

**PATTERNS OF LEGAL CHANGE: SHAREHOLDER AND CREDITOR RIGHTS IN TRANSITION ECONOMIES**

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**1. INTRODUCTION**

The reform of the enterprise sector in the former socialist countries has been at the core of the economic reform programs, which were launched ten years ago, beginning in Poland and followed by other governments throughout the region. A key element of the enterprise reform package was privatisation. Depending on the country and the specific area of the law in question, this reform measure was preceded, accompanied, or followed by legal reforms. Legal reforms in the region have been comprehensive and affected not only areas immediately relevant for the enterprise sector, but the entire legal system

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ranging from constitutional, administrative, criminal and civil law to the organization and procedural rules of the court system.<sup>1</sup> This paper focuses on laws that are immediately relevant for the restructuring and financing of enterprises, in particular the rights of shareholders as stipulated in company laws, securities regulations, and the right of creditors as holders of collateral and in bankruptcy. The paper investigates the patterns of legal change in these areas of the law and identifies key determinants of legal change. The method employed is a formalised comparison of legal change based on pre-defined legal indicators. A data base was constructed, which codes the development of shareholder and creditor rights from 1990 through 1998 for 24 transition economies (excluding only Serbia, Tadjikistan and Turkmenistan). The paper joins a growing literature that uses cross-country formalised legal indicators to investigate the interaction between legal and economic change using statistical tools.<sup>2</sup> It introduces the data used and descriptively analyses the patterns of legal change that can be observed. A statistical analysis of the interaction between legal and economic change is addressed in a separate paper.<sup>3</sup>

The results presented in this paper can be summarized as follows: Differences in the law on the books were less pronounced at the outset of reform than one may have expected. Moreover, there is a strong tendency towards convergence of formal legal rules as the result of extensive legal reforms. Convergence seems to be primarily the result of foreign technical assistance programs as well as of harmonisation requirements for countries wishing to join the European Union. The external supply of legal rules notwithstanding, the pattern of legal reforms suggests that law reform has been primarily responsive to economic change rather than initiating or leading it. In comparison, the pre-socialist heritage of transition economies has little explanatory power for the observed patterns of legal change. Partial exceptions are countries with German legal heritage, which favour creditor over shareholder protection and displayed substantially better creditor protection at the outset of reforms than other transition economies.

<sup>1</sup> Pistor, *Law Meets the Market: Matches and Mismatches in Transition Economies*, (Washington D.C., unpublished mimeo, The World Bank 1995); Gray, *Evolving Legal Framework for Private Sector Development in Central and Eastern Europe*, (Washington, D.C., The World Bank 1993); Sachs and Pistor, *Rule of Law and Economic Reform in Russia*, (Boulder, Co., Westview Press 1997).

<sup>2</sup> La Porta, et al., "Law and Finance", 106 *Journal of Political Economy* (1998) 1113-1155; La Porta, et al., "Legal Determinants of External Finance", 52 *Journal of Finance* (1997) 1131-1150; Levine, "The Legal Environment, Banks, and Long-Run Economic Growth", 30 *Journal of Money, Credit, and Banking* (1998) 596-613.

<sup>3</sup> Pistor, et al., "Law and Finance in Transition Economies", *Economics of Transition* (2000) (forthcoming).

## 2. CONVERGENCE AND DIVERGENCE IN LEGAL DEVELOPMENT

The literature of the new institutional economics (NIE) defines institutions as "any form of constraint that human beings devise to shape human interaction",<sup>4</sup> which includes both the formal law and informal constraints, or social norms. A question raised in this literature, which shall also be addressed in this paper, is how institutions change over time. Two competing hypotheses address the dynamics of institutional change. The first hypothesis suggests that competition will over time self-select the most effective institutions and different social systems will converge on these.<sup>5</sup> The second hypothesis proposes that institutions develop along path dependent trajectories. Institutional change is incremental and shaped by pre-existing conditions. Thus, systems will continue to diverge rather than converge, even in the presence of competition.<sup>6</sup> In light of the increasing integration of markets, some authors suggest that while specific institutions may remain different, the globalisation of the economy will lead to functional convergence through substitution effects.<sup>7</sup> Thus, a third hypothesis could be added, namely that different institutional arrangements may be used for similar functions. The variance in institutions may be the result of different initial conditions, but the tasks they perform are largely the same.

