

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Arocena, Pablo

Working Paper

Privatisation Policy in Spain: Stuck Between Liberalisation and the Protection of Nationals' Interests

CESifo Working Paper, No. 1187

Provided in Cooperation with:

Ifo Institute - Leibniz Institute for Economic Research at the University of Munich

Suggested Citation: Arocena, Pablo (2004): Privatisation Policy in Spain: Stuck Between Liberalisation and the Protection of Nationals' Interests, CESifo Working Paper, No. 1187, Center for Economic Studies and ifo Institute (CESifo), Munich

This Version is available at: https://hdl.handle.net/10419/76475

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



PRIVATISATION POLICY IN SPAIN: STUCK BETWEEN LIBERALISATION AND THE PROTECTION OF NATIONALS' INTERESTS

PABLO AROCENA

CESIFO WORKING PAPER NO. 1187 CATEGORY 9: INDUSTRIAL ORGANISATION MAY 2004

PRESENTED AT CESIFO CONFERENCE ON PRIVATISATION EXPERIENCES IN THE EU NOVEMBER 2003

An electronic version of the paper may be downloaded

• from the SSRN website: http://SSRN.com/abstract=546066

• from the CESifo website: www.CESifo.de

PRIVATISATION POLICY IN SPAIN: STUCK BETWEEN LIBERALISATION AND THE PROTECTION OF NATIONALS' INTERESTS

Abstract

This paper carries out an overview of the recent history of privatisation in Spain. At this point, the paper focuses on the analysis of the economic, financial and political objectives pursued by successive Spanish Administrations. It is argued that privatisation policy has been inconsistent with the liberalising measures, reflecting the conflict between the advocacy of market liberalisation and the protection of nationals' interests. Likewise, we review the still very scarce empirical evidence on the economic consequences of privatisation on firms' and markets' performance, with a particular emphasis on the analysis of privatisation and liberalisation in the utilities sectors.

JEL classification: L33, 150, L97.

Keywords: privatisation, liberalisation, Spain, utilities.

Pablo Arocena
Universidad Pública de Navarra
Departamento de Gestión de Empresas
Campus de Arrosadia
31006 Pamplona
Spain
pablo@unavarra.es

Introduction

The privatisation of public firms started to be significant in Spain from mid 80s onwards and has been conducted under two different Administrations: the Socialist Administration (1982-1996) and the Conservative Administration (1996-2004). Privatisation was especially intense throughout the 1996-2000 period, when the large utilities and industrial groups, which rank at the top of the largest Spanish firms, were totally privatised. As a result, the participation of the public enterprise sector in the GDP has been reduced from 3% in 1995 to 1% in 2002. According to OECD (2002) data, Spain's privatisation programme has raised 38,401 USD million between 1990 and 2001, which ranks Spain on the fourth position among the European privatising countries.

In this chapter we carry out an overview of the recent history of privatisation in Spain. At this point, the paper is focused on the analysis of the economic, financial and political objectives that the successive Spanish governments actually pursued. Likewise, we review the still very scarce empirical evidence on the economic consequences of privatisation on firms' and markets' performance, with a particular emphasis on the analysis of privatisation and liberalisation in the utilities sectors.

2. The privatisation under the Socialist Administration (1983-1996)

In Spain, the international economic recession of the 70s coincided with the start of the transition towards democracy after the Franco's dead in 1975. Hence, the rationale of the government's intervention in the public enterprise sector -hereafter PES- over the period 1977-82 was marked by the industrial crisis and social instability.

The combination of the economic and the political turmoil led to the successive governments of the democratic transition to use the National Institute of Industry (INI), created during the Franco's dictatorship in 1941, as an instrument to keep the employment and income distribution. As García-Fernández (1990) argues, it was a time of political 'solutions' for business crisis. The nationalisation of a large number of loss-making companies led to the creation of a huge unprofitable PES suffering from overcapacity, overstaffing and chronic financial needs. The INI was configured as a 'hospital' of firms with the most unwelcome prospects.

The victory of the Socialist Workers Party (hereafter PSOE) in the general elections of 1982 initiated a period of successive Social-Democratic governments presided over by Felipe González. The first socialist cabinet implemented a set of global reform policies and intense sectoral adjustments. The stated aim of the government's industrial adjustment policy was to adapt the Spanish industry to the changing economic environment that would lead to the integration of Spain in the European Community in 1986. The perspective to join the EC represented a formidable challenge for the Spanish PES, which

was virtually bankrupt. First, it had to deal with the adaptation to the European competition policy, which required the elimination of subsidies and the dismantling of various public monopolies. Second, it implied the opening of the industrial sector to a more competitive environment.

2.1. The rationalisation and reorganisation of the PES

The first measure towards reforming the PES consisted of the introduction of profitability criteria and control mechanisms in the management of public holdings. Simultaneously, the state-owned sector was fully reorganised through a strategy of concentration of business lines around strong companies. This was part of the cabinet's effort to build a set of national champions, capable of reaching leading positions in the world market. Up to then, the Spanish public industrial sector was mostly comprised of small and medium-sized companies by world standards. They lacked the size to compete in the international arenas with other European players and to access new markets and technologies, unable for leading the way for other Spanish business.

Therefore, this was the time of the creation and the strengthening of large Spanish industrial public groups. Thus, the dominant position of the power generator Endesa in the electricity market was reinforced by the ascription of all the state-owned electrical companies. The iron and steel, aluminium and electronic sectors were organised around CSI-Aceralia, Inespal and Inisel respectively, through several mergers and shares' exchanges. In the same way, the oil and gas companies that formed the National Institute of Hydrocarbons were consolidated into a single company, Repsol, which became

the largest Spanish industrial company. Similarly, all state banks were merged into Argentaria to form the third largest banking group.

Parallel to this strategy of concentration, the investment in public companies increased dramatically between 1985-1991. The investment effort concentrated on the telecommunications, transport and energy sectors. At the same time, the utilities sectors -and consequently the three state-owned bigs Repsol, Endesa and Telefonica, were protected from foreign and domestic competitors well after Spain's integration to Europe in 1986. In this respect, the regulation of the energy sectors was clearly pro-industry biased, allowing the companies to keep all the productivity gains and cost reductions and thereby to increase their profitability rates (Arocena *et al*, 2002). The PSOE tried to make clear from the outset that it had no aim at nationalising any of these industrial groups and that they would contribute dividends to the public purse.

2.2 Privatisation

The PSOE had not in advance any privatisation programme after definition of objectives, criteria, sectors, companies selected, methods, guarantees for the process or general calendar. As Bel and Costas (2001) argue, privatisation rather was part of the strategy of rationalisation of the PES, and later on with the cash-rising objective to reduce budget deficit. At the beginning, socialist politicians were even reluctant to use the term privatisation and instead used other words such a disinvestment or denationalisation. As Claudio Aranzadi (1989) Ministry of Industry and Energy 1988-93 and chair of the INI 1982-88,

declared, "the decisions of disinvestment of the INI do not respond to political or ideological reasons, but to criteria of industrial and financial rationality".

2.2.1 The early years: 1985-1992

Firms firstly privatised shared some (or several) of the following features: (i) Small and medium-sized companies that had been nationalised during the transition towards democracy because of social or political reasons. This *reprivatisation* of these companies was then the logic consequence of the relinquished INI's role as 'hospital of firms'. (ii) Companies operating in competitive environments of little relevance in their respective sector. (iii) Companies that could no longer be competitive as PEs because of their lack of size, technological backwardness or insufficient distribution networks. The restructuring of these firms would have involved major investment. Instead, they were sold to foreign groups that would provide technology improvements, synergies and economies of scale. Such were the cases of the car-maker SEAT and the truck-maker Enasa, which were sold to Volkswagen and Iveco respectively. Table 1 lists all firms privatised during this period.

[Table 1 about here]

The bulk of companies were directly sold each to a single buyer after financial restructuring involving outright grants under the context of the *Plan of Restructuring and Reindustralisation*, led by the Royal Decree-Law 8/1983 of 30 November and the Law 27/1984 of 26 July. Under this Plan, the state administered monetary subsidies and compensations to laid-off workers, as well as to support labour relocation or early retirement programs. Comín

(1995) estimates that over the period 1985-1994, the INI raised 1,833 million euros by the sale of publicly-owned companies, but had previously devoted 2,290 million euros to restructuring. Likewise, some non-viable companies with substantial losses were liquidated due to the impossibility to find a buyer.

Finally, as shown in Table 2, between 1986-1990, the government also sold blocks of shares of profitable PEs in the stock market, but with the firm remaining under the state's control. The goal of these partial sales was to obtain cash to finance the capital needs of these firms, and thus avoiding to resort to the National Budget (Aranzadi, 1989; De la Dehesa, 1993).

[Table 2 about here]

2.2.2 The Maastricht Treaty and the State Budget's deficit (1993- March 1996)
In February 1992, the Treaty on European Union was signed at Maastricht. The Program of Convergence of Spain was presented in March of 1992 with the objective was to assure that Spain gain admittance to the third phase of the European Monetary Union. Additionally, the slowdown of the economic activity in 1992 forced the government to adopt a series of urgent budgetary measures through the Royal Decree Law 5/1992 of 21 July. The need to fulfil the convergence criteria and the economic recession required the reduction of the State budget's deficit and the debt, which to a great extent marked the entrusted objectives to the public sector. Hence, from 1992 the sales of packets of shares of very profitable firms were significant (see Table 2). In fact, the income collected from these sequential IPOS accounted for 80% of the total income collected from privatisations under the socialist administration.

