



Mandatory Full-Cost Pricing in Public Services: The Case of the ‘Fantask’ Sentence

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Abstract

The sentence issued by the Court of Justice in the ‘Fantask’ Case defined what sort of policies can be adopted by the Member States in connection with the fees for company registration without contravening the stipulations of Community legislation on raising capital. This article analyses how to set prices that comply with the sentence and at the same time generate efficient incentives. It first reviews to what extent the sentence meets the aims on which it is based. Second, it provides a guide for subsequent development of related jurisprudence. Third, it throws some light on how public authorities can set pricing policies.

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JEL Classification: H21, K34, M49

1. The legal problem

1.1. Background on rules and jurisprudence

The Case concerns the interpretation of the Directive for the harmonisation of indirect taxes on capital raising (hereafter called the “Directive”).¹ The purpose of this Community regulation is to promote free movement of capital which is considered essential for the functioning of the European internal market. The Directive therefore aims to harmonise the laws relating to duty chargeable on contributions of capital to capital companies, abolishing the indirect taxes charged hitherto on capital raising in the Member States and regulating in its articles 2 to 9 the imposition of a single tax to be charged only once within the area of the common market and applied to several company transactions, including company formation and capital increases. In order to avoid disturbance to the movement of capital, the rates and structure of this tax are harmonised for the whole of the Community.² The Directive also abolished other indirect taxes which, since they had the same characteristics as the tax on capital raising, had they been maintained, would have damaged its aims (articles 10 and 11). These included taxes of any type in respect of registration or any other formality prior to the start of business activity to which a company or legal person operating for profit may be

subject by reason of its legal form (article 10). However, the Directive also establishes an exhaustive list of exceptions under section 1 of its article 12.³ Letter e) of this section states specifically that Member States may charge duties paid by way of fees or dues.

Moreover, in its “Ponente Carni” sentence, the Court of Justice made a distinction between taxes that were prohibited by article 10 of the Directive and duties paid by way of fees or dues.⁴ Sections 41 and 42 of this sentence establish that the latter only include payments made at the time of registration, for which the amount is based on the cost of the service provided. Therefore, if the amount to be paid is completely unrelated to the cost of the service or is calculated in terms not of the cost of the operation but of the costs of the body carrying it out, then it should be considered a tax and therefore prohibited under article 10 of the Directive.

1.2. The “Fantask” Case

According to Danish company law, companies and capital increases must be entered in a registry and this registration is subject to the payment of fees. Until 1992, registration fees comprised two parts—a fixed basic payment and a variable supplementary payment, calculated in proportion to the nominal value of the capital raised. A report by the Danish National Audit Office showed that, as a result of charging this supplementary payment, the income of the Danish Company Registry (the Erhvers-og Selskabsstyrelsen, better known as “Styrelsen”⁵) was far in excess of its costs. The supplementary payment was therefore abolished as from 1 May 1992 and the fixed basic fee was raised. The Fantask company and others then requested that the Styrelsen return the supplementary payments made between 1983 and 1992. When this claim was rejected, they reported the Danish Ministry of Industry to the Østre Landsret. The companies maintained that, in the light of the Ponente Carni sentence, the supplementary payment-and, for Fantask, also the basic fee-were contrary to the terms of articles 10 and 12 of the Directive.

In June 1995, the Østre Landsret referred eight questions to the Court of Justice for a preliminary ruling concerning interpretation of the Directive in respect of the fees for registration of new companies and capital raising. These questions were of two types. The first four considered the nature and the establishment of the charges. The last four considered several problems of a legal nature arising from the possible return of payments that had been incorrectly charged for being contrary to the terms of the Directive. The second group of questions will not be dealt with in this study, which will focus rather on the practical problem arising out of the Court’s response to the first four.⁶ *First*, the degree to which Member States are free to delimit the concept of duties paid by way of fees or dues. *Second*, whether or not the basis for the calculation of duties charges under e) of section 1 of article 12 of the Directive 69/335/EEC may include costs relating to: officials not directly involved in effecting the registration, such as the staff who are engaged

in preparatory legal work; effecting registration of other matters relating to companies, in respect of which the Member State has determined that no specific consideration is to be paid; performing duties, other than registration, that are required of the registration authority such as examination of companies' accounts and supervision of companies' bookkeeping; payment of interest and depreciation of all capital costs concerning the field of company law and related fields of law; official journeys not connected with the specific work of registration; the registration authority's external dissemination of information and guidance not connected with the specific work of registration. *Third*, whether or not the Member States could fix standardised charges by rules valid without limitation of time. The Danish Court also asked, if this was not possible, whether they were therefore required to adjust the scale of charges every year or at other fixed intervals and whether it was of any significance for the answer whether charges are fixed in proportion to the amount of the capital to be raised. *Fourth*, how registration charges were to be related to the cost of each service. The aim was to clarify whether the sum paid in consideration for registration could be calculated on the basis of the actual cost of the specific service or if it could be fixed, for example, at a basic charge together with a supplement that would vary with the nominal value of the capital subscribed, so that the amount of the duty is independent of the registration authority's time used and other costs necessary for effecting the registration.

The Court, taking into account that each State is not free to interpret the expression "duties paid by way of fees or dues" (point 26), sentenced that:

"in order for charges levied on registration of public and private limited companies and on their capital being increased to be by way of fees or dues, their amount must be calculated solely on the basis of the cost of the formalities in question. It may, however, also cover the costs of minor services performed without charge. In calculating their amount, a Member State is entitled to take account of all the costs related to the effecting of registration, including the proportion of the overheads which may be attributed thereto. Furthermore, a Member State may impose flat-rate charges and fix their amount for an indefinite period, provided that it checks at regular intervals that they continue not to exceed the average cost of the registrations at issue."

1.3. Structure of the problem

The main question concerns the consideration of the duties paid by way of fees or dues. In practice, the sentence can be said to define a number of restrictions and possibilities for Member States when establishing these dues. From a legal point of view, which is in line with practical interests, the two main problems are to identify the direct costs and overheads that are relevant for these purposes and to allocate the latter among the specific services that are provided. The appropriateness of including certain costs as well as the criteria for fixing prices may vary substantially

with two factors: first, the type of registration service being provided (such as whether or not the Registry bears any liability) and second, the way in which the registration body is organised. (The latter may vary between a fully-fledged part of the Public Administration and some sort of hybrid comprising elements that are characteristic of organisations granted private concessions or franchises). The following analysis therefore aims to consider the relevant costs and the use of pricing formulas that are suitable for the many different situations existing in the area of the European Union.

2. Notions on efficient pricing

2.1. The microeconomic ideal

One of the most basic microeconomic deductions tells us that, in principle, the socially optimal price for any good or service is that which makes the marginal cost of producing it equal to the marginal utility provided by consuming it. This condition of marginal optimality is one of the keys to our understanding of how competitive markets work and of how and why prices move inside them.

However, Microeconomics is a less powerful guide for action when it has to be used for making decisions. This is because in business practice—especially within the Public Administration—neither the function of demand nor that of costs are known. In our case, it is difficult to estimate the demand. Fortunately, it is not as relevant as in commercial markets since at least for many services it can be expected to be fairly rigid within the relevant price range, which is very narrow after the Ponente Carni sentence. This is because these are complementary services for which the price—or cost for the user—is not very significant with respect to the total cost incurred by the user when forming and starting operations with a mercantile company. The most serious difficulties therefore lie, however, in estimating marginal cost. We can assume in our case—and this is generally done in decisions on prices—that such decisions should be taken adopting a long-term approach. We should therefore consider that all costs are variable, that is, that they are all perfectly avoidable and are therefore marginal or opportunity costs. They thus include not only costs that are directly linked to production but also costs of an indirect and general nature and investments in the capital, both human and physical, used in production (capital that is paid for in several ways—through profits, interest or wages, depending on the type of organisation and its financial structure).

