

## PATH-DEPENDENCY AND CORPORATE GOVERNANCE IN ITALY: THE POLITICAL ORIGINS OF DEBT FINANCING

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### Abstract

In this paper we investigate the emergence and the co-evolution of institutional complementarities between debt and equity as alternative financial instruments in the case of Italy. We focus on the evolution of Italian firms (related to the benchmark years from 1952 to 1991). Through the data collected we observed the collaterals that firms were able to transfer to loan institutes. We also examined the factors which made difficult to switch to equity financing, comparing the rate of profitability of Italian firms with alternative investments. The results show a financial structure for Italian firms that rely exclusively on debt, independently of the public or private nature of firms' property and of the economic sector. This anomaly seems to be the consequence of path-dependencies between "political origins" and firm's governance structure in Italy.

**Keywords:** corporate governance, debt financing, equity financing

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### 1. Introduction

In recent years, an extensive body of studies has dealt with the issue of convergence versus diversity in corporations' ownership and control in contemporary economic systems. Most of these works have compared corporate governance models through the lens of the New Institutional Economics (NIE) theory of the firm and have stressed the role of the legal nature of corporations beside the traditional agency costs theories (Allen and Gale, 2000; Becht, Bolton and Röell, 2002). According to this literature two main systems of corporate governance might be distinguished (Bratton and J.A. McCahery, 1999; Allen and Gale, 2000): a *market system* characterised by dispersed shareholding and thick, liquid trading markets, and a *hierarchical control system* characterised by a hard control exerted over the management by a principal or a coalition of principals (banks, families, etc.), thin trading and non-controlling stakes. While the former system may be found in US and UK, the latter has been experienced in a variety of forms by Germany Italy, Japan, and many other countries. The main question addressed recently by this scholarly literature is whether one of the two stylized corporate governance systems is characterized by some relative competitive advantage over the other and can thus prevail in the global market. Some of these systems have recently undergone through serious economic and institutional crises. This leaves unsolved the problem of convergence *versus* diversity in corporate models.

Recent works have emphasized the role plaid by historical conditions and legal origins in shaping path-dependency and diversity in corporate governance patterns (Bebchuk and Roe, 1999; Schmidt and Spindler, 2002; Beck, Demirgüç-Kunt and Levine, 2003; Djankov, Glaeser, La Porta, Lopez-de-Silanes and Schleifer, 2003), while some others have announced 'the end of history' in corporate governance models (Hansmann and Kraakman, 2003).

Despite the a high degree of uniformity achieved by the recent wave of corporate law reforms in many developed countries, the question of diversity in corporate governance is still an issue, as far as the emergence of institutional complementarities among corporate governance domains pushes towards self-reinforcing equilibria shaped by local historical conditions. In this respect, the rise of diversity in governance systems calls for an explanation of path-dependency phenomena in governance as in financial structures which shape, at the same time, firms and markets, sheltering national systems from external competition (Bebchuk and Roe, 1999; Hall and Soskice, 2001; Aoki, 2001; Schmidt and Spindler, 2002). Corporate governance changes are not merely financial either technological matters, rather they occur in a given institutional framework, in which economic, legal, political and organisational issues are bundled in a complex institutional order, shaping all the relevant agents and their actions (La Porta, Lopez-de-Silanes, Schleifer and Vishny, 1998; Becht, Bolton and Röell, 2002) and crafting "institutionalized linkages between the organization

domain and the financial transaction domain [...] (Aoki, 2001)".

In this paper we apply the notion of institutional complementarity (Milgrom and Roberts, 1990; Topkis, 1998; Aoki, 2001) to the study the relationship between corporate governance and corporate finance in Italian firms in order to enlighten new insights in the well-known trade-off between equity and debt financing.

## 2. Debt, Equity and institutional complementarities

Our focus here is not on agency costs rather on an extension of 'Transaction Costs Approach' (TCE) to corporate finance. Williamson (1988) emphasized the relationship between corporate governance and corporate finance, considering the financial choices in corporate governance as endogenous adaptation, in a world of incomplete contracts, to technological choices.

According to the TCE's framework, projects for which physical asset specificity shows a low degree ought to be financed by debt, whereas, as the degree of asset specificity increases, equity should be the preferred financial instrument. Asset specificity limits the possibility of re-deploying the resources in alternative uses and, in the case of bankruptcy<sup>1</sup>, it limits also the related protection of bondholders' pre-emptive claims. In order to finance projects characterised by high levels of specificity, the board of directors should thus switch to the selective intervention that is typically allowed by equity finance. The holders of common stocks are the firm's ultimate residual claimants and, in the event of bankruptcy, they are the only agents entitled to get what is left after everyone else is paid. For this reason, they have a fairly limited interest in the risks associated potential low liquidity of the specific assets to be financed. The main result of the transaction-cost approach is that, as transactions costs become relevant in the analysis of corporate finance, a new governance structure, called 'dequity', might be implemented. 'Dequity' combines the best properties of debt and equity and allows some form of selective intervention which in turn enables the firm to select the appropriate combination of debt and equity which provides the appropriate degree of assets specificity.

However in spite of growing interdependence and globalization, there is no a clear evidence on corporate governance and finance models converging towards a unique model of 'dequity' financing. Nicita and Pagano (2003) explain the emergence and persistence of diversity in corporate models by focusing on the path-dependent co-evolution between 'governance' and 'finance' in corporate governance systems due to the emergence

of institutional complementarities between the degree of assets specificity in the firm (i.e. its technological structure) and its financial structure.

On the other side one can imagine also a co-evolutionary interdependence between debt and equity. In this respect, the call on the equity market coincides with an increase of the social capital through the inlet of a new liquidity by some new entrepreneurs/investors. For instance, in the Italian civil law, equity (*capitale sociale*) is the share of financial asset which could not be withdrawn by owners, until corporation's dissolution or its bankruptcy. This attribution underlines a peculiar security duty, because it could be an indicator of the trust that the corporation deserves from third parts, given that is a means for their guarantee<sup>2</sup>. As a consequence a co-evolutionary path-dependency might emerge between equity and debt. A call on equity market in  $T_0$  makes easier a call on the market of debt in  $T_{+1}$ , as a result of the larger guarantee for creditors<sup>3</sup> in virtue of the higher firm's equity. Besides, the granting of a loan by a bank or by a lending institution sends a signal to the market about the health and wealth of the corporation<sup>4</sup>. In a third period  $T_{+2}$  new entrepreneurs/investors could seize this signal and receive the incentive to acquire new shares of the firm's risk capital, because of the good future outcomes foreshadowed<sup>5</sup>. Due to the presence of institutional complementarities (Aoki (2003:208) "[...] The second class deal with an inter-linkage among institutions that may arise in a situation where agents may not strategically coordinate their choices across different domain because of

<sup>2</sup> Definition of Equity (*capitale sociale*), in Enciclopedia della Banca e della Borsa, Compagnia Edizioni Internazionali, Roma, Milano. 1971. Translation by the authors.

<sup>3</sup> For instance, managers of an Italian s.p.a. couldn't give back initial and following awarding of firm's partners, without a modification of the partnership agreement (through a resolution of the stakeholders meeting). Creditors could prevent this modification because equity is a warranty for the funds entrusted to the corporation (art. 2445 cod.civ.).

<sup>4</sup> Ross 1977 studied how manager's choice between debt and equity could be a mean to signal the real state of the corporation.

