Security versus Bank Finance: the Importance of a Proper Enforcement of Legal Rules

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Abstract

We argue that in an unreliable enforcement regime, transactions tend to become intermediated through institutions or concentrated among agents bound by some form of private enforcement. Provision of funding shifts from risk capital to debt, and from markets to institutions with long term relations.

When minority investors' rights are poorly protected, the ability of firms to raise equity capital is impaired, leading to less finance for new risky ventures. More generally, fewer firms will be financed with outside equity, resulting in a low capitalization relative to GNP and a predominance of internal (unlisted) equity and bank lending over traded securities.

We report some supporting evidence on a small set of countries on the correlation between investor protection and development of security markets. We use existing measures of investor protection and corruption, as well as a price measure, the premium on voting stock, which is related to the control premium. In countries where the voting premium is large, corporate financing is dominated by bank lending and equity markets are much smaller. The other indicators are also consistent with our hypothesis, although the sample size is limited.

Introduction

The characteristics of financial systems seem to differ significantly across countries. Even across developed economies there is a large disparity in the relative sizes of stock markets. For example, the ratio of the stock market's capitalization to GNP in 1993 was 0.12 in Italy, 0.35 in France and 1.10 in the UK (IFC 1994). The same variation can be found in developing countries. Table I present some facts on the relative size of stock markets for developed as well as developing countries for 1986 and 1993. The general perception is that the relative market capitalization for developing countries is much lower than that of developed countries. In reality the average relative market capitalization of the developing countries almost equals that of the developed countries. As recently as 1986, however, the average ratio of equity capitalization to GNP was 73 % in the set of developed countries and 13% for the developing economies. Most strikingly, there are many examples of developing countries whose stock market capitalization well exceed the average for developed economies. The divergence among developed countries and the recent surge in market capitalization for many developing countries indicate that equity market development is not only a matter of economic development.

At the same time, there are also large differences in the relative size of debt markets and the relative shares of bank loans and corporate bonds across countries. In the so-called bank dominated financial systems (such as Germany and Japan), firms rely more on bank debt than bonds; the reverse pattern seems to hold for the US.

Table I: Stock Market Capitalization over GNP in various countries

Developed Countries	Capitalization/GNP		Developing Countries	Capitalization/GNP	
	1986	1993		1986	1993
Australia	0.23	0.66	Argentina	0.02	0.18
Austria	0.08	0.16	Bangladesh	0.01	0.02
Belgium	0.38	0.37	Brazil	0.16	0.21
Canada	0.56	0.57	Chile	0.27	1.05
Denmark	0.27	0.33	Colombia	0.02	0.19
Finland	0.20	0.25	Costa Rica	0.06	0.06
France	0.24	0.35	Egypt	0.06	0.10
Germany	0.34	0.23	Greece	0.03	0.16
Italy	0.27	0.12	India	0.06	0.37
Japan	1.10	0.76	Indonesia	0.00	0.24
Luxembourg	5.26	1.36	Jamaica	0.25	0.44
Netherlands	0.57	0.57	Jordan	0.52	1.00
N. Zealand	0.21	0.57	Korea	0.14	0.41
Norway	0.20	0.24	Malaysia	0.59	3.67
Spain	0.22	0.22	Mexico	0.05	0.62
Sweden	0.57	0.50	Morocco	0.02	0.10
Switzerland	1.10	1.07	Nigeria	0.02	0.03
UK	1.41	1.10	Pakistan	0.05	0.22
USA	0.62	0.82	Peru	0.09	0.15
			Philippines	0.07	0.74
			Portugal	0.05	0.16
			Sri Lanka	0.07	0.23
			Thailand	0.07	1.09
			Trin Tobago	0.08	0.11
			Turkey	0.02	0.30
			Venezuela	0.03	0.14
			Zimbabwe	0.08	0.24
Average	0.73	0.54		0.11	0.45

Source: Emerging Stock Markets Factbook and International Financial Statistics.

These differences have received increasing attention from academics over the last years. The main approach taken by the literature has been to compare the efficiency of the different forms of financing in solving informational frictions and agency problems between investors and managers. One of the underlying ideas of this literature is that (external) financing not only concerns the design and allocation of cash flow rights, but also defines the

allocation of control rights.1 However, an issue that is often neglected in this literature is that these rights are enforced through the legal framework. The degree to which a legal framework performs this task effectively may vary significantly across forms of financing as well as among countries.