The Program of Convergence also meant an important instrument to encourage the liberalisation of some economic sectors. Thus, it assigned the antitrust authority (*Tribunal de Defensa de la Competencia*) the task to elaborate reports on deregulation intended to increase the liberalisation of the Spanish economy. This impulse lead to the approval of deregulating measures in service and transport sectors and to lay the foundations of the liberalisation of energy and telecom sectors. Also, the approval of the Electricity Act in 1994 established the first independent electricity regulator (the National Electricity Commission) and opened the way for liberalising the electricity market.

The government had advocated its interest for maintaining a controlling share in the privatised companies. Besides, the socialist administration used the privatisation programme to create groups of stable shareholders, the so-called 'núcleos duros', with the aim of keeping the control of the privatised firms in Spanish hands. This policy was intended to avoid losing the national sovereignty in sectors considered of strategic interest. To that effect, the Ministry of Industry issued guidelines to encourage the participation of the Spanish financial and industrial groups in the institutional tranches of the IPOs. This policy reinforced the power that financial oligarchy had traditionally in the Spanish economy (Lancaster, 1989; Rodríguez, 2000). Further, this strategy succeed in preventing any of these firms from being taken over by any major international player in these sectors, which arguably restricted capital market pressures to be efficient.

In 1995, the government passed the Law 5/1995 of 23 March, described as the 'legal framework for disposal of publicly-owned holdings in certain companies'. The law provided the government a tool to prevent eventual takeovers in leading privatised companies: the golden share. This veto power was later on used by the conservative government –see next section- to frustrate an attempted acquisition of Telefonica by the Dutch company KPN in 1999. Golden shares are still in force in Telefonica, Endesa, Repsol, Indra and Iberia.

Finally, some months later, the Royal Decree-Law 5/1995 of 16 June dissolved the INI and divided the state holdings into two groups: the State Industrial Agency (AIE) and the State Corporation for Industrial Participations (SEPI). AIE grouped a set of chronically unprofitable companies located in mature sectors subject to plans of industrial restructuring -mining, iron and steel, shipbuilding and military constructions- whereas SEPI was created as the shareholder of the most profitable public firms.

3. The privatisation under the conservative administration (1996-2004).

3.1 The 'Program for the Modernisation of the Public Enterprise Sector'

The model of privatisation changed radically in 1996 following the victory of the right-wing People's Party (PP) in the March elections. Under the new conservative Administration, Spain moved quickly toward privatisation, out of conviction and because it was a readily means for curbing the budget deficit. Thus, the first step of the new cabinet was the approval of the 'Program for the Modernisation of the Public Enterprise Sector', which set up the foundations of the government's privatisation strategy.

The program of privatisation created the Consultative Council on Privatisations (CCP) along with a new state holding company, the State Corporation for Property Participations (SEPPA) to hold the share packages controlled by the Department of Government Property. This new body along with the already existing SEPI and the AIE came to be called "Managing Agents of Privatisation Process". The main function of the CCP consists of reporting on all privatisation issues brought forth by the managing agents. Particularly, it must judge whether each process and proposal of sale complies with the publicity, transparency and open competition principles. Likewise, it is obliged to inform on whichever questions raised by the government or the managing agents during the process of privatisation.

The Program of Privatisation established the reclassification of stateowned companies into four separate groups according to a calendar of privatisation. It set out immediate sale of the most profitable, while sale of the others was considered after they had been made profitable, except in those cases of extreme deficit in which any action to be taken was postponed.

3.2 Full privatisation: the 'crown jewels' on sale

Privatisations carried out since 1996 have been channelled both through strategies of direct sale and public offerings and meant the sale of the largest and most profitable state-owned enterprises. Included here were such 'crown jewels' (a term widely used by the Spanish economic press) as Repsol, Endesa, Telefonica and Tabacalera. These operations accounted for an enormous amount of funds obtained from privatisation in comparison to that of the

previous Administration, as shown in Table 3. Hence, according to SEPI (2003) the State raised a total of 13,222.27 million euros between 1982 and 1996. Between June 1996 and December 2003, SEPI privatised 48 companies and disposed of minority stakes in another 5 companies. These operations generated an income of 29,400 million euros, which were devoted to reduce national debt and according to estimates by Verges (1998), up to 75% of proceeds served to reduce current fiscal deficit.

[Table 3 about here]

This massive placement of the shares of state companies contributed to the strengthening of the Spanish financial markets. Thus, the capitalisation of the stock exchange increased from 189,794 million euros in 1996 to 419,451 million euros in 2002. While the State share in market's total capitalisation declined from 16.64% in 1992 (10.87% in 1996) to 0.21% in 2001, the amount of shares of listed Spanish companies held by households -as a percentage of market capitalization- increased in the same period from 24.44% in 1992 (23.59% in 1996) to 27.96% in 2001.

Though privatisation extended share ownership to many people who had never owned shares before, the culture of a new 'popular capitalism' is far from being solidly founded among the Spanish people. Non-financial assets – mostly real state- still accounts for 80% of the total assets held by Spanish families in 2002. Indeed, the proportion of financial assets has been reduced from 26.13% in 1996 to 20.30% in 2002.

The president of SEPI was clear in November 2000 when announcing in the Spanish Parliament that SEPI was expected to be completely privatised by 2003. However, current privatisation agenda does not include the coal mining group HUNOSA, the shipbuilding group IZAR, the Radio and Television Broadcasting RTVE and the National Railways RENFE, which altogether account for more than 90% of total state subsidies.

3.3 Liberalisation, competition and the role of the European Directives

The PP Administration passed a number of important legislative reforms according to the liberalising principles of the European Directives. Thus, the approval of the Electricity Act at the end of 1997 placed the Spanish power market amongst the most liberalised in Europe, well above the minimum required in the European Directive 96/92EC (see Table 4). The same applies to the approval of Hydrocarbons Law (1998) and the Royal Decree Law of Urgent Measures of Deregulation and Increase of Competition (1999). The pace of market liberalisation introduced by these reforms was faster than the European Directive 98/30/EC concerning the common rules for the internal market of natural gas. The Hydrocarbons Law also created the National Energy Commission as an independent regulator overseeing all energy industries.

[Table 4 about here]

In the telecommunications sector, full liberalisation occurred in 1998 through the approval of Law 12/1997 and Law 11/1998, which are the transposition of the successive amendments of Directive 90/388/EEC with regard to the implementation of full competition in telecommunications

markets. Similarly, the approval of the Law 24/1998, which is the legal transposition of the Postal Directive 97/67/EC, established the gradual liberalisation of the postal services. Though privatisation has not occurred in this sector, since 2002 two private newcomers *-Via Postal* and *Unipost*-compete with the state-owned incumbent *Correos y Telégrafos S.A.* in the incipient liberalised segments of the market, namely urban mail, intercity mail up to 350 grams and direct advertising.

However, liberalising laws were undertaken together with decisions aimed to manage and protect the interest of national incumbents. Thus, some reforms were biased by previous agreements between the government and the companies, as in the electricity sector (Arocena *et al*, 1999). Further, following the privatisation of utilities, the state retained direct control over firm's strategic decisions through 'golden shares' while persons close to the government were appointed as chairmen of privatised firms. Especially renowned cases were those of Telefonica and Endesa. At the same time as a number of independent regulatory bodies were created the Ministry always retained its administrative authority to intervene and to make the last decision in key operations like mergers, ignoring the recommendations of the regulators.

In December 1999 the government passed a controversial law intended to prevent hostile take-overs of Spanish energy companies by foreign companies. The Budget Law 14/2000 included a provision that allowed the Spanish government to limit the voting rights in a Spanish energy utility of any shareholder being a state-controlled foreign company. This policy was shaped

by the government's goal of preserving the Spanish ownership in strategic sectors -e.g. telecommunications and energy- (Expansion 4/5/2000; El Mundo 19/12/1999). The government resorted to this law to restrain the take-over bid of Electricité de France for the electric utility Hidroeléctrica del Cantábrico.

Finally, the policy of creating stable Spanish shareholders in privatised firms contributed to expand the complex network of cross participation between financial and industrial groups characteristic of the Spanish economy as described before. This has resulted in an enormous concentration of power in a few hands (Lasheras, 1999). As Arocena (2003) argues, the extensive cross-ownership among these firms generated a web of common interests, raising concerns about their ability to distort entry and competition.

In this respect, Vergés (1999, 2000) argues that privatisation has not been used in Spain to increase competition by eliminating the former public monopolies, he rather states that monopoly positions still exist but under private ownership. Table 5 shows the Herfindahl-Hirschman index and 2-firm concentration ratios as indicators of the likely competitive potential in four industries affected by privatisation and liberalisation in the mid 90s. By any standard concentration is massive. High degree of concentration persists years after liberalisation and reflects the slow progress of competition in these sectors. This is very discouraging since economic theory suggests that competition rather than ownership leads to performance gains.

