CAPITAL STRUCTURE AND CORPORATE GOVERNANCE: THE FRENCH CASE

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Abstract

The world economy has undergone major changes during the last twenty years. Financial markets have grown spectacularly on the international level. In particular, stock markets rose substantially in the 1990s. At the same time, the combined process of deregulation and financial innovations transformed the internationalization of financial activities into financial globalization, which witnessed a considerable strengthening of both the impact and freedom of action of the main players. France did not remain unaffected by this evolution, much the contrary. This was all the more impressive given the historical weakness of the country's financial markets. Many studies have been devoted to the growth of financial markets and many others to corporate governance, but the influence of the capital structure and the forms of governance on corporate strategies have rarely been empirically evaluated in the literature, due to the scarcity of relevant data. This paper aims at understanding (I) how the capital structure of French corporations has changed and, through an empirical study, (II) how this change may have impacted their strategy.

Keywords: corporate governance, capital structure, France

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1.The new geography of capital of French corporation

1.1 Radical reforms implemented by successive French governments

On a world level, finance has been profoundly transformed over the last twenty years. What characterizes these changes in France is that the government, not the private sector, has been the driving force behind them. In addition, the French government has been instrumental in changing the corporate financial environment.

Three major sets of factors led to these important developments. First of all, world deregulation has led to an unprecedented expansion of financial markets by eliminating the obstacles to the circulation of financial capital. In France, the government has carried out a deliberate policy of market deregulation, whose purpose has been to encourage opening up the market to various operators and products.

Secondly, the authorities dearly needed to expand the financial market. For example, they needed to find a means to finance growing budget deficits in the main industrialized countries. Beginning in the 1980s this led to the issuing of government bonds with little risk and high returns, and contributed to the dynamism of financial markets. In the context of globalization, continental European governments also sought to finance restructuring and expansion by turning to financial markets and by attracting foreign investors. The extensive waves of privatization programs in the 1980s and 1990s played a fundamental role in the U.S. institutional investors' growing share of the capital of large European and particularly French companies (Coriat, 2006).[11]

Thirdly, for investors, the long period of rise in the value of financial assets in the 1990s had a stimulating effect on investments in financial products. And this effect has been amplified recently by the generally favorable evolution of the relevant taxation. Competition between the different financial markets has produced similarly low rates of taxation everywhere. At the same time, the increasing uncertainty of how retirement pensions will be financed in the future has encouraged employees to increase their own savings plans. Finally, the growth

[11] In France an initial wave of privatizations was carried out in 1986—Saint Gobain, Banque Paribas, Société Générale, among others. A second wave began in 1992 with Total, followed by Rhone Poulenc and the Banque Nationale de Paris in 1993, Renault in 1994, and Péchiney in 1995. Between 1997 and 2000, the French government also sold to institutional investors part of its share in companies such as France Télécom, Thomson, Air France, and Crédit Lyonnais.

of mutual funds is the expression of the development of a stock market culture among small investors, even in countries where financial investing had been limited in the past. This is the case in France, where one out of three households today holds financial assets, comprising more than half of all household savings, against only one third of all such savings in the 1970s. While privatization of traditional infrastructures was strategically used by governments to attract foreign investors and increase the liquidity of national capital markets, it has also been a means of encouraging middle class households to shift their savings in the direction of the stock market.

1.2 The shift from capitalism dominated by the public sector to shareholder capitalism

The growth of institutional investors has led to a major change as to who holds corporate capital. In countries such as France or Germany, large blocks of corporate shares were traditionally held by friendly companies ("hard-core" shareholders or banks), who controlled major companies more or less directly. These controlling blocks have progressively been replaced by independent institutional shareholders. In the 1990s, European firms relied less on bank credit and more on equity markets to raise capital. As a result, domestic ownership of these companies and cross-shareholding among firms declined.[12] Simultaneously, ownership gradually became more dispersed and more international, with institutional investors such as U.S. pension funds and mutual funds coming to the fore. The importance of these investors varies considerably according to their weight in their own countries and also according to the local conditions in the receiving country. For instance, the absence of pension funds in France helps explain the relatively greater weight of foreign investors in French corporations. Depending on the source, the proportion of equity these players are said to hold in companies listed on the French market varies between 38% and 50% and is also thought to be quite significant in unlisted companies in certain growth sectors.[13] In some countries recently introduced legislation has accentuated this phenomenon. This has been the case for example in Germany, where the Bundestag has reduced capital gains taxes for banks and corporations selling their stock holdings (Lane, 2003).