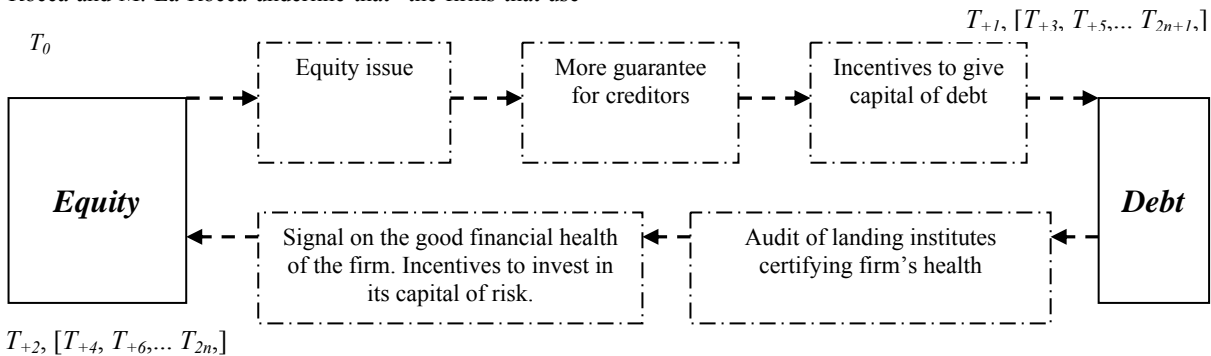
<sup>5</sup> Nicita and Scoppa (2004) observe that the crucial condition, in resolving problems of adverse selection through the use of signaling, stands on the hypothesis that the signal consists in an activity or in a decision of the agent that could be easily observed by the principal. Moreover its sending must be convenient for the agents with the best characteristics, while, at the same time, it must result expensive for agents who cannot afford those characteristics. Under other hypothesis everyone could exploit the incentive to send a signal and it will be useless. For this reason an inverse relation between agents' characteristic and the cost of sending is necessary.

Serious and important audits made by lending institutes, and their continuous monitoring on the firm's patrimonial situation made possible to send wrong signal only under the hypothesis that the corporation spread false news about its financial condition with altered balance. Therefore sending false signal results very expensive for the heavy sanction about the crime of false accounting (art. 2622 cod.civ. *False comunicazioni sociali in danno dei soci o dei creditori*).

<sup>1</sup> Another explanation based on debt capacity constraints is developed by Hart and Moore (1994).

a limited scope of choices, limited perceptions, or for other reason, but their choices are parametrically affected by prevailing rules of actions choices (institutions) in other domains. As a consequence there may arise interdependencies of institutions across domains, which we will conceptualize as institutional complementarities) an efficient governance structure allows the use of both debt and equity as a trigger for a virtuous circle, leading firms to an higher level of efficiency in financing (About the optimal mix between debt and equity structure E.T. La Rocca and M. La Rocca underline that “the firms that use

debt as source of finance can benefits based on tax advantage, thanks to the interest deductibility, reduction of asymmetric information and managerial discipline. Vice versa, there are some costs related on the use of debt on the presence of financial distress, agency problem and lost of financial flexibility”. E.T. La Rocca and M. La Rocca Capital Structure, debt-maturity structure and local financial development: an empirical analysis in Italy. On SSRN. 2006).



This perspective, as noted above, is satisfactory only under an efficient organization of the institutions: a change in the rules of their functioning would mean a change of the institutional context (North 1990)<sup>6</sup> breaking the virtuous circle. For this reason we argue that it is necessary to analyze the relationship between financial market and the firm's governance structure. This work analyzes in particular the peculiarity of the Italian case, where the virtuous circle is replaced by the heavy use of only one of the financial tools. In the next section we elaborate from a data set the level of warranty given by Italian firms to the banks, observing on the one hand the level of capitalizations (*ex-ante*) and on the other hand the performance improvement (*ex-post*). In third sections we provide some possible explanations for the results observed. The last section gives a brief survey and final remarks.

### 3. The Italian case

#### 3.1 A brief survey

The research has been conducted taking as sample the larger Italian firms (rated by turnover) in the benchmark years 1952, 1960, 1971, 1981, 1991<sup>7</sup>.

<sup>6</sup> “Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction [...] In the Jargon of the economist, institutions define and limit the set of the choices of individual” (North 1990). In particular, according with Barca (1997), we argue that “the economic history of a country, with its success and failure, could be read usefully as the history of the rules of a game; this rules are formal (currency, market, Law, contract, organization) and informal (cultural belief, code of conduct, trust and fiduciary duties).” (Barca 1997: X, translated by the authors.)

<sup>7</sup> Data's source Mediobanca for 1952, 1960, 1971; R&S

Starting from the definition of *leverage*<sup>8</sup>, we draft two different indexes, the first to measure the call on the market of *debt*, the second for the *equity*.

[1.1]  $E_i = \text{company's capital}_i / \text{Assets}_i$  [  $i$  is 'the  $i$ -th firm of the sample].

[1.2]  $D_i = \text{medium-long term debt} / \text{Assets}_i$  [  $i$  is 'the  $i$ -th firm of the sample].

In particular 1.1 permits, on the one hand, to estimate how equity weighs on the capital's structure, on the other hand, the degree of capitalization for the Italian firms. Results confirm previous studies<sup>9</sup>: persistent immaturity for the Italian system in the growth of an equity market (Italian equity market is the smaller between the most industrialized countries) and a general situation of undercapitalization for the firm taken as sample.

The common explanation given in related literature calls for the public structure of Italian capitalism<sup>10</sup>, the economic familiar relations<sup>11</sup> the

for 1981, 1991.

<sup>8</sup> Leverage is some measure of a firm indebtedness to the size of its overall asset base. Alan J. Auerbach, *leverage, new palgrave money and finance*, 1972, pag.574-577.

<sup>9</sup> See among the others, Pierluigi Ciocca, *Il progresso economico dell'Italia permanenze, discontinuità, limiti*. Il Mulino, Bologna, 1994.

<sup>10</sup> “The presence of a strong public firm stigmatizes one of the peculiar treat of Italian capitalism to such an extent that its structure has been defined as mixed (by State and Market). This peculiarity stands not only in the dimension, owned by the State, of our economic system, [...] but mainly in the role of replacement that public firms carried out both in comparison to the public administration and to the financial system.: Fabrizio Barca e Sandro Trento, “La parabola delle partecipazioni statali: una missione tradita”, in *Storia del capitalismo Italiano*, a cura di Fabrizio Barca, Donizzelli, 1997, Roma, Pag.185. Translation by the authors.

pyramidal structure of the groups<sup>12</sup>, and the rift between bank and firm<sup>13</sup>: in other words, the peculiarity of the Italian corporate governance. Figure 1 compares 1.1 to 1.2 showing, historically, an heavy impact of debt (up to five times superior) in respect of equity. Reasons for this disproportion are several, and track their selves down in the evolution of Italian economy, where, unlike other countries with ancient industrialization, a heavy share of production, was (and is still) provided by small firms (Fuà 1983). Inevitably this means greater difficulties in the call on the equity market. The reasons lies in the presence of economies of scale, tied with the reduction of agency and enforcement cost, for the creation of governance rules for the protection of non-controllers stakeholders.

