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# Government Control of Privatized Firms

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## Abstract

We study the evolution of the control structure for a large sample of privatized firms in OECD countries and find that governments typically transfer ownership rights in State-owned enterprises without relinquishing control rights. Indeed, as of 2000, after the largest privatization wave in history, governments are still the largest shareholder or use special powers to retain voting control of 62.4% of privatized firms. Control is often retained and leveraged through pyramids, dual-class shares, and golden shares. While in common law countries golden shares are typically used by governments to wield power in privatized firms, in civil law countries governments tend to retain large ownership stakes. When we look at the combined use of ownership and golden shares, we find no association between the legal origin and the extent of government control over privatized companies. Rather, we document more prevalent government influence over privatized firms in countries with proportional electoral rules and with a centralized system of political authority.

Keywords: Privatization, Corporate Governance

JEL codes: L33, D72, G15, H6, K22

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## I. Introduction

The wave of privatizations that began in the 1980s in the United Kingdom, and spread across the globe during the 1990s, is arguably the greatest transfer of ownership in the history of the corporation. Governments all over the world have either sold or are selling large blocks of their ownership positions in corporations to the private sector. In terms of flows, privatization transactions, including share issue privatization (SIP) and private placements, have raised globally revenues of US\$1,230 billion during the 1977-2003 period, about one fifth of total issuance on public equity markets. Yet, stories in the popular press suggest that the roll back of the State has been incomplete. Governments have often separated ownership and control in privatized companies by means of pyramids, statutory restrictions and special-class shares that grant them exceptional powers.<sup>1</sup>

Italian privatizations provide a revealing example of this reluctance to relinquish control in State-owned enterprises (SOEs). After the 1992 general elections, when the country was facing one of the most acute economic and political crises of the post-war period, the government decided to launch its first large-scale privatization process. Major privatization deals implemented since 1993 have raised more than \$100 billion, making Italy third in total value of privatizations worldwide (Securities Data Corporation). Despite these remarkable quantitative results, the Italian government is still an influential shareholder in many privatized firms. For example, it holds direct and indirect stakes (through Cassa Depositi e Prestiti, CDP) in Eni (the largest oil and gas company), Enel (the electricity giant), Alitalia (the flagship carrier), and Finmeccanica (the aerospace, defense and IT group). It also enjoys special powers to veto strategic decisions and acquisitions in fully privatized companies such as Telecom Italia, the former telecommunication State monopoly. These preliminary observations feed the suspicion that, despite large-scale privatizations, governments still wield power in SOEs.

In this paper, we want to document whether such a reluctance to relinquish control exists, and how widespread it is. We also study country, industry, and firm characteristics that tend to be associated with government influence over SOEs. Ultimately, this study concludes that government control of privatized firms is not an Italian peculiarity but a common feature of privatization in developed economies.

We show that many privatizations of a SOE are characterized by the sale of equity without a corresponding transfer of control rights. This may happen because the government remains the largest *ultimate* shareholder of the company, although it no longer owns 100% of the stocks, or because it enjoys veto or special powers through its possession of so-called “golden shares.”<sup>2</sup> We document this evolution of corporate control by carrying out a comprehensive analysis of the structure of ultimate control (voting) rights in a sample of 141 privatized (publicly traded) companies from developed economies, over the period 1996 to 2000. We find that the most common privatization outcome is that the State remains the largest ultimate owner. This is true for about one third of so-called “privatized” firms.

A few studies employing the notion of ultimate control outside a privatization setting have documented the widespread presence of governments as ultimate owners of banks (La Porta, Lopez-Silanes and Shleifer, 2002), as well as more in general (e.g., La Porta *et al.*, 1999, Claessens *et al.*, 2000, and Faccio and Lang, 2002). To our knowledge, however, with the exception of Tian’s (2000) study of Chinese privatizations, all other papers on privatizations have at most focused on direct ownership. In a recent paper, Boubakri, Cosset and Guedhami (2005) study *direct* ownership and conclude that governments relinquish control over time. We show that the picture looks totally different when *indirect* voting rights are accounted for. Our methodology in fact allows us to document that in more than 50% of privatized firms in which a government is the largest ultimate shareholder, this government employs pyramids and dual-class share structures to retain majority control. Had we not considered these mechanisms, we would have substantially understated the power of the State in privatized firms.<sup>3</sup>

Consistent with earlier findings by Jones, Megginson, Netter and Nash (1999), we document a widespread use of control restrictions and golden shares. We additionally show that these mechanisms are particularly common amongst privatized companies in which the government is *not* the largest shareholder. This combination of evidence allows us to conclude that through ownership *or* golden

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<sup>1</sup> For example, Julian Ellison and Duncan Reed, *Getting tough on golden shares*, Financial Times, June 6, 2003.

<sup>2</sup> We define *golden shares* as the complex of special powers and statutory constraints that enhance State control in privatized companies (see Section III.B).

<sup>3</sup> Later in the paper we show that, as of 2000, governments *directly* controlled an average of 37.14% of voting rights, while their ultimate control stake was on average 52.18%.

shares, governments are able to maintain control of almost two thirds of privatized firms. This result is quite surprising, given that conventional wisdom relates the period under study to a drastic rethinking of the role of State ownership which spurred a massive privatization wave: In fact, our evidence indicates that, even in a period during which governments were divesting substantial amounts through the sale of ownership of corporations, they maintained tight control in the majority of these firms.

Interestingly, we show that the instruments used by governments to retain control over privatized firms differ, to some extent, across countries. For example, while governments are unlikely to keep large ownership stakes in privatized firms in common law countries, golden shares are widespread in these same jurisdictions. Thus, there seem to be some substitution in the channels used by governments to maintain their influence over SOEs. We also document larger government control through ownership in countries dominated by a left wing majority, in politically fragmented democracies with proportional electoral rules and in countries with a centralized structure of political and fiscal authority. When we look at the combined use of ownership and golden share, we find no relation between government influence and legal origin. However, political and institutional factors remain significantly related to the frequency of government control of privatized firms. We thus conclude that when it comes to relinquish control, the political fragmentation induced by proportional rules makes the status quo the most likely outcome, and privatization remains incomplete. On the contrary, the delegation of substantial authority to sub-national governments fosters private investment and full privatization.

The rest of the paper is organized as follows. In section II, we describe the sample and data employed in the study. In section III, we discuss the ultimate control structure of privatized and matching firms, as well as the diffusion of golden shares. Section IV looks into the characteristics of countries, industries, and firms that tend to be associated with larger control rights, or the presence of golden shares. Section V concludes the paper.

## II. Data

### A. Privatized companies and control sample

The complete list of privatization transactions in public equity markets in OECD economies before 1/1/1997 is obtained from the *Global New Issues Database of Securities Data Corporation* (SDC). Privatization transactions are defined as primary or secondary issues of shares on a public equity market by companies where central or local governments act as shareholders. Our source provides us with a list of 299 privatization transactions, 44% of which are IPOs. As it is widely documented, the sheer size of the companies has often forced divesting governments to privatize by sequencing multiple tranches. In fact, the privatizations reported refer to 205 individual companies, involved in 1.4 issues on average. We cross check the presence of these companies both in the Privatization International (PI) Database and in Megginson's Appendix.<sup>4</sup> All the companies in our list are also reported in the PI dataset and appear in Megginson's Appendix. We then compare the data obtained from SDC with the information from selected official sources, such as the Italian Ministry of the Economy and Finance, the British HM Treasury, and Spanish SEPI, and other privatization agencies. After this double check, we conclude that our initial sample includes 98% of companies privatized in public equity markets in OECD economies prior to 1997. After requiring that ownership data be available, we end up with a sample of 141 firms privatized before 1/1/1997.

For comparative purposes, for each privatized firm, a match is identified as any company from the same country and Campbell's (1996) industry as the privatized firm. Among all eligible firms, we select the one with the total equity market capitalization closest to that of the privatized firm, as of year-end 1996, as long as its market capitalization is within a +/-30% range. If no company satisfies these criteria, we then select the firm with the closest market capitalization (in the +/-30% range) to the privatized company using Campbell's industry classification, but from any country. If this results in no match for a privatized firm, we then pick the domestic firm with the market capitalization closest to our privatized firm as of the end of 1996, in the +/-30% range, regardless to its industry. Whenever the government shows up as shareholder for a matching firm, we replace it with the next

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<sup>4</sup> <http://faculty-staff.ou.edu/M/William.L.Megginson-1/>

size match. The majority of the firms in the control group (68 per cent) are matched with the first best case, 30 per cent with the second best case, and only one with the third best case.

Name changes and acquisitions are tracked using the information contained in *Worldscope*, *Extel*, and *SDC*. In the case of mergers and acquisitions, we track the ownership of the bidder or the company resulting from the merger. If the privatized company merged with or was acquired by a private company not included in the control sample, and was consequently de-listed or listed with shares registered under a new name, we consider as a “privatized company” either the newly created company or the acquirer of the privatized company itself, provided their shares trade on the stock market where the privatized company was initially floated.

## B. Control structures: Data and examples

We employ the sources listed in the Appendix to measure the ultimate control (voting) rights of the largest shareholders for all privatized and matching companies, as of the end 1996 and 2000. Corporate control is measured in terms of voting rights, following the procedure employed in previous studies by La Porta, Lopez-de-Silanes, and Shleifer (1999), Claessens, Djankov, and Lang (2000), and Faccio and Lang (2002). For example, if a family owns 50% of Firm X, which owns 30% of Firm Y, then we posit that this family controls 30% of Firm Y (the percentage is determined by the weakest link along the control chain). As discussed in detail later, ultimate control is defined at the 10% cut-off level, i.e. we posit that a company has a large shareholder whenever anyone directly or indirectly controls at least 10% of voting rights. In addition, for the privatized companies, full information on ownership restrictions, voting caps, and special powers granted to the State are collected from the privatization prospectuses.

Two examples show that privatized companies may have quite complex control structures. The following privatized firms are selected: Deutsche Lufthansa AG (Germany), and SGS-Thomson Microelectronics (now STMicroelectronics, France).

[Figure 1 goes here]

Deutsche Lufthansa, Germany's largest airline, was first “privatized” in May 1966 via a rights issue which diluted the government's stake to 74.31 per cent. Figure 1 depicts its control structure as

of end 1996. The company has five direct shareholders: Deutsche Postbank, Deutsche Bahn, KfW, the State of North Rhine-Westphalia and MGL. Deutsche Postbank, Deutsche Bahn, KfW are government-majority controlled firms. The State of North Rhine-Westphalia is a local government authority. MGL is a publicly traded company with two main shareholders: Bayerische Landesbank Girozentrale (with a 44.5% control stake) and Dresdner Bank (also with a 44.5% control stake). Bayerische Landesbank, in turn, is 50% controlled by the State of Bavaria (a local government authority) and 50% controlled by the Association of Bavarian Saving Banks. Dresdner Bank is 22% controlled by Allianz (which is part of a complex cross-holding).

