# Assessing the Value of Law in Transition Economies

*Edited by Peter Murrell*

*Ann Arbor*

THE UNIVERSITY OF MICHIGAN PRESS

CHAPTER 9

# Law as a Determinant for Equity Market Development: The Experience of Transition Economies

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The importance of financial sector development for economic growth has long been recognized (Goldsmith 1969; McKinnon 1973). Research focusing on stock market development has shown that not only the banking sector, but also stock exchanges play an important role in financial sector development (Levine and Zervos 1996b; Levine 1997). A study on company financing in emerging markets (Singh 1995) offers further support for the importance of stock markets in developing countries, showing that in these countries equity markets have played a role in raising new funds to finance companies' investment projects that far exceeds their role in developed economies (Corbett and Jenkinson 1994). It is therefore not surprising that the establishment and development of stock markets occupied an important place in reform policies in the former socialist countries.

The results of actual market development in transition economies have been mixed. In its most recent *Transition Report* (1998), the EBRD points out that financial markets are still underdeveloped. In comparison to developed market economies, but also to many other emerging markets, financial intermediation both by banks and by securities markets is weak.

A possible explanation for the cautious development of stock markets in the region is the lack of adequate legal protection. The importance of an adequate legal framework for capital market development has been underscored by comparative studies that show that the quality of minority shareholder protection is positively correlated with market size and market liquidity (La Porta et al. 1997, 1998). These are the first studies that use statistical methods to assess the impact of a subset of legal indicators on stock market development for a large number of countries (transition economies have not been included). While there is much room for refining the indicators used (see below), these studies have made a major contribution to the comparative analysis of law and development. Most important, they have shown that law is a major determinant

of financial market performance. Other factors may be at work as well, including macroeconomic conditions, privatization strategies, exogenous shocks from financial market crisis in other emerging markets (Mexico, Asia, Russia), or simply the youth of these institutions.

This chapter focuses on law as a possible explanatory variable. To control for at least some of the other factors mentioned, it focuses on the three most advanced transition economies, the Czech Republic, Hungary, and Poland, that is, countries that pursued somewhat different economic policies, but are overall perceived to have implemented successful reform programs (EBRD 1998). The three countries also have the most developed stock markets in the region.

An examination of the role of law in promoting stock market development in transition economies serves several purposes. Many transition economies have established stock markets, and the fate of these markets may have important implications for the evolving financial system and corporate governance structure in these countries. Privatization programs, at least in countries that used mass privatization, relied heavily on the development of liquid stock markets. It was hoped that the distribution of shares to large segments of the population and newly created financial intermediaries would lead to active trading on the secondary market where property rights could be reallocated.[1]

A better understanding of the factors that help promote stock market development would also have important implications not only for other transition economies, but more generally for emerging markets. To the extent that law can be identified as one of these factors, this would enable policymakers to improve the legal infrastructure for market development.

The major findings of the chapter can be summarized as follows. First, law seems to be an important explanatory variable for the development of stock markets. However, the focus on shareholder rights embodied in corporate law is too narrow. Other rules, including rules protecting not only shareholders, but also investors (potential shareholders), as well as the trading rules of stock exchanges, need to be considered. The development of stock markets in transition economies highlights in particular the importance of investor protection rules. Second, these different sets of rules are not static, but interact within existing constraints, such as industry structure and ownership concentration of firms. To be effective, law must address the specific problems that arise within a given system. Third, the implication of this finding is that what might be the most efficient rules in one country could be ineffective in another. This also suggests that the development of governance systems tends to be highly path-dependent. Fourth, path dependence does not preclude innovation, although innovation and change might be slow and affect only parts of an economic system. The most important promoter of change is permeability between systems. Capital mobility has improved permeability as companies and intermediaries can now access



markets and rules that govern markets outside their home jurisdiction. This has also affected transition economies as is evidenced by the migration of firms to stock markets in the West. Less regulatory rigidity, that is, more competition between rules within one jurisdiction, could foster this process of permeation and competition, and allow companies as well as investors to pick the rules that best suit them. The introduction of different trading rules for block trading and trading of smaller stakes on several stock exchanges in transition economies is a first and important step in this direction.

The chapter is organized as follows. First, different sets of legal rules that may be determinants of stock market development are discussed. The following section develops a dynamic model of the interaction of different subsets of rules with preexisting conditions, including ownership concentration and the composition of shareholders. This analysis is then applied to three transition economies, the Czech Republic, Hungary, and Poland, and the legal infrastructure and ownership concentration of firms in these countries are examined. Shareholder property rights, investor protection, and stock exchange trading rules are compared across the three transition economies. Then the findings are related to available data on stock market performance.

## Determinants of Stock Market Development

The literature on financial market development has long focused on macroeconomic conditions and economic policy choices as the major determinants of stock market development. Recent studies, however, suggest that law is an important determinant for corporate finance (debt vs. equity), the ownership structure of firms, and stock market development (La Porta et al. 1997, 1998). These studies use indicators for investor protection, including shareholder rights and creditor rights in forty-nine countries. Shareholder rights define the scope of legal protection for equity holders, including voting rights, and the right to sue management for damages. Creditor rights refer to the rights of debt holders, in particular secured and unsecured lenders and their rights in bankruptcy procedures. La Porta et al. group the countries included in their study according to the origin of their legal system into countries that belong to the common law family, the family of French civil law countries, the family of German civil law countries, and those of the Scandinavian legal family. The level of shareholder protection across legal families differs, with common law countries offering the highest level of investor protection, French civil law countries the lowest, and German civil law as well as the Scandinavian countries taking a middle position. The same ranking applies to creditor rights. Thus, legal families seem to be consistently more or less protective of investors, be they creditors or shareholders.

If law is an important determinant for finance, then the level of shareholder

protection on the one hand and creditor protection on the other may explain the relative cost of debt versus equity of firms and thus their capital structure. An important assumption of this proposition is that the formal law on the books actually matters. The difference between law on the books and law in action is well known particularly in comparative corporate governance. The effectiveness of legal institutions (but also business culture) may influence the relevance of formal law. The relatively high explanatory power of formal legal indicators reported by La Porta et al. (1997, 1998), however, suggests that differences in the formal law on the books should not easily be dismissed.[2]

The theoretical argument for using law as an independent variable to analyze the ownership concentration of firms was developed in Shleifer and Vishny 1997. Based on a survey of corporate governance around the world they conclude that a combination of relatively concentrated ownership and good legal rules is needed for effective corporate governance. The mix of these elements differs across countries. The authors argue that the United States relies primarily on legal rules designed to protect shareholders. These include rules that ensure the easy transfer of shares; keep elections of directors relatively uninhibited by managers; and give shareholders the power to sue directors and managers for breach of fiduciary duty. In contrast, the German legal system, they suggest, is less strong on protecting shareholders. Shareholders therefore hold larger stakes in companies to compensate weaknesses in legal rules with actual control.[3]

La Porta et al. (1998) provide evidence from cross-country analysis for a positive correlation between the quality of legal protection for minority shareholders and ownership concentration. Indicators for shareholder protection used in this study include voting rules (one share–one vote; proxy by mail); minority rights (cumulative voting or other rules to ensure proportional board representation; the right to sue and to call an extraordinary shareholder meeting); the absence of requirements to block shares around a shareholder meeting; and preemptive rights. Data on ownership concentration are limited to the ten largest companies that are listed on a country's stock exchange.[4] The ownership concentration in these companies is higher in countries with weaker shareholder protection, and lower where it is stronger. La Porta et al. (1997) show that these indicators also correlate positively with measures of equity market development, including market size and market liquidity. The importance that La Porta et al. attribute to the role of corporate law in determining corporate ownership structures and market development has received a mixed reception, especially among legal scholars.[5] Easterbrook, for example, argues that law plays only a marginal role in shaping corporate governance, and that ultimately competitive markets are the most important controls on management as well as the main forces that shape corporate structure: "The law of corporate finance is endogenous rather than exogenous" (Easterbrook 1997, 26). Others have argued that legal protections included in a country's corporate law have become increasingly marginalized as securities and exchange legislation is providing more comprehensive and often more effective rules for investor protection (Coffee 1998a). Law matters, but the law that really matters is not corporate law in the narrow sense, but legislation that ensures the basic functioning of the securities market. The specific legal rules referred to in this context include disclosure, takeover, insider trading as well as antifraud provisions, and finally an independent state agency charged with supervising the market. Some scholars have voiced reservations about the causal argument (Mayer 1998) as well as the selection of legal indicators. Berglöf (1997), for example, suggests that the indicators may be biased toward the Anglo-Saxon model. The finding that common law countries have better shareholder protection would therefore be circular.



We will discuss the selection of legal indicators and the causal link between law and finance further below. A more basic issue is whether shareholder protection rules, such as the ones used by LaPorta et al., are in fact the most important legal rules to consider when assessing the quality of investor protection offered by a legal system. As Coffee (1998a) suggests, there is at least one other subset of rules that is relevant for stock market development, which includes disclosure, insider trading, takeover rules, and antifraud provisions. Disclosure rules apply not only to issuers wishing to sell shares to the public, but also to other market participants, including other shareholders and other investors seeking to acquire a controlling stake. Insider trading rules are a corollary to disclosure rules and attach criminal and/or civil sanctions to noncompliance with disclosure rules. Similarly, forging of company books or inaccuracies in financial data may be deemed to be punishable offenses.