Our claim is that the attractiveness of securities versus intermediated finance is most sensitive to the quality of the legal environment. Securities are standardized arm's length contractual relationships, in which the inventor rights are specified largely in the law; the enforcement of these rights depends on the quality of the legal system. An inadequate legal framework impairs the development of security markets as it leads to expropriation of small shareholders and bondholders and favors bank lending. As a consequence, the provision of funding shifts from dispersed risk capital more exposed to the risk of expropriation to debt, and from markets to institutions, i.e. towards intermediated credit. We argue that these differences are relevant to explain some of the differences across countries, cross-sectional as well as over time.

We are not the first ones to stress the role of legal protection in the development of financial markets. La-Porta, Lopes-De-Silanes, Shleifer and Vishny (1997) address the importance of shareholder and creditor protection for the relative size of stock and debt markets across countries. They find a positive relation between shareholder protection, measured by the quality of the control rights of shareholders and the quality of their enforcement, and stock market financing. A similar effect is found for creditor protection on the ratio of debt over GNP. While La Porta et al analyze how creditor protection can explain the debt over GNP ratio lumping bond and bank debt financing together our approach, in contrast, points at the effects of the legal framework for the relative attractiveness of security market financing. Our claim is that poor investor protection hampers the development of security markets, and pushes firms towards intermediated credit.

The lack of a developed equity market is a particularly serious disadvantage for the emergence and growth of innovative firms, for which equity is essential (Myers, 1977). Their

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1 Dewatripont and Maskin (1995) and Von Thadden (1995) compare the disciplining advantages of market versus bank financing. Boot and Thakor (1997) show how banks may focus on solving moral hazard problems while equity markets provide valuable information to the firm about the prospect of investments. See Thakor (1996) for an extensive discussion on these and other papers.

expansion is constrained to be financed with internal funds, which in general will not match the investment opportunities available, or with bank intermediation.2 The disadvantages of bank credit lies in its incapacity to support rapid expansion based on future prospects as opposed to current net worth. Arguably, it is precisely the insistence on collateral that favors banks in poor contractual enforcement regimes. It may also be exclusively inappropriate in emerging industries, At the same time, exclusive reliance on bank financing may create an informational monopoly for the banks, which allows them to obtain large rents which, via high int. rates, weakens incentives Rajan (1992).

In the first section we present our main argument. The second part provides some suggesting evidence. We identify a price measure as a measure for the degree of minority shareholder protection and compare it with the relative importance of security markets in a small number of countries from which such data are available. We also apply our perspective to the recent surge in stock market capitalization of the countries reported in Table I.

Section I   Unreliable legal framework and the development of security markets

Public enforcement of contract law facilitates private arrangements by providing a vehicle for contractual commitments. In addition, regulatory rules complement private contracts by providing default and standard clauses. Under ideal conditions of no transaction costs, private negotiation may in principle deliver any efficient outcome (Coase, 1960). It is important to realize, however, that legal rules alone are not sufficient to create a favorable legal framework; their proper enforcement is just as important. The Coase solution itself relies on some impartial, binding instrument to enforce any final agreement.

It is well recognized that excessive regulation is an obstacle to the development of financial markets. Even when rules of law are well designed, however, their enforcement is often affected by political considerations. Sovereign governments have vast powers in determining the "rules of the game", through legislation or administrative discretion (although limited by constitutional or international laws). Issues of income distribution are an important

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2 Debt is also particularly inappropriate in emerging industries, where risk capital is essential to redistribute the considerable risk and in ventures where the large fraction of intangibles over tangible assets increases the cost of financial distress induced by debt financing and increases its moral hazard costs.

policy motive; equity and efficiency are known at times to conflict. Thus rules established to create ex ante incentives may be undermined by the ex post desire of altering the promised allocation of benefits in order to favor some constituency.[3] In addition, the individuals assigned to ensure enforcement may be easily corrupted. This creates a contractual environment of unreliable enforcement.

