economy*, Vol 96, no. 1, 1988, pp. 42-60, and P. R. MILGROM and J. ROBERTS, “An Economic Approach to Influence Activities in Organizations”, *American Journal of Sociology*, Vol. 94, Supplement, 1988, S1154-S1179, and “Bargaining and Influence Costs and the Organization of Economic Activity”, in J. ALT and K. SHEPSLE, eds. *Perspectives on Positive Political Economy*, Cambridge University Press, Cambridge, MA, 1990, pp. 57-89; as well as the summary in P. R. MILGROM and J. ROBERTS, *Economics, Organization and Management*, Prentice-Hall, Englewood Cliffs, NJ, 1992, pp. 269-80.

⁷⁰ Article 16 NR requires that subjects in the theoretical part and questions in the practical exercises in competitive examinations for notaries’ positions relate to current positive law. These regulations also provide that the Tribunal should give no warnings to or ask questions of candidates in the oral exercises. The same reasoning can be used to justify the memory-based nature of the first two exercises, particularly when, in addition, the third exercise which consists of drafting a legal opinion, removes the possibility that only candidates with good memories will be successful.

making since 1903 (Royal Decree of October 21st) makes influence activities difficult, as the decision makers are distanced from the beneficiaries.

V. Summary and Extensions

This work analyses the efficiency of the organizational patterns of Civil Law notaries despite their restrictive nature in terms of competition. This positive evaluation is based on a theoretical analysis of their economic rationale and a comparison of empirical results with different types of organization. The theoretical analysis begins with an examination of the notary's product, distinguishing between the public and private services associated with each transaction in which the notary is involved. The public services relate to monitoring legality —acting as a gatekeeper— and reducing litigation —providing standard inputs into the judicial and contractual processes— and are of the nature of externalities. The private services minimize private transaction costs by arbitration and conciliation tasks. The provision of both sets of services by a single professional person enables economies of scope to be obtained but it is subject to a serious conflict of interest — notaries must be willing to deny themselves the benefit of collecting fees from legally doubtful contracts. This conflict is efficiently resolved by the particular organization of Civil Law notaries, based on three powerful incentive mechanisms — quasi-rents, variability and self-selection — which ensure that the services are provided with a substantial degree of security. These incentives are structured according to organizational patterns which, seen from the market point of view, constitute restraints on competition —e.g., restricted entry, captive demand, rigid organizational rules and fixed prices. Nevertheless, their cost as restraints on competition seems low, in terms of the direct loss due to monopoly, a potential upward shift in the cost function and rent-seeking activities. The available empirical evidence is also consistent with the efficiency of the organization of notaries. Firstly, with equality of services, the Civil Law system of notaries seems to result in lower total legal costs than the Common Law system. The Spanish system of notaries also reveals higher productivity growth rates than those of other branches of the public sector organized along purely civil service lines. Secondly, it is

seen how the different organizational mechanisms of Spanish notaries — remuneration by quasi-rents, variability and self-selection — are consistent with the objectives of ensuring effectiveness in the provision of a certain type of notary services and/or minimizing their cost.

The analysis provides a preliminary framework and some concrete guidelines for improving regulatory decisions regarding the notary organization, such as prices, capacity increases and characteristics of the entry examinations. This framework could be easily enhanced by formally modelling and empirically testing the effects of regulatory decisions on the actual working of the organization. Also, a comparative institutional assessment, examining which transactions are more or less suitable for notary intermediation was out of the scope of this paper, but it is indirectly enlightened by its analysis. Regulatory decisions on this matter should be driven by the existence of external effects in terms, mainly, of control of legality. The paper provides a basis for examining for which kinds of transactions should notary intervention be mandated by regulation. From a normative point of view, they should be those producing substantial external effects, either of a legal or judicial nature. It should also be useful for reviewing the scope of services the notary system could be able to provide efficiently, including perhaps a revision and certification of some standard contracts.

Finally, two possible extensions of this analysis can be mentioned relating to the organization of professional and public services. With respect to professional services, similar arguments to those set out here could be applied to justify the competitive restraints which characterise them in terms of efficiency. The same remuneration pattern by quasi-rents, for example, can be generated by other types of entry barrier and not only by examination, as in the case of notaries. Nevertheless, an evaluation in terms of efficiency will in any event be an empirical matter to be elucidated and in general will basically depend on two conditions. The first is that when the problem is analysed, there is a real need — grounded on current technological constraints — for the production by professionals of significant externalities. The second condition concerns the degree of effective matching between the production of these

externalities and the incentive structure that generates the organizational/competitive restraints that the professional body in question adopts.