The difference between these rules and the aforementioned shareholder rights is not whether they can be found in a country's corporate law, in securities and exchange legislation, or in the rules of a major stock exchange. Rather, they serve different functions. The legal indicators for shareholder protection identified by La Porta et al. allocate cash flow and control rights in the corporation to shareholders and vest them with procedural rights, such as the right to sue directors in order to enforce these substantive rights.[6] Disclosure rules, mandatory takeover bids, insider trading rules, and the like, do not primarily address shareholders, but investors in general, including existing and potential shareholders. Their purpose is to enhance the functioning of the market and to this end vest investors primarily with information rights, for example, from an investor acquiring large stakes in a corporation, they could not otherwise claim.[7] Shareholders may benefit from investor protection, but there may also be conflicts of interest between current shareholders (insiders) and new investors (outsiders) seeking to acquire shares or even control. In short, one set of rules allocates *property rights* in the corporation, the other establishes *in-*

*vestor protection rules.* The two sets of rules also differ in the role played by the state. Shareholder property rights typically require that shareholders fight for their own rights. They vote themselves in person or by mail or give proxy rights to others. They attend shareholder meetings, sue directors or officers, and so forth. In contrast, the state has played a greater role in enforcing investor protection rules, such as disclosure requirements, insider trading rules, or antifraud provisions. The need for regulation of securities markets is disputed in the literature.[8] The most important argument in favor of regulation is that a well-functioning securities market with low-cost information is a public good; the interests of companies and various types of investors (small investors, large shareholders, intermediaries, institutional investors, etc.) are not always sufficiently aligned to rely on market forces alone. The scope of regulatory oversight that is desirable may differ across markets depending on the level of competition and transparency. In newly emerging markets state regulation may be more important to establish a competitive market environment with a minimum of information. As markets evolve and market watchdog institutions, such as rating agencies, emerge, the need for state regulation may decline. Whatever the benefits of state regulation might be in developed markets, the arguments may therefore not simply be transferable to emerging markets.

A third set of rules has been completely overlooked by the comparative corporate governance literature, namely, stock exchange trading rules. These rules establish the procedure by which property rights in firms can be traded, and they determine who may trade on the exchange. In principle, two major trading systems can be distinguished: dealer or quote-driven markets on the one hand and auction or order-driven markets on the other. Both markets may employ intermediaries who have the exclusive right to trade on the exchange. In the case of dealer markets, these intermediaries may act not only for their clients' accounts, but also their own. Dealers add liquidity to the market by taking over the risk of placing especially larger stakes that might face heavy price discounts if placed on an auction market. In other words, they offer sellers of larger blocks immediacy (Grossman and Miller 1988). Alternatively, intermediaries may act only as brokers, that is, only on behalf of their clients.

From a theoretical point of view, auction markets seem more efficient than dealer markets. Auction markets in principle allow direct interaction of market participants (although frequently exchanges require that orders are placed through brokers), enhance transparency, and guarantee execution of orders at the market price. In contrast, dealer markets are said to be less transparent and impose additional costs in the form of fees on market participants (Pagano and Roell 1990). Nevertheless, empirical studies have not been able to show that auction markets outperform dealer markets (Steil 1996). In fact, the London Stock Exchange, a dealer market, is still the largest (in terms of market capitalization) and most liquid market in Europe. Comparative studies of market development in Europe show that different market segments favor different trading rules (Pagano and Roell 1990; Steil 1996; Hopt and Baum 1997). Block trading is greatly facilitated by dealers. In contrast, the trading of smaller stakes is much cheaper if conducted on computerized auction systems.



To summarize, there are at least three sets of rules that may influence the development of stock markets: shareholder property rights, investor protection rules, and trading rules. For a better understanding of the relationship between law and finance, we need to establish the relative importance of these three sets of rules and how they interact with each other.

## An Interactive Model of Stock Market Development

A core proposition of this chapter is that property rights, investor protection rules, and trading rules interact within a given set of constraints. These constraints include the ownership structure of firms, but also the economic and political environment in which markets operate. While it might be possible to define in theory the most efficient rules for stock market development, existing constraints may render alternative rules more effective.

Considering preexisting economic conditions is particularly important in the context of transition economies. Here, economic and legal developments prior to the implementation of reforms have shaped existing institutions. Companies had been established under socialism or were nationalized in the early days of the regime. Many were oversized, overemployed, and invested in areas prescribed by state plans rather than market demand. Presocialist law was either overruled or was not applied. Thus, even if countries had presocialist laws on the books, they lacked several decades of actual application and enforcement of these rules. Reform strategies, including the choice of privatization methods, have influenced the initial ownership structure of firms, and political conditions were crucial to the development of the capacity and credibility of legal institutions. The key question for transition economies is which combination of legal rules will promote stock market development in light of the preexisting conditions in these countries.

The suggestion that legal rules interact with economic outcome variables (rather than determining them) is at odds with the findings of La Porta et al. (1997, 1998), who suggest that there is a causal link between law and finance running from the protection of shareholder property rights to finance. La Porta et al. (1998) rest their causal argument on the origin of legal systems. English, French, and German law was transplanted to many other parts of the world during the nineteenth and early twentieth centuries, that is, prior to industrialization in most of these countries. While this is correct, the development of law in the origin countries from which laws were transplanted has been much more interactive. The repeated changes in corporate law in Germany, France, the

United Kingdom, and the United States since their enactment in the nineteenth century give ample evidence of the incremental adjustment of law to actual or perceived economic change.[9] In light of the different development strategies these countries pursued, the divergence of their corporate laws and their corporate governance systems is not surprising. What is more puzzling is that transplant countries have apparently been faithful to the original models with few exceptions, where subsequent occupation led to the transplant of other systems.[10]

Differences between countries are not limited to differences in law, but include different corporate governance systems. The two major corporate governance systems are the internal control model (ICM) and the external control model (ECM). The terminology for describing these models varies. Sometimes the external model is referred to as the arm's-length, outsider, or company law model, whereas for the internal control model terms such as control-oriented, insider, or enterprise model are used (Wymeersch 1994, 1998; Berglöf 1997; Mayer 1998). The two models are characterized by differences in the financial system as well as by differences in the relative importance of different governance mechanisms (Berglöf 1997). The major financial-system difference is that ECMs have large and liquid stock markets, while stock markets in ICMs tend to be small and illiquid, with companies governed by controlling shareholders, including but not limited to banks. With respect to governance mechanisms, the predominant conflict in the ECM is between shareholders and managers; shares tend to be more widely dispersed; investors are portfolio-oriented; and hostile takeovers are potentially important, as is the role of the board of directors at least for firing management in times of crisis. In contrast, the major features of the ICM are that conflicts are more likely to arise between large block holders and majority shareholders; shares are more concentrated; investors are control- rather than portfolio-oriented; there is only a limited role for hostile takeovers; and the role of the board may be more limited, as controlling shareholders can use informal mechanisms to influence management.

The differences between these two models also imply a different role for law. Shleifer and Vishny (1997) suggest that law (in particular shareholder property rights) is more important for the external governance model as represented by the United States than for the insider control model represented by Germany. An ICM may employ different types of shareholder property rights to address the specific conflicts of interest that arise in this model, such as provisions that aim at protecting minority shareholders against a major block holder. In addition, shareholder property rights are not the only legal rules that distinguish the two models. In the ECM firm, governance is exercised primarily through market control. Capital markets, in particular stock exchanges, are governed by investor protection as well as trading rules.

The interactive model for analyzing the relationship between legal rules and preexisting conditions that results in a particular governance model is sketched out in table 9.1. We limit our analysis to factors that are relevant for stock market development, that is, to shareholder rights, and do not include creditor rights.



Cross-country comparison offers examples that are consistent with this model. Legal rules defining shareholder property rights in Germany on the one hand, and in the United States on the other, seem to accommodate different focal points of potential conflicts—the conflicts between principals (shareholders) and agents (managers), and between large block holders and minority shareholders. As is well known, in the United States both direct shareholder suits (a shareholder sues in his own right for damages he or she incurred) and derivative suits (a shareholder sues on behalf of the company for damages it incurred) are established by law and are used quite frequently.[11]

In contrast, in Germany derivative suits are not known and direct suits are possible only in exceptional circumstances. In general, shareholders are required to demand that the supervisory board take legal action against the management board in case the supervisory board does not act on its own. Instead, German corporate law offers shareholders the possibility to challenge in court decisions taken at the annual shareholder meeting—and this right is frequently used in practice by aggrieved shareholders. Moreover, shareholders of subsidiaries that are controlled by a parent company have the right to sue the management of the parent company directly. An entire body of law has been created that carefully regulates the relationship between companies that belong to a holding structure, or *Konzern,* focusing in particular on the conflict of interest between shareholders of dependent companies and management of the leading or parent company of the *Konzern.* The law of concerns (*Konzernrecht*) was

TABLE 9.1. Interaction between Ownership Structure and Legal Rules

| | ICM | ECM |
|---|---|---|
| Ownership structure | Concentrated | Dispersed |
| Shareholder property rights | Small vs. large shareholders<br>Judicial review of decisions taken at shareholder meeting<br>Informal control over managerial decisions | Shareholders vs. managers<br>Formal control including judicial review of managerial decisions |
| Investor protection rules | Disclosure to shareholders<br>Weak investor protection rules<br>Weak capital market supervision | Disclosure to investors<br>Insider trading and antifraud provisions<br>Strong capital market supervision |
| Trading rules | Dealer market | Auction market |

*Source:* Berglöf 1997 and compilation by author.

included in the corporate law in 1965 when this law underwent substantial supervision. This special set of rules is the subject of much debate, because it stands in the way of the harmonization of takeover rules and other corporate law issues within the EU. Critics of this body of law hold that it has furthered the creation of holding structures, while supporters argue that it provides an important set of rules to deal with conflicting interests within these structures that developed for reasons outside the law.[12] It is also questionable whether this law is effective in protecting minority shareholders in company groups. The important point for the purpose of this analysis is that this body of law developed *in response* to the emergence of company groups and reflects a process of incremental adaptation of law to economic conditions.