[Table 5 about here]

4. Results and consequences of the privatisation process

In Spain there are a number of studies on the performance differences between private and state-owned enterprises. They are basically based on the analysis of economic and financial ratios, and systematically show a superior performance of private firms (Cuervo 1989; Argimón *et al*, 1999). This is not surprising given that, as described before, since mid 70s the Spanish PES acquired a large number of private companies to avoid their bankruptcy and liquidation.

By contrast, the empirical research about the effects of privatisation on the former state-owned companies is very limited. This scarcity is certainly due to the difficulty to obtain reliable data on Spanish privatised firms—particularly on the earliest privatisations occurred between 1985-1996, and because privatisation is an still ongoing process. Next we revise the existing literature.

4.1 The impact of privatisation on firms' performance.

The first attempt to test the effects of privatisation on firm's efficiency is offered by Sanchís (1996). To that purpose, he used a sample of 17 Spanish public firms that were privatised between 1985 and 1990. His results suggest that both competition and restructuring had a positive impact on productivity growth and that the effect of privatisation was relatively weak. Nevertheless, these conclusions should be taken with caution because (i) only five out of the 17 companies included in this study were fully transferred to the private companies, and (ii) he only includes data for one year after their privatisation.

Melle (1999) studies the magnitude of various performance indicators of ten firms before and after their privatisation. She examined changes resulting from privatisation in the same set of economic variables analysed by Megginson et al (1994): (i) Profitability; (ii) Operating Efficiency: (iii) Capital investment; (iv) Output; (v) Employment level, (vi) Leverage and (vii) Payout. Her sample only included the major firms privatised through public share offerings between 1990 and 1999. The author does not reach conclusive results on the improvement of performance induced by the change of property. She also observes that her results might be biased because the firms included in her sample operated in sectors with different degree of market competition. This limitation is surmounted by Villalonga (2000). She uses a sample of 24 Spanish firms that were operating in competitive environments at the time of privatisation (between 1985-1993), so that no (de)regulation or liberalisation interferes with the estimation of strict privatisation effects. She does not find any statistical support either to the hypothesis that privatisation increases firm's efficiency, measured by Return on Assets. She further claims that privatisation involves more than pure ownership effects and looks for other political and organizational factors that influence on the observed effect of privatisation on efficiency. Her results show that selling off the firm in a period of economic growth (recession), the foreign (national) nature of the buyer, large (small) firm size and high (low) firm's capital intensity are factors that significantly reinforce (counteract) the effect of firm's privatisation on efficiency.

Finally, Cabrera and Gómez (2003) represent the latest and most comprehensive attempt to test the effect of privatisation on performance. As Melle (1999), the authors compare the mean and median values of various

firm's profitability and efficiency indicators in the three years before and after privatisation. Interestingly, unlike previous studies their results show a statistically significant improvement following company's privatisation, both on profitability and operating efficiency. These conclusions are of special relevance because the authors analyse the most extensive sample of privatised firms that anyone could construct in Spain. They examine 52 non-financial enterprises, which accounts for more than 45% of the total number of firms privatised in Spain -either by public offerings or direct sales- and more than 95% of the total gross proceeds raised by privatisation between 1985-2000.

However, the positive relationship between privatisation and firm's performance is not statistically significant for the group of firms sold by means of public offerings, which includes the largest public utilities. This is particularly noteworthy, since its privatisation happened together with the liberalisation of their respective sectors.

4.2 The effect of privatisation and liberalisation in the utilities sectors

A common weakness of the cited studies is that they do not compare the evolution of performance of privatised firms with that followed by their competitors, who did not experience any change in ownership. Next, we carry out such a comparison for the main privatised utilities –Endesa, Repsol, Telefonica and Enagas-, which altogether roughly accounted for 60% of total gross proceeds raised from privatisation in Spain. Particularly, we compare the performance level of formerly public utilities before and after their privatisation with that of achieved by its private rivals, who simultaneously

faced the same change in the environment in the same time period -e.g. market liberalisation, technical change and/or demand growth for the whole sector, but not privatisation. Table 6 summarises the average of four key performance indicators for each utility and time period as well as their average growth rates relative to the corresponding sector.

[Table 6 about here]

Figures clearly show that the four companies improved substantially their levels of labour productivity and operating efficiency (value added per employee and sales per employee) after privatisation and liberalisation. For example, first row in Table 6 shows that Repsol annually generated on average 92,000 euros per employee before privatisation and 130,000 afterwards, both at constant 1990 prices. However, regarding the average annual changes our results show that post-liberalisation performance in labour productivity and operating efficiency for the group of privatised utilities was actually poorer than that achieved by their private counterparts. For example, the second row in column 2 shows that Repsol's annual increase of sales per employee was 11.7% higher than that of its competitors over the pre-liberalisation period but 2.9 points lower following its privatisation.

With regards to profitability, the picture is somewhat different. Thus, Endesa and Telefonica show substantial reductions in their Return on Sales ratios after liberalisation, which indicates lower prices and tighter profit margins. The opposite applies to Repsol and Enagas, which suggests that competitive pressure and/or price regulation was weaker in these sectors.

4.3 Prices and quality of service in the utilities sectors.

Post-privatisation period witnessed substantial utilities price reductions together with an increase of the range of services and bill paying options. Relating price and service changes to privatisation is complicated by technological progress and, in the case of gas and electricity, variations in fuel input prices. Thus, in most countries telecom prices have fallen under state ownership in the 1990s as well as under private ownership. Similarly, lower oil prices in the 1990s have driven down gas and electricity prices in Europe, again irrespective of ownership.

As shown in Table 7 the cumulative reduction of average prices of telecommunications services in Spain has been remarkable since market liberalisation. According to the telecommunications market regulator (CMT, 2002), prices for fixed telephone services fell about 50% on average between 1998-2002. The sharpest price reduction is observed for long-distance calls, which fell around 58% in the same period. Prices of mobile telephone services also declined by 30%.

[Table 7 about here]

Nevertheless, the price of telephone services and particularly Telefonica's, are still relatively high in Spain. The Spanish Association of Consumers and Users (OCU, 2001) compared Telefonica's prices adjusted by Power Purchase Parities (PPP) with those of the dominant players in 17 countries (14 European countries plus Australia, Canada and USA) The study ranked Telefonica as the third most expensive company behind Portugal

Telecom and Telekom Austria. This even means a relative worsening of the Telefonica's fifth position in 2000 ranking (OCU 2000).

In the electricity sector, the energy regulator (CNE 2002) compares the evolution of electricity prices in sixteen European countries between 1997-2002, that is to say since the liberalisation of the Spanish power market. Household tariffs decreased by 13% in monetary terms along that period, which ranks Spain at the top of the list of price-cuttings in Europe. Likewise, industrial electricity prices fell between 1997-2002. For the smallest industrial consumers the reduction was relatively moderate (about 5% in monetary terms) in comparison with that registered in the rest of Europe. By contrast, price reduction for largest industrial users was among the highest in Europe (between 10%-21% depending on consumer type). However, as in the case of telecommunications, the international comparisons of average prices (before taxes and converted at PPPs) show that Spanish domestic and industrial tariffs are the third and the fifth most expensive in Europe respectively.

Natural gas prices for the industrial sector were mostly stable during the 1990s. However in May 1999 prices started to rise rapidly and by the beginning of 2003 industrial prices were about 40% higher than in 1994 (CNE 2003). Households' gas prices kept an increasing trend over the decade and by 2003 average domestic tariff was 30% higher than in 1994. According to the International Energy Agency (CNE, 2001), average natural gas prices in Spain are the highest in Europe, both in the domestic and industrial sector.

Table 8 reports consumers' satisfaction on six criteria for eight services of general interest in Spain as well as in the fifteen member states of the European Union. The criterion that provokes the greatest proportion of dissatisfaction is that of price. For example, first row in column II shows that only 32% of Spanish consumers consider that prices for mobile telephone services are fair. Prices for telephone, electricity and gas supply services are perceived as excessive by a majority of Spanish consumers. The level of satisfaction on this point is below the overall European mean. By contrast, prices for water, post, transport and rail services, which are supplied by state-owned enterprises and municipalities, show percentages of satisfaction above those registered in the European Union.

[Table 8 about here]

Table 8 also inform about satisfaction regarding access and quality of service. Satisfaction rate of Spanish consumers concerning access is high. Four services out of the eight studied are easy to access for more than 90% of Spanish consumers. Rail services between towns/cities are easy accessible only for 71% of Spanish consumers, still above the overall European mean -61%.

Further, a high percentage of Spanish consumers also regard themselves as satisfied with the quality of their services. On average, 83% of Spanish users declared themselves satisfied concerning the quality of services. Five services get higher satisfaction rates than the overall European average.

However, the percentage of satisfaction is rather low concerning the clarity of information, fairness of contract terms and quality of customer

service provided by service suppliers. On average, two thirds of Spanish consumers are not satisfied with the information and customer service they receive from their suppliers and only 53% feels satisfied with the contracts made with service providers. In comparative terms, the Spanish consumers are less satisfied on these criteria than EU consumers except for city transport and rail services.

