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Banking Regulation, Institutional Framework and Capital Structure: International Evidence from Industry Data

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Abstract

This paper uses an industry data set from the European Union, United States and Japan to investigate the degree to which banking regulation and institutional environment affects corporate finance choices. La Porta et al. (1997, 1998) have shown the influence of investor protection on financing decisions. We extend these measures of investor protection and develop a measure for banking regulation. We both confirm prior findings and provide additional evidence of "institutional effects". We find that prudential banking regulation is positively associated with industry indebtedness, indicating that prudential rules make it easier for firms to access to credit market. Furthermore, we also find that disclosure rules affect leverage decisions.

Keywords: banking regulation, investor protection, capital structure

JEL Classification: G32, G38, G18.

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1.- Introduction

The empirical literature on corporate finance has shown that financial decisions depend on firm characteristics (Titman and Wessels, 1988; Barclay and Smith, 1995, Cleary, 1999 and Wald, 1999) and most recently legal rules and the degree of investor protection are proved to be important determinants of capital structure (La Porta, 1997 and 1998, Demirguc-Kunt and Maksimovic, 1998 and 1999; Carlin and Mayer, 2003, Lombardo and Pagano, 1999)[1]. However, despite the growing interest of this area of research, thus far the literature present two weaknesses. First, it has not paid much attention to other institutional arrangements that may affect financing decisions as well; namely banking regulation and transparency in the economy. This is surprising since the theoretical literature suggests that asymmetric information conditions credit relationships. Furthermore, the firm-banking relationships would be affected by the structure and strategic decisions of the banking sector. Second, the conclusions rely on partial institutional measures which are constant over time. Both questions are tackled in this paper.

The objective of the paper is therefore, twofold. On the one hand, we empirically explore the role of banking rules and disclosure requirements in influencing capital structure decisions. We start from the literature showing the relationship between investor protection in financing decisions and then construct and introduce measures to account for the banking regulation and level of public information. On the other, we complete the existing measures of investor protection and incorporate the innovations passed when occurred.

On addition to this, previous work has mostly relied on aggregated data or large firms, which have easier access to international capital markets and therefore are less subject to the institutional constraints imposed by domestic markets. Instead, we use industry-level panel data drawn from a cross-section of nine European countries, United States and Japan, therefore our data don´t have the aforementioned problem. Furthermore, as far as we are concerned, there are not previous papers that study jointly USA, Japan and a large sample of European countries. Besides, industry-level data have important advantages over both firm level and country-level data for the purpose at hand. To the extent that agency problems vary systematically across industries, the institutional developments on which we focus in this study may affect leverage levels

[1] See in particular Giannetti (2003), who explores this relationship at firm level in eight European

differently in each industry. In this case, country-level data may mask the effects of interest because of aggregation. On merely statistical grounds, industry-level data are preferable to firm-level data mainly because of the "survivorship bias". This bias arises when firms with a long history are included in the sample (Lombardo, 2000). Since the sudden disappearance of an industry is a much rarer event, this problem is drastically alleviated by the use of industry indices.

We find that investor protection influence leverage decisions, consistent with the existing results. Furthermore, banking regulations and disclosure requirements affect indebtedness of economic sectors in a significant way. In countries with better protection of creditors, problems associated to the lack of collateral assets are lessened, consistent with the hypothesis that agency problems are reduced in such scenarios. Furthermore, prudent banking regulation also reduce the need of fixed assets to attract external finance. Hence, investment in intangible assets that lead to faster growth may increase. Therefore, improvements in the institutional framework reduce financial constraints and may foster sector performance. Beyond their academic interest, these conclusions are of use to policymakers engaged in institutional design.

The paper is organised as follows. Section 2 reviews the related literature and the relevant theoretical relations found between firm leverage and institutional variables as well as the correlations with industry attributes. Section 3 describes the construction of the legal variables and the data set. The statistical model and the results are presented in section 4. The sensitivity and robustness analyses are reported in section 5. Section 6 concludes.

2.- Related literature and hypothesis

A main branch of theoretical finance literature analyses the effect that asymmetric information has on financial decisions, and the difficulties caused by incomplete contracts[2]. In empirical studies, firm attributes have been traditionally used as proxies of asymmetric information in credit relations. Table 1, panel A summarises the standard results and collects the usual proxy. The institutional framework claim, however, that institutional arrangements affect the agency problems associated to credit relationships (La Porta et al., 1997). Creditor rights play a role in determining how

countries and also distinguishes between company size

[2] See Harris and Raviv (1991) for a survey.

much the presence of collateral can favour the choice of debt over equity. Given a certain level of asymmetric information, lender ability to recover their loans (or the collateral) is also important. If the legal protection of creditors in not adequate, they may be reluctant to lend. If creditors do not have the right to require collateral or cannot effectively repossess collateralized assets, interest rates will raise in response to these agency problems and if that is not enough to cover the opportunity cost of lending, the credit market may even collapse. The strict protection of creditors rights leads to cheaper credit. Consequently, as pointed out by Padilla and Requejo (1998), many valuable investment projects, which would not be funded because of moral hazard problems, may be financed when the debtor is allowed to commit his own wealth to the repayment of debts. Furthermore, Fabbri (2001) using a general equilibrium model shows that firms located in countries which provide stronger legal protection to creditor rights, have access to a larger external financing, therefore affecting positively debt maturity.

Apart from the increasing *ex ante* efficiency of credit markets, strict protection of creditors also raises efficiency *ex post*. This effect is connected to the bankruptcy procedure. When borrowers can decide on reorganisation without creditor consent, liquidation may not take place even when it is efficient. Therefore, strict protection of creditor rights to be repaid with absolute priority eliminates the possibility of this kind of *ex post* overinvestment problem (Gertner and Scharfstein, 1991). Henceforth, strict protection has positive effects on leverage levels. However, there are other theories that consider that strict enforcement of creditor rights may lead to inefficiencies both *ex ante* and *ex post*. Collateral rights might lead to underinvestment in project evaluation by banks (Manove, Padilla and Pagano, 2001), or collateral repossession may reduce project control by lenders (Bebchuk and Fried, 1996). As a consequence, many unworthy projects may be funded and bankruptcy cases will increase. In case of default, if creditor rights are strictly enforced, they will have no incentives to allow their debtors to restructure financially although it may be efficient to keep assets in debtor hands. The empirical evidence seems to agree with the former view, see Giannetti (2003).

The theoretical literature has analysed the effects of shareholder rights as well. Shareholder rights are related to capital market development. Investor protection is crucial because expropriation of minority shareholders by the controlling shareholders is generally present in modern corporations. Expropriation is connected to agency

problems, as well as the legal system (Jensen and Mecking, 1976). Grossman and Hart (1988) point out the relevance of residual power of investors (guaranteed by legal framework) in order to partly mitigate distortion practices from insiders. Legal protection of shareholders makes expropriation practices less efficient. As investor protection improves, the insiders must engage in more distorted and wasteful diversion practices (La Porta et al., 1999c). When investors are protected from expropriation, they pay more for securities, making this form of external finance more attractive for entrepreneurs, who will issue more securities. Therefore, shareholder protection encourages the development of equity markets measured by the valuation of firms, listed companies and the rate at which firms go public (La Porta et al. 1999b). A positive relation between shareholder protection and corporate valuation has been shown recently through different modelling (Gorton and Schmid, 1996 and La Porta et al. 1999b). Better protection of shareholders implies lower firm costs in participating to equity markets (Pagano, 1989). Henceforth, higher shareholder protection will encourage firms to float capital and reduce debt levels. In this context, the allocation of resourses in fixed assets reduce its relevance to obtain external finance.

Besides investor protection, banking regulation is relevant for the lender-borrower relationship as well. Financial intermediation is a response to the inability of market mechanisms to efficiently solve informational asymmetries in this relation. As pointed out by Bhattacharya and Thakor (1993), the frictions associated to incomplete information generate instability problems in financial markets that can be reduced with the adequate regulation.

Banking regulation is mainly justified to protect the interests of small shareholders who do not have access to information (Dewatripont and Tirole, 1994) and to set up a security belt for the banking system so as to avoid financial crises and the negative externalities associated (Freixas y Rochet, 1997). Rate controls, entry restrictions, charter limitations of banks or separation of commercial and investment banking have been widely used by regulators to limit competition (Matutes and Vives, 1995), since competition has traditionally been considered a source of excessive risk taking in banking. In this sense, some governments have even encouraged collusive agreements among banks. Recent empirical research on European banking highlights the importance of imperfect competition in the sector (Neven and Röller, 1994).

Norms that restrict competition have been modelled in different settings with similar results. Suarez (1993) develops a model that demonstrates that this particular

type of banking regulation creates barriers to entry, which protect and enhance the exercise of monopoly power. Petersen and Rajan (1995) claim that more firms should be able to obtain credit from financial institutions in areas where credit market are more concentrated. Furthermore, the average quality of firms obtaining finance should be lower as the credit market becomes more concentrated. Caminal and Matutes (1997) find that total loans are related to market power as well. Under asymmetric information, banks optimally choose between restricting the loan size or monitoring firm decisions. Loan size may decrease with market power but the incentive to exert monitoring effort increases. Unless monitoring costs are prohibitively high, their model suggests that market power enhances welfare. That is, some degree of market power is likely to reduce the expected lending rate and extend credit since it increases the probability that loans will take the form of information based credit. The length of the bank-firm relationship also increases. Therefore, the expected effect of prudential banking regulation on leverage and maturity structure is positive.