One can also interpret the development of codetermination law in Germany as a response to existing governance structure. Although employee representation on the supervisory board was primarily designed to enhance the role of employee stakeholders, it was also thought to provide a counterbalance to the dominance of banks and other companies as large block holders.[13]

Finally, the greater importance placed on conflict of interest rules in U.S. law as compared to German law is suggestive of the greater importance one legal system places on the relationship between managers and shareholders as opposed to other stakeholders of the company (Berglöf 1997).[14] Thus, if we abstract from the origin of legal systems and look at the contents of rules as they have developed over time, we find that different countries have found different legal solutions to different problems created by alternative development trajectories. In response to the high industry concentration in Germany, a comprehensive law on groups of companies was enacted in 1965. In contrast, in the United States the increasing dispersion of shares in the 1920s led to the enactment of the 1933–34 securities and exchange legislation. In addition, the influence of financial institutions was diffused by the enactment of the Glass Steagall Act. Whether these formal legal solutions have been effective in solving the actual problem is a different matter. What these examples suggest, however, is that the process of legal and economic change is highly interactive.

A further conclusion is that there is no perfect set of legal rules irrespective of the existing conditions in a given country. In other words, the law of concerns would probably have been useless if enacted in the United States, where company groups also exist, but developed capital markets in combination with strong protection of minority shareholder rights offer effective controls. Conversely, in a system with highly concentrated ownership, minority shareholder protection may be desirable, but on its own it is hardly sufficient to change the existing corporate governance structure. Controlling shareholders must have incentives to sell, and markets must exist that facilitate the selling of large blocks.

Legal rules and existing governance systems tend to reinforce each other. While this does not preclude change, this supports the proposition that institutional change is path dependent (North 1990; Roe 1996; Bebchuk and Roe 1999). Path dependence means that systems adapt incrementally to specific problems that arise from the constraints of the existing system. Instead of converging, systems may therefore continue to diverge. Path dependence, however, does not rule out innovation within systems. The process of innovation may ultimately deliver similar results—a viable stock market—even though, or rather *because*, different paths were used that accommodated preexisting conditions.[15] Such innovations may be triggered by exogenous events—in the case of stock markets, for example, by the increasing globalization of markets and technological change. In order to materialize, however, such trends require institutional support that addresses the preexisting conditions *and* paves the way for future change.



A good example of the interaction of path-dependent institutional development that carries the potential for change is the impact of the expansion of trading activities by London dealers to continental Europe in the 1980s subsequent to the liberalization of capital controls. Continental European stock exchanges at the time were small and illiquid. Block holders, however, were attracted by the possibility of placing their blocks with London dealers who offered them immediacy—the possibility of selling the block at the quoted price and thereby transferring to the intermediary the risk of finding a buyer. This added liquidity to stock markets, as blocks became tradable. London dealers in turn have increasingly taken advantage of the low-cost computerized auction systems at several continental European stock exchanges that allow them to place smaller slices of the blocks they hold (Steil 1996). One can easily imagine two outcomes of this scenario. One is that block holdings may be reduced over time—a result that is less likely when insisting on the theoretically most efficient low-cost continuous auction system in a country where concentrated block holding dominates. Another is that London dealers are digging their own graves, because their strategy may further the dispersion of ownership concentration and thus render their services as providers of immediacy for block traders superfluous over time.

This implies that the dynamics of institutional change are not only determined by preexisting conditions nor only by preestablished legal rules. Rather they are a function of the interaction between these conditions and legal rules that address the specific conditions, but are flexible enough to permit competition and permeation between different sets of rules and between different governance structures.

To illustrate the dynamics of existing conditions, legal rules, and innovation, the following sections sketch out three stylized scenarios for stock market development. We assume different initial conditions and different needs for external financing and analyze the implications for the relative importance of shareholder property rights, investor protection, and trading rules.

In the first scenario, a legal regime is put in place up front that specifies the contents and enforceability of shareholder rights. In the context of transition economies, this scenario applies only to newly founded joint stock companies. The large bulk of corporations, especially those listed on the stock exchanges, are formerly state-owned companies that have been privatized in full or in part. Nevertheless, for illustrative purposes, it is worth considering this scenario. As corporations are established and make their initial public offerings, investors decide whether to buy large or small stakes. If property rights are well defined, investors will prefer to buy smaller stakes, as this will help them to diversify without having to discount their investment when acquiring only a minority position. The security of property rights stimulates the development of a secondary market where property rights are reallocated. Even if the initial allocation of property rights is inefficient, subsequent transactions are likely to result in efficient outcomes (Coase 1960).

La Porta et al. (1998) seem to endorse this scenario when they suggest that well-protected shareholder property rights lead to less concentrated ownership structures and the development of liquid stock markets. Historically, this interpretation is rather questionable. A closer look at the shareholder rights used in La Porta et al. 1998 to assess the scope of minority shareholder protection that a legal system affords reveals that these rights did not trigger economic development; rather, several of these rights were introduced much later than the initial introduction of a corporate law and appear to have been enacted in response to economic development.[16]

The second scenario supposes that firms with relatively concentrated ownership exist at the time corporate statutes are enacted. This resembles the scenario of many transition countries after the completion of privatization. Ownership concentration may vary across countries, but, as will be discussed later, it proved to be quite high even in countries that used mass privatization programs, which could have led to a more dispersed ownership structure. Assume that firms will finance new investments from retained earnings or will obtain bank credits, but will not raise equity finance. Again, this closely resembles many transition economies after privatization. As capital markets had not yet developed, raising equity through public offerings was not an immediate option for most companies. Moreover, in countries where insider ownership dominates, such as in Russia, the fear of losing control created important disincentives for management to use this financing option. In other countries, large shareholders, including a coalition of institutional investors (such as voucher investment funds in the Czech Republic), may have had similar concerns.

Absent a primary market, the main function of a stock exchange is to facilitate secondary trading. Starting from a highly concentrated ownership structure, the development of a secondary market for shares is likely to take a different path than the one outlined in the first scenario, even if we assume that property rights are well defined. Large blocks are difficult to place, and sellers may face substantial discounts if they are trying to do so. In a pure Coasian world, an efficient outcome may still be achieved through subsequent bargaining. Once transaction costs are added, this outcome is less likely. If shareholders have the choice between markets with different trading rules, block holders are likely to choose a market with intermediaries who take over the risk of placing these shares. Just as the sellers themselves, these intermediaries have incentives to restrict public disclosure. They are paid for collecting information and thus would lose this income if disclosure was public. Moreover, they also benefit from concealing major transactions, because they want to avoid allowing market forces to lower the price before they have placed the block. Under this scenario, a secondary market is likely to develop only if trading as well as disclosure rules facilitate the placement of larger blocks. If trading rules do not permit the engagement of dealer-intermediaries or if they otherwise restrict block trading, large block holders who are willing to sell are likely to conduct their transactions off the exchange. This allows them to keep their transactions secret, thus avoiding the danger of substantial price discounts, but it also prevents the development of a transparent and liquid market.



In the third scenario, companies start off with concentrated ownership, but firms seek to raise funds on the market. This is the scenario many policy advisers had intended for transition economies. Those that favored an ECM over an ICM for transition economies expected that the choice of the right privatization method—that is, mass privatization—in combination with the establishment of stock exchanges would create incentives for companies to raise new funds on the market, which in turn would promote the development of active primary and secondary stock markets.

The new owners who buy into an established company with shareholders that already hold often larger stakes in this company need protection not only against management, but also against controlling shareholders.[17] Unless small investors have access to information about companies at reasonable costs and are adequately protected against looting by company insiders and/or controlling shareholders, they are unlikely to buy minority positions, or else only at a discount. Note that well-defined shareholder property rights or contractual arrangements alone are unlikely to alter this situation, because even if the law affords future shareholders with effective anti-directors' rights, they may still be subject to the uncertainty of large-shareholder actions. To solve this tension, small investors will need support from a third party to ensure that they receive not only information about the company, but also about major transactions on the market—that is, investor protection rules that are guaranteed and enforced by the state. At the same time, stringent disclosure requirements may create disincentives for sellers and dealers to participate in on-market transactions. Thus, there is a trade-off between tapping the broader market of small investors in or-

der to raise additional capital and facilitating block trading by existing large shareholders. A possible solution is different markets for different market segments, each adopting different trading rules, with free entry from one market to another.

The three stylized scenarios suggest that depending on the initial conditions and the demand of firms for new equity finance, different sets of rules may be appropriate for the development of stock markets. Where firms start with dispersed ownership, the specification of property rights may be sufficient, at least as long as transaction costs are close to zero. However, where firms start out with a concentrated ownership structure, the development of deep and liquid stock markets is more difficult. Appropriate trading rules may lower the costs of trading blocks, but at the expense of disclosure and other investor protection rules that reduce the level of insider trading. In order to induce small investors to invest their savings in stock markets, investor protection rules and enforcement of such rules by an independent party is needed to facilitate market development. However, if full disclosure is imposed prematurely, this will induce block holders to transact off the exchange, thus reducing rather than increasing market transparency.

## Legal Determinants of Stock Market Development in Transition Economies

As has been stated at the outset of this chapter, we are interested in law as an explanatory variable for the performance of the newly established stock markets, in particular in the Czech Republic, Hungary, and Poland. However, in light of the discussion in the previous sections, we do not attempt to establish a simple causal relation between legal rules and stock market indicators, but to analyze the interaction of the three subsets of rules with the ownership structure of major companies.