There is a lively debate in the corporate governance literature about these alternative patterns of institutional development and in particular about the role of law for convergence or divergence of corporate governance systems. Proponents of the divergence, or path dependence, hypothesis argue that even if corporate law was harmonised across countries, other legal rules (tax laws,

<sup>4</sup> North, *Institutions, Institutional Change and Economic Performance* (Cambridge, Cambridge University Press 1990), 1st edn. (New York, Norton 1981) p. 4.

<sup>5</sup> Easterbrook and Fischel, *The Economic Structure of Corporate Law*, (Cambridge, Mass., Harvard University Press 1991). The convergence hypothesis has been most prevalent among macro-economists. They show strong trends towards convergence in levels of GDP per capita among regions within the US. See on strong convergence of OECD countries Dorwick and Nguyen, "OECD Comparative Economic Growth 1950-1985", 79 *American Economic Review* (1989) 1010-1030; however, only conditional convergence for developing countries Barro and Sala-i-Martin, "Convergence", 100 *Journal of Political Economy* (1992) 223-251.

<sup>6</sup> North, *supra* n. 4; Roe, "Chaos and Evolution in Law and Economics", 109 *Harv. L.Rev.* (1996) 641-668.

<sup>7</sup> Coffee, "The Future As History: The Prospects for Global Convergence in Corporate Governance and Its Implications", 93 *NW Univ L Rev.* (1999) 631-707. For a similar point based on a case study of recent trends in German corporate governance see Gordon, "Corporate Governance: Pathways to Corporate Convergence? Two Steps on the Road to Shareholder Capitalism in Germany", 3 *Colum J Eur L* (1999) 219. However, he correctly points out that political constraints, as well as long-term practices of insider governance may limit the scope of convergence. See *ibid.* at p. 241.

co-determination legislation, etc.) and institutional constraints (financial structure, existing ownership structure of firms), or simply political considerations would stand in the way of convergence.<sup>8</sup> The opposite view holds that convergence is likely to take place, once the main regulatory obstacles are removed.<sup>9</sup> The economic forces towards success, they suggest, are the same all over the world. Both views regard legal institutions as important for promoting or hindering convergence, but differ in their assessment of the propensity of a particular body of law, such as corporate law, to achieve this goal.

The literature up to now has used qualitative analysis as a method to investigate these questions. This paper, by contrast, proposes a way to test the competing hypotheses this literature has developed in a more rigorous way by systematically coding legal rules in time series. In this regard, the paper also deviates from La Porta, et al., who code legal rules at a single point in time – the early nineties – and boldly assume that law does not change dramatically over time.<sup>10</sup>

The paper focuses on the development of legal change in transition economies (TEs) and documents change in the law on the books. There are several reasons for mapping out the details of change in the law on the books. First, some authors have argued that even though corporate law may be trivial in developed market economies,<sup>11</sup> it is likely to play a much greater role in transition economies where it not only redefines the allocation of rights and responsibilities of various stakeholders, but also serves an educational function.<sup>12</sup> Second, new research results stress the importance of legal rules as determinants for corporate finance and corporate governance. In a survey of corporate governance around the world, Shleifer and Vishny argue that the structure of companies and the level of stock market development is determined by the quality of shareholder protection.<sup>13</sup> In countries with strong

<sup>8</sup> Roe (1996), *supra* n. 6; Bebchuk and Roe, "A Theory of Path Dependence in Corporate Governance and Ownership", 52 *Stanf. L Rev.* (1999) 127. See also Gordon, *supra* n. 7.

<sup>9</sup> Easterbrook and Fischel, *The Economic Structure of Corporate Law*, (Cambridge, Mass., Harvard University Press 1991); Ramseyer, "The A-Contextual Logic to the Japanese Keiretsu", in: Roe (ed.), *Corporate Governance Today*, (New York City, offset 1998) pp. 527-563.

<sup>10</sup> See La Porta, et al. (1998), *supra* n. 2, at p. 1126.

<sup>11</sup> Black, "Is Corporate Law Trivial?: A Political and Economic Analysis", 84 *NW Univ L Rev.* (1990) 542-597. The argument holds that efficient capital markets, well-functioning and competitive managerial labor, and product markets, are more effective constraints on managerial power than formal legal constraints.