Lufthansa has three ultimate shareholders with the 10% cutoff rule: Allianz, which indirectly controls 10.05% of votes (the minimum among 10.05%, 44.5% and 22%), the Association of Bavarian Saving Banks, which controls 10.05% of votes (the minimum among 10.05%, 44.5% and 50%), and the German government, which controls 50.70%<sup>5</sup> of the votes. The State is thus Lufthansa's (largest) controlling shareholder. Notice that we would have ended up with a Government stake of only 1.77% had we focused on direct ownership – as almost all privatization studies do.

[Figure 2 goes here]

STMicroelectronics N.V. (formerly known as SGS-Thomson Microelectronics N.V.) was first privatized in December 1994 when the company's shares were initially floated on the NYSE. STMicroelectronics N.V. manufactures and supplies a broad range of semi-conductor integrated circuits and discrete devices. Figure 2 illustrates its control structure as of the end of 2000. The company's control structure involves complex pyramids. The bottom left side of the figure depicts the stakes that can be traced back to the French government. The right side reports the chains that trace back to the Italian government. The French government indirectly controls STMicroelectronics N.V. through two government majority-controlled firms: CEA (100% controlled) and France Telecom (55.5% controlled). CEA, through CEA Industries, controls 51% of FT1CI. So, the French government indirectly controls 51% of FT1CI ( $\min(100\%, 100\%, 51\%)$ ). Additionally, through France Telecom, it indirectly controls the remaining 49% ( $\min(55.5\%, 49\%)$ ) of FT1CI. Thus, overall, the French government controls 100% of FT1CI ( $51\%+49\%$ ). In turn, FT1CI indirectly controls 50%

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<sup>5</sup>  $[1.03\% (\min(100\%, 1.03\%)) + 0.4\% (\min(100\%, 0.4\%)) + 37.45\% (\min(80\%, 37.45\%)) + 1.77\% + 10.05\%$

( $\min(69.4\%, 100\%, 50\%)$ ) of STMicroelectronics N.V. Thus we posit that the French government controls 50% of STMicroelectronics N.V. ( $\min(50\%, 100\%)$ ).

The Italian government, on the other hand, indirectly controls STMicroelectronics N.V. through IRI (100% government owned) and Finmeccanica (in which the government controls 32.4% of votes). Additionally, IRI has a 5% stake in Finmeccanica. Thus, the Italian government controls 37.4% of Finmeccanica. Finmeccanica has a 50% stake in STMicroelectronics Holding NV, who controls 100% of STMicroelectronics Holding II BV which, in turn, has a 69.4% stake in STMicroelectronics NV. Thus, through this pyramid, the Italian government controls 37.4% of STMicroelectronics N.V.'s voting capital ( $\min(69.4\%, 100\%, 50\%, 37.4\%)$ ). This company is therefore under majority government control, albeit two different nations are involved.<sup>6</sup>

### III. The ultimate control structure of privatized and matching firms

#### A. Evolution of control rights

Following previous research (La Porta *et al.*, 1999, Claessens *et al.*, 2000, and Faccio and Lang, 2002), we classify ultimate owners into the following six types:

- *State*: A national government, a local authority (county, municipality, etc.), or a government agency;
- *Family*: A family or a firm that is unlisted on any stock exchange;
- *Widely held corporation*: A non-financial firm, defined as *widely held* (that is, no shareholder controls 10% or more of the votes);
- *Widely held financial institution*: A financial firm (SIC 6000-6999) that is widely held;
- *Miscellaneous*: Charities, voting trusts, employees, cooperatives, foundations, or minority foreign investors;
- *Cross-holdings*: Firm X is controlled by another firm, Y, which is in turn controlled by X, or directly controls at least 10% of its own stock.

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( $\min(10.05\%, 44.5\%, 50\%)$ )]

<sup>6</sup> Overall, we have more than one government entity only in a handful of cases.

If the ultimate owner of a corporation is an unlisted firm, we trace back its owners using all available data sources. Companies that do not have a shareholder controlling at least 10% of votes are classified as *widely held*.

[Table I goes here]

Table I analyzes the ultimate controlling owners of privatized and matching corporations under the 10 percent rule. Panel A shows that the State is the most common type of ultimate owner for privatized firms. This is true both as of the end of 1996, when 34.75% of privatized firms have the State as largest ultimate owner, and as of the end of 2000, when the government is the largest ultimate owner in 29.79% of cases.<sup>7</sup> Thus, even after privatization, almost one third of firms remain government-controlled. A large fraction of privatized companies do not have a controlling shareholder under the 10 percent rule, and are therefore labeled as “widely held”. The proportion of widely held companies increases through time amongst privatized firms (27.66% in 1996, and 30.50% in 2000), although insignificantly so. Amongst privatized firms, the second most important type of ultimate owner is families and unlisted companies. Families control 16.31% of firms in 1996, and 19.86% in 2000. Widely held financial institutions are also relatively frequent large shareholders, and include 17.02% of cases in 1996 and in 9.93% of cases in 2000. Widely held corporations, miscellaneous investors, and cross-holdings appear to play a substantially more marginal role.

The ownership of matching firms exhibits a different pattern (see Table I, Panel B). By construction, the government never is the largest shareholder in the matching sample. Most of these companies are widely held (37.59% of cases in 1996 and 41.84% in 2000). Family control is the second most important type of control structure. Families are the largest shareholder in 35.46% of cases in 1996, and 28.37% of cases in 2000. Widely held financial institutions are also relatively important, being the largest shareholders for 19.86% of all matching firms in 1996, and for 11.35% of peers in 2000. Once again, widely held corporations, miscellaneous investors, and cross-holdings play a minor role, although the former two investor types are definitely more common amongst matching than amongst privatized firms.

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<sup>7</sup> Thus, the percentage of firms for which the government is the major shareholder declined through time by 4.96 percentage points.

A comparison between privatized and matching firms (Panel C) shows some convergence in their control structures. From 1996 to 2000, the differences in the percentage of firms controlled by families, widely held financial institutions, and miscellaneous shareholders decline or become insignificant. However, the differences in the percentage of firms controlled by widely held corporations, as well as the differences in the percentage of widely held firms, increase.

[Table II goes here]

Table II shows that, on average, in 1996 the largest ultimate controlling shareholder controlled 27.80% of voting rights of privatized firms. This percentage marginally declines to 25.51% as of the end of 2000. In 1996, control rights are more diffuse for the control sample, where we find that the largest shareholder on average controls 21.10% of votes. This proportion, however, increases substantially by the end of 2000, when the largest shareholder controls 26.37% of votes. As a consequence, we observe a convergence in the concentration of voting power between privatized and matching firms. This convergence, however, comes from changes in the control structure of matching firms, which becomes much more concentrated.

Most importantly for our purposes, we show that amongst companies in which the government is the largest shareholder, government control rights average 51.27% at the end of 1996, and 52.18% at the end of 2000. So, in these companies, not only the government is the largest shareholder, but on average it controls the *majority* of votes.

We find a widespread use of control enhancing devices (e.g., pyramids, cross-holdings or dual-class share structures) among privatized firms in which the government is the largest shareholder: in 1996, 53.06% of these firms (vs. 30.61% of their matching peers) had in place some control enhancing device; in 2000, 52.38% of government controlled firms (vs. only 33.33% of their peers) were using such instruments. Had we not considered these mechanisms, the average government control rights would have been of only 43.01% (rather than 51.27%) in 1996, and 37.14% (rather than 52.18%) in 2000. This indicates that previous studies that only focus on direct ownership substantially understate the magnitude of government powers.

## B. Golden shares

The analysis of control rights does not provide a full picture of the real power wielded by the government, who can grant itself wide discretionary powers over partially or even fully privatized firms by the use of golden shares.

We define *golden share* as the system of the State's special powers and statutory constraints on privatized companies. Typically, special powers include (i) the right to appoint members in corporate boards; (ii) the right to consent to or to veto the acquisition of relevant interests in the privatized companies; (iii) other rights such as to consent to the transfer of subsidiaries, dissolution of the company, ordinary management, etc. The above mentioned rights may be temporary or not. On the other hand, statutory constraints include (i) ownership limits; (ii) voting caps; (iii) national control provisions.

This set of powers and constraints may stem from the possession of a redeemable special share, from limitations imposed by the privatized company's statutes, often in accordance with the privatization law, or from the possession of special class shares.

Golden shares have different institutional characteristics in different countries. For example, in the U.K., the prior consent of the special shareholder is normally required for any change in the ownership limitations in the Articles of Association, which usually prevent a person - or persons acting in concert - from having an interest of 15% or more in the voting share capital. The articles defining rights attached to the special share cannot be altered or removed. The special shares do not carry any rights to vote at general meetings, but they do entitle the holder to attend and speak at such meetings. The special share in this "basic" form applies to British Aerospace (now BAE Systems) British Energy, Southern Electric, and National Grid Group Plc. The rights attached to the special share are wider only in a few cases where a national "strategic" interest can be identified. The French *action spécifique* is particularly diversified. In general, prior approval of the Minister is required if persons or entities are to hold more than a certain percent of the capital or voting rights (10% for Elf Aquitaine (now Total), Havas, and Thomson-CSF (now Thales)). Usually a representative of the French Government is appointed to the Board of Directors to act on behalf of the Minister. In some cases he has limited veto power (i.e. for Elf Aquitaine, to block the sale of certain strategic assets),

while in others he can veto any board resolution (Thomson-CSF). In Turkey, in some cases special powers are so extensive that they involve government in ordinary management.

Listed companies are required to fully disclose the presence of golden share provisions in their prospectuses. We have therefore solicited privatization prospectuses from individual companies, investment banks, security exchange commissions, and privatization agencies. We have been able to obtain 104 prospectuses out of our sample of 141 companies privatized in OECD countries in the 1977-2000 period.<sup>8</sup> We then identified the presence of golden shares in the company's prospectus.

[Table III goes here]

Table III documents the diffusion of golden shares amongst privatized firms. We find that 62.5% of such firms have outstanding golden shares as of the end of 1996. Special powers are quite frequent and appear in 39.42% of privatized companies. Additionally, in a number of cases privatized companies' statutes set upper limits on the individual ownership or voting rights that can be acquired without government approval. In some cases, these limitations only apply to ownership held by foreign investors. It is common for the privatized company's statute to require the headquarters to be located in the country of incorporation or for it to require the board members to be citizens of the country of incorporation.

Golden shares are more common amongst companies in which the government is not the largest shareholder. As reported in Table III, as of the end of 1996, golden shares were present in 56.41% of the 39 companies under government control (under the 10% rule), and in 66.15% of the remaining 65 firms in which the government was not the largest shareholder. A similar picture comes out at the end of 2000, when golden shares are present in 57.58% of companies in which the government was the largest shareholder, and in 64.79% of firms in which the government does not control at least 10% of votes.

Through ownership *or* golden shares, the government controls 65.2% of privatized firms as of the end of 1996, and 62.4% of privatized firms as of the end of 2000. This evidence clearly indicates

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<sup>8</sup> Detailed institutional information about golden shares can be found from some official web sites (such as the HM Treasury in the United Kingdom, [www.hm-treasury.gov.uk](http://www.hm-treasury.gov.uk), the Spanish Sociedad Estatal de Participaciones Industriales, [www.sepi.es](http://www.sepi.es), the Austrian Holding and Privatisation Agency, [www.oia.g.at](http://www.oia.g.at)).

that, in the majority of cases, the “privatization” process was not followed by a complete relinquishment of power by the State.