The level of public information can affect financing decisions in different ways. On the one hand, disclosure requirements are good proxies for the extent of asymmetric information within a country. Therefore, firms investing in intangible assets should have easier access to debt in countries with better accounting standards and stricter information requirements. On the other, when information is public, its cost decreases, investment profitability increases, and consequently investors are encouraged to invest (Subrahmanyan and Titman, 1999). Furthermore, agency problems between managers and shareholders reduce, as the incentives to extract rents by managers decrease (Pagano and Röell, 1998) and firms are encouraged to raise capital from the stock markets, and consequently, debt levels may reduce. Yet, if disclosure requirements are pretty demanding, floating incentives decrease sharply (Campbell, 1979) and the latter effect reduce. Therefore, information disclosure effects on leverage are not obvious *ex ante*.

Finally, the institutional factor that traditionally has been considered to affect leverage levels is tax distortion. Higher corporate tax levels tend to favour the use of debt, while non-debt tax shields such as depreciation deductions can be used as substitutes for debt tax advantage and therefore reduce the leverage level of firms. Table 1, panel B collects the results.

The results commented provide support for the institutional effect as a complementary explanation of the finance decisions. We expand previous studies to test

these effects. First, we use international standardised data for a wide sample, and we test the main capital structure results jointly with the institutional effect. Second, and related to the latter, the measures of the institutional environment used in the literature are not always satisfactory. The indexes are partial, since they only include some norms and are constant through time. We improve the construction of the institutional variables by taking into account for the legal changes as well.

3.- Data and variables included

To capture the empirical relationship between the institutional environment and leverage decisions, we use data from different sources.

3.1. Institutional Variables

La Porta et al. (1998a) develop an index for creditor protection and another for investor protection and construct a measure for the origin of laws. The creditor and investor protection indexes are developed from bankruptcy and company regulations. Both indexes, as the authors recognise, are not complete. There are other laws that affect directly the level of investor protection which are not taken into account in these indexes. We try to fill this gap by analysing additional economic norms in order to be closer to the true structural environment. We have analysed merger and acquisition laws, accountancy regulations, auditing norms, disclosure requirements and banking regulations. With this information, following the methodology developed by La Porta et al. (1998a), we have constructed several indexes to measure shareholder and creditor protection, banking degree of prudence and protection and disclosure requirements.

The method of construction is the same for all four indexes. Using accounting and legal literature[3], we define different categories which summarise the protection to investors, public intervention in banking and the quantity of information that has to be public respectively, present in the rules cited. For every country and each category we sum one unit when the feature is present and zero otherwise. Afterwards, we sum for each index and obtain the result for every country. We have taken into account changes

[3] On corporate law: Hawkins and Morton, (1990) and Raybould and Firth Ed. (1991).
On accounting: Alexander and Archer (1992) and Blake and Amat (1993).
On banking and financial markets: Interbank Research Organization (1978), Moreiro (1992), Parejo, Calvo and Paul (1993), Campbell and Moore (1993), Forestieri and Mottura (1998) and Katayama and Makov (1998).

in legislation in order to obtain time series differences and not only cross-country variations.

Henceforth, shareholder protection index, "*share*", has 9 categories. These categories include the La Porta et al. ones: mail voting allowed for general meeting; no need to deposit the shares before voting, cumulative voting allowed, protection to small shareholders, preemptive right to buy new issues of stock and finally the required percentage to attend a shareholder meeting is inferior to 10%. After the review of national merger law, we include three new categories: equal treatment of shareholders in case of mergers, control of directors' activities and forbidden manager protection practices[4] (such as poison pills when they impose restrictions to shareholder rights[5]). The new creditor index, "*cred*", ranges between 0 and 5, being the categories: "stay on assets" procedure allowed, no priority to other stakeholders (employees, government or public entities), managers are not allowed to begin the reorganisation process without the consent of creditors, creditors have the right to impose an external administrator and finally explicit protection in merger procedures. For both indexes higher values are associated to better protection. USA is the country with the maximum shareholder protection, scoring 8. Belgium presents the minimum value 1. In relation to creditor index, Denmark presents a score of 4 being the maximum, and France with a 0 value is the minimum. Panel A of table 2 presents the construction of these variables.

Following Allen and Gale (1995) we have analysed the main features of banking regulation, through nine categories[6] in order to account for the competition restriction in the banking sector. The nine categories can be subdivided in 3 groups according to their main goal. The first group refers to control of activity. Namely, need of license to establishment activity (charter), together with warranted social benefit, board of directors minimal skills and distinction[7], control on merger activities and branch

[4] In this case we add one unit when the protective tactics are not permitted, in order to maintain the internal coherence of the index.

[5] In the case of United States, we sum one unit because the use of pills are not absolute: "managers can use defensive tactics only to the extent that is reasonable in relation to the threat posed and always protecting shareholder rights (Unocal Test, 1985). The Delaware courts also indicated that they protect against managerial moves to impede voting by shareholders to remove them. On the contrary, some European countries allow shareholder voting rights restrictions (France) or the "creative use of share capital" (Netherlands).

[6] Similar categories have also been used in a study on European banking regulation developed by Interbank Research Organization (1978). Parejo et al. (1993) has used this idea of categories to analyse banking regulation as well. More recently, Barth et al. (2001) have analysed different aspects of banking market structure and banking rules in a similar vein.

[7] Chartering requirements have been traditionally used to restrict entry and competition (Mishkin, 2000).

openings. The second group controls activity scope: separation of banking activities and other financial activities, and restriction to participate other firms. The third group refers to risk control in a double sense: own share tenure restrictions and control of large loans and their accumulation in one person. Therefore, "*bank*" will range between zero and nine when none or all categories are present in a national system. Higher values imply tighter restrictions to competition. Values for each category and each country are shown in table 2, panel B[8].

Disclos captures the information firms are required to disclose. We analyse the need of compulsory disclosure in four different situations: merger, auditing, deciding to go public as well as the contents of annual accounts. Thus, "*disclos*" will range from 0 to 4. Accordingly, higher values of "*disclos*" imply more information available to markets and investors. When comparing *"disclos"* values, a great uniformity is observed among European countries. The constitution treaty of the European Community (1952) established the mutual recognition of national firms. Harmonisation, however, has not finished yet, even though there are some fields where it has evolved more quickly. Information requirement is one of the most homogeneous fields. The main work has been made on public firm information related to mergers and acquisition of companies, annual account balance and auditory norms[9]. Panel C of table 2 presents the score and time changes. La Porta et al (1998) already use an index to account for the level of public information. This index is constructed through the analysis of 1990 annual accounts of a sample of companies; at least three companies for each country are included. However, no information is given upon company size or the exact number of companies included per country. Therefore, this index could represent the practice of some firms alone and not the relevance of the information published by firms in a country. Our index instead is based on existing laws, thus entailing all companies.

With the inclusion of these variables, we have come closer to the real institutional environment faced by firms along the 1990-1999 period. We have not included any variable for the origin of the law, although present in previous articles. As Rajan and Zingales (2001) point out, legal origin does not have a constant explanatory power over time due to legal innovations and reforms. Therefore, we are not sure that

[8] Some of the categories are present in all the countries. Although, they do not allow us to distinguish between the different nature of banking law, we have included them in order to cover the main aspects of the national regulation.
[9] European Interior Market Review 1993.

the legal origin still has an explanatory power, when legal systems continuously change to adapt to new scenarios.

The analysis of the legal innovations in the 1990-1999 period, is especially relevant for disclosure requirements and banking regulation. With regard to disclosure rules, it can be observed that they have become stricter for Denmark and Netherlands since 1993. In connection to banking law, American innovations suppose a tendency towards higher geographical competition and fewer restrictions[10]. The remaining norms have remained stable since the Eighties, when major changes took place.

3.2. Leverage and sector attributes

Our sample includes 11 developed countries[11]. Data come from the BACH[12] database, created within the European Committee of Central Banks. The main advantage of these data is the comparability of data, so that the robustness of the results is assured. All data come from book information, hence, it is not possible to evaluate the market values of debt ratios. However, it is generally admitted that the book value of leverage is the result of the management´s financial decisions. Moreover, previous empirical papers (Rajan and Zingales, 1995 and Boot et al,. 2000) do not find significant differences in factors correlated with debt to book and market capital. The period considered is 1990-1999. The main features of the data described in Appendix 1.

The ratios included are:

Leverage is calculated as total debt on assets. Total debt includes banking credit, trade creditors and debenture loans.
Maturity is calculated as the ratio of long term debt on total debt.
Profitability is the standard return on assets ratio: Profit before tax plus interest and depreciation over total assets.
Collateral captures tangible assets to total assets.
Non-debt tax shields: Depreciation and provision[13] level over total assets.

[10] Geographical controls for branch establishment have been present until 1997. The Riegle-Neal Interstate Banking and Branching Efficiency Act enables banks to establish branches and buy other banks across the country. The passing of this act ends up a long deregulatory process. The deregulation process had started in 1978. By 1993, the state-level deregulatory process was essentially completed: all states but Arkansas, Iowa and Minnesota allowed statewide branching, and all states but Hawaii permitted out of state bank holding companies to enter (Jayaratne and Strahan, 1997). Therefore, branching restrictions only disappear in 1997, despite almost all American banking economists had agreed for over two decades that such a measure would improve the efficiency of the banking sector. A similar debate has taken place during the nineties concerning the repealing of Glass-Steagall Act. The Glass-Steagall Act was finally repealed in 2000.
[11] Germany, France, Denmark, Italy, Spain, Portugal, Austria, Belgium, Netherlands, USA, and Japan.
[12] Bank for the Accounts of Companies Harmonised. It contains sector data since 1985.
[13] Depreciation and provisions of non financial fixed assets.