<sup>12</sup> Black and Kraakman, "A Self-Enforcing Model of Corporate Law", 109 *Harv. L.Rev.* (1996); 1911-1982. Hay, et al., "Toward a Theory of Legal Reform", 40 *European Economic Review* (1996) 559-567.

<sup>13</sup> Shleifer and Vishny, "A Survey of Corporate Governance", 52 *Journal of Finance* (1997) 737-783.

shareholder protection, investors can afford to take minority positions rather than controlling stakes. As a result, companies tend to have dispersed shareholders as owners, and capital markets are rather liquid. By contrast, where shareholder rights are not well protected, investors will compensate this deficiency by taking controlling stakes. This leads to high levels of ownership concentration. Regression analyses using indicators for the quality of the law on the books in 49 countries around the world (excluding transition economies) on the one hand, and ownership concentration of the largest listed companies as well as key indicators for stock market development on the other, confirm that high quality law on the books – as measured by the legal indicators used in this study – is positively correlated with (relatively) dispersed ownership and liquid capital markets.<sup>14</sup> Similarly, Levine shows that high quality creditor protection law is important for bank performance as measured by the volume of credit to the private sector.<sup>15</sup>

Third, a detailed analysis of change in the law on the books will enhance our understanding of the interaction between legal and economic change. Law is frequently treated as exogenous to socio-economic change, because many countries received their formal legal order from other countries by way of transplantation.<sup>16</sup> In the most simplistic scenario of the convergence theory, identical legal rules should lead to largely similar outcomes. However, even when law is transplanted, the law does not necessarily precede the development of a country's enterprise or financial sector. Structural differences in the ownership concentration of firms, the existence or absence of stock markets, the quality of the banking sector, and the extent to which the state controls the real and/or the financial sector either directly as an owner, or indirectly through regulation and case by case interventions, may have created conditions that put countries on different development paths, which are not easily broken by changing the laws on the books.<sup>17</sup>

The problem of pre-existing conditions is of particular relevance in transition economies. They inherited an enterprise sector from the socialist regime, which was in need of restructuring. Although the development of a new enterprise sector is important, the main challenge at least in the initial stages of

<sup>14</sup> La Porta, et al. (1998), *supra* n. 2; La Porta, et al. (1997), *ibid.* The authors of these studies also mention the importance of effective enforcement institutions. Yet, even if these variables are controlled, the contents of legal rules and their origin seems to matter.

<sup>15</sup> Levine (1998), *supra* n. 2.

<sup>16</sup> La Porta, et al. (1998), *supra* n. 2.

<sup>17</sup> Bebchuk and Roe (1999), *supra* n. 8; Bebchuk, "A Rent-Protection Theory of Corporate Ownership and Control", 7203 *NBER Working Paper Series* (1999); Pistor, "Law as a Determinant for Stockmarket Development in Eastern Europe", in: Murrell (ed.), *Assessing the Value of Law in Transition Economies*, (Ann Arbor: University of Michigan Press 2000 (forthcoming)).

economic transition was to devise a legal system that would help meet the financial needs of the *existing* enterprises and facilitate their restructuring. Privatization strategies may have created another path dependence, as they determined the initial ownership structure of companies. Mass privatization programs tended to promote relatively more dispersed ownership structures and/or large fractions of insider ownership, whereas direct sales methods led to block holdings by strategic investors.<sup>18</sup> In addition, the legacy of the socialist system meant that most countries were saddled with banks that carried bad loan portfolios and lacked the capacity to assess and monitor the viability of the investment projects they were financing.<sup>19</sup> Whether these initial conditions or the quality of laws can explain the outcomes we observe today, such as the extent of enterprise restructuring, the level of development of the financial sector, or the effectiveness of corporate governance, can only be assessed once we know the pattern of legal change.

Path dependence is relevant not only for economic development, but also for the development of the legal system. An important finding of La Porta, et al., is that countries, which became part of the same legal family in the nineteenth century display remarkably similar features in the quality of investor protection even today.<sup>20</sup> Transition economies were not barren countries either with respect to their legal development. Many of the Central and Eastern European countries still had their pre-war codes on the books. They were often riddled with socialist principles, but still contained key provisions on shareholder and creditor rights. Most of these countries can trace their formal legal systems back to either to the German or the French civil law family.<sup>21</sup> Fol-

<sup>18</sup> Despite these differences in initial conditions, commentators agree that transition economies are increasingly converging on a control structure with concentrated ownership rather than sustaining dispersed ownership. See Berglöf, "Corporate Governance in Transition Economies: The Theory and Its Policy Implications", in: Aoki and Kim (eds.), *Corporate Governance in Transitional Economies*, (Washington, D.C., The World Bank 1995) pp. 59-98 with data for the largest companies in three transition economies. For a theoretical explanation of the instability of non-control structures, see Bebchuk (1999), *supra* n. 17.