2.2. Full cost pricing

Considerable difficulties arise for fixing the prices of each product based on an estimate of its marginal cost in the long term, even within companies.⁷ Business practice often resorts to approximation. The prices of products are often based on

their “full cost” and, although this is not specifically mentioned, this is the option that is implicit in the sentence, especially under the first point. The procedure starts obtaining the *direct cost* of production by estimating all the costs of work and materials that can be directly related to the product in question.⁸ *Production cost* is then calculated by adding to the direct cost obtained in the first step an allocation of the overheads of the production centre itself (the Registration office in our case). This distribution is usually based on working time, the cost of materials and/or the processing time. Normally, the total sum of these overheads is usually calculated annually and allocated to individual products based on expected levels of activity. *Total cost* results from adding a mark-up to the sum of direct and indirect costs and then adding an estimate of the general costs incurred outside the production centre (in companies, these would be the costs of administration, marketing, etc.). Finally, *prices* are established adding a profit margin which is commonly expressed as a percentage of total cost. This profit margin usually varies amongst products and companies and with time in order to take into account, respectively, differences in demand and in the use of capital resources by the various products, and changes in economic conditions.⁹ In order to solve the problems involved in including the cost of capital, it is preferable to use a full-cost version in which, when establishing the price, instead of the capital cost being allocated in proportion to the production cost, it is allocated according to the effective use of capital resources.¹⁰

2.3. *Activity-based costing and the dynamic effects of cost-based pricing*

The allocation of fixed costs to products based on the direct costs caused by them has been much criticised for giving rise to serious distortion.¹¹ In recent years, these criticisms have even originated a new paradigm in the theory of Managerial Accounting. This movement has come to be known as *Activity-Based Costing* or *ABC*.¹²

Cost allocation arose originally to provide reasonable prices for valuing inventories in external financial statements. The realism of the final result and especially the price structure for the various products were not particularly important. The long-term consequence, however, was unexpected, in that it aggravated the systematic difficulty of controlling the volume of fixed costs (for example, those of a central personnel department). The latter were being distributed without taking into account which department or products gave rise to them. And the cost accounting system not only did not ‘collect’ from the various internal divisions for the use of those fixed resources but, because of the allocation criteria, in fact charged them for incurring the direct costs that were taken as the basis for allocation.

If we are to find reasonable criteria for allocation, we need to identify the ‘cost drivers’, phenomena, causal characteristics or ‘factors’ behind the ‘fixed’ costs. In many situations, the volume of direct costs has little, if any, correlation with this

internal demand for services (such as co-ordination and supervision) from central resources (such as management or inspection bodies). In the case of co-ordination, for example, it is likely that a greater product variety will lead to a greater need for co-ordination, although variety will not necessarily have much effect on the direct costs of production. For these reasons, the essential origin of fixed costs tends to be seen in the 'transactions', these being understood as the exchange of both materials and information.¹³

It is reasonable to think that much more support is generally required for occasional or new services or those which have some special attribute than for traditional, mass, standard services. This means that, when both types of service are produced in a single unit, the use of an allocation formula based on direct costs usually gives rise to prices that subsidise the standard services at the cost of the special services. As stated by Kaplan and Atkinson,

"many of the costs of factory support departments are caused by such transactions as the number of setups, inspections, receipts, payments, parts, vendors and engineering change orders. The system for measuring product costs should determine how these support or indirect costs vary, in the long run, with the transactions or events initiated by producing multiple products in the same facility. The costs of these transactions can then be assigned to the individual products that trigger the demand for the transactions" (1989, p. 194). Moreover, the system should aim to assign all the costs, not only production costs, because in the end, "[a]ll the resources of the firm exist to design, produce, market, service the firm's products. Therefore the costs of all the firm's resources can and should be considered product costs" (p. 192).

This problem of the potentially incorrect allocation of fixed costs is usually considered to be more serious in service activities because direct costs are less important in them and this makes it necessary to allocate practically all their costs. In addition, since these are less tangible activities in which quality attributes are paramount, it is difficult to find really representative measures for the use of resources. All this becomes even more complicated in organisations producing a large variety of services. Both of these considerations are very important for our purposes because the two features are present in the case of registration, which is clearly a tertiary activity that, at least in some systems, comprises a substantial variety of services.

2.4. Cost allocation and cost minimisation

The analysis thus reaches a point where it links up with the microeconomic comments at the start of the section. What is important in cost allocation is not only to reach efficient equilibrium in the *external* market but also to create efficient incentives *within* the organisation. This would be the case only when each

final product generates efficient demands from the various internal units and resources providing all kinds of intermediate services and processes that are necessary for producing the final products.

Conventional microeconomic analysis assumes that the cost function is fixed (all production centres optimise the use of resources and work at their ‘production possibilities frontier’). As with all methodological assumptions, this is a simplistic assumption. In this case, it serves to clarify a number of phenomena concerning market functioning but it does not help much in solving organisational problems. In less obscure terms, Microeconomics ensures us that, in order to obtain an optimum level of production and consumption, all we need to do is fix the price at the point at which the marginal cost of production and the marginal utility of consumption are equal. However, in practice, the *dynamic* optimality may depend on the procedure followed to fix the price. This dynamic dimension is easily seen in individual responses to incentives generated by such a procedure.

Let us take the example of a department providing services to the public, such as a Registry. In order to provide its services, this department in turn uses the services of a central unit such as a professional association of registrars and/or a ministerial department. Let us also assume that this central unit distributes its costs amongst the registries according to their direct costs. If, as is usually the case, the volume of direct costs is relatively unrelated to the common costs (because, when the former are incurred, more is not necessarily demanded of the services provided by the central body incurring the latter), then the allocation system would generate perverse incentives. It would in fact be encouraging those in charge of the peripheral units to substitute a lower consumption of direct costs with greater use of the central services and this would lead to an increase in the common costs. They would have an excessive incentive to reduce indirect costs and hardly any incentive to reduce their demand from the central suppliers. However, it is costly to meet the demand of these central services. Therefore, in order to motivate conduct which will dynamically optimise costs, the centres which adopt it most intensively must see an increase in their contributions to the maintenance of the central unit. Otherwise, they will tend to generate inefficient growth in the expenses of the latter. As a result, the costs—the curve or cost function—will rise above the minimum level and the situation will no longer be one of productive efficiency.

3. The productive process of registries

In order to correctly evaluate the phenomena described in the previous section which refer basically to the understanding of the nature of costs—their causal connection to certain products—some knowledge is required of the production technology, both with respect to the products and the processes used to obtain them.

3.1. *Variety in the products of the various registration systems*

Although they share common elements, the various registration systems also have certain marked differences. Obviously, all of them carry out an *administrative* function involving the reception, conservation and production of information based on the documents that serve to accredit certain transactions. However, the systems differ considerably with respect to the other functions of 'legal transformation' which may or may not be added to this minimum function. In the most developed systems, the registry has to *qualify*¹⁴—the documents presented to it, either accepting them for registration or rejecting them. The registry therefore carries out a transformation function, consisting of legal control or *gatekeeping*,¹⁵ by which it makes sure that the transactions in question are legal both with respect to third parties and for the contracting parties themselves. As a result, the document or deed registered is transformed—it is given *fides publicae* and generates legal effects that differ substantially from those of unregistered documents.

The economic reasoning why registries also control legality is to obtain economies when this control is carried out in conjunction with the services of the administrative registry. In other words, it is less costly for the same professional to provide the two types of service. This advantage has a dual origin in both information and contractual technology¹⁶: both services require the same information and also need and can share costly quality safeguards.