With reference to major Italian firms other reasons for this unbalance between debt and equity could be discovered. In particular, a transactions cost analysis reveals how potential entrepreneurs could get discouraged to become owners of big Italian firms, due to firm's property assets, always concentrated in the hand of few families<sup>14</sup>. This means

a high disincentive for new owners, to gain access to big firms' property. Moreover there was a chronic scarcity of information about the financial situation of these firms. Ernesto Rossi<sup>15</sup> shows the problematic situation for the main Italian firms stressing, for example that Snia Viscosa and Pirelli<sup>16</sup> gave not the value of its turnover neither the number of its employees, Edison<sup>17</sup> dose not make public its annual pay-off. The opposite has happened in those countries where firms are characterized by a spread property asset (Barca 1994). Moreover, a similar result could be found in Italian public firm. In fact, a crucial role was recovered by important public holding, as IRI<sup>18</sup> or ENI<sup>19</sup>, owner of a large share of the Italian firms. Although, in the original intention of Beneduce<sup>20</sup> and Menichella<sup>21</sup>, IRI would have had to remain functional to a temporary phase of Italian economy<sup>22</sup>, the property assets of those firms remained public until the beginnings of nineteen's.

<sup>11</sup> See among the others Fabrizio Barca 1994, 1997, Magda Bianco e Paola Casavola 1996.

<sup>12</sup> "Pyramidal structure joined with public property, fiduciary (frequently familiar) relation between investor and entrepreneur, statute solution, pre-emption's clause and cross shareholding agreement accord, granted, in Italy the right degree of separation between principal (the one that predates capitals) and agents (the one that manage capitals). These instruments became the replacement for this peculiarity that were deficient or absent in Italy: the market of firm's control, *ex-post* court's supervision and the continuous monitoring by institutional investors and landing institutes. Fabrizio Barca, Francesca Bertucci, Graziella Capello, Paola Casavola, "La Trasformazione proprietaria di Fiat; Pirelli e Falk dal 1947 a oggi" in *Storia del capitalismo Italiano*, a cura di Fabrizio Barca, Donizzelli, 1997, Roma, Pag. 157.

<sup>13</sup> The rift between bank and firm, together with the imposition of the banking specialization, prevents the development of strict relations between banks and firms[...], in contrast with Anglo-Saxon countries we observe the absence of middlemen for the firm's control[...]not much developed is the role of institutional investors. Magda Bianco e Paola Casavola, "Corporate governance in Italia": Alcuni fatti e problemi aperti in *Rivista delle società*, 1996.

<sup>14</sup> Concerning to the allocation of control in the major Italian firms, in the immediate second post-war period, we observe that large part of these firms were under the strict and adamant control of some entrepreneurial families. In particular heirs of Parodi-Delfino owned more than 90% of BDF, Falk had the property of more than 70% of the homonym firm, while Agnelli family had the control of 70% of FIAT. Instead Montecatini was an example of spread ownership, with 54599 shareholders in 1946. Anyway just 0,17% of these shareholders had the property of more than 31% of firm's equity (Zerini 1947: 127; Amadori and Brioschi 1997: 120). We want to underline the presence of a strong disincentive for the call to the capital of risk. "[I]n Italy the money saver/ shareholder

was an intruder able to be manipolte in the stok exchange dynamics" (Amadori and Brioschi 1997: 122. Translation by the Authors).

<sup>15</sup> E. Rossi. *Capitalismo Inquinato*. Edited by R. Petrini, Laterza, Roma-Bari, 1993.

<sup>16</sup> Snia Viscosa was one of the larger Italian firms of the chemical sector in the last century with the strongest incidence for Italian producer in the world market. The Pirelli Group has a long industrial tradition, it was built at the end of 800, now it is ranked among the world's leaders in every sector in which it operates.

<sup>17</sup> Edison was the larger Italian firm in the production of electric power until 1963

<sup>18</sup> IRI (Institute for the industrial rebuilding- *istituto per la ricostruzione industriale*) has been a holding totally owned by the State. Created in 1933, in order to avoid the failure of the main important Italian bank, IRI become the owner of large part of Italian industrial system, originally owned by this bank jointly. In particular IRI since 1940 to 1990 was the main Italian industrial group.

<sup>19</sup> ENI is an Italian important group, its operating activities are: oil, natural gas, electricity generation, engineering and construction, petrochemical business. Created by Enrico Mattei in 1948 until 1998 this group was totally owned by the State.

<sup>20</sup> Alberto Beneduce was a well-known Italian scholar and politician in the early years of the last century. In particular in 1933 Beneduce has been the main promoter and organizer of IRI, and its president until 1939.

<sup>21</sup> Donato Menichella was a big name of the Italian economic and political scene of the firs part of the last century. Before he has been nominated governor of the Italian central bank in 1948, he has been since 1934 the general director of IRI.

<sup>22</sup> See among the others Giovanni. Siciliano, *Cent'anni di borsa in Italia: imprese e rendimenti azionari nel ventesimo secolo*, Il Mulino, Bologna, 2001. Fabrizio Barca and Sandro Trento, "La parabola delle partecipazioni statali: una missione tradita", in *Storia del capitalismo Italiano*, a cura di Fabrizio Barca, Donizzelli, 1997, Roma,

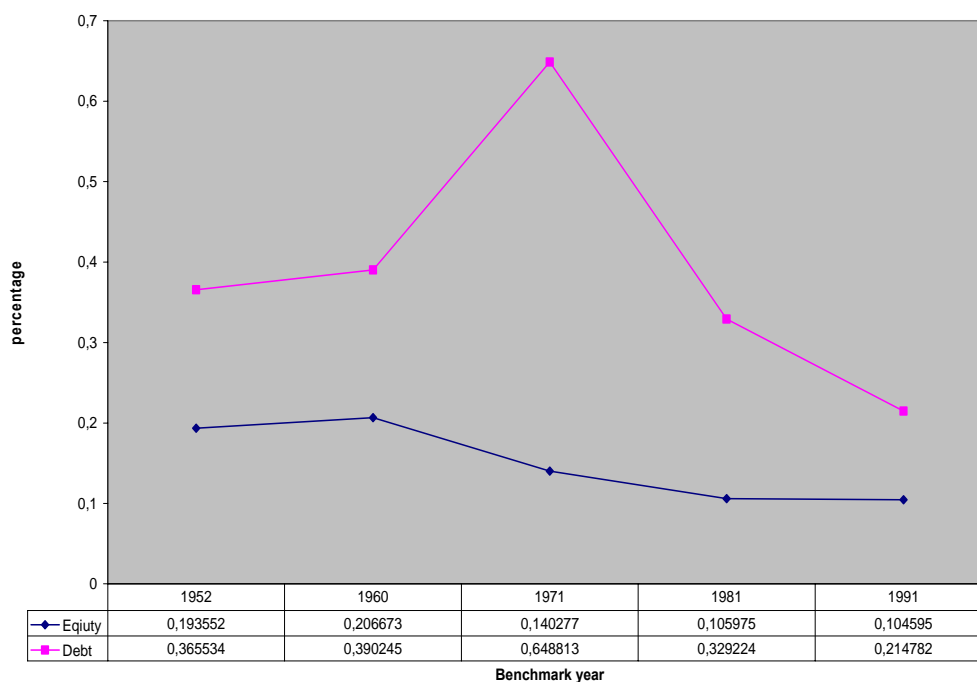


Fig. 1 Data shows the average value for each benchmark years

These elements together led to a growth financed almost exclusively by debt, inadequate under financial profile and, in general harmful for the equilibria of Italian economy; in fact they were the cause of many State's interventions in the Italian economy as, *i.e.*, corporate rescues<sup>23</sup>.