As a further proof of the influence of governments over privatized firms, and the actual “exercise” of golden shares, we find a number of cases in which government ministers or members of parliaments sat themselves on the board of our sample firms. For example, Belgian Justice Minister Tony Van Parys served as Chairman of Dexia Belgium SA during our sample period, while Senator Philippe Bodson served as Executive Director of Distrigaz SA; Canadian MP Hon. W. David Angus was director of Air Canada; Swedish MP Lennart Nilsson served as Chairman of Celsius AB; in the UK, where the relinquishment of voting rights appears to have been more complete, we identified several cases in which prominent members of the House of Lords sat on the boards of privatized firms including AEA Technology PLC, BG PLC, BP Amoco PLC, British Airways PLC, Rolls-Royce PLC, and Scottish and Southern Energy PLC. Most of these firms have outstanding “golden shares”.

### C. Government influence across different industries and countries.

Table IV shows that, as of 2000, government control (through voting rights) is particularly common in some sectors, such as basic industries and services, in which the majority privatized companies have the government as largest shareholder. Other industries that are largely dominated by the government after privatization are transportation, consumer durables, and food/tobacco. On the other hand, governments have appeared to be more likely to relinquish voting rights in sectors such as leisure, textile/trade, and finance/real estate. Additionally, more than half of the firms operating in the basic industries, consumer durables, leisure, petroleum, transportation, and utilities sectors have outstanding golden shares. On the other hand, golden shares are relatively absent in sectors such as capital goods, finance/real estate, and textiles/trade.

[Table IV goes here]

Panel B of Table IV provides the breakdown by country. It shows that privatizations have been carried out reluctantly in Finland and Greece where, as of the end of 2000, the government was still the largest shareholder in all former SOEs. On the other hand, the privatization process appears to have been more complete in Australia, Ireland, Mexico, New Zealand, Turkey, UK, and US. These

figures, however, only reflect the identity of the largest blockholder, but fail to incorporate special powers and golden shares. In fact, in Australia, Belgium, Greece, Ireland, Mexico, the Netherlands, New Zealand, Norway, Sweden and Turkey, all privatized firms have outstanding golden shares. In the UK, the government held golden shares in 85% of privatized companies, while it divested all voting rights.

In Panel C, we compare the extent of government control of privatized companies across countries. For this purpose, we start by splitting countries based on their legal origin. The “law and finance” literature has shown that legal origin matters considerably in explaining government intervention in the economy. In particular, the State is typically an influential blockholder in civil law countries as opposed to common law countries (La Porta, Lopez-de-Silanes, Shleifer, 1999). Government ownership of banks is also pervasive in civil law countries (La Porta, Lopez-de-Silanes, Shleifer, 2002). Legal origin affects investor protection and financial development and thus it may also affect indirectly government’s incentives to relinquish control of SOEs (La Porta et al., 1997, 1998). We test the role of legal origin by using the dummy *COMMON LAW* that equals one if a given firm is from a country with a common law legal tradition and zero otherwise.

With respect to ultimate control rights, our results are in line with prior evidence by La Porta, Lopez-de-Silanes, and Shleifer (1999, 2002): governments are substantially more likely to be the largest blockholder of companies in civil law, as opposed to common law countries (48.5% vs. 4.6% of cases). However, we find the opposite result for golden shares and special powers. For example, 86.5% of firms based in common law countries have outstanding golden shares, opposed to “only” 49.2% of companies from civil law countries. This suggests that the earlier papers are actually overstating the differences between the two sets of countries. Certainly, in common law countries governments are using alternative instruments to retain influence.

In addition to a country legal origin, other institutional factors may also matter in explaining government’s control of SOEs. Thus, we consider possible political determinants of government control of privatized firms. Two possible channels are taken into account: the political incentives shaped by electoral rules, and the political orientation of incumbent governments. A higher electoral dis-proportionality is a key feature of majoritarian political systems, displaying on average a lower

number of parties, more stable cabinets, and a lower degree of political fragmentation. The empirical literature on the political economy of privatization has established that the timing and the extent of privatization is affected by the electoral rule, with majoritarian countries privatizing sooner a larger fraction of the SOE sector (Bortolotti and Pinotti, 2003, and Bortolotti and Siniscalco, 2004). On the contrary, in proportional political systems large-scale privatization is instead delayed by a war of attrition among different veto players. Thus electoral dis-proportionality should affect residual state ownership in privatized firms. We capture the degree of the dis-proportionality by using the Gallagher (1991) index, which is based on the following formula:

$$G = \sum_{i=1}^N \sqrt{\frac{1}{2}(v_i - s_i)^2} \quad (1)$$

$v_i$  = votes share obtained by party  $i$

$s_i$  = seats share held by party  $i$

$N$  = total number of parties

The index is continuous and takes the value zero when the apportionment of parliamentary seats is exactly proportional to electoral results. It increases, on average, as disproportionality increases.<sup>9</sup> Initially developed by Lijphart (1999), this variable has been extended and updated by Bortolotti and Pinotti (2003) using the sources listed in the Appendix, and used by Pagano and Volpin (2005) as a determinant of corporate governance patterns in OECD economies.

Panel C of Table IV points out a substantial difference in the likelihood of governments remaining the dominant shareholder as function of the degree of electoral dis-proportionality. In particular, we find a significantly higher proportion of government-controlled firms in countries with a low disproportionality index.

Several theoretical models have shown the relevance of partisan politics in privatization (Perotti, 1995; Biais and Perotti, 2002). In particular, these models show that by allocating a substantial amount of (underpriced) shares to the middle class, right wing government creates a constituency supporting market oriented policies, increasing the chance of reelection. The empirical

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<sup>9</sup> For presidential and semi-presidential countries, (such as, respectively, USA and France) the yearly disproportionality index results from the average of values taken at the last legislative and presidential elections.

implication is straightforward: one should expect higher government control in privatized firms in countries ruled by socialist, or Christian-democrats coalitions relative to countries governed by right-wing market oriented cabinets.

Starting from the comprehensive partisan classification by Huber and Inglehart (1995), we construct an index of political orientation (*PARTISAN*) which is given by the weighted average of the scores obtained by parties forming the executive, where the weights are given by the ratio of the number of parliamentary seats held by each party over the total hold by the ruling coalition as a whole as a proxy of the effective power enjoyed by each party within the government coalition. This index, which survived an extensive cross-check with other independent sources, has been used to explain the timing of privatization in OECD countries, with large scale privatization delayed longer in countries ruled by coalitions leaning to the left of the political spectrum (Bortolotti and Pinotti, 2003). Consistent with our predictions, we find more government control of privatized firms in countries ruled by left-wing governments (e.g., low partisan index).

According to the commitment view, governments are forced to establish SOEs when they lack the necessary institutions to support private investment in socially-valuable projects due to the risk of expropriation (see Esfahani and Ardakani, 2005). Weingast (1995) points out that fiscal federalism combining local governments' regulatory responsibility over the economy with a hard budget constraint provides a suitable governance structure to credibly commit the state to preserve markets and support private investment. To test this theory, we use a dummy variable that equals one in countries where state/provinces have authority over taxing, spending, or legislating, and zero otherwise (*FEDERAL*). This variable comes from the Beck, Clarke, Groff, Keefer, and Walsh's (2001) *Database of Political Institutions*. This indicator broadly identifies countries implementing fiscal federalism, an institutional setting where the central government delegates fundamental powers to federal states or lower level government (see Oates, 1999). If markets can thrive under fiscal federalism, our dummy should be negatively associated with public ownership and control of firms. Different from this prediction, in our univariate tests we observe a similar likelihood of having the government as largest shareholder in countries with a more decentralized political structure. However,

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we find a larger prevalence of golden shares in federal systems. We show in the next Section that this result is driven by other country characteristics which we fail to appropriately reflect in a univariate setting.

#### IV. Multivariate analysis of government control rights

Our descriptive analysis suggests that government control of privatized firms is pervasive around developed economies. Yet the breakdown by country and industry reveals some intriguing cross-sectional variation. So, what country factors and firm characteristics are associated with a higher government control of privatized firms? In order to answer to this question, a multivariate analysis of ultimate government control rights and golden shares is in order.

To proceed in that direction, some additional data collection is needed. First, we have to track changes in governments' direct and indirect ownership in our sample of privatized firms. These changes in direct stake may be due to further privatization sales, to primary stock issues, or to acquisitions of the company's shares by the government or other public entities. Obviously when pyramiding occurs, changes in the ownership structure have to be identified along the entire control chain in order to obtain data on control rights that is consistent with the data analyzed in section II. This comprehensive data collection allows us to construct the variable *STATE*, the share of control rights held by the government in the privatized company in the 1996-2000 period. Second, a set of economic and financial variables has to be constructed to control for firm-specific time varying effects.

Our test proceeds in three-stages. In the first stage, we estimate directly ultimate government control rights in a given privatized firm in year  $t$  (*STATE*). In the second stage, we estimate the probability of observing golden shares by means of a dummy variable (*GOLDEN*) which takes value 1 if at least one of the provisions described in section III.B is present in a given privatized firm in year  $t$ , and 0 otherwise. Finally, we consider the combination of power obtained via votes and golden shares by estimating the probability that a given privatized firm is under government control and/or subject to golden share provisions. This probability is captured by two dummies (*GOLDOWN10* and *GOLDOWN20*) taking the value 1 when *GOLDEN* is equal to one and/or residual government voting

rights exceed 10 or 20 percent, respectively, and zero otherwise. We now turn to describing the explanatory variables used.

#### A. Country specific explanatory variables

We consider a broad set of legal, institutional, political, and economic variables at the country level as potential candidates affecting the variability of government power in privatized firms. In all regressions, we control for the legal origin of the country, the degree of electoral disproportionality, the partisan orientation of the government, and the level of political decentralization. These variables were described in Section III.C.

In addition to those variables, we recognize that public finance conditions appear to be primary drivers in privatization policies, and as such they could in principle explain residual government stakes in privatized firms. Indeed, financially distressed governments have been typically involved in divestiture because revenues could be allocated either to curb public debt or to finance the budget. Furthermore, in some developed countries, notably Italy and France, State-owned enterprises themselves contributed to the accumulation of public debt in that ailing firms have been often bailed out by the State. Privatization could thus improve the public budget indirectly via a reduction to transfers to former SOEs. To measure the outlook of public finance, we use the ratio of total (domestic and foreign) debt to GDP in a given year (*DEBT RATIO*). Fiscal deficits could be used an alternative measure, but we think that a flow variable is less suitable to explain a stock variable such as government control rights. Furthermore, debt series are typically more stable and less affected by business cycles.