Industry growth opportunities: The growth rate of value added at time t, between t and t-1.

Table 3 presents the summary statistics of the main ratios included. Data confirm the cross-country differences accounted in previous papers (Wald, 1999 and Giannetti, 2003). The US presents the lowest leverage ratio. On the contrary, Japan and Italy have the highest debt ratio. Both countries guarantee higher protection to creditors and their degree of banking prudence is above the average according to table 2.A. However, the level of collateralised assets in Italy is in the lowest quartile. This preliminary evidence suggests that collateral assets may be less important when creditor rights are protected and when there is a certain degree of market power in the banking market. Therefore, institutional arrangements may play a role in explaining financial decisions.

The differences in debt maturity are more pronounced, Italy presents the lower maturity and US the largest; yet, the cross country differences decrease slightly when we only include manufacturing sectors in the computation. As panel C shows, services sectors present relevant differences to the industry sectors. A possible explanation is that manufacturing firms compete more worldwide while service firms compete more in their home countries, and therefore, maintain their particular features. This implies that firm characteristics are still important for understanding cross country differences in capital structure.

4.-Estimation method and results

The two previous sections suggest that financial decisions are affected by the institutional settings where sectors are operating in, not only by investor protection but by the banking norms and the transparency in the economy. These four institutional factors (altogether) have not been empirically investigated yet. Here, we want to test two hypothesis: whether agency problems are mitigated in protected environments and therefore incentives to invest in collateralised assets decrease and whether these arrangements influence the maturity structure of debt and therefore facilitate external finance availability. For the empirical test, we estimate the following equation:

$$Leverage_{i,j,t} = \alpha + \beta * industry\ attributes_{i,j,t} + \gamma * INST_{i,t} + + \eta_{ij} + \psi_t + \varepsilon_{i,j,t} \quad (1)$$

where $i = 1,\ldots, n$ refers to countries, $j = 1,\ldots, m$ refers to economic sectors and $t = 1,\ldots, T$ to time periods. The error term, $\varepsilon_{i,j,t}$ is identically distributed and uncorrelated across

observations and with exogenous variables, but cov ($\varepsilon_{i,j,t}$,$\varepsilon_{i,j,s}$) may be different from zero if $t = s$. To take into account sector cross-sectional differences that are not observed or are invariant over time, we include fixed effects[14]. In particular, we include industry and country effects and time effect (η_{ij}, ψ_t respectively). These fixed effects also help to control for possible data problems due to the definitions of balance sheets items in BACH. Even if there are cross-country differences in data treatment, they are not likely to vary much over time and, therefore, the conclusions regarding the effects of industry attributes on corporate finance decisions are not affected.

The fixed effect estimator provides unbiased estimates of the parameters of interest by taking all the variables in deviation from the individual mean and exploiting only the time-series variability[15]. In addition to including sector indicators and country indicators, we include some interaction terms in the spirit of Rajan and Zingales (1998) and Claessens and Laeven (2003) among others. In particular, we interact an institutional factor with an industry characteristic. Apart from using the values of the institutional measures, in the interaction terms, we also use dummy variables associated with these indicators, which group countries above and below the average and facilitate the interpretation of the results.

Once we have tested the institutional effects on leverage and agency problems, we turn to debt maturity. Debt maturity is interesting to analyse because of the differences evidenced in the summary statistic from the data and because it is expected to be affected by debt levels, and therefore, by the institutional environment. Firm attributes and also the structure and concentration of the banking systems are said to influence maturity, because it influences the nature of bank-firm relationships. The equation to estimate is:

$$Maturity_{i,j,t} = \alpha + \beta * leverage + \delta * industry\ attributes_{i,j,t} + \gamma * banking\ structure\ features_{i,t} + \eta_{ij} + \psi_t + \varepsilon_{i,j,t} \quad (2)$$

Debt maturity and banking structure may affect each other, since the structure of the banking system conditions the funds supply. To reduce the possibility of endogeneity in the specification, we estimate the maturity equation using two-stages

[14] The Hausman test rejects the hypothesis that the random effect estimator is consistent, because individual fixed effects are correlated with the explicative variables in both equations. When correlation is present, conditional inference must be done (fixed effect estimation) [Arellano y Bover, 1990].

[15] In some of the specifications, however, we only include industry effects in order to be able to estimate γ, the parameter of interest. In these cases, we include country dummies to account for unobservable variables.

least squares. Additionally, we test the effects of banking regulation and creditor protection in the maturity structure through interaction terms.

Following the papers by Mayer (1988) and Frankel and Montgomery (1991) to account for the banking concentration, we use the assets of three largest banks as a share of assets of all commercial banks in the system. To account for the size and capacity of entities, we will use level of deposits. Investment strategy is measured by the quantity of shares and participations in non-financial firms. The data come from the OCDE database.

4.1. Investor protection and banking regulation

In table 4, we present results for equation 1 without interaction effects. We report for brevity only the coefficients of interest, namely the institutional variables and the industry attributes said to influence leverage levels. Standard errors and t-statistics are corrected for heteroskedasticity. We introduce one institutional feature at a time and in the last column we introduce them all.

For the most part, the data supports the traditional theories of corporate finance and industry characteristic affect significantly leverage levels. Profitability, measured by the return on assets presents a positive and significant coefficient in all runs. This is coherent with Jensen´s theory of free cash flow (1986). No support for the pecking order theory is found in any of the specifications. Collateral assets do not seem to be universally relevant to ease the access to external credit, being non significant in column (1) and (2). Future growth opportunities can be considered an intangible assets that requires external financing. Previous studies show a negative relationship between growth opportunities and leverage, that is future growth opportunities are financially through stock markets. However, this result may be driven by the excessive weight of listed firms in the sample used. We, instead, find a positive and significant coefficient, meaning that industries become more leveraged as their growth opportunities improve. This effect may be stronger in countries with less developed stock market, such that firms with growth opportunities are not able to issue new capital and fund growth. Size, proxied by the logarithm of total assets is positive and significant except for the first and second columns. Finally, the coefficient of non debt tax shield is negative and significant as expected. Hence, the evidence is consistent with previous findings .

With respect to the legal variables, all coefficients are significant both one at a time and when they are introduced at the same time. Banking regulation affects

positively and significantly leverage levels as predicted by direct regulation models, therefore a certain degree of market power improves lending relationships between banks and economic sectors (column1). The quantity of public information, *disclos* presents a negative significant coefficient, meaning that the quality of information affects leverage negatively, consistent with the results by Subrahmanyan and Titman, (1979), who claim that when information is public, its cost decreases, investment profitability increases, and consequently investors are encouraged to invest. Hence, better information can lead to higher participation in equity markets, reducing debt levels. The third column collects the results for the shareholder protection. Shareholder rights affect negatively leverage. As we have previously claimed, when external investors are protected from expropriation, they are willing to invest and securities become more attractive for entrepreneurs as costs of floating decreases and can avoid the discipline of debt (Pagano, 1989). Creditor protection has a positive effect on debt levels, as expected by the main stream of financial literature, Padilla and Requejo (1998), that is, better protection provides cheaper credit that seems to drive to higher debt levels. Finally, column 5 presents the results for the complete set of variables. All the variables are significant and maintain the signs just commented. Therefore, the legal variables that affect directly the financial intermediaries increases credit availability, whereas, the factors more related to the development of stock market, seem to discourage debt decisions. Another interesting remark, is that, when legal factors are introduced in the analysis, collateral assets do not seem to be so crucial to access credit. Therefore, the legal terms may influence the investment decisions.

As an additional investigation into the channels through which legal arrangements affect investment decisions, we include the interaction terms. On the one hand, we analyse whether creditor protection and banking regulation affects the necessity of collateral assets. We want to see if collateral needs are less demanding in countries where creditors an financial intermediaries are protected. On the other, we interact growth opportunities with the legal features associated to stock market development (shareholder protection and disclosure requirements). In this case, we control if high growth sectors reduce indebtedness levels in countries with more transparency and better protection to shareholders, that is, they are able to issue new capital to finance growth. Results are collected in table 5, panel A and B.

Panel A presents the results for the interaction between banking law and creditor

protection and collateral assets. The interaction terms reported are constructed with the dummy variables associated to the legal factors. Results show that legal environment affects the extent of agency problems. Prudent banking regulation enhances leverage levels and furthermore reduces the importance of collateral assets significantly (column 1). Furthermore, the collateral coefficient is not significant. Therefore, economic sectors operating in countries with more prudent banking laws are less constrained to invest in tangible assets in order to access credit. Moreover, those sectors more R+D intense can develop more easily in such a setting. Creditor protection, (column 3) confirms the positive significant effect on leverage previously obtained and besides, the interaction term (*cred2*) is negative and significant; that is good creditor protection favours access to credit to those sectors investing in intangible assets. The results when we include the complete set of legal variables are similar (column 2 and 4), although the banking interaction term is not significant. The results when we introduce the interaction term with the value of the legal variables (not reported) remain unchanged.

Panel B of table 5 presents the results for the other set of interaction variables, those related to growth opportunities. The interaction term of disclosure requirements is only significant when all the legal factors are included in the regression, column2. Only in this case, we can argue that high growing sectors (with more growth opportunities) operating in countries with more developed stock markets will reduce the debt finance. The interaction term of the shareholder protection is not significant. Therefore, better shareholder protection affects negatively leverage levels, that is, being debt and equity somehow substitutes, better protection to external shareholder makes more attractive to resort the stock market to raise capital; however, we do not find an heterogeneous effect across sectors. Henceforth, the secondary effects of the variables related to the stock market development on debt levels are weaker.