These common explanations are supported in our analysis by an empirical study on the efficiency of the financial choices.

### 3.2 A quantitative analysis

The Italian law outlines three main roles, relating to equity's characteristics: the first is an organizational duty, the second a role of bond and the third a role of guaranty. In particular, equity constitutes the share of the firm's patrimony unavailable until the corporation's dissolution or its bankruptcy. Therefore, creditors look at the equity as the main warranty<sup>24</sup> on the credits allowed to the firm, when

<sup>23</sup> Several authors focus on this issue. Among the other see for example Barca 1994, Barca and Trento 1997, Ferri and Trento 1997, De Cecco 1997, Fortuna 2001, Conte and Piluso 2006, Bainchi *et alii* 2006.

<sup>24</sup> Cerrato e Zamperetti (2004) note as the article 2438 of Italian Civil Code (*aumento di capitale*) is the expression of a general principle of transparency and correctness in the process of capital issue. This article prevents the emission of new share until the issued are entirely paid. Therefore the article defends the effectiveness of equity in protection of third parts, potentially deceived by the value of a theatrically capital in witch they trust as real.

In the same direction moves Modulo (2003) in comment to the article 2348 of Italian Civil Code. He notes how the reform 2003 introduces a specific and expressed responsibility in protection of partners and third parts. The

the company becomes insolvent. The Italian Civil Code gives a special protection to creditors, allowing them the right to block the extraordinary dissolution regarding the reduction of equity (art. 2445 Cod Civ.).

Lower values of equity should make the call on the market of debt more difficult, for the reason shown above. Nevertheless it is necessary to explain that equity is just a part of the judgment about the health and the profitability of a firm<sup>25</sup>: in fact, landing institutes base their valuations on complex procedure<sup>26</sup>.

norm aim to prevent to S.p.a. ostentation towards third parts of equity, composed principally by credits of the firm towards partners.

Guaranty function is even expressed thought the discipline of its reduction (art.2445 *riduzione del capitale sociale*). The reform of this article was inspired in actuation of the enabling act (art.4, comma 9, lett.c), legge 3 Ottobre 2001, n. 366). It foresees that reform is aimed to a simplification of the discipline of equity reduction; eventually to amplify the hypothesis of a real reduction of equity with the exclusive goal of the creditor's protection.

<sup>25</sup> The model of determination of the economic capital, in the valuation of a firm, is based on various factors; is principally founded on the future rent that firm foresees to persecute, considering the alternative investment, the risk of the activity and the liquidity. Giorgio Pellati e Luigi Rinaldi, *La valutazione d'azienda*, edizioni Il Sole 24 Ore, Milano, 2005.

<sup>26</sup> The valuation of a firm is conduct with complex methodology, different according to its stadium of life. If we hypothesize the cessation of activities, or the dissolution of the company, valuation will consist in a mere aggregate of assets that will be liquidated. Different is the situation when we have continuity on the side of the

Creditors, in case of insolvency, could satisfy not just on the non callable equity, but even on the social patrimony<sup>27</sup> as a whole, where firms' patrimony symbolizes the complexity of legal relationship (active and passive) referring to the firm<sup>28</sup>. For this reason we thought it is necessary to verify if there was any correlation between indebtedness and some indicator of the firm's performance. From the data we have selected the value of the fixed technical assets [ $fta_i$ ] and the turnover [ $t_i$ ]. We developed the following linear regression with last square method's (OLS):

$$[1.3] \quad D_i = q + (\alpha t_i) + (\gamma fta_i) + \varepsilon_i \quad [\text{with } i \text{ is the } i\text{-th firm of the sample and } fta_i, t_i \text{ the dependent variable and } \varepsilon_i \text{ the residual error}].$$

The high degree of correlation between fixed technical assets and turnover ( $r^2$  0,836) shows an inability for the model to explain the correlation between debt and the measure of the firm's performance. In other words we can obtain more precise results by two different regressions using first the turnover as dependent variable and then the  $fta_i$  (results are showed in appendix).

To verify if a particular value of one element (debt index) is in general followed by the presence of a second element (firm's performance), the previous linear regression was replaced by the following:

$$[1.4] \quad D_i = q + (\alpha t_i) + \varepsilon_i,$$

$$[1.5] \quad D_i = q + (\gamma fta_i) + \varepsilon_i \quad [\text{with } i \text{ is the } i\text{-th firm of the sample and } fta_i, t_i \text{ the dependent variable and } \varepsilon_i \text{ the residual error}].$$

When we find a certain relation, for meaningful value (some value of the estimator related to the variation of the independent variable on the dependent one), this points out the manner in which

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firm management, but under different property assets; in this circumstance firm is such an investment for the production of a future rent. In our study we consider continuity on the side of the management and the same property structure, we have as a parameter for the valuation of the firm the *capitale di funzionamento* (that is a peculiar reorganisation of the budget items done in order to stress the earning referred to a precise period), in Italian accounting law we have as direct reference one of the balance sheet documents: *stato patrimoniale*.

<sup>27</sup> We refer to these kind of firms where we observe a diaphragm between the patrimony of the partners and firm's patrimony. In Italian civil law we refer to the office of limited responsibility (*responsabilità limitata*). Responsibility of partners is limited by the share of capital that they subscribed, in fact for the obligations, acquired in name of the firm, respond just the firm with his own patrimony: in such a case the autonomy is perfect. (art. 2325, comma 1 e 2352, 2463, comma 1 cod. civ.) (Buonocore 2005)

<sup>28</sup> Gianfranco Campobasso, *Diritto Commerciale*, Utet, 2005

the dependent variable weighs on debt, in other words how the turnover (for the 1.1) and the fixed technical assets (for the 1.4) weigh on debt index. For equation 1.4. the value of  $R^2$  (*varianza spiegata*) is less than 1%. This shows a substantial inability for the model to explain the debt modification as dependent to the variation of the fixed technical assets. The Coefficient referred to the independent variable shows a value that confirms the previous thesis (see the appendix). Another important result emerges from the analysis of the scatter diagram where it is evident the absence of any kind of correlation between debt index and fixed assets. The same results emerge from the 1.4. In particular we can verify from the examination of  $R^2$  that there is no correlation between turnover and leverage index.

To explain in simple words what emerges from this study, we could observe that Italian firms kept on receiving funds from landing institutes, although they have no warranty back neither with a consistent equity, neither with wide profit margin or an increases of the fixed technical assets. Before observing the reasons why it could have happened, we need to consider first the equity side: potential investors could have received some warranty for their investments? What was the risk rate of the profitability of the Italian firm's capital?

The index of global profitability (ROE<sup>29</sup>) permits us to value the capacity of a firm in attracting capitals from potential investors. We built this index for a larger sample of Italian firms.

This time our data involve the first 200 Italian firms (rated by turnover) in the benchmark years 1952, 1960, 1971, 1981 e 1991<sup>30</sup>. The index shows the average profitability for capital unit. The investment in a capital unit of a firm is efficient only if the rate of this investment is greater than the other alternative considered on the market, with the same level of risk. We proceeded assembling the value of ROE for each benchmark year and calculating its average value. This average value represents the expected rate of profitability ( $TRE^e$ ) for those investors that decide to acquire randomly capital shares of an Italian firm of the sample, and maintaining these stocks for one year.