#### B. Firm specific explanatory variables

We control for firm characteristics potentially affecting government control rights by use of a large set of variables. First, we consider their industry sector. Indeed, some former State monopolies operating in energy, transportation, telecommunications, and utilities, are strategically important for the national economy and are often shielded from competition. Furthermore, they may enjoy

favourable treatment by the State in terms of regulation, guaranteed business, contracts, etc. If companies operating in these sectors are more valuable, it is plausible that the government will keep a larger stake in these firms. Significant benefits may also stem from government ownership of banks which can be used to establish political control in the selection of projects to be financed. We control for this effect by use of industry dummy variables based on two-digit SIC codes for more politically sensitive sectors (*PETROLEUM, TRANSPORT, UTILITIES, FINANCE*).

We additionally control for value, profitability, size and leverage using financial data from *Worldscope*. These variables are alternatively used in levels or in differences (e.g., between the value of the privatized firm and its matching peer). In the first case, we assume that the government decision to retain control hinges on the characteristics of the privatized company. In the second case, the government considers the relative “performance” of the privatized firm with respect to a benchmark. These two groups of variables are labelled with the same name, and the notes in the Tables will specify the corresponding estimated coefficients. As customary in this kind of analysis, we measure value by the conventional market-to-book (*MB*), profitability by return on equity (*ROE*), size by the (log of) total assets (*SIZE*), and leverage by the debt-to-equity ratio (*LEVERAGE*).<sup>10</sup>

Government residual control rights may also depend on the non-pecuniary private benefits of control. Since they reflect the benefits a shareholder may extract from the firm, they should be correlated with the firm’s control structure. In particular, we should observe a higher subsequent concentration of control in companies in which shareholders are able to extract larger non-pecuniary benefits of control. The problem is of course to find a way of isolating non-pecuniary benefits. For this purpose, we follow Gompers, Ishii and Metrick (2006), and build a variable (*BENEFIT*) that is given by the percentage of firms in each 2-digit SIC industry (within each country) whose name includes the name of any of its top officers (CEO, chairman of the board, president, a vice-president, or secretary of the board), as reported in *Worldscope* as of the beginning of the sample period.<sup>11</sup>

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<sup>10</sup> More precisely, the *MB* ratio is defined as the ratio of market value of ordinary and preferred equity to the book value of equity. *ROE* is computed as (Net Income before Preferred Dividends - Preferred Dividend Requirement) / Last Year's Common Equity. *SIZE* represents the total assets of the company converted to U.S. dollars using the fiscal year end exchange rate. *LEVERAGE* is computed as (Long Term Debt + Short Term Debt & Current Portion of Long Term Debt) / Common Equity.

### C. The testing strategy

The nature of our dependent variables strictly conditions the choice of the econometric tools used in our analysis. For example, the variable measuring government control rights (*STATE*) is left (right) censored for all the firm-years where ultimate government voting rights are zero (one), which are a significant fraction of our sample. In this case, conventional regression methods fail to account for the qualitative difference between limit (zero/one) observations and non-limit (continuous) observations. Tobit analysis, instead, is based on a new random variable that infers the missing tail in the distribution of the observed variable, allowing for estimation by conventional maximum likelihood methods (Amemiya, 1985). Additionally, the probabilities of control via golden shares are estimated using conventional Probit models. All the econometric models presented estimate the parameters by maximizing a log-likelihood function.

Our dataset allows employing panel estimation techniques, which deal both with the heterogeneity across units (i.e. firms, in our case) and over time. However, it is known that the presence of fixed effects complicates matters significantly in non-linear models as sufficient statistics conditioning on which fixed-effects are swept out of the likelihood exist only in special cases (Hsiao, 1986; Baltagi, 1995). Furthermore, some explanatory variables are dummies which do not display any variability over time. Equations have thus been estimated by using random effects models.

We are also aware that our estimates may be affected by endogeneity problems, especially when firm characteristics are included as regressors. As a partial solution, all the time varying covariates are lagged of one year. Obviously, this strategy makes variables simply predetermined and not strictly exogenous. Given this possible bias, we admit that we are estimating conditional expectation, and caution the reader at making any causal interpretation of our reported coefficients.

### D. Empirical results

We do not have any theoretical a priori about the possibly differential effect of our explanatory factors on ultimate government control in terms of votes or golden shares provisions. We simply note that no clear relation is visible between these two channels, even if some provisions (particularly

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<sup>11</sup> The procedure used to build our variable is slightly different from the one used in Gompers et al. (2006). The

special powers, ownership limits and voting caps imposed to foreign shareholders) appear negatively correlated with ultimate government control rights. For the sake of consistency we run exactly the same models for all dependent variables described at the beginning of section IV.

Table V presents the results of the estimated coefficients of Tobit regressions for the variable *STATE*, measuring residual ultimate government control rights in privatized firms. Column (1) presents the baseline model, Column (2) includes sector dummies, and Column (3) and (4) reports the estimated coefficients of firm specific variables, in levels and in differences between the privatized company and its peer.<sup>12</sup>

[Table V goes here]

This first set of results confirms the empirical relevance of the legal, institutional and political factors in explaining government control in privatized firms. In line with previous studies, common law countries present a statistically significant lower level of government control rights, suggesting that the privatization process measured in terms of voting rights tends to remain incomplete in civil law countries. A maybe more surprising result concerns the strong effect of fiscal federalism in accomplishing the roll back of the State as shareholder in privatized firms. Across all specifications, the dummy *FEDERAL* is always highly statistically significant. It is important to note that this effect holds for all privatized firms, and not only for those held by the local government. This result implies that the so called “market-preserving” federalism (which encompasses fiscal authority) provides the institutional commitment needed to support larger involvement of private shareholders in the capital of one country’s most important companies.

Political variables appear also important, even if they lose statistical significance in the model including peer-adjusted performance measures (Column 4).<sup>13</sup> Overall, the estimated coefficients of the variable *PARTISAN* suggest a negative relation between right-wing government and government control rights, which is completely consistent with previous findings on the privatization side (Jones

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different choices are mostly driven by data constraints.

<sup>12</sup> We have opted for parsimonious specifications since the number of observations shrinks rapidly when additional control variables are included. We report the estimated coefficients of the set of control variables that yielded the most interesting results.

<sup>13</sup> It is important to note however the significant drop in the number of observation when these adjusted measures are included.

et al., 1999, Bortolotti et al, 2003). Insofar new elections shift from the left to the right the political orientation of governments, the State as shareholder loses power in privatized firms.

Interestingly, electoral systems affect considerably the control structures of privatized firms. We find a strong and negative relationship between the disproportionality index, *DISPR*, and residual government voting rights. This evidence is in line with the growing empirical literature in political economy which established a link between electoral rules and a broad range of fiscal policy choices. On average majoritarian countries, which display the higher disproportionality between seats and votes are associated with smaller governments, less welfare spending and balanced budgets (Milesi-Ferretti, 2002; Persson and Tabellini, 2003). In our context, the lower share of voting rights observed in firms privatized in majoritarian countries could be a consequence of the lower number of veto players involved in the privatization decision, which could be delayed in consensual democracies with a strongly proportional political representation.

With respect to industries, the sector of activity does not generally seem to matter much in government's decision to relinquish control. Surprisingly, statistically significant lower government stakes are found in banks or financial institutions. La Porta, Lopez-de-Silanes, and Shleifer (2002) analyzing data for 1995 conclude that government ownership of banks remained very large even after the wave of privatization in the 1980s. Our finding suggests that after the large-scale wave of the 1990s, government ownership in banks shrunk considerably relative to the other sectors.

Column (3) and (4) in Table V report the estimated coefficients for the firm characteristics. Interestingly, we find that more valuable and more profitable firms tend to be more extensively privatized, while less performing ones remain under tighter government control. Both the market-to-book (*MB*) and the return of equity (*ROE*) are highly statistically significant and negative coefficient, both in levels and in differences. These findings appear consistent with "best-foot-forward" policy in privatization, with government selling first the better companies (see Gupta, Ham, Svejnar, 2005). Finally, non-pecuniary private benefits of control result in higher concentration of control in the hands of the government when adjusted financial indicators are included. A similar result obtains for company size. Leverage and the debt to GDP ratio instead do not appear to matter.

[Table VI goes here]

Table VI presents the results of the probit analysis of government control exerted via golden shares. Special powers or statutory constraints curbing private shareholder rights are more likely in common law countries and if the privatized company operates in the utility sector. The latter factor is not surprising because golden shares provision have been explicitly designed by governments to maintain control or exert some veto power in mergers and acquisition in politically sensitive sectors. Utilities include electricity, gas, and telecommunications companies managing strategic infrastructures and providing services of general interest often under the scrutiny of national regulators. Golden share provisions provide a safe harbour against unwanted takeovers of strategic interests for the national economy.

The likelihood of observing golden shares in privatized firms appears systematically affected by legal origin. As already noted in the descriptive analysis, special powers and statutory constraints are a typical trait of privatization in common law countries. The coefficient of *COMMON LAW* is always highly statistically significant and remarkably stable across regressions. This evidence shows that golden shares, initially established in the United Kingdom to favor the transfer of ownership rights in strategic industries, found a more favourable environment in the countries belonging to the same legal tradition.

Finally, we estimate the combination of power exerted by governments via votes as ultimate shareholder and via golden shares. Table VII presents the probit analysis of dummies capturing jointly the existence of golden shares and a government share of voting rights larger than 10 or 20 percent (*GOLDOWN10* and *GOLDOWN20*, respectively). These dummies allow to capture the overall power of the State in privatized firms and as such their frequency can be interpreted as a reliable proxy for the willingness to retain control after privatization.

[Table VII goes here]

Three factors which were already very relevant in the first stage of analysis prove their empirical validity in this final test: the electoral rule, fiscal federalism, and the industry of activity. Across specifications and taking into account for difference control thresholds, we find a negative and highly statistically significant relationship between government control and disproportionality of the electoral system. Majoritarian elections thus favour the relinquishment of government control in

firms, while proportional systems induce a larger size of government in term of residual stakes in former SOEs.

Fiscal federalism is confirmed being quite important in explaining residual power in privatized firms. The coefficient of the corresponding dummy is always negative and statistically significant, albeit less in the smaller sample with adjusted firm performance measures. The same result holds when different thresholds of control rights are considered in the construction of the dependent variables. Overall these findings suggest that federal countries delegating substantial regulatory and fiscal authority to sub-national governments are endowed with more suitable institutions supporting market development and full privatization. Competition among states combined with a harder budget on the one hand creates incentives to efficiency improvements and further privatization at the local level, on the other hand the higher commitment capabilities of the central State provide a governance structure supporting large sunk private investment and a smaller SOE sector.

Finally, the financial industry sticks out as being the more genuinely privatized in recent times. We report a very strong negative and highly statistically coefficient for the corresponding sector dummy, which suggests that the strategic role of banks in financing politically originated project progressively lost ground in developed economies. Overall, government control of privatized firms appears truly widespread in our sample, and mostly unaffected by sector or individual firm characteristics

## V. Conclusions

We document new important findings concerning government control of privatized firms. First, we show that across our sample of OECD countries, the privatization process has been carried out only partially. By employing the relatively new concept of ultimate control to supplement data on changes in the direct ownership of privatized companies, we show that as of the end of 2000, governments are either the largest shareholders or have substantial veto powers in almost two thirds of formerly State-owned firms. This outcome is in sharp contrast with the typical definitions of “privatization.” For example, Shleifer and Vishny (1997) argue that “[i]n most cases, privatization replaces political control with private control by outside investors.” Similarly, according to the White

House,<sup>14</sup> “[p]rivatization is the process of changing a public entity or enterprise to private control and ownership.” The picture we document looks indeed very different.