<sup>19</sup> Brainard, "Reform in Eastern Europe: Creating a Capital Market", *Economic Rev.* (1991) 49-58; EBRD, *Transition Report* (London, European Bank for Reconstruction and Development (EBRD) 1998).

<sup>20</sup> La Porta, et al. (1998), *supra* n. 2.

<sup>21</sup> Many of the countries in Central and Eastern Europe modeled their legal systems in the interwar period on the German system. In the countries of South-Eastern Europe that used to be part of the Ottoman empire, French law had stronger influence, mostly because of the reception of French law in the 19th century when the Ottoman empire reformed its legal system. Nevertheless, the borrowing does not suggest that the model was followed closely, or other legal systems were not consulted in the process. A brief summary of the history of formal private law in different countries can be found in: *International Encyclopedia of Comparative Law, National Reports*, (Tübingen, J.C.B. Mohr 1972). For a summary of the socialist legal system,

lowing the logic of the path dependence hypothesis, one might expect that they will now borrow again from countries that belong to the same legal family, rather than looking for more effective rules elsewhere.<sup>22</sup>

In addition, the socialist system itself, including the early transition to a market economy may have created new path dependencies. Many transition economies had started to introduce legal change prior to the collapse of the socialist system.<sup>23</sup> Hungary was the first country to introduce a bankruptcy code in 1986 and to promulgate a law on business associations in 1988. The Soviet Union also engaged in extensive legal reforms during the period of *perestroika*, which has shaped the post-socialist legal system.<sup>24</sup> A law on enterprises was adopted in 1987 and decrees on joint stock companies were issued at the Union level as well as in Russia in 1990. Many of these laws had serious gaps. Moreover, as these laws were adopted when the socialist doctrine still shaped the basic understanding and design of law, they frequently introduced hybrid legal constructions, which created obstacles for market based legal reforms in the post-socialist era. This is true in particular in the area of property rights. A good example is the concept of operative management, which allocates full control over assets to a company without transferring ownership. The separation between ownership and control leaves management unaccountable to the owner and fails to allocate liabilities of the enterprise.<sup>25</sup>

Thus, pre-war history, late socialist reforms, as well as the policy choices at the outset of the transition process may have constrained policy makers and legislators in designing a new legal system. And yet, the change of the political and economic regime, which they initiated could have given them the opportunity to design the law on the books in a way they deemed most appropriate for future development. Because of the relative ease with which laws can be enacted in comparison to the difficulties of restructuring the enterprise or financial sectors (prolonged political struggles in parliament notwith-

see Zweigert and Kötz, *Einführung in die Rechtsvergleichung auf dem Gebiet des Privatrechts*, 2. Aufl. (Tübingen, J.C.B. Mohr Paul Siebeck 1984) pp. 332-403. This legal family has now been discarded from this book. See Zweigert and Kötz, *Introduction to Comparative Law*, 3rd edn. (Oxford, Clarendon Press 1998).

<sup>22</sup> There is, of course, a lively debate about the relevance of legal families. The area of the law for which the legal families have been developed is the core of civil law, i.e., contract law, property rights, and torts. Constitutional and administrative law development usually do not follow the same pattern. Even for other areas of private law, including corporate law and capital market development, it is doubtful, whether a consistent set of criteria exists that makes the distinction of different legal families meaningful.

<sup>23</sup> Pistor (1995), *op. cit.* n. 1.

<sup>24</sup> Butler, *Soviet Law*, 2nd edn. (London, Butterworths 1988); Feldbrugge, *Russian Law: The End of the Soviet System and the Role of Law*, (Dordrecht, Martinus Nijhoff Publishers 1993).

