

# PRIVATIZATION IN ITALY 1993-2002: GOALS, INSTITUTIONS, OUTCOMES, AND **OUTSTANDING ISSUES**

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# PRIVATIZATION IN ITALY 1993-2002: GOALS, INSTITUTIONS, OUTCOMES, AND OUTSTANDING ISSUES

# **Abstract**

This paper describes the privatization program in Italy during the 1990s and puts that policy in the context of macroeconomic adjustment, general market deregulation, and promotion of private investment in the provision of public infrastructure. The wave of state divestitures reached Italy later than other OECD countries. A deep-rooted tradition of state intervention, coupled with the use of public enterprises as a source of employment and political support, hindered the timid attempts at privatization of the 1980s, delaying until 1992 the start of largescale privatizations. These were imposed on Italian politicians and electorate by a host of factors: the financial crisis affecting both the general government and, sometimes irreversibly, state-owned enterprises (SOEs); the increasing aversion of the European Commission towards state aid to ailing firms; and the discredit thrown on public enterprises by their involvement in corruption scandals. An evaluation of its results in manufacturing, performed on the basis of a set of operative and restructuring performance indicators for a representative sample of privatized firms, indicates the lack of statistically significant improvements in efficiency scores. The analysis of the consequences of privatization on corporate governance show that, notwithstanding considerable changes in the structure of ownership and a sizeable contribution to capitalization and liquidity growth, the market for corporate control remains insufficiently transparent. These results appear to relect multiple factors – the preference accorded to quantitative targets in the context of EMU convergence, the weakness of the executive and its dependence on shaky parliamentary majorities in the Italian political system, and finally the resistance of politicians to relinquish control over SOEs. In the broader framework of fiscal decentralization, this last factor seems if anything reinforced by recent normative changes and proposals.

JEL Code: H1, G3, L5.

Keywords: privatization, regulatory reform, industrial restructuring, Italy.

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### 0. Introduction

In 1992, when a large-scale privatization program was launched in the midst of a dramatic political, economic and financial crisis, the Italian public enterprise sector was larger than in other major OECD countries. Although state owned enterprises (SOEs) may have made a significant contribution to growth in the 1950s and early 1960s (Barca and Trento 1997, over time they increasingly became the source of production inefficiencies and misallocation of resources. Non-economic goals were imposed upon public managers, effective incentive systems and monitoring devices were lacking, and the response to changes in market and technological developments was slow, due to the lack of competitive pressures in the sheltered markets where most of these enterprises were operating.

On the basis of a complex legal framework, capped at least temporally by the 1994 privatization law, successive governments completed large sell-offs, increasing both stock market capitalization and the number of shareholders and contributing substantially to the reduction of public debt and therefore to the convergence towards the Maastricht criteria. Quantitative results have been nothing short of outstanding: Italy has topped the OECD privatization ranking each year in 1995-99 (from number 9 in 1992) before falling to the second place in 2000. Annual proceeds averaged some US\$ 12b during 1992-2000 (OECD 2002, Table 1, p. 46), equivalent to 1.1 per cent of 2000 GDP. Albeit only partial, the 1999 privatization of ENEL, the electricity utility, was the world's largest initial public offer (IPO) ever at that time. IRI, the state-owned industrial holding that played such an important role not only in the country's post-war catchup, but was also a sort of model for policy-makers in many late-industrializing countries, was liquidated; control over ENI, the oil and gas group, was transferred to the private sector; the state exited almost completely from a wide range of manufacturing sectors; and in telecommunications not only was the historical operator sold off, but control over Telecom Italia (TI) has changed hands twice since privatization – an occurrence that is unheard of in the world history of utilities privatization! Finally, there are good reasons to believe that, on account of credibility gains and improvements in the size and efficiency of financial markets, privatization contributed to fiscal consolidation through positive effects on net debt service.

This paper reviews the motives, methods, and results of Italian privatizations. The first section describes the role of the public enterprise sector in the Italian economy and the main problems hindering SOEs. The policy, legal and operational framework in which privatizations were implemented are analyzed in Section 2, while the following one provides a short history of state sell-offs. The fourth Section analyzes the performance of privatized companies using a variety of indicators such as profitability, technical efficiency, investment, employment, and productivity. Next come the bright and dark spots of the program: on the one hand, the success in increasing the size, depth, and sophistication of financial markets (Section 5); on the other

<sup>&</sup>lt;sup>1</sup> A decade later, a few data suffice to recall the crisis: the currency lost more than 20 per cent vis-à-vis the Deutsche Mark in May-September 1992; at the end-August 1992 auction the Treasury failed to place lire 3.3bn (€ 1.7m at today's rate) bonds; the two top anti-Mafia prosecutors were killed in May and July 1992; in the 1992-94 legislature there were 685 requests to the Chamber of Deputies to remove immunities in a house with 630 members (Golden 2002, p. 15); and interest rates on 10-year bonds reached 14 per cent in March 1995.

hand, the limits in liberalization and regulatory reform and the remaining uncertainties in the restructuring of the main assets still under public control – including those controlled by local authorities (Sections 6-7). A final section draws some conclusions.

# 1. The Public Enterprise Sector in the Early 1990s<sup>2</sup>

In terms of both scale and scope, in the early 1990s the Italian public enterprise sector ranked high among OECD countries. Shares of employment, value added, and gross fixed capital formation of public enterprises generally exceeded those of other founding members of the EU. Partly reflecting a model of state ownership which often used state acquisitions as a safety net for ailing private enterprises, public holdings controlled numerous firms, operating in a wide and heterogeneous range of sectors. The three main conglomerates (IRI, ENI, and EFIM) employed over half a million people altogether in 1992. As a result, compared with other EU countries, the presence of Italy's public enterprise sector was strong in nearly all branches of economic activity, with the difference being largest in industry and in finance and insurance. Of the largest Italian non-financial firms (ranked according to net sales), the state owned in 1991 twelve out of the top twenty and over one third of the largest fifty. At the same time, the vast majority of financial intermediation – about 90 per cent of total financial investment and 80 per cent of total deposits in 1991 – was ensured by public credit institutions.

The pervasiveness of state ownership in the Italian business sector was compounded by a control and management structure which was extremely complex, opaque and prone to political interference. A large number of Italian public enterprises was still operating under public law in 1992. The group organization of IRI, ENI, and EFIM, with public agencies heading pyramids of majority-controlled sectoral holdings and subsidiaries operating in a wide range of economic branches, was also unusual amongst major OECD countries, where public enterprises have been traditionally more specialized. Moreover, Italian public groups suffered from the overlap of several layers of control: the political decision level, dispersed over a large number of entities (the Ministry of State Participations, two inter-ministerial committees, the government and several parliamentary committees, all enjoying cross-veto powers); their own boards of directors, often inflated with a large number of representatives designated by political parties; and the management of the controlled subsidiaries. Management independence was further limited by the inclusion of the conglomerates in the planning legislation (forcing them to present medium-term development programmes to government and Parliament).<sup>3</sup> As a result, especially during economic downturns, non-economic goals were put above corporate policy considerations: public enterprises were used to preserve jobs, sustain investment levels and rescue ailing private firms, while tariff and pricing policies aimed at damping inflation.

It is not surprising, therefore, that on the whole the public enterprise sector was characterized by a disappointing performance and widespread inefficiency, especially since the 1970s. Public non-financial enterprises were constantly less profitable than their private counterparts over the

<sup>&</sup>lt;sup>2</sup> This section is based on Goldstein and Nicoletti (1996).

<sup>&</sup>lt;sup>3</sup> In the case of IRI, general strategic guidelines were set by the Council of Ministers, while for ENI this responsibility was given to a three-Minister committee (Finance, Treasury, and Industry).

1974-1991 period. Even allowing for the higher leverage ratios of public enterprises, which boosted financial charges, especially in periods of sustained inflation and rising interest rates, their operating surpluses were, on average, much lower than in the private sector. The comparison with private businesses is particularly telling when comparing performance of firms engaged in the same activity in competitive markets: according to sectoral 1991 data on profits, labour income and labour productivity, private firms outperformed public firms in virtually all competitive sectors.

As concerns natural or legal monopolies, such as public services, public services were, on the whole, produced less efficiently and had a lower quality than in comparable countries. The efficiency gap between Italy and other OECD countries was particularly large in cost and tariff levels. The greater part of these differences can be ascribed to sluggish labour productivity growth, except for electricity where productivity developments were broadly in line with other OECD countries. Since technologies, ownership and market structures are similar in most other European countries, the inefficiency of Italian public services is largely attributable to regulatory failure. Inefficiencies in the sheltered sector of the Italian economy are indeed widely held responsible for structural inflation and competitiveness losses during the 1980s. Even though a less negative picture emerges when analysing the contribution of public enterprises to the innovative effort of industry and to its internationalization, these data provide a broad indication of the potential direct efficiency gains which can be obtained from privatization.

Despite some consolidation in the 1980s, the financial position of public conglomerates deteriorated dramatically towards the end of the decade. Apart from sporadic sales of public enterprises – the most important being those of IRI's Alfa Romeo to Fiat and of ENI's Lanerossi to Marzotto - no coherent privatization policy existed. The share of public enterprises in economic activity (as measured by the average of the value added, gross fixed capital formation and employment shares) remained broadly constant during the 1980s. With government transfers dropping dramatically in the 1987-90 period and virtually ending more recently, the situation became critical for EFIM and the non-financial section of IRI. At over half per cent of GDP, EFIM's net financial debt in 1991 was twice larger than net sales and completely wiped out its own capital, prompting its liquidation in July 1992. While IRI's consolidated accounts masked wide differences between the financial situations of its subsidiaries, with loss-making activities surviving thanks to sustained transfers from profitable activities, at the end of 1992 IRI's nonfinancial section recorded net losses and net financial charges amounting to 6 and 9 per cent of net sales, respectively, pushing net financial debt to about 90 per cent of net sales (5 per cent of GDP). The deterioration of the financial situation of the oil and gas conglomerate, ENI, and of the electricity concern, ENEL, was less serious.

# 2. The Institutional Set-up

The 1992 framework document presented by Government to Parliament set out the four general goals of privatization: *i)* to improve corporate efficiency; *ii)* to increase the degree of market

<sup>&</sup>lt;sup>4</sup> EFIM was liquidated in February, at a L 14,000b cost for the Treasury. In July 1993, Italy was entitled to guarantee the debt of its fully-owned public enterprises in accordance with the Italian civil code.

competition; *iii*) to widen financial market and promove the internationalization of the industrial system; and finally – and "residually", iv) to increase fiscal revenues and reduce public debt. <u>Table 1</u> provides a synthetic description of the main normative actions concerning privatization. These can be categorized under different, albeit obviously intertwined, headings:

- Corporatization i.e. the application of the rules of the civil code to SOEs entrusted their single shareholder, the Treasury, and their managers with the same responsibilities and obligations faced by the owner of a private firm.<sup>5</sup> This virtually eliminated activities run by administrative bodies, drastically reducing the number of juridically-autonomous activities run under public law and simplifying the control structure.<sup>6</sup> The Treasury became fully responsible for appointing managers and immediately used its new prerogatives to restructure the board of directors of the joint-companies, reducing drastically their size and dismissing representatives designated by political parties.<sup>7</sup> In addition, the so-called **golden share** granted the Treasury special powers in public enterprises operating in the areas of defence, transportation, telecommunications, and energy. These cover the appointment of a set number of directors as well as vetoing the acquisition of large shareholdings (more than 5 per cent) by any single investor and the breaking-up, liquidation, or transfer abroad of the company.
- In theory the law imposed a cumbersone, 7-step **procedure**, augmented to nine if the privatization was complete (Cassese 1996). *De facto* the Treasury has kept most of the powers. A committee of three ministers of the Treasury, Budget, and Industry was entrusted with the power of formulating proposals and general guidelines concerning privatization. The Treasury and in particular to its privatization division has provided technical support to the committee and liaised with the management of the public enterprises. The privatization process was also made more flexible than in other EU countries by the wide latitude given to the management of IRI and ENI over the day-to-day conduct of the restructuring process of their subholdings and subsidiaries. Finally, with a view to making the privatization process more transparent and credible, a special

<sup>6</sup> The move towards corporatization and privatization was facilitated by the peculiar group structure of IRI and ENI, that have enjoyed a relative freedom in opening up to private capital (through listing or new issues) and even in trimming their possessions in non-core activities. In addition, some public services (e.g. telecommunications, air transport, and gas distribution) were provided, under exclusive state concessions, by listed subsidiaries of IRI or ENI. As a result, legal hindrances to privatizations were sometimes less severe than abroad, where legislative action was required even for partial sales, minority shareholdings by private investors and stock market listing were less common, and prior changes in the legal status of employees were required for sale or listing.

<sup>&</sup>lt;sup>5</sup> An important precedent was the corporatization of banks in the early 1990s.

<sup>&</sup>lt;sup>7</sup> Bertero and Rondi (2000) study the budget regime for a panel of manufacturing SOEs over the period 1977-93. They identify a switch from a soft to a hard budget constraint regime in 1987, associated with reining in excessive managerial discretion and an important change in their investment decisions. The effects of all such measures were remarkable, with the major state-owned and state-controlled companies recording a combined profit of L 1,288b in 1994, compared to 1993 losses of almost L 10,000b (Mediobanca 1995). Over the 1992-94 period, the state monopoly for salt and tobacco and the national railways system were also turned into joint-stock companies. The national mail service and the road maintenance service were turned into public agencies

<sup>&</sup>lt;sup>8</sup> This contrasts with the experiences of the UK and France, where full responsibility for each privatization was assigned to a single ministry (the sponsoring ministry and the Finance ministry, respectively).

commission (*Comitato permanente di consulenza globale e di garanzia*), composed of the Treasury Director and four independent experts, was set up in June 1993 to provide advise on the timetable, sale procedures, and the choice of evaluation advisers and lead managers for market placements.<sup>9</sup>

- Beyond and above the intention stated by the government of making the greatest effort to achieve the Maastricht convergence criteria and ensure Italy's participation as founding member of the Economic and Monetary Union, **external pressures** to privatize took the form of two binding commitments with the European Commission. This stance was partly the result of pressures by the European Commission for policies consistent with article 90 of the Treaty of Rome and the EU-wide restructuring of the steel industry.<sup>10</sup>
- Concerning methods, Law 474 made explicit the preference for public offers. In order to dilute ownership concentration and ensure a better representation of small shareholders, statutes were allowed to be changed to put limits to the amount of shares owned by single investors and to introduce proportional representation of shareholders for the election of the boards of directors. The opportunity of resorting to mixed techniques, involving direct sale to long-term investors, either through a negotiation or a competitive bidding, was incorporated in the April 1995 decreti ministeriali del Presidente del Consiglio, foreseen by the law (Macchiati 1999).
- Finally, the privatization law made the sale of public utilities conditional on the institution of **independent regulatory authorities** to fix tariffs and oversee compliance with quality standards (see *infra* 6.3).