The effect of ambiguity about enforcement is to alter the form of private contracting, leading to serious distortions. An unreliable legal enforcement ultimately wears out the thread of public confidence in the legal process and destroys the necessary sphere of contractual autonomy of the private sector. Resources may become wasted in the purchase of influence required to facilitate, or more simply make possible, economic transactions. However, it is likely that the greatest damage to economic efficiency is not due to such wasteful investment in political influence, which would simply represent an additional cost to economic activity. Rather, lack of reliable enforcement may lead to a degeneration in private transacting.4 Once private parties cannot credibly commit to contractual compliance they will develop noncontractual enforcement mechanisms which allow them to collaborate through threats of retaliation or ostracism. There is indeed ample evidence of such networks of mutual collaboration, from the "old boys network" and private clubs to the Chinese "guanxi" to crossholding networks in countries such as Italy or Japan (Berglöf and Perotti, 1994) to kinship connections and guilds (Greif, 1988; Milgrom et al., 1989). Private enforcement mechanisms are necessarily less efficient than a reliable common legislation, since agents unconnected through a scheme are unable to transact. Thus, losses are larger than the benefits enjoyed by some agents, since valuable exchange opportunities cannot be implemented. Finally, lack of explicit contracting is reflected in a general loss of information concerning opportunities to transact, since the price at which exchange take place is not conveyed. In accordance with these statements, Mauro (1995) finds that measures of corruption are correlated with lower private investment.

Securities, as a subset of private contracts, are by their nature particularly sensitive to the legal framework. As they represent liabilities of corporate entities embodied in standardized transferable claims, their explicit contractual content is obviously limited

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[3]   Perotti (1995) develops an explicit model of this form of political risk in the context of privatization sales.

compared with, say, a lengthy bank loan document. Many of the associated rights are not specified contractually but supplied by background economic legislation. Consequently, the value of securities depends as much on their legal rights as on the quality of enforcement of these rights.

Given that shareholder rights and their enforcement possibilities provide investor protection, the latter will therefore depend on both the quality of legal rules and the quality of law enforcement. La Porta, Lopez-de-Silanes, Shleifer and Vishny (1996), using a sample of 49 developing and developed countries, find that shareholder rights differ substantially across countries. Their index of shareholder protection measures restrictions on voting rights, minimum threshold requirements for shareholders to call for an extraordinary shareholder meeting and the rights to challenge management. They also find substantial differences in the quality of law enforcement, which, just as the variation in shareholder rights, cannot be explained by differences in income per capita.

Shleifer and Vishny (1997) argue that whenever the legal framework supporting investor protection is weak, ownership concentration leverages up investor protection. They argue that by holding a majority stake, control by voting requires little enforcement by courts. This view is supported by La Porta et al (1997) who find that shareholder concentration decreases with shareholder protection. Hence, ownership concentration seems to serve as a substitute for poor investor protection. The effective control, then, of large shareholders may increase the willingness to invest in shares by other shareholders. However, control and concentrated ownership may reduce liquidity (Bolton and Von Thadden, 1998), and this trade-off between control and liquidity may discourage firms to go public (Pagano and Roell, 1998).

While concentrated ownership ensures overall monitoring over management by large investors, it is not a general solution to agency problems. When the legal rule fails to constrain the actions of controlling shareholders, the value of minority claims can be easily diluted. Example include transfers of assets at arbitrary prices to closely controlled firms, investment at inflated prices in connected firms, or sales of control blocks with no consideration for equal treatment of small shareholders. This unequal distribution of gains between small and large shareholders results in a reluctance of small investors to participate in the market. Poor liquidity, aggravated by uncontrolled insider trading, increases required yields, depresses

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4   For a related view of corruption, see Shleifer and Vishny (1993).

prices, further discouraging financing through security markets.

One objection against this line of reasoning is provided by the argument that some may argue that as long as small investors anticipate the future dilution of their claims and price it correctly, no damage is inflicted on them. However, this argument is just too simple.

A simple formal model can illustrate the ex ante effect of poor enforcement of minority investors' claims and thus on security financing. We focus here on entrepreneurs who have valuable but risky investment opportunities and little financial resources. Assume that each investment project entails an initial cost equal to I. Investment projects however differ by their expected profitability, denoted by θ and distributed on $[\underline{\theta}, \overline{\theta}]$. Let I represent the threshold for positive net present value projects. Under risk neutrality and a zero discount rate, it follows that all projects of value $\theta \$ I$ are efficient and should be financed.