In many countries, corporate capital has gradually passed from the hands of a reduced number of strategic shareholders into the hands of many independent institutional stockholders, each of them holding only a limited number of shares. Cross-shareholdings have been disappearing and dual class shares eliminated. A large number of continental European countries have also changed their corporate law and financial market regulations in recent years. National laws on corporate governance are being revised in similar directions in many countries to make investment in national firms more attractive to international investors and hedge funds.

U.S. mutual and pension funds are the most prominent among the varied categories of institutional investors. Although they are products of specific processes and obey different sets of rules, these players are in many ways a homogenous group because their interests and their demands often coincide on key issues. Clearly a large number of recent European economic reforms and transformations, particularly in France, have been made with an eye on U.S. mutual and pension funds.

1.3 The increasing role of foreign institutional investors in France

Institutional investors draw their power from the colossal mass of financial assets they manage—over $55 trillion in 2005, according to OECD, more than the combined GDP of all the industrial member countries of the OECD! Adding to their weight was the extremely rapid increase of these assets—244% from 1992 to 2005. Their geographical distribution is extremely unbalanced—almost 55% are in the United States, whereas only 10% are in Japan, 8% in the United Kingdom, 5% in France and 4% in Germany.

During this same period, the percentage of the shares of listed corporations held by institutional investors increased considerably (Jeffers and Plihon, 2002), both in the United States and in France. In this field, France has the distinction of having the largest percentage of shares of listed firms held by non residents. According to a recent study of the Banque de France (2007), non residents held 46.4% of the capital of the CAC 40 companies in December 2006. The share held by non residents increased by thirteen points from 1997 to 2006.

At the same time, the percentage of stock held by this category is clearly greater for the corporations part of the CAC 40 than for other firms. This confirms observations made previously (Jeffers and Moyé, 2004), and may be partially explained by the importance of liquidity for non resident institutional investors when making investments and the increasingly indexed and delegated investment strategies they have adopted.

A study of the percentages of stock held in the CAC 40 companies at the end of 2002 by non

[12] As share buyback programs have become increasingly widespread, today equity markets are no longer providing firms with capital on a net basis.

[13] The weight of non-residents varies considerably from one company to another and from one business sector to another. For example, non-residents own more than 50% of basic industrial and natural resource companies, including companies such as Air Liquide, Bouygues, Lafarge, Saint Gobain, or Total. The financial company sector (AXA, AGF, BNP Paribas, Société Générale...) is the second most preferred area for foreign investors, who own nearly 45% of it. U.S. funds comprise a large portion of these non-residents.

residents showed sizeable variations over the previous two years according to the business sector. Non residents preferred firms in basic industry as well as financial companies. They also increased their presence in the sector of general industry from 24% to 37.8%. And, despite significant withdrawals from the technology sector after the NASDAQ bubble burst, they continued to hold 44.1% of the stock in that field (Banque de France, 2004).

One explanation as to why these investors turned to the French market are the returns from the largest French companies. Along with U.S. firms, they were the most profitable for stockholders if the Total Shareholder Return standard (new share price + dividend paid out / initial stock price) is used, according to a study of the Boston Consulting Group in 2000.

All the assessments show that in many industrialized countries, such as France, the presence of institutional investors is sizeable and growing. Clearly, it has significantly modified the capital structure of the largest companies, and the effect of this change on their functioning should be examined.

1.4 The debate with respect to changes in French forms of governance: a convergence towards the Anglo-Saxon model?

What is the significance of these changes? Are they transitory or lasting? Do they impact corporate strategy? And if so, how? Do they demonstrate the failure of the continental European model of corporate governance and the superiority of the Anglo-Saxon model? Do they mean the differences between national systems will be eliminated in favor of one unified system? One important question that arises is whether one particular national corporate governance system is better than another, and whether national governance systems will converge. If convergence does occur, does that mean that systemic differences will disappear, leaving only one model, or are we witnessing a dual convergence leading to a hybrid model, specific to each system according to the dependency path?