Privatisation in Spain: A summing-up.

My purpose here is to summarise in which sectors privatisation has failed or was successful. The consideration of failure and successful is very often ambiguous and subject to qualitative judgements in particular cases. First, early sales of public small sized companies were used to give back previously nationalised firms to the private sector. The state had rescued many firms in bankruptcy during the politically unsettled period of democratic transition. The economic and financial measures applied to these firms before its *reprivatisation* should be rather judged as a success of management under public ownership, since it allowed the survival of most of them.

In terms of the impact of privatisation on firms' efficiency, available evidence is not conclusive. It rather suggests that other factors are more important than pure ownership change, namely competition, the buyer type and the firm's size and capital intensity. In these cases, privatisation always would play a complementary and reinforcing role (Villalonga, 2002). The cases of SEAT and ENASA in the automobile industry would be representatives.

By taking a temporal perspective over the last twenty years, the role of the public sector and the subsequent privatisation of state-owned companies in Spain reflects a story of socialisation of losses and privatisation of profits. Thus, the enormous financial effort made by the State in the creation of strong leading industrial groups following dramatic sectoral restructuring ended in their selling-off once they turned into competitive and profitable companies. This has been the case in the iron and steel sector (CSI-Aceralia), aluminium (INESPAL) and electronics (INDRA), which continue being competitive as private firms in their respective sectors.

The same applies to the utilities sectors, where the high households' prices for telephone, electricity, gas and oil products served to strength companies like REPSOL, ENDESA, GAS NATURAL and TELEFONICA under public ownership. Their huge cash-flows financed their Latin-American expansion throughout the nineties without incurring in state capital subsidies. On the contrary, the traditional loss-making companies remain in public hands: coal-mining, radio and television broadcasting, railways and shipbuilding.

On the other hand, the governments' liberalising effort resulted in a number of major legislative and regulatory reforms in many industries, sometimes even bringing forward or accelerating the timing established by the EU Directives. However, the government's goal to obtain as large a financial contribution from privatisation to the budget as possible was achieved at the expense of market restructuring and consequently, of faster and effective market competition in newly liberalised sectors: oil, gas, electricity and

telecommunications. Putting in other words, while privatisation policy carried out by the government suited the goal of cash-raising to reduce the state budget, it was intrinsically incompatible with that of market liberalisation and increase of competition. It can be said that the Spanish process of privatisation reflects and has been marked by the conflict between the advocacy of market liberalisation and the protection of nationals' interests. Thus, the formation of national champions led to the increase of the level of vertical and horizontal concentration in the utilities sectors and the corresponding reduction of the domestic rivalry. As the former president of the Competition Body and chair of the National Energy Commission 1995-2000, Fernández-Ordóñez (2000) argues, the anxiety for creating leading Spanish industrial and financial groups able to compete with foreign multinationals explains the inconsistency between the Spanish industrial policy and the pro-competitive policies. This contradiction has been shared by the different Spanish Administrations over the last twenty years, irrespective of their ideological divergences.

References

- Aranzadi, C. (1989) "La política de desinversiones del INI", Papeles de Economía Española 38: 258-261.
- Argimón, I., C. Artola and J.M. González-Páramo (1999) "Empresa pública y empresa privada: Titularidad y eficiencia" *Moneda y Crédito* 209: 45-93.
- Arocena, P. (2003) "The reform of the utilities sector in Spain" in Ugaz, C. and C. Waddams-Price (editors) *Utility Privatization and Regulation: A Fair Deal for Consumers?*, 125-148. Edward Elgar Publishing: Cheltenham, UK.

- Arocena, P., I. Contín and E. Huerta (2002) "Price regulation in the Spanish energy sectors: who benefits" *Energy Policy* 30: 885-895.
- Arocena, P., K.U. Khün and P. Regibeau (1999) "Regulatory reform in the Spanish electricity industry: a missed opportunity for competition", *Energy Policy* 27: 387-399.
- Bel, G. and A. Costas (2001) "La privatización y sus motivaciones en España: de instrumento a política", *Revista de Historia Industrial* 19/20: 39-65.
- Cabrera, L. and S. Gómez (2003) "Un estudio de la eficiencia económica del proceso de privatizaciones español", paper presented at the XIII Conference of the Asociación Científica de Economía y Dirección de la Empresa (ACEDE), September 2003. Salamanca, Spain.
- CMT (2002) *Informe anual 2002*. Madrid: Comisión del Mercado de las Telecomunicaciones.
- CNE (2001) *Información básica de los sectores de la energía*. Madrid: Comisión Nacional de la Energía.
- CNE (2002) Precios de la electricidad en el entorno europeo en el año 2002. Madrid: Comisión Nacional de la Energía.
- CNE (2003) *Boletín mensual de estadísticas de gas natural*. Madrid: Comisión Nacional de la Energía.
- Comín, F. (1995) "La España pública en la España contemporánea: formas históricas de organización y gestión (1770-1995)" Documento de Trabajo 9505, Historia Económica. Madrid: Fundación Empresa Pública

- Cuervo, A. (1989) "La empresa pública: estructura financiera, rentabilidad y costes financieros", *Papeles de Economía Española* 38: 177-198.
- Cuervo, A. (1997) La privatización de la empresa pública. Madrid: Encuentro.
- De la Dehesa, G. (1993) "Las privatizaciones en España", *Moneda y Crédito* 196: 131-141.
- EC (2002) Second benchmarking report on the implementation of the internal electricity and gas market. Brussels: European Commission.
- EORG (2002) Consumers' opinions on services of general interest.

 Eurobarometer 58 Special Edition. European Opinion Research Group.
- Fernández-Ordóñez, M.A. (2000) La competencia. Madrid: Alianza.
- Gámir, L. (1999) Las privatizaciones en España. Madrid: Pirámide
- García-Fernández, J. (1990) "Política empresarial pública 1973-1988", in Aceña, P. and F. Comín (editors) *Empresa pública e industrialización en España*. Madrid: Alianza Editorial.
- Lancaster, T.D. (1989) *Policy stability and democratic change: Energy in Spain's Transition*. University Park, Pennsylvania State University Press.
- Lasheras, M.A. (1999) La regulación económica de los servicios públicos.

 Barcelona: Ariel
- Megginson, W.L., R.C. Nash and M.Van Randenborgh (1994) "The Financial and Operating Performance of Newly Privatized Firms: An International Empirical Analysis" *Journal of Finance* 49(2): 403-452.
- Melle, M. (1999) "Algunos resultados efectivos de las privatizaciones en España: una primera aproximación", *Economía Industrial* 330: 141-158.

- OCU (2000) Compra Maestra 236, Organización de Consumidores y Usuarios.
- OCU (2001) Compra Maestra 253, Organización de Consumidores y Usuarios.
- OCU (2002) Compra Maestra 265, Organización de Consumidores y Usuarios.
- OECD (2002) "Recent Privatisation Trends in OECD Countries" *Financial Market Trends* 82, June 2002: 43-55.
- Rodríguez, J.A. (2000) "El círculo del poder: La estructura social del poder económico en la España de los noventa", *Sistema* 158: 53-89.
- Sanchís, J.A. (1996) "Privatización y eficiencia en el sector público español", Revista de Economía Aplicada 10: 65-92.
- SEPI (2003) http://www.sepionline.com
- Vergés, J. (1998) "Efectos de las privatizaciones españolas sobre los presupuestos generales del Estado" *Hacienda Pública Española* 147:215-31
- Vergés, J. (1999) "Balance de las políticas de privatización de empresas públicas en España (1985-1999)", *Economía Industrial* 330: 121-139.
- Vergés, J. (2000) "Privatisations in Spain: Process, Policies and Goals", European Journal of Law and Economics 9(3): 255-280.
- Villalonga, B. (2000) "Privatization and efficiency: differentiating ownership effects from political, organizational and dynamic effects" *Journal of Economic Behavior and Organization* 42: 43-74.