Table 1. Main normative bases for privatization

# 3. Italian Privatization 1993-2002: A Synthesis

Although companies to be sold were identified as early as December 1992, privatization properly started only in late 1993, when a precise timetable was established, in order to enhance the credibility of state sell-offs among domestic and foreign investors, and the first private sales were made. This long period of gestation reflected the need to establish the legal and policy framework as much as the persistence of diverging views among political parties supporting the government on the aims and scope of state divestitures. This stands in stark contrast with France in 1993, where only a few months separated the announcement of privatizations by the new centre-right government from the first sales. Starting in December 1993, in a quick 7-month sequence, three major banks and INA, the second-largest insurance company, were sold through

<sup>&</sup>lt;sup>9</sup> In contrast with the French *Commission de la privatisation*, in Italy the commission's decisions over pricing and other issues are not binding for the government, nor are they legally-enforceable.

<sup>&</sup>lt;sup>10</sup> The Treaty of Rome defines as "incompatible" state aid to either public or private enterprises, except in specified cases. In recent years the Commission has devoted special attention to public enterprises. In this respect, the key feature of the Treaty are Articles 92 and 93 that deal with public enterprises and attribute to the Commission the powers of monitoring and addressing deliberations to member states.

<sup>&</sup>lt;sup>11</sup> For analyses of the French privatization experience, see Goldstein (1996, 2003).

public offers (<u>Table 2</u>). ENI pruned non-core activities through plant closures and widespread asset sales. EFIM received  $\epsilon$  439m through the sale of its core assets (alluminium, glass, etc.) and trasferred its subsidiaries in defence, aerospace, and rail equipment to Finmeccanica. IRI was liquidated on 28 June 2000 and the Treasury mandated the *Comitato dei Liquidatori* to finalize the sale of remaining assets by end-2003 (Bianchi 2002a). Its shareholdings in Alitalia (53 per cent) and RAI (99.5 per cent) were transferred to the Treasury, in the latter case via a fully-owned new company (RAI Holding).

#### Table 2. Major privatizations in Italy since 1993

Sales can be categorized according to different classifications.

- In terms of **timing** (<u>Table 3</u>), the 1997-99 peak is clear, as activity over those three years represented roughly two thirds (65.11 per cent) of the 1992-2000 total. In 1997, in particular, the privatization IPOs accounted for 45.9 per cent of the total capital raised on the Milan Stock Exchange. The decline in activity in 2001 was due in part to unfavourable equity market conditions leading to postponement of planned transactions such as the sale of further stakes in ENEL. The single most important sale was the public offering of a 6 per cent stake in ENI. The only significant activity recorded in 2002 was the sale of the residual 3.5 per cent Treasury stake in TI. Market conditions permitting, the Economics Ministry hopes to bring in € 20b by early 2004. One of the most imminent sales could be that of 100 per cent in ETI, the tobacco monopoly. Bidding details were released in September 2002 and offers are expected in December (the sale could yield as much as € 1.5b).
- In terms of **sequencing**, as more than 80 per cent of credit was state-controlled, it was paramount to privatize public banks first. Without such action, in the context of the 1994 banking law, which relaxed the half-a-century old ban on bank shareholdings in non-financial enterprises, the process could have paradoxically gone into reverse if banks had acquired shares of state-owned enterprises or converted debt of private non-financial enterprises into equity. Admittedly, this reflected both strategic and opportunistic considerations, since the so-called "banks of national interest" owned by IRI were also among the most profitable and attractive state enterprises. Concerning manufacturing enterprises, the initial emphasis was on the food and heavy industries (steel and glass in particular). In fall 1993, in the face of mounting debt that was on the verge of wiping out net capital, IRI's subholding for iron and steel (Ilva) was liquidated, its industrial activities were transferred to two new companies, Ilva Laminati Piani (Ilp) and Acciaierie Speciali Terni (Ast), which were privatised, and the giant Bagnoli plant was closed down. At any rate, and

<sup>&</sup>lt;sup>12</sup> The Privatization Committee held its first meeting during the Berlusconi administration in May 2002 and set as priorities completing by early 2003 the sale of the Treasury's residual stake in TIa, the privatization of Eti and Tirrenia, and the offer of a further non-controlling stake of ENEL. It advised against placing the residual participations in Alitalia, ENI, and Finmeccanica. The government anticipates reducing its stake to 30 per cent in ENEL, Alitalia, electricity distribution network Terna, and its management company Gestore Nazionale della Rete Nazionale. By the end of 2003, the government also plans on disposing of an 83 per cent stake in shipbuilder Fincantieri, its 85 percent stake in cruise company Tirrenia, and a 34 per cent stake in a credit institute. On the other hand, no plans exist for diluting government control in the railways and the post office.

<sup>&</sup>lt;sup>13</sup> Restructuring began in 1998 when the former monopoly was placed under new management. The company was then corporatized in July 2000.

far from surprisingly, in peak years by far the greatest receipt shares are accounted by oil and utilities sectors (including local ones). Finally, the share of the transport sector is minimal as railways, the ferry operator, and the airline remain under state control.

- The choice of the sale **technique** has an obvious impact on the desired structure of property rights in privatized firms and ambiguity about sale procedures indeed reflected conflicts within the government over what kind of private ownership structure was to be encouraged. Partisans of *noyaux durs* and people's capitalism, using the French and the British experiences as show-cases, entered into a heated cabinet dispute which eventually led to the resignation of a minister. Although a number of non-financial enterprises were sold to industrial investors through private placements in the early part of the decade, by 1994 the government decisively showed its preference for public offers. Again, such placements proved especially successful in the late 1990s when companies such as TI, ENI, and ENEL were put on the stock market. Mixed techniques, associating public offers and placements to stable shareholders, have been used in a few cases, notably TI and Autostrade. On the other hand, management buyouts (MBOs) have been rare, the major instance being Esaote.
- Concerning **fiscal treatment**, a special public debt-redemption fund was created in 1993, in order to draw a clear line between transitory proceeds from asset sales and the deficit-reducing effects of other budgetary measures. This stands in contrast with the attitude of both the British government, which used proceeds to reduce the PSBR by almost one percent of GDP on average over the 1984-1988 period, and the French government, which used proceeds to reduce the state sector deficit by three quarters of a percentage point in both 1993 and 1994. In any case, even if the totality of public enterprises were to be sold, with all privatization proceeds used to redeem public debt, the impact would be limited, since it was estimated that their value amounts to only 15 per cent of public debt. <sup>14</sup>
- Given the wide variety of techniques used, it is not easy to classify **buyers** in a clear and comprehensive manner. Suffice for our purposes to analyze public offers. Domestic retail investors have always represented the largest category of PO investors (with percentages ranging between 33.4 and 79.1) and accounted for 47.3 per cent of the unweighted average (<u>Table 5</u>). International capital markets have also been very receptive, absorbing on (unweighted) average a third of the offers, with peaks in the case of IMI. The relative smaller role played by Italian institutions is not surprising in view of the infancy of pension funds in the country.
- While absolute figures are impressive by international standards, the picture is more controversial when considering sell-offs that have led to **control** change. Out of a total equal

<sup>&</sup>lt;sup>14</sup> A more sizeable contribution to rapid public debt reduction could come from the sale of public real estate, whose value is estimated at around 50 per cent of public debt. Real estate sales have been planned since 1987, when an *ad hoc* government commission produced a report on this subject, but to date few sales have been completed. The most significant has been the partial privatization of railway stations (Grandi Stazioni) that has led to a 7,500 per cent increase in net assets value.

<sup>&</sup>lt;sup>15</sup> The exception is INA 3 which was reserved to institutional investors.

<sup>&</sup>lt;sup>16</sup> Foreign direct privatization investment has included General Electric in Nuovo Pignone, RWE in Enichem, Wartsila in Fincantieri, Pilkington in SIV, and Krupp in AST.

to  $\in$  121.3 bn in 1993-2001, the amount corresponding to a control transfer is considerably lower ( $\in$  50.4 bn). Considering then that Fondazioni have acquired assets for  $\in$  13.4 bn, "pure" privatization recepits have been as low as  $\in$  37 bn (De Nardis 2001).

Table 3. Privatizations by sector, 1992-2000
Table 4. Privatizations by method, 1992-2000

Table 5. Privatization on the stock exchange by investors category

# 4. The Efficiency Effects of Selling Non-Financial Enterprises

Although many summaries of different countries' privatization programs have been written, those of a qualitative nature easily outnumber quantitative studies. Exceptions include countries with the longest-running experimentation with privatization such as Chile (Fischer *et al.* 2002), Mexico (La Porta and Lopez-de-Silanes 1999), and the UK (Cragg and Dyck 1997). Other cross-country studies are also of a statistical nature, in particular two influential contributions are Galal *et al.* (1994) and Megginson and Natter (2000). As in the cross-sectional studies of public-private ownership, the evidence from longitudinal studies about whether privatization leads to an efficiency increase is not totally conclusive (Villalonga 2001).

In the Italian case, quantitative analyses are few and far between. The widest-ranging one, produced for a Parliamentary commission, concludes that the Treasury has gained from the appreciation of its stakeholdings in listed companies such as ENI and ENEL. Industrial concentration has increased, but this may have been necessary in order to enhance production and technology efficiency (Mediobanca 2000). Erbetta (2001) analyzes the dynamics of performance in the years before privatization, finding a significant growth in productivity levels in the four years preceding the shift from public to private ownership, attributable mainly to employment cuts. Munari (2002) examines the consequences on corporate innovation activities, finding that privatization led to a reduction in both the number of research personnel and the overall budget, although also to an increase in patenting propensity (at least in low-innovation sectors).

Following the benchmark approach of Meggison *et al.* (1994), this section seeks to provide an *ex-post* performance analysis of privatization based on a sample of non-financial enterprises. Privatizations undertaken in the financial sector are excluded as they involved specific issues that would require a specific analysis. The sample includes 25 companies that operate in the following industries: food and retail distribution (Gs, Autogrill, Cirio Bertolli De Rica, PAI), steel (Dalmine, Tubi Ghisa), alluminium (Alumix, Comital, Euroallumina), cement and glass (Cementir, SIV), chemicals and fibers (Montefibre, Enichem Augusta, Inca International, Alcantara), electronics, machinery and equipment (Nuovo Pignone, Savio Macchine Tessili, Esaote, DEA), construction (Società Italiana per Condotte d'Acqua, Italstrade), telecommunications (Telecom Italia), energy (ISE), and media (Editrice Il Giorno, Nuova Same). Data come from Mediobanca (a), an annual publication on the financial statements of

 $<sup>^{17}</sup>$  The analysis of the performance impact of privatization included in the report is at the level of each firm and thus not allow for broader generalizations.

Italy's largest enterprises, and covers a set of eight variables: net sales, operating income, net assets, investment, fixed investment, number of employees, debt and an index of liquidity. Indices have then been constructed to analyze profitability (Operating Income-to-Sales; Operating Income-to-PPE, Net Income-to-Sales, Return on Assets, and Return on Equity); operating efficiency (Sales-to-PPE and Operating Costs-to-Sales); investment and assets [Log(PPE), Investment-to-Sales, Investment-to-PPE]; output [Log (Sales)]; finance (Long-Term Debt-to-Equity and Current Ratio<sup>19</sup>); and taxes (Net Taxes-to-Sales). For each indicator a comparison is made between the mean and median values of the two years following privatization with their values in the two years before privatization. To circumvent the fact that changes in performance could reflect cyclical movements of the economy, rather than privatization, data on private companies in the same industry is used for control (Mediobanca b). Following a procedure close to the one used by La Porta and López de Silanes (1999), the performance of privatized companies was adjusted by taking the difference between the indicator for the privatized enterprise and the average for the control group (excluding the enterprise itself).

In general the results (<u>Tables 6-7</u>) show an improvement in profitability indicators, although with no statistical significance and the exception of return on equity where ownership transfer appeared to bring about a worse performance than for the control group. Albeit with no statistical significance, operating efficiency indicators also suggest a post-sale degradation with respect to the control group. On the other hand, investment indicators show a marked and significant improvement in both specifications. This seems consistent with the hypothesis that SOEs were investment-constrained under the weight of the early 1990s fiscal crisis. Sales also increased significantly. A clearer picture appears with the indicators of financial management. There was a non-significant increase in the current ratio, both in absolute terms and in comparison with the private firms. With respect to long term debt-to-equity (LTD-to-equity), in absolute terms privatization has a positive and significant impact. However, when compared with the performance of private sector firms, a different picture emerges, as the coefficients become negative. These results are similar to those reported for Brazil and Mexico and suggest that once their credit status is no longer guaranteed by the government, former SOEs were forced to adjust by decreasing their LTD-to-equity and increasing the current ratios.

# Table 6. Performance changes in privatized companies Table 7. Performance changes in privatized companies (adjusted)

Although these results provide a significant addition to the literature on the results of privatization in Italy, a word of caution is in order. Due to severe data limitation, the dataset is unfortunately much smaller (in terms of number of both firms and years) than in La Porta and Lopes de Silanes (1999) on Mexico, Fischer *et al.* (2001) on Chile, and Anuatti-Neto *et al.* (2002) on Brazil. A further problem is the use of those very years that are best excluded in such exercises because of the potential pre-sale accounts cleansing effect and of the on-going reorganization process that, begun prior to sale, may continue immediately afterwards.

<sup>&</sup>lt;sup>18</sup> Property, plants and equipment.

<sup>&</sup>lt;sup>19</sup> Current assets over current liabilities.

## 5. Privatization, Financial Markets, and Corporate Governance

Privatization and deregulation of price and entry restrictions affects the optimal governance structures of firms in two ways (Lehn 2002). First, insofar managers have more authority to establish prices and enter new markets, the importance of their function increases; second, by removing the protective cover of regulation, deregulation injects uncertainty and instability into the business environment and thus increases the costs of monitoring managerial performance. On both accounts, the method of privatization has important consequences on the nature of agency relationship and therefore on the two hitherto mentioned issues. Against the background of the discussion concerning the relative costs and benefits of bank- and market-based financial systems in adressing such issues (Levine 2002), two privatization models influential in Western Europe have been the French *noyau dur* one of core investors and the British one of people's capitalism.