4.2. Banking regulation and banking structure

In the estimation of equation (2), we use only smaller industries[16], as they are supposed to be more credit constrained, have less access to credit markets and therefore have less influence on banking structures. The results are presented in table 6. Debt maturity depends positively on the profitability. The ability to provide collateral assets

[16] By smaller sectors we include the BACH classification of small and medium sizes. The reason of including both levels is to obtain a more homogeneous category along the sample. The results obtained using the only small size do not change significantly.

also lengthens debt maturity. Size affects maturity negatively. Therefore, larger industries have easier access to stock markets and present lower levels of long term debt. Leverage ratio and future growth opportunities do not seem to affect debt maturity structure. The former result changes with the introduction of the creditor interaction effect (column 3). In this run, the more leveraged firms present shorter length debt, indicating that most of smaller sectors leverage ratios are short term debt contracts. In connection to the banking structure variables, evidence is mixed. The strategic decisions of banking influence debt maturity. While share tenure affects negatively, industry participations increase debt maturity. Therefore, the establishment of close ties between banks and firms increases the maturity of debt levels, as suggested by standard results of the banking theory. Finally, the coefficient of concentration is weakly significant, however, it is significant when we distinguish between countries above and below the average degree of prudence in banking regulations (column 2). Therefore, in this case, concentration in the banking sector presents positive effects on maturity, although we can not evidence a differential effect associated to the banking law. In column 3, we introduce the interaction between the creditor protection level and banking concentration. Again there is no direct effect of the banking concentration, yet in those countries with better creditor protection, concentration has a positive effect on maturity as expected.

5. Robustness

Now, we present a battery of tests we have realised to check the robustness of the results. Particularly, we check the results obtained in specification (1), because we have used the complete sample and therefore we can analyse the correlations evidenced in different subsamples. First, we check if the conclusions reported are sensitive to the size of national sectors or to the industries included. Afterwards, we check if there are countries that are particularly influential for getting the previous results.

5.1. Size Analysis

Until now, we have analysed all sector sizes without distinction. However, size has been proved to be an important conditioning factor for debenture levels. Henceforth, it is important to examine if the general correlations found are valid, when taking particular sector sizes independently. Then, we separate the economic sectors into two categories: large sectors on the one hand and small and medium on the other. Financial

patterns are said to be affected by firm size (Rajan and Zingales, 1995). Moreover, reputation (proxied by sector size) may alleviate information asymmetries and thus can improve access to credit (Giannetti, 2003). Moreover, large sectors usually can have access to international capital markets reducing their dependence on national economic grounds. Therefore, focusing specially on larger sectors, we might expect less important effect of legal scenario on leverage. Table 7 collects the results for the smaller[17] sectors and table 8 for the larger industries.

For the smaller industries, the signs and significance of the legal variables remain qualitatively similar to those obtained with the whole sample. Interestingly, the magnitude of the coefficients changes. On the one hand, the creditor protection is more important to smaller sectors, as evidenced by the greater coefficient. On the other, disclosure requirements, banking norms and shareholder protection reduce their effects on leverage decrease. This first result is confirmed in the interaction analysis. The only term that is significant is the one relative to creditor protection. This effect is more pronounced than in the total sample Those small industries in higher creditor protection countries are less subject to invest in collateralised assets.

Table 8 presents the results for the larger sectors. Profitability presents a negative and significant coefficient supporting pecking order predictions for larger industries. This result is consistent with the major evidence in the literature and confirms the idea that previous results were adapted to larger firms; therefore when including smaller sectors conclusions differ. The other industry feature coefficients remain qualitatively similar. Related to the legal variables, all of them are significant and except for the creditor protection maintain the expected signs. Creditor protection presents in some realisations a negative sign, consistent with the orthodox view. Therefore, larger sectors that can have access to stock markets, reduce their debt when creditor protection is too strict. However, when we distinguish the countries according to their protection, the coefficient is again positive and the need of collateral is lower for those sectors operating in the high protected countries. Banking regulation effect is more pronounced for larger sectors and their needs of collateral to access the credit market in prudent banking countries are less demanding. Therefore, the firm-banking relationships may be easier the larger the firm.

[17] We use again the size category: small and medium (SME) when we talk about smaller sectors.

5.2. Manufacturing industries and influential countries

Finally, we check if results are affected by the sectors or countries included. Results are presented in table 9 and 10 respectively. Manufacturing sectors replicate mainly the results for the total sample. The main difference is the negative relation found between profitability and leverage levels, coherent with the pecking order hypothesis. Banking regulation is more important to manufacturing sectors, and both the direct and secondary effect present higher coefficients. Therefore, prudent banking regulation encourages more the manufacturing leverage levels, and those sectors operating in such a setting need less collateral to access credit market. Finally, the last check we have realised is to show if any country disproportionately influences the previous results. No strong differences emerge when we exclude the various countries. The major differences are that creditor protection is not significant when we eliminate Netherlands and information quality is not significant any more when USA is dropped from the analysis. Therefore, results seem pretty robust to the different tests we have realised. Table 10 collects the results.

6. Concluding Remarks

Recent contributions claimed with reasonable confidence that institutional environment matters for financial decisions. Beyond this general characterisation of institutions there is a complex structure of rules and economic norms, which shape capital structure. The extent of banking regulation is, in our opinion, part of the most important determinants of such relationship, and it had not been investigated yet. Furthermore, economic rules evolve and the innovations should also be taken into account.

On the one hand, this paper incorporates the banking regulation and disclosure requirements to the analysis of corporate finance decisions. Our findings suggest a significant impact of both banking regulation and disclosure requirements. Besides, we find evidence that creditor protection has a positive effect on firm indebtedness. This finding is consistent with the theoretical predictions and previous empirical work. Furthermore, we find in countries with higher protection to creditors and prudent banking regulations, agency problems are alleviated, since sectors' need of collateral to secure credits is lower. Therefore, designing an adequate banking regulation and protection to creditors helps to overcome the problems associated to asymmetric information. Moreover, reputation and growth opportunities always facilitate the access

to credit. Disclosure requirements and shareholder protection that enhance stock market development have a detrimental effect on leverage levels. These effects are robust to different subsamples; even though, we find some different patterns associated to size. Banking regulation is more important to large sectors, while creditor protection for smaller ones. The effect of profitability also seems to depend on size. These conclusions also take into account the legal reforms passed during the period.

The maturity analysis shows the relevance of the banking structure. Concentration has a positive effect on leverage length. In particular, in those countries above the average in banking regulation. This result supports models predicting that maintaining a certain degree of market power in banking facilitates the development of lending relationships. This result is more important if we bear in mind empirical evidence on maturity debt structure and banking structure. Short-termism is an endemic feature of capital structure, at least in many European countries (Debreil et al, 1996). Furthermore, European banking systems are characterised by the monopolistic competition (Bikker and Groeneveld, 2000). Hence designing an adequate banking law is particularly important for external finance.

To sum up, the consideration of banking regulations and other institutional variables significantly improves the understanding of capital structure decisions. Therefore, future work has to continue this line of research, fully incorporating other economic factors. Additional attention should be paid to the effects of industry sector, whose relation with the institutional environment has to be deepened. In connection to the banking structure, there are other features, different from the legal scenario, that are also relevant for the development of this economic sector. Public ownership of bank holdings or significant public presence in the banking sector is one of these. Actually, in some of the countries analysed the public participation is quite relevant (e. g. Spain). Therefore, the inclusion of this factor in the lending process analysis should shed new light in the knowledge of capital structure. Finally, and given the recent branch of literature on the relationship between institutions and economic growth, we consider interesting to extend this kind of analysis to our improved institutional measures.

Appendix 1: BACH data base.

BACH contains information on 23 sectors, from the new NACE classification (3-digit) (see table A.1). Not all the countries have data for all of the sectors and manufacturing sectors are the best represented. Data contained in BACH program are disaggregated by size. Each sector is divided in three classes depending on the level of turnover: small firms (net turnover inferior to 7 Euro million), medium firms (from 7 to 40 Euro million of net turnover) and large firms (net turnover greater than 40 Euro million[18]).

From 1990 onwards (that is our period of study) there have been some improvements in some aspects: decreasing of some biases and increased representation (table A.2 has the complete information about representation for each country).

Data come from the balance sheet and profit and loss account, as well as data coming from the information on the notes which expand the scope of financial analysis.