Table 1. Total privatisations under the PSOE Administration 1985-1996

1985	6 1
Igñsa Food DS Pleamar 1000	
Cesquisa Chemical DS Cepsa 45.5	
Secoinsa	
SKF Española	
Viajes Marsans Tourism	
Grossypium	
1986	
Frigsa	
Gypisa Food DS Norteños 100	
Inisa	0 n.a
Remetal Saa	
Issa	
Aluflet Aluminum DS Accionistas privados de Aluflet 40 Motores Barreras Deutz Pamesa Fovisa Iron and steel DS Gekanor 100 Indugasa Car industry DS Grupo GKN 50 Seat Car manufacturer DS Voskswagen 100 Telesincro Electronics DS Bull 100 Mmpr 68 Evatsa Aluminum DS Cebal 100 Alumilas Aluminum DS Cebal 100 Alumilas Aluminum DS Montupet 44 Purolator Car industry DS Eisenwerk Bruhl 33.3 Dirsa Food DS Promodes/BBV 50 Miraflores Food DS Agrolimen 51 Miraflores Food DS Agrolimen 51 Miraflores Food DS Agrolimen 51 Miraflores Food DS Eisenwerk Bruhl 100 Enfersa Fertilizers DS Ercros 100 Pesa Electronics DS Efertuzzi 100 Pesa Electronics DS Amper 77.4 Ancoal Aluminum DS Montupet 44 Miraflores Food DS Amper 79.4 Ancoal Aluminum DS Montupet 58 Miraflores Food DS Ferruzzi 100 Pesa Electronics DS Amper 79.4 Ancoal Aluminum DS Omnium Industrie 79.4 Ancoal Aluminum DS Omnium Industrie 79.4 Ancoal Engineering DS Indonesia Coal and others 80 Imepiel Shoes DS DFG Grupo Cusi 100 Dirsa Engineering DS DFG Grupo Cusi 100 Dirsa Miraflores DS BBV 50 Solvay 33.5 Corifer Food DS Rústicas 100 Enasa Frod DS Estudesa 100 DS Estudesa 100 Enasa Foroelain DS Estudesa 100 Estud	
Motores Barreras Deutz Paper DS Klockner Humboldt Deutz AG 60 Fovisa Iron and steel DS Gekanor 100 Indugasa Car industry DS Grupo GKN 50 Seat Car manufacturer DS Voskswagen 100 Telesincro Electronics DS Bull 100 Mamper Electronics PO many 68 Forestal del Atlántico 80 Litofan Aluminum DS Baumgartner Ibérica 100 Alumalsa Aluminum DS Montupet 44 Purolator Car industry DS Eisenwerk Bruhl 33.3 Dirsa Food DS Promodes/BBV 50 Miel Española Food DS Agrolimen 51 Miraflores Food DS Queserias Miraflores Miraflores Food DS Queserias Miraflores Acesa Highways PO many 58 Ercros 100 Enfersa Fertilizers DS Ercros 100 Enfersa Fertilizers DS Ercros 100 Pesa Electronics DS Amper 97.4 Ancoal Aluminum DS Ancoal Aluminum DS DFG Grupo Cusi 100 Dirsa Myholesaler DS DFG Grupo Cusi 100 Dirsa Myholesaler DS Rústicas 100 Enfasa Frood DS Rústicas 100 Promodes/BBV 50 DFG Grupo Cusi 100 Dirsa Salinas Torrevieja Salt DS Solvay 38.5 Solvay	
Pamesa	
Fovisa	
Indugasa Car industry DS Grupo GKN 50	
Seat	
Telesincro	
Amper	
Dessa	
Evatsa	
Litofan Aluminum DS Baumgartner Ibérica 100 Alumalsa Aluminum DS Montupet 44 Purolator Car industry DS Knecht Filterwerke 97.4 Victorio Luzuriaga Car industry DS Eisenwerk Bruhl 33.3 Dirsa Food DS Promodes/BBV 50 Miel Española Food DS Agrolimen 51 Miraflores Food DS Queserias Miraflores n.a. Acesa Highways PO many 58 1988	
Aluminum DS Montupet 44 Purolator Car industry DS Eisenwerk Bruhl 33.3 Dirsa Food DS Promodes/BBV 50 Miel Española Food DS Agrolimen 51 Miraflores Food DS Queserías Miraflores n.a. Acesa Highways PO many 58 1988	
Victorio Luzuriaga Dirsa Food Dirsa Food Miel Española Miraflores Acesa Highways PO many Statican MTM-Ateinsa Enfersa Oesa Food Pesa Ancoal Intelhorce Textiles Dirsa Hytasa Textiles Dirsa Cojier Food DS Rodesa DS Benorbe	
Dirsa Food DS Promodes/BBV 50 Miel Española Food DS Agrolimen 51 Miraflores Food DS Queserías Miraflores n.a. Acesa Highways PO many 58 1988 -	4 n.a
Miel Española Food DS Agrolimen S1	
Miraflores Acesa Highways PO many 58 1988	
Acesa	
1988 -	
1989 Astican MTM-Ateinsa Shipbuilding Capital goods DS GEC Alsthom 100 Enfersa Fertilizers DS Ercros 100 Oesa Food DS Ferruzzi 100 Pesa Electronics DS Amper 97.4 Ancoal Aluminum DS Omnium Industrie 75.2 Intelhorce Textiles DS Benorbe 100 1990 Adaro Indonesia Engineering DS Indonesia Coal and others 80 Hytasa Textiles DS Textil Guadiana 100 Imepiel Shoes DS DFG Grupo Cusi 100 Dirsa Wholesaler DS Solvay 38.5 Coifer Food DS BBV 50 1991 Coisa Food DS Rústicas 100 Enasa Truck manufacturer DS Rústicas 100 Fridarago Food DS Estudesa 100 Grupo Empresas Alvarez Jobac Wholesaler DS Estosmer/Eroski 100	131.6
MTM-Ateinsa	2.05
Enfersa	
Oesa Food DS Ferruzzi 100 Pesa Electronics DS Amper 97.4 Ancoal Aluminum DS Omnium Industrie 75.2 Intelhorce Textiles DS Benorbe 100 1990 Adaro Indonesia Engineering DS Indonesia Coal and others 80 Hytasa Textiles DS Textil Guadiana 100 Imepiel Shoes DS DFG Grupo Cusi 100 Dirsa Wholesaler DS Promodes/BBV 75.1 Salinas Torrevieja Salt DS Solvay 38.5 Coifer Food DS BBV 50 1991 Coisa Food DS Rústicas 100 Enasa Truck manufacturer DS Iveco 100 Fridarago Food DS Rústicas 100 Grupo Empresas Alvarez Jobac Wholesaler DS Estudesa 100	
Pesa Ancoal Ancoal Intelhorce Electronics Aluminum DS DS DS DS DS DFG Grupo Cusi Amper PS.2 1990 Adaro Indonesia Hytasa Imepiel Shoes Dirsa Salinas Torrevieja Salt Coifer Food DS Enasa Fridarago Grupo Empresas Alvarez Jobac Engineering DS Indonesia Coal and others BO Textil Guadiana 100 1991 Coisa Fridarago Grupo Empresas Alvarez Jobac Food DS BBV 75.1 1991 Enasa Fridarago Grupo Empresas Alvarez Jobac Food DS Rústicas I00 100 1992 Erosmer/Eroski 100 1993 Erosmer/Eroski 100	
Ancoal	
Intelhorce	
1990 Adaro Indonesia Engineering DS Indonesia Coal and others 80 Hytasa Textiles DS Textil Guadiana 100 Imepiel Shoes DS DFG Grupo Cusi 100 Dirsa Wholesaler DS Promodes/BBV 75.1 Salinas Torrevieja Salt DS Solvay 38.5 Coifer Food DS BBV 50 1991 Coisa Food DS Rústicas 100 Enasa Truck manufacturer DS Iveco 100 Fridarago Food DS Rústicas 100 Grupo Empresas Alvarez Porcelain DS Estudesa 100 Jobac Wholesaler DS Erosmer/Eroski 100	
Hytasa	
Imepiel	
Dirsa Wholesaler DS Promodes/BBV 75.1 Salinas Torrevieja Salt DS Solvay 38.5 Coifer Food DS BBV 50 1991 Coisa Food DS Rústicas 100 Enasa Truck manufacturer DS Iveco 100 Grupo Empresas Alvarez Porcelain DS Estudesa 100 Jobac Wholesaler DS Erosmer/Eroski 100	0.6
Coifer Food DS BBV 50 1991 Coisa Food DS Rústicas 100 Enasa Truck manufacturer DS Iveco 100 Fridarago Food DS Rústicas 100 Grupo Empresas Alvarez Porcelain DS Estudesa 100 Jobac Wholesaler DS Erosmer/Eroski 100	
1991Coisa EnasaFood Truck manufacturerDS DS IvecoRústicas100 100Fridarago Grupo Empresas Alvarez JobacFood PorcelainDS DS EstudesaRústicas Estudesa100 100<	5 0.6
Enasa Truck manufacturer DS Iveco 100 Fridarago Food DS Rústicas 100 Grupo Empresas Alvarez Porcelain DS Estudesa 100 Jobac Wholesaler DS Erosmer/Eroski 100	
Fridarago Grupo Empresas Alvarez Jobac Food DS Rústicas DS Estudesa 100 Estudesa 100 Fridarago DS Estudesa 100 Fridarago DS Estudesa 100	
Grupo Empresas Alvarez Porcelain DS Estudesa 100 Jobac Wholesaler DS Erosmer/Eroski 100	
Jobac Wholesaler DS Erosmer/Eroski 100	
	_
TSD Electronics DS Telepublicaciones 100 1992 Icuatro Health DS Grupo Alegre 90	
1 5	
1993Automoción 2000Car industryDSInversores Reo100Fábrica San CarlosCapital goodsDSGrupo Navacel and others100	
Ineco Engineering DS Varios 66	
Palco Aluminum DS Alcan Deutschland 100	
1994 Artespaña Craftsmanship DS Medino, S.L. 100	
ASDL Aerospace DS Quadrant Group 87	
Caivsa Gas DS Gas Natural 100	
Cia. Transatlántica Shipping DS Naviera de Odiel/Mar. Valenciana 100	
Enagas Gas DS Gas Natural 91	
Grupo Royal Brands Food DS RJR Nabisco 50	
1995 Lesa Food DS Leyma/Iparlat 100	
Refinalsa Aluminum DS Remetal 50	
Sidenor Iron and steel DS Digeco/Olarra/Rodac. 50	
1996 Sagane Gas DS Enagas 91	30

Source: own elaboration on data from economic press and Cuervo (1997) DS = Direct Sale; PO = Public Offering.