The discussion of the three stylized scenarios suggests that the sequencing of enterprise establishment, enactment of legal rules, and development of stock markets may be important for understanding the dynamics of legal and economic development. The relevant dates for legal and institutional reform in the three countries are summarized in table 9.2.

In all three countries, companies existed already as part of the heritage from the socialist system. These companies were owned by the state; thus, ownership was highly concentrated. Privatization had the potential of altering this ownership structure. In principle, countries had the choice between classic forms of privatization, including selling large stakes to strategic investors or placing stock on the market. The latter option was not used very frequently, because at the time privatization was initiated, stock markets were not yet functioning. An alternative was to use mass privatization, that is, to allow citizens

TABLE 9.2. Chronology of Legal Reform, Privatization, and Opening of Stock Exchange

| | Czech Republic | Hungary | Poland |
|---|---|---|---|
| 1988 | | Corporate law enacted | |
| 1989 | | | |
| 1990 | | Securities and exchange law adopted | |
| 1991 | | Budapest Stock Exchange opens | 1934 corporate law revised |
| | | Independent securities commission established | Securities and exchange law adopted |
| 1992 | Corporate law enacted | Privatization begins | Warsaw Stock Exchange opens |
| | Mass privatization begins | | Independent securities commission established |
| | Securities and exchange law adopted | | |
| 1993 | Prague Stock Exchange opens | | |
| 1994 | | | |
| 1995 | Mass privatization ends | | Mass privatization begins |
| 1996 | Corporate law revised | | |
| 1997 | | | Mass privatization ends |
| 1998 | Independent securities commissions established | Corporate law revised | |

*Source:* Compilation by author from country legal materials.

and specialized intermediaries to acquire the shares of privatized companies. It seemed reasonable to expect a much more dispersed ownership structure as a result of this privatization strategy. In fact, voucher investment funds were seen as a solution to the danger of highly dispersed ownership structures in countries that used mass privatization techniques, and it was hoped that they would contribute to the consolidation of shares (Pistor and Spicer 1997).

At least in cases where the chosen privatization strategy did not automatically lead to concentrated ownership, the quality of the law that existed at the time companies were privatized may have been an important factor in determining the evolving private ownership structure. As can be seen from table 9.2, all three countries managed to enact a corporate law before privatization was launched. Thus, buyers of shares in privatized companies knew the scope of legal rights these shares afforded them.[18] The opening of stock exchanges preceded privatization in Hungary and Poland. In the Czech Republic, it coincided with the completion of the first wave of privatization. In other words, privatized companies in principle had access to an exchange both for raising new funds and for listing their shares for trade on the secondary market.

The most pronounced difference between the three countries lies in the institutional basis for market supervision. While Hungary and Poland established an independent securities commission as early as 1991, it took the Czech Republic until April 1998 to follow suit. Before then, market supervision was conducted by the Ministry of Finance, which pursued a hands-off approach. To the extent that market supervision by the state is important for the protection of small investors, this would suggest that small investors in the Czech Republic were at a disadvantage to their counterparts in Poland and Hungary and would therefore have been more reluctant to acquire shares in privatized companies either in initial offerings or on the secondary market. This would also suggest that the choice of a privatization strategy in the Czech Republic that could have led to a more dispersed ownership structure may not have prevented the evolution of an ICM rather than an ECM in that country.

In fact, observers of transition economies hold that most countries seem to be evolving toward an ICM rather than an ECM. This is supported by data on the ownership concentration of the ten largest firms that are listed on the stock exchange—excluding financial companies and companies where the state is the largest owner.

In the Czech Republic, 1,849 companies were privatized in the mass privatization program (Lieberman, Nestor, and Desai 1997). On average, more than 80 percent of total shares were offered in mass privatization, and only relatively small stakes were retained by the state. Still, a substantial number of companies were sold to strategic investors. In these cases, only a small fraction of their shares was included in mass privatization, if any at all. For the latter companies it is therefore not surprising to find that their ownership structure is highly concentrated. This is different, however, for companies that were privatized through mass privatization. The participants at voucher auctions were citizens who had only a small amount of voucher "capital" to invest, as well as voucher investment funds. These intermediaries had the right to acquire vouchers from citizens in return for a share of their fund. They accumulated 71 percent of all vouchers in the first wave of mass privatization and 63 percent in the second wave (Lieberman, Nestor, and Desai 1997, 11, table 9.2). They therefore had the resources to buy larger stakes in companies, subject only to ceilings established by law and their own incentives to acquire larger stakes. The ceiling established by Czech law was a maximum of 20 percent of the voting stock of a single issuer. This did not allow them to acquire controlling blocks, but several investment funds together could exercise controlling influence.



The surprising result of mass privatization was that many voucher funds indeed bought relatively large blocks of shares (Coffee 1996, 1998b). In developed market economies, institutional investors, with the important exception of German universal banks, typically acquire only small stakes in companies (Baums, Buxbaum, and Hopt 1994). In the United States, this has been attributed to overregulation of financial intermediaries (Roe 1994; Black 1990b, 1992). However, comparative analysis reveals that even in countries with less regulation, such as the United Kingdom, institutional investors tend to acquire relatively small stakes and are for the most part passive owners of enterprises (Black and Coffee 1994). Thus, institutional investors apparently prefer liquidity to control (Coffee 1991). In contrast, Czech voucher funds favored control, as they tended to buy stakes at or close to the legal ceiling.

The literature has attributed this result primarily to the rewards awaiting shareholders that use their control rights for restructuring firms, which can be expected to be high (Claesens, Djankov, and Pohl 1996). However, there is little evidence that voucher funds in particular have actually engaged in restructuring. Overall, the Czech Republic is noted for the absence of substantial restructuring efforts, not for their presence. A more plausible explanation might be that the legal framework did not offer sufficient protection for minority shareholders.

Available data on ownership concentration in the largest Czech firms support the notion that the Czech Republic is evolving toward high concentration of ownership in firms. The average stake of the largest shareholders in these companies is 39.9 percent, and of the three largest shareholders 59.7 percent.

In the case of Hungary, high ownership concentration is consistent with the privatization strategy pursued in this country. Taking the ten largest nonfinancial companies in Hungary and excluding those where the state is the largest shareholder, the average stake of the largest shareholders is 50.3 percent, and the average stake of the three largest shareholders 56.9 percent.[19] In Poland privatization was stalled for many years, although a number of sales to

strategic investors as well as management-employee buy-outs were carried out. The mass privatization program included only 512 companies (Lieberman et al. 1997), that is, less than a third the number of companies that were included in mass privatization in the Czech Republic. This difference is particularly notable in light of the fact that Poland has four times the population of the Czech Republic. The Polish mass privatization program also differs from the Czech program in that only few national investment funds (NIFs) were established. Moreover, they were required by law to acquire core stakes of about 33 percent in several privatized companies, but could diversify their investments with respect to other companies (Duvivier in Lieberman et al. 1997; Lipton and Sachs 1990). Data on ownership concentration show that the largest shareholder in the ten largest nonfinancial and non-state-owned companies holds on average 35.9 percent of the shares, and the three largest shareholders together hold 44.5 percent. Both numbers are lower than those for Hungary or the Czech Republic.

Despite these differences, these data do indeed suggest that concentrated share ownership is an important feature of evolving governance systems in the three transition economies. Privatization strategies mattered more in some countries than in others. They mattered in Hungary, where large stakes were sold to outside investors, but also in Poland, at least with respect to the core stakes NIFs had to acquire in some companies. In the Czech Republic the privatization strategy created the potential for a more dispersed ownership structure. Voucher funds were not required to buy up to 20 percent of total common stock; the law only prevented them from buying even larger stakes. The question is, then, why they did not limit their acquisitions to smaller stakes with the advantage of greater liquidity and thus lower risk. Law may be an important answer to this question. Assuming that there is a functional substitution between strong shareholder protection and ownership concentration as suggested by Shleifer and Vishny (1997), then good laws were more important in the Czech Republic than in Hungary in order to sustain the potential for a more open governance structure. But even in Hungary, differences in law may matter. While shareholder property rights may be less relevant, strong investor protection and adequate trading rules that facilitate the trading of larger blocks could support the evolution from an ICM to an ECM or some hybrid governance model that is more open to change than a pure ICM.

## Comparing Property Rights, Investor Protection, and Trading Rules

The Czech Republic, Hungary, and Poland had comprehensive civil and commercial legislation in place before they came under socialist rule. These laws were influenced primarily by the German, but also by the French civil law tradition.[20] Poland retained most of its prewar codes. It simply revived the 1934 Commercial Code and eradicated all socialist principles that could have stood in the way of a market economy. The Czech Republic enacted a new Commercial Code in 1992, which includes the corporate law. It closely resembles the German corporate law and even includes a provision on labor codetermination. This law was revised in 1996, mostly to comply with EU guidelines on corporate law. Hungary's earlier introduction of economic reforms is reflected in the fact that as early as 1988 the Business Associations Act was enacted, which was revised substantially in 1998. Just as in the Czech Republic, compliance with EU law has influenced this reform. Poland has also followed this trend, though relevant legislation has not been integrated into the Commercial Code, but rather may be found in other legislation (such as the Securities Act). Given the similarities in legal history and aspired legal future, it is not surprising to find many similarities in law across the three countries.