Within our institutional framework, this type of professional intervention in which the State enforces the law by ordering the intervention of a professional who has to act for other reasons in private transactions is an essential part of the strategy adopted for enforcing the law. Although this is a very broad concept, readers who are familiar with the legal systems of western Europe will understand that, in many of them, the most characteristic example of a *gatekeeper* can be found precisely in the notary and registration systems.¹⁷ In the *Common Law* countries, it is mostly lawyers who also carry out a dual function which includes not only the provision of private services but also that of acting as *gatekeepers*, although to a lesser extent. English barristers, for example, actually act as real agents of the law.¹⁸

These two essential functions of registries, which we shall classify respectively as the *administrative* and *legal* functions, can be carried out with different levels of quality, by including or excluding certain quality attributes of various types to the service. In the administrative function, quality dimensions are mostly of a tangible type—reliability or safety, time-limits or waiting periods, ease of access, etc. The most important quality attributes of the legal function are, however, more difficult to ascertain as they often comprise a refusal to provide a service and to carry out the registration of the document or company in the Registry. A relatively tangible attribute of this quality dimension, which allows us to specify the degree to which it occurs, is that of *liability*, taking this in a broad sense, to signify the explicit and implicit guarantees provided by the registry as to whether its decisions comply with the law.

3.2. *Variety in registration systems*

The structure of the registry is determined to a great extent by the type of services it is required to provide. When it is merely for the purpose of administrative registration, conventional organisation is viable as the type of resources required and the tasks to be carried are relatively easy to supervise. In general, this type of service is organised like a typical administrative office (although it is to some extent a production process which can even be organised following ‘industrial’ patterns because of the relative ease with which many of the important variables can sometimes be measured¹⁹). These bureaucratic organisations often form part of the Ministries of Justice, although such a structure in fact makes cost allocation even more complicated.

On the other hand, when the registry carries out legal control functions, acting as a contractual gatekeeper, there is a great change in the type of resources and tasks. The final decision on qualification requires the use of human capital of a high professional level, with obvious complications for the motivation and control of productive conduct which must meet the public purpose being sought. As with any professional service, registration services of this type tend to result in serious asymmetry of information which makes efficient management and especially quality control very difficult. The service provided involves judgement of individual cases by means of the professional applying his or her accumulated human capital. It is very difficult to measure or evaluate the result. So the professional’s work can be seen as the application of human capital to the solution of individual cases, resulting in a product whose quality is difficult to ascertain. Each of these elements—evaluation, a non-ascertainable, individualised product and intense use of human capital—gives rise to specific problems of both a contractual and organisational type.²⁰

The general problem involved in the organisation of this type of services is therefore that of developing mechanisms for safeguarding or ensuring quality in circumstances that are very unfavourable because verification of compliance by third parties as well as observation by the interested parties themselves are very often impossible or only possible in the long term. This problem is similar to that of professional firms (of lawyers, consultants and auditors, doctors, etc.).²¹ It is therefore no surprise that the solutions applied tend to be very similar, generally involving deferred payment for the professional. So, during much of their career, such professionals receive quasi-rents (income above what could be earned in the best possible alternative employment). This compensation structure has two effects. First, it directly motivates them to fulfil their obligations for fear of losing such extra income. Second, it generates a favourable self-selection process which indirectly encourages performance.²²

Before ending this review of registration products and organisations, it should be pointed out that the differences in costs between the systems of different countries seem to depend more on the *management* of each national system than on their *design* or basic architecture. Costs tend to vary within more similar orders of

magnitude in such widely differing systems as the German and Scottish or the French and English systems than in systems of the same institutional type (that, is comparing the German system with the French and the Scottish with the English).²³ These data refer only to costs but this does not seriously limit the analysis. On the one hand, the value of services does not differ so much from one country to another as to justify the differences noted in costs. On the other hand, higher costs do not seem to reflect the provision of more valuable or complete services.

4. Direct costs

Essentially, the Ponente Carni and Fantask sentences determine that prices must be fixed according to costs. In the second section we saw that this formula guarantees maximum social wellbeing if the long-term marginal costs are considered so that all the costs are variable and avoidable, whether or not they are fixed in the short term. We shall now proceed to analyse the problems that arise in the various registration systems when this pricing policy is applied. We shall examine how the types of problem and the possible solutions may vary depending on the type of registry and, especially, depending on the extent to which the registry includes legal control functions. Although we shall not draw up a scale of prices, it is advisable in these sections to proceed as if this were to be done in order to identify the problems and to provide a basis for judging to what extent the various elements of current prices tally with the pricing procedure established by Community jurisprudence.

Based on these considerations this fourth section analyses direct costs. The fifth section will discuss the allocation to products of the registries' indirect costs and the general costs of the whole system, and the sixth will focus on the actual pricing.

In practice, the study of product costs begins by calculating those that can be directly ascribed to each product. A 'direct' or 'variable' cost is understood as a cost that is "uniform per unit but fluctuates in total in direct proportion to changes in the related total activity or volume" (Horngren, 1982, p. 977). 'Fixed' costs, on the other hand, "remain unchanged in total for a given time period despite wide fluctuations in activity" (p. 969). The jurisprudence is explicit in recognising the difficulties existing for identifying direct costs. As stated under point 29 of the Fantask sentence:

"As regards the setting of the amount of duties paid by way of fees or dues, the Court stated in Ponente Carni, at paragraph 43, that it may be difficult to determine the cost of certain transactions such as the registration of a company. In such a case, the assessment of the cost can only be on a flat-rate basis and must be fixed in a reasonable manner, taking account, in particular, of the number and qualification of the officials, the time taken by them and the various material costs necessary for carrying out the transaction."

Without going into the exact meaning of “on a flat-rate basis” in the above quote,²⁴ our interpretation is that the sentence requires the most accurate calculation possible of the costs incurred when each specific service is provided, even within each type of service. This is based on three types of consideration: (a) the obligation to take into account the number, qualification and time of the human resources devoted to this task, together with the material expenses; (b) the requirement that the determination of costs be reasonable; and (c) the general tone of the sentence under other points and considerations. So in the example given in the above quote, that of the registration of a company, we believe it is necessary to apply variable price formulae, with the variability corresponding to the capacity of the companies to generate different costs at the time of registration. Furthermore, the amount of such costs will depend on a wide range of factors within each registration system such as the amount of capital, the complexity of the articles of association, the type of contribution, etc.

In many production processes, it is relatively easy to relate certain costs to the production of specific goods or services. This is the case when the resources associated with the costs are used only in the production of these products by means of specialised production processes. In the case of registries, it may be the case with certain expenses, such as some communications (by telephone and by mail), office supplies and especially the time spent by staff that specialise in a certain type of service (for example, the registration of proxies, or capital increases). It is obvious that, if taken globally, in all these items there are direct and indirect costs but at least part of them can usually be related to specific services.

It must be taken into account that the relevance of the final result (the economic reliability of the prices resulting from the process) depends to a great extent on whether most of the costs are direct or can be easily and reasonably assigned to the various products. Here there are important differences between registration systems and in the organisation of the registries, whatever type of system they belong to. In systems which provide only an administrative registry it is easier to calculate direct costs because these tend to be more tangible and are relatively easy to measure in physical units of consumption. In addition, it is easier to value such consumption with a view to including them in a cost figure. Legal enforcement services, however, are more difficult because of the intangibility of some of their essential attributes. Whatever the system, the internal administrative process within the registry can basically be organised in one of two ways. Productive resources, particularly staff, can be specialised either according to the functions carried out or to the products, and this too can be done in several ways. When specialisation is according to function, several teams of workers deal with standard tasks (reception, presentation, qualification, taxation, etc.). Alternatively, when specialisation is according to product, each team or department processes a specific type of document (formation of companies, proxies, appointments, capital increases, liquidations, dissolutions, sales by instalments, bond issues, annual accounts, etc.).