NUMBER	**SECTORS AND SUBSECTORS**
100	Energy And Water
200	Industrial Sectors
210	Intermediate Products
211	Extraction Of Metalliferous Ores Preliminary Processing Of Metal
212	Extraction Of Non-Metalliferous Ores And Manuf. Of Non-Metallic Mineral Products
213	Chemicals And Man-Made Fibres
220	Investment Goods And Consumer Durables
221	Manufacture Of Metal Articles, Mechanical And Instrument Engineering
222	Electrical And Electronic Equipment Including Office And Computing Equipment
223	Manufacture Of Transport Equipment
230	Non.Durable Consumption Goods
231	Food, Drink And Tobacco
232	Textiles, Leather And Clothing
233	Timber And Paper Manufacture, Printing
234	Other Manufacturing Industries Not Elsewhere Specified
300	Building And Civil Engineering
400	Trade
410	Wholesale Trade, Recovery Services
420	Sale Of Motor Vehicles, Wholesale And Retail Trade
430	Retail Trade
440	Hotels And Restaurants
500	Transport And Communication
600	Other Services Not Elsewhere Specified

TABLE A.2: SAMPLE FEATURES

COUNTRY	SECTOR STRUCTURE	LARGE FIRM BIAS	OTHER BIASES	REPRESENTATIVE SAMPLE
Austria	Primacy manufacturing firms	High.	Solvent firm bias	Well represented manufacturing industry
Belgium	No bias present	No present		Statistically representative sample
Denmark	Primacy manufacturing firms	Low		Statistically representative sample
France	Manufacturing 56% Services 23%	Low, small and medium firms well represented		Non statistic sample
Germany	Primacy manufacturing firms	High. Large firms mean 65% of added value.	Solvent firm bias	It is not statistically representative but covers about 60% of total sales
Italy	60% Manufacturing 30% Services	Low		Non statistic sample, covers about 55% of Manufacturing industry.
Japan	Manufacturing 35% Servicce 50%	None		Statistically representative sample.
Netherlands	Good representative sample	Non important		Statistic sample
Portugal	70% Manufacturing.	Non important		Non statistic sample
Spain	Good representative sample	High	Public firms	Covers about 40% of non financial firms
United States	Building and other services non represented	None		Statistically representative sample

Based :Cano Prieto, J. R. Banco de España, Central de Balances.

[18] Exchange rate were obtained from the historical series of each country. The calculation was done using the 1990-95 simple average.

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TABLE 1: Theoretical background.

Impact on leverage volume

Panel A

VARIABLE	LEVERAGE VOLUME
Size (proxied by logarithm of total assets)	↑ Rajan and Zingales (1995) Myers (1984)
Internal funds (proxied by profitability ratio)	↓ Myers and Majluf (1984) ↑ Jensen (1986)
Collateral (proxied by tangible assets)	↑ Assymetric information theory
Growth opportunities (proxied by growth rate of value added)	↓ Myers (1977) ↑ Giannetti (2003)

Panel B: Institutional factors

VARIABLE	LEVERAGE VOLUME
Creditor Rights	↑ Ortodox theories (Gertner and Scharfstein, 1991, La Porta et al. 1998, Fabbri, 2001) ↓ Critical theories (Bebchuk and Fried, 1996, Manove et al. 1998)
Shareholder Rights	↓ Jensen and Mecking (1976), Grossman, Hart and Moore (1988), La Porta et al. (1999b)
Banking Regulation	↑ Suarez (1993), Petersen and Rajan (1995), Caminal and Matutes (1997)
Non-debt tax shields (proxied by depretiation on total assets)	↓ Titman and Wessels (1988)
Disclosure Requirements	↑ Campbell (1979) ↓ Subrahmanyan and Titman, (1999)

TABLE 2: Institutional variables.

Panel A: Shareholder and Creditor Protection.

Shareholder and creditor protection extends La Porta et al (LLSV, 1998a) indexes to include merger regulation. We control for specific protection of shareholders. We sum one point to LLSV shareholder index, if control of boards of Directors is present (Dir. Cont), that is no restriction to market mechanism. When equal treatment to all shareholders is guaranteed we sum one point as well. Thirdly we increase the index in one unit more if defensive tactics are absent. Creditor index is an extension of LLSV as it includes merger protection to firm operations and creditors.

Regulation	**Shareholder protection**					**Creditor protection**		
	LLSV	Dir cont	Eq. treat	def tacts	**total**	LLSV	merger	**Total**
Austria	2	0	1	1	**4**	3	0	**3**
Belgium	0	0	1	0	**1**	2	1	**3**
Denmark	2	0	1	1	**4**	3	1	**4**
France	3	1	1	0	**5**	0	0	**0**
Germany	1	0	1	1	**3**	3	0	**3**
Italy	1	0	0	0	**1**	2	0	**2**
Japan	4	0	0	0	**4**	2	0	**2**
Netherlands	2	0	0	0	**2**	2	0	**2**
Portugal	3	1	1	0	**5**	1	0	**1**
Spain	4	0	1	0	**5**	2	0	**2**
Usa	5	1	1	1	**8**	1	0	**1**

Panel B: Banking Legislation.

Variable construction has done from comparative studies by InterBank Research Organization (1978) and Parejo et al.(1993). Furthermore national laws have been used. Updating taken into consideration since 1990. There are nine categories. License granting needed, necessity from community, board of directors requirements, separation of activities, restriction to participation held in nonfinancial firms and other financial entities respectively, restriction to own share holding, loan concentration risk control, merger permission, restriction to branch opening.

Regulation	Lisen.	Com.	Board	Separ	Partic-	Own	Loan	Merg.	Branch	
Austria	1	0	1	0	1+1	1	1	1	0	**7**
Belgium	1	1	1	0	1+0	0	1	1	0	**6**
Denmark	1	0	1	1	1+1	1	1	1	0	**8**
France	1	1	1	0	1+0	0	1	1	0	**6**
Germany	1	0	1	0	1+0	0	1	1	0	**5**
Italy	1	1	1	0	1+0	0	1	1	1	**7**
Japan	1	1	1	1(0)$_a$	0+1	0	1	1	1(0)$_a$	**8(6)$_a$**
Netherlands	1	0	1	0	1+0	0	1	1	0	**5**
Portugal	1	0	1	0	1+0	0	0	1	0	**4**
Spain	1	0	1	0	0+0*	1	1	1	0	**5**
Usa	1	1	1	1	1+1	0	1	1	1(0)$_b$	**9(8)$_b$**

Note: *Lowest limitation to non financial firm participation, therefore very weak control (almost non existence).

a: the value in brackets is valid from 1993 on. b: the value in brackets is valid from 1997 on.

TABLE 2: Institutional variables (cont).

Panel C: Information requirements.

Disclosure requirements (disclos) capture all the information available for investors. If annual accounts have a strict pattern we sum one unit to the index. If merger information must be public at the same time it is communicated to authorities, we add one point. We sum one point for information requirements to participate in stock markets. Finally, we sum an extra point when auditing is compulsory for all large firms (not only firms participating in capital markets).

	disclosure requirements (disclos)				
	Strict	Merger	stock mkt	auditing	**total**
Austria	1	1	1	1	**4**
Belgium	1	1	1	1	**4**
Denmark	0	1	1	0/1*	**2/3***
France	1	1	1	1	**4**
Germany	1	1	1	1	**4**
Italy	1	1	1	0	**3**
Japan	1	1	1	1	**4**
Netherlands	0	0/1*	1	1	**2/3***
Portugal	1	1	1	1	**4**
Spain	1	1	1	1	**4**
Usa	1	1	1	1	**4**

*From 1993 the partial score is one and therefore the total value of disclos increased. It reflects a legal change.

TABLE 3: Summary statistics.

Lever is leverage ratio. Mat is the maturity ratio. Roa is return on assets ratio. Collat is the percentage of fixed assets on total assets. Grop accounts for growth opportunities

.

Panel A: Summary statistics for Countries and all economic sectors.

		AUS	BEL	DNK	FRA	GER	ITA	JPN	NTLS	POR	SPA	US	avg	stdev
	Mean	0.63	0.59	0.60	0.62	0.60	0.66	0.69	0.54	0.54	0.56	0.50	**0.59**	**0.06**
LEVE	Std	0.15	0.11	0.10	0.08	0.16	0.08	0.11	0.10	0.11	0.10	0.05	**0.10**	**0.03**
	min	0.27	0.13	0.33	0.33	0.22	0.36	0.41	0.26	0.14	0.23	0.33	**0.27**	**0.09**
	max	1.14	0.85	0.93	0.81	0.86	1.53	0.96	0.91	0.82	0.92	0.74	**0.95**	**0.22**
	Mean	0.29	0.31	0.30	0.32	0.22	0.20	0.34	0.38	0.31	0.23	0.43	**0.30**	**0.07**
MATU	Std	0.13	0.12	0.08	0.14	0.08	0.10	0.11	0.12	0.14	0.13	0.10	**0.11**	**0.02**
	min	0.00	0.08	0.02	0.06	0.03	0.03	0.12	0.08	0.01	0.00	0.24	**0.06**	**0.07**
	max	0.87	0.77	0.59	0.90	0.43	0.72	0.70	0.81	0.91	0.73	0.68	**0.74**	**0.14**
	Mean	0.34	0.25	0.28	0.30	0.23	0.26	0.34	0.34	0.39	0.32	0.31	**0.31**	**0.05**
COLL	Std	0.14	0.12	0.16	0.11	0.08	0.12	0.11	0.14	0.15	0.14	0.07	**0.12**	**0.03**
	min	0.07	0.04	0.00	0.02	0.07	0.05	0.05	0.08	0.10	0.06	0.17	**0.06**	**0.04**
	max	0.88	0.67	0.63	0.78	0.40	0.76	0.78	0.85	0.95	0.82	0.57	**0.74**	**0.16**
	Mean	0.00	-0.06	0.01	0.01	-0.01	0.00	-0.01	0.00	0.00	0.01	0.00	**0.00**	**0.02**
GROP	Std	-0.17	0.53	-0.09	-0.16	0.06	-0.13	-0.07	-0.09	-0.42	-0.13	-0.07	**-0.07**	**0.23**
	min	0.77	-7.75	0.28	0.53	-0.24	0.53	0.28	0.42	5.46	0.58	0.36	**0.11**	**3.03**
	max	1.37	2.56	0.54	2.57	0.26	1.19	0.47	0.42	3.41	1.58	0.30	**1.33**	**1.09**
	Mean	0.11	0.14	0.16	0.14	0.15	0.10	0.11	0.14	0.14	0.11	0.15	**0.13**	**0.02**
ROA	Std	-0.04	0.80	-0.05	-0.03	0.03	-0.03	0.03	0.04	-0.24	-0.05	0.04	**0.05**	**0.26**
	min	0.03	-3.49	0.11	0.01	0.02	0.05	0.01	-0.03	1.26	0.36	0.03	**-0.15**	**1.17**
	max	0.37	20.29	0.47	0.25	0.25	0.19	0.25	0.28	4.77	0.28	0.26	**2.51**	**6.05**

TABLE 3: Summary statistics. (cont.)