Subsequently we have compare  $TRE^e$  with the rate of government bond in the same years, to analyze the efficiency of state investments. To have a precise valuation we introduce the level of risk associated. The risk of a portfolio investment increases with the difference between each possible realization of the rate of profitability (ROE of each single firm of the sample) and its expected value (the average ROE).

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<sup>29</sup> The index of global profitability ROE (return on equity) state the rate of return of the capital of risk of a firm with the ratio between net income and creditor's equity.

<sup>30</sup> Data's source database imita.db.

Years	R.O.E	Variance	Standard deviation.	government bond <sup>31</sup>
1952	10,23%	3,28%	20%	5,10 % <sup>32</sup>
1960	7,82%	2,19%	15%	5,56% <sup>33</sup>
1971	-2,39%	4,60 %	21%	6,83% <sup>34</sup>
1981	10,56%	22,85%	48%	15,29% <sup>35</sup>
1991	17,35%	20,05%	45%	12,44% <sup>36</sup>
Average value	9,96%	11 ,07%	33%	7,93%

**Fig 2.** Average Roe of the firm of the sample, risk and rate of state found

Quantitative measure of the risk is provided by the variance of the distribution of the rate associated to the single firm of the sample<sup>37</sup>. Values are shown in figure. 2.

This measure shows that a high rate of ROE is counterbalanced by a high risk's degree (on average risk is three time higher than its profitability), hypothesis of non selected investment not justify a high volatility<sup>38</sup>, anyway.

As it is evident, the high degree of risk associated with the rate of profitability of the Italian firms is not a justification for slight margins of profit in comparison with government bond. We sustain that a rational economic agent had not the incentive, in those years, to invest in the capital of risk of an Italian firm.

Next section tries to address some possible explanations.

## 4. Explaining path-dependency and corporate governance in Italy

### 4.1 Political origins of corporate governance

“The costs of transacting arise because the information is costly and asymmetrically held by the parties to exchange and also because any way of the actors develop institutions to structure human interactions results in some degrees of imperfection of the markets” (North 1990)<sup>39</sup>. According with North

<sup>31</sup> Data are taken from *Bollettino statistico Banca d'Italia*. Tipografia della Banca d'Italia. Roma.

<sup>32</sup> Treasury redeemable stock acquired in October 1952, and term-time 1954

<sup>33</sup> Treasury redeemable stock, data for consolidated stock is 4,88%

<sup>34</sup> Treasury redeemable stock with term-time April 1<sup>th</sup> 1972

<sup>35</sup> Treasury stock with term-time April 1<sup>th</sup> 1982

<sup>36</sup> Rate of B.O.T. term-time

<sup>37</sup> Variance is an absolute measure of the risk: for this reason financial analysts use to employ in their analysis its square root (called standard deviation).; this index is directly comparable with the TRE.

<sup>38</sup> Although the technical term is standard deviation in the world of business this concept is summarized with the word volatility or rather price's waver around an average value, calculated in a defined period.

<sup>39</sup> D.C North. Institutions, Institutional change and

we want to show that system of firms and banks with their complex interconnection arises as a reaction of a transaction cost system. In particular we argue that the firms as institutions choose their governance structure according with the complex system of norms, sanctions, monitoring system and social interaction that shape human behaviour<sup>40</sup>. In the next paragraphs we try to demonstrate one of the possible causes that origin the imbalance in favour of debt. In particular we underline that the firm's choices were not irrational and that there was an alignment with the “complex set of constraint that shape the *ex post* bargaining over the quasi-rents generated in the course of a relationship [...] the outcome of the bargaining will be affected by several factors besides the initial contract (Zingales 1999)<sup>41</sup>.

In some recent works<sup>42</sup> Pagano shows the correlations between ownership dispersion and employment protection. As it is shown in the next figure<sup>43</sup> employment protection is higher where is lower the degree of dispersion of ownership. We can assert, following Pagano (2006), that the high degree of ownership concentration is reached as a replay of employment protection in a process of circular causation. This process happened particularly in those European countries with aristocratic origins, or, in other words, where the condition that existed when “big business” emerged in the country, entailed the rise of a strong entrepreneurial class and weak democratic institutions<sup>44</sup>. Entrepreneurs employed

economic performance Cambridge University press, 1990. Pag. 108

<sup>40</sup> Economic literature uses to distinguish between two different forms of governance. The more general one referring to the complex system of norms that affect *ex post* bargaining and one other refers just to the agency costs that arise from the problem of ownership dispersion.

<sup>41</sup> L. Zingales. Definitions of “Corporate governance”. In *New Palgrave of Law and Economics*, 1999, pp. 497-503

<sup>42</sup> Ugo Pagano “Political Origins of Corporate Governance” preliminary draft written for the Workshop on the Politics of Corporate Governance organized in Copenhagen on 29-30 September by the Center for Corporate Governance (CCG) and the Center for Economic Business Research (CEBR).

M.Belloc and Ugo Pagano. “Co-Evolution Paths of Politics, Technology and Corporate Governance”. *ECGI (European Corporate Governance Institute) Working Paper, Law Working Paper n. 36//2005* (May2005)

<sup>43</sup>M. Belloc and Ugo Pagano (2005)

<sup>44</sup> “The case of “aristocratic origins” can be schematized in this way. Society had been used for a long time to a concentration of political and economic power in the hands of few families (the royal family and the aristocracy). The rule of dynastic succession had been accepted as the legitimate way of transmitting political and economic power and upward mobility was strongly discouraged: individuals were supposed to fill the same social roles of their parents and upward mobile individuals were often despised. When large firms became the best suited for economic development, the new industrial aristocracy, which controlled them even beyond the means of their considerable wealth, was not challenged by an established

their resources and made efforts to consolidate their positions of control as countervailing power of the growing trade union position. As a consequence, resources involved in this process were not designated to a realignment of the firm's governance in order to attract capital of risk by new investors.

On the other hand investors were not willing to destine their found to invest in big firms' equity because of the impossibility of determining firms' governance. This condition, jointly to the scarce presence of institutional investors and the lack of investors protections, got the basis for the process of cumulative causation leading to the concentration of ownership and the imbalance of financial tools.

In particular in the *post-war* period we observe that a large share of the Italian big enterprises was owned by the State. The presence of the State in Italian economy was determined to replace the lack of big investors different from the other that control the private big firms. To open to the market of equity could have meant the implementations of the power in the same hands and the constitutions of a strong economic power, able to influence in a relevant way the political decision. De Cecco (1997) underline this peculiar aspect of the Italian system, stressing that the role of the State in Italian economy was determined, among the other causes, by the lack of trust in markets dominated by great economic power.

In this frame Barca (1997 *b*) observes the presence of a link of mutual convenience between the power of the public sector (formerly dictatorial, subsequently democratic) and the power of private industries' lobbies. In this relation, the former gave guarantees for a technical and stringent management and the latter had a relative independence from the public sector. The path dependencies between political origins and the corporate governance, in absence of an institutional shock (as it happened in Japan) determined the bank-centric system of Italy.