Given the recent changes in French capitalism, in particular the growing holdings of Anglo-Saxon investors in the stock of French corporations, it can be tempting to affirm that management styles are currently conforming to the Anglo-Saxon system. This question has given rise to contradictory analyses. Some authors feel that the national models in continental Europe will end up keeping their specificity; for example, this is the analysis made by Roe (1990 and 1994) and Hall and Soskice (2001). On the other hand, other authors have concluded there is an inexorable convergence towards a dominant model imported from the Anglo-Saxon countries (Berger and Dore, 1991; and in France: Morin, 1998 and 2000). More recently, a third group of authors has come to the conclusion that a new hybrid model of corporate governance, a combination of the shareholder and the stakeholder models, has emerged (Plihon, Ponssard and Zarlowski, 2005 and Jeffers, 2005).

2. An empirical study of the corporate governance of French firms

Our goal in this section is to establish a relationship between capital structure and governance and, more specifically, to try to link corporate strategies and governance with clearly distinct patterns of capital structure.

2.1 Data sets used

We used the following data sets (Table 1) to carry out this project: LIFI,[14] EAE,[15] LEREPS,[16] and VIGEO.[17] LEREPS provided us with information regarding capital structure, percentage of share ownership, categories of investors (banks, pension funds, investment funds, and so on), and their nationality; Vigeo with information regarding corporate governance practice; LIFI and EAE with information about financial relations and accounting data. These data sets allowed us to study shareholder concentration, investor categories and nationalities. We then related them to different elements of corporate governance, such as human resource management, attention given to shareholders, to civil society organizations, and to other stakeholders.

Our study sample consists of the firms publicly traded on the Paris stock exchange and belonging to the SBF 120 index (see Table 1).

Pairing different data sets allowed us to build a comprehensive database, composed of 14,883 subsidiaries representing 90 groups. Working on a database composed of subsidiaries considerably enhanced the quality of our results.

[14] Enquête sur les liaisons financières entre sociétés (LIFI) – is a permanent mechanism run by the National Institute of Statistics (INSEE) to observe French firms of the private sector. These firms can belong to any sector of activity as long as their portfolio is above 1.2 billion euros, their sales figures superior to 60 million euros, or the number of their employees over 500.

[15] (EAE) is an annual survey conducted each year with a sample of firms belonging to:
- the manufacturing industry;
- the food processing industry;
- construction and transportation;
- trade and other services

Firms part of the sample have more than 20 employees or more than 5 million euros in sales.

[16] LEREPS is a research center in economics of the University of Toulouse.

[17] VIGEO is a French social rating agency.

Table 1. Summary of data sets used in this study

Data Sets	Variables Types	Years Available	Computation Level
LEREPS	Capital structure Investors Nationality of investors	2002	SBF 120 Firms
VIGEO	Governance	1999-2000-2001	SBF 120 Firms
LIFI	Financial relationships	2000-2001	see footnote 4
EAE	Accounting data	1999- 2002	see footnote 5

2.2 Methodology

After the exclusion of firms for which necessary information was lacking, we built a typology of the remaining 14,883 firms (subsidiaries), grouping similar firms together and constituting groups as different from each other as possible.

In order to build such a typology of the groups, we proceeded as follows:

- We applied a Principal Component Analysis (PCA) to the capital structure database in order to determine the factors that most differentiated the various firms. PCA makes possible the compression of data by reducing the number of dimensions without much loss of information. We proceeded with PCA, keeping only the first three factors. The result preserved 69% of the total information, a good representation of all the variables.
- We put the firms together in homogenous groups through dynamic clouds of points and applied ascending hierarchical classification to compute the largest possible number of segments and obtain the most meaningful organization of our data base. The Ascending Hierarchical Classification consists of carrying out progressive grouping of individual values in accordance with their degrees of similarity to obtain a single class that groups them all. Once this calculation has been made, the individual values are divided up into various classes.

2.3 Three major sets of discriminating factors

Table 2 presents the variables used in the PCA and the correlation between the variables and the first three factors. We can visualize the projection of variables on the multidimensional space F1-F3 in Figure 2.