Table 9.3 shows how these countries score according to a set of shareholder rights indicators that uses the La Porta et al. (1998) indicators as a basis, but supplements them. One share–one vote means that each share of equal nominal value confers the same number of votes. The three countries use this

TABLE 9.3. ECM Shareholder Property Rights in Transition Economies

| | Czech Republic | | Hungary | | Poland |
|---|---|---|---|---|---|
| | 1992 | 1996 | 1992 | 1998 | 1934/1991 |
| 1. 1 Share–1 Vote | 0 | 0 | 0 | 0 | 0 |
| 2. Shares not blocked before meeting | 1 | 1 | 1 | 1 | 0 |
| 3. Proxy by mail | 0 | 0 | 0 | 0 | 0 |
| 4. Cumulative voting | 0 | 0 | 0 | 0 | 0 |
| 5. Oppressed minority rights* | 0 | 0 | 0 | 0 | 0 |
| 6. Not more than 10 percent of shares required to call extraordinary shareholder meeting | 1 | 1 | 1 | 1 | 1 |
| 7. Preemptive rights | 1 | 1 | 1 | 1 | 1 |
| 8. Quorum for shareholder meeting at least 50 percent | 0 | 0 | 1 | 1 | 1 |
| 9. Directors can be dismissed without cause | 1 | 1 | 1 | 1 | 1 |
| 10. Put option in reorganization | 0 | 1 | 0 | 1 | 0 (1) |

*Source:* Indicators 1 through 7 from La Porta et al. 1998. Indicators 8 through 10 compiled by author.

Primary sources: Czech Republic: Commercial Code 1992 as amended 1996; Hungary: Business Associations Act 1992 as amended 1998; Poland 1934 Commercial Code as amended 1991.

*Note:* *Only judicial recourse against decisions by management and supervisory board included.

rule as the baseline, but allow corporate statutes to deviate and to include multiple votes or impose voting ceilings. Multiple votes proved to be useful in the context of transition economies, when less than 50 percent of total shares were sold to a strategic investor (which was not uncommon especially in Hungary; see Pistor and Turkewitz 1996), but both parties wanted to assure that they received control rights. Voting ceilings allow companies to dilute the influence of major block holders. For an ECM model, however, a mandatory one share–one vote rule would be preferable, because investors can rely on the fact that the number of shares they acquire reflects their control rights over the company.

Shares not blocked before the meeting can be an ambiguous indicator. While it is true that the requirement that shares be deposited several days in advance of a shareholder meeting hinders trading at a time when this might be crucial for exerting pressure on management, it can also be interpreted as a technical device to ensure that only eligible shareholders attend the shareholder meeting. This is particularly important in countries following the German tradition where bearer rather than registered shares dominate. Note also that in jurisdictions where registered shares dominate, registration of shares is often required several days in advance of the meeting with similar implications for control transactions. Because of its ambiguity, the variable should probably be dropped.

Proxy by mail refers to the procedure developed primarily in the United States, by which shareholders can vote by mail. Most civil law countries, including the three countries in our sample, do not include explicit rules on voting by mail—nor do they exclude it. They stipulate that a shareholder may delegate his voting rights to another person who attends the meeting. Proxy by mail offers lower transaction costs and encourages small shareholders to vote. It is therefore preferable. Still, as long as the delegation of voting rights is not contingent on formal requirements, it is a close second best.[21]

Cumulative voting helps minority shareholders to elect a representative to the board of directors. It is not known in civil law jurisdictions. The three countries also do not include other provisions to ensure that minority shareholders are adequately represented on the board. Such a provision, however, would not have much impact in these jurisdictions, because the board lacks the most powerful weapon over company management. The management board, which is equivalent to the executive directors in the United States, is appointed and dismissed not by the supervisory board (the equivalent of the board) as in most other jurisdictions today, but by the shareholder meeting.[22]

Oppressed minority rights refer to the right of shareholders to sue management or members of the supervisory board for damages incurred in person or by the company. Following the German tradition, litigation rights are underdeveloped in the three countries, although it is possible to challenge decisions taken by the shareholder meeting in court. The latter seems to be more



appropriate for countries that follow the ICM model. Control over management is typically assured by virtue of concentrated ownership. Minority shareholders therefore require protection more against controlling shareholders than against management.

Minority shareholders can be given the right to call an extraordinary shareholder meeting. Corporate laws around the world typically require that these shareholders represent a minimum amount of shares, somewhere from 5 to 20 percent. For all three countries the threshold is 10 percent. Any threshold is somewhat arbitrary, but 10 percent is most common around the world.

Preemptive rights, finally, give existing shareholders in the case of a new issuance an option to acquire enough shares to retain their share in the company. They thus prevent the dilution of stakes held by existing shareholders by issuing new shares. All three countries include this rule.

Curiously missing in the list of indicators used by La Porta et al. are several indicators that appear to be of at least equal importance for protecting shareholders, and in particular for protecting them not only against management, but also against large block holders. Such a rule is the quorum requirement for the shareholder meeting to take binding decisions. In most jurisdictions, at least 50 percent of the shareholders must be represented. This is true also for Hungary and Poland. In the Czech Republic, however, 30 percent suffices. This means that the attendance of only two voucher funds, each holding 20 percent of total shares, allows them to make binding decisions, including decisions with super majority requirements, such as charter changes, because the supermajority requirement refers only to the number of shares present, not total shares.

Another indicator, which is quite important especially in the context of privatization and change of control, is whether the management board can be released at any time or only for a reason. Germany, for example, requires a cause. In contrast, in France, the United States, the United Kingdom, but also in Japan, to give just a few examples, dismissal without cause is possible. Although the corporate laws of the three countries discussed in this chapter closely follow the German model, they also do not require cause for dismissing members of the management board.

Finally, the position of minority shareholders is typically endangered in takeovers and mergers. Many laws give shareholders who have voted against such reorganizations a put option, which mandates the corporation to buy them out at a reasonable price. Put options were not included in the original laws, but have now been added in all three countries.

The overview in table 9.3 shows that there is little variance across countries or over time. In all three countries, minority shareholder protection is relatively weak and has improved only marginally with the revision of the corporate laws.

In contrast, there is greater variance across countries in investor protection rules, especially when examining the law at the outset of economic reform. Table 9.4 gives the relevant indicators at the beginning of reform (most rules were established between 1991 and 1993) and shows changes over time by listing the scores at year-end 1998.

Public disclosure per annum refers to the number of times companies must publish financial information. We include only requirements for listed companies. Quarterly reports are the rule. However, in the Czech Republic reporting frequency initially was uncertain, as the relevant rules of the Prague Stock Exchange stipulated that the issuer should publicly disclose information "during the year" (Wolff, Thompson, and Nelson 1993). Apart from regular reports about a company's performance, law often requires that major transactions will be disclosed to the public. While Hungary and Poland established thresholds (10 and 25 percent) of outstanding shares a buyer acquires to trigger disclosure, the Czech Republic did not mandate disclosure of major acquisitions before 1996. Czech law included a comparatively vague prohibition on insider trading, but the absence of disclosure rules left ample room for transactions beyond the knowledge and control of other market participants or state supervisors.

Mandatory takeover bids require buyers that have acquired a block of shares specified in law to make an offer to buy the remaining outstanding shares. The three countries in the sample were influenced by the legal development in the EU. Poland was the first country to emulate EU rules using an early draft of this guideline; it ended up with a legal provision that exceeds the standards that are now under consideration for the proposed guideline. According to Polish law, a buyer who crosses the 33 percent (50 percent prior to the amendment of the law) threshold must make an offer to buy all the remaining shares (Wolff, Thompson, and Nelson 1993; Soltysinski 1998). Hungary included a similar provision only in the 1998 revision of the Business Associations Act. The Czech Republic also waited until the corporate law revision to address the issue of mandatory takeover bids. The threshold for a mandatory bid in the Czech Republic is lower; it takes the acquisition of 50 percent rather than 33 percent of outstanding shares to trigger a mandatory takeover bid. All three countries included insider trading and antifraud provisions in corporate law or securities legislation with criminal and civil sanctions attached to them. The enforcement of these rules relies primarily on state enforcement agencies, such as the prosecutor's office and the courts, or an independent regulator/supervisor.

The existence of an independent supervisor of stock markets (or lack thereof) is where the three countries differ the most. Hungary and Poland established an independent supervisory agency at the beginning of reform. In both countries, this agency is charged with supervising capital markets. Moreover,



its actions can have ramifications for the position of issuers and traders at stock exchanges, even if they operate under their own set of rules.[23] In contrast, in the Czech Republic the task of supervising the fledgling financial market was left with the Ministry of Finance, which pursued a hands-off policy. Only after abuses of investor rights became rampant and there was clear evidence that the public was losing confidence in the market was an independent commission established (in April 1998).

The last indicator included in table 9.4 is quantitative listing requirements. The relevant rules of the Warsaw Stock Exchange (WSE), for example, include the following listing requirements: The value of the shares to be admitted is at least PLN 24 million; the book value of the company wishing to be listed is at least PLN 36 million, and its share capital PLN 7 million; and at least 500 shareholders must hold the shares admitted.[24] Quantitative listing requirements such as these have been widely criticized as they restrict access of companies to the market (Taylor 1997). In the context of newly established exchanges where investors and intermediaries lack information and are sufficiently inexperienced, they may, however, be of some value as a signaling device that the company has some merit. The Czech experience is a case in point. Listing requirements were virtually absent at the outset of reform. All companies that were included in the mass privatization program were automatically listed on the Prague Stock

TABLE 9.4. Investor Protection Rules in Transition Economies

| | Beginning of Reforms | | | As of 1998 | | |
|---|---|---|---|---|---|---|
| | Czech Republic | Hungary | Poland | Czech Republic | Hungary | Poland |
| At least four public disclosures per annum for listed companies | 0 | 1 | 1 | 1 | 1 | 1 |
| Mandatory disclosure for acquisition of more than 10 percent | 0 | 1 | 1 | 1 | 1 | 1 |
| Mandatory takeover bid when acquiring large block | 0 | 0 | 1 | 1 | 1 | 1 |
| Insider trading and antifraud provisions | 1 | 1 | 1 | 1 | 1 | 1 |
| Independent regulator/ supervisor established | 0 | 1 | 1 | 1 | 1 | 1 |
| Quantitative listing requirements | 0 | 1 | 1 | 1 | 1 | 1 |

*Source:* Compilation by author from country legislation. Czech Republic: Commercial Code 1992 as amended 1996; Hungary: Business Association Act 1988 as amended 1998; Poland: Law on Public Trading in Securities and Trust Funds 1991 as amended in 1994.