The lack of warranty have no explanation anyway, In fact, according with previous paragraphs we note an unjustified recourse to the capital of debt in comparison with the use of equity as financial channel. In fact, loans allotted by landing institutes were not granted, neither with broad margin of capitalization, neither with a correspondence between the growth of debt and growth of performance (fixed technical assets and turnover)<sup>45</sup>. We presuppose that landing institutes replaced classical warranties (capitalization and expected good performance) with some other element, determining the same situation for both public and private owner in the financial choices As it shown in fig.2).

To grant loans for public firms there was, beyond any other kind of warranty, the State as entrepreneur, which throughout its internal revenue could replace the lack of warranties of its firms. Instead private firms have, on the one hand relevant and positional information on the political and economic choices of the State<sup>46</sup>, on the other hand various form of financial support and credits on easy terms<sup>47</sup> in virtue of the public interest that those firms covered in terms of contribution to GDP, defence of employment and benchmark for Italian economy<sup>48</sup>.

Such a situation makes possible that the more important Italian firms become independent from the need of a call on the capital of risk, in virtue of the fact that large part of financial requirement was satisfied on the market of debt.

Effects go beyond the original intentions of the State's short time support. Independency from equity discouraged a corporate governance rearrangement (for example, efficient rules on the side of minority shareholders); this means on the one hand less incentives for new entrepreneur/investors in giving their founds in the risk's capital of Italian firms, on the other hand the missed development of the Italian stock exchange.

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democracy. The new industrial giants were embedded in a society where, in spite of numerous rebellions, dynastic power was still widespread and accepted as legitimate. Capitalist dynasties could increase their power thanks to their own wealth and to the accumulation of capital that large-scale firms allowed. They could also extend their control beyond their wealth thanks to pyramids and other financial arrangements. Members of the large owning families served as managers of the firms. Small shareholders had no chance to fire these "dynastic" managers and professional managers were confronted with a socially exclusive wealthy group, which enjoyed a "de facto" tenure thanks to its family links. Faced with the concentrated interests of capitalist dynasties, workers reacted by concentrating their interests into unions and social-democratic parties". Ugo Pagano "Political Origins of Corporate Governance" preliminary draft written for the Workshop on the Politics of Corporate Governance organized in Copenhagen on 29-30 September 2006 by the Center for Corporate Governance (CCG) and the Center for Economic Business Research (CEBR). Pag 9.

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<sup>45</sup> See the appendix.

<sup>46</sup> For example see the role of Pirelli and Fiat in the realization of the main Italian Freeway Milan-Naples.

<sup>47</sup> See for example Colombo's Law of 1959 for the founding and support to small and medium firms; Sabatini's Law (1965) gives incentives to realize investment in fixed capital, The law for special intervene in the south to go over the dualism in production; or to the Ossola's Law (1976) with incentives for the exportations.

<sup>48</sup> Fiat, for exemple, according to Michelsons (1997) had in organizational and economic sense a role of means and screen between local productive system and foreign market. "This peculiarity permitted to small firms a growth protected from the action of market, while technical competences were transmitted trough direct investment or by fiat itself". A. Michelesons. "Grande fabbrica e minime imprese: l'indotto Fiat negli anni del boom economico". In *Comunità di imprese* a cura di F. Amatori e A. Colli. Il Mulino, 1997. Pag. 90. Translated by the authors.



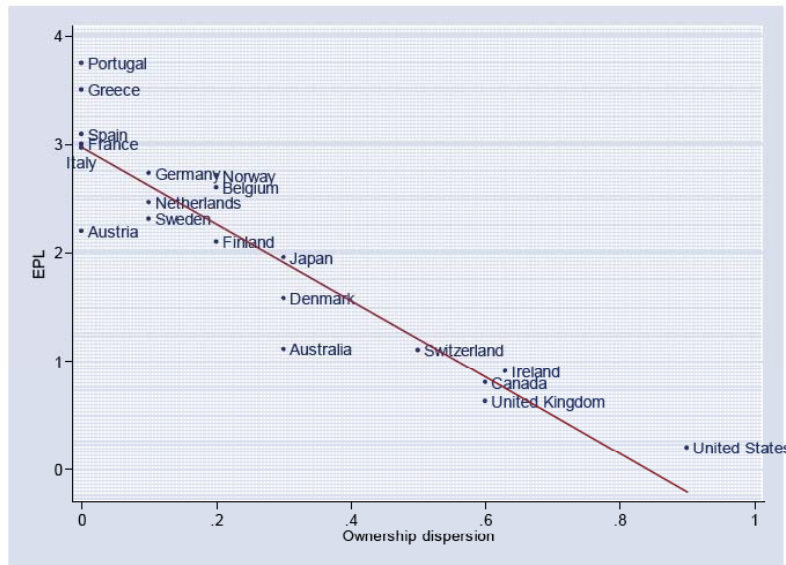


Fig. 1: Employment protection and ownership dispersion

Fig 3 Employment protection and ownership dispersion, In Belloc and Pagano (2005)

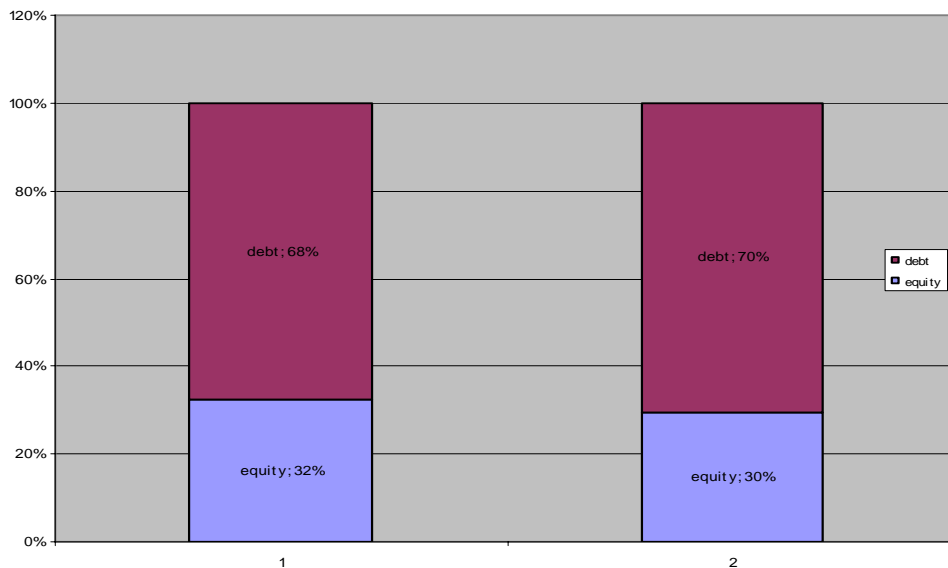


Fig. 4. Column one shows the composition between debt and equity for the public owner column two for the private one

We stress that this kind of choices (debt-oriented system and missed governance’s reorganization) were not irrational, but are the consequences of the complex system in which firms were involved. Close to the “political origins” and the role of the State there was another important factor affecting firms’ financial choices: the absence of a competition in the credit’s market.