In Italy, much more than in other European countries, deciding how to sell state assets and to whom has been a central issue in the early policy debate on privatization. Although the ratio of financial instruments to GDP in the early 1990s was similar to that prevailing in other large OECD countries, the structure of financial markets was rather atypical. In 1991, the number of companies listed in the Milan stock exchange was less than a third of those listed in Paris, with trading and the ratio of market capitalization to GDP being the lowest among the major six OECD countries. On the other hand, government securities listed in the Milan stock exchange exceeded 85 per cent of GDP. The composition of financial savings by households was also remarkably different from that prevailing in other OECD countries: in 1988, shares directly held by Italian households amounted to less than 15 per cent of GDP, compared to holdings of around 70 per cent of GDP in both France and the United States and 40 per cent of GDP in the United Kingdom. Indirect investment in shares through mutual funds was also relatively small.

If policy-makers were skeptical of citizens' willingness to buy shares of privatized companies, however, it was not only for the limited size of the stock exchange, but also because of the opaque nature of corporate ownership and control. The Italian corporate sector is dominated by a small core of pyramidal groups, mutually protected by cross-ownership of shares, interlocking directorates, and informal ties (Barca 1995). These groups have extensively tapped into the stock market, while often proving scornful of the rights of minority shareholders. Through the chain of equity holdings linking the top of the pyramid to lower levels, control over all firms belonging to the group is exercised with a minimum amount of capital invested. Inter-group cross-shareholdings facilitate strategic alliances, potentially leading to collusive behaviour. In this way, both the group holding and lower-level holdings and subsidiaries are shielded from hostile take-overs and undesired changes in management. Severe restrictions have also limited ownership linkages between banks and industry, depriving the system of the kind of monitoring provided by *hausbanken* in Germany. Only Mediobanca acquired large and stable shareholdings in all major industrial and insurance groups, usually participating in their controlling coalitions

<sup>&</sup>lt;sup>20</sup> At the end of 1992, the state controlled over 18 per cent of the number of listed enterprises, accounting for over 25 per cent of total market capitalisation: candidates for privatization had a share of 18.5 per cent of the total (Consob 1993).

and acting as a sort of "main bank" for a tight and exclusive Northern financial and industrial elite. 21

Insufficient application of directors' fiduciary duties, inadequate legal safeguards for minority shareholders, and the dominant role of a single investment bank have combined to thwart the emergence of a well-functioning market for corporate control, keeping the number of mergers and acquisitions at low levels relative to other European countries. Private benefits of control on the Milan Stock Exchange were enormous and could easily be worth more than 60 per cent of the value of non-voting equity (Zingales 1994). Boards of directors are dominated by insiders and/or represent the interests of the controlling shareholders. Brunello *et al.* (2002) find that CEO turnover is negatively related to firm performance also in this environment, but not when the CEO is an owner.

With the privatization plan of 1992 foreseeing the near-tripling in future years of the amount of fresh capital raised in the Milan stock exchange in 1992, doubts about the ability of a small market to absorb such a large amount of shares were justified. Many observers warned that widening share ownership was impossible to achieve without major tax incentives, huge underpricing, increases in households' saving propensities (already high by international standards), or a reallocation of households' portfolios away from public debt and bank deposits. Although new institutional investors, such as private pension funds, are far from being operational, privatizations through the stock market were highly successful, with public offers largely oversubscribed and underpricing on average lower than in other EU countries over the same period (Macchiati 1999, Table 2). This outcome was the result of a combination of different factors. The government's success in lowering interest rates more rapidly than in other European countries made shares – directly but also through insurance and mutual and pension funds – relatively more attractive to hold than government securities (Table 8). An effective advertising campaign and investors' feeling that subscribing to the offers was a way to participate in an historical event were other factors.<sup>22</sup> In addition, a significant amount of shares was sold to foreign investors, which benefited from the weakness of the lira (Table 9).

# Table 8. Porfolio allocation of household savings Table 9. Ownership composition of listed companies

Privatization has prompted the adoption of new legislative measures providing better safeguards for shareholders through greater transparency and a more effective representation in governing bodies (see *supra*, Table 1). The need to extend such reforms to improve the protection for minority shareholders by general improving disclosure, by means of a restrictive regulation of shareholder agreements and of the takeover bids, to all quoted companies led to the 1998 so-called "Draghi Bill". According to the stock market regulator, the Bill has been effective in increasing transparency, informational symmetry, and price significance on Italian financial

<sup>&</sup>lt;sup>21</sup> In 1987, stakes of Mediobanca in other major groups accounted for 40 per cent of the market value of total intergroup shareholdings (Brioschi *et al.* 1990). In turn, virtually all major private groups (with the exception of Fininvest), as well as Credito Italiano, Banca Commerciale, and Banca di Roma, had shareholdings and a seat in the bank's board.

<sup>&</sup>lt;sup>22</sup> The promotional leaflet distributed by the government in late 1993 stated that "privatization is a policy that indirectly concerns all citizens as [it aims at] creating a sounder economic democracy free from political abuses".

markets (Consob 2001). While this is not due solely to privatization, an example of an direct link is provided by the reinforced transparency obligations that followed foreign listing of privatized companies. When Pirelli took over Olivetti, for instance, Security Exchange Commission regulations obliged it to release information on TI's shareholders agreement since the latter has dual listing in Milan and New York. In Italy, on the other hand, Consob only required their partial publication (Bortolotti and Siniscalco 2001). The five privatized Italian companies that belong to the EURO STOXX 50 index perform remarkably well in corporate governance terms, with an average score of 7.43 versus \_\_\_\_ for the whole sample (DWS 2002). Other indicators suggest that changes have not been dramatic. A 2000 Consob survey showed that only five out of 242 listed companies had reduced the capital threshold for calling an extraordinary shareholders' meeting, four had increased the minimum quorum for deliberations, and seven had introduced mail voting. Moreover, only once has the minority exerted its right to call a shareholders' meeting and never have the powers to file a law suit against directors and to solicit proxies been used.

More fundamentally, privatization has not seen the surge of public companies, whose shares are widely held and which are subject to the discipline of the market for corporate control. Ownership-control separation through pyramidal structures persists. More generally, ownership concentration remains very high (Spaventa 2002). In 2001 the largest shareholder owned on average 42 per cent of a quoted company, while the share corresponding to the market (including all investors holding less that 2 per cent each) was less than 50 per cent (a threshold only surpassed in 1997 and 1998). In the attempt to prevent the acquisition of control in privatized companies by small groups of shareholders, the government limited the amount of shares to be owned by single investors. However, these limits have proved largely ineffective and paradoxically, in the future they will also make it more difficult for possible riders to take over control.<sup>23</sup> Even at TI, where such rules did not exist and control has changed hands not once but twice, the rights of minority shareholders have not been respected (see Box 1).<sup>24</sup>

<sup>&</sup>lt;sup>23</sup> Little after the sale of Banca Commerciale and Credito Italiano, Mediobanca moulded controlling coalitions in the two banks, undermining attempts by the government to turn them into public companies.

<sup>&</sup>lt;sup>24</sup> Another company that has seen control change hands is GS, a supermarket chain, sold to France's Promodés. Leonardo Holding, a consortium that holds the majority shareholding in Aeroporti di Roma, sold a 44.7 per cent stake to a technical operator, Australia's Macquarie Airports Group.

#### Box 1. Corporate governance in the Telecom Italia's takeovers

Two proposals were made to IRI, one by Pirelli and Alcatel in 1993, the second by Mediobanca in 1995, to acquire the control of STET, but were both refused. STET and TI finally merged in November 1996, Guido Rossi (former head of the stock market watchdog Consob) was appointed as chairman, and the company was sold in October 1997. A stable shareholder group bought 9 per cent of the share capital and committed not to sell the shares for at least three years. In exchange they were allowed to appoint six of the 13 directors. The purchase of shares by strategic investors fell short of the initial target set by Italian authorities, although more than 2 million domestic retail investors became shareholders. The Treasury controlled another 5 per cent and the market subscribed the remaining capital. AT&T, the largest US telecoms company, and Unisource, a pan-European telecoms alliance, were expected to become the industrial partners. Upon privatization, three directors named by small shareholders were included in the 11-member board (excluding the two executive directors). The other directors represented the government (two), foreign industrial partners (two), and financial shareholders (four). A clash eventually erupted between Rossi, who proposed to hold more regular board meetings with more direct board involvement in company operations, and senior management, leading to Rossi's eventual resignation. A man with longstanding business ties to the Agnelli family was named the new CEO. During 1998 TI's performance was very poor and a new CEO, a former Fiat board member, was appointed in October.

In February 1999, Olivetti, supported by (among others) three merchant banks (Chase Manhattan, Lehman Bros. and Mediobanca), a small bank (Interbanca) and a pool of northern entrepreneurs, declared a takeover bid for a target five times its size. As Olivetti already controlled two telecoms companies (Infostrada and Omnitel) jointly with Germany's Mannesmann, the Antitrust Agency compelled it to sell its shares to Mannesmann. Although Consob blocked the takeover initially because of a procedural flaw and TItalia's management, with support from Deutsche Telekom, resisted it, this was successfully concluded on 21 May 1999. At the very last moment, the core shareholders sold their shares to Olivetti at twice the price they had paid the Treasury two years before. The bid was mounted as a leveraged buy-out operation and, by resorting to pyramidal a chain of financial companies, Olivetti gained control with a holding of about 3.2 per cent. In order to win control, however, Olivetti saddled itself with enormous amounts of debt. To help pay it, Olivetti tried to move TI's controlling stake in the highly profitable mobile-telephone subsidiary to Tecnost, the vehicle used for the acquisition. But minority investors kicked up such a fuss that the plan had to be dropped.

In July 2001, Pirelli, along with the Benetton group, gained control through a complex deal with Olivetti. Pirelli agreed to pay  $\epsilon$  4.18 per Olivetti share, a premium of about 80 per cent over the market price. Shareholders of Bell, the vehicle through which Olivetti was controlled, saw the transaction as an opportunity to make a profit quickly, rather than as a long-term industrial investment. While Olivetti still has a 54 per cent of the operator, Pirelli and Benetton control approximately 27 per cent of Olivetti and now have the power to make management and strategic decisions. By limiting their stake in Olivetti, Pirelli and its allies avoided having to make an offer to all shareholders in Olivetti, and for the market float in TI and its listed subsidiaries (TIM and Seat Pagine Gialle).

More fundamentally, market-friendly legal reforms do not equate to a more efficient application of the norms by the judiciary. Bortolotti and Siniscalco (2001) calculate that the Draghi reform resulted in a 3-notch increase in the La Porta *et al.* investors' protection index, and yet the consequent increase in stock market capitalization has been far lower than expected. The analysis by Enriques (2002) of Milanese (and by extension, Italian) corporate law judges highlights egregious cases of deference to corporate insiders, especially with regard to parent-subsidiary relationships. It appears to be rare for the court to take the substantive reasons for the dispute into any account and judges do not seem to care about whether their decisions provide

the right incentives for directors and shareholders.<sup>25</sup> This seems to confirm that better enforcement of law is more important than the origins of legal systems (Chan-Lee and Ahn 2001).

# 6. Privatization and Regulatory Reform

In 1991, up to two thirds of IRI's workforce and up to 30 per cent of ENI's employees produced goods and services in markets sheltered by legal monopolies, exclusive state concessions or dominant state demand. Exclusive state concessions were generally granted to state-controlled enterprises and the regulatory regime, based on direct management of public utilities or indirect control through IRI and ENI, blurred the relationship between the regulator and the producer, allowing a high degree of monopoly power. Moreover, the authority over concession, monitoring and regulation of public services was extremely fragmented among several ministries, local authorities, public companies and national committees. The exception was tariff-setting, which was the responsibility of a single government committee, the CIP (*Comitato Interministeriale Prezzi*), whose decisions were often subordinated to macroeconomic or social policy objectives, such as inflation control or equity considerations.

International experiences show how a combination of privatization, liberalization and better regulatory design holds the promise of large efficiency gains. Moreover, insofar as belated liberalization may amount to a breach of commitments taken with shareholders, it is easier to open markets before, rather than after, privatization — although conditioning divestiture upon liberalization may play into the hands of anti-reform groups (Giavazzi 1996). Unfortunately, measured with respect to its impact on competition, Italy's regulatory environment was in 1998 (the most recent year for which comparative cross-country data for product market regulations is available) much stricter than in the average European country or the United States (Nicoletti 2002, Figure 1). A variety of tariff indicators (Table 10) also shows that Italy is generally less competitive than other major EU countries, especially for business users.

Table 10. International comparison of public service prices (2001 data)

#### 6.1. Structure regulation

Structural regulation involves break up of public utilities, functional separation of competitive and non-competitive activities, and access liberalization to networks. The public telecom operators were reorganized in view of their privatization, with the unification of various IRI subsidiaries<sup>26</sup> into a new holding, TI, the world's sixth largest telecoms operator. This decision was hardly optimal in view of the desirable liberalization of telephone services. A better alternative would have been to privatize the subsidiaries separately, thereby injecting immediately elements of competition in the system. Given that financial markets usually

<sup>&</sup>lt;sup>25</sup> Furthermore, only recently, and in any case still sporadically, have at least a few court's opinions been so drafted as to let the reader understand what the real dispute was and which party had really acted opportunistically.

<sup>&</sup>lt;sup>26</sup> Stet's subsidiaries for domestic, international and satellite services (Iritel, Sip, Italcable and Telespazio Stet, a listed financial holding in which IRI owned 65 per cent of shares), held in turn a 60 per cent stake in Telecom Italia.

discounts closed-end financial holdings relative to the cumulated value of their subsidiaries, selling Stet's operational companies separately could have also maximized revenue for the government. In 1994, a second mobile telephone services licence was awarded and, over the 1991-95 period, the markets for telecommunications equipment, access to the public switched network and telecommunication services, except voice telephony, were liberalized.<sup>27</sup>

Changes in the market environment of the electricity supply industry have been even more modest. Several proposals were advanced to open production and maintain an exclusive concession for grid operation in order to ensure co-ordination and safety of electricity supplies. Opinions diverged on whether to unbundle ENEL prior to sale, whether to liberalise electricity supply to large customers, and on the extent and the features of price regulation. However, unbundling proposals met fierce opposition both within the government, wishing to avoid further delays and maximise proceeds from the sell-off, and from the managers and trade unions of the state company. In addition, disagreements at the EU level on the completion of the single market for energy have further weakened the momentum for reforms.