Exchange. This has inflated data on the number of listed companies, but has not resulted in the development of a vibrant market. In 1997, the Prague Stock Exchange (PSE) introduced listing requirements. Subsequently, 1,301 of the 1,716 companies that had been listed in 1995, or 76 percent, were gradually delisted. Regulators apparently expect that this will boost investors' confidence in the quality of the remaining companies.

The three countries also differ with respect to trading rules. The Budapest Stock Exchange (BSE) follows the Anglo-Saxon model (Zalewska-Mitura 1998). Trade is carried out during the hours when the stock exchange is open and is conducted by intermediaries who are licensed by the members of the stock exchange. These intermediaries may be brokerage companies or securities traders. The former can act only as agents making orders on behalf of their clients. The latter may carry out transactions both for their clients and for their own accounts and thus resemble dealers on the London market. All transactions for listed securities must be carried out on the exchange.

The Warsaw Stock Exchange followed the Lyons model. It is an order-driven centralized and paperless market that primarily uses call auctions. A continuous auction system was introduced in 1992 for state bonds, which in 1996 was extended to shares. Large blocks are traded off-session by members of the exchange. The size of a block transaction as well as the price is subject to stock exchange regulations. The number of securities in a block trade must be at least equal to the average number of securities sold during the last three sessions. Moreover, unless the block of shares exceeds 5 percent of total shares admitted to the exchange, the price shall not differ by more than 15 percent from the price of the last session (Zalewska-Mitura 1998).

The Prague Stock Exchange (PSE) uses call auctions as its trading system. Members of the exchange or licensed intermediaries offer broker services only. They may not trade on their own account. Unlike the WSE and the BSE, the PSE allows transactions of listed securities to be carried out off the exchange (Wolff, Thompson, and Nelson 1993). In addition, an active over-the-counter trade (the so-called RM-System) developed that was based on the computerized share-registration system that was set up for mass privatization. At the RMS, investors can trade directly with each other without having to employ intermediaries. However, the flat fee charged for transactions at the RMS discourages small transactions as the effective rate renders costs higher than at the PSE (Lastovicka et al. 1994).

To summarize, legal rules differ across the three countries, but differences are more marked with respect to some rules than for others. Shareholder property rights are weak across the board when using the expanded set of indicators. Differences between countries are more pronounced when looking at investor protection as well as trading rules. With respect to investor protection rules, the Czech Republic clearly stands out as the country that had the weakest law in this regard at the outset of reform. Trading rules also differ across countries. The original trading rules have remained in place, but they were often complemented with additional rules to accommodate demands especially for block trading in an attempt to keep these transactions under the umbrella of the exchange.



TABLE 9.5. Comparing Shareholder Property Rights, Investor Protection, and Trading Rules in Transition Economies

| | Czech Republic | Hungary | Poland |
|---|---|---|---|
| Shareholder property rights | Weak | Weak | Weak |
| Investor protection rules | Weak | Strong | Strong |
| Trading rules that facilitate block trading | Weak (PSE)<br>Strong (RTM) | Strong | Weak |

*Source:* Compilation by author from various primary legal sources.

*Note:* Trading rules refer only to on-the-floor trading. Poland, for example, has introduced rules that allow members of the exchange to trade blocks on the exchange, but off the floor. This is not included in this coding.

The main differences in legal rules between the Czech Republic, Hungary, and Poland are summarized in table 9.5.

### Stock Market Performance

The most commonly used indicators for assessing stock market performance and liquidity include market capitalization as a measure of the overall size of the market, value traded, and turnover of the market. All three indicators focus on secondary market development. A summary of the most important indicators of stock market performance for the three countries is given in the chapter appendix (table A9.1).

These indicators are difficult to assess. The reason is that the history of these markets is still very short. Moreover, in the few years since their inception, markets have been exposed to the uncertainties of the transition process, speculative episodes on the stock markets (most notably in Poland in 1994), and several exogenous shocks beginning with the Mexican financial crisis in late 1994, followed by the Asian financial crisis since the summer of 1997, and lastly the collapse of the Russian capital market in August 1998.

Another important factor that cautions against putting too much emphasis on these data is that they do not reflect only the response of market actors to the legal infrastructure consisting of shareholder property rights, investor protection rules, and trading rules. Rather, they have been influenced by direct policy interference. The most pronounced measure was the decision of the Czech gov-

ernment to list all companies that were included in mass privatization on the Prague Stock Exchange. As a result, the number of companies listed on the exchange far exceeded the number of companies on the other two exchanges, where the decision to list was left to the companies. Only the delisting of companies in 1997 has brought the numbers at the Prague exchange more in line with those at the Budapest and Warsaw exchanges. Interestingly, in February 1999, the number of companies listed on the WSE exceeded those on the PSE (see appendix table A9.2).

The number of companies listed influences the market capitalization ratio, especially when these companies are among the largest in the economy. It is therefore not surprising that until 1997, the Prague exchange had the highest market capitalization as a percentage of GDP. In 1997 it was surpassed by the Budapest Stock Exchange. This appears to be the result of two factors: the delisting of Czech companies and the privatization of major gas and utilities companies in Hungary, which has driven up the market capitalization ratio at the Budapest exchange.

Turnover is measured by the value traded divided by market capitalization. Thus, ceteris paribus, markets with higher market capitalization will have a lower turnover ratio. Not surprisingly, the Warsaw stock exchange, which has the smallest market capitalization, has had the highest turnover ratio. Note, however, that high market capitalization does not necessarily mean lower liquidity. The NYSE, for example, which has the highest market capitalization on a worldwide scale, still ranks seventh in market turnover, and the London Stock Exchange, which is third in market capitalization, occupies the tenth place on an international scale.

A more meaningful measure of liquidity is the value traded—not as a percentage of market capitalization, but of GDP. Here, the Prague exchange shows higher numbers than the two other exchanges. Still, these numbers may also be influenced by the large number of listed companies and their high market capitalization.

Given the ambiguities of these measures, we use several other indicators to assess market performance in the three countries. The first is market perception data from a survey of domestic and foreign investors. Data compiled in the 1998 Global Competitiveness Report of the World Economic Forum show that businesses do not perceive the Czech stock exchange to be an important source for raising external funds. The Czech Republic also gets significantly lower scores than either Poland or Hungary for financial institutions regulations and the prevention of insider trading (see table 9.6).

Interestingly, with respect to firm-level corporate governance, the Czech Republic scores almost as high as Hungary or Poland.[25] Since the underlying corporate laws are very similar, this is not surprising. But these findings suggest that for stock market performance, shareholder rights are of secondary importance to investor protection rules.



TABLE 9.6. Stock Market Perception Data

| | Czech Republic | Hungary | Poland |
|---|---|---|---|
| Stock markets are an important source of new capital for firms | 2.02 | 3.92 | 3.67 |
| Regulation and supervision of financial institutions is adequate for financial stability | 2.84 | 4.83 | 4.06 |
| Insider trading is not common in the stock market | 2.56 | 4.04 | 4.48 |

*Source:* 1998 World Competitiveness Report of the World Economic Forum.
*Note:* The data give the mean for all answers received in a given country on a scale from 1 to 7. Lower scores indicate a negative assessment, higher scores a positive assessment.

This conclusion is also supported by data on the trading of firm shares on different host markets outside their home jurisdiction, where they are often more successful in raising funds or trading shares than at home. When firms migrate, they stay incorporated in their home countries, that is, shareholder property rights do not change. Firms must, however, adapt to existing investor protection rules of the target market, especially disclosure, insider trading, and antifraud rules. They are also subject to state supervision in the host market.

London has for a long time been an important market for companies from other jurisdictions, in particular from continental Europe. Despite the high costs involved in such a move, an increasing number of firms have migrated in recent years to the United States (both NYSE and NASDAQ). Migrating firms subject themselves voluntarily to the more stringent rules that prevail in the U.S. capital market (Coffee 1998a). Apparently this is worth the cost of complying with more than one set of accounting rules and disclosure standards, and forgoing the opportunities a less heavily regulated market might offer.

A similar trend can be observed for stocks from transition economies. A considerable number of firms have migrated to stock exchanges in Germany, with the Berlin stock exchange taking the largest share, where 117 stocks from Eastern Europe (24 companies from the Czech Republic, 13 from Hungary, and 13 from Poland) are currently listed. While most of these stocks are traded over the counter rather than on the regulated market, they still must meet the basic listing requirements of the exchange. They are requested to submit the name of the company, its location, and the jurisdiction that governs the corporation, as well as information about the activities of the company. If the company is not

traded at another exchange, more detailed information must be submitted, and if listing occurs in conjunction with an initial offering in the home market, a prospectus must be provided. Moreover, companies listed on the over-the-counter trade are obliged to disclose information about imminent shareholder meetings, dividend payments, changes in the capital structure of firms, and any other items that may be deemed relevant for the valuation of the shares.[26]

Whether firms (or their investors) migrate or prefer the home market may be taken as a sign of their perception of the home market and its ability to furnish them with liquidity and new capital. In the summer of 1998, prior to the Russian financial crisis, only 4 Polish companies were traded on any one of the German stock exchanges.[27] In comparison, Hungary had 17 and the Czech Republic 16 companies traded on German exchanges. The comparison is even more remarkable when we relate these numbers to the number of companies that were listed at that time at the local stock exchange. In percentage terms, Poland had 2 percent, the Czech Republic 5 percent, and Hungary 32 percent of its companies traded on German stock exchanges (see appendix table A9.3).