Several works on the effects of banking competition on financial stability highlights its negative impact in terms of increased incentives to take risks (Matutes and Vives 1996, Helmann *et Alii*

2000). In particular according with Petersen and Rajan (1995) banks can sustain the cost of a starting relationship with new borrowers only if its market power allow it to recover the cost at later stages if such entrants turn out to be successful. As a consequence we expect to find a greater number of new entrants (in the non-financial market) where banks have market power. Otherwise, Cetorelli and Strahan (2004) leads an empirical research asking whether concentration of market power in banking has an effect on the number of firms in a given sector and on firm average size. Empirical evidence shows

that “bank with market power erect an important financial barrier to entry”<sup>49</sup> in order to protect the profitability of their existing borrowers. Important conclusion leads us to reconsider the interconnection between financial and non-financial market. In particular Spagnolo (2004) shows that “by controlling borrower’s choice of managers and managerial incentives, a concentrated or collusive banking sector can implement collusion and monopolize otherwise competitive downstream product market”<sup>50</sup>

Moreover we observe many links between bank and firms, in particular analyzing boards of directors of a relevant sample of Italian firms Luzzatto Fegiz in 1928 observes that “leafing through the yearbooks of [these company] the same names repeat again itself [...] and often the same persons occupied two or three pools and sometimes twenty or more” (Luzzatto Fegiz 1928: 127).

A more recent study, lead by Ferri and Trento (1997) analyzing a sample of financial and non financial firms reveal that this interconnection between bank and firms slowly decrease, but links between different credit institute become thicker step by step<sup>51</sup>. The analysis of the interconnections is important because of empirical evidence reveals that “more frequent are contact between firms, [...] more easy is the disclosures of relevant information and coordination between companies” (Ferri and Trento 1997: 414. Translated by the Authors). Results show that despite prohibition, there was strong cooperative bonds between banks and firms, in particular bonds are observed between public credit institute and both, public and private, firms but just on this direction: names in board of public bank often slide in the board of public and (especially) private companies, but not vice-versa .

Anyway, without assuming the presence of collusive situation, in this frame we observe the presence of a particular kind of foreclosure. Foreclosure effect is generally defined as the exercise of power on a market in order to extend the firm’s dominance not on this specific market, but on an adjacent one. This kind of activity manifest itself through the exercise of exclusive practise<sup>52</sup> in order

to damage competitors on the downstream market, in virtue of the control of an essential input in the upstream market.

Foreclosure effect is not directly referable to the Italian credit market, in fact the call on the capital of risk was not forbidden, but the Italian policy (in the banking management) gives a strong incentive to recur to the competitor financial tool anyway. The public management of the investment bank was another element that improved the this peculiar situation of the main Italian firms permitting, on the one hand, the growth of national industries, but on the other hand missing the trigger of the virtuous circle between financial tools, for the full availability of finance, with the lowest cost.

On the contrary where banks are not concentrated and “where credit markets are more competitive product market should also be more competitive, and R&D investment should be more intense” (Spagnolo 2004: 24).

The peculiar situation of the bank system, jointed with the strong role of the State and the politic origins of Italy leads to a system isolated from the dynamics of competition in financial and non-financial market<sup>53</sup>. These kind of consideration are imputable to political an ideological interest, finalised to protect public firm and the public administration of economy (Marchetti 1997, Barca e Trento 1997). In fact in the Seventies, while other states were enacting or reforming their competition law, an investigation commission of Italian Parliament came to the (curious) conclusion that Italy didn’t need an antitrust law, because a problematic situation of competition was not revealed<sup>54</sup>. Nevertheless, although in these years competition was not considered an efficient tool encouraging economic welfare and technological progress, inefficient effects of anticompetitive practices were not eliminated.

arise when the bottleneck good is used as an input (e.g., an infrastructure) by a potentially competitive downstream industry, or when it is sold directly to customers, who use the good in conjunction with other, perhaps complementary goods (e.g., system goods or aftersale services). In the former case, the firms from the competitive segment that are denied access to the necessary input are said to be “squeezed” or to be suffering a secondary line injury. In the latter case, the tie may distort or even eliminate effective competition from the rivals in the complementary segment”. Patrick Rey and Jean Tirole. ”A primer in foreclosure”. In *handbook of industrial organization III*. Edited by M. Armstrong and R. Porter

<sup>53</sup> “Beneduce system shows [...] it was not able to work in open economy with different nexus of power. It was a financial circuit for the allocation of scarce resource an for the protection of domestic good.” (De Cecco 1997: 399. Translation by the Authors).

<sup>54</sup> F. Ghezzi, M. Maggiolino, P. Magnani e G. Mangione. *Appunti di Diritto Antitrust e Disciplina della concorrenza sleale*. Università Commerciale Luigi Bocconi, Milano, 2003.

<sup>49</sup> N. Cetorelli and P. E. Strahan. “Finance as a Barrier to Entry: Bank Competition and Industry Structure in Local U.S. Markets”. *FRB of Chicago Working Paper No. 2004-04 SSRN Jun, 2004*. Pag. 28.

<sup>50</sup> G. Spagnolo. Debt as a (credible) device: Everybody happy but the consumer. In Working paper of economics and finance N. 243. Stockholm School of Economics, 2004. Pag. 24.

<sup>51</sup> G. Ferri and S. Trento “la dirigenze delle grandi banche”. on *Storia del capitalismo Italiano*, edited by di Fabrizio Barca. Donizzelli, , Roma 1997.

<sup>52</sup> “[...]foreclosure refers to a dominant firm’s denial of proper access to an essential good it produces, with the intent of extending monopoly power from that segment of the market (the bottleneck segment) to an adjacent segment (the potentially competitive segment). Foreclosure can

## 5. Final remarks

According with Williamson (1988), we defined debt and equity as effective form of corporate governance with different cost of functioning. Only through the simultaneous use of both tools we can guarantee the efficient specificity of the assets with the lowest transaction costs. We want to stress that the problem of Italian capitalism lies, neither in the absence (scarcity) of capitalist, neither in the scarcity of capital. We observe that Italy could be a *mine* of entrepreneurial ability and faculty of saving, its weakness and strength lies elsewhere. In particular “with its peculiar institutions Italian capitalism had been able -or had been not- to combine capitalist with assets and to select and renew its politic and economic managerial class” (Barca 1997 a : XI).

The role of the State in Italian economy was the one of temporary alternate<sup>55</sup>, allowing the completion of many crucial investments, in periods of slump (The great depression of thirties) or in period of rapid growth (when the completion of some investment valuated as crucial for the growth of Italian economy).

It all happens in a *post-war* period, in the temporary absence of an entrepreneurial class. Many authors (see for example De Cecco 1997 or Conte and Piluso 2006) noted as this virtuous role of the State, as guide for the Italian economy, was replaced step by step by a policy of mere support without any reorganization of the governance structure<sup>56</sup>. In our opinion this reorganization did not take place because Italian firms could satisfy their need of funds only with their favourite position on the market of debt. In fact State’s support and the public management of the banks made up for equity for both public and private firms, through particular laws, incentives and corporate rescues. Given these elements and the politic origins of Italian capitalism

<sup>55</sup>Analyzing the Italian economic policy, concerning the role of the State and, in particular the function of Beneduce’s IRI, De Cecco stresses that this policy was “extraordinarily careful at the Italian structural condition, Italy in fact was a big power just for its wide population and its geo-politic position; It was the reason why Italy was sentenced to accelerate its growth, endowing itself with an economic structure able to preserve its geo-politic condition, without the momentary presence, neither of a strong entrepreneurial bourgeoisie, neither of firms and saving.” (De Cecco 1997: 392, Translation by the Authors).