In the latter case, it is simpler to estimate the direct costs as the staff specialisation provides a firm starting-point. Even so, some problems are difficult to resolve. First, it is not usually efficient for the more highly-qualified staff to become specialised, so they usually provide a variety of services. This is especially the case of the Registrars themselves, that is, the people who actually have to qualify the documents in those systems which provide legal control. So such costs fall somewhere between the categories of direct and indirect costs. Second, some services, such as the presentation of annual accounts, are very seasonal and therefore require large quantities of resources that in principle are specialised in the provision of other services. Third, it would not be reasonable to suppose that there is homogeneity within each product so the direct cost of registration cannot be estimated by dividing the cost of each department by the number of documents in which it specialises. On the contrary, within each department it is necessary to consider the specific factors driving the cost of the different services (of relevance here too are characteristics such as the amount, complexity, extension, urgency, etc. of the services to be provided).

Assignment of the direct costs is far from simple in most cases, although there are techniques that allow for reasonably good estimates of costs such as those mentioned. There are basically two procedures—process engineering and statistical approaches. The former involves a number of sampling processes—by physical inventory, filming, timing, etc.—to measure the resources and time used. These figures are then valued and added together to give the direct cost. The statistical approach is more indirect as it is based on identification using regression techniques of the cost drivers causing variability in the total direct cost.²⁵ This method is widely applicable, not only for direct costs.

5. Indirect costs and overheads

We shall now analyse the process for indirect costs prior to estimating the cost of each service or type of service. In our context, ‘indirect costs’ are understood as being those incurred by any registration office which cannot be directly allocated to specific types of service. Obviously, the separation between direct and indirect costs is to a certain extent arbitrary, as there is always some degree of ambiguity. ‘Overheads’ are those costs paid to provide services to several registry offices which thus benefit from the common use of the resources of some type of central body. This may be a department within the Administration or a professional association. (Note that although the sentences refer to both types of cost under ‘overheads’, in this study we shall reserve this term for costs that are common to a group of registry offices.)

The allocation of indirect costs and of overheads as defined above gives rise to widely varying degrees of difficulty. However, the objective of this allocation is the same whether it follows the recommendations of economics and accounting theory

analysed in the second section or the dictates of Community jurisprudence which are studied below. It is essentially a question of allocating costs in terms of the potential of the various services to generate them or, in other words, of identifying the appropriate cost drivers for each specific service.

5.1. Allocation and inclusion criteria in the Community jurisprudence

It is first important to state that Community jurisprudence recognises the need to allocate both indirect costs and overheads. In spite of this recognition of the principle of allocation, the Fantask sentence is of little help, however, in carrying out such allocation. It only states in its point 30:

“in calculating the amount of duties paid by way of fees or dues, the Member States are entitled to take account not only of the material and salary costs which are directly related to the effecting of the registrations in respect of which they are incurred but also, in the circumstances indicated by the Advocate General in paragraph 43 of his Opinion, of the proportion of the overheads of the competent authority which can be attributed to those registrations.”

The above reference to the circumstances given by the Advocate General clarifies little as these are summarised in his Conclusions in the following, vague terms:

“The allocation of costs should be made in accordance with the normal principles of commercial cost and management accounting. In particular, where costs relate only partly to the services in question, a reasonable apportionment must be made on the basis of suitable criteria.”

The ambiguity of the Court’s judgement is understandable in view of the serious practical problems faced by the decision-makers when establishing reasonable prices, as shown in the second section above. It therefore seems that, in spite of the firm tone of some paragraphs of the sentence, essentially the only instruction is that “suitable” cost allocation criteria should be applied when calculating prices. So the choice of criteria depends on a judgement of a technical nature. Discrepancies are likely to arise because there is no unanimity on the most suitable criteria.

The jurisprudence does, however, provide a firmer criterion for the exclusion of expenses for the drafting and enforcement of Company Law by rejecting the claims of the Danish and Swedish governments. These claims go against the provisions of the Ponente Carni sentence which are confirmed in the Fantask sentence in its point 27, which states:

“the Court has already held, in its judgment in Ponente Carni at paragraphs 41 and 42, that the distinction between taxes prohibited by Article 10 of the Directive and duties paid by way of fees or dues implies that the latter cover

only payments collected on registration whose amount is calculated on the basis of the cost of the service rendered. A payment the amount of which had no link with the cost of the particular service or was calculated not on the basis of the cost of the transaction for which it is consideration but on the basis of all the running and capital costs of the department responsible for that transaction would have to be regarded as a tax falling solely under the prohibition of Article 10 of the Directive.”

It should also be stated that, with respect to tasks that repeat those carried out by other legal controllers, there is a specific reference in the conclusions of the Advocate General but not in the sentence. A possible interpretation is that the Tribunal preferred not to pass a general judgement on a matter which, in our opinion, may require specific examination of the regulations of each Member State.

These two points are of little relevance in countries in which the registration functions are carried out by a specialised, separate body. For instance, in Spain this body also has a special standing within the Public Administration. Both the Ministry of Justice and the General Directorate for Registries and Notaries are funded from the State Budget and not from charges for this type of service. Although it is true that the Public Administration is receiving increasing benefits from the Registries, the volume of such benefits is insignificant in comparison with those obtained in other countries. In some of these, most of the expenses of the Ministry of Justice or equivalent—even including prison expenses—are paid for from registration fees (although this refers to fees for all types of registers, not just those of a mercantile nature).

5.2. Types of indirect cost and reasonable allocation criteria

Indirect costs arise because a large number of production resources are used for carrying out a number of services, in such a way that the connections between the services and the costs are not apparent. When studying the costs it is therefore necessary to find which cost drivers are most appropriate in each case with a view to allocating these costs to the various services, calculating the unit cost of such services and finally pricing them.

We shall distinguish between three main types of indirect cost that give rise to different problems. First, costs associated with the use of highly-qualified professionals which are especially difficult to allocate to specific services because their work is related to attributes of an intangible nature that are difficult to evaluate. These basically consist of human capital services involving previously-acquired knowledge and/or previously set-up quality safeguards. Second, costs that are common to several registration offices give rise to two allocation problems with respect to efficiency in the use of resources and pricing. First, such expenses should be shared out amongst all the registries in the network according to the degree to

which they generate long-term changes in the volume of expenses incurred by the central unit. (This subject falls outside the scope of the present study although it has been covered briefly in Section 2.4.). Second, such expenses need to be taken into account when fixing the final prices to be charged to the user. In order for such prices to fulfil their economic function and to respect the terms of Community jurisprudence, this consideration needs to be made in terms of the capacity of the different services to alter the volume of expenses of the central unit. This would be very difficult to estimate, however, without using costly techniques that anyway are not very reliable. Third, processing of other indirect costs is also complex but, since the sums involved are smaller, this will not be dealt with in detail. For larger registration offices, they include the working hours of the staff and even Registrars who are often allocated on an annual rota scheme, that carry out tasks for the administration of the Registry itself. (Some Mercantile Registries are so large as to be similar in size and organisational complexity to medium-sized companies.) There is also a whole range of other expenses, including computers (a fast-growing item both for investments in hardware and software and for maintenance and security), the purchase of official books, electricity consumption, office and warehouse rental, safety and cleaning, communications and those office supplies that cannot be charged direct.

5.3. Allocation of costs linked to the use of highly-qualified staff

The main indirect cost in registration activities is that related to the use of highly-qualified human resources. Administrative staff and officials are usually allocated to certain services and thus acquire a high degree of specialisation. But this is not the case with the Registrars themselves, the professionals in charge of the two crucial steps in the process—qualification prior to registration and certification of the Registry's contents. These usually carry out both functions for all types of document within the scope of one Registry. Whatever the degree of specialisation, the essential problem with this type of cost is not so much how to allocate them to different services (company formation, capital increases, proxies, etc.) as to allocate them, within each service, in terms of cost drivers.