We show that, in common law countries, golden shares are commonly used by governments to retain control and often exercised, as highlighted by the presence of politicians on the boards of these companies. On the other hand, in civil law countries governments tend to retain large ownership stakes, both directly and indirectly, through the use of pyramids. Surprisingly, when we look at the combined use of ownership and golden shares, we find no association between the legal origin of the country, and the extent of government control over privatized companies. Rather, government influence in firms, through ownership or golden shares, appears to be affected by other political and institutional factors, such as the proportionality of the electoral system and by the centralization of political authority.

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<sup>14</sup> <http://www.whitehouse.gov/omb/circulars/a076/a076sa1.html>

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Appendix: Data Sources

Panel A: Ownership Data

Country	Data Sources for 1996:	Data Sources for 2000:
Australia	Australian Stock Exchange, 1997, "ASX all Ordinary Index. Company Handbook", Sydney, N.S.W.	<a href="http://www.companies.govt.nz/search/cad/dbssiten.main">http://www.companies.govt.nz/search/cad/dbssiten.main</a>
Austria	Wiener Börse, 1997, "Yearbook 1996", Österreichische Vereinigung für Finanzanalyse, Wien	Wiener Börse, 2001, "Yearbook 2000", Österreichische Vereinigung für Finanzanalyse, Wien
Belgium	Banque Bruxelles Lambert, 1996, "Actionnariat des Sociétés Belges cotées à Bruxelles", Department Etudes et Stratégie.	Banque Bruxelles Lambert, 2000, "Actionnariat des Sociétés Belges cotées à Bruxelles", Department Etudes et Stratégie. <a href="http://www.stockexchange.be/enindex.htm">http://www.stockexchange.be/enindex.htm</a>
Canada	The Financial Post, 1996, "Survey of Industrials" The Financial Post, 1996, "Survey of Mines and Energy Resources" Statistics Canada, 1996, "Inter-corporate Ownership in Canada."	Company web sites from: <a href="http://www.tse.com/">http://www.tse.com/</a>
Denmark	Company web sites	Company web sites
Finland	<a href="http://www.huginonline.com/">http://www.huginonline.com/</a> Company web sites from: <a href="http://www.hex.fi">http://www.hex.fi</a>	<a href="Http://www.huginonline.com/">Http://www.huginonline.com/</a> Company web sites from: <a href="http://www.hex.fi">http://www.hex.fi</a>
France	The Herald Tribune, 1998, "French Company Handbook 1997," SFB-Paris Bourse <a href="http://www.bourse-de-paris.fr/fr/market8/fsg830.htm">http://www.bourse-de-paris.fr/fr/market8/fsg830.htm</a>	<a href="http://www.bourse-de-paris.fr/fr/index_fs.htm?nc=2&amp;ni=6&amp;nom=marche">http://www.bourse-de-paris.fr/fr/index_fs.htm?nc=2&amp;ni=6&amp;nom=marche</a> Company web sites from: <a href="http://www.euronext.com/fr/">http://www.euronext.com/fr/</a>
Germany	Commerzbank, 1997, "Wer gehört zu Wem," 19 <sup>th</sup> edition. Bundesaufsichtsamt für den Wertpapierhandel, "Major Holdings of Voting Rights in Officially Listed Companies," September 1997	Commerzbank, 2000, "Wer gehört zu Wem," 20 <sup>th</sup> edition Bundesaufsichtsamt für den Wertpapierhandel, "Major Holdings of Voting Rights in Officially Listed Companies," December 2000
Greece	Company web sites	<a href="http://www.ase.gr/">http://www.ase.gr/</a>
Ireland	London Stock Exchange, 1997, "The London Stock Exchange Yearbook"	<a href="Http://www.hemscott.co.uk/equities/">Http://www.hemscott.co.uk/equities/</a>
Italy	CONSOB, 1997, "Bollettino – edizione speciale n. 4/97 – Compagine azionaria delle società quotate in borsa o ammesse alle negoziazioni nel mercato ristretto al 31 dicembre 1996"	<a href="Http://www.consob.it/">Http://www.consob.it/</a>
Japan	Toyo Keizai Shanposha, 1997, "Japan Company Handbook", Tokyo, Japan, Winter Edition. ( <a href="http://www.toyokeizai.co.jp/english/jch/order/index.html">http://www.toyokeizai.co.jp/english/jch/order/index.html</a> )	Toyo Keizai Shanposha, 2001, "Japan Company Handbook", Tokyo, Japan, Summer Edition.
Mexico	Company web sites from: <a href="http://www.bmv.com.mx/bmving/index.html">http://www.bmv.com.mx/bmving/index.html</a>	Company web sites from: <a href="http://www.bmv.com.mx/bmving/index.html">http://www.bmv.com.mx/bmving/index.html</a>
Netherlands	Company web sites from: <a href="http://www.euronext.com/en/">http://www.euronext.com/en/</a>	Company web sites from: <a href="http://www.euronext.com/en/">http://www.euronext.com/en/</a>
New Zealand	Datex, 1997, "New Zealand Directory of Shareholders"	Datex, 2001, "New Zealand Directory of Shareholders"
Norway	<a href="Http://www.huginonline.com/">Http://www.huginonline.com/</a> Company web sites from: <a href="http://www.ose.no/english/">http://www.ose.no/english/</a>	<a href="http://www.huginonline.com/">http://www.huginonline.com/</a> Company web sites from: <a href="http://www.ose.no/english/">http://www.ose.no/english/</a>

Portugal	Bolsa de Valores de Lisboa, 1997, “Sociedades Cotadas 1996”	Bolsa de Valores de Lisboa e Porto, 2000, “Sociedades Cotadas 1999”, CD-rom
Spain	Comision Nacional del Mercado de Valores, 1996 and 1997, “Participaciones significativas en sociedades cotizadas”	<a href="http://www.cnmv.es/english/cnmve.htm">http://www.cnmv.es/english/cnmve.htm</a>
Sweden	<a href="http://www.huginonline.com/">Http://www.huginonline.com/</a>	<a href="http://www.huginonline.com/">http://www.huginonline.com/</a>
Turkey	Company web sites.	The Istanbul Stock Exchange, 2001, “Yearbook of Companies”, available at: <a href="http://www.ise.org">http://www.ise.org</a>
UK	London Stock Exchange, 1997, “The London Stock Exchange Yearbook”	<a href="http://www.hemscott.co.uk/equities/">http://www.hemscott.co.uk/equities/</a>
USA	<a href="http://www.sec.gov/cgi-bin/srch-edgar">http://www.sec.gov/cgi-bin/srch-edgar</a>	<a href="http://www.sec.gov/cgi-bin/srch-edgar">http://www.sec.gov/cgi-bin/srch-edgar</a>

Ownership information is supplemented with the various companies’ privatization prospectuses, Bankscope, the Economist Intelligence Unit country reports (for Government ownership), Extel Financial, Faccio and Lang (2002), Fortune ([www.fortune.com](http://www.fortune.com)), Lexis-Nexis, and Worldscope.

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Panel B: Additional Data

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*Accounting and stock market data:*

1. Worldscope; Datastream
2. Company privatization prospectuses and accounts

*Data-sets used to track companies (i.e., to identify name changes, M&As, etc...):*

1. Thomson Financial Securities Data, SDC Platinum™, Worldwide Mergers & Acquisitions Database
2. Extel Financial
3. Sources listed in Panel A

*Political data:*

1. Electoral Studies, various years
  2. Banks, A.S., T.C. Day and W.R. Muller (2002), Political Handbook of the World 2000-2002 - CSA publications, State University of New York.
  3. Zarate’s World Political Leaders since 1945 ([www.terra.es/personal2/monolith](http://www.terra.es/personal2/monolith))
  4. Library of Congress Country Studies (<http://lcweb2.loc.gov/frd/cs/cshome.html>),
  5. Administration and Cost of Elections ([www.aceproject.org](http://www.aceproject.org))
  6. Elections Around the World ([www.electionworld.org](http://www.electionworld.org))
  7. Parties and Elections in Europe ([www.parties-and-elections.de/indexe.html](http://www.parties-and-elections.de/indexe.html))
  8. Political Reference Almanac (<http://www.polisci.com/almanac/nations.htm>)
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Figure 1. The control structure of Deutsche Lufthansa (Germany) as of the end of 1996

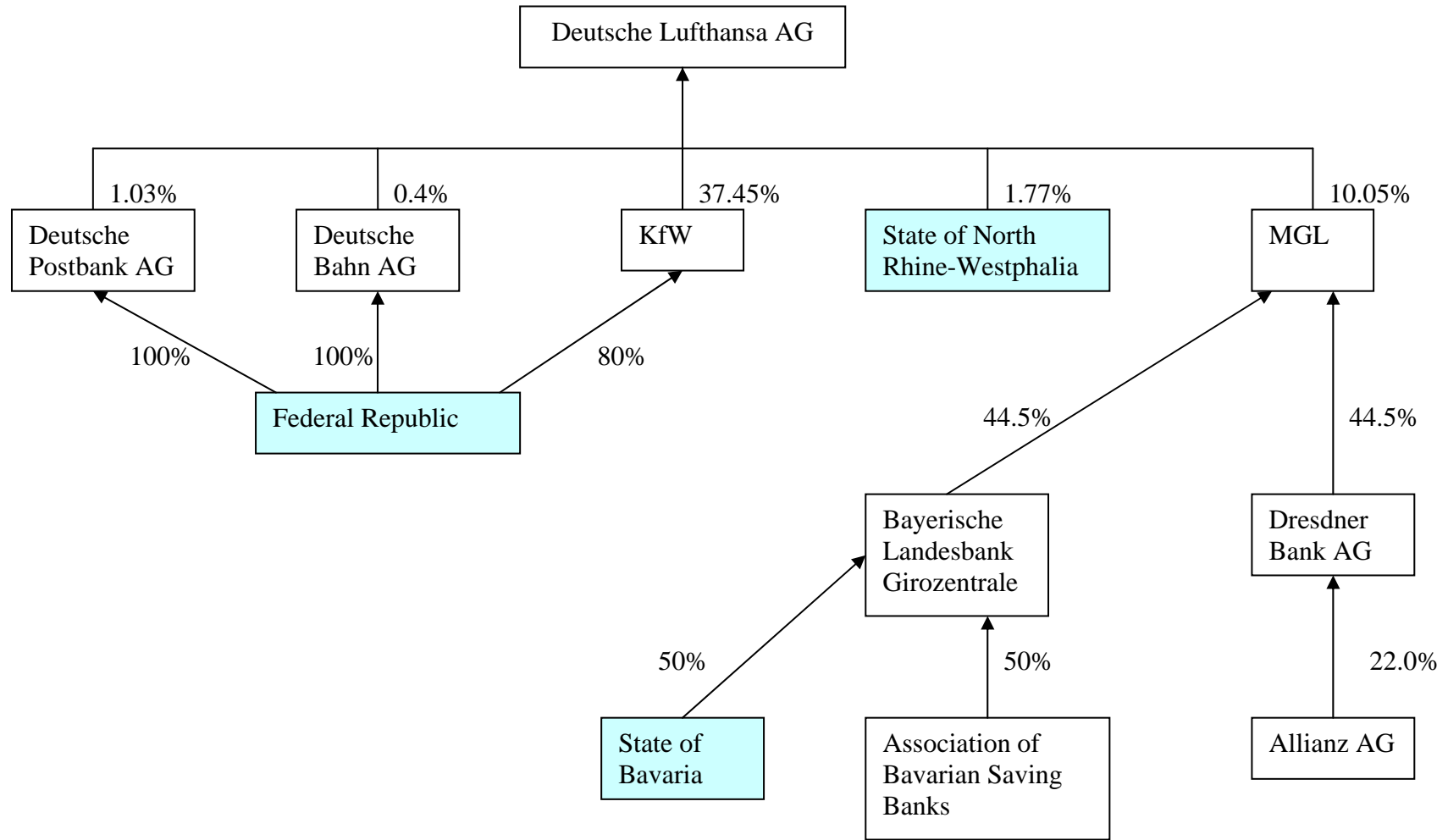


Figure 2. The control structure of STMicroelectronics NV (France) as of the end of 2000.