It is well known that under information asymmetry over the value of the project, investors face adverse selection, so some profitable investment projects may not be funded (Myers and Majluf, 1984). However, it is easy to see that the same is true under symmetric information when there are private benefits from control.

The modern theory of incomplete contracting indicates that ownership offers residual rights of control which result in private, contractible benefits (Grossman and Hart, 1986). An investor in control of a firm can decide over the use of its assets in all circumstances not explicitly restricted by law or contract obligations, and is therefore able to do so at its own advantage. Obviously, the controlling owner will also benefit from any illegal use of assets tolerated by the legal system.

Define ϕ to be the fraction of corporate income that can be appropriated by the controlling shareholders before pro rata distribution (for some discussion, see Hart, 1988). We argue that ϕ, as a measure of the control benefit accruing to the controlling shareholder, is also a measure of the degree of enforcement of the rule of equal income rights per share.

In this model, the ability of entrepreneurs to raise enough outside equity financing is limited by two factors. In the first place, market prices for equity will reflect a discount equal to $1-\phi$ relative to the underlying profits which reflects the anticipated control benefit). In addition, since control is very valuable, the entrepreneur will sell voting equity only up to a point where they retain a majority of voting rights. Let that threshold be α (which can be below ½ when the rest of shares are held by dispersed investors).

The firm value (gross of investment cost) is θ. Because of the private benefit from control, the value of a control stake of size α is worth $[\phi + \alpha(1-\phi)]\ \theta$. As a consequence, the maximum amount of capital that can be raised on the market is $(1 - \alpha)(1-\phi)\ \theta$.

Clearly, if expected profitability is high enough, the firm will be able to finance its project by selling stock to small investors. However for some values of $\theta > I$ not enough funds can be raised by the sale of minority equity to finance the investment:

$$(1 - \alpha)(1-\phi)\ \theta\ < I$$

Define θ^{**} to be the profitability threshold for a project to be financed through outside equity. This threshold will equal:

$$\theta^{**} = \frac{I}{(1 - \alpha)(1-\phi)}$$

It is immediately clear that θ^{**}, the value of the marginal project which can be financed, is above its first best level I as long as ϕ is positive and α is below one. Moreover, it is an increasing function of ϕ:

$$d\theta^{**}/d\phi = \frac{(1-\alpha)I}{(1-\alpha)^2(1-\phi)^2} > 0$$

In conclusion, some valuable investment will not be undertaken. Moreover, the greater is the appropriation factor ϕ, the larger the proportion of profitable ventures which could not be financed.[5]

An inadequate legal framework may be sustained over time, despite its inefficiencies. When in a country the judicial branch is weak in the face of the executive branch, the laws cannot be enforced in a neutral fashion and tend to be used to political advantage (Shleifer and Vishny (1993)). A deliberately inadequate legislative and enforcement framework may magnify rent seeking potential of politicians and thus be allowed to persist. In principle, new entrepreneurs could pressure for legislative action to increase protection for outside investors, thus allowing financing of a greater number of profitable ventures. However, established firms

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[5]   Notice that the minimum threshold for control α also reduces the ability to raise capital. This effect can be eliminated by the sale of nonvoting equity. However, nonvoting shares may also increase the degree of discretion of the control stake, raising ϕ further.

which have already issued securities will resist reinforcing minority interest's rights, since a decrease in ϕ would subtract from the current value of their control stake.

Therefore, a deliberately inadequate legislative and enforcement framework may magnify the rent-seeking potential of politicians and as a consequence of the unreliability of equity financing, funding of investment will tend to be provided more often in form of unconditional claims, i.e. claims demanding unconditional payments of fixed amounts at a stipulated date; in other words, debt tends to dominate as a source of financing.[6]

In conclusion, in a context of unreliable contracts, banks have a comparative advantage over market financing. Bank finance relies on repeated interaction and often long term relations; as a result, banks may be in a better position to supervise borrowers through noncontractual enforcement, such as the threat of refusing further credit. Intermediating organizations will tend to prevail over markets as a form of organizing financial transactions, not because of an inherent superior capacity to administer financing. Banks will be able, as concentrated holders of loans with detailed provisions and explicit guarantees which can, in case of default, force a transfer of control. Moreover, banks offer a safe form of investment for savers: their liabilities are unconditional claims, which can be withdrawn on demand. As banks are typically perceived as implicitly or explicitly guaranteed through deposit insurance schemes, they can raise funding more easily, say, than bond funds.