When the Russian financial crisis hit the Eastern European markets, investors began to flee emerging markets. In part this may have been simply a herd effect. However, in part it could also be related to the legal and institutional framework in emerging markets. To the extent that shareholder property rights are of primary importance in generating confidence in or causing nervousness about a market, companies that are traded at home and those traded abroad should be equally affected. If, however, investor protection rules are of more concern to investors, one would expect that markets with better investor protection rules would be less affected than those with weaker rules.

In all markets, both home and foreign, the value traded declined between August 1998 and March 1999. The decline was steepest on the PSE, which lost 30.5 percent. The Polish market lost 17 percent, and the Hungarian market lost 5.7 percent. However, value traded declined less on the German exchanges, where Czech companies lost 21 percent of value traded, Hungarian companies 5.7 percent, and Polish companies even gained 5.75 percent. This would support this chapter's proposition that for stock market development, investor protection rules are of greater importance than shareholder property rights. Note, however, that these data are not strictly comparable: only a segment of companies is traded at foreign exchanges, and probably the most attractive companies are listed there, which are better equipped to weather the storm of an exogenous shock. A more accurate comparison would therefore require a comparison of the data of individual companies.

Another indicator for the importance of investor protection rules might be the migration of firms to better governed markets in response to a crisis. Interestingly, for all three countries the number of companies that were traded on German stock exchanges increased after the Russian financial crisis of August 1998. In Poland, and—to a lesser extent—in Hungary, this reflects an increase in the total number of listed companies on the home market. In contrast, in the Czech Republic, the number of companies traded on German exchanges more than doubled, while the number of listed companies on the home market decreased by 35 percent. Thus, the Czech data seem to suggest that companies have greater credibility outside their home jurisdiction.



The relatively poor performance of the Czech market since the Russian financial crisis is also reflected in the substantial decrease in market capitalization (−35 percent). Compare this with a decrease of 22.1 percent in the case of Hungary and a 17.8 percent increase in the case of Poland. Another indicator for the comparably weak institutional framework of the Czech market is that the home market has been much more volatile in terms of changes in value traded than the local markets in Hungary and Poland. In fact, in the latter two countries the foreign markets have been more volatile than the home market.

In sum, data on stock market performance show that the three markets have evolved quite differently since their inception. Shareholder property rights cannot account for these differences, as they were almost identical in all three countries. The low scores the Czech Republic has received in survey data and its steeper decline since the Russian crisis are at least indicative of weaknesses in the institutional framework. Observers have already noted that investors were migrating from Prague to neighboring exchanges because the home market lacked credibility. The data presented above support this trend both for investors and for companies that seek listing on other exchanges.

To the extent that institutional factors can be held responsible for the relatively poor performance of the Czech market, this can be attributed primarily to the weaknesses in investor protection rules. As has been noted above, the conscious hands-off policy pursued by the Ministry of Finance during the early years of transition meant that only few investor protection rules were established or enforced. This policy was reversed only recently, and it remains to be seen whether this will have a positive impact on market development.

The Polish market has been strongest in terms of adding companies to the market since the beginning of the Russian crisis. In fact, it is now the largest market of the three in terms of numbers of listed companies as well as market capitalization, both in nominal value and as a share of GDP (see appendix table A9.1). The BSE has been less affected by the crisis than the Czech market. Its development overall appears to be slower, but also more steady, than the Polish market. Value traded as a percentage of GDP is still low, which indicates a rather illiquid market. In light of the privatization strategy pursued, this is not surprising. However, companies seem to be demanding greater liquidity. As of March 1999, 52 percent of the number of companies that are listed on the BSE

are also traded on German stock exchanges. Given the greater amounts of capital available on Western markets, block traders may have an easier time finding buyers. Thus, Hungarian firms may be following the example of continental European firms that began to migrate westward in the 1980s in search of greater liquidity. Over time, this may also provide greater liquidity to the Hungarian market.

## Conclusion

This chapter has advanced several themes. One is that law matters for stock market development, but that a better understanding of the types of legal rules and their relative importance within the context of existing constraints is needed. The chapter identifies three sets of rules that may be relevant for market development: shareholder property rights, investor protection, and trading rules. The experience of equity market development in the three most advanced transition economies, the Czech Republic, Hungary, and Poland, suggests that the set of rules that mattered most for the development of these markets are investor protection rules. Hungary and Poland both established strong investor protection rules at the outset of reforms, including an independent state agency to supervise these markets. While some observers have suggested that this has suffocated market development, these markets have outperformed the Czech market, despite the fact that the privatization strategy pursued in the Czech Republic created a much greater potential for the development of viable stock markets than the Polish or certainly the Hungarian strategy.

A second theme is that rules need to address the focal point of the prevailing conflicts within a given system. Where the focal point is the conflict between minority shareholders and block holders, strengthening judicial review of managerial decisions will not necessarily promote minority shareholder protection. Worse, rules designed for one system may increase transaction costs in another. An example is disclosure rules, which increase transaction costs for block trading. Similarly, deep and liquid markets will benefit from auction markets, while thin markets where block holding dominates might be better off with trading rules that allow dealers to transact on their own account.

The third theme is that precisely because different problems prevail in different systems and rules tend to accommodate these differences, institutional change tends to be path dependent. Nevertheless, this does not necessarily preclude change. The most powerful motor for change is competition between markets and between different sets of rules. When not only investors, but also stock market intermediaries and companies can choose the markets that offer the best terms for them, competition between, but also within systems can develop.

APPENDIX

TABLE A9.1. Stock Market Indicators for Transition Economies, 1991–98

| | Czech Republic | Hungary | Poland |
|---|---|---|---|
| Number of companies | | | |
| 1991 | 0 | 20 | 9 |
| 1992 | 0 | 23 | 16 |
| 1993 | 0 | 28 | 21 |
| 1994 | 1,028 | 40 | 36 |
| 1995 | 1,716 | 42 | 53 |
| 1996 | 1,670 | 45 | 55 |
| 1997 | 320 | 49 | 96 |
| 1998 | 261 | 55 | 206 |
| Market capitalization as percentage of GDP | | | |
| 1991 | 0 | 1.5 | |
| 1992 | 0 | 1.6 | |
| 1993 | 0 | 2.3 | |
| 1994 | 14.6 | 4.2 | |
| 1995 | 31.2 | 5.9 | 3.9 |
| 1996 | 32.1 | 12.5 | 6.6 |
| 1997 | 26.9 | 35.5 | 9.6 |
| 1998 | n.a. | n.a. | n.a. |
| Turnover ratio | | | |
| 1991 | 0 | 0 | 0 |
| 1992 | 0 | 6.35 | 89.7 |
| 1993 | 0 | 14.17 | 129.12 |
| 1994 | 0 | 21.56 | 176.73 |
| 1995 | 24.94 | 17.3 | 71.52 |
| 1996 | 50.28 | 41.56 | 84.76 |
| 1997 | 0 | 22.62 | 71.72 |
| 1998 | n.a. | n.a. | n.a. |
| Value traded as percentage of market capitalization | | | |
| 1991 | 0 | 0 | 18.5 |
| 1992 | 0 | 0 | 64.9 |
| 1993 | 0 | 0 | 68.5 |
| 1994 | 22.8 | 21.1 | 157.2 |
| 1995 | 23.0 | 29.3 | 59.4 |
| 1996 | 46.5 | 26.8 | 62.3 |
| 1997 | 50.5 | 7.4 | 61.2 |
| 1998 | n.a. | n.a. | n.a. |

*Continued*

TABLE A9.1.—*Continued*

| | Czech Republic | Hungary | Poland |
|---|---|---|---|
| Value traded as percentage of GDP | | | |
| 1991 | 0 | 0 | n.a. |
| 1992 | 0 | 0 | n.a. |
| 1993 | 0 | 0 | n.a. |
| 1994 | 3.3 | 0.9 | n.a. |
| 1995 | 7.1 | 1.7 | 2.3 |
| 1996 | 14.9 | 3.3 | 4.1 |
| 1997 | 13.6 | 2.6 | 5.9 |
| 1998 | n.a. | n.a. | n.a. |

*Source:* EBRD stock market data base; IFC Emerging Stock Market Data Base. n.a. = not available.