Table2. Percentage of the information available on each of the PCA axes

	F1	F2	F3	Total Information
Concentration	**70%**	0%	1%	**70%**
Non-Financial Company	**53%**	2%	29%	**84%**
Banking Institution	0%	36%	**54%**	**91%**
Investment Company	27%	16%	2%	**46%**
Fund*	1%	**66%**	15%	**82%**
Investment Advisory Firm** and Pension Fund	**54%**	8%	10%	**71%**
France	**76%**	3%	0%	**79%**
Anglo-Saxon	**51%**	0%	2%	**53%**
Nordic	**32%**	4%	7%	**43%**
Germany	8%	0%	0%	**9%**
Total Information	**40%**	**15%**	**13%**	**69%**

* Funds managed by mutual funds
**Mutual funds

As seen in Table 2, F1 contains most information (40%). It is characterized by high concentration of capital, the presence of non-financial companies, as well as the presence of pension funds. Investors are of French nationality as well as Anglo-saxon. F2 shows mainly mutual funds, then banks as main investors. As for F3, investors are primarily banks and non-financial institutions. Overall, F1-F2-F3 provides us with 69% of information available.

To take an example, we will comment on Figure 1, which is a projection of the variables on the factorial axis F1-F3. The main characteristics of axis F1 between 0.0 and 1.0 are the high concentration of capital, the presence of non-financial firms and French nationality. Between 0.0 and -1.0, the axis has three characteristics—the dispersion of shareholders, the presence of investment funds and pension funds, as well as that of Anglo-Saxons.

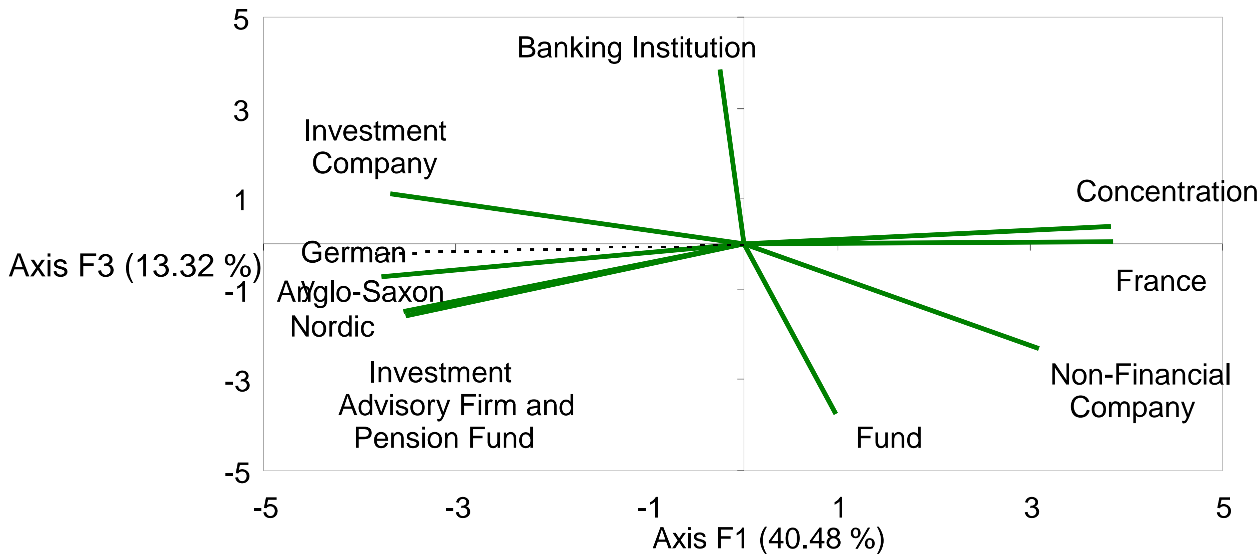

Figure 1. Projection of the variables on the factorial axis F1-F3

Axis F3 represents banks. Banking institutions play a relatively significant role in the capital structure of the firms found in the positive portion of axis F3. As can be seen, banks and mutual funds are two different ways to hold capital in French firms. This opposition between them echoes the traditional opposition of bank-based and market-based financial systems.

How should we interpret these results?

2.4 .Four groups of firms

Information generated by the three axes of the PCA allows us to present the following typology. Four groups of firms are clearly delineated. Two of them are unmistakably distinct (Groups 1 and 3) according to the level of capital concentration, the main categories, and the nationality of the shareholders (see table 3). As for the two other groups (2 and 4), differences in capital structures appear, but few conclusions can be drawn on other questions because of a large heterogeneity in their practices.