Section II   Some empirical evidence

In this section we provide some empirical support for the link between inadequate legal enforcement and capital market development. We will first present some suggestive evidence for the relation between investor protection and the relative importance of bonds and bank debt in firm financing in a small sample of developed countries. After that, we will provide some evidence on the role of investor protection in the recent increase in stock market capitalization in emerging economies.

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[6]   For a rigorous verification that the optimal financing contract in the presence of manipulation of output is an non-contingent claim, see Allen and Gale (1994).

Developed Countries

The link between inadequate legal enforcement and capital market development has received only little empirical attention. The only study we know of is La Porta et al (1997). La Porta et al construct proxies for shareholder and creditor protection through comparison of the legal rules in 49 countries. As a proxy for the quality of law enforcement, they use an index that reflects the perceived law and order tradition in each country constructed by a commercial rating agency. They find that the quality of shareholder and rights and the quality of law enforcement are positively related to market capitalization over GNP, number of listed firms per capita and number of IPOs per capita across countries. Similarly, creditor protection is positively related to the level of debt over GNP.

In their analysis, La Porta et al do not distinguish between bonds and bank debt. In contrast, our approach links the quality of the legal framework to the size of all security markets vis-à-vis self-financing and the intermediated credit market.

We argue that control premia reflect a degree of enforcement of equal income rights across shares. Thus we use as a measure of legal protection of investors, the premium on voting shares defined as the percentage difference between the price of common and nonvoting shares with relative to nonvoting shares, similar dividend rights. The advantage of this measure is that it is a price measure, so it reflects the amount investors are willing to pay.

The very existence of a control premium is an interesting issue. In a Modigliani-Miller world the value of a share is the discounted value of the stream of its prorata dividend; the allocation of control is not relevant. In fact, since nonvoting shares often have some privilege with respect to dividends, so in principle their price should be **higher** than that of voting shares. However, this is not the case; nonvoting shares almost invariably trade at a discount.

In general, poor enforcement of small equityholders' rights implies that controlling shareholders enjoy considerable benefits, which will be reflected in the price of control stakes. Unfortunately, there is only limited information on the prices at which control stakes are sold; in addition, in some countries there is no obligation to purchase all outstanding shares in case of a control transfer. However, the relative price of voting to nonvoting shares will reflect at least part of the control premium. Even when one shareholder owns a control stake in the firm, the future allocation of control is not certain. When with some probability there will be a future control contest, then even voting shares traded on the exchange may become useful to

gain control. Thus in general, the voting premium will reflect a fraction of the control premium. Specifically, in the context of our simple model let now Θ denote the present value of firms' profits. Assume that there are N shares, so control requires N/2 shares.

Suppose also that there is some probability π that a voting share may become necessary for a control contest. At that date the price of a traded voting share today will be $[(1-\phi) + \phi] \Theta/N$. In contrast, a nonvoting share will never be useful for control: its value will then equal $(1-\phi) \Theta/N$. Let Π be the present value of the probability π.

The average value of a share inside a control stake equal to half of all shares is:

$$V^M = [(1-\phi)/N + \phi\Pi /N] \Theta$$

while the value of a minority share is:

$$V^m = (1-\phi) \Theta/N$$

and the control premium is given by:

$$\frac{(V^M-V^m)}{V^m} = 1+\phi\Pi/(1-\phi)$$

which is clearly increasing in ϕ.

Thus, for a voting premium can be used as a price proxy for the fraction of value which a controlling shareholder can extract. Unfortunately, nonvoting shares are not very common; thus we are at best able to present suggestive rather than corroborating evidence.

Table II presents a list of voting premia data across seven countries, the largest number we could collect. We report both an absolute and a relative measure of voting premia, which weighs the difference in price by the number of voting and nonvoting shares. The table contrasts this measure of control premia with the relative size of security markets, internal finance and bank finance in financing corporations.

Even on this small dataset it is clear that there is strong correlation between the control premium and the extent of security financing. Switzerland, Sweden, Canada, the UK and the USA, all countries with strong capital markets, appear to have a lower voting premium, arguably a sign of stronger enforcement of minority rights.7 All these countries exhibit well

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7   Sweden appears an intermediate case. For discussion on the protection of minority

developed security markets, whose importance for the financing of corporate nonfinancial firms is above the average for all OECD nations.