Lever is leverage ratio. Mat is the maturity ratio. Roa is return on assets ratio. Collat is the percentage of fixed assets on total assets. Grop accounts for growth opportunities

Panel B: Summary statistics for countries and manufacturing sectors.

		AUS	BEL	DNK	FRA	GER	ITA	JPN	NTL	POR	SPA	US	AVG	STD
	mea	0.59	0.56	0.60	0.59	0.56	0.64	0.66	0.53	0.52	0.55	0.50	**0.57**	**0.05**
LEV	sdev	0.13	0.09	0.10	0.06	0.16	0.07	0.11	0.10	0.10	0.09	0.05	**0.10**	**0.03**
	min	0.35	0.19	0.33	0.33	0.22	0.43	0.41	0.26	0.14	0.25	0.33	**0.29**	**0.09**
	max	0.94	0.85	0.93	0.73	0.83	1.53	0.84	0.91	0.82	0.88	0.74	**0.91**	**0.22**
	Mea	0.31	0.32	0.30	0.33	0.24	0.20	0.35	0.38	0.31	0.22	0.43	**0.31**	**0.07**
MAT	Sdev	0.10	0.10	0.07	0.10	0.07	0.07	0.09	0.10	0.13	0.11	0.10	**0.09**	**0.02**
	min	0.06	0.12	0.02	0.12	0.06	0.09	0.17	0.08	0.01	0.03	0.24	**0.09**	**0.07**
	max	0.71	0.77	0.59	0.90	0.43	0.72	0.70	0.75	0.91	0.68	0.68	**0.71**	**0.13**
	Mea	0.35	0.25	0.28	0.30	0.25	0.26	0.35	0.33	0.40	0.32	0.31	**0.31**	**0.05**
COL	Sdev	0.11	0.08	0.16	0.07	0.06	0.09	0.09	0.12	0.12	0.10	0.07	**0.10**	**0.03**
	Min	0.14	0.09	0.00	0.02	0.11	0.11	0.18	0.08	0.16	0.15	0.17	**0.11**	**0.06**
	Max	0.88	0.64	0.63	0.61	0.40	0.70	0.78	0.85	0.95	0.72	0.57	**0.70**	**0.16**
	Mea	0.00	-0.02	0.01	0.02	-0.01	0.00	-0.01	-0.01	0.02	0.01	0.00	**0.00**	**0.01**
GRO	Sdev	0.13	0.14	0.09	0.19	0.06	0.11	0.08	0.09	0.20	0.14	0.07	**0.12**	**0.05**
	Min	-0.53	-0.55	-0.28	-0.53	-0.24	-0.53	-0.28	-0.42	-0.75	-0.58	-0.36	**-0.46**	**0.16**
	Max	0.94	0.92	0.54	2.57	0.26	1.07	0.47	0.24	1.76	1.58	0.30	**0.97**	**0.74**
	Mea	0.12	0.13	0.16	0.14	0.15	0.11	0.12	0.14	0.14	0.12	0.15	**0.13**	**0.02**
ROA	Sdev	0.03	0.03	0.04	0.02	0.03	0.03	0.02	0.04	0.08	0.05	0.04	**0.04**	**0.02**
	Min	-0.03	-0.11	-0.11	-0.01	0.04	-0.05	0.05	-0.03	-0.57	-0.36	0.03	**-0.10**	**0.19**
	Max	0.23	0.25	0.27	0.20	0.25	0.19	0.20	0.28	0.36	0.28	0.26	**0.25**	**0.05**

TABLE 3: Summary statistics (cont).

Panel C: Summary statistics for economic sectors.

Lever is leverage ratio, calculated as total debt (banking credit, trade creditors and debenture loans) on total assets. Profit is return on assets ratio (profit before tax plus interest and depreciation over total assets). Collat is the percentage of tangible assets on total assets. Ntds is non-debt tax shield and is proxied by the amount of depreciation and provisions on total assets Grop accounts for growth opportunities (growth rate of value added between t and t+1). Averg presents the arithmetic average across country and size for the period 1990-1999. Std. dev. is the standard deviation for the same period and median the median across sector and size for 1990-1999. Book data from BACH database

	LEV				MAT				ROA				COL				GR0			
Sect	**Mn**	**Sd**	**Min**	**Max**	**Mn**	**Sd**	**Min**	**Max**	**Mn**	**Sd**	**Min**	**Max**	**Mn**	**Sd**	**Min**	**Max**	**Mn**	**Sd**	**Min**	**Max**
100	**0.53**	0.17	0.19	0.93	**0.49**	0.16	0.02	0.91	**0.11**	0.09	-0.57	0.21	**0.53**	0.17	0.11	0.95	**0.02**	0.29	-0.75	2.57
200	**0.58**	0.09	0.33	0.82	**0.29**	0.08	0.12	0.49	**0.13**	0.02	0.05	0.20	**0.28**	0.08	0.00	0.45	**0.00**	0.05	-0.17	0.21
210	**0.53**	0.10	0.25	0.80	**0.32**	0.08	0.12	0.53	**0.14**	0.04	0.03	0.29	**0.32**	0.09	0.00	0.51	**-0.01**	0.07	-0.20	0.37
211	**0.59**	0.14	0.31	1.53	**0.34**	0.14	0.07	0.90	**0.11**	0.07	-0.36	0.30	**0.34**	0.13	0.00	0.72	**0.02**	0.25	-0.58	1.95
212	**0.52**	0.11	0.14	0.83	**0.35**	0.10	0.01	0.71	**0.16**	0.05	0.06	0.36	**0.34**	0.09	0.00	0.55	**-0.01**	0.11	-0.31	0.66
213	**0.52**	0.11	0.22	0.79	**0.29**	0.10	0.03	0.52	**0.15**	0.03	-0.03	0.24	**0.29**	0.08	0.00	0.44	**-0.01**	0.09	-0.35	0.34
220	**0.59**	0.09	0.35	0.82	**0.25**	0.08	0.07	0.48	**0.13**	0.03	0.02	0.23	**0.24**	0.07	0.00	0.40	**0.00**	0.06	-0.18	0.27
221	**0.60**	0.09	0.24	0.82	**0.25**	0.08	0.06	0.48	**0.13**	0.03	-0.02	0.27	**0.23**	0.08	0.00	0.41	**0.00**	0.07	-0.25	0.29
222	**0.58**	0.10	0.32	0.86	**0.24**	0.10	0.03	0.65	**0.13**	0.04	-0.03	0.27	**0.21**	0.07	0.00	0.39	**0.00**	0.13	-0.53	1.11
223	**0.62**	0.11	0.27	0.89	**0.26**	0.11	0.06	0.76	**0.11**	0.04	-0.11	0.24	**0.27**	0.09	0.00	0.58	**0.02**	0.21	-0.53	1.76
230	**0.59**	0.09	0.35	0.85	**0.31**	0.09	0.12	0.61	**0.14**	0.02	0.08	0.20	**0.30**	0.08	0.00	0.50	**-0.01**	0.04	-0.22	0.17
231	**0.59**	0.10	0.35	0.86	**0.30**	0.10	0.06	0.60	**0.14**	0.03	0.07	0.24	**0.32**	0.09	0.00	0.56	**-0.01**	0.07	-0.26	0.22
232	**0.59**	0.09	0.33	0.81	**0.29**	0.11	0.06	0.69	**0.13**	0.03	0.03	0.21	**0.25**	0.09	0.00	0.45	**0.00**	0.07	-0.20	0.27
233	**0.59**	0.10	0.26	0.86	**0.33**	0.11	0.15	0.71	**0.14**	0.03	0.05	0.22	**0.33**	0.10	0.00	0.66	**-0.01**	0.07	-0.28	0.56
234	**0.60**	0.09	0.38	0.87	**0.29**	0.09	0.03	0.52	**0.15**	0.04	-0.10	0.28	**0.30**	0.08	0.00	0.48	**0.00**	0.08	-0.32	0.61
300	**0.72**	0.10	0.40	0.91	**0.18**	0.08	0.03	0.62	**0.09**	0.03	0.01	0.27	**0.16**	0.08	0.03	0.53	**0.00**	0.10	-0.52	0.36
400	**0.69**	0.09	0.43	0.92	**0.20**	0.08	0.06	0.49	**0.10**	0.04	-0.13	0.18	**0.20**	0.08	0.08	0.43	**-0.05**	0.55	-7.75	0.30
410	**0.69**	0.09	0.38	0.86	**0.17**	0.06	0.04	0.37	**0.10**	0.04	-0.13	0.18	**0.15**	0.05	0.05	0.27	**-0.04**	0.32	-3.60	0.35
420	**0.72**	0.09	0.42	0.98	**0.16**	0.09	0.00	0.46	**0.10**	0.04	-0.04	0.23	**0.18**	0.08	0.05	0.40	**0.01**	0.14	-0.40	0.71
430	**0.68**	0.11	0.40	0.96	**0.24**	0.09	0.09	0.49	**0.12**	0.03	0.03	0.24	**0.28**	0.09	0.13	0.57	**-0.01**	0.09	-0.39	0.37
440	**0.63**	0.17	0.13	1.14	**0.49**	0.17	0.00	0.85	**0.13**	0.05	0.05	0.47	**0.53**	0.18	0.04	0.86	**0.01**	0.16	-0.33	1.09
500	**0.59**	0.12	0.23	0.97	**0.45**	0.15	0.14	0.87	**0.13**	0.32	-1.26	4.77	**0.54**	0.14	0.21	0.82	**0.00**	0.55	-5.46	3.41
600	**0.62**	0.12	0.33	0.96	**0.38**	0.14	0.05	0.87	**0.18**	1.45	-3.49	2.03	**0.27**	0.13	0.05	0.74	**-0.05**	0.69	-7.65	2.56

TABLE 4: Determinants of leverage.