Group 1 is characterized by capital dispersion; the main shareholders are pension, investment, and other kinds of funds, many of which are Anglo-Saxon. Subsequently Group 1 firms will be referred to as "Anglo-Saxon." Strikingly, they correlate positively with giving significant weight to corporate governance principles, with implementing these principles, and with obtaining results based on them. Two good examples of this kind of firm are Total-Elf (energy sector) and Vivendi (new technology of communication and information), as seen in Table 4.

Table 3. Correlation between typological groups and capital structure

	Group 1	Group 2	Group 3	Group 4
Capital Concentration				
Concentration	-64%	3%	56%	32%
Institutional Shareholders				
Non-Financial Company	- 29%	- 25%	88%	- 19%
Banking Institution	- 1%	- 21%	- 38%	81%
Investment Advisory Firm and Pension Fund	76%	- 35%	- 42%	- 20%
Investment Company	22%	24%	- 41%	- 25%
Fund	19%	- 44%	4%	32%
Nationality of Shareholders				
France	- 57%	- 16%	65%	39%
Anglo-Saxon	63%	- 20%	- 39%	- 25%
Nordic	47%	- 20%	- 28%	- 11%
Germany	18%	10%	- 24%	- 16%

At the opposite end of the spectrum, Group 3 is denoted by a high concentration of capital and the shareholders are mostly non-financial firms. A majority of these shareholders are French. Subsequently referred to as "French," Group 3 firms correlate negatively with giving weight to corporate governance issues and specifically with paying attention to their shareholders. Examples of this type of firm are Casino (supermarkets), which is owned by a family, and Crédit Agricole (banking sector), which

belongs to the mutual sector. It is striking to see that St Gobain, one of the oldest French companies, has adhered to the "Anglo-Saxon" style of corporate governance.

Table 4. Main French firms belonging to the four typological groups

GROUP 1	GROUP 2	GROUP 3	GROUP 4
25 heads of groups 6237 companies	47 heads of groups 4839 companies	9 heads of groups 2320 companies	9 heads of groups 1497 companies
Accor Aventis BNP – Paribas Essilor Lafarge Saint-Gobain Thomson Total Elf Vivendi	AGF Bouygues Carrefour Danone Eurotunnel Michelin Sanofi Syntelabo Société Générale Valeo	Casino Guichard Crédit Agricole SA Dassault Systèmes Euro Disney TFI Thales	CNP Assurances Ciments Français Crédit Lyonnais Natexis Banques Pop Pinault Printemps

In an effort to further refine our findings, we conducted an analysis based on the different typological groups identified above and we linked the typological groups to variables of governance practice.

2.5 The relationship between capital structure and governance strategies

We first used the data set provided by Vigeo on corporate governance. It gave information on:

- Shareholders, on three levels: first, the declared goals (referred to as leadership in Table 4), second, their implementation (deployment), and finally, the obtained results (results).
- Human resources: the quality of human resources in each firm, compared to that of its respective sector.
- Civil society organizations: the quality of each firm's relation with CSOs was compared to that of its respective sector.
- Other stakeholders: three types—clients and suppliers, social environment, and shareholders.

We related the preceding capital governance criteria with our four typological groups. We found a similar contrast in the analysis of the typological groups and corporate governance practices (see Table 5)..

Table 5. Correlation between the typological groups and governance practice

	Group 1	Group 2	Group 3	Group 4
Shareholders:				
• Leadership	28%	13%	- 63%	9%
• Deployment	38%	7%	- 66%	5%
• Results	27%	11%	- 65%	18%
Firm Human Resources	29%	12%	- 61%	6%
Sector Human Resources	30%	9%	- 55%	4%
Firm Civil Society Organizations	30%	9%	-62%	11%
Sector Civil Society Organizations	30%	6%	-60%	14%
Partnership:				
• Clients and Suppliers	21%	10%	-56%	18%
• Social environment	15%	24%	-50%	- 2%
• Shareholders	34%	1%	- 58%	12%

There are clearly two distinct, diametrically opposite, typological groups—groups 1 and 3. They are characterized by totally different corporate governance policies, reflecting their contrasting capital structures as seen previously. Concerning the two other groups—groups 2 and 4—it is not possible to draw clear-cut conclusions on their corporate governance policies (see Table 6) although differences do exist in terms of the structure of their capital. Considering the period our empirical work is based on—the first years of the twenty-first century—the firms belonging to these two groups seem to be in an intermediary position, which could be interpreted as a transition from their initial "French" style to a new one. These apparent shifts in the corporate

landscape should be a fascinating object of further study.