Table 2. Partial sales under the PSOE Administration 1985-March 1996

Year	Company Name	Industry	Method	Buyer	% share	Gross proceeds
					sold	€ million
1985	-	-	ı	ı	ı	-
1986	Gesa	Energy	PO		39	54
1987	TelefonicaI	Telecommunications	PO		6	282.5
1988	Ence I	Paper	PO		39.3	106.9
	Endesa I	Energy	PO		20.4	480.8
1989	Repsol I	Energy	PO	(BBV	30.6	939
				4%)		
1990	Repsol II	Energy	DS	Pemex	5	191.8
1991	-	-	1	ı	1	-
1992	Repsol III	Energy	PO		10	420.7
1993	ArgentariaI	Banking	PO		25	661.1
	ArgentariaII	Banking	PO		23	1081.8
	Repsol IV	Energy	PO		13	661.1
1994	Endesa II	Energy	PO		8.7	1,081.8
1995	Ence II	Paper	PO		19	70.3
	Repsol V	Energy	PO		19	1,206.8
	Telefonica II	Telecommunications	PO		11	1,172
1996	ArgentariaIII	Banking	PO		25	1,021.7
	Repsol VI	Energy	PO		11	781.3

DS = Direct Sale; PO = Public Offering

Source: SEPI (2003), Gámir (1999)

Table 3. Privatisation under the PP Administration (March 1996-2003)

Year	Company Name	Industry	Method	Buyer	% share sold	Gross proceeds € million
1996	Gas Natural	Energy	PO	many	4	216.7
	Sefanitro	Fertilizers	DS	Fertiberia	52.6	3.3
1997	A1;-	C41	DC	A de - d/A sisters in /C - etc serv	47.2	268.6
	Aceralia Aceralia	Steel Steel	DS PO	Arbed/Aristrain/Gestamp many	47.2 52.8	268.6 794.3
	Aldeasa	Duty-free shops	PO	many	80	273.7
	Almagrera	Mining	DS	Navan Resources	100	2.65
	Auxini	Construction	DS	OCP Construcciones	100	35.76
	Elcano	Sea transport	DS	Grupo Marítimo Ibérico	100	34.7
	Ferroperfil	Aluminum	DS	Executives (MBO)	100	1.2
	Infoleasing	Leasing	DS	Liscat	100	18.6
	Hijos J. Barreras	Shipbuilding	DS	Grupo Barreras	100	4.5
	Iongraf Repsol VII	Aluminum Energy	DS PO	Executives (MBO) many	100 10	1 1,012
	Retevisión I	Telecommunications	DS	Endesa-Stet and others	70	1,012
	Surgiclinic Plus	Medical products	DS	Hambros	50	0
	Sodical	Regional development	DS	many	51	4.6
	Enagas	Energy	DS	Gas Natural Group	9	84.1
	Endesa III	Energy	PO	many	27.5	4,029.2
	Tisa	Telecommunications	DS	Telefonica	23.8	763.3
1998		D 1:	DO.		20.2	2.276.2
	Argentaria IV Productos Tubulares	Banking Steel	PO DS	many Tubos Reunidos	29.2 100	2,276.3 0
	Tabacalera	Food/Tobacco	PO	many	52.4	1,722.1
	Endesa IV	Electricity	PO	many	29.5	6,323.2
	Inima	Environment	DS	Grupo OHL	100	3.75
	Comee	Energy	A	diverse	100	9
	Serausa	Highways	A	Areas, S.A.	100	14.8
	Potasas	Mining	DS	DSW/La Seda/Tolsa	100	103.4
	Inespal	Aluminum	DS	Alcoa	100	375.6
	Telefonica III	Telecommunications	PO	many Shareholders and others.	21.16	3,786.4
1999	Retevisión II	Telecommunications	A	Snareholders and others.	30	739.2
1999	INDRA	High technology	PO	many	66.1	393.3
	Red Eléctrica	Electricity	PO	many	31.5	341
	ICSA-AYA	Aerospace	DS	Mecanizaciones Aeronáuticas	100	0.72
	Astander	Shipbuilding	DS	Italmar	100	1.8
	LM Composites Toledo	Engineering	DS	LM Glasfiber	50	5.2
	Enatear	Road transport	DS	Alianza Bus	100	157.4
	Iberia I	Airlines	DS	diverse	40	1,093.8
2000	-	-	-	-	-	
2001						
2001	Conversion Aluminio	Aluminum	DS	Alucoil, S.A.	100	0.7
	Santa Barbara	Armament	DS	General Dynamics Corporation	100	5
	Iberia II	Airlines	PO	many	48	524
	EXPASA I	Agriculture	A	diverse		31.6
	ENCE I	Paper	PO	many	26	99.3
	ENCE II	Paper	DS	CaixaGalicia, Bankinter, Zaragozano	25	130.5
	Interinvest (Aerolíneas	Airlines	DS	Air Comet	99.2	0
2002	Argentinas & Austral)					
2002	Coosur / Olcesa	Olive/ Sunflower oil	DS	Consorcio Jaén Oliva	89.4/100	7
	Química del Estroncio	Mining	DS	Fertiberia	51	10.4
	EXPASA II	Agriculture	A	diverse		45.4
	Transmediterranea	Sea transport	DS	Acciona and others	95.24	259
2003						
	Grupo ENA	Highways	DS	Sacyr, Banco Santander and others	100	1586.3
	Mussini	Insurance	DS	Mapfre Caja Madrid Holding	100	297
	Turbo2000	Engines/Turbines	DS	Sener	100	66

DS = Direct Sale; PO = Public Offering; A = Auction

Source: own elaboration on data from economic press, SEPI (2003) and Gámir (1999).

Table 4. Implementation of the European Energy Directives in Spain

	Electricity	Gas
Declared market opening by 2003	100%	100%
Unbundling: transmission system	ownership	ownership
operator/owner		
Unbundling: Distribution system	legal	legal*
operator		
Regulation of network tariffs	ex-ante	ex-ante
Overall network tarriffs	average	normal
Number of transmission companies	1	1
Regulatory body	yes	yes
	(National Energy	(National Energy
	Commission)	Commission)
Competence on regulating access	ministry	ministry
conditions		
Competence on dispute settlement	regulator	regulator
Balancing conditions and charges set by	market	regulator
Balancing period	60 minutes	Daily
Power exchange	yes	
Intraday market possible	yes	
Transmission tariff structure		postalised
Storage available for TPA		yes

^{*}Gas Natural retains a 40% share and is the largest shareholder in the Transmission System Operator, Enagas. Source: EC(2002)

Table 5. Concentration in liberalised industries

		1994	1998	2002
Electricity				
Generation				
	HHI	2127	3550	3150
	CR2	59.5	78	74
Distribution				
	HHI	2086	3534	3210
	CR2	53	81	77
Natural Gas				
	HHI	8125	8200	5200
	CR2	97.8	95.5	78
Telecommunications				
Fixed telephony				
	HHI	10000	9570	6940
	CR2	100	99.7	88.8
Mobile				
	HHI	10000	5896	4060
	CR2	100	100	82.1
Oil fuels				
	HHI	3616	3310	2540
	CR2	79	75	66

Source: Own elaboration from CMT (2002), CNE (2001) and companies' annual reports.

Table 6. Utilities performance before and after privatisation.