In principle, the task seems much easier for specialised resources because allocation amongst the different services is determined by the specialisation. On the other hand, when professionals supervise different products, their relative dedication to each of them has to be measured. However, in practice, the real difficulty is similar with and without specialisation because the heterogeneity amongst different services of a single type (between two company formations, for example) means that allocation is meaningless—from both the economic point of view and that of jurisprudence—unless account is taken of the differences between products. These, although they may be of the same legal type, are often heterogeneous in terms of the real costs they generate and should therefore be charged at different rates.

It is thus essential to identify the cost drivers of each service, so that the price system resulting from the allocation of the joint costs will meet the legal requirements derived from the sentence which, in this respect, will tally with conditions of economic efficiency. By way of clarification, some of these cost drivers may be mentioned. The *amount* of the transactions covered by the documents is closely related to the liability taken on by the Registry, irrespective of who is the liable party—the State or the professional. Other things being equal, liability increases in direct proportion to the amount. The *complexity* of the transactions determines that the processes of qualification and certification will be much slower and more risky. The complexity in turn is linked to factors with a highly variable degree of observability. Some such are the presence of facts, persons or circumstances making it necessary to consider and subsequently study *foreign law*; intervention by *regulatory* bodies for the examination of the transactions proposed by certain entities (companies quoted on the stock exchange, financial intermediaries) and whose approval must be checked and evaluated by the Registrar; the *number of parties* involved in the transaction, and the degree to which the parties have chosen to include *explicit* contractual conditions distinct from those established by law when the latter are not mandatory. (For example, the inclusion of agreements to pool voting rights and in general limitations on the transmission of shares give rise to heavy costs.) If other conditions were the same, this last factor could be roughly estimated according to the length of the document to be registered. The degree of *urgency* required in the processing of the document. This obviously makes qualification more difficult, requires the use of extra resources and means that routine procedures cannot be taken advantage of. The *standardisation of documents*, on the other hand, makes processing uniform and leads to advantages because of the specialisation of resources and the development of routines which allow less well-qualified workers and mechanical means to carry out tasks which otherwise would require more qualified staff. These lead to marked reductions in costs without meanwhile affecting quality. If the document is a *new* legal document, this generally means that more resources are required to qualify it. The newness usually goes together with a poorly-defined legal situation and this makes qualification more costly in that the Registrar takes on a greater liability. The *accumulated knowledge* in the Registry on the legal situation of the parties to a transaction. This cost driver is of undoubted importance and price formulae should take it into account. Obviously, special care should be taken that the resulting differences in price are linked to real differences in cost. Otherwise, barriers could be placed by artificially favouring those parties having greater Registry activity, which would usually be the local companies.

In summary, three general comments should be made on the above cost drivers. Firstly, they do not only affect the cost of the most highly-qualified staff but also other cost categories. For example, urgency gives rise to additional costs of all types, as does complexity. The fact that we have covered them dealing only with the cost of human capital is only because of the greater relative importance of the latter. Secondly, the importance of these cost drivers depends to a great extent on

the definition of the product produced by each type of registration system. It is true that complexity, for example, tends to increase costs in all cases. However, this increase may be minimal in administrative registration systems because all it involves is the processing and custody of a larger number of documents. The opposite is the case in systems in charge of controlling the legality of the documents registered and of certifying the content of such documents. Thirdly, the observability and, therefore, the cost of measuring the various cost drivers is very variable. Attention should be paid to the possibility of correlation existing between them so that those that are most easily observable can be used without leading to very serious errors of estimation. This is the basis of the statistical method for cost assignment that was covered under Section 4.2.

5.4. Cost proportional to amounts in Community jurisprudence

The analysis to which we have just submitted potential cost drivers shows how both the value of the guarantee provided by the Registry and, partly as a result of this, the time taken to qualify or certify the documents increases with the number of operations to be carried out for documents to be registered or certified. In addition, these two direct causes are reinforced by the highly probable possibility that there is a high degree of correlation between the amount and the complexity involved. Finally, also to be added is the fact that the use of the amount as the basis for allocating costs and calculating prices is a low-cost solution because it is an easy variable to measure and verify.

In view of these considerations, the wording of the Fantask sentence seems unfortunate with respect to the possibility that prices may be variable and unlimited with respect to the amount of the transactions covered in the document for registration. The sentence states the following in its point 31: “Charges with no upper limit which increase directly in proportion to the nominal value of the capital raised cannot, by their very nature, amount to duties paid by way of fees or dues within the meaning of the Directive. Even if there may be a link *in some cases* between the complexity of a registration and the amount of capital raised, the amount of such charges will *generally* bear no relation to the costs actually incurred by the authority on the registration formalities” (emphasis added). The sentence is incorrectly worded on this matter because, if taken literally, it seems to go against common sense and economic reasoning. More seriously, it also goes against systematic interpretation of the sentence itself. It therefore seems reasonable to assume that the above wording of point 31 is applicable literally only to registration systems in which it is not possible to show the existence of a causal connection between amount and cost. The philosophy of the sentence itself seems to support this interpretation which is summarised clearly in the conclusion which states that prices “must be calculated solely on the basis of the cost of the formalities in question.”

5.5. *The nature of liability as a real cost*

Since the matter of whether or not costs can be charged according to the amount depends to a great extent on the liability involved, the economic nature of such liability as a real cost of the services must therefore be clarified.

Civil liability basically amounts to the fact that the Registry takes on the financial consequences of its errors. There are various systems. In all the countries of the European Union, except Spain, this liability is taken on to a greater or lesser extent, and in very varying degrees, by the State. In Spain, it is taken on by the Registrar in person, as discussed below. And the risk involved in the liability can be insured with a third party or the State, or the Registrar can self-insure, that is, he can take on the risk himself. There is also a variety of hybrid solutions.

Whatever the formula adopted, the liability has one special characteristic of great interest for the objective of allocating costs to services in a sensible way. For other costs, there is real *consumption* of resources such as paper, hours of work or electricity. But with liability, in principle there is just a *transfer* of resources over time—the customer receives, together with the registration service, a guarantee that, if certain contingencies arise in the future, he will receive economic compensation. So what he is really acquiring is an insurance together with the service. This approach to the problem demonstrates that it is wrong to exclude the cost of the guarantee when calculating the price as this would amount to pricing insurance policies at zero.

A similar consideration should be behind the allocation of the cost of the guarantee amongst the different services. This should be done according to the risk being guaranteed. As always, the relevant cost drivers should be taken into account and, in this case, these are *risk* factors. They include above all the *amount* of the transactions, for which reason it is advisable to use the amount as one of the bases for reference when allocating costs and calculating prices. In addition, to meet the requirements of the sentence with respect to the relation between costs and prices, it is appropriate for this basis of calculation to be considered without any upper limit—even if so doing contravenes the literal interpretation of point 31 of the sentence quoted above. Otherwise, if prices that are unrelated to the amount are applied and therefore, to some extent, they are also unrelated to the risk, then services that involve greater risks would be subsidising those of lesser risk. In this case, transfers of wealth would be generated as well as inefficiency in the consumption of services and the bearing of risks.

6. Pricing decisions

6.1. *Fixed and variable costs with measurable magnitudes*

Point 29 of the sentence covered above means that different prices have to be set for each type of service when provision of such services involves different costs, but

also for each specific service when there are measurable characteristics that can explain the cost generated in providing it. We should therefore apply more widely the argument given in the previous section concerning the use of the amount as the basis for allocation. The reality of many services is that they present two types of cost—a fixed cost that is determined by the type of service in question and that is completely independent of any quantitative or qualitative characteristic, and a variable cost which depends on one or usually several of these characteristics. For example, it would seem reasonable to suppose that the cost of a proxy has a fixed element which results from the fact that its storage—both in a computer medium and in books—and the cost generated by postage are fully determined by the type of document. However, a large number of other dimensions—both quantitative (such as the amount involved) and qualitative (such as the restrictions placed on the action of proxy holders)—may lead to widely varying costs for the Registry. To the extent that the technological reality of services, their *cost function*, has this property, the best way of allocating these costs and therefore of establishing the price is a mixed formula whereby both a fixed and a variable cost are included.