With respect to public services, the efficiency achieved by the particular organization of Civil Law notaries could be an interesting reference when designing new organizational structures. In recent years, there has been a proliferation of reforms in public administration in many countries, from the “internal market” in the British National Health Service to the businesslike management of personnel⁷¹. This work indirectly makes a contribution to reflection in this field, concentrating on a mixed organizational type that, despite its antiquity (the basic features of the Spanish notary system were laid down by a 1862 Act, still in force), is the result of progressive adaptation over many decades of organizational patterns similar to some of those which are beginning to be seen in new experiments. An understanding of these patterns may be of interest in fresh attempts to reform public administration, at least where there are little differences in the contexts in which such patterns are applied. It suffices to mention two cases at the heart of public administration. In a context similar to the one dealt with here, it is noteworthy how the civil service type treatment applied to court clerks — which until the 1940’s were organized on similar lines to notaries in Spain — seems to have had deplorable consequences in terms of productivity and it is one of the causes of the current bottleneck in the courts⁷². On a more general plane, a large part of the analysis of notaries can be applied in questioning the recent policy of remunerating the most qualified civil servants in the government and public sector in general. This policy has considerably reduced the proportion of the present value of total remuneration during the professional career that is linked to length of service⁷³.

⁷¹ See for example, A. J. CULYER, A. MAYNARD, y J. POSNETT, (eds.), *Competition in Health Care: Reforming the NHS*, Houndmills, London, 1990; OECD, *Flexible Personnel Management in the Public Service*, Public Management Studies, Paris, 1990; and OECD, *Pay Flexibility in the Public Service*, Public Management Studies, Paris, 1993.

⁷² This is confirmed by the high productivity of courts where the clerks continued operating until recently under the old system, according to a Supreme Court judge.

⁷³ This has been verified, in the case of the public health services, in B. ARRUÑADA, “Diseño organizativo y gestión del personal en la sanidad pública”, en A.E.S., (ed.), *Cambios en la regulación sanitaria*, SG Editores, Barcelona, 1995, pp. 64-119.

If, as appears to be the case with notaries, public functions can be efficiently organized by means of professional careers remunerated with quasi-rents linked to length of service, those in charge should be aware that reforms affecting remuneration can easily destroy this delicate system of incentives and self-selection. Such reforms can be carried out in different ways depending on the type of civil servant but they have similar consequences. The reduction of premiums for length of service of salaried civil servants is equivalent for these purposes to either freezing or liberalising the prices of officials remunerated by a fee scale, or increasing the number of posts or the services they must provide freely to the State. In all these cases there is a double effect; in the short term, the quasi-rents are eliminated and in the long term the process of self-selection is destroyed. This difference in the time scale of the effects provides a perverse incentive to public administrators. This is because a policy that takes away these quasi-rents will produce immediate benefits to them in terms of a reduction in public spending and/or the prices of services. However, most of the costs of such a policy will appear later, particularly in a possible decline in the quality of the services as a result of deterioration in the process of self-selection. In this context it would be worthwhile, but it falls outside the scope of this work, to explore whether public administrators do in fact have difficulty in maintaining this kind of long term commitment. This argument could provide a positive rationale for some seemingly naive liberalization proposals, as these lack an understanding of the efficiency possibilities of the type of mixed organization forms such as the one analysed here and usually underestimate the cost of regulating alternative arrangements.

Table 1

Legal costs associated with the purchase and sale of real estate valued at 75,000 US dollars
in the USA and Spain.

Service	United States			Spain	Higher cost in USA
	Minimum	Maximum	Average		
Title insurance	\$450	\$600	\$525	\$0	\$525
Lawyers' Fees	500	1,500	1,000	0	1,000
Land Registry Fees	40	60	50	94	-44
Notary's Fees	10	25	18	343	-325
Equivalent Legal Cost	1,000	2,185	1,593	437	1,156

Sources: Own preparation from the Spanish tariff scale and data on the USA contained in M. GALANTER, M. BALLARD and J. ESSER, "The Cost of Common Legal Transactions in the United States", Institute of Legal Studies, University of Wisconsin, Madison, WI, July 1994. The exchange rate on 6 October 1994 has been used (one US dollar = 128.140 pesetas).