The other two countries, Italy and Israel, stand out for the extent of the discount on nonvoting stock.[8] In both these countries equity markets are modest; more generally, security markets are a minor source of financing for the corporate sector. Note that it is hard to explain these differences in voting premia as reflecting different probabilities of corporate control contests, since it does not appear that Italy and Israel have more takeover activity than the US or the UK; in fact, the evidence would suggest the reverse.

There is also a large difference in concentration of ownership across these countries: Italian listed firms have much larger concentration of shareholdings than, say, the US, Switzerland or the UK. This implies a lower probability of a control context (at least of contexts where control is fought by buying shares from the public), which means that our voting premia underestimate the true control premia.[9]

Also certain features of nonvoting stocks could complicate our measurement of control premia. In general, nonvoting stock have higher dividend seniority and sometimes some degree of seniority in case of liquidation, so the voting premia will underestimate the value of control. In some cases, traded voting shares may have less trading liquidity, once again biasing downward our estimate of the voting premia. However, Megginson (1988) concludes that liquidity is not a factor in the relative pricing of voting shares in the UK. Finally, there may be market segmentation; several years ago, in Sweden and Switzerland foreigners could only hold nonvoting stock. However, these restrictions are now in the process of being removed; thus at least the more recent measures of the voting premia should not be affected.

Table II Voting premia and relative importance of security markets and bank financing

Country and Year	No. Firms	Voting Premium (%)	Capitalization over GNP of:			
			Listed	Unlisted	Corporate	Bank

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interest there; see Bergstrom and Rydquist, 1990.

8   Zingales (1994) reports that premia paid for control blocks can rise to even more extreme values during control contests in Italy, up to several times the nonvoting share price.

9   On the other hand insiders' holdings in companies with superior voting stock are reportedly higher than the domestic average in the US and UK.

	Absolute	Relative*		Equity (1990)	Equity (1990)	Bonds	Loans
Canada (1989)	90	10.0	na	56.0	na	18.1	18.0
Israel (1989)	75	73.7	na	20.9	na	7.6	64.0
Italy (1990)	76	70.9	25.5	12.8	39.8	2.3	52.1
Sweden (1990)	41	12.4	5.1	33.5	19.7	4.1	45.2
Switzerland (1986)	45	1.3	na	67.9	na	54.4	168.3**
UK (1982)	152	13.3	na	89.1	na	35.3	71.9**
USA (1983)	15	1.2	na	89.4	45.3	28.6	22.6

. *Ratio of difference in price between voting and nonvoting or limited voting shares divided by value of nonvoting or limited voting shares, multiplied by fraction of voting rights. **Includes significant fraction lent to foreigners

Source: Levy (1982), Biger (1990), Zingales (1994,1995), Rydqvist (1992), Horner (1990), Megginson (1990), Smith and Amoako-Adu (1991), elaborations on various Central Bank reports, OECD and IFC statistics.

Table II also allows some comparisons on the extent of total security versus intermediated financing for nonfinancial firms. Both Italy and Israel show a dominant presence of bank lending in financing corporate balance sheets.

Our argument is that investors in bonds also suffer from poor legal enforcement just as small shareholders. Other causes may account for some of the difference in sources of corporate debt financing. For instance countries with a low share of corporate bonds may

have a history of high inflation (although this is not consistent with the relatively high value for the UK).The sample is too small to resolve this issue.

The fact that the ratio of unlisted to listed equity is so large in Italy in comparison to the corresponding value for the US and Sweden (the only other countries for which we have some data) is consistent with our hypothesis. There is a diffuse perception that the fraction of listed to total equity in Italy is abnormally low.

As a final check, we compare these capital market features with the data on shareholder control rights and quality of law enforcement, assembled by La Porta et al (1996). As a proxy of shareholder control rights, La Porta et al construct an index on a scale of 0 to 5, measuring the rights of shareholders to challenge the Board of Directors. Their analysis also makes use of the quality of law enforcement, as measured by two different indices obtained from commercial agencies; these cover the efficiency of the judicial system, and the law and order tradition in the country. We also include corruption measures in our comparison obtained from Prabhan (1997). As we laid out in the previous section, corruption measures are a potential indicator for legal latitude on behalf of the government. A high indicator corresponds with low levels of perceived corruption. The values of these measures for the countries in our sample with voting premia are reported in Table III.