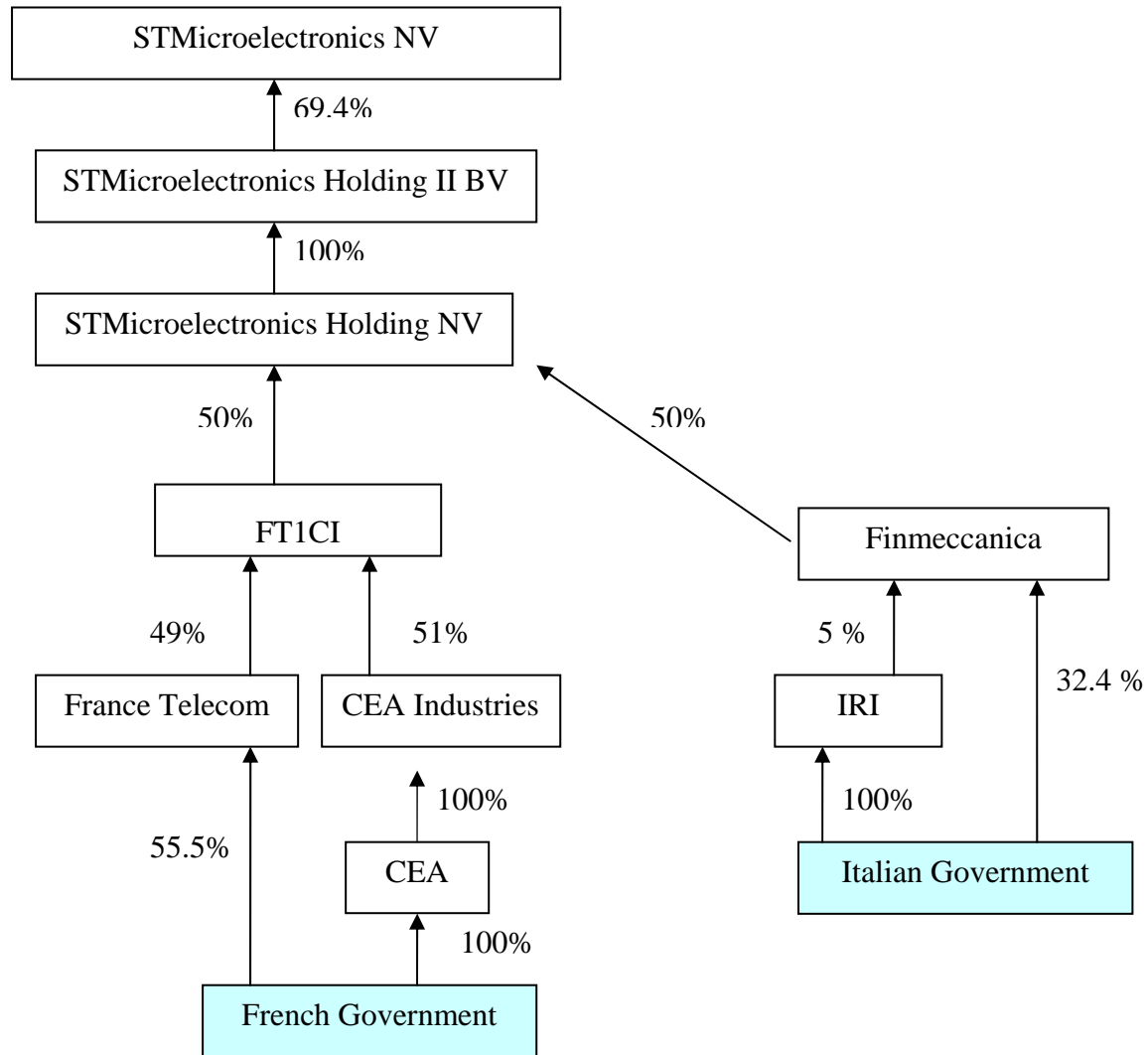


Table I. Ultimate Control of Privatized and Matching Firms (Largest Shareholder)

Data for 141 privatized corporations and 141 matching firms are used to construct this table. The table presents the percentage of firms controlled by different controlling owners, using 10% ownership as the threshold. Controlling shareholders are classified into six types. *State*: A national government (domestic or foreign), a local authority (county, municipality, etc.), or a government agency. *Family*: A family (including an individual) or a firm that is unlisted on any stock exchange. *Widely held financial institution*: A financial firm (SIC 6000-6999) that is defined as widely held because no shareholder controls 10% or more of the votes; held at the control threshold. *Widely held corporation*: A nonfinancial firm, widely held using the control threshold. *Miscellaneous*: Charities, voting trusts, employees, cooperatives, or minority foreign investors. *Cross-holdings*: The firm Y is controlled by another firm, that is controlled by Y, or directly controls at least 10% of its own stocks. Companies that do not have a shareholder controlling at least 10% of votes are classified as *widely held*. <sup>a</sup>, <sup>b</sup>, and <sup>c</sup> denote statistical significance at the .01, .05, and .10 levels, respectively. Z-statistics for equality of proportions are reported in the table.

Panel A: Privatized Firms										
Time period	Number of firms	State	Family	— of which:		Widely held corp.	Widely held financial	Miscell.	Cross-holdings	Widely held
				<i>Identified families</i>	<i>Unlisted firms</i>					
End of 1996	141	34.75	16.31	2.84	13.48	2.84	17.02	1.42	0.00	27.66
End of 2000	141	29.79	19.86	2.84	17.02	4.26	9.93	4.96	0.71	30.50
Diff '00-'96		-4.96	3.55	0.00	3.55	1.42	-7.09 <sup>c</sup>	3.55 <sup>c</sup>	0.71	2.84
Z-stat		-0.89	0.77	0.00	0.83	0.64	-1.74	1.69	1.00	0.52
Panel B: Matching Firms										
Time period	Number of firms	State	Family	— of which:		Widely held corp.	Widely held financial	Miscell.	Cross-holdings	Widely held
				<i>Identified families</i>	<i>Unlisted firms</i>					
End of 1996	141	0.00	35.46	13.48	21.99	2.13	19.86	4.96	0.00	37.59
End of 2000	141	0.00	28.37	7.09	21.28	8.51	11.35	8.51	1.42	41.84
Diff '00-'96		0.00	-7.09	-6.38 <sup>c</sup>	-0.71	6.38 <sup>b</sup>	-8.51 <sup>b</sup>	3.55	1.42	4.26
Z-stat		.	-1.28	-1.76	-0.14	2.39	-1.97	1.19	1.42	0.73
Panel C: Difference between Privatized and Matching Firms										
Time period		State	Family	— of which:		Widely held corp.	Widely held financial	Miscell.	Cross-holdings	Widely held
				<i>Identified families</i>	<i>Unlisted firms</i>					
<i>Diff end 1996</i>		34.75 <sup>a</sup>	-19.15 <sup>a</sup>	-10.64 <sup>a</sup>	-8.51 <sup>c</sup>	0.71	-2.84	-3.55 <sup>c</sup>	0.00	-9.93 <sup>c</sup>
Z-stat		7.70	-3.67	-3.26	-1.87	0.38	-0.61	-1.69	.	-1.78
<i>Diff end 2000</i>		29.79 <sup>a</sup>	-8.51 <sup>c</sup>	-4.26 <sup>c</sup>	-4.26	-4.26	-1.42	-3.55	-0.71	-11.35 <sup>b</sup>
Z-stat		7.02	-1.67	-1.64	-0.91	-1.46	-0.39	-1.19	-0.58	-1.98

Table II. Ultimate Control Rights

Data relating to 141 privatized corporations and 141 matching firms are used to construct this table. *Control rights* is the percentage of voting rights ultimately controlled by the largest controlling shareholder. *Government control rights* is the percentage of voting rights controlled by the Government, whenever a Government shows up as the largest shareholder. *Private control rights* is the percentage of voting rights controlled by the largest shareholder in firms matching those in which the Government is the largest shareholder. Firms using *control enhancing devices* denotes the percentage of government-controlled firms (or matching peers) in which the controlling shareholder enhances his/her voting power by using pyramids, multiple control chains and/or dual class share structures. Pyramids occur when the controlling shareholder owns one corporation through another which he does not totally own. Firm Y is held through multiple control chains if it has an ultimate owner who controls it via a multitude of control chains, each of which includes at least 5% of the voting rights at each link. Dual class shares occur when firms have outstanding stocks with different voting and/or cash flow rights. <sup>a</sup>, <sup>b</sup>, and <sup>c</sup> denote statistical significance at the .01, .05, and .10 levels, respectively.