6.2. *The implicit nature of capital costs*

We saw in the second section how, in the world of business, cost-based prices are set by adding to the estimate of the long-term marginal cost of the product the expected profit or a charge for the opportunity cost of the capital used. Several mentions have already been made of the allocation of those costs which, depending on the organisational and accounting structure of the registration system, may arise in the form of profit or expenditure (rental, depreciation, payment of human capital, etc.). We are not now going to reconsider these or other specific costs, but our aim is just to clarify the analysis in order to warn of the danger of under-estimating the costs of capital when these are implicit. This occurs mainly in two cases—the opportunity cost of the capital invested by the Public Administrations, and the remuneration of human capital with quasi-rents.

In order to understand the inclusion of this concept of cost, it is essential to understand that profit is only the form taken for the remuneration of certain production factors within certain types of organisation. The resources that are most widely paid for with profits are usually capital resources, both tangible (buildings, equipment, etc.) and intangible (such as the goodwill of a company). However, labour is also often remunerated in this way, not just in co-operatives but also in many professional activities in which the so-called ‘human capital’ (basically, training and knowledge) may also be remunerated with profits.

This dependence on the type of organisation means that profit only appears explicitly as such in those types in which the provider or providers of capital resources receive a residual remuneration, as with individual entrepreneurs or the partners in a company. On the other hand, in the case of government departments or non-profit organisations, remuneration of these resources is generally implicit.

The condition that fees should not be in excess of the cost that is mentioned in several points of the Fantask sentence must be understood in the taxation context in which it was passed—no profits should go to the Member States. The price does not have to be below the average cost, but the latter should include the *normal* profit of the Registry. This may include any *accounting* profit and must include the opportunity cost of the capital. ('Normal' is here used in the economic sense, as the competitive remuneration of capital resources.)

Participation in profits by the staff, for example, is a special characteristic of the Spanish Registries. This participation usually takes the form of a percentage of the net income after expenses and constitutes the payment not only of the Registrar (who, in line with his greater human capital and the greater risk he takes on, receives a larger proportion) but for all the staff. Remuneration of the Registrar includes the following concepts—labour (in the neo-classic economic sense, as a standard work effort), the human capital that has been accumulated through prior investments in training, the considerable financial costs incurred by the Registrar as a result of deferment of the income earned through his actions as an agent in the administration and settlement of several taxes, the economic risk resulting from the remote but real possibility that the income of the registry will not cover its expenditure especially in the early years, deferred remuneration in the form of quasi-rents in compensation for the non-existent or minimum payment received both during the training stage and in the early years of practice, the quasi-rents that might constitute economic *rents* as a result of imperfections in the *ex ante* competition for future quasi-rents.²⁶ Registry staff also share in the revenue, receiving different shares according to their category and length of service. The only exception are the less qualified staff who usually earn fixed wages.

6.3. *The issue of externalities*

The Fantask sentence does not mention the external effects of the registration activity but it would be desirable from the social point of view for Registry prices to try to consider them. Otherwise, the private decisions of economic agents aiming to optimise their private well-being would take the level of consumption of services above or below the socially optimum level (according to whether the externality is negative or positive).

The existence of externalities in certain services may sometimes justify pricing which generates what at first sight seem to be subsidies from one service to another. This argument can be clarified by mentioning two very different examples with respect to the positive or negative nature of the corresponding externality. On the one hand, setting a relatively low price for registration of annual accounts could be justified by the existence of positive externalities. The latter essentially mean that companies do not enjoy all the benefits of registering their accounts but that a large part of these revert to third parties or to society as a whole. This at

least is the only reasoning that can justify the compulsory nature of registering such accounts. On the other hand, prices that are *apparently* higher than the cost may serve to discourage activities with a high social cost such as the formation of companies to carry out activities that go against the common good, such as tax evasion, or to get round regulations. This argument could be used to justify the charging of fixed fees that are much higher than the cost for each company formation and for each operating period (as in Italy, at least before the Ponente Carni sentence) and that are completely independent of the amount of capital involved in the transaction.

If externalities are treated in this way, a great deal of discretion has to be used as they are very difficult to estimate. However, it is also true that many of the registration obligations of a mercantile nature can basically be justified precisely because they generate positive externalities. Furthermore, recent developments reinforce the importance of externalities. If the role of registration information was originally to produce a public good of use to the registered entities, there has been a certain change whereby the beneficial effects for third parties have gained in importance, at least with respect to the intention or justification of the regulations for company registration that have been introduced recently, such as annual accounts. The reality of such externalities, however, is debatable.²⁷

6.4. Detail and updating of prices

The Fantask sentence recognises that the price lists should be incomplete-to the extent that they imperfectly reflect current costs incurred in providing each of the various services-with respect to a number of conceptual and time dimensions. On the one hand, it allows for minor services to be carried out free of charge because, according to its point 28, “for the reasons given by the Advocate General in paragraphs 37 and 45 of his Opinion, a Member State may impose charges for major transactions only and pass on in those charges the costs of minor services performed without charge.” On the other hand, under its point 32, it tolerates the use of average costs for fixing lump sum prices, because “the amount of duties paid by way of fees or dues does not necessarily have to vary in accordance with the costs actually incurred by the authority in effecting each registration and a Member State is entitled to prescribe in advance, on the basis of the projected average registration costs, standard charges for carrying out registration formalities in relation to capital companies.” Finally, with respect to the review of fees over time, it goes on in the same point to recognise that “furthermore, there is nothing to prevent those charges from being set for an indefinite period, provided that the Member State checks at regular intervals, for example once a year, that they continue not to exceed the registration costs.”

The content of the sentence on these matters is in line with economic reasoning. For example, one reason for including the costs of minor operations within

operations for which there is an explicit charge is the increase in the costs of the actual administration of the price system, as prices become more and more detailed. The economic theory of property rights recognises this when it explains how, even in private transactions, many valuable attributes of exchanges are delivered free of charge (they are placed voluntarily by the parties in the “public domain” of the contract) because, if there were a charge for them, the actual administration of the charges would be prohibitively expensive.²⁸ This is the case, in a famous example, of the use made of restaurant space by diners—the price they pay is irrespective of the time spent in the establishment. This lack of an explicit charge leads to inefficient use of resources (for example, diners spend too long at the table after finishing their meals) but such inefficiency is less of a burden than the actual cost of a more detailed price system which would require estimating prices, measuring usage and administering of collection of the explicit charge for the corresponding attribute of the product or service.

The same reasoning explains the content of the legal dictate with respect to flat-rate prices and periodic reviewing of prices. In both cases, only the high costs involved in more detailed measurement can justify the inefficiency caused by the lack of detail. Moreover, this argument can even be applied to all costs, as it is in Section 6.5 below, because of the minor importance of these fees in relation to the differences existing between the countries of the European Union on the matter of capital taxation.

6.5. The argument for subsidiarity

The main purpose of this study is to examine the consequences of a judicial sentence which has resulted in jurisprudence, and not to examine the degree to which it ties in or not with the intentions of the legislation within which it was passed. However, the following section includes some comments and ideas for a more thorough study. First, the harmonisation was perhaps carried out at the time not because of its importance but precisely because of its unimportance. Second, the consequences of the standardisation and the lack of it are perhaps insignificant in the context of taxing on revenue from capital. Third, as a result, both the Community legislators and the Court may be wrong in judging that the subject of the Directive and the matter in conflict are relevant for achieving the purposes of the Directive itself.