The dependent variable, lever, is the leverage ratio on industry k and country i at time t. Industry attributes are profitability (roa), size (logsales), tangible assets (collat) and non-debt tax shields (ndts). Legal variables included are banking regulation (*bank*), creditor protection (*cred*), shareholder protection (*share)*,and disclosure requirements (*disclos*). Standard errors (in parenthesis) corrected for heteroskedasticity. All specifications include time effects.

	Lever	lever	lever	lever	lever
roa	0.0185**	0.0207***	0.1137***	0.1137***	0.1129***
	(0.0073)	(0.0073)	(0.0066)	(0.0066)	(0.0066)
collat	-0.0001	0.0000	0.0022***	0.0022***	0.0024***
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
size	0.0051	0.0057	0.0913***	0.0913***	0.0925***
	(0.0057)	(0.0057)	(0.0041)	(0.0041)	(0.0041)
amo	-0.1237***	-0.1351***	-0.7643***	-0.7643***	-0.7633***
	(0.0359)	(0.0360)	(0.0267)	(0.0267)	(0.0266)
groppor	0.0118**	0.0113**	0.0392***	0.0392***	0.0387***
	(0.0047)	(0.0047)	(0.0077)	(0.0077)	(0.0077)
bank	0.0057***				0.0104***
	(0.0017)				(0.0033)
disclos		-0.0137***			-0.0299***
		(0.0038)			(0.0069)
share			-0.0435***		-0.0163***
			(0.0016)		(0.0017)
cred				0.0205***	0.0641***
				(0.0019)	(0.0048)
Constant	0.5626***	0.6506***	0.8303***	0.5948***	0.5633***
	(0.0132)	(0.0141)	(0.0125)	(0.0061)	(0.0328)
Obs	5499	5499	5499	5499	5499
R-squared	0.04	0.04	0.40	0.40	0.40
Hausman test[19]	111.29a	109.15a	40.38b	40.30b	275.86a
Sector effects	Yes	Yes	Yes	Yes	Yes
Country effects	Yes	Yes	No	No	No
Country dummies	No	No	Yes	Yes	Yes

*significant at 10%; ** significant at 5%; *** significant at 1%

Hausman test: a significant at 1%, b significant at 5% and c significant at 10%

TABLE 5: Determinants of leverage. Interaction effects

Panel A

The dependent variable, lever, is the leverage ratio on industry k and country i at time t. Industry attributes are profitability (roa), size (logsales), tangible assets (collat), growth opportunities (groppor) and non-debt tax shields (amo). Legal variables included are banking regulation (*bank*), creditor protection (*cred*), shareholder protection (*share),*and disclosure requirements (*disclos*). Standard errors (in parenthesis) corrected for heteroskedasticity. All specifications include time effects.

	(1)	(2)	(3)	(4)
	lever	lever	lever	Lever
roa	0.0186**	0.1130***	0.1169***	0.1158***
	(0.0073)	(0.0066)	(0.0066)	(0.0066)
Collat	0.0001	0.0024***	0.0034***	0.0033***
	(0.0001)	(0.0002)	(0.0003)	(0.0003)
Size	0.0054	0.0925***	0.0942***	0.0947***
	(0.0057)	(0.0041)	(0.0041)	(0.0041)
amo	-0.1249***	-0.7638***	-0.7838***	-0.7807***
	(0.0358)	(0.0267)	(0.0269)	(0.0269)
groppor	0.0119**	0.0387***	0.0396***	0.0392***
	(0.0047)	(0.0077)	(0.0077)	(0.0077)
Disclos		-0.0297***		-0.0236***
		(0.0070)		(0.0071)
Share		-0.0164***		-0.0177***
		(0.0018)		(0.0018)
cred		0.0644***	0.0313***	0.0747***
		(0.0050)	(0.0029)	(0.0055)
Bank	0.0086***	0.0109***		0.0105***
	(0.0022)	(0.0038)		(0.0033)
Bank2	-0.0002**	-0.0000		
	(0.0001)	(0.0002)		
Cred2			-0.0005***	-0.0004***
			(0.0001)	(0.0001)
Constant	0.5393***	0.5591***		
	(0.0172)	(0.0363)		
Observations	5499	5499	0.5736***	0.5212***
R-squared	0.04	0.40	(0.0074)	(0.0343)
Hausman test	547.94a	1298.90a	63.44a	238.40[a]
Sector effects	Yes	Yes	Yes	Yes
Country effects	Yes	No	No	No
Country dummies	No	No	Yes	Yes

*significant at 10%; ** significant at 5%; *** significant at 1%
Hausman test: a significant at 1%, b significant at 5% and c significant at 10%

TABLE 5: Determinants of leverage. Interaction effects

Panel B

The dependent variable, lever, is the leverage ratio on industry k and country i at time t. Industry attributes are profitability (roa), size (logsales), tangible assets (collat), growth opportunities (groppor) and non-debt tax shields (amo). Legal variables included are banking regulation (*bank*), creditor protection (*cred*), shareholder protection (*share),*and disclosure requirements (*disclos*). Standard errors (in parenthesis) corrected for heteroskedasticity. All specifications include time effects.

	(1)	(2)	(3)	(4)
	lever	Lever	lever	Lever
Roa	0.0207***	0.1127***	0.1138***	0.1130***
	(0.0073)	(0.0066)	(0.0067)	(0.0066)
Collat	0.0000	0.0024***	0.0022***	0.0024***
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Size	0.0061	0.0926***	0.0913***	0.0925***
	(0.0057)	(0.0041)	(0.0041)	(0.0041)
amo	-0.1349***	-0.7638***	-0.7644***	-0.7633***
	(0.0360)	(0.0266)	(0.0267)	(0.0266)
groppor	0.0242**	0.0811***	0.0406***	0.0394***
	(0.0111)	(0.0206)	(0.0133)	(0.0133)
bca		0.0103***		0.0104***
		(0.0033)		(0.0033)
accion		-0.0163***	-0.0435***	-0.0163***
		(0.0017)	(0.0016)	(0.0017)
acreed		0.0640***		0.0641***
		(0.0048)		(0.0048)
disclos	-0.0136***	-0.0299***		-0.0299***
	(0.0038)	(0.0069)		(0.0069)
dis2	-0.0149	-0.0488**		
	(0.0117)	(0.0220)		
Shar2			-0.0020	-0.0011
			(0.0161)	(0.0160)
Constant	0.6503***	0.5643***	0.8303***	0.5634***
	(0.0141)	(0.0328)	(0.0125)	(0.0328)
Observations	5499	5499	5499	5499
R-squared	0.04	0.40	0.40	0.40
Hausman test	110.00a	280.80[a]	8719.78a	268.75a
Sector effects	Yes	Yes	Yes	Yes
Country effects	Yes	No	No	No
Country dummies	No	No	Yes	Yes

*significant at 10%; ** significant at 5%; *** significant at 1%
Hausman test: a significant at 1%, b significant at 5% and c significant at 10%

TABLE 6: Maturity and banking structure.

The dependent variable is maturity ratio on industry k and country i at time t. Industry attributes are profitability (roa), size (logsales), tangible assets (collat) and growth opportunities (groppor). Financial structure variables are concentration in the banking sector (concentr), shares owned (sharown), participation in other companies (parti) and deposits (depos).

	(1)	(2)	(3)
	matur2	matur2	matur2
Lever	-0.4749	-0.1843	-0.6129**
	(0.3065)	(0.2674)	(0.2666)
Roa	0.0401***	0.0416***	0.0397***
	(0.0043)	(0.0038)	(0.0044)
Collat	0.0010***	0.0011***	0.0010***
	(0.0002)	(0.0002)	(0.0002)
Size	-0.1728***	-0.1751***	-0.1729***
	(0.0083)	(0.0074)	(0.0086)
Groppor	-0.0129	-0.0173**	-0.0115
	(0.0080)	(0.0071)	(0.0080)
Depos	-0.0254	0.0084	-0.0563
	(0.0417)	(0.0412)	(0.0458)
Sharown	-0.0433**	-0.0360**	-0.0452**
	(0.0186)	(0.0182)	(0.0197)
Parti	0.9391***	0.8316***	1.0363***
	(0.1720)	(0.1543)	(0.1832)
Concentr	0.0226^	0.0332*	-0.0180
	(0.0176)	(0.0172)	(0.0322)
Conbank		-0.0094	
(Concentr*bank)		(0.0165)	
Concred			0.0527*
(Concentr*cred)			(0.0316)
Constant	0.5088**	0.3110*	0.6186***
	(0.2071)	(0.1842)	(0.1881)
Obs	4662	4662	4662

Note: ^significant at 15%, *significant at 10%; ** significant at 5%; *** significant at 1%
Hausman test: a significant at 1%, b significant at 5% and c significant at 10%

TABLE 7: Robustness. Small and medium sectors

The dependent variable, lever, is the leverage ratio on industry k and country i at time t. Industry attributes are profitability (roa), size (logsales), collateral (collat) and non-debt tax shields (amo). Legal variables included are banking regulation (*bank*), creditor protection (*cred*), shareholder protection (*share*) and disclosure requirements (*disclos*). Standard errors and t-statistics (in parenthesis) are corrected for heteroskedasticity.