<sup>25</sup> See Feldbrugge (1993), *op. cit.* n. 24, pp. 236-239 for details.

standing) this is the area, where policy design should be most apparent. This scenario assumes that policy makers are fully aware of the possible implications of alternative institutional design, and are free to choose among them. The actual experience of transition shows, that this is a rather bold assumption. Case study analyses of institutional reform in transition economies show that the selection and implementation of reform measures was more erratic, with frequently several reform avenues pursued simultaneously.<sup>26</sup>

In order to analyse the determinants of legal change in transition economies, we have constructed a data base that codes shareholder and creditor rights in 24 transition economies from 1990 through 1998. We capture annual change with the year-end status being used for coding purposes. The coding includes, but extends the indicators selected by La Porta, et al.<sup>27</sup> The primary purpose of this extension is to capture possible functional substitutions different legal systems offer for shareholder or creditor protection. We will discuss the additional variables as well as the cumulative indices we constructed using these variables in sections 3 and 4 below.<sup>28</sup> The original indicators are, however, sufficient for a first test of the convergence or divergence hypotheses in legal development. They also enable us to compare emerging patterns in transition economies with those found in other countries.

We refer to the cumulative shareholder rights index (called antidirectors index by La Porta, et al.) as LLSVsh, and to the cumulative creditors rights index as LLSVcr. LLSVsh is composed of six variables, which reflect the position of minority shareholders in companies and code provisions that protect them on the one hand, as well as the absence of provisions that weaken their position, on the other. The index includes (1) proxy voting by mail; (2) shareholders not required by law to deposit their shares prior to the general shareholders' meeting; (3) cumulative voting, or proportional representation of minorities on the board of directors ensured by other means; (4) an oppressed minorities mechanism, defined as the ability of shareholders to sue directors or to challenge the decisions of shareholder meetings in court; (5) the minimum percentage of share capital that entitles a shareholder to call an extraordinary shareholders' meeting, being less than or equal to 10 %; and (6) shareholders having pre-emptive rights when new shares are issued that can be waived only by a shareholder vote.

LLSVcr includes four variables, all of which address the role of creditors, and in particular secured creditors, in bankruptcy procedure: (1) restrictions

<sup>26</sup> See Elster, Ofte and Preuss, *Institutional Design in Post-communist Societies: Rebuilding the Ship at Sea*, (Cambridge, UK, Cambridge University Press 1998), for the pattern of institutional change in Bulgaria, the Czech Republic, Hungary and Slovakia.

<sup>27</sup> La Porta, et al. (1998), *supra* n. 2.

<sup>28</sup> Details for the definition of variables and their coding are given in Appendix 1.

such as creditor consent exist for going into reorganization as opposed to liquidation; (2) secured creditors are not stayed in bankruptcy; (3) secured assets are satisfied first when assets are distributed; and (4) management does not stay in bankruptcy, but is replaced with a court or creditor appointed receiver.

The convergence hypothesis as applied to legal change predicts that countries select the legal rules that have shown to be most effective in other countries, and regulatory competition leads to the harmonisation of legal rules. By contrast, the divergence hypothesis proposes that the choices lawmakers face are constrained by pre-existing institutions, political and social forces. Transition economies may have been caught in this pattern of path dependent development, or they may have taken the opportunity of a regime change to fundamentally alter their inherited legal systems by choosing legal rules that have shown to be most effective in competitive institutional evolution. To test these two propositions, we determine the level of shareholder and creditor protection in transition economies at the outset of the transition period. Rather than 1990, we chose 1992, because of variations in the onset of the regime change, and because we lack early data for some countries.

Using the pre-socialist legal heritage as a basis, we can distinguish three groups of countries moving from West to East. First, the countries with a German legal heritage. They received their formal legal systems either from Austria, because they belonged to the Austro-Hungarian empire prior to its dissolution, or copied the law from Germany in the interwar period. The countries that belong to this family include most of the countries of Central and Eastern Europe and the Baltics, namely Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic, and Slovenia (hereinafter CEE/Baltics).<sup>29</sup> The second group are countries that used to belong to the Ottoman empire and received French law, when its legal system underwent modernisation in the mid 19th century.<sup>30</sup> These countries include Albania, Bosnia, Bulgaria, the Federal Yugoslav Republic of Macedonia, and Romania, i.e., the countries of South-Eastern Europe (hereinafter SEE). The final group is comprised of the former Soviet Union Republics with the exception of the Baltic states. Their legal history is quite diverse. Russia was influenced by Roman/Byzantine law and reforms in the late 19th and early 20th century were

<sup>29</sup> Part of Poland, of course, received French law during the Napoleonic wars. However, subsequent German law has been stronger.