In 1999, a timetable for introducing competition was laid out in the so-called Bersani decree, that ruled that no utility can produce or import more than half of total consumption by 2003. To reduce its market share to around 40 per cent, ENEL has spun off three separate and independent generating companies, totaling 15,000 megawatts (MW) of generation capacity, and put them on sale by public auction. No company was allowed to acquire or hold stakes in more than one of the three companies, and no buyer can be more than 30 per cent government-held.<sup>29</sup> Elettrogen – the second largest, based in Rome and Piacenza – was sold to

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<sup>&</sup>lt;sup>27</sup> Liberalization was the result of the belated adoption by the Italian Parliament of a series of EU directives concerning telephone equipment (301/88), access to public networks (387/90) and telecommunication services (388/90). Several rulings by competition authorities were instrumental in accelerating liberalisation of terminal equipment and network access regimes. The opening up of the mobile telephone market spurred a dispute with the European Commission, which began legal proceedings against Italy in October 1995. In the exploitation agreement, the new entrant was asked to pay the government a fee in return for the GSM licence, while the incumbent operator was granted the licence for free. The Commission deemed this arrangement unfair and asked the Government to find adequate compensation for the new entrant.

<sup>&</sup>lt;sup>28</sup> In principle, vertical unbundling is the only way to ensure competition in electricity generation and supply as well as free access to the network. At the same time, horizontal unbundling -- involving the sale of production plants and distribution networks to several private (possibly regional) companies -- could allow "yardstick" regulation based on the comparative performance of independent companies.

<sup>&</sup>lt;sup>29</sup> This last requirement was to prevent Electricite de France (EdF) from acquiring these companies. Previously, EdF had already acquired a 20 per cent share of Montedison, parent company of Italy's largest IPP Edison. EdF and Fiat formed a consortium called Italenergia that received permission from the EU antitrust authority to take over Montedison in August 2001. Renamed Edison, the group has been shedding non-energy assets in order to lower debt. Plans to raise cash through a share offering, however, have been frozen because of a slump in the company's shares. The European Commission ruled in June 2001 that capital flows may not be restricted merely because of varying degrees of liberalization. The initial privatization sale may be restricted, but such restrictions can only be in place for a limited period, after which the privatized companies can be resold to state-owned companies. In 2000 and 2001, the Commission opened another two in-depth investigations involving EdF. The EdF/EnBW merger was cleared on the condition that EdF undertook some divestments and auctioned off virtual generation capacity in France. The second case, Grupo Villar Mir/ENBW/Hidroeléctrica del Cantábrico, is still pending (check).

Endesa of Spain (with Brescia's ASM local utility) for  $\ell$  2.63bn in the summer of 2001.<sup>30</sup> Eurogen – the largest company, based in Rome and Milan – was put up for sale in September 2001 and finally purchased by the Edipower consortium of utilities and financial institutions.<sup>31</sup> The terms of the sale included a  $\ell$  3.05bn equity price and required Edipower to reimburse Eurogen's  $\ell$  750m debt to ENEL. A consortium including Belgium's Electrabel and Rome's utility ACEA paid  $\ell$  551m for the smallest company, Interpower, based in Naples and Rome, and took on an additional  $\ell$  323m in company debt. ENEL must also shed market share in power distribution to comply with the requirement of a unique distributor in each municipality. It has proved arduous for ENEL and the municipalities to agree on prices and only in August 2002 did ENEL trasferred network capacity and clients to the Milano and Verona utilities. Concerning the transport and dispatch functions, these have been transferred to a new company (Gestore Rete Trasmissione Nazionale, GRTN) fully-owned by the Treasury. A number of transmission companies also exist, of which the largest is ENEL-owned Terna.

In the natural gas market, Italy has been less timid in incorporating the EU Directive, passed in June 1998, that calls member states to open to competition. In May 2000 the government directed that no single company can supply more than 50 per cent of the natural gas sold to final users by 2003 and send more than 70 per cent of natural gas put into the transmission system beginning in 2002 (reduced to 61 per cent by 2009). The legislation also requires corporate separation of natural gas storage and transport activities, exceeding the EU obligation of accounting separation. SNAM retains control of the 30,000-kilometer grid, but ENI had to split SNAM's pipeline transport activities from commercial and sales activities. In late November 2001, 35 per cent of SNAM Rete Gas Italia, the new company controlling the gas grid, were sold through an IPO, which was heavily oversubscribed. ENI's new gas distribution company, Italgas Più, was also launched in November 2001.<sup>32</sup>

#### 6.2. Conduct regulation

Limited progress in structure regulation has put an additional burden on conduct regulation to determine the permitted patterns of behaviour of regulated firms in the public interest. Conduct regulation can include both (product and access) price regulation and regulation of non-price behaviour such as service and product quality, quantity, investment, and environmental impact.

In the case of telecommunications, recent AGC decisions have introduced Flat Rate Internet Access Call Origination (FRIACO), levelled access conditions for other licensed

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<sup>&</sup>lt;sup>30</sup> In September 2001, ENEL purchased Nueva Viesgo from Endesa, making it the fifth-largest generator in Spain.

<sup>&</sup>lt;sup>31</sup> Edipower comprises Edison, AEM, AEM Torino, Aar e Ticino SA di Elettricità (Atel), Unicredito, Interbanca, and MRBS Capital Partners.

 $<sup>^{32}</sup>$  Through Stoccaggi Gas Italia, ENI also operates a system where it stores and modulates natural gas. ENI's storage system is made up by nine fields. In November 2002 it offered & 2.5b for the 56 per cent of Italgas it does not already own. By taking full ownership of Italgas, that has 38 per cent of the retail market, ENI can create a seamless gas operation stretching from exploration and extraction into homes and business, the model pursued by Centrica, the UK-based diversified utility. In October 2001 ENEL acquired five gas distribution companies in Northern Italy (Arda Gas, Gead, Adda Gas, Geico, and Sein). Consolidation is set to accelerate whein industrial customers are allowed to move away from lone regional suppliers in 2004.

operators (OLO) and Internet Service Providers, and regulated shared access, subloop unbundling, leased wholesale lines, and wide bandwidth (DSL, CVP) (AGC 2002). Following a ywo-year investigation, it has also imposed TI stricter cost accountancy obligations so to prevent the incumbent from using information provided by competitors as anti-competitive tools. Although the incumbent owns nearly all fixed access lines, there are 4 GSM operators and five 3G licenses were also awarded in October 2000. It is not difficult to receive a license as proved by the existence of 198 operators (in March 2001) and over 1,000 authorizations (AGC 2001).33 New regional operators have begun forming but are still in the initial network buildout phases and will not be capable of offering alternative infrastructure to TI for several years.<sup>34</sup> Unbundling is becoming an option for more operators now that TI has made 939 exchanges available (of 1,040 whose opening was required by competitors) which cover approximately half the total subscriber lines (AGC 2002). Some 35,000 lines have also been disaggregated, a level only surpassed by Germany in Europe. Carrier pre-selection began in January 2000, and by the end of August 2001, about 2 million subscribers used it.35 Number portability was available in 2001 for fixed users and almost two years later for mobile subscribers.<sup>36</sup> Tariff rebalancing is still in progress – the license fee was increased in 2001 – and will be completed in 2002.

TI's share of the fixed telephony market has been decreasing progressively and it stood at about 76.8 per cent at the end of 2001, compared with 73.8 per centa year earlier. TI's share of the long-distance call market was 64 per cent at the end of 2001, down from 93 per cent in 1999. The mobile sector is the largest in Europe in terms of revenue, and the highest in Europe (except for Luxembourg) in terms of penetration rate. This is reflected by the fact that mobile and fixed telephony services have equal shares of the total telecommunications market. Average tariffs have significantly declined for both fixed and mobile calls (Cavaliere 2001).

ENEL enjoys a dominant position in the upstream market for electricity generation. This is shown by its share of the gross installed capacity (approximately 53 per cent in 2000) and of the actual electricity produced in Italy (approximately 77 per cent, excluding auto-generation, in 2000), as well as by the type of power plants at its disposal (base load, mid-merit and peakload). Moreover, the AGCM alleges that ENEL is dominant in the downstream, partly liberalised, Italian electricity supply market (37 per cent in the first nine months of 2001), also because of its position in the upstream market where ENEL is vertically integrated. Price regulation is designed to impose a uniform tariff across Italy, thereby reducing the possible beneficial effect on consumers of the limited liberalization of electricity generation. Meanwhile, red tape has held up applications to build new generating plants that might compete with ENEL.<sup>37</sup> In February 2002 the Ministry for Productive Activities has intervened to speed

<sup>33</sup> Awards for fixed-wireless access licenses are still planned.

<sup>&</sup>lt;sup>34</sup> E.Biscom offers fiber access to residential and SME users in Milan through its subsidiary FastWeb.

<sup>&</sup>lt;sup>35</sup> In Germany call-by-call carrier selection was introduced in December 2002.

<sup>&</sup>lt;sup>36</sup> In France mobile number portability will only be operational from July 2003.

<sup>&</sup>lt;sup>37</sup> By 31 March 2001, GRTN had received some 260 proposals for new generating plant with a total gross capacity of 77 GW (a figure sufficient to double total installed national capacity and far in excess of Italy's future needs). Most, if not all of these plans are for new developments on green-field sites. The overwhelming majority also

things up by instituting a single, 180-day, "one-stop" centralized authorization system for plants with capacity greater than 300 MW.

Competition for delivery and sale to actual and potential "eligible customers" (that is consuming less than 20 GWh per year) is still limited. The Electrical Power Exchange (*Borsa Elettrica*) that according to the Bersani decree was to be operative in January 2001, is still on the launching pad. The advantages of having an exchange include transparency (given that strategic behaviors would be detected) and the possibility to extert pressure on the dominant supplier through the aggregation of dispersed users. It should start in October 2002, but even this late deadline could not be met due to still unsolved issues such as the treatment of imports and subsidized production (so-called Cip6).<sup>38</sup> Falling short of limiting ENEL's freedom of maneuver (and knowing that new generation capacity will not be fully operative before long) what is needed is the development of derivative instruments and mechanisms to "contractualize" generation capacity, such as those introduced in France on the Powernext market (Checchi *et al.* 2002). The resistance has come from both large users, that currently benefit from cross-subsidies (Gallo and Checchi 2002), and the government's insistance on inserting a clause to give the Ministry the power to correct prices in case of "excessive" volatility.

An outline of a draft law "Reform and reorganization of the energy sector" was presented in July 2002. Its main provisions include trasferring grid ownership from ENEL to GRTN; cancelling the fees provided for the "hydroelectric rent" (to compensate for the excess value that such plants have in a market system) while not acknowledging stranded costs for past investments: extending eligibility to all non-domestic clients before 2004; and allowing Italian firms, which cannot build nuclear power plants in Italy, to enter into joint ventures abroad. The intent seems more to control ENEL rather than to reduce its size and market power (Scarpa 2002). Investment banks have indeed considered the draft law positive for the company: Lehman Brothers for instance sees additional value of  $\ell$  0.3 per share (8 August) and Deutsche Bank quantifies an even greater improvement (up to  $\ell$  0.5 per share) (23 July).

The Antitrust Authority (AGCM) has emerged as an effective "competition advocate" in the regulatory arena without assuming the regulatory portfolio itself. After complaints from several alternative fixed-line providers and the Italian Association of Internet Service Providers, the AGCM launched an investigation into TI's provision of access and found that the incumbent had taken advantage of its ownership of the PSTN access network by refusing requests from alternative operators for wholesale DSL services, while at the same time offering its own DSL retail service. TI was fined  $\epsilon$  59m for abusing its position as a carrier with significant market power. In the SNAM/Edison case the competition authority has dealt with refusal of access. In March 2002, the AGCM launched a full investigation into ENEL alleging infringement of Article 82 in the liberalized market for supply of electricity to eligible clients. Surprise investigations have been carried out at ENEL's premises throughout Italy and a decision is

propose new thermal facilities using predominantly gas combined cycle technology. Uncertainty prevails concerning the ability to get the gas required to feed such an electricity system.

<sup>&</sup>lt;sup>38</sup> Latest indication is that it will start operation on 1 January 2003, but the official date will be declared only after Parliament has passed the Marzano bill (see below).

expected by February 2003. The issue of ENEL's dominance is currently on appeal before the Italian courts in the ENEL/Infostrada case, and may affect the outcome here.<sup>39</sup>

#### Box 2. The ENEL/Infostrada acquisition

ENEL's strategy in the late 1990s has been to buy other utilities and manage a network for distributing a variety of services to its customers. In October 2000, it announced an  $\epsilon$  11bn cash-and-bonds purchase of Infostrada, a fixed-line telecoms company sold by Britain's Vodafone after the latter's takeover of Germany's Mannesmann. The operation (falling under the threshold of EC Regulation No. 4064/89) was initially notified to the European Commission which, upon verification of any anti-competitive effects on the telecommunications market, referred the case back to the AGCM for examination in relation to the impact of the proposed transaction on the Italian electricity market.

In February 2001, the AGCM cleared the acquisition arguing that the development of a multi-utility offering was advantageous for consumer. Nonetheless, it also considered it necessary to intervene to prevent ENEL from abusing its strong position to delay or hinder the market entry of competitors in the market for the supply of electrical power to eligible customers. Accordingly, ENEL was required to shed at least 5,500 MW of its generating capacity within three months from the date of the dismissal of the Gencos. In May 2001, ENEL filed an appeal to the competent Regional Administrative Tribunal (TAR Lazio) alleging, on several grounds, the unlawfulness of the requested additional dismissal. According to ENEL, the conditions imposed by the AGCM were excessive, since other less drastic measures could have been prescribed in order to ensure full competitiveness in the market, such as the prohibition of co-marketing in the two markets affected, or the imposition of specific guarantees on the functioning of the Borsa Elettrica.

In November 2001, TAR Lazio overturned the AGCM's decision, arguing that, although still high, ENEL's market share had been practically halved since the opening-up of the Italian energy market. The imminent introduction of a quasi-mandatory power exchange mechanism would further weaken its dominance in the upstream generating market, making it illogical for ENEL to take advantage of its market power to the benefit of its activity in the market for downstream supply. Following the AGCM appeal, in November 2002 the Counsil of State acknowledged ENEL's dominant position but overturned the decision to shed its power capacity. According to the ruling, the AGCM has failed to justify the need to sane a problem in the deregulated distribution market through an intervention in the separate generation segment.

ENEL now controls Italy's second-largest telecoms group through Wind, its telecoms subsidiary, together with France Telecom. ENEL's other controversial deal was the proposal to purchase Acquedotto Pugliese, a big water company in southern Italy, from the Treasury. Following the opposition of local authority, this was finally shelved. The current government has transferred a 87 per cent stake to the Apulia region.