Table III: Quality of Shareholder Control Rights, Law Enforcement and Corruption

Country	Shareholder Rights	Efficiency of Judicial System	Law and Order	Corruption
Canada	4	9.25	10.00	9.0
Israel	3	8.75	7.80	7.7
Italy	0	6.75	8.33	3.4
Sweden	2	10.00	10.00	9.1
Switzerland	1	10.00	10.00	8.8
UK	4	10.00	10.00	8.4
USA	5	10.00	10.00	8.7

Sources: La Porta et al (1996), Prabhan (1997).

The table offers some additional hints. The two countries with high voting premia tend to be perceived as having poor legal enforcement and the highest degree of corruption. Although Sweden and Switzerland score low on the shareholder control rights indicator, these countries are characterized by reliable judicial system and low corruption, while the formal rules may not be very developed. It is likely therefore that some forms of expropriation of minority shareholders are limited by a strict enforcement of existing laws. This suggests that proper enforcement, rather than formal regulation, is what matters for security market development.

Developing countries

The pattern in market capitalization of developing countries reported in Table I suggest a huge recent increase in the relative size of the stock markets in these economies. Although an extensive study of the explanatory power of our story for this spurt in market capitalization is beyond the scope of this paper, we do believe that the experienced growth in market capitalization is closely related with government policies towards establishing stable and reliable conditions for private transactions.

In fact to some extent the increase in market capitalization is due to privatization programs in many of these countries, which lead to many new listings on these stock

markets.10

On the other hand, privatization may have added to market capitalization through indirect effects of successful privatization on market deepening. Successful privatization requires sound framework supporting private transactions and private investment. Prior to a sale, the government is uniquely motivated to establish a firm regulatory framework and to reduce ambiguity concerning private equity rights. This leads to a resolution of regulatory and legal uncertainty and in a strengthening of property rights and institutional reliability.

Perotti and Van Oijen (1998) provide evidence on the indirect benefit of successful privatization. They use three proxies that reflect uncertainty about the attitude of the government towards private ownership and market transactions. They find that these indicators tend to improve progressively as the privatization program is carried out. Moreover, they find that these indicators are strongly related to stock market development, supporting the resolution of regulatory and legal uncertainty view.

The ability to commit to a rigorous behavior towards investors offered by superior regulation may explain examples of migration of stock issues by firms from countries with less developed markets to foreign financial centers. The recent experience of many recent cross-or primary listings in the US and UK by firms from less developed financial countries is suggestive. Thus competition across financial centers does not lead to competition in laxity, in fact quite the opposite (Modigliani and Perotti, 1990).

Conclusion

We have related the development of security markets to the emergence of a credible enforcement rule, designed in particular to protect minority and foreign investors.

Legal inadequacy may take various forms and may characterize a regime of intervention which is either too pervasive and insufficient. Under excessive intervention, executive and administrative discretion is so pervasive that it fosters corruption rather than supervision. Legal rules are intentionally left lacking clarity or proper enforcement in order to perpetuate the ubiquitous involvement of political factions in the government of the economy.

We conclude that the development of financial markets requires a certain degree of

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10   Not all of the countries listed in Table I underwent large privatization programs, and some did so only after 1993. Also, the magnitude of the increase between 1986 and 1993 is

regulation, consistently and impartially enforced; in other words, some clear and reliable "rules of the game". We provided some, if limited, evidence in support of this thesis.

One aspect which deserves further exploration is the potential conflict among listed firms and entrepreneurs who wish to raise equity capital. Any firm may need to issue securities to finance investment at some point in time, to fund large investment opportunity or diversification of personal holdings (Pagano, 1993). While large, established firms face a lower threshold because of their notoriety and established activities, new firms face a compounded problem in accessing the capital market due to the poor protection for investors.

A research direction to pursue would be to use comparative data on the size distribution of firms to verify the claim that weak equity markets hinder the growth of small and medium size firms. If the size distribution of firms in countries with small capital markets indicates much fewer medium size firms, then it may be argued that the availability of risk capital for financing expansion is insufficient, leading to an average smaller scale of firms funded with inside equity alone.

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too large to be explained by privatization sales alone.

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