<sup>30</sup> Note that periodically Bosnia belonged to the Austro-Hungarian empire, but this has not strongly affected its legal development during the 19th century.

modeled primarily on German law.<sup>31</sup> The Central Asian republics were governed by Islamic law and various customary rules. What they have in common is the absence of a firmly established modern formal legal order prior to the emergence of the socialist system. Table 1 below lists the level of shareholder and creditor rights in the three regions in 1992 and 1998 and compares it with the level of protection in the four major legal families reported on.<sup>32</sup>

Table 1: Shareholder and creditor rights in comparison with legal families and world average

	Shareholder rights		Creditor rights	
	1992	1998	1992	1998
CEE/Baltics	2	3.05	2.55	3.55
SEE	2	2.6	0	3
Eurasia	2.35	3.45	1.05	3.05
All Transition Economies	2.17	3.13	1.40	3.23
Common law	4.0		3.11	
French civil law	2.33		1.58	
German civil law	2.33		2.33	
Scandinavian civil law	3.0		2.0	
World average (49 countries)	3.0		2.30	

Source: La Porta, et al. (1998), *supra* n. 2 and compilation by author.

At the outset of legal reforms, the level of shareholder and creditor protection in all transition economies was well below world average. In the breakdown by legal families, the only exception is the level of creditor rights protection in transition economies of German legal origin. They are above world average, and even higher than the Germany family average. By 1998, legal changes had been introduced that raised the level of investor protection in most transition economies above the level of the civil law systems and brought them within close range of the average for common law countries, which offers the best protection for investors according to La Porta, et al.<sup>33</sup>

The fact that transition economies of French origin continue to lag behind most other transition economies in 1998, can be attributed largely to the late onset of reforms in the countries that used to belong to Yugoslavia, where war and civil unrest delayed economic as well as legal reforms.<sup>34</sup> Still, changes in creditor rights have been remarkable in these countries. An interesting

<sup>31</sup> Owen, *The Corporation under Russian Law, 1800-1917*, (Cambridge, UK, Cambridge University Press 1991); *International Encyclopedia of Comparative Law, National Reports, supra* n. 22, 1.

<sup>32</sup> La Porta, et al. (1998), *supra* n. 2.

<sup>33</sup> *Ibid.*

<sup>34</sup> Compare also the indicators for economic reforms of the EBRD in: EBRD (1998), *supra* n. 19.

feature of the Eurasian countries is that their performance as of 1992 is less bad than one might have expected of countries that did not have a pre-socialist history of a developed civil and commercial law. This is primarily the result of the late *perestroika* reforms, which introduced some basic rules on the organization of enterprises, including shareholder protection rules.<sup>35</sup> By 1998, the Eurasian transition economies had not only caught up with other transition economies, but their laws now offer better protection on average than the laws of other transition economies. In contrast, creditor rights were only very weakly protected in this region as of 1992 and in 1998 they continue to lag behind the CEE/Baltics. The latter group of countries displays the least dramatic change between 1992 and 1998. Yet legal change during the transition period has improved the level of investor protection above that of other German legal systems. The results suggest that overall the law on the books in transition economies is converging towards legal rules of the highest level irrespective of the pre-socialist legal heritage.

Convergence of legal rules can have different causes. It may be the result of top-down harmonisation, which in turn may be induced by international standardisation of selected areas of the law, the influence of a common pool of advisors, or the conscious selection by domestic policy-makers in the law receiving country of the best quality laws based on comparative research. Alternatively, convergence of legal rules may be the result of a response to similar problems, which call for similar solutions. For example, widespread violation of minority shareholder rights may have triggered similar efforts to strengthen the protection of these rights across the region.

There is strong evidence that much of the legal change in shareholder and creditor rights we can observe in transition economies is the result of foreign technical assistance. Various countries have offered extensive aid to transition economies for reforming their legal systems. The American aid agency (USAID) has been particularly active in many countries of the former Soviet Union, including Armenia, Georgia, Kyrgyzstan, Kazakhstan, Moldova, Russia, Uzbekistan, and Ukraine, but also in Bosnia-Herzegovina, Macedonia, and with regard to creditor rights, also in Poland.<sup>36</sup> Countries wishing to

<sup>35</sup> Feldbrugge, *op. cit.* n. 24; Pistor, "Company Law and Corporate Governance in Russia", in: Sachs and Pistor (eds.), *supra* n. 1, pp. 165-187; Gray and Hendely, "Developing Commercial Law in Transition Economies: Examples from Hungary and Russia", *ibid.*, pp. 139-164.