Source: Polo (2001) and Delfino and Sorvillo (2002).

<sup>39</sup> 

<sup>&</sup>lt;sup>39</sup> The investigation focuses on two clauses in the standard supply agreements proposed by ENEL's trading subsidiary, ENEL Trade, namely an exclusivity provision and a right of first refusal (so-called English clause). According to the AGCM, under the exclusivity clause eligible clients undertake not to acquire any energy from any supplier other than ENEL. If ENEL decides to allow the client to buy imported energy, the price of ENEL's supply will automatically and proportionally increase. As ENEL is the sole operator capable of furnishing peak and modulation electricity, the exclusivity clause would effectively tie in eligible customers, discouraging them from changing suppliers. This would deter national and foreign competitors by further raising the already high barriers to entry into the market. And by creating artificial transparency in the market, the English clause would further discourage any possible competing suppliers of electricity originating abroad. "Competition comment", Freshfields Bruckhaus Deringer, June/July 2002.

### 6.3. Regulatory governance

Key issues in regulation include the designation of independent regulatory authorities (IRAs), their *de jure* independence, the definition of their powers, their accountability, and the role of the existing antitrust authority in monitoring access to networks and competition in the liberalised service markets. The 1994 law made the creation IRAs a prerequisite for the privatization of public utilities. A much-delayed bill creating separate IRAs for electricity and gas (AEEG) and for telecommunications and media (AGC) was approved by Parliament in 1995 after no fewer than 180 hours of debates. IRAs regulate concessions and access to the market, ensure the universality and quality of services, supervise the operating companies' balance sheets, set service tariffs, investigate on possible misbehaviour of licensees (either independently or upon reports of customers), and rule the repeal of licences or pecuniary sanctions pending judiciary appeal by faulty companies.

Law 249 gave the AGC two overriding objectives: to introduce liberalization, also on the basis of EU-wide choices, and to guarantee cultural, political and social pluralism in the media sector. In a country where half of the TV industry, the largest publishing house, and various newspapers are controlled by a leading politician, the creation of a single IRA for both telecoms and media, while partly justified by technological convergence, was dictated by clear political considerations (Petretto 2000). These found its reflexion in the power granted to Parliament of appointing the regulators, in the lack of specific eligibility criteria, and in the excessive frequency of parliamentary hearings (Pontarollo and Oglietti 2000, p. 772). Concerns have also emerged regarding the slowness of the decision-making process and its opacity – there are no public hearings and the AGC does not prepare position papers to guide the regulatory game. On the other hand, and despite the heavier burden brough about by the relative lack of progress in structural deregulation, the AEEG – that has fewer members (three rather than nice) appointed by the prime minister and sits in Milan rather than Rome – has been more successful in gaining credibility.

It is not straightforward to identify some independent variables that explain such differences.<sup>41</sup> That TI is fully private (bar the golden share, of course) while ENEL is still government-controlled has not made any significant difference on their approach to the regulatory game, that has been confrontational in both cases. Enforcement appears to be hampered by lengthy and cumbersome procedure, but also by the incumbents' practice of appealing systematically against the IRA decisions. While due process is a fundamental legal principle, IRAs need to put in place

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<sup>&</sup>lt;sup>40</sup> In the 1997 Green Paper, the EC put forward as one proposition for a future regulatory model the creation of a new horizontal regulatory model to cover the whole range of existing and new services in the communications sector. Nevertheless, not many institutional changes have been made to take into account convergence between telecommunications and broadcasting. Along with the political difficulty to integrate separate regulatory institutions, the special role played by media and content policy in some countries makes it delicate to merge broadcasting and telecommunications regulatory institutions. In the Besley and Pratt (2001) model, in particular, media ownership patterns may generate capture through a channel that is industry-specific and demands media-specific regulation.

<sup>&</sup>lt;sup>41</sup> An obvious one would be the degree of statutory independence. Gilardi (2002) builds aggregate independence scores that have rather similar values for both IRAs. Individual variables, however, show that the AEEG is more independent insofar as the statuses of the agency head and board members and the relationship with political bodies are concerned, although less so in terms of financial rules.

disincentives for excessive delaying measures (Nicoletti 2002).<sup>42</sup> Although hard to test, it is intuitively clear that, even in collegiate bodies such as the Italian IRAs, the personal qualities of the AEEG's president has played an important role, confirming that "persons appointed to these positions must have personal qualities to resist improper pressures and inducements [and] must exercise their authority with skill to win the respect of key stakeholders, enhance the legitimacy of their role and decisions, and build a constituency for their independence (Smith 1997).

The 1990s have seen a general proliferation of delegation to non-representative institutions around Europe (Thatcher 2002) and Italy has been no exception – one may indeed argue that the traditional weakness of ministerial bureaucracy has strengthened the process even more than in other EU members. There is a perception that IRAs have on some occasions filled the void left by executive inactions and converted in law-making bodies (e.g., De Nicola 2001). For this reason, the on-going political debate on reforming IRAs is welcome, provided of course the principle of safeguarding investors and consumers against the risk of undue ingerence remains overriding. The bicameral commission for Costitutional reform debated the opportunity of giving selected IRAs a constitutional ranking. The current majority has acknowledged the need to preserve independence and autonomy, but argued that "political organs must proceed in fine-tuning the instruments that are necessary to carry out the functions that should remain under their control, especially as concerns the IRAs' decisions of highest social and economic impact" (Camera dei Deputati 2002). The instrument to implement this function is identified in the Documento di programmazione economica e finanziaria, hence making Parliament responsible for ensuring the fulfilment of the government's guidelines.<sup>43</sup> The majority proposal currently in front of Parliament (DdL Tabacci) considers merging AEEG and AGC into a single regulator – and issue on which the international debate is far from settled – but unfortunately also suggests that its members should be appinted by the government, hence reducing their independence and credibility.

Finally, a brief mention should be made of the consequences of the 2001 reform of the Constitution (Title V of the Second Part). This includes at article 117 the decentralization of the authority over transport and cabottage networks, the organization of the telecommunications and media sectors, as well as energy generation, transport, and domestic distribution. In accordance with the subsidiarity principle, regions and local authorities already have broad competencies in the energy domain. Insofar as this is a sector where benefits (and interdependencies) are national, whereas negative externalities are often local, cooperation among different levels of government is required (Galbiati and Vaciago 2002). Early evidence, unfortunately, shows that the governance game is characterized by strong animosity. Regions have challenged the 2002 decree to speed up new generation projects, claiming that grid ownership should be allocated between local governments by voltage. The AEEG has also expressed concern for the decision by Sicily to delay to 2010 the liberalization of the gas

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<sup>&</sup>lt;sup>42</sup> An interesting parallel can be made with New Zealand, where the absence of a regulator provided the incumbent operator, Telecom New Zealand, with the competitive weapon of most use to an incumbent: the ability to delay. Instead of being obliged to interconnect on specific terms by law, Telecom New Zealand was able to convert disputes into full-blown litigation, with numerous appeal stages throughout the legal system.

<sup>&</sup>lt;sup>43</sup> In September 2002, the government decided freezing utility and public transport prices to help contain a pick-up in inflationary pressures and defuse a growing political dispute over Italy's true inflation rate.

retail market that at the national level is foreseen for 2003.<sup>44</sup> The vague formulation in the July 2002 draft law of what principles are fundamental, and henceforth reserved to the State, in the energy sector is a further problem (Scarpa 2002).

# 7. The Future of State Ownership

### 7.1. Industrial policy and the scope for further state retrenchment

Other EU countries have accompanied state retrenchment from manufacturing with various industrial policy measures. In France, the 1986 privatization law put a 20 per cent limit on non-residents' investment in privatised enterprises, which was relaxed in 1993 to apply only to non-EU citizens. Moreover, both in the late 1980s and in the mid-1990s the government selected core groups of mainly-domestic investors (noyaux durs, later renamed groupes d'actionnaires stables) and retained special voting rights (action spécifique). A complex "industrial Meccano" has also been played to create sorts of national champions in different segments of the aerospace and defence industry (Goldstein 2001). In the UK, the "golden share" was used by the government to prevent foreigners from buying relevant stakes in key companies, such as Rolls-Royce and BP.

The 1992 plan left the scope for state retrenchment largely undefined. Moreover, special powers would be retained in areas defined as "strategic", with the strategic nature of an activity loosely defined as "the ability to influence outcomes in several other sectors". Although the 1994 privatization law circumscribed strategic areas to defence, transportation, telecommunications, energy and "other public services", the plan still outlined a future industrial structure in which the government would continue to have significant, albeit generally minority, shareholdings in a long list of activities, including many competitive markets. Shareholdings and supervisory functions were concentrated in the Treasury (now Economy) Ministry (<u>Table 11</u>). This was deemed to serve the public interest in the event that the State were to maintain a significant presence in some sectors at the end of the privatization process.<sup>46</sup>

#### Table 11. Shares held by the Ministero dell'Economia

The implications of privatization for the structure of Italian industry have been the source of harsh political conflicts. Reinforcing economic democracy through the emergence of new business actors was a peculiar aim made in the 1992 plan, that made explicit reference to an increase in the number of large-sized groups from six (IRI and ENI, plus IFI-Fiat, Ferfin-Montedison, CIR-Olivetti, and Fininvest) to ten or twelve. It is a moot point whether this goal, sometimes loosely rationalized as a means to increase competition in the Italian economy, had any economic content. In any case, the strategy has met limited success in nurturing new large-

<sup>&</sup>lt;sup>44</sup> Professor Pippo Ranci, personal communication, 30 October 2002.

<sup>&</sup>lt;sup>45</sup> The plan identified nine sectors in which the government intended to keep significant (although generally minority) stakes: electricity, energy and chemicals, banking, insurance, airline transportation, high-tech manufacturing, distribution and catering, plant engineering and installation, and telecommunications.

<sup>&</sup>lt;sup>46</sup> Ministers in the current executive, however, have suggested that the Ministry for Productive Activities should also have a voice.

sized actors. A simple analysis of the "boundaries" of the 20 largest domestic business groups shows that the assets bought during privatization account for a sizeable share of 2000 consolidated turnover in three cases only – namely Olivetti (96 per cent), Edizione Holding (59.6 per cent),<sup>47</sup> and Riva (74.7 per cent). On the other hand, the IFI-Fiat group, in co-operation with different allies, has played an active in financial privatization, especially through its participation in Banca di Roma and Turin's San Paolo bank.

In the 1990s most industries have seen a consolidation at the European and/or global level. Italian business has been left largely aside from this process, as very few firms have had the organizational capabilities and financial resources either to take over foreign competitors or to merge with them on an equal footing (Bianchi 2002b). Size remains a problem for Italian business and this finds its manifestation in a trade structure that puts her in competition with low-wage emerging economies. Above and beyond ideological *a prioris*, however, the criticism that state retrenchment has not supported industrial restructuring is not accurate.<sup>48</sup> Suffice here to briefly remind three cases.

STMicroelectronics (STM), created in 1987 through the merger of two SOEs (Italy's SGS and France's Thomson Semiconductors) has emerged as the world's third-largest chipmaker, after Intel and Toshiba. Though STM went public with an initial public stock offering in 1994, Paris and Rome each still control 22 per cent stakes in the company.<sup>49</sup> Betting big on convergence applications (the chips needed for wireless communications, data-networking and digital consumer electronics), it was was the fastest growing of the Top 10 global semiconductor manufacturers in 2000 and one of only three to post a net profit in 2001. The presence of long-term investors has probably been crucial under at least two respects. It has allowed the company to invest even during downturns in the chip cycle. STM spends 10 per cent of annual operating profit for research into futuristic technologies with no immediate payoff and 15 per cent of total revenues on research and development.<sup>50</sup> It has also allowed the management to focus on long-term strategic alliances with buyers like Nokia, Thomson Multimedia, Hewlett-Packard, and Bosch, that provide about 40 per cent of STM's revenue, a proportion that distinguishes it from commodity chip suppliers, whose virtually interchangeable devices go to a vast variety of customers.

Finmeccanica has been an active participant in the reorganization of the European aerospace and defense industry. In the missiles sector, it contributed its assets to MBDA, a joint venture created in 2001 with BAe Systems and EADS. Alenia, the subsidiary formed from a merger

<sup>&</sup>lt;sup>47</sup> In this case, the holding firm of the Benetton family, the share is potentially underestimated as the company also holds important, albeit not absolute majority, participations in Autostrade and Aeroporti di Roma. In November 2002 investors led by the Benettons sought full control of Autostrade in a takeover bid costing up to  $\epsilon$  8bn (Italy's second-largest ever after the second Telecom Italia one).

<sup>&</sup>lt;sup>48</sup> A case in point is Clô (2002) that argues that trimming ENEL's size to the benefit of foreign competitors will generate long-term inefficiency for the country.

<sup>&</sup>lt;sup>49</sup> The principal shareholder is a wholly owned subsidiary of ST Holding, which is indirectly owned half by FT1CI (a company consisting of two French shareholders, Areva and France Telecom) and half by Finmeccanica.

<sup>&</sup>lt;sup>50</sup> "Going Beyond the PC", *International Herald Tribune*, 29 January 2001 and "The Stars of Europe – Managers", *Business Week*, 17 June 2002.

between Aeritalia and Selenia, has a 19.5 per cent stake in the Eurofighter consortium, a 15 per cent one in the A 400M (ex FLA) military airlifter program, is a 50 per cent partner in the German-Italian Future Maritime Patrol Aircraft, and is in the same position with Aerospatiale Matra inside the ATR consortium. Agusta, the helicopter manufacturer, merged with Britain's GKN-Westland Helicopters in 2000.

Alitalia, finally, concluded in November 1998 what remains at this day a path-breaking agreement with KLM in view of an eventual merger. The Dutch airline however called the deal off in April 2000 saying uncertainties over the development of the Malpensa hub and the Italian airline's proposed privatization posed an unacceptable business risk – although in December 2002 an independent Dutch arbitration tribunal found that the termination was "not valid" and ordered KLM to pay Alitalia at least  $\ell$  150m. One year later A litalia concluded a 10-year commercial agreement with Air France, leading to the exchange of 2 per cent equity stakes in January 2003. 2003.

### 7.2. The governance of Fondazioni

Corporate governance problems linked to the residual, if not dominating, role of public institutions appear to be particularly severe in the banking sector – where they may indeed pose severe obstacles on the way towards a more competitive and efficient industry structure. At end-1999, Fondazioni – charitable foundations controlled by local authorities – held at a minimum a relative majority in each of Italy's five largest banking group and in six out of the top nine (De Nardis 2000) and the four largest groups are also intertwined throughout a web of mutual shareholdings. Assets under their control amount to  $\ell$  35bn.