	(1)	(2)	(3)	(5)	(4)
	Lever	lever	lever	lever	lever
Roa	0.0764***	0.0763***	0.0754***	0.0766***	0.0764***
	(0.0073)	(0.0073)	(0.0073)	(0.0074)	(0.0073)
Collar	0.0013***	0.0013***	0.0006***	0.0013***	0.0013***
	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)
logsales	0.0608***	0.0604***	0.0562***	0.0608***	0.0608***
	(0.0049)	(0.0049)	(0.0049)	(0.0049)	(0.0049)
Amo	-0.5049***	-0.5035***	-0.4934***	-0.5052***	-0.5058***
	(0.0329)	(0.0329)	(0.0327)	(0.0329)	(0.0329)
groppor	0.0313***	0.0311***	0.0310***	0.0328**	0.0541***
	(0.0084)	(0.0084)	(0.0084)	(0.0130)	(0.0202)
Bca	0.0089***	0.0067*	0.0085**	0.0089***	0.0089***
	(0.0034)	(0.0040)	(0.0034)	(0.0034)	(0.0034)
Disclos	-0.0156**	-0.0169**	-0.0255***	-0.0156**	-0.0155**
	(0.0077)	(0.0078)	(0.0078)	(0.0077)	(0.0077)
Share	-0.0149***	-0.0144***	-0.0168***	-0.0149***	-0.0150***
	(0.0019)	(0.0019)	(0.0019)	(0.0019)	(0.0019)
Cred	0.0783***	0.0770***	0.0487***	0.0783***	0.0782***
	(0.0051)	(0.0052)	(0.0068)	(0.0051)	(0.0051)
Bank1		0.0002			
		(0.0002)			
Cred2			0.0015***		
			(0.0002)		
Shar2				-0.0025	
				(0.0165)	
Dis2					-0.0271
					(0.0220)
Constant	0.5116***	0.5314***	0.6245***	0.5116***	0.5120***
	(0.0347)	(0.0390)	(0.0386)	(0.0347)	(0.0347)
Observations	3755	3755	3755	3755	3755
R-squared	0.50	0.50	0.51	0.50	0.50
Hausman Test	212.95a	399.62a	680.30a	231.04a	212.94a

*significant at 10%; ** significant at 5%; *** significant at 1%

Hausman test: a significant at 1%, b significant at 5% and c significant at 10%

TABLE 8: Robustness. Larger sectors

The dependent variable, lever, is the leverage ratio on industry k and country i at time t. Industry attributes are profitability (roa), size (logsales), collateral (intang) and non-debt tax shields (ndts). Legal variables included are banking regulation (*bank*), creditor protection (*cred*), shareholder protection (*share*) and disclosure requirements (*disclos*). Standard errors and t-statistics (in parenthesis) are corrected for heteroskedasticity.

	(1)	(2)	(3)	(4)	(5)
	lever	lever	lever	Lever	lever
roa	-0.6474***	-0.6547***	-0.8784***	-0.6477***	-0.6448***
	(0.0526)	(0.0524)	(0.0420)	(0.0526)	(0.0526)
Collat	0.0018***	0.0021***	0.0044***	0.0018***	0.0018***
	(0.0002)	(0.0003)	(0.0002)	(0.0002)	(0.0002)
Size	0.0945***	0.0947***	0.1585***	0.0945***	0.0946***
	(0.0068)	(0.0068)	(0.0053)	(0.0068)	(0.0068)
Amo	-0.4987***	-0.5091***	-0.8145***	-0.4991***	-0.4973***
	(0.0481)	(0.0481)	(0.0277)	(0.0482)	(0.0482)
groppor	0.0303***	0.0291***	0.0471***	0.0230	0.0681*
	(0.0109)	(0.0109)	(0.0097)	(0.0241)	(0.0366)
Bca	0.0145***	0.0230***	0.0209***	0.0145***	0.0144***
	(0.0049)	(0.0055)	(0.0035)	(0.0049)	(0.0049)
disclos	-0.0258***	-0.0218**	-0.0139*	-0.0258***	-0.0260***
	(0.0094)	(0.0095)	(0.0074)	(0.0094)	(0.0094)
Share	-0.0135***	-0.0147***	-0.0151***	-0.0135***	-0.0135***
	(0.0035)	(0.0035)	(0.0019)	(0.0035)	(0.0035)
cred	-0.0278***	-0.0246***	0.1110***	-0.0278***	-0.0278***
	(0.0036)	(0.0037)	(0.0075)	(0.0036)	(0.0036)
Bank2		-0.0008***			
		(0.0002)			
Cred2			-0.0027***		
			(0.0003)		
Shar2				0.0091	
				(0.0268)	
Dis2					-0.0413
					(0.0382)
Constant	0.7516***	0.6851***	0.3951***	0.7515***	0.7527***
	(0.0434)	(0.0473)	(0.0401)	(0.0434)	(0.0434)
Observations	1744	1744	3993	1744	1744
R-squared	0.48	0.48	0.50	0.48	0.48
Hausman test	3474.99	49.98a	43.67a	38.75b	2842.09a

Note:* significant at 10%; ** significant at 5%; *** significant at 1%

TABLE 9: Robustness. Manufacturing sectors

The dependent variable, lever, is the leverage ratio on industry k and country i at time t. Industry attributes are profitability (roa), size (logsales), collateral (collat) and non-debt tax shields (amo). Legal variables included are banking regulation (*bank*), creditor protection (*cred*), shareholder protection (*share*) and disclosure requirements (*disclos*). Standard errors and t-statistics (in parenthesis) are corrected for heteroskedasticity.

	(1)	(2)	(3)	(4)	(5)
	lever	Lever	lever	lever	lever
roa	-0.8944***	-0.9014***	-0.8784***	-0.8943***	-0.8907***
	(0.0425)	(0.0424)	(0.0420)	(0.0425)	(0.0425)
Collat	0.0030***	0.0036***	0.0044***	0.0030***	0.0030***
	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)
logsales	0.1576***	0.1588***	0.1585***	0.1576***	0.1572***
	(0.0053)	(0.0053)	(0.0053)	(0.0054)	(0.0053)
Amo	-0.7689***	-0.7804***	-0.8145***	-0.7689***	-0.7689***
	(0.0277)	(0.0276)	(0.0277)	(0.0277)	(0.0276)
groppor	0.0506***	0.0495***	0.0471***	0.0449**	0.1260***
	(0.0098)	(0.0098)	(0.0097)	(0.0193)	(0.0239)
Bca	0.0205***	0.0340***	0.0209***	0.0205***	0.0204***
	(0.0036)	(0.0043)	(0.0035)	(0.0036)	(0.0036)
disclos	-0.0317***	-0.0249***	-0.0139*	-0.0317***	-0.0325***
	(0.0073)	(0.0074)	(0.0074)	(0.0073)	(0.0073)
Share	-0.0194***	-0.0225***	-0.0151***	-0.0194***	-0.0192***
	(0.0018)	(0.0019)	(0.0019)	(0.0018)	(0.0018)
cred	0.0552***	0.0633***	0.1110***	0.0552***	0.0554***
	(0.0052)	(0.0054)	(0.0075)	(0.0052)	(0.0052)
Cred2			-0.0027***		
			(0.0003)		
bank2		-0.0011***			
		(0.0002)			
Shar2				0.0075	
				(0.0219)	
Dis2					-0.0894***
					(0.0259)
Constant	0.5994***	0.4824***	0.3951***	0.5992***	0.6019***
	(0.0351)	(0.0405)	(0.0401)	(0.0351)	(0.0351)
Observations	3993	3993	3993	3993	3993
R-squared	0.49	0.49	0.50	0.49	0.49
Hausman test	1403.25a	177.69a	658.19a	667.19a	5375.02a

Note: *significant at 10%; ** significant at 5%; *** significant at 1%
Hausman test: a significant at 1%, b significant at 5% and c significant at 10%

TABLE 10: ROBUSTNESS. EXCLUDING COUNTRIES

The first column reports the results for the total sample. The following columns present the results obtained when eliminating the cited country. Blank cells means non significant result.

	total	AUS	BEL	DEN	FRA	GER	ITA	JAP	NET	POR	SPA	USA
Roa	+	+	+	+	+	+	+	+	+	+	+	+
Collat	+	+	+	+	+	+	+	+	+	+	+	+
Size	+	+	+	+	+	+	+	+	+	+	+	+
Amo	-	-	-	-	-	-	-	-	-	-	-	-
Bank	+	+	+	+	+	+	+	+	+	+	+	+
Cred	+	+	+	+	+	+	+	+		+	+	-
Share	-	-	-	-	-	-	-	-	-	-	-	-
Disclos	-	-	-	-	-	-	-	-	-	-	-	