To summarize, in France it is possible to establish a correlation between the capital structure of companies and their practice in terms of governance.

Table 6. Summary of the typological groups' characteristics

Group 1 6237 firms 25 heads of groups	Group 2 4839 firms 47 heads of groups	Group 3 2320 firms 9 heads of groups	Group 4 1497 firms 9 heads of groups
Capital Structure			
Dispersion of shareholders	Non significative	Concentration of shareholders	Concentration of shareholders
- Investment advisory firms - Pension funds	Investment company	Non-financial company	Banking institution
Anglo-Saxon	Pre-dominantly German	French	French
Governance			
Compliance with shareholder governance principles	No dominant behavior with respect to governance	No compliance with shareholder governance principles	No dominant behavior with respect to governance

It should be noted that besides the two contrasting models, French and Anglo-saxon, detected by our study, it is possible to discern more intermediate models whose practice of corporate governance seems less clearly defined.

Conclusion

The ways in which capital is held have greatly evolved these past years in the countries of continental Europe—particularly in France where almost all industrial and financial companies have been privatized within the past two decades. This has led to the spectacular increase in non resident institutional investors' holdings of the capital of the main French companies with evidently important consequences for their functioning.

Traditionally, in the literature, two points of view have opposed each other concerning the spread of corporate governance models. One insists on their convergence, the other refutes it. These two positions, attractive in theory, do not have much to do with reality. When companies are examined individually, as we tried to do it in this study of French firms, a great diversity of situations is found. This is probably also the case for other European countries. Some companies, whose capital is largely detained by Anglo-Saxon investors, apply corporate governance practices from the shareholder model, whereas companies less open to international investors apply more local corporate governance practices more related to the history and institutions of the country. Our study suggests that, in a global economy, the nationality and the nature of the shareholders count more than the localization of the company. We believe however that domestic institutions and the political and judicial frameworks also have often significant influence on the results and the practices of firms.

References

1. Banque de France (2007), "La détention par les non-résidents des sociétés françaises du CAC 40 à la fin 2006", *Bulletin Mensuel*, p. 55 - 60, Mai.
2. Berger, Susan and Dore, Ronald (ed.), *National Diversity and Global Capitalism, Ithaca,* NY: Cornell University Press, 1991.
3. Coriat B. (2006), «Moves towards finance-led capitalism : the French case » in "*The hardship of nations: exploring the paths of modern capitalism*", B. Coriat, P. Petit and G. Schmeder (dir) , Edward Elgar.
4. Hall P. and Soskice D. (2001), *Varieties of capitalism: the institutional foundations of comparative advantage*. Edited by Hall, Peter; Soskice, David. Oxford University Press, 2001, pp. 1-68.
5. Jeffers E. (2005), "Corporate Governance: Toward Converging Models?", *Global Finance Journal* 16.
6. Jeffers E. and Moyé D. (2004), "Dow Jones, CAC 40, SBF 120 : comment expliquer que le CAC 40 est le plus volatil?", in *Revue d'économie financière* n° 74, 2004.
7. Jeffers E. and Plihon D . (2002), « Politiques et modes de gestion des fonds d'investissement », in D. Plihon et J-P. Ponssard, La Documentation Française, 2002
8. Lane C. (2003), "Changes corporate governance of German corporations: convergence to the Anglo-American model?, ESRC Center for Business Center, University of Cambridge, Working Paper.
9. Morin F. (2000), "A transformation of the French model of shareholding and management", *Economy and Society*, 29, 1 : 36 – 53.
10. Morin F. (1998), *Le modèle français de détention et de gestion du capital*, Paris : Les Editions de Bercy.
11. Plihon D., Ponssard J-P. and Zarlowski P. (2005), "Towards a Convergence of the Shareholder and Stakeholder Models", *Corporate Ownership & Control*, Vol. 2, Issue 3, Spring, pp. 11 – 18.
12. Roe M. (1994), Strong Managers, Weak Holders, The Political Roots of American Corporate Finance, Princeton, New Jersey: Princeton University Press.
13. Roe M. (1990), "Political and Legal Restraints on Ownership and Control of Public Companies", *Journal of Financial Economics*, 27, pp.7-41.