The objective of the Community legislation on this matter was to harmonise national legislations in order to reduce discrimination, double taxation and obstacles to the free movement of capital in the internal market. For this purpose, the directives harmonised the capital duty and abolished stamp duty. As far as capital duty is concerned, harmonisation is complete since the Directives define: the Member State in which transactions are taxable, the person liable to pay tax, taxable transactions, the basis of assessment, the rate of the duty which may not exceed one per cent, and the conditions for exemption. In addition, the Directives

abolish all other taxes on the raising of capital as well as stamp duty on securities representing capital, shares and bonds.

As a result of the Fantask sentence, this harmonising spirit goes so far that it affects rights which are accessory to the tax on capital contributions, because the Court has rejected the claim made by the Danish Government that the Directive had not harmonised the legislation of the Member States on the matter of 'duties paid by way of fees or dues'.

According to a study of the situation of the single market carried out in 1996 by the European Commission itself, there are still very serious tax problems in the area of free movement of capital. However, these problems are not related to registration charges but to other matters such as the treatment of non-residents, withholding taxes on capital income, non-recoverability of tax credits, taxes on transactions within groups of companies, discrimination of permanent establishments compared to domestic companies, the subsistence of double taxation phenomena, etc.²⁹

Consideration of the failure of this harmonisation effort so many years after promulgation of the Directive 69/335/EEC leads us to think that the rapid adoption of this regulation resulted more from the insignificance of taxes on contributions of capital to companies have on for the tax revenue of the Member States than from its relevance for the construction of the common market. This hypothesis ties in with the discredit of this type of special indirect taxes which offer little monetary compensation in spite of their high administration cost.

There are at least signs that the harmonisation of the tax, which in fact was anachronistic and of little financial significance, might have been carried out because agreement was relatively easy to reach among the Member States. In addition, it does not seem to provide substantial benefits in terms of real harmonisation. In support of this argument, account must be taken of the following circumstances in the two cases in litigation (*Ponente Carni* and *Fantask*). Firstly, there were no differences for reasons of nationality in the origin of the capital or the persons involved. Secondly, there was no advantage in moving capital towards the affected State such as unjustifiably low duties (below cost). Lastly, there was hardly any double taxation. On this basis, which questions the real achievements of the sentence in terms of harmonisation, the rigour with which the Court has applied the Directive is debatable. The sentence might amount only to a second step in a sequence of trivialities, leading to changes being adopted that are in fact more cosmetic than real.

The rigour of the sentence would certainly be better justified if its enforcement involved no costs. Harmonisation gives rise to at least two large costs, however. On the one hand, the explicit cost of adapting those systems not complying with the sentence and, on the other, an implicit cost that takes the form of a loss of potential organisational possibilities. In general, nobody knows for sure what are the efficient mechanisms for financing public expenditure. Also, as we have seen in the third section, different types of registration system may require different price

formulae. The differences in the payment systems do not affect only the level of services provided but also the efficiency of the control carried out by users of the bodies supplying the services. The situation is therefore of such a type as to require a certain amount of organisational flexibility, within which each State could look for the solution which would best respond to its particular characteristics.

In summary, there is reason to fear that the sentence comes dangerously close to a point at which excessively strict compliance with the Directive would give rise to doubtful benefits while inevitably generating costs.

Conclusions

The Fantask sentence subjects prices or duties to be charged for company registration formalities to a series of conditions whereby the setting of such prices or duties should be based on the cost of such formalities. The sentence, however, allows for the inclusion of the part of the overheads that can be allocated to services as well as the costs generated by minor transactions that are carried out free of charge. It also allows for duties to be fixed at a flat rate and for their amounts to be established for an indefinite period, provided that regular checks are carried out to ensure that they do not exceed the average cost of the services.

These conditions should be interpreted taking into account the differences existing in the nature of the services provided by the different registration systems and the organisational structures adopted for them by the Member States. There are three especially relevant differences in this context. Firstly, when the services include intangible attributes of value, such as the guarantee provided by the civil liability of the State, or the body or person in charge of the registration services, the cost of this guarantee should be included in the price. Second, when the services are provided by a network of registries that is co-ordinated and supervised by a central body, the costs generated by the latter have to be charged in the prices of the services. Third, the capital cost of the whole system of registries has to be allocated through prices among the various services, bearing in mind that, whatever the organisational structure of the system, this cost can take different forms making it more or less visible.

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Notes

1. Council Directive 69/335/EEC of 17 July 1969 relating to the approximation of the laws of the Member States concerning indirect taxes on the raising of capital (OJ L 249, 3 October 1969; EE 09/01, p. 22), amended by the following Council Directives: 73/79/EEC of 9 April 1973, Council Directive 74/553/EEC of 7 November 1974 and Council Directive 85/303/EEC of 10 June 1985.
2. Sentence dated 27 June 1979, Conradsen, 161/78, Rec. p. 2221, section 11.
3. See the Sentence dated 2 February 1988, Dansk Sparinvest, 36/86, Rec. p. 409, section 9.
4. Sentence dated 20 April 1993, Ponente Carni and Cispadana Costruzioni (Joined Cases C-71/91 and C-178/91, Rec. p. I-1915).
5. Its official name since Law no. 851 dated 23 December 1987 (Lovtidende A 1987, p. 3229) is Erhvervs-og Selskabsstyrelsen (Department of Trade and Companies).
6. Point 19 of the Fantask sentence (sentence from the Court of Justice dated 2 December 1997. Fantask A/S e.a. against Industriministeriet (Erhvervsministeriet). Petition for preliminary ruling: Østre Landsret—Denmark. Directive 69/335 EEC—Registration charges on companies—Procedural time-limits under national law. Matter C-188/95). A summary of the sentence can be seen in *Activities of the Higher Court of Justice and the Examining Court of the European Communities*, no. 33/97, 1–5 December 1997.
7. See, for instance, Kaplan and Atkinson (1989, p. 181).
8. See Kaplan and Atkinson (1989, pp. 182–183).
9. See Haynes (1964, pp. 315–324).
10. See Lanzilotti (1958, pp. 921–940).
11. The microeconomic recipe of allocating fixed costs according to the inverse of elasticities (Ramsey Pricing) is not of much use either both because of its implementation reasons (considering the information cost it incurs and the difficulties to avoid arbitrage) and its negative impact on competition.
12. See, amongst many works on the subject, the following: Cooper and Kaplan (1987), Johnson and Kaplan (1987), Staubus (1988), Morrow (1992), Lewis (1995) and Kaplan and Cooper (1998). For an assessment, see the critical comments by Zimmerman (1997, pp. 519–528).
13. See the pioneering works by Miller and Vollman (1985, pp. 142–150) and Cooper and Kaplan (1987).
14. This term is used to refer to the Register's task of approving documents as valid for registration, after verifying their legality, an essential task within the registration systems of most European countries.
15. This kind of legal enforcement involves imposing a liability on a third party—the gatekeeper—who, because of his other functions, in this case the administrative side of registration, is well placed for refusing to co-operate and, by doing so, he prevents or hinders unlawful conduct. This figure of the gatekeeper as a guardian of the law was developed by Kraakman (1986). This type of contribution by professionals towards the enforcement of law *ex ante* can be justified by the deficiencies in the normal strategy for the enforcement of law *ex post* which is based on repression and consequent dissuasion and prevention.
16. We have covered this matter from a general approach in Arruñada (1998, pp. 119–123) and, for the notarial case, in Arruñada (1995, pp. 32–33; 1996, p. 10).
17. For an economic analysis of the Latin model of notary public, with special reference to the Spanish system which is very similar to the German *nunotariat*, see Arruñada (1995 and 1996).
18. See, for example, Posner (1995) for an argument along these lines.
19. For an introduction to the problems involved in applying modern management techniques in services companies, see Fitzsimmons and Sullivan (1982).
20. For a development of these ideas, see Arruñada (1998, pp. 116–119).
21. See, amongst many others, Fama and Jensen (1983a, pp. 315–317; 1983b, pp. 334–337), Gilson and Mnookin (1985), and Carr and Mathewson (1990). A public organisation with these same properties in the English-speaking world is that of the federal judges in the United States, whose remuneration