In its original formulation, the 1992 Amato law, that created the *Fondazioni*, forbade them from controlling banks other than the one from which they were spun-off. Parliament, however, imposed them to safeguard public control over such assets. Proposals and laws in the 1990s aimed at turning the *fondazioni* into private-sector players, attentive to science and culture promotion on a local basis, but with a focus on managing the return on the investment rather than the assets themselves. The 1999 Ciampi Law, in particular, streamlined governance structures, introduced tax incentives to push *Fondazioni* to exit banks by 2005, and forbade them to control companies that are not instrumental to social objectives.<sup>53</sup> The Law's weak point is the definition of control, that still allows them to team up with other investors, most often other *Fondazioni*, to form a voting syndicate.<sup>54</sup> Furthermore, the requirement for their

<sup>&</sup>lt;sup>51</sup> KLM and Alitalia were to keep operating as separate air carriers, but with their operations jointly run and marketed by the Alliance, that was to process and market the capacity provided by the operating carriers, by defining schedules and timetables, managing the yield management system, and setting the tariffs.

<sup>&</sup>lt;sup>52</sup> Alitalia's market capitalization was  $\in$  1.03b in mid-November 2002, Air France's was equal to  $\in$  2.49b.

<sup>&</sup>lt;sup>53</sup> The Law was presented in early 1997, approved by Parliament in late 1998, and finally issued by the Council of Ministers in May 1999.

<sup>&</sup>lt;sup>54</sup> Insofar as the participation to voting syndicates is only taken into account when an individual *Fondazione* exercises a dominating role, in the Ciampi Law the definition of control is looser than in the 1994 banking law (Testo unico bancario) and in the Draghi bill. Exploiting this legal loophole, in many cases the *Fondazioni* have built a web of interlocking shareholdings, further decreasing control contestability (Messori 2000).

board members not to be directors of the banks that are each foundation's main asset is not enforced adequately.

The 2002 budget law has pushed back by one year the term for privatization; granted local government bodies the authority to appoint a majority of directors;<sup>55</sup> trasferred to the Treasury the power to fix the range of permissible investment; imposed that 10 per cent of non-banking assets be invested in *Infrastrutture spa*, a new state corporation funding public works, and that banking participations placed with assets management funds (*Società di Gestione del Risparmio*) that for all practical purposes are simply subject to the Treasury's moral suasion (Giavazzi 2001). Equally troublesome, the text does not clarify the criteria to identify (now outlawed) joint control over banks. In sum, the debate on the ultimate function of such institutions – to make grants to finance project, to directly supply social services, or to gather funds to be sued in combination with own endowment to serve the community – is still far from solved.

#### 7.3. The case of local utilities

Italy counts 1,300 local utilities, of which 405 had been corporatized at end-2001 using the incentives of the so-called Bassanini 2 law (No. 127/97), with a total turnover of  $\epsilon$  19bn and profits of more than  $\epsilon$  1bn in 2001. Services such as local transport, water and sanitation, and gas and electricity distribution are provided by such utilities. The local dimension of the regulatory reform process, however, is potentially a problem owing to the greater influence of vested interests at these levels (OECD 2002). In 1999, the D'Alema government issued a decreto legislativo to introduce liberalization in local transport and gas in accordance with EU laws. The reform aims at safeguarding services universality, but oblige local authorites to verify whether the market can supply them better than public-owned utilities. Parliament, however, failed to convert the proposal into a law.

The 2002 financing law introduced the obligation to split network ownership and the provision of services (that remains public), and to rely on competitive procedures to grant operating licences. Municipalities have the option to reduce their stakes in utilities below 51 per cent, but after fixed assets (plants, grid) have been transferred to a public-owned company. It is doubtful that these changes go in the direction of introducing more liberalization (Pera 2001 and Massarutto 2002). These are simple general guidelines, at any rate, and implementing regulations (*regolamenti attuativi*) have not been issued yet, although they were expected by June 2002. Regions, moreover, have appealed in front of the Supreme Court on the grounds that the principles of federalism introduced in the Constitution (heading V) give them the

<sup>&</sup>lt;sup>55</sup> The 2002 *Finanziaria* introduces the principle of "prevailing territorial representation" in place of that of of balancing the powers of local authorities and "civil society" (article 11).

<sup>&</sup>lt;sup>56</sup> In the case of water and sanitation, the 1994 Galli law aimed at improving supply service through gradual privatization and consolidation (in 1999 Italy counted more than 8,100 different suppliers and even Acquedotto Pugliese, the largest one, is 1/20 in size compared to European competitors such as Vivendi, Ondeo, or RWE-Thames Water). Investment needs over the next 20 years are estimated to amount to  $\ell$  45b, far in excess of public sector's available resources.

<sup>&</sup>lt;sup>57</sup> Exclusive management (*gestione in esclusiva*) is deemed necessary in both sectors – in the case of transport in order to ensure financial sustainability, for gas distribution to reflect its peculiar techno-economic characteristics.

powers to regulate territorial public services. Some local utilities are medium-sized and in some cases provide multiple services, but most of them are far too small to survive in a liberalized environment. Normative uncertainty and the September 2002 tariff freezing have hindered the industry consolidation and further slowed listing plans on the stock exchange (Table 12).

Table 12. Privatization of local utilities

## 8. Conclusions, or The Political Economy of Italian Privatization

No *ex post* analysis of Italian privatization can forget how deep and widespread was scepticism surrounding its quantitative and qualitative goals at launch. In this sense, the pace and the extent of privatizations in the midst of the worst political and economic crisis in post-war Italy has been nothing short of surprising. Successful solutions were found in a number of areas, including the sequencing of sales, the use of privatization proceeds, and the creation of a wide audience of investors attracted by state divestitures. Italy has shown a higher degree of transparency in the conduct of private sales than France and has been, partly out of necessity, far more open towards foreign investors than both France and the UK, where authorities used special powers (such as special voting rights) to prevent large foreign investments. Foreigners, lured by the lira devaluation, were also reassured by the fact that Italian authorities did not use proceeds to reduce fiscal deficits. Domestic financial markets proved far more adequate than previously expected in absorbing large amounts of new shares. Partly due to the simultaneous reduction of yields on government bonds, oversubscription has been generally larger than elsewhere in the EU, even with lower underpricing.

However, the policy drive also suffered from several unsettled issues, which limited its beneficial effects. First, a sizeable share of privatization activity has concerned non-controlling stakes in SOEs. This means that capital market discipline through both monitoring by private agents and the threat of takeover cannot function properly. Second, despite the spreading out of shareholdings and attempts at limiting single equity stakes, public companies have not emerged and the stock market does not allocate corporate control. Such a market for corporate control will remain quiescent as long as the respect of minority shareholders' rights is lax, the application of existing laws (such as those concerning take-over bids and insider trading) is feeble, and the role of institutional investors is subdued. Third, in public utilities opportunities have been lost to use divestiture as a Trojan horse to introduce more competition, in particular throughout the vertical separation of hitherto public-sector monopolists and more audacious forms of asymmetric regulation. This problem is particularly severe in electricity and (to a lesser degree) natural gas. Fourth, uncertainties abound concerning the conditions for privatizing the air, railways, post office, and tobacco companies as well as many smaller energy and water utilities owned by local authorities. And finally, public sector bodies maintain control over companies that operate in competitive sectors. This happens despite the lack of a clear vision on the limits to the process of state retrenchment – when not despite policy statements to the effect that the *entire* country should be managed like the private sector – and with poor guarantees that the management of public sector assets will maximize collective welfare. A telling example in this sense is the role of non-profit *Fondazioni* in the banking sector.

If the potential economic benefits from state divestitures have not been fully realized it has been partly for the inherent weakness of the coalition governments that have run the country for most of this 10-year period. The Italian system is clearly different from the ideal-type for fast and effective market reforms in which a strong executive is capable of assuming long-term committments, with relatively few counterchecks and a reduced number of veto players. Divergences among political parties over key issues such as the very extent of the divestiture program, the nature (if not the identity) of private investors, the speed of market liberalization, and the powers and independence of regulators have slowed down progress on many occasions.<sup>58</sup>

This is however only part of the story. Despite widespread technical and intellectual agreement on the correct forms of privatization, research has shown that "politicians' preferences shape the specific institutions that will be used to implement those policies introducing a "political bias," which is contingent on the privatizing government" (Murillo 2002, p. 463). Italy seems caught between the free-market doctrines of Margaret Thatcher and the centralized power policies of Jean-Baptiste Colbert. On the one hand, the current government exposed during the 2001 electoral campaigns strong views against state intervention. On the other hand, Economy Minister Tremonti recently stated that the government can be a good shareholder and that a proactive industrial policy to correct market failures is preferable to "a dogmatic interpretation of anti-trust principles" (Tremonti 2002). Tommaso Padoa-Schioppa of the European Central Bank's executive board recently said that "to be Thatcher one needs the courage to take unpopular choices and see them through to the end, and that's missing. To be Colbert, one needs a state that works, and that's missing, too". Sha the literature on the political economy of reforms has long argued, it is this combination between the "three Is" – institutions, interests, and ideas – that explains the significant deceleration of privatization since 2001.

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<sup>&</sup>lt;sup>58</sup> It is not surprising that an opinion poll conducted before the 2001 polls showed privatization to be the lowest priority among 12 policy priority alternatives. Having said that, this was the policy area on which the government recorded the second-lowest score of very negative opinion. Moreover, roughly 60 per cent of respondents thought that electricy, gas, water, and transport should be fully liberalized. See *Sondaggio CONFCOMMERCIO-Cirm sui temi di politica economica* at <a href="http://www.confcommercio.it/Iniziative/Cernobbio/popolazione.pdf">http://www.confcommercio.it/Iniziative/Cernobbio/popolazione.pdf</a>.

<sup>&</sup>lt;sup>59</sup> "Italy 'gambling away credibility' – de Benedetti", *Financial Times*, 17 September 2002.

#### **Bibliography**

- Abate, Antonio and Alberto Clô (2000), "La regolazione elettrica in Italia, alcune prime valutazioni", *L'Industria*, Vol. 21, No. 4.
- Anuatti-Neto, Francisco, Milton Barossi-Filho, A. Gledson De Carvalho and Roberto Macedo (2002), "Benefits and Costs of Privatization: Evidence from Brazil", *mimeo*, <a href="http://www.iadb.org/res/laresnetwork/projects/pr144finaldraft.pdf">http://www.iadb.org/res/laresnetwork/projects/pr144finaldraft.pdf</a>
- Autorità garante della concorrenza e del mercato (AGCM) (various years)
- Autorità per l'energia elettrica e il gas (AEEG) (various years), Relazione annuale sullo stato dei servizi e sull'attività svolta.
- Autorità per le garanzie nelle comunicazioni (AGC) (various years), Relazione annuale sull'attività svolta e sui programmi del lavoro.
- Barca, Fabrizio and Sandro Trento (1997), "La parabola delle partecipazioni statali", in Barca (ed.), *Storia del capitalismo italiano dal dopoguerra a oggi*, Roma: Donzelli.
- Bertero, Elisabetta and Laura Rondi (2000), "Financial pressure and the behaviour of public enterprises under soft and hard budget constraints: evidence from Italian panel data", *Journal of Public Economics*, Vol. 75, No. 1: 73-98.
- Besley, Timothy and Andrea Prat (2001), "Handcuffs for the Grabbing Hand? Media Capture and Government Accountability", *mimeo*, London School of Economics and Political Science.
- Bianchi, Patrizio (2002a), "La chiusura dell'IRI. Considerazioni al mergine di un evento storico", *L'Industria*, Vol. 23, No. 1.
- ---- (2002b), "Grandi imprese, privatizzazioni e riorganizzazioni produttive", in Giampaolo Galli and Luigi Paganetto (eds.), *La competitività dell'Italia*, Milano: Il Sole 24 Ore.
- Bortolotti, Bernardo and Domenico Siniscalco (2001), "Importare la Corporate Governance?"
- Brunello, Giorgio, Clara Graziano, and Bruno Parigi (2002) "CEO Turnover in Insiders Dominated Boards: The Italian Case", *Journal of Banking and Finance*.
- Camera dei Deputati (2002), *Indagine conoscitiva sulla situazione e le prospettive del settore energetico*, X Commissione Attività Produttive.
- Cassese, Sabino (1996), "Le privatizzazioni in Italia", Stato e mercato, No. 47: 323:49.
- Cavaliere, Alberto (2001), "I servizi pubblici: privatizzazioni e liberalizzazioni in corso", in Luigi Bernardi and Alberto Zanardi (eds.), *La finanza pubblica Rapporto 2001*, Bologna: il Mulino.
- Cecchi, Claudia, Pia Saraceno, and Giacomo Vaciago (2002), "Subito la Borsa elettrica", *il Sole 24 Ore*, 14 June. Chan-Lee, Jim and Ahn (2001),
- Clô, Alberto (2002), "I grandi gruppi energetici in Italia tra passato, presente e... futuro?"", L'Industria, Vol. 23, No. 1.
- ----, Giovanni Goldoni, and Davide Pastorino (2002), "Di male in peggio", Energia, No. 3.
- Consob (various years), Relazione annuale, Roma.
- Cragg, Michael and I. J. Alexander Dyck (1997), "Management control and privatization in the UK", *Rand Journal of Economics*, Vol. 30, No. 3: 475-97.
- Cuervo, Alvaro, and Belén Villalonga (2000), "Explaining the variance in the performance effects of privatization," *Academy of Management Review*, Vol. 25, No. 3: 581–590.
- D'Souza, Juliet and William L. Megginson (1999), "The Financial and Operating Performance of Privatized Firms During the 1990s", *Journal of Finance* (August).
- Debenedetti, Franco and Tommaso Valletti (2002), "Primo, nessun cambio delle regole in corsa", *Il Sole 24 Ore*, 28 January.
- Delfino, Maurizio and Pia Sorvillo (2002), "Italy: The Competition Act and the attitude and competence of the Competition Authority" in *The European Antitrust Review 2002*.