Panel A: Privatized Firms

All privatized companies				Companies in which the government is the largest shareholder		
Country	Number of firms	Mean control rights (largest shareholder)	Median control rights	Number of firms	Government control rights (Mean)	Firms using control enhancing devices (%)
End of 1996	141	27.80	19.99	49	51.27	53.06
End of 2000	141	25.51	16.16	42	52.18	52.38
Diff '00-'96		-2.29				
T-stat		-1.26				

Panel B: Matching Firms

Country	Number of firms	Mean control rights (largest shareholder)	Median control rights	Number of firms	Private Control Rights (Mean)	Firms using control enhancing devices (%)
End of 1996	141	21.10	11.92	49	15.67	30.61
End of 2000	141	26.37	13.40	42	17.76	33.33
Diff '00-'96		5.27 <sup>b</sup>				
T-stat		2.13				

Panel C: Difference between Privatized and Matching Firms

Country	Mean control rights	Mean control rights
<i>Diff end 1996</i>	6.70 <sup>b</sup>	35.50 <sup>a</sup>
T-stat	2.37	9.10
Diff end 2000	-0.86	34.42 <sup>a</sup>
T-stat	-0.28	7.80

Table III. “Golden share” Provisions in Privatized Firms

*Golden share* is a dummy that takes the value of 1 if the Government enjoys special powers or if there are other statutory constraints in a privatized company. *Special Powers* is a dummy that takes the value of 1 if the Government enjoys special powers in privatized companies. *Special powers* stem from the possession of special class shares and from provisions contained in the privatized company’s statute, and they include (i) the right to appoint members in corporate board; (ii) the right to consent to or to veto the acquisition of relevant interests in the privatized company; (iii) other rights such as to consent to the transfer of subsidiaries, dissolution of the company, or even ordinary management decisions. *Statutory constraints* include (i) ownership limits; (ii) voting caps; (iii) national control provisions. *Ownership limit* is a dummy that takes the value of 1 if the company statute establishes an upper limit on the individual ownership rights that can be acquired without Government consent. *Voting Cap* is a dummy that takes the value of 1 if the company statute establishes an upper limit on the votes that any shareholder may cast at general meetings. *Foreign Ownership Limit* is a dummy that takes the value of 1 if company statute establishes an upper limit on the individual ownership rights that can be acquired by a foreign investor without Government consent. *Foreign Voting Cap* is a dummy that takes the value of 1 if the company statute establishes an upper limit on the votes that any foreign shareholder may cast at general meetings. *National Control* is a dummy that takes the value of 1 if the company statute prohibits non-residents to acquire a controlling interest in the privatized company. *Location/Directors’ Nationality* is a dummy that takes the value of 1 if the company statute requires that the corporate headquarters be located in the country of incorporation or that the board members be citizens of the country of incorporation. *Gov’t Controlled* firms are those whose largest shareholder (at the 10% threshold) is a national government (domestic or foreign), a local authority (county, municipality, etc.), or a government agency. All other firms are classified as *Non-Gov’t Controlled*.

	All Privatized Firms		Gov’t Controlled    Non-Gov’t Controlled (as of end ’96)				Gov’t Controlled    Non-Gov’t Controlled (as of end ’00)			
	N	Mean (%)	N	Mean (%)	N	Mean (%)	N	Mean (%)	N	Mean (%)
Golden share	104	62.50	39	56.41	65	66.15	33	57.58	71	64.79
Of which:										
Special Powers:	104	39.42	39	28.21	65	46.15	33	27.27	71	45.07
Ownership Limit	99	33.33	38	18.42	61	42.62	32	18.75	67	40.30
Voting Cap	99	24.24	39	23.08	60	25.00	33	27.27	66	22.73
Foreign Ownership Limit	99	12.12	38	7.89	61	14.75	32	9.38	67	13.43
Foreign Voting Cap	97	7.22	37	5.41	60	8.33	31	6.45	66	7.58
National Control	104	9.52	38	10.53	66	9.09	31	12.90	73	8.22
Location/Directors’ Nationality	104	9.62	39	5.13	65	12.31	32	6.25	72	11.11

Table IV. Industry and Country Distribution of Privatized Firms by Control Type

*Industry Classification* is based on Campbell (1996, p. 316). *Market Cap. (th US\$)* is the average market capitalization across privatized companies in a given industry/country (in US\$) as of the end of 1996. *Gov't Controlled* firms are those whose largest shareholder (at the 10% threshold) is a national government (domestic or foreign), a local authority (county, municipality, etc.), or a government agency. *Golden share* is a dummy that takes the value of 1 if the Government enjoys special powers or if there are statutory constraints on privatized companies. *Common Law* is a dummy taking value 1 for companies of common law countries. *Partisan* is variable capturing the right-left wing political orientation of the coalition supporting the executive and it ranges from 0 (extreme left) to 10 (extreme right). *Dispr* is the Gallagher index of electoral disproportionality. *Federal* is a dummy variable taking the value one in countries where state/provinces have authority over taxing, spending, or legislating.

Panel A: Distribution by Industry

Industry classification	Two-Digit SIC Codes	# of Obs.	% of All Privatiz.	Market Cap. (th US\$)	Gov't Controlled 1996 (%)	Gov't Controlled 2000 (%)	Golden Share (%)
Basic industries	10, 12, 14, 24, 26, 28, 33	13	9.2	2,788,598	53.85	53.85	60.00
Capital goods	34, 35, 38	4	2.8	2,302,681	50.00	25.00	33.33
Construction	15-17, 32, 52	3	2.1	5,074,864	33.33	33.33	50.00
Consumer durables	25, 30, 36, 37, 50, 55, 57	15	10.6	4,294,365	40.00	40.00	60.00
Finance/real estate	60-69	34	24.1	3,354,805	17.65	17.65	38.10
Food/tobacco	1, 9, 20, 21, 54	5	3.5	3,008,677	40.00	40.00	50.00
Leisure	27, 58, 70, 78, 79	3	2.1	1,990,081	0.00	0.00	100.00
Petroleum	13, 29	9	6.4	19,304,327	33.33	33.33	66.67
Services	72, 73, 75, 80, 82, 87, 89	2	1.4	1,478,758	50.00	50.00	50.00
Textiles/trade	22, 23, 31, 51, 53, 56, 59	1	0.7	2,162,774	100.00	0.00	0.00
Transportation	40-42, 44, 45, 47	17	12.1	3,877,685	47.06	47.06	64.29
Utilities	46, 48, 49	35	24.8	13,307,290	34.29	20.00	85.19

Panel B: Distribution by Country

Country	# of Obs.	% of All Privatizations	Market Cap. (th US\$)	Gov't	Gov't	Golden Share (%)	Country attributes			
				Controlled 1996 (%)	Controlled 2000 (%)		Common Law	Dispr	Partisan	Federal
Australia	6	4.3	2,362,704	0.0	0.0	100.0	1	10.47	6.73	1
Austria	11	7.8	1,208,097	81.8	81.8	25.0	0	1.06	5.40	1
Belgium	2	1.4	1,704,919	50.0	50.0	100.0	0	3.66	4.98	1
Canada	9	6.4	2,218,113	22.2	22.2	87.5	1	17.67	5.10	1
Denmark	2	1.4	4,052,246	100.0	50.0	50.0	0	1.57	4.49	0
Finland	4	2.8	1,366,844	100.0	100.0	25.0	0	3.65	5.53	0
France	20	14.2	7,344,097	30.0	25.0	33.3	0	31.11	7.32	1
Germany	10	7.1	12,416,954	50.0	50.0	40.0	0	1.78	6.69	1
Greece	2	1.4	3,749,041	100.0	100.0	100.0	0	8.24	4.60	0
Ireland	2	1.4	1,238,265	0.0	0.0	100.0	1	2.86	5.62	0
Italy	12	8.5	7,626,273	50.0	33.3	50.0	0	7.53	4.56	1
Japan	4	2.8	37,368,888	75.0	75.0	33.3	0	6.87	7.51	0
Mexico	1	0.7	1,641,726	0.0	0.0	100.0	0	.	.	1
Netherlands	3	2.1	15,651,368	33.3	33.3	100.0	0	1.05	5.37	0
New Zealand	2	1.4	4,214,644	0.0	0.0	100.0	1	17.19	7.30	0
Norway	6	4.3	845,287	50.0	33.3	100.0	0	3.95	4.13	0
Portugal	9	6.4	1,280,305	11.1	11.1	80.0	0	4.46	4.88	0
Spain	5	3.5	12,161,026	40.0	20.0	50.0	0	5.92	6.33	0
Sweden	3	2.1	1,939,769	66.7	33.3	100.0	0	1.18	4.08	0
Turkey	3	2.1	236,935	0.0	0.0	100.0	0	.	.	0
U.K.	24	17.0	10,105,532	0.0	0.0	85.0	1	13.55	7.71	0
USA	1	0.7	800,036	0.0	0.0	0.0	1	8.08	4.15	1
Overall sample	141	100.0	6,884,500	34.8	29.8	62.5				

Panel C: Country Attributes and Government Control of Privatized Firms

Country Attributes	# of Obs.	Market Cap. (th US\$)	Gov't Controlled 1996 (%)	Gov't Controlled 2000 (%)	Golden Share (%)
<i>Common Law = 1</i>	44	6,554,042	4.6	4.6	86.5
<i>Common Law = 0</i>	97	7,034,399	48.5	41.2	49.2
<i>Difference</i>		-480,357	-43.9 <sup>a</sup>	-36.6 <sup>a</sup>	37.3 <sup>a</sup>
<i>Dispr ≥ median</i>	76	6,997,324	21.1	17.1	66.7
<i>Dispr &lt; median</i>	61	7,156,810	54.1	47.6	52.6
<i>Difference</i>		-159,486	-33.0 <sup>a</sup>	-30.5 <sup>a</sup>	14.1
<i>Partisan ≥ median</i>	71	10,513,670	22.5	19.7	62.3
<i>Partisan &lt; median</i>	66	3,361,994 <sup>a</sup>	50.0	42.4	60.4
<i>Difference</i>		7,151,676	-27.5 <sup>a</sup>	-22.7 <sup>a</sup>	1.9
<i>Federal = 1</i>	65	7,604,881	29.2	24.6	77.3
<i>Federal = 0</i>	76	6,268,386	39.5	34.2	51.7
<i>Difference</i>		1,336,495	-10.2	-9.6	25.6 <sup>a</sup>

<sup>a</sup>, <sup>b</sup>, and <sup>c</sup> denote significance in the difference between the two groups (e.g., Common Law = 1 and Common Law = 0) at the 1, 5, and 10 percent level, respectively.

Table V. Tobit Regressions Explaining Government's Control Rights

This table reports the estimated coefficients and associated standard errors (in parentheses) of tobit estimations. The dependent variable is the *ultimate government control rights* in firm *i* in year *t*. Normality of the individual effects is assumed (random-effects model). *Common Law* is a dummy taking value 1 for companies of common law countries. *Partisan* is variable capturing the right-left wing political orientation of the coalition supporting the executive and it ranges from 0 (extreme left) to 10 (extreme right). *DISPR* is the Gallagher index of electoral dis-proportionality. *Federal* is a dummy variable taking the value one in countries where state/provinces have authority over taxing, spending, or legislating. *Debt Ratio* is the ratio of total public debt to GDP. *Petroleum*, *Transportation*, *Utilities*, and *Finance* are sector dummies based on two-digits SIC codes (see Table IV). *Leverage* is the debt-to-equity ratio. *MB* is the market-to-book ratio. *ROE* is the return of equity. *Size* is the (log) of total assets. *Benefit* is proxy for non-pecuniary benefits of control. *Year Dummies* is a set of time dummies for 1996-2000 (coefficients are not reported). All time varying covariates are lagged of one year. In regressions (1)-(3) control variables refer to the privatized company, while in regression (4) variables are constructed as differences between the values of the privatized and the matching firm. Wald  $\chi^2$  tests the null of joint significance of the parameters. <sup>a</sup>, <sup>b</sup>, and <sup>c</sup> denote statistical significance at 1, 5 and 10 percent level, respectively.