VAE Pre-priv Post-priv Pre-priv Pre-priv <t< th=""><th></th><th>REF</th><th>REPSOL</th><th>ENDESA</th><th>ESA</th><th>TELEF</th><th>TELEFONICA</th><th>ENA</th><th>ENAGAS</th></t<>		REF	REPSOL	ENDESA	ESA	TELEF	TELEFONICA	ENA	ENAGAS
Mean* 99 1996/02 1994/97 1999/02 1999/02 Imual ΔVAE 18.6 1.30 130 197 89 103 Imual ΔVAE 18.6 1.4 23.2 15 -6.6 -20.7 Annual ΔNAE 487 653 222 483 113 179 Annual ΔSE 11.7 -2.9 24 24.8 -0.5 -17.2 Mean(%) 7.8 9.6 28.5 20.2 26.2 17.7 Mean (%) -1.3 1.6 -0.8 7.2 0.8 -6.3 Mean (%) 26.6 22.1 23.4 25.5 26.2 18.0 al ΔRoe(%) 0.8 -2.4 -1.1 20.3 11.4 -15.2		Pre-priv	Post-priv	Pre-priv	Post-priv	Pre-priv	Post-priv	Pre-priv	Post-priv
Mean* 92 130 130 197 89 103 Imual ΔVAE 18.6 1.4 23.2 15 -6.6 -20.7 Mean* 487 653 222 483 113 179 Annual ΔSE 11.7 -2.9 24 24.8 -0.5 -17.2 Mean(%) 7.8 9.6 28.5 20.2 26.2 17.7 ual ΔRoS(%) -1.3 1.6 -0.8 7.2 0.8 -6.3 Mean (%) 26.6 22.1 23.4 25.5 26.2 18.0 al ΔRoE(%) 0.8 -2.4 -1.1 20.3 11.4 -15.2		1988/94	1996/02	1994/97	1999/02	1994/97	1999/02	1989/93	1995/99
$Mean*$ 92 130 130 197 89 103 $Innual \Delta VAE$ 18.6 1.4 23.2 15 -6.6 -20.7 $Mean*$ 487 653 222 483 113 179 $Annual \Delta SE$ 11.7 -2.9 24 24.8 -0.5 -17.2 $Mean(\%)$ 7.8 9.6 28.5 20.2 26.2 17.7 $ual \Delta RoS(\%)$ -1.3 1.6 -0.8 7.2 0.8 -6.3 $Mean(\%)$ 26.6 22.1 23.4 25.5 26.2 18.0 $al \Delta RoE(\%)$ 0.8 -2.4 -1.1 20.3 11.4 -15.2	VAE								
Innual ΔVAE 18.6 1.4 23.2 15 -6.6 -20.7 Mean* 487 653 222 483 113 179 Annual ΔSE 11.7 -2.9 24 24.8 -0.5 -17.2 Mean(%) 7.8 9.6 28.5 20.2 26.2 17.7 val ΔRoS(%) -1.3 1.6 -0.8 7.2 0.8 -6.3 Mean (%) 26.6 22.1 23.4 25.5 26.2 18.0 al ΔRoE(%) 0.8 -2.4 -1.1 20.3 11.4 -15.2	$Mean^*$	92	130	130	197	68	103	120	287
Mean* 487 653 222 483 113 179 Annual ΔSE 11.7 -2.9 24 24.8 -0.5 -17.2 Mean(%) 7.8 9.6 28.5 20.2 26.2 17.7 val ΔRoS(%) -1.3 1.6 -0.8 7.2 0.8 -6.3 Mean (%) 26.6 22.1 23.4 25.5 26.2 18.0 al ΔRoE(%) 0.8 -2.4 -1.1 20.3 11.4 -15.2	Annual ΔVAE	18.6	1.4	23.2	15	9:9-	-20.7	-3.1	-15.4
Mean* 487 653 222 483 113 179 Annual ΔSE 11.7 -2.9 24 24.8 -0.5 -17.2 Mean(%) 7.8 9.6 28.5 20.2 26.2 17.7 val ΔRoS(%) -1.3 1.6 -0.8 7.2 0.8 -6.3 Mean (%) 26.6 22.1 23.4 25.5 26.2 18.0 al ΔRoE(%) 0.8 -2.4 -1.1 20.3 11.4 -15.2	SE								
Annual ΔSE 11.7 -2.9 24 24.8 -0.5 -17.2 Mean(%) 7.8 9.6 28.5 20.2 26.2 17.7 val ΔRoS(%) -1.3 1.6 -0.8 7.2 0.8 -6.3 Mean (%) 26.6 22.1 23.4 25.5 26.2 18.0 al ΔRoE(%) 0.8 -2.4 -1.1 20.3 11.4 -15.2	Mean*	487	653	222	483	113	179	643	1210
Mean(%) 7.8 9.6 28.5 20.2 26.2 17.7 val ΔRoS(%) -1.3 1.6 -0.8 7.2 0.8 -6.3 Mean (%) 26.6 22.1 23.4 25.5 26.2 18.0 al ΔRoE(%) 0.8 -2.4 -1.1 20.3 11.4 -15.2	$Annual \Delta SE$	11.7	-2.9	24	24.8	-0.5	-17.2	2.4	-37.7
Mean(%) 7.8 9.6 28.5 20.2 26.2 17.7 val $\Delta RoS(\%)$ -1.3 1.6 -0.8 7.2 0.8 -6.3 Mean (%) 26.6 22.1 23.4 25.5 26.2 18.0 al $\Delta RoE(\%)$ 0.8 -2.4 -1.1 20.3 11.4 -15.2	RoS								
ual \(\Delta RoS(\%)\) -1.3 1.6 -0.8 7.2 0.8 -6.3 Mean (%) 26.6 22.1 23.4 25.5 26.2 18.0 al \(\Delta RoE(\%)\) 0.8 -2.4 -1.1 20.3 11.4 -15.2	Mean(%)	7.8	9.6	28.5	20.2	26.2	17.7	5.4	11.9
Mean (%) 26.6 22.1 23.4 25.5 26.2 18.0 al $\Delta RoE(\%)$ 0.8 -2.4 -1.1 20.3 11.4 -15.2	Annual $\Delta RoS(\%)$	-1.3	1.6	-0.8	7.2	8.0	-6.3	-16.6	-1.8
26.6 22.1 23.4 25.5 26.2 18.0 0.8 -2.4 -1.1 20.3 11.4 -15.2	RoE								
0.8 -2.4 -1.1 20.3 11.4 -15.2	Mean (%)	26.6	22.1	23.4	25.5	26.2	18.0	5.6	12.3
	Annual $\Delta RoE(\%)$	8.0	-2.4	-1.1	20.3	11.4	-15.2	-7.1	-16.8

*Thousands euros at constant 1990 prices
$$VAE = Value \ Added / \ Employees \ (Value \ Added = Wages + Depreciation + Profit before interest and tax)$$

$$SE = Sales / \ Employees$$

$$RoE = Profit before interest and tax / Equity$$

$$RoS = Profit before interest and tax / Sales$$

$$\Delta X = \left(\Delta X_{\ firm} - \Delta X_{\ sec \ for}\right) = \left(\frac{X_{\ firm}^{\ firm}}{X_{\ firm}^{\ firm}}\right) - \left(\frac{X_{\ sec \ for}^{\ firm}}{X_{\ sec \ for}}\right)$$

Source: Companies' annual reports.

Table 7. The evolution of utilities average prices and Consumer Price Index in Spain (1997-2002)

	Telecommunication			
	S	Electricity	Natural Gas	CPI
1997	100	100	100	100
1998	95	96	96	101.4
1999	88	91	94	104.3
2000	62	87	106	108.5
2001	52	85	108	111.4
2002	45	86	125	115.8

Source: own elaboration on data from CNE(2001) and CMT (2002)

Table 8. Consumers' satisfaction on services of general interest in Spain and in the European Union. December 2002.

	I.	II.	III.	IV.		VI.
	Access	Prices	Quality of	Information	Contract terms	Customer
			service			service
Mobile telephone services	81 (75)	32 (44)	81 (84)	(29) 09	46 (59)	68 (72)
Fixed telephone services	(68) 76	36 (51)	(06) 28	(52) 89	(49) 84	(22) 69
Electricity supply services	91 (88)	49 (55)	89 (91)	67 (73)	54 (68)	(22)
Gas supply services	(29) 98	53 (55)	(98) 68	(69) 29	57 (65)	(29) 89
Water supply services	93 (86)	(99) (99)	91 (89)	69 (72)	(99) 09	69 (74)
Postal services	92 (87)	(89) 89	82 (82)	(88 (78)	54 (70)	64 (74)
Transport services within towns/cities	(69) 88	56 (47)	74 (66)	72 (68)	51 (57)	61 (59)
(bus, tram, subway, etc.)						
Rail services between towns/cities	71 (61)	50 (38)	71 (59)	67 (62)	51 (51)	60 (54)
Mean	(82) 98	51 (52)	83 (81)	(12) 29	53 (63)	(69) 99

Figures report percentages of satisfied consumers in Spain and, in parenthesis, the corresponding to EU15.

These percentages of 'satisfaction' result from harmonising responses to questions Q2, Q3, Q4, Q5, Q6 and Q8 included in the questionnaire of the Eurobarometer Nº 58 into two types of reply ('satisfied' or 'not satisfied') in the following way:

Q2. In general, would you say that **access** to **** services is easy (= 'satisfied') or difficult (='not satisfied') for you?
Q3. In general, would you say that the **price** you pay for the **** services you use is fair (='satisfied') or unfair (='not satisfied')?
Q4. In general, what do you think of the **quality** of the **** services you use? Would you say it is very good, fairly good, fairly bad or very bad? ('very good' + 'fairly good' responses = 'satisfied'; 'fairly bad + 'very bad' responses = 'not satisfied')

Q5. In general, would you say that the **information** (bills, contracts, advertising, tickets, leaflets, etc.) you get from your **** provider is clear ('satisfied') or unclear ('not satisfied')?