<sup>56</sup> It concerns economic and industrial policy of broad support to the public firms, as these suggested by Saraceno, assigning to the company owned by the State “improper burdens”, or the successive policy of “national champions”. Barca and Trento (1997) assign to this inefficiency in the relation between property and management the slump of the public firm and the successive impossibility of a rescue in a contest previously dominated by a great inflation (during seventies and eighties) and restraint to the public balance during the nineties.

Italian firms had a unique equilibrium in debt, and a substantial independence from equity.

As a first consequence, this independency from equity obstructed the growth of an Italian stock market comparable with the one of the other industrialized countries. Secondly the position of the Italian corporation on the equity market becomes weaker, making firms in need of a stronger State’s support. We want to underline that it is not the role of the State that causes the break-up of the virtuous circle, but the wrong policy that didn’t escort grants with any incentive for a governance rearrangement. Anyway public administration of the banks jointly with particular economic policy permitted, on one side, the growth of the Italian corporation, but denied, on the other hand, the trigger of the virtuous circle between financial tools.

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**Appendices**

✓ [1.4]  $D_i = \alpha + (\alpha t_i) + \epsilon_i$  [with  $i$  is the  $i$ -th firm of the sample,  $t_i$  the dependent variable and  $\epsilon_i$  the residual error].

Dependent Variable: DEBT

Method: Least Squares

Sample(adjusted): 14 109

Included observations: 64

Excluded observations: 32 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.300127	0.026063	11.51525	0.0000
FATTURATO	-5.76E-09	5.16E-09	-1.115501	0.2689
R-squared	0.019675	Mean dependent var		0.285750
Adjusted R-squared	0.003863	S.D. dependent var		0.181581
S.E. of regression	0.181230	Akaike info criterion		-0.547353
Sum squared resid	2.036337	Schwarz criterion		-0.479888
Log likelihood	19.51531	F-statistic		1.244341
Durbin-Watson stat	1.496702	Prob(F-statistic)		0.268941

✓ [1.5]  $D_i = \alpha + (\gamma \text{fta}_i) + \epsilon_i$  [with  $i$  is the  $i$ -th firm of the sample,  $\text{fta}_i$  the dependent variable and  $\epsilon_i$  the residual error].

Dependent Variable: DEBT

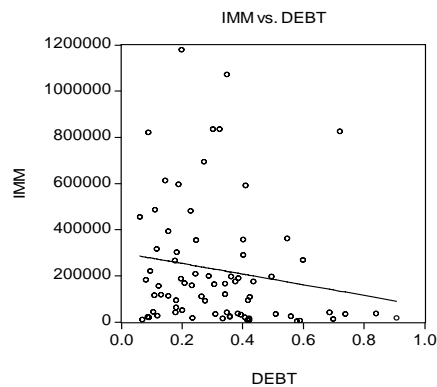
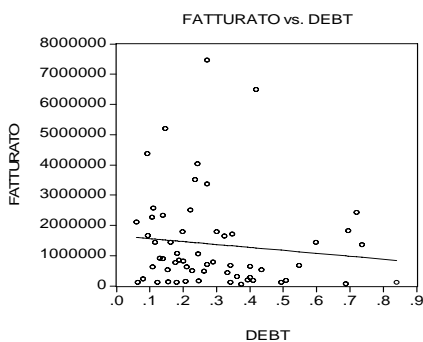
Method: Least Squares

Sample(adjusted): 1 109

Included observations: 93

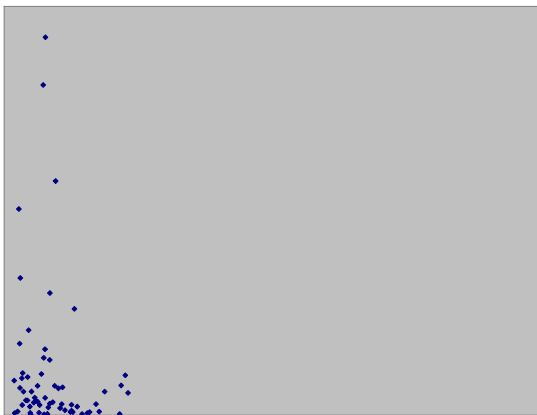
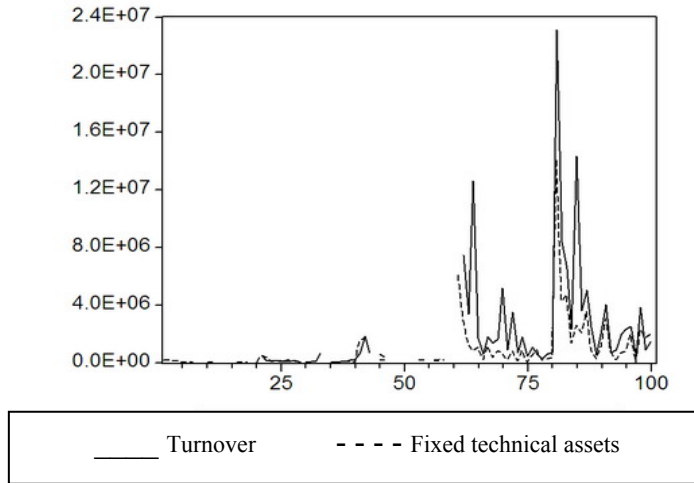
Excluded observations: 16 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.321802	0.021585	14.90854	0.0000
IMM	-1.55E-08	1.14E-08	-1.357975	0.1778
R-squared	0.019862	Mean dependent var		0.310206
Adjusted R-squared	0.009092	S.D. dependent var		0.192055
S.E. of regression	0.191180	Akaike info criterion		-0.449935
Sum squared resid	3.326020	Schwarz criterion		-0.395471
Log likelihood	22.92199	F-statistic		1.844095
Durbin-Watson stat	1.633791	Prob(F-statistic)		0.177829



✓ [1.3]  $D_i = \alpha + (\beta t_i) + (\gamma fta_i) + \varepsilon_i$  [with  $i$  is the  $i$ esima firm of the sample and  $f t a_i, e t_i$  the dependent variable and  $\varepsilon_i$  the residual error].

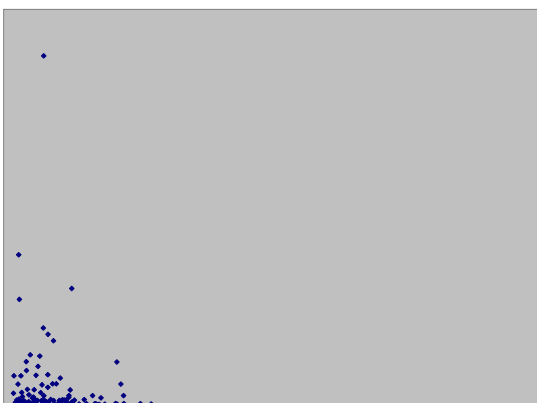
We proceeded with two different regressions (1.4 and 1.5) for the following reasons. The high degree of correlation between fixed technical assets and turnover ( $r^2$  0,836) shows an inability for the model to explain the correlation between  $D_i$  and this proxy of the firm's performance. Results are showed in following pictures:



Scatter diagram 1:

X: Debt Index

Y: Turnover



Scatter diagram 2:

X: Debt index

Y: Fixed technical assets