	[1]	[2]	[3]	[4]
Constant	0.136 <sup>c</sup> (0.070)	0.265 <sup>a</sup> (0.084)	0.422 <sup>a</sup> (0.131)	0.044 (0.155)
Common Law	-0.392 <sup>a</sup> (0.052)	-0.524 <sup>a</sup> (0.060)	-0.511 <sup>a</sup> (0.062)	-0.481 <sup>a</sup> (0.083)
Partisan	-0.015 <sup>c</sup> (0.008)	-0.015 <sup>c</sup> (0.008)	-0.022 <sup>a</sup> (0.008)	-0.015 (0.010)
Dispr	-0.004 <sup>c</sup> (0.002)	-0.004 <sup>b</sup> (0.002)	-0.005 <sup>b</sup> (0.002)	-0.0033 (0.002)
Federal	-0.214 <sup>a</sup> (0.045)	-0.237 <sup>a</sup> (0.060)	-0.237 <sup>a</sup> (0.059)	-0.182 <sup>a</sup> (0.070)
Debt ratio	0.125 (0.078)	0.081 (0.077)	0.060 (0.071)	0.000 (0.112)
Petroleum		0.048 (0.061)	0.088 (0.060)	0.206 <sup>a</sup> (0.078)
Transportation		0.089 (0.079)	0.088 (0.078)	0.026 (0.118)
Utilities		-0.014 (0.059)	0.050 (0.059)	0.079 (0.069)
Finance		-0.277 <sup>a</sup> (0.057)	-0.256 <sup>a</sup> (0.058)	-0.410 <sup>a</sup> (0.085)
Leverage			0.016 (0.067)	0.082 (0.064)
MB			-0.022 <sup>b</sup> (0.009)	-0.042 <sup>a</sup> (0.015)
Roe			-0.001 <sup>a</sup> (0.000)	-0.001 <sup>a</sup> (0.000)
Size			-0.010 (0.013)	0.031 <sup>b</sup> (0.015)
Benefit			0.004 (0.003)	0.012 <sup>a</sup> (0.003)
Year dummies	Yes	Yes	Yes	Yes
Obs.	524	524	524	288
Left-censored obs.	328	328	328	185
Right-censored obs.	5	5	5	4
Log Likelihood	-23.253	-11.331	-1.241	3.902
Wald $\chi^2$	130.65 <sup>a</sup>	155.78 <sup>a</sup>	183.54 <sup>a</sup>	164.09 <sup>a</sup>

Table VI. Probit Regressions Explaining the Presence of Golden Shares

This table reports the estimated coefficients and associated standard errors (in parenthesis) of Probit estimations. The dependent variable is an indicator taking value 1 when at least one *Golden Share* provision (see Table III) is observed in company *i* in year *t*. Normality of the individual effects is assumed (random-effects model). *Common Law* is a dummy taking value 1 for companies of common law countries. *Partisan* is variable capturing the right-left wing political orientation of the coalition supporting the executive and it ranges from 0 (extreme left) to 10 (extreme right). *DISPR* is the Gallagher index of electoral dis-proportionality. *Federal* is a dummy variable taking the value one in countries where state/provinces have authority over taxing, spending, or legislating. *Debt Ratio* is the ratio of total public debt to GDP. *Petroleum*, *Transportation*, *Utilities*, and *Finance* are sector dummies based on two-digits SIC codes (see Table IV). *Leverage* is the debt-to-equity ratio. *MB* is the market-to-book ratio. *ROE* is the return of equity. *Size* is the (log) of total assets. *Benefit* is proxy for non-pecuniary benefits of control. *Year Dummies* is a set of time dummies for 1996-2000 (coefficients are not reported). All time varying covariates are lagged of one year. In regressions (1)-(3) control variables refer to the privatized company, while in regression (4) variables are constructed as differences between the values of the privatized and the matching firm. The percentage of matched observations is reported as a measure of goodness-of-fit. Wald  $\chi^2$  tests the null of joint significance of the parameters. <sup>a</sup>, <sup>b</sup>, and <sup>c</sup> denote statistical significance at 1, 5 and 10 percent level, respectively.

	[1]	[2]	[3]	[4]
Constant	-0.468 (1.870)	-0.190 (1.980)	-1.187 (3.455)	-9.352 <sup>b</sup> (4.664)
Common Law	5.590 <sup>a</sup> (1.120)	5.226 <sup>a</sup> (1.165)	4.944 <sup>a</sup> (1.215)	5.332 <sup>a</sup> (1.599)
Partisan	0.013 (0.222)	-0.083 (0.229)	-0.032 (0.233)	0.216 (0.351)
Dispr	-0.485 (0.457)	-0.565 (0.485)	-0.570 (0.493)	0.083 (0.687)
Federal	1.294 (1.195)	1.524 (1.246)	1.419 (1.256)	1.342 (1.856)
Debt ratio	-0.731 (1.920)	-1.169 (1.965)	-0.970 (1.996)	2.737 (3.003)
Petroleum		0.735 (1.419)	0.347 (1.515)	1.276 (1.742)
Transportation		0.884 (1.320)	1.300 (1.358)	1.885 (2.132)
Utilities		2.539 <sup>b</sup> (1.225)	2.019 (1.301)	4.079 <sup>b</sup> (1.723)
Finance		-1.494 (1.271)	-1.325 (1.530)	-1.389 (1.848)
Leverage			-1.817 (1.859)	-0.837 (1.871)
MB			0.105 (0.220)	0.342 (0.493)
Roe			0.003 (0.012)	0.007 (0.009)
Size			0.160 (0.319)	0.366 (0.325)
Benefit			-0.052 (0.064)	0.067 (0.096)
Year dummies	YES	YES	YES	YES
Obs.	386	386	386	210
Matched	71.46%	75.82%	78.87%	70.59%
Log Likelihood	-75.912	-70.931	-69.931	-41.134
Wald $\chi^2$	26.32 <sup>a</sup>	31.68 <sup>a</sup>	33.97 <sup>b</sup>	24.44

Table VII. Golden Share cum Ownership: Probit Regressions

This table reports the estimated coefficients and associated standard errors (in parenthesis) of Probit estimations. The dependent variable is an indicator taking value 1 when at least one golden share provision is observed in company  $i$  in year  $t$  and/or government voting rights exceed 10 or 20 percent (*Golddown10*, *20*). Normality of the individual effects is assumed (random-effects model). *Common Law* is a dummy taking value 1 for companies of common law countries. *Partisan* is variable capturing the right-left wing political orientation of the coalition supporting the executive and it ranges from 0 (extreme left) to 10 (extreme right). *DISPR* is the Gallagher index of electoral dis-proportionality. *Federal* is a dummy variable taking the value one in countries where state/provinces have authority over taxing, spending, or legislating. *Debt Ratio* is the ratio of total public debt to GDP. *Petroleum*, *Transportation*, *Utilities*, and *Finance* are sector dummies based on two-digits SIC codes (see Table IV). *Leverage* is the debt-to-equity ratio. *MB* is the market-to-book ratio. *ROE* is the return of equity. *Size* is the (log) of total assets. *Benefit* is proxy for non-pecuniary benefits of control. *Year Dummies* is a set of time dummies for 1996-2000 (coefficients are not reported). All time varying covariates are lagged of one year. In regressions (1)-(3) control variables refer to the privatized company, while in regression (4) variables are constructed as differences between the values of the privatized and the matching firm. The percentage of matched observations is reported as a measure of goodness-of-fit. Wald  $\chi^2$  tests the null of joint significance of the parameters. <sup>a</sup>, <sup>b</sup>, and <sup>c</sup> denote statistical significance at 1, 5 and 10 percent level, respectively.

	<i>Golddown10</i> (>10%)				<i>Golddown20</i> (>20%)			
	[1]	[2]	[3]	[4]	[1]	[2]	[3]	[4]
Constant	3.258 <sup>c</sup> (1.791)	4.238 <sup>b</sup> (1.969)	2.895 (2.872)	-2.829 (4.607)	3.619 <sup>b</sup> (1.843)	4.290 <sup>b</sup> (1.935)	3.167 (2.983)	-4.932 (4.800)
Common Law	1.203 (0.923)	0.883 (1.008)	1.008 (1.047)	1.453 (1.597)	1.833 <sup>c</sup> (1.048)	1.403 (1.007)	1.527 (1.048)	1.684 (1.455)
Partisan	0.254 (0.217)	0.208 (0.218)	0.238 (0.228)	0.430 (0.386)	0.167 (0.222)	0.167 (0.225)	0.126 (0.234)	0.533 (0.382)
Dispr	-0.129 <sup>a</sup> (0.038)	-0.118 <sup>a</sup> (0.039)	-0.140 <sup>a</sup> (0.044)	-0.127 <sup>c</sup> (0.067)	-0.177 <sup>a</sup> (0.497)	-0.167 <sup>a</sup> (0.040)	-0.189 <sup>a</sup> (0.045)	-0.204 <sup>a</sup> (0.070)
Federal	-2.334 <sup>b</sup> (1.125)	-2.141 <sup>b</sup> (1.093)	-2.281 <sup>b</sup> (1.127)	-2.626 (2.026)	-2.340 <sup>b</sup> (1.142)	-2.010 <sup>c</sup> (1.113)	-2.260 <sup>b</sup> (1.135)	-3.201 (2.069)
Debt ratio	-2.322 (1.787)	-2.223 (1.832)	-2.492 (1.898)	-2.197 (3.193)	-2.499 (1.809)	-2.379 (1.842)	-2.728 (1.924)	-2.659 (3.274)
Petroleum		-0.647 (1.436)	-0.649 (1.553)	-0.791 (1.869)		0.105 (1.445)	0.253 (1.560)	0.705 (1.844)
Transportation		-0.655 (1.406)	-0.461 (1.485)	-0.884 (2.515)		-0.105 (1.438)	0.115 (1.516)	0.679 (2.596)
Utilities		0.435 (1.010)	0.475 (1.140)	0.579 (1.782)		1.060 (1.020)	1.192 (1.152)	2.098 (1.812)
Finance		-3.187 <sup>a</sup> (1.027)	-3.067 <sup>a</sup> (1.196)	-5.399 <sup>a</sup> (1.905)		-2.628 <sup>b</sup> (1.055)	-2.422 <sup>b</sup> (1.221)	-3.480 <sup>c</sup> (1.850)
Leverage			-0.789 (1.562)	0.126 (2.185)			-0.481 (1.636)	-0.818 (2.254)
MB			0.019 (0.239)	0.051 (0.415)			0.067 (0.257)	0.245 (0.502)
Roe			0.001 (0.011)	0.007 (0.009)			0.002 (0.012)	0.008 (0.009)
Size			0.171 (0.262)	0.692 <sup>b</sup> (0.327)			0.114 (0.272)	0.722 <sup>b</sup> (0.344)
Benefit			0.034 (0.050)	0.153 (0.110)			0.044 (0.053)	0.213 <sup>c</sup> (0.120)
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	428	428	428	233	427	427	427	233
Matched	80.28%	85.26%	86.06%	83.27%	78.88%	83.67%	84.26%	82.27%
Log likelihood	-77.386	-70.913	-70.379	-34.989	-75.438	-69.847	-69.279	-36.227
Wald $\chi^2$	17.73 <sup>b</sup>	30.16 <sup>a</sup>	29.96 <sup>b</sup>	19.48	20.81 <sup>b</sup>	32.53 <sup>a</sup>	32.99 <sup>b</sup>	22.19