- De Nardis, Sergio (2000), "Privatizzazioni, liberalizzazioni, sviluppo: introduzione e sintesi", in *idem* (ed.), *Le privatizzazioni italiane*, Bologna: il Mulino.
- De Nicola, Alessandro (2001), "Autorità di garanzia, separiamo i poteri", Il Sole 24 Ore, 19 December.
- DWS (2002), Corporate Governance Survey of EURO STOXX 50 companies.
- Enriques, Luca (2002), "Off the Books, But on the Record: Some Evidence from Italy on the Relevance of Judges to the Quality of Corporate Law", presented at the conference *Global Markets, Domestic Institutions: Corporate Law and Governance in a New Era of Cross-Border Deals*, Columbia Law School, 5-6 April.
- Erbetta, Fabrizio (2001), "Does the run-up of privatization work as an effective incentive mechanism? Preliminary findings from a sample of Italian firms", Ceris-Cnr, Working paper, No. 11.
- European Commission (2001), Seventh Report on the Implementation of the Telecommunications Regulatory Package.
- Filippa, Luca and Alessandra Franzosi (2001), "Capitalizzazione di Borsa, settori istituzionali e portafoglio *retail*", Borsa Italiana, *Bit Notes*, No. 2.
- Fischer, Ronald, R. Gutierrez, and Pablo Serra (2002), "The Effects of Privatization on Firms and on Social Welfare", Universidad de Chile.
- Gallo, Nicola and Claudia Cecchi (2002), "La Borsa elettrica boicottata dalle imprese "sussidiate", *Corriere della Sera*, 8 July.
- Giavazzi, Francesco (1996), "Privatizzazioni, liberalizzazione dei mercati e assetto proprietario delle imprese: alcuni falsi dilemmi", *Stato e mercato*, No. 47: 351-60.
- ---- (2001), "I gattopardi del credito", Corriere della Sera, 7 December.
- Gilardi, Fabrizio (2002), "Policy Credibility and Delegation to Independent Regulatory Agencies: A Comparative Empirical Analysis", *Journal of European Public Policy*, Vol. 9.
- Golden, Miriam A. (2002), "Does Globalization Reduce Corruption? Some Political Consequences of Economic Integration", presented at the Annual Meetings of the American Political Science Association, Washington.
- Goldstein, A. (1996), "Privatizations and Corporate Governance in France", *BNL Quarterly Review*, No. 196: 455-88.
- ---- (2001), "Stato, mercato ed Europa nel capitalismo francese: il caso dell'industria della difesa", *Stato e Mercato*, No. 61: 161-96.
- ---- (2003), "Whither Socialism? The French Privatization Experience 1997-2002", mimeo.
- ---- and G. Nicoletti (1996), "Italian privatisation in international perspective", *Cuadernos di Economia*, Año 33, No. 100: 425-451.
- La Porta, Rafael and Florencio Lopez-de-Silanes (1999), "The Benefits of Privatization: Evidence from Mexico", *Quarterly Journal of Economics* (November): 1193-1242.
- Lehn, Kenneth (2002), "Corporate governance in the deregulated telecommunications industry: lessons from the airline industry", *Telecommunications Policy*, Vol. 26, No. 5-6: 225–242.
- Levine, Ross E. (2002), "Bank-Based or Market-Based Financial Systems: Which is Better?", National Bureau of Economic Research (NBER), *Working Paper*, No. 9138.
- Macchiati, Alfredo (1999), "Breve storia delle privatizzazioni in Italia", *Mercato concorrenza regole*, Vol. 1, No. 3.
- Massarutto, Antonio (2002), "La riforma dei servizi pubblic locali. Liberalizzazione, privatizzazione o gattopardismo", *Mercato concorrenza regole*, Vol. 4, No. 1.
- Mediobanca (a) (various years), Le principali società italiane, Milano.
- ---- (b) (various years), Dati cumulativi di 1760 società italiane, Milano.
- ---- (2000), Le privatizzazioni in Italia dal 1992, Milano: R&S (Ricerche e Studi).

- Megginson, William L. and Jeffry M. Netter (2001), "From State to Market: A Survey of Empirical Studies on Privatization", *Journal of Economic Literature*.
- Messori, Marcello (1999), "Gli assetti proprietari delle maggiori banche italiane", in Luigi Paganetto (ed.), *Banche e concorrenza in Europa*, Bologna: il Mulino, 105-15.
- ---- (2000), "Fondazioni e assetti proprietari del sistema bancario", in L. Filippini (ed.), *Economia delle fondazioni*, Bologna, il Mulino, 187-212.
- ---- (2002), "Fondazioni bancarie indietro tutta", La Repubblica, 22 April.
- Ministero del Tesoro, del Bilancio e della Programmazione Economica (2001), *Libro bianco sulle privatizzazioni*, April.
- Munari, Federico (2002), Privatizzazioni e innovazione. Nuovi assetti proprietari e investimenti in ricerca e sviluppo, Roma, Carocci.
- Murillo, M. Victoria (2002), "Political Bias in Policy Convergence", World Politics, Vol. 54, No. 4.
- Nicoletti, Giuseppe (2002), "Institutions, Economic Structure and Performance: Is Italy Doomed?", presented at the 1<sup>st</sup> *Monitoring Italy Conference*, ISAE, 10 January.
- OECD (various years), Economic Survey of Italy, Paris.
- Pera, Alberto, "Concorrenza tradita", Il Sole 24 Ore, 18 December.
- Polo, Michele (2001), "Multiutilities, molte authorities e il caso ENEL-Infostrada", Mercato concorrenza regole, Vol. 3, No. 2.
- Pontarollo, Enzo and Andrea Oglietti (2000), "La performance dell'Autorità per le Garanzie nelle Comunicazioni: un primo esame", *L'Industria*, Vol. 21, No. 4.
- Ranci, Pippo (2000), "Un contributo per valutare l'Autorità per l'energia elettrica e il gas", *L'Industria*, Vol. 21, No. 4.
- Scarpa, Carlo (2002), "La paura scorre sul filo (elettrico)", www.lavoce.info/news/print.php?id+31&news\_pk+138&from+index.
- Schamis, Hector (2002), Re-Foring the State. The Politics of Privatization in Latin America and Europe, University of Michigan Press.
- Spaventa, Luigi (2002), "Indagine conoscitiva sul <u>Testo Unico</u> della Finanza. Audizione alla VI Commissione Finanza della Camera", 20 March.
- Tremonti, Giulio (2002), "«Il mio new deal»", interview, Corriere della Sera, 16 November.
- Villalonga Belén (2000), "Privatization and efficiency: differentiating ownership effects from political, organizational and dynamic effects", *Journal of Economic Behaviour & Organization*, Vol. 42, No. 1: 43-74.
- Zingales, Luigi (1994), "The Value of the Voting Right: A Study of the Milan Stock Exchange Experience", *Review of Financial Studies*, Vol. 7 (Spring): 125-148.

**Table 1.** Main Normative Bases of Italian Privatization

"Amato Law" 218 (July 90)	Transformed public banks into joint-stock companies and allowed the sale of up to 49 per cent of their shares to private investors.			
Law 35 (January 92)	Turned public agencies (enti di gestione), state autonomous companies and other government economic bodies into joint-stock			
	companies.			
Law 359 (August 92)	Turned IRI, ENI, ENEL, and into joint-stock companies and trasferred ownership to the Treasury.			
"Reorganisation plan"	Presented by the Treasury in Parliament, suggested a two-step privatisation strategy for IRI, ENI, IMI, BNL, and INA: the			
(November 92)	transformation of SOEs into joint-stock companies and the rapid placement of a few large-sized and profitable ones on the market.			
Decree 174/1993	Eliminated the Ministry for State Shareholdings			
Law 202 (mid-1993)				
Law 432 (October 93)	Established the Fondo per l'ammortamento dei titoli di Stato whose sole objective is to reduce the public debt. Following EU			
	guidelines and Eurostat principles, privatization revenues as well as dividends distributed by SOEs shall not be used to cover			
	fiscal imbalances.			
Savona-Van Miert agreement	Allowed the recapitalization of state-owned steel companies in exchange for a promise to proceed with their privatization.			
(93)				
Andreatta-Van Miert protocol	Required the government to reduce IRI's debt to "physiological levels acceptable to a private investor operating in a market			
	economy", i.e. take IRI's debt-to-equity ratio from 13-to-one to 0.86-to-one.			
Law 474 (July 1994)	Fixed the rules for the sale of the State's shareholdings; introduced partly paid shares (granting full voting and divident rights and			
	spreading payment over 3 or 4 years); the golden share; a 5 per cent limit on the proportion of total capital that a single investor			
	can hold; the right of the Treasury to create a <i>noyau dur</i> ; gave small shareholders a voice on the board through proportional			
	representation (voto di lista); and forced members of a concert party to launch a partial take-over bid (for the same number of			
	shares that they already hold). It subordinated the privatization of public utilities to the creation of Independent Regulatory			
	Authorities. On the same vein, in 1995 recently privatized companies were required to introduce postal voting.			
Law 481 (November 1995)	Established Independend Regulatory Authorities for public utilities.			
Law 662 (December 96)	Allowed to use the <i>Fondo</i> 's resources to buy shareholdings that companies fully owned by the Treasury may have in other firms			
	in order to accelerate the formers' eventual privatization.			
Law 588 (19 November	Included urgent measures to improve the financial standing of Banco di Napoli in view of its restructuring and privatization			
1996)				
Decree law 598 (21	Transferred STET shares from IRI to the Treasury, that paid the former a guaranteed prices so as to allow IRI to reduce its debt.			
November 1996)	Also exempted this financial operation from any tax.			

Law 184 (16 June 1998)	Regulates divestiture of indirect state shareholdings
Legislative decree 58 (February 98)	The Consolidated Act on Financial Intermediation (so-called Draghi reform) has weakened shareholders' syndicates and voting agreements (they have to be announced, their duration cannot exceed three years, and in case of takeover bids, they are no longer valid) and eased the conditions for mounting a takeover bid (buying more that 30% of a company's total capital makes it compulsory to bid for all shares). It has also introduced tools to protect minority shareholders typical in common law systems – for example the possibility for qualified minorities to sue the management (so-called derivative suit) and for shareholders to vote by mail – and has lowered from 20 per cent to 10 per cent of capital the threshold for requiring management to organize an assembly. While it does not introduce any changes in the structure of the boards of directors, the bill states that at least one out of three (or two out of five) auditors should represent minority shareholders. Insider trading is now strictly regulated as well, and proxy votes have been introduced. Shareholders' meetings were authorized to introduce defensive tactics against hostile bids. In the area of corporate disclosure, the scope of some reporting requirements has been broadened to cover unlisted companies that have issued widely held financial instruments.
Legislative decree 79 (March 99)	Implemented EU directive 96/92/CE on the single market for electricity.
Legislative decree 164 (2000)	Implemented EU directive 98/30/CE on the single market for natural gas.
Law 57 (March 2001)	Granted the Competition Authority the power to scrutinize the activity on the market of government-controlled undertakings and statutory (i.e. <i>de jure</i> ) monopolies. Should the latter intend to trade in markets other than those in which they already trade, they must operate through separate companies, the incorporation of which (as well as the acquisition of controlling interests in undertakings trading on different markets) requires prior notification to the Competition Authority.
Law 66 (March 2001)	Returned from the AGC to the Ministry the competence to issue individual licences and general authorizations.
Law 217 (June 2001)	The Ministry is still in charge of the periodic revision of the universal service's scope as well as the verification of universal service obligations; the discipline related to private telecommunications services; and the tender for assigning WLL licences.

 Table 2.
 Major privatisations in Italy since 1993

	Corporation (Group)	Method of sale	Percentage sold	Gross proceeds (€ m)
1993	Italgel	Private agreement	62.12	223
	Cirio-Bertolli-DeRica	Private agreement	62.12	160
	Credito Italiano (IRI)	Public offering	58.09	930
	SIV (EFIM)	Auction	100.00	108
	Total for year			1 422
1994	IMI – 1 <sup>st</sup> tranche	Public offering	32.89	927
	COMIT (IRI)	Public offering	54.35	1 493
	Nuovo Pignone (ENI)	Auction	69.33	361
	INA – 1 <sup>st</sup> tranche	Public offering	47.25	2 340
	Acciai Speciali Terni	Private agreement	100.00	322
	SME – 1 <sup>st</sup> tranche	Private agreement	32.00	373
	Total for year			6 377
1995	Italtel	Auction	40.00	516
	Ilva Laminati Piani	Private agreement	100.00	1 298
	Enichem Augusta (ENI)	Auction	70.00	155
	IMI – 2 <sup>nd</sup> tranche	Private agreement	19.03	472
	SME - 2 <sup>nd</sup> tranche	Accept takeover bid	14.91	176
	INA - 2 <sup>nd</sup> tranche	Private agreement	18.37	871
	ENI – 1 <sup>st</sup> tranche	Public offering	15.00	3 253
	ISE	Auction	73.96	191
	Total for year			7106
1996	Dalmine	Auction	84.08	156
	Nuova Tirrena	Auction	91.14	283
	SME – 2 <sup>nd</sup> tranche	Accept takeover bid	15.21	62
	INA – 3 <sup>rd</sup> tranche	Conv. Bond issue	31.08	2 169
	IMI – 3 <sup>rd</sup> tranche	Public offering	6.94	259
	ENI - 2 <sup>nd</sup> tranche	Public offering	15.82	4 582
	Total for year			7 742
1997	ENI - 3 <sup>rd</sup> tranche	Public offering	17.60	6 833
	Aeroporti di Roma	Public offering	45.00	307
	Telecom Italia	Core investors + public offering	39.54	11 818
	SEAT editoria	Core investors + public offering	61.27	854
	Banca di Roma	Public offering + bond issue	36.50	980
	Total for year			20 940
1998	SAIPEM (ENI)	Public offering	18.75	589
	ENI – 4 <sup>th</sup> tranche	Public offering	14.83	6 711
	BNL	Public offering	67.85	3 464
	Total for year			10 764
1999	ENEL	Public offering	31.70	16 550
	Autostrade	Auction + public offering	82.40	6 722
	Mediocredito Centrale	Auction	100.00	2 037
	Total for year			25 382
2000	Aeroporti di Roma	Direct sale	51.2	1 327

	Finmeccanica	Secondary public offer	43.7	5 505
	COFIRI	Direct sale	100.0	504
	Banco di Napoli	Tender share to takeover bid	16.2	493
	Total for year			7 933
2001	ENI – 5 <sup>th</sup> tranche	Accelerated block building	5.0	2 721
	Total for year			2 907
2002	Telecom Italia	Placement with institutions	3.5	1 400
	Total for year			1 498
	Total 1993-2000			92 072

Source: Ministero del Tesoro, Bilancio e Programmazione Economica (2000), Italy's Report on Economic Reform and other sources.