- is deferred by means of a generous pension. On this subject, see Posner (1995, pp. 109–144). The case of financial auditors is studied in Arruñada (1999).
22. There has been a long tradition of studying this mechanism in economics as the first references take us back to Adam Smith (1776), although modern treatment of these incentives started with Becker and Stigler (1974). Studies on how expectations of obtaining a flow of quasi-rents in the future automatically lead producers to maintain the quality of their products or services have been carried out by Klein and Leffler (1981), Williamson (1983) and Shapiro (1983), and have been applied in a labour environment in models for the use of remuneration for length of service to motivate performance, thus avoiding ‘moral hazard’. These started with the work by Lazear (1979) and, more recently, in the literature on ‘efficient wages’ that started with Shapiro and Stiglitz (1984).
 23. See Arruñada (1998, pp 131–132).
 24. The original Danish term seems to have been wrongly translated and there are discrepancies in the different versions. In the official English-language version, it was translated as “In such a case the assessment of the cost can only be *on a flat-rate basis*.” Apparently a more correct translation would have been “In such a case the costs can only be *assessed* as a certain amount” (emphasis added).
 25. For a basic description of both methods, see Kaplan and Atkinson (1989, pp. 93–177), or any other modern Managerial Accounting textbook.
 26. Such rents improve the efficiency of the system, as shown by Fisher (1985), by avoiding complete dissipation of the type analysed by Posner (1975) of the future quasi-rents which are necessary to ensure quality. For a more thorough analysis, see Arruñada (1995, pp. 98–110; 1996, pp. 23–26).
 27. On this subject, see Arruñada (1990, pp. 293–320).
 28. See, for example, Barzel (1989).
 29. See especially the sections “Free movement of capital,” “Reasons for obstacles to free movement” and “Direct Taxation” in the preparatory document for the report on the situation of the internal market that was presented by the Commission to the European Parliament and the Council, based on 38 specific enquiries and a thorough survey of business opinions (Commission of the European Communities, 1996).

References

- Arruñada, B. (1990). *Control y regulación de la sociedad anónima*, Madrid: Alianza.
- Arruñada, B. (1995). *Análisis económico del notariado*, Madrid: CGN.
- Arruñada, B. (1996). “The Economics of Notaries.” *European Journal of Law and Economics*. 3(1), 5–37.
- Arruñada, B. (1998). “Gestaltung und Regulierung von Freiberuflichen Dienstleistungen: Ein Allgemeiner Handlungsleifaden.” In H. Herrmann and J. Backhaus (eds.), *Staatlich Gebundene Freiberufe im Wandel: Rechtliche und Ökonomische Aspekte aus Wissenschaft und Praxis*, Baden-Baden: Nomos Verlagsgesellschaft. 19, 115–135.
- Arruñada, B. (1999). *The Economics of Auditing: Quality, Private Incentives and Regulation*, Dordrecht and Boston: Kluwer.
- Barzel, Y. (1989). *Economic Analysis of Property Rights*, Cambridge: Cambridge University Press.
- Becker, G. S. & Stigler, G. J. (1974). “Law Enforcement, Malfeasance, and Compensation of Enforcers.” *Journal of Legal Studies*. 3 (January), 1–18.
- Carr, J. L. & Mathewson, G. F. (1990). “The Economics of Law Firms: A Study in the Legal Organization of the Firm.” *Journal of Law and Economics*. 33 (October), 307–330.
- Commission of the European Communities (16 December 1996). “The 1996 Single Market Review.” *Commission Staff Working Paper*, SEC (96) 2378, Brussels.
- Cooper, R. & Kaplan, R. S. (1987). “How Cost Accounting Systematically Distorts Product Costs.” In W. H. Bruns and R. S. Kaplan (eds.), *Accounting & Management: Field Study Perspectives*. Boston: Harvard Business School Press, Chap. 8.

- Fama, E. F. & Jensen, M. C. (1983a). "Separation of Ownership and Control." *Journal of Law and Economics*. 26 (June), 301–325.
- Fama, E. F. & Jensen, M. C. (1983b). "Agency Problems and Residual Claims." *Journal of Law and Economics*. 26 (June), 327–349.
- Fisher, F. M. (1985). "The Social Cost of Monopoly and Regulation: Posner Reconsidered." *Journal of Political Economy*. 93(2), 410–416.
- Fitzsimmons, J. A. & Sullivan, R. S. (1982). *Service Operations Management*, New York: McGraw-Hill.
- Gilson, R. J. & Mnookin, R. H. (1985). "Sharing Among the Human Capitalists: An Economic Inquiry into the Corporate Law Firm and How Partners Split Profits." *Stanford Law Review*. 37 (January), 313–392.
- Haynes, W. W. (1964). "Pricing Practices in Small Firms." *Southern Economic Journal*. (April), 315–324.
- Horngren, C. T. (1977). *Cost Accounting: A Managerial Emphasis*, 5th ed., Englewood Cliffs, NJ: Prentice Hall, 1982.
- Johnson, H. T. & Kaplan, R. S. (1987). *Relevance Lost: The Rise and Fall of Management Accounting*, Boston, MA: Harvard Business School Press.
- Kaplan, R. S. & Atkinson, A. A. (1989). *Advanced Management Accounting*, 2nd ed., Englewood Cliffs, NJ: Prentice-Hall.
- Kaplan, R. S. & Cooper, R. (1998). *Cost & Effect: Using Integrated Cost Systems to Drive Profitability and Performance*, Boston: Harvard Business School Press.
- Klein, B. & Leffler, K. (1981). "The Role of Market Forces in Assuring Contractual Performance." *Journal of Political Economy*. 89 (August), 615–641.
- Kraakman, R. H. (1986). "Gatekeepers: The Anatomy of a Third-Party Enforcement Strategy." *Journal of Law, Economics and Organization*. 2, 53–105.
- Lanzilotti, R. F. (1958). "Pricing Objectives in Large Corporations." *American Economic Review*. (December), 921–940.
- Lazear, E. P. (1979). "Why Is There Mandatory Retirement?" *Journal of Political Economy*. 87 (December), 1261–1284.
- Lewis, R. J. (1995). *Activity-Based Models for Cost Management Systems*, Westport, Conn: Quorum Books.
- Miller, J. & Vollman, T. (1985). "The Hidden Factory." *Harvard Business Review*. (September–October), 142–150.
- Morrow, M. (1992). *Activity Based Management: New Approaches to Measuring Performance and Managing Costs*, Cambridge: Woodhead-Faulkner.
- Posner, R. A. (1975). "The Social Costs of Monopoly and Regulation." *Journal of Political Economy*. 83(4), 807–827.
- Posner, R. A. (1995). "What Do Judges Maximize." *Overcoming Law*, Cambridge, MA: Harvard University Press.
- Shapiro, C. (1983). "Premiums for High Quality Products as Returns to Reputations." *Quarterly Journal of Economics*. 98 (November), 659–679.
- Shapiro, C. & Stiglitz, J. E. (1984). "Equilibrium Unemployment as a Worker Discipline Device." *American Economic Review*. 74 (June), 433–444.
- Smith, A. (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations*, Indianapolis: Oxford University Press/Liberty Press, 1981 (1st ed., 1776).
- Staubus, G. J. (1988). *Activity Costing for Decisions: Cost Accounting in the Decision Usefulness Framework*, New York: Garland.
- Williamson, O. E. (1983). "Credible Commitments: Using Hostages to Support Exchange." *American Economic Review*. 73, 519–540.
- Zimmerman, J. L. (1997). *Accounting for Decision Making and Control*, Chicago: Irwin.