TABLE A9.2. East European Companies on Local and Foreign Stock Exchanges (nominal values)

| | Czech Republic | | Hungary | | Poland | |
|---|---|---|---|---|---|---|
| Stock Market Indicators | Local | German | Local | German | Local | German |
| Number of companies | | | | | | |
| July 98 | 271 | n.a. | 53 | n.a. | 183 | n.a. |
| Aug. 98 | 271 | 16 | 53 | 17 | 183 | 4 |
| Sept. 98 | 270 | 31 | 53 | 27 | 185 | 8 |
| Oct. 98 | 266 | 33 | 53 | 27 | 189 | 8 |
| Nov. 98 | 263 | 31 | 53 | 28 | 193 | 9 |
| Dec. 98 | 261 | 35 | 55 | 29 | 198 | 11 |
| Jan. 99 | 258 | 30 | 55 | 27 | 202 | 10 |
| Feb. 99 | 176 | 32 | 61 | 29 | 205 | 9 |
| Mar. 99 | 175 | 34 | 63 | 33 | 206 | 12 |
| Market capitalization | | | | | | |
| July 98 | 14,486.97 | n.a. | 16,131.58 | n.a. | 17,865.09 | n.a. |
| Aug. 98 | 10,894.77 | n.a. | 10,205.04 | n.a. | 11,934.14 | n.a. |
| Sept. 98 | 11,305.16 | n.a. | 9,923.71 | n.a. | 12,539.55 | n.a. |
| Oct. 98 | 12,256.70 | n.a. | 11,560.49 | n.a. | 12,961.15 | n.a. |
| Nov. 98 | 11,798.56 | n.a. | 12,513.35 | n.a. | 18,985.04 | n.a. |
| Dec. 98 | 12,045.45 | n.a. | 14,027.65 | n.a. | 20,461.09 | n.a. |
| Jan. 99 | 10,682.24 | n.a. | 14,542.03 | n.a. | 24,516.50 | n.a. |
| Feb. 99 | 8,696.74 | n.a. | 13,196.63 | n.a. | 20,117.70 | n.a. |
| Mar. 99 | 9,406.9 | n.a. | 12,566.93 | n.a. | 20,836.5 | n.a. |
| Value traded | | | | | | |
| July 98 | 430.89 | n.a. | 1445.22 | n.a. | 1165.28 | n.a. |
| Aug. 98 | 500.2 | 11.6 | 1365.96 | 7.8 | 599.08 | 2.4 |

TABLE A9.2.—*Continued*

| | Czech Republic | | Hungary | | Poland | |
|---|---|---|---|---|---|---|
| Stock Market Indicators | Local | German | Local | German | Local | German |
| Value traded | | | | | | |
| Sept. 98 | 533.95 | 14.2 | 1528.23 | 34.9 | 572.24 | 7.1 |
| Oct. 98 | 373.13 | 14.4 | 1336.76 | 40.7 | 558.14 | 5.5 |
| Nov. 98 | 388.35 | 12.3 | 1450.42 | 52.2 | 668.23 | 24.4 |
| Dec. 98 | 605.33 | 15.7 | 1540.97 | 34.3 | 812.89 | 6.1 |
| Jan. 99 | 228.88 | 6.7 | 1430.36 | 21.4 | 1010.96 | 20.4 |
| Feb. 99 | 221.36 | 7.2 | 1526.60 | 7.3 | 794.79 | 12.2 |
| Mar. 99 | 299.40 | 9.1 | 1362.34 | 7.2 | 965.46 | 16.2 |
| Value traded (percent change) | | | | | | |
| July 98 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Aug. 98 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Sept. 98 | 6.3 | 22.5 | 10.6 | 34.9 | −4.7 | 75.3 |
| Oct. 98 | −43.1 | 1.4 | −14.3 | 16.6 | −2.5 | −22.6 |
| Nov. 98 | 3.9 | −14.5 | 7.8 | 28.2 | 16.5 | 340.6 |
| Dec. 98 | 35.8 | 27.7 | 5.9 | −34.2 | 17.8 | −74.8 |
| Jan. 99 | −164.00 | −57.2 | −7.7 | −37.6 | 19.6 | 223.7 |
| Feb. 99 | −3.4 | 6.7 | 6.3 | −65.9 | −27.2 | −42.4 |
| Mar. 99 | 26.0 | 2.6 | −12.1 | −1.8 | 17.7 | 30.8 |

*Source:* IFC Emerging Stock Market Data Base; Deutsche Börse Group Statistics.
*Note:* all values in millions U.S. $. n.a. = not available.

TABLE A9.3. East European Companies on Local and Foreign (German) Stock Exchanges (foreign exchange as share of local exchange)

| Stock Market Indicators | Czech Republic (in percentages) | Hungary (in percentages) | Poland (in percentages) |
|---|---|---|---|
| Number of companies | | | |
| July 98 | n.a. | n.a. | n.a. |
| Aug. 98 | 5 | 32 | 2 |
| Sept. 98 | 11 | 51 | 4 |
| Oct. 98 | 12 | 51 | 4 |
| Nov. 98 | 12 | 53 | 5 |
| Dec. 98 | 13 | 53 | 6 |
| Jan. 99 | 12 | 49 | 5 |
| Feb. 99 | 18 | 48 | 4 |
| Mar. 99 | 19 | 52 | 6 |

*Continued*

TABLE A9.3.—*Continued*

| Stock Market Indicators | Czech Republic (in percentages) | Hungary (in percentages) | Poland (in percentages) |
|---|---|---|---|
| Value traded | | | |
| July 98 | n.a. | n.a. | n.a. |
| Aug. 98 | 2.3 | 0.5 | 0.4 |
| Sept. 98 | 2.7 | 2.3 | 1.2 |
| Oct. 98 | 3.9 | 3.0 | 1.0 |
| Nov. 98 | 3.2 | 3.6 | 3.7 |
| Dec. 98 | 2.6 | 2.2 | 0.8 |
| Jan. 99 | 2.9 | 1.5 | 2.0 |
| Feb. 99 | 3.3 | 0.4 | 1.5 |
| Mar. 99 | 3.0 | 0.5 | 1.7 |

*Source:* IFC Emerging Stock Market Data Base; Deutsche Börse Group Statistics.
*Note:* all values in millions of U.S. $.

NOTES

1. This process has been called the "privatization of privatization," because at this stage, the state would have relinquished its control rights, and market transactions would ensure the most efficient allocation of resources. See Frydman and Rapaczynski 1994.

2. The results of ordinary least square regressions for ownership concentration using legal origin dummies and a number of control variables have an adjusted $R^2$ of 56 percent. Adding the cumulative indices for creditor and shareholder protection increases the adjusted $R^2$ to 73 percent. See table 8 in La Porta et al. 1998.

3. An important aspect not included by the authors in explaining the relative concentration of ownership in the two countries is antitrust law. At the time when the antitrust law (the Sherman Act of 1890) was adopted in the United States, German courts acknowledged the legality of cartels—which frequently included cross-ownership relations—that were formed during the recession of the 1890s (Tilly 1998). Industrial concentration accelerated in Germany after World War I (Assmann 1992), while in the United States the 1920s witnessed increased dispersion of shares as described by Berle and Means (1932).

4. These data may underestimate the actual ownership concentration in an economy, as companies that are closely held will not even be listed on an exchange.

5. It is ironic that economists now stress the importance of law, while lawyers have earlier concluded that corporate law is "trivial" (Black 1990a, whose article is entitled "Is Corporate Law Trivial?") for corporate governance at least in developed market economies. See also Easterbrook and Fischel 1991.

6. See Black and Kraakman 1996 on the distinction between substantive and procedural rules.

7. This can be described as a redistribution of information rights in favor of potential investors who have neither a contractual claim nor a claim based on property rights (equity) against larger shareholders, or even a company to supply them with relevant financial information.



8. Stigler 1964; Jarrell 1981. For a defense of the U.S. securities regulation see, however, Seligman 1983 and Coffee 1984.

9. See Blumberg 1993 for a brief overview of the early history of the corporation. For a detailed account of the development of corporate law in the United Kingdom during the nineteenth century see Kostal 1994; for Germany see Assmann 1992.

10. The best example is the case of Japan, whose corporate law became heavily influenced by U.S. law following World War II.

11. Whether this enhances corporate governance is, however, a different matter. For a skeptical view see Romano 1991.

12. For an attempt to harmonize this body of law across Europe, see Forum Europaeum Konzernrecht (1998).

13. See Pistor 1999 for a detailed discussion of codetermination and its impact on corporate governance.

14. In Germany, the primary conflict-of-interest problem in the corporation is not the conflict between principals and agents, but between labor and capital. This is clearly reflected in the extensive codetermination legislation that applies to large corporations. See Pistor 1999.

15. This approach differs from that of Bebchuk and Roe (1999), who posit that *despite* harmonization of rules, convergence might not be happening. We argue that harmonization of rules may prevent convergence, because different conditions require rules to develop along similar paths.

16. Throughout the nineteenth century, the one share–one vote rule, for example, was highly uncommon. See Dunlavy 1998.

17. This applies to investors buying shares both on the primary and the secondary market and therefore also affects the operation of scenario 2 above.

18. In contrast, Russia relied on the Council of Minister Decree of the 1990s on joint stock companies that was not very comprehensive. This decree was supplemented by a model statute for privatized companies. A comprehensive corporate law was enacted only in 1996, that is, after mass privatization had been completed in June 1994. See Pistor 1997, 1998.

19. Data from World Scope data base.

20. The Napoleonic codes were introduced to parts of Poland as well as to parts of Germany when France occupied those territories.

21. As was the case in Russia, where notarial certification was required. See Pistor 1997.

22. The allocation of the right to appoint management from the shareholder meeting to the supervisory board occurred in Germany only in 1937 and in fact has been attributed to the fascist leader principle (Assmann 1992). Countries that had previously adopted German law did not necessarily follow this trend. In common law countries, the shareholder meeting appoints the board, which can either carry out management functions itself or delegate this task to executive officers the board appoints. Over time, this has become common practice. See Clark 1986 and Black and Kraakman 1996.

23. To give an example, the rules of the Budapest Stock Exchange state that if the State Securities Supervision Board suspends the securities trading license of a member

of the stock exchange, this automatically leads to the suspension of membership of the exchange. See Art. 7 and 8.1 Chapter of the Budapest Stock Exchange 1997.

24. Listing requirements of the WSE. See <http://www.atm.com.pl/gpw/regul_e.htm>.

25. The relevant question was: Are corporate boards effective in monitoring management performance and representing shareholder interests? The scores for the three countries were as follows: Czech Republic 3.23, Hungary 3.82, and Poland 3.44.

26. Guidelines of the Over the Counter Trade at the Berlin Stock Exchange (Section 5).

27. See tables A9.1 and A9.2 for details.

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