<sup>36</sup> This information was given by Alexander Shapleigh of USAID. According to USAID, the results have not been equally strong in all countries. Good results were achieved in shareholder rights reforms in Armenia, Kazakhstan, Kyrgyzstan and Romania. For creditor rights, good results were reported for Kazakhstan, Kyrgyzstan, Latvia, Poland, Romania and Ukraine. Since this assessment is highly subjective, in our analysis we include all countries that have received USAID for legal reforms of shareholder and creditor rights.

join the European Union (EU) are required to harmonise extensive parts of their laws with European standards. This includes key areas of the law that affect shareholder rights, as well as creditor rights. The recent corporate law amendments in the Czech Republic, and Hungary, for example, can be attributed to an effort to comply with harmonisation requirements. To illustrate the supply-induced convergence, Table 2 reports the value for LLSVsh and LLSVcr in 1998 for countries that received substantial aid from USAID for reforming their legal system on the one hand, and those that have completed accession arrangements with the EU on the other. We drop Bosnia-Herzegovina and the FYR Macedonia for the comparison, as the late onset of reforms may skew the results.

Table 2: Supply-led convergence of legal rules

	LLSVsh (1998)	LLSVcr (1998)
<i>Recipients of USAID</i>		
Armenia	5.5	na
Georgia	3.0	2.75
Kazakhstan	5.25	2.75
Kyrgyzstan	2.25	3
Latvia	na	4
Moldova	3.5	4
Poland	na	2.25
Romania	3	4
Russia	5.5	2.5
Ukraine	3.5	2.5
Uzbekistan	3.5	2.5
Mean for TEs that received USAID	3.85	3.03
<i>First tier EU accession countries</i>		
Czech Republic	3	3
Estonia	3.75	4
Hungary	3	3.75
Poland	3	2.25
Slovenia	2.5	4
First tier EU accession countries	3.05	3.4
Sample mean all TEs	3.13	3.23

Note: na = not applicable, meaning that for this area of the law, there was no substantial involvement of USAID.

Source: Author's compilation.

The most striking result is the high level of minority shareholder protection in the countries that received aid from the United States. The average for the six countries listed in Table 2 is close to the average of the common law family (see Table 1 above). The countries that belong to the first tier of future EU accession countries offer lower levels of minority shareholder protection,

but are still well above the average of German or French civil law systems. The reason could be that several EU guidelines that were used for reforming the corporate laws of prospective Member States are influenced by UK law and thus are leading to an influx of common law principles into the core countries of the civil law systems.<sup>37</sup> Differences in creditor protection are more difficult to attribute to different donors than differences in shareholder rights, at least if we confine ourselves to the few indicators constructed by La Porta, et al.

The evidence of convergence of legal rules across the region notwithstanding, the basis for comparison when using only LLSVsh and LLSVcr is rather limited. For a more comprehensive assessment of the patterns of legal change in transition economies, we therefore develop a more extensive taxonomy of shareholder and creditor rights in the following two sections.

### 3. TAXONOMY OF SHAREHOLDER RIGHTS

The indicators we used for a first test of the convergence and divergence hypotheses focus only on particular aspects of the law. For shareholders (LLSVsh), minority shareholder rights are coded, and for creditor rights (LLSVcr), the rights of creditors, in particular of secured creditors, in bankruptcy. Neither corporate law statutes nor legal rules aimed at protecting creditors, however, are necessarily limited to these functions, nor is there necessarily only one set of rules to achieve a particular outcome. A broader analysis of the dynamics of legal change in transition economies therefore requires the inclusion of variables that capture other goals of the law, or offer functional substitutes.<sup>38</sup> In this section we develop a taxonomy of shareholder rights, while the next section is devoted to creditor rights. Although the inclusion of some variables was motivated by legal developments in transition economies, in

<sup>37</sup> For a discussion of the effects of the takeover guideline in Poland, see Soltysinski, "Transfer of Legal Systems as Seen by the "Import Countries": A View from Warsaw", in: Drobniak, et al. (eds.), *Systemtransformation in Mittel- und Osteuropa und ihre Folgen für Banken, Börsen und Kreditsicherheiten*, (Tübingen, Mohr Siebeck 1998) pp. 69-82. Compare this with the positive evaluation of the City Takeover Code for transition economies by Coffee, "The Lessons From Securities Market Failure: Privatization, Minority Protection, and Investor Confidence", draft of September 1999.