Table 3. Privatization classified by sector (1992-2000)

	Steel	Food	Capital	Services	Chemicals	Mining &	Glass,	Banking	Insurance	Textile	Oil &	Transport	Telecoms	Local	
			goods			NFM	alluminium				energy		& media	utilities	Constructio
							& cement								n
1992	36.7	8.8	2.6	13.1	3.0	1.4	34.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1993	0.0	21.1	26.0	0.0	2.8	0.7	4.8	41.5	0.0	0.5	2.5	0.0	0.0	0.0	0.0
1994	4.8	5.7	3.4	0.0	3.3	1.6	0.0	41.8	35.9	1.5	2.0	0.0	0.0	0.0	0.0
1995	16.4	2.3	2.7	0.0	6.1	1.9	0.0	17.7	0.0	0.0	45.3	0.9	6.8	0.0	0.0
1996	2.9	0.8	3.2	1.5	1.2	0.6	3.2	3.2	24.3	1.2	56.6	0.0	0.0	1.3	0.0
1997	0.1	0.0	0.9	0.4	0.0	0.0	0.1	8.4	0.0	0.0	33.0	0.0	55.5	1.5	0.0
1998	0.0	0.0	11.1	0.6	0.0	0.0	0.0	26.5	0.0	0.0	44.6	3.0	9.0	5.1	0.1
1999	0.1	0.0	4.2	0.1	0.1	0.0	0.0	17.1	0.0	0.0	59.7	14.9	0.0	3.6	0.1
2000	0.0	0.0	61.8	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	24.9	0.0	13.1	0.0

Table 4. Privatization classified by sale technique (1992-2000)

	Stock market offers	To industrial	To institutional	MBO	Other techniques
		investors	investors		
1992	0.0	100.0	0.0	0.0	0.0
1993	49.6	48.6	1.8	0.0	0.0
1994	80.5	17.7	1.4	0.4	0.0
1995	44.7	43.8	0.0	0.0	11.5
1996	59.1	16.9	3.2	0.0	20.8
1997	83.7	16.3	0.0	0.0	0.0
1998	84.6	15.2	0.0	0.2	0.0
1999	91.8	8.0	0.0	0.0	0.2
2000	53.5	38.0	8.5	0.0	0.0

Table 5. Privatization on the stock exchange by investors category

	Retail Italy Institutions			Institutions abroad	i
		Italy	Cont. Europe	UK & Ireland	North America
IMI 1	42.9	11.4	29	0.7	16.0
INA 1	68.3	9.5	15	5.3	6.9
ENI 1	33.4	29.6	15	5.0	22.0
ENI 2	40.3	14.0	16.4	15.6	13.7
IMI 2	0.0	42.6	20.2	27.9	9.3
INA 3	0.0	50.0		50.0	
ENI 3	52.3	11.9	10.7	10.3	14.8
Telecom Italia	75.0	5.8	8.1	2.9	8.2
ENI 4	76.4	8.0	2.8	6.8	6.0
BNL	62.9	10.5	21	.6	5.0
ENEL 1	36.6	25.7		37.7	
ENI 5					
Autostrade	79.1	10.7		10.2	
Finmeccanica					·
Unweighted average	47.3	19.1		33.6	
		_	· · · · · · · · · · · · · · · · · · ·		

Table 6. Performance changes in privatized companies

	N	Mean before	Mean after	T-stat for	Z-stat for
		Median before	Median after	change in mean	change in mean
Profitability					
Operating income/sales	25	0,0308	0,0524	-0,931418	-0,56848
		0,0588	0,0357		
Operating income/PPE	25	-0,0827	0,1982	-1,256976	-0,89274
		0,1506	0,1560		
Net income/sales		-0,0291	0,0107	-1,630013	-1,24849
		0,0106	0,0158		
Net income/Total assets	25	-0,0206	0,0083	-1,054694	-0,75520
		0,0118	0,0148		
Net income/equity	25	-0,0449	0,0327	-0,847193	-0,83397
		0,0903	0,0595		
Operating efficiency					
Log(Sales/PPE)	25	0,5149	0,5183	-0,062198	-0,00015
		0,4794	0,6533		
Operating costs/Sales	25	0,8559	0,8522	0,168898	-0,33158
		0,9249	0,9553		
Investment and assets					
Log (PPE)	25	4,9771	5,0259	-0,746237	-0,25580
		5,1842	5,1762		
Investment/sales	25	-0,0094	0,0548	-2,420396**	-1,92132*
		-0,0020	0,0222		
Investment/PPE	25	-0,1304	0,1363	-2,093582**	-2,02618**
		-0,0116	0,0489		
Output					
Log (Sales)	25	5,4920	5,5442	-1,768036*	-0,33158
		5,4255	5,4255		
Finance					
Current	25	1,1731	1,2745	-0,875016	-0,67410
		0,9985	1,0765		
LTD/Equity	25	0,6178	1,3888	-2,049611*	-2,04806**
		0,5552	0,6764		
Net Taxes					
Net Taxes/Sales	25	0,0228	0,0080	0,890721	1,01745
		0,0073	0,0046		

significant at 10% level

significant at 5% level significant at 1% level

Performance changes in privatized companies (adjusted) Table 7.

	N	Mean before	Mean after	T-stat for	Z-stat for
		Median before	Median after	change in mean	change in mean
Profitability					
Operating income/sales	20	-0,02128	0,00501	-1,147306	-0,61489
		0,00327	-0,00589		
Operating income/PPE	20	-0,25124	0,07227	-1,377185	-0,81152
		0,02858	0,03673		
Net income/sales		-0,02505	-0,01170	-0,477755	-0,34057
		0,00994	-0,00889		
Net income/Total assets	20	-0,02101	-0,01042	-0,354885	-0,22638
		0,01347	-0,00704		
Net income/equity	20	0,37316	-0,01282	1,564902	1,61598
		0,12372	-0,01024		
Operating efficiency					
Log(Sales/PPE)	20	0,18672	0,17168	0,235394	0,15045
		0,28257	0,18873		
Operating costs/Sales	20	-0,17214	-0,16858	0,393660	-0,02938
		-0,06964	-0,04668		
Investment and assets					
Log (PPE)	20	-1,66596	-1,66097	-0,064592	-0,02073
		-1,55311	-1,73239		
Investment/sales	20	-0,04764	0,04242	-2,492775**	-2,02208**
		-0,02510	0,00092		
Investment/PPE	20	-0,23342	0,09921	-2,075066*	-2,15551**
		-0,03785	0,01780		
Output					
Log (Sales)	20	-1,47924	-1,48929	0,320284	0,04345
		-1,47063	-1,57711		
Finance					
Current	20	0,15688	0,22083	-0,425156	-0,36341
		0,05871	0,05726		
LTD/Equity	20	5,32799	0,92000	1,786276*	1,77759*
		0,15266	0,26829		
Net Taxes					
Net Taxes/Sales	20	0,00420	-0,01535	0,932907	1,11501
		-0,00640	-0,00287		

<sup>\*\*</sup> 

significant at 10% level significant at 5% level significant at 1% level \*\*\*

Table 8. Porfolio allocation of household savings

	1995	1996	1997	1998	1999	2000	2001:H1
Notes and deposits	40.7	39.0	34.3	29.8	25.1	24.7	24.7
<b>Government bonds</b>	26.3	23.5	18.0	11.1	8.6	9.0	9.5
Equities	14.5	13.8	17.0	19.7	25.6	25.2	23.3
Italian non-listed	10.8	10.2	11.1	11.8	15.1	13.4	11.9
Italian listed	2.2	2.1	3.7	5.1	7.5	8.2	7.6
Foreign	1.6	1.5	2.2	2.7	3.0	3.6	3.7
Mutual funds	4.0	5.9	9.9	16.8	19.0	17.3	16.5
Insurance & pension	8.6	8.9	9.4	9.6	10.7	11.6	12.3
funds							
Bonds	2.6	5.4	7.5	9.1	6.7	8.0	8.9
Other foreign	1.9	2.2	2.7	2.7	2.9	2.9	3.5
Other	1.4	1.4	1.2	1.2	1.3	1.4	1.4

Source: Filippa and Franzosi (2001), Table 3.

Table 9. Ownership composition of listed companies

	1995	1996	1997	1998	1999	2000	2001:H1
Foreign	11.6	15.0	18.6	19.6	16.3	15.7	15.5
Domestic	88.4	85.0	81.4	80.4	83.7	84.3	84.5
Institutional investors	13.4	13.5	15.7	15.5	12.3	13.2	13.7
Insurance	4.3	4.4	4.9	3.9	2.5	3.1	3.9
Pension funds	0.9	0.9	0.9	0.7	0.6	0.6	0.8
Gestioni	2.6	3.0	3.4	2.8	2.8	2.7	2.6
Mutual funds	5.7	5.3	6.5	8.1	6.4	6.8	6.5
Banks	5.8	4.0	5.7	10.0	5.5	6.3	4.8
"Fondazioni"	3.1	3.5	2.8	4.7	4.3	4.8	4.8
Holding companies	18.7	12.8	22.0	17.8	24.2	23.7	22.8
Households	21.2	18.7	23.1	23.4	26.2	26.4	29.3
Public sector	26.1	32.5	12.0	8.9	11.2	9.9	9.1

Source: Filippa and Franzosi (2001), Table 1.

Table 10. International comparison of public service prices (2001 data)

	France	Germany	Italy	Sweden	UK
Telecommunications					
Monthly spending (private)	83	74	100	60	79
Monthly spending (business)	79	78	100	52	97
Mobile services	78	74	100	76	79
Electricity					
Year consumption 600 kWh	177	255	100	266	221
Year consumption 7500 kWh	59	77	100	54	54

Source:

own elaboration on AEGG data (*Il Sole-24 Ore*, 5 December 2002), Oftel (2002), *International benchmarking study of mobile services*, and Wissenschaftliches Institut für Kommunikationsdienste (2002), *Situation of the Swiss Telecommunications Market in an International Comparison*.

Table 11. Share stakes held by the Ministero dell'Economia

Name	Sector	Stake	Mkt value	Sales (2000) <sup>a</sup>	Employees
ENIEL	Engage	(per cent)	(31/10/02) <sup>a</sup>		(2000)
ENEL	Energy	68	20 143	24 687	72 647
ENI	Energy	30	16 873	47 938	69 969
Finmeccanica	Defense & Aereospace	32	1 496	5 987	39 370
Telecom Italia	Telecommunications	3	1 460	28 591	114 669
Alitalia	Trasport	62	639	5 391	23 478
SEAT	Media	0.1	8	1 333	2 654
Poste Italiane	Postal services	100	n.a.	6 898	176 252
Ferrovie dello Stato	Trasport	100	n.a.	4 766	111 621
Rai Holding	Holding	100	n.a.	2 812	11 704
ETI (Ente Tabacchi Italiani)	Tobacco	100	n.a.	2 223	347 <sup>b</sup>
Gestore Rete Trasmissione Nazionale	Energy	100	n.a.	1 019	660
Cinecittà Holding	Services (diversified)	100	n.a.	38	5768
Consap	Insurance	100	n.a.	n.a.	n.a.
Consip – Concessionaria Servizi Informativi Pubblici	Services (diversified)	100	n.a.	n.a.	n.a.
ENAV	Trasport	100	n.a.	n.a.	n.a.
IRI	Holding	100	n.a.	n.a.	n.a.
Italia Lavoro	Social development	100	n.a.	n.a.	n.a.
Sogesid – Società per la Gestione degli Impianti Idrici	Water	100	n.a.	n.a.	n.a.
SOGIN – Società Gestione Impianti Nucleari	Energy	100	n.a.	n.a.	n.a.
Sviluppo Italia	Regional development	100	n.a.	n.a.	n.a.
EUR	Services (diversified)	90	n.a.	n.a.	n.a.
Mediocredito Friuli V. G.	Banking	34	n.a.	n.a.	n.a.
Coopercredito	Banking	14	n.a.	n.a.	n.a.

<sup>(</sup>a) € million

(b) most employees are on secondment from Amministrazione Autonoma Monopoli di Stato

Sources: sales and employment from Mediobanca, market value OECD elaboration based on Borsa Italiana and Direzione Generale del Tesoro-Ministero dell'Economia.

**Table 12.** Privatization of local utilities

Company	City	Sector	Notes
AEM	Milan	Electricity and	Free float is 23%. Strategy is to expand in the power generation business (the board of directors has
		gas	recently approved a 240MW brownfield project, which would also be used in the district heating service in
			the Milan area) and to lower its presence in the telecoms business (FastWeb). Moreover, it considers
			entering the water business, in accordance with the Milan local authorities' decision on the issue.
AEM Torino	Turin	Electricity and	Free float is 29.9%. Expansion plans in power generation targets 2,800MW of installed capacity in 2007
		gas	from the current 1,650MW (including Eurogen), and in district heating with an objective of 44mn m <sup>3</sup> of
			volumes supplied in 2005 (an increase of 55%). In order to reduce net debt, it may either sell a minority
			stake (around 30%) in its hydro power plants to an industrial investor or increase capital.
Acea	Rome	Multi	Main businesses are electricity and water. A joint venture with Electrabel, operational in January 2003,
13.60.4		T1 ( 1 )	aims at building greenfield plants to generate 22,700 Gwh by 2007.
AMGA	Genoa	Electricity and	Free float is 39.19%, the rest is owned by the Genoa (54.11%) and Rome (3.7%) municipalities and
A	Durania	gas	Italenergia Bis (3%).
Asm	Brescia	Multi	Listed in July 2002 (free float is 27%). Offer price was 12% below the one suggested by the advisor. In 2001, together with different partners, it has acquired Elettrogen and Plurigas; it has also bought a 20%
			stake in Trentino Servizi to implement the multiutility business model outside of the Brescia area.
Acegas	Trieste	Multi	Although listed, the decision of the new local government to remove the board of directors following
Accgas	THESIC	Multi	elections has been criticized.
~ .			
Seabo	Bologna	Electricity and	Project to list a new holding company to be created through a merger with four other utilities blocked.
		gas	Withdrawal of the private partner in the telecom subsidiary (Acantho).
Meta	Modena	Electricity and	Following the withdrawal of Edison, the Comune is seeking a new partner (possible ones are Acea, Endesa
		gas	and Asm Brescia) and to list on the stock exchange.
Amp	Parma	Electricity	Edizione Holding and SanPaolo-Imi, that hold a 35 per cent stake, intend to exit due to listing delays.
Agac	Reggio Emilia	Electricity	Listing plans.
Aps	Padova	Electricity	Listing plans.
Agsm	Verona	Electricity	Listing plans suspended following a political dispute.
Tea	Mantova	Electricity	Plan to integrate with Pavia, Lodi, and Cremona utilities.
Estgas	Friuli	Gas	Listing plans.
Aim	Vicenza	Electricity	Listing plans.

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