Table 2

Productivity Indices of Notaries, Courts, Hospitals and Public Sector Schools

	1973	1983	1990	Cumulative annual rate
Notaries				
Documents per notary	1,403	1,867	2,082	2.35%
Documents per notary employee (1)	468	417	497	0.32%
Number of notaries	1,391	1,604	1,915	1.79%
Number of employees (1)	3,925	7,186	8,028	4.06%
Employees per notary (1)	2.74	4.48	4.19	2.39%
Courts				
Number of sentences per judge (3)		351	241	-6.07%
Number of sentences per employee (3)		40	22	-9.48%
Expenses per sentence in 1982 pesetas		54,004	144,131	17.78%
Number of judges (4)		2,036	3,322	7.24%
Number of other staff (4)		16,136	33,765	11.12%
Public Hospitals				
Managers per hospital	1.71	2.51	7.31	8.92%
Employees per hospital manager	133	219	110	-1.08%
Stays per manager	38,915	33,757	12,240	-6.58%
Patients admitted per manager	1,986	2,326	1,038	-3.74%
Clercks per hospital	12	36	62	10.30%
Patients admitted per clerck	290	162	123	-4.95%
Stays per doctor	1,883	1,234	828	-4.71%
Patients admitted per doctor	116.62	117.99	127.25	0.51%
Stays per nurse	1,342	575	397	-6.91%
Stays per nursing auxiliary	1,184	570	452	-5.51%
Public Sector Schools				
Pupils per teacher, Pre-school (2)		30.58	23.59	-3.64%
Pupils per teacher, Primary School (2)		26.34	21.03	-3.16%
Pupils per teacher, Secondary School (2)		16.32	15.66	-0.59%
Pupils per teacher, Occupational training (2)		14.44	12.34	-2.22%
Students per teacher, Degree courses (2)		18.42	20.70	1.68%
Students per teacher, Engineering (2)		8.83	12.16	4.67%

Sources: Own preparation with data from (a) for notaries' offices, the *Anuario de la Dirección General de los Registros y del Notariado*, Ministry of Justice, Madrid, different years; (b) for courts, S. PASTOR, *¡Ah de la justicia! Política judicial y economía*, Madrid, 1993; (c) for health, *Estadística de Establecimientos Sanitarios*, from INE; and (d) for education, the *Anuario Estadístico de España*, also from INE. Notes: (1) Figures for 1972. (2) 82-83 and 89-90 academic years. (3) figures for 1984 and 1990. (4) figures for 1982 and 1991.

Table 3

Percentage of dissipation of rents based on the multiple of notary remuneration, the degree of specificity of the preparation required for access and the characteristics of potential candidates for the notary's profession.

Remuneration multiples of those candidates who ...		Less uniform potential candidates (alfa = 2.1)		More uniform potential candidates (alfa = 2.5)	
fail entry test	pass entry test	r = 10%	r = 20%	r = 10%	r = 20%
More specific test (s = 0.95)	k = 1.50	0.31%	0.77%	25.39%	27.05%
	k = 2.50	6.18%	6.63%	31.26%	32.92%
Neutral test (s = 1.00)	k = 1.50	9.55%	10.03%	35.03%	36.78%
	k = 2.50	9.55%	10.03%	35.03%	36.78%
Less specific test (s = 1.05)	k = 1.50	21.08%	21.42%	47.67%	48.89%
	k = 2.50	13.42%	13.75%	40.01%	41.23%

Definitions: **k** is the multiple of notary remuneration compared with that which could be obtained by a lawyer with similar qualifications; **s** the multiple of remuneration of a failed candidate in entry examinations to the notary's profession compared with remuneration of a lawyer who had not prepared for them; **alpha**, the uniformity of candidates — the higher **alpha** the less the variation in income obtainable by potential candidates (assumed to follow a Pareto distribution with a parameter equal to **alpha**); and **r** their discount rate.

Figure 1

Development with length of service of the average level of activity of notaries by age of entry into the profession and the category of office occupied (curves estimated using the statistical model, truncated to represent normal values for each sample).