Q6. In general, would you say that the terms and conditions of the **contract** with your **** provider are fair ('satisfied') or unfair (not satisfied) Q7. In general, would you say that the **customer service** provided by your **** service provider is very good, fairly good, fairly bad or very bad? ('very

good' + 'fairly good' responses = 'satisfied'; 'fairly bad + 'very bad' responses = 'not satisfied')

CESifo Working Paper Series

(for full list see www.cesifo.de)

- 1120 Piotr Wdowinski, Determinants of Country Beta Risk in Poland, January 2004
- 1121 Margarita Katsimi and Thomas Moutos, Inequality and Redistribution via the Public Provision of Private Goods, January 2004
- 1122 Martin Peitz and Patrick Waelbroeck, The Effect of Internet Piracy on CD Sales: Cross-Section Evidence, January 2004
- 1123 Ansgar Belke and Friedrich Schneider, Privatization in Austria: Some Theoretical Reasons and First Results About the Privatization Proceeds, January 2004
- 1124 Chang Woon Nam and Doina Maria Radulescu, Does Debt Maturity Matter for Investment Decisions?, February 2004
- 1125 Tomer Blumkin and Efraim Sadka, Minimum Wage with Optimal Income Taxation, February 2004
- 1126 David Parker, The UK's Privatisation Experiment: The Passage of Time Permits a Sober Assessment, February 2004
- 1127 Henrik Christoffersen and Martin Paldam, Privatization in Denmark, 1980-2002, February 2004
- 1128 Gregory S. Amacher, Erkki Koskela and Markku Ollikainen, Deforestation, Production Intensity and Land Use under Insecure Property Rights, February 2004
- 1129 Yin-Wong Cheung, Javier Gardeazabal, and Jesús Vázquez, Exchange Rate Dynamics: Where is the Saddle Path?, February 2004
- 1130 Alberto Alesina and Guido Tabellini, Bureaucrats or Politicians?, February 2004
- 1131 Gregory S. Amacher, Erkki Koskela, and Markku Ollikainen, Socially Optimal Royalty Design and Illegal Logging under Alternative Penalty Schemes, February 2004
- 1132 David M. Newbery, Privatising Network Industries, February 2004
- 1133 Charles Yuji Horioka, The Stagnation of Household Consumption in Japan, February 2004
- 1134 Eiji Fujii, Exchange Rate Pass-Through in the Deflationary Japan: How Effective is the Yen's Depreciation for Fighting Deflation?, February 2004
- 1135 Mark M. Spiegel and Nobuyoshi Yamori, Determinants of Voluntary Bank Disclosure: Evidence from Japanese Shinkin Banks, Febrary 2004

- 1136 Robert Dekle and Kenneth Kletzer, Deposit Insurance, Regulatory Forbearance and Economic Growth: Implications for the Japanese Banking Crisis, February 2004
- 1137 Takatoshi Ito and Kimie Harada, Bank Fragility in Japan, 1995-2003, February 2004
- 1138 Kunio Okina and Shigenori Shiratsuka, Policy Duration Effect under Zero Interest Rates: An Application of Wavelet Analysis, February 2004
- 1139 Francine D. Blau and Lawrence M. Kahn, Do Cognitive Test Scores Explain Higher U.S. Wage Inequality?, February 2004
- 1140 Michael Rauscher, Economic Growth and Tax-Competing Leviathans, February 2004
- 1141 Ernst Fehr and Jean-Robert Tyran, Money Illusion and Coordination Failure, February 2004
- 1142 Ingo Vogelsang, Network Utilities in the U.S. Sector Reforms without Privatization, March 2004
- 1143 Marc-Andreas Muendler, Estimating Production Functions When Productivity Change is Endogenous, March 2004
- 1144 Sascha O. Becker, Samuel Bentolila, Ana Fernandes, and Andrea Ichino, Job Insecurity and Children's Emancipation, March 2004
- 1145 Pascalis Raimondos-Møller and Alan D. Woodland, Non-Preferential Trading Clubs, March 2004
- 1146 Robert Fenge and Matthias Wrede, EU Regional Policy: Vertical Fiscal Externalities and Matching Grants, March 2004
- 1147 Chi-Yung Ng and John Whalley, Geographical Extension of Free Trade Zones as Trade Liberalization: A Numerical Simulation Approach, March 2004
- 1148 Marc-Andreas Muendler, Trade, Technology, and Productivity: A Study of Brazilian Manufacturers, 1986-1998, March 2004
- 1149 Eugene Beaulieu, Vivek H. Dehejia, and Hazrat-Omar Zakhilwal, International Trade, Labour Turnover, and the Wage Premium: Testing the Bhagwati-Dehejia Hypothesis for Canada, March 2004
- 1150 Giorgio Brunello and Francesca Gambarotto, Agglomeration Effects on Employer-Provided Training: Evidence from the UK, March 2004
- 1151 S. Brock Blomberg, Gregory D. Hess, and Athanasios Orphanides, The Macroeconomic Consequences of Terrorism, March 2004
- 1152 Bodo Sturm and Joachim Weimann, Unilateral Emissions Abatement: An Experiment, March 2004

- 1153 Wolfgang Ochel, Welfare-to-Work Experiences with Specific Work-First Programmes in Selected Countries, March 2004
- 1154 Jan K. Brueckner and Eric Pels, European Airline Mergers, Alliance Consolidation, and Consumer Welfare, March 2004
- 1155 Aaron Tornell, Frank Westermann, and Lorenza Martínez, NAFTA and Mexico's Economic Performance, March 2004
- 1156 George Economides, Sarantis Kalyvitis, and Apostolis Philippopoulos, Do Foreign Aid Transfers Distort Incentives and Hurt Growth? Theory and Evidence from 75 Aid-recipient Countries, March 2004
- 1157 Robert Fenge and Volker Meier, Are Family Allowances and Fertility-related pensions Siamese Twins?, March 2004
- 1158 Bruno S. Frey, Simon Luechinger, and Alois Stutzer, Valuing Public Goods: The Life Satisfation Approach, March 2004
- 1159 Jerome L. Stein and Guay C. Lim, Asian Crises: Theory, Evidence, Warning-Signals, March 2004
- 1160 Romain Ranciere, Aaron Tornell, and Frank Westermann, Crises and Growth: A Re-Evaluation, March 2004
- 1161 Assaf Razin and Efraim Sadka, Transparency, Specialization and FDI, March 2004
- 1162 Ludger Woessmann, How Equal Are Educational Opportunities? Family Background and Student Achievement in Europe and the United States, March 2004
- 1163 B.M.S. van Praag and Barbara E. Baarsma, Using Happiness Surveys to Value Intangibles: The Case of Airport Noise, March 2004
- 1164 Aaron Tornell, Frank Westermann, and Lorenza Martínez, The Positive Link Between Financial Liberalization, Growth, and Crises, March 2004
- 1165 Helge Berger and Carsten Hefeker, One Country, One Vote? Labor Market Structure and Voting Rights in the ECB, March 2004
- 1166 Clemens Fuest and Martin Kolmar, A Theory of User-Fee Competition, March 2004
- 1167 Friedrich Schneider and Robert Klinglmair, Shadow Economies around the World: What Do We Know?, April 2004
- 1168 Horst Raff and Nicolas Schmitt, Exclusive Dealing and Common Agency in International Markets, April 2004
- 1169 M. Hashem Pesaran and Allan Timmermann, Real Time Econometrics, April 2004
- 1170 Sean D. Barrett, Privatisation in Ireland, April 2004

- 1171 V. Anton Muscatelli, Patrizio Tirelli and Carmine Trecroci, Can Fiscal Policy Help Macroeconomic Stabilisation? Evidence from a New Keynesian Model with Liquidity Constraints, April 2004
- 1172 Bernd Huber and Marco Runkel, Tax Competition, Excludable Public Goods and User Charges, April 2004
- 1173 John McMillan and Pablo Zoido, How to Subvert Democracy: Montesinos in Peru, April 2004
- 1174 Theo Eicher and Jong Woo Kang, Trade, Foreign Direct Investment or Acquisition: Optimal Entry Modes for Multinationals, April 2004
- 1175 Chang Woon Nam and Doina Maria Radulescu, Types of Tax Concessions for Attracting Foreign Direct Investment in Free Economic Zones, April 2004
- 1176 M. Hashem Pesaran and Andreas Pick, Econometric Issues in the Analysis of Contagion, April 2004
- 1177 Steinar Holden and Fredrik Wulfsberg, Downward Nominal Wage Rigidity in Europe, April 2004
- 1178 Stefan Lachenmaier and Ludger Woessmann, Does Innovation Cause Exports? Evidence from Exogenous Innovation Impulses and Obstacles, April 2004
- 1179 Thiess Buettner and Johannes Rincke, Labor Market Effects of Economic Integration The Impact of Re-Unification in German Border Regions, April 2004
- 1180 Marko Koethenbuerger, Leviathans, Federal Transfers, and the Cartelization Hypothesis, April 2004
- 1181 Michael Hoel, Tor Iversen, Tore Nilssen, and Jon Vislie, Genetic Testing and Repulsion from Chance, April 2004
- 1182 Paul De Grauwe and Gunther Schnabl, Exchange Rate Regimes and Macroeconomic Stability in Central and Eastern Europe, April 2004
- 1183 Arjan M. Lejour and Ruud A. de Mooij, Turkish Delight Does Turkey's accession to the EU bring economic benefits?, May 2004
- 1184 Anzelika Zaiceva, Implications of EU Accession for International Migration: An Assessment of Potential Migration Pressure, May 2004
- 1185 Udo Kreickemeier, Fair Wages and Human Capital Accumulation in a Global Economy, May 2004
- 1186 Jean-Pierre Ponssard, Rent Dissipation in Repeated Entry Games: Some New Results, May 2004
- 1187 Pablo Arocena, Privatisation Policy in Spain: Stuck Between Liberalisation and the Protection of Nationals' Interests, May 2004