<sup>38</sup> In comparative law methodology, analyzing the function of legal rules rather than trying to find identical legal rules in different systems has long been recognized. See Zweigert and Kötz (1984), op. cit. n. 21, who call this approach a functional approach to comparative law. Critical, however, Frankenberg, "Critical Comparisons: Re-thinking Comparative Law", 26 *Harv. Int LJ* (1985) 411-455. On the importance of functional substitutes in corporate governance and securities market regulation, see Coffee (1999), *supra* n. 7.

principle this taxonomy may also be used to analyze the patterns of legal change in other countries in more detail.

For shareholder rights we create five cumulative indices in addition to LLSVsh: VOICE, EXIT, ANTIMANAGE, ANTIBLOCK and SMINTEGR. The corporate governance literature commonly distinguishes between “voice” and “exit” as the two alternative strategies shareholders may invoke to assert their control over company management.<sup>39</sup> “Voice” refers to control through voting rights, including hiring and dismissing managers, shareholder suits, and the like. “Exit” means that shareholders may liquidate their holdings by selling their shares in case they are not satisfied with the way a company is managed. Both mechanisms shall protect shareholders, but they provide different avenues for that purpose and are secured by different legal rules. Most of the LLSVsh indicators are legal rules that protect “voice”. The fact that these variables appear to be important determinants for stock market development, may seem puzzling. A naive application of the “voice” vs. “exit” concepts to the law would suggest that for equity market development, exit rules should be more important than voice rules. The strong correlation between minority voice rights and capital market development,<sup>40</sup> however, suggests that even though minority shareholders may be passive and prefer “exit”, they are likely to acquire minority stakes only, if this position gives them the potential to exert control through “voice”, despite the fact that (due to cost considerations) voice may never be exercised. Yet, since LLSVsh does not include indicators for shareholder exit rights, we cannot test, whether they indeed substitute for weak voice rights.

The VOICE index includes all of the LLSVsh variables, as well as other control variables, which may, but do not have to, be specifically targeted at minority shareholders. In particular, VOICE includes the right of minority shareholders to call an audit commission, a minimum quorum requirement for a shareholder meeting to take binding decisions, supermajority requirements for adopting decisions that affect the existence of the corporation in its current form (including amendments to the charter, the liquidation of the company, or mergers and reorganizations), the possibility to fire directors and managers at any time without cause, and the absence of provisions that mandate employee or state representation on the board. The last provision may strengthen the position of other stakeholders in the company, but does so at the expense of shareholder control. Finally, we have included a provision which reflects a special feature of many corporate statutes in transition economies: the al-

location of the right to hire and fire top management (chief executives) of the company. In most developed market economies today this right is vested with the board of directors (supervisory board), which in turn is elected by the shareholder meeting. This “representative democracy” model is widely believed to be more effective in controlling management than the “direct democracy” model,<sup>41</sup> in which shareholders themselves hold this key control right. The reason is that shareholders may lack the information necessary to respond, and even if they have access to adequate information, will be slow to act. Yet, several transition economies still favor the “direct democracy” model, although different arrangements in the corporate charter are often optional.

The EXIT index includes legal rules that facilitate shareholders leaving the corporation. This includes a legal provision that protects the right to sell shares without prior approval by other shareholders or the company’s directors (without exceptions to this rule, i.e., for bearer shares, which are quite common in civil law countries); and the absence of extensive formal requirements for selling one’s shares. EXIT also includes rules that facilitate exit by shareholders in case of takeovers and other major transactions that may endanger their position in the company. In particular we include put options and mandatory takeover rules. While the latter may prevent takeovers (which in the context of transition economies may in fact be desirable), the protection of minority shareholders is still an important objective.

With ANTIMANAGE and ANTIBLOCK we try to assess the relative weight given by a legal system to the conflict between shareholders and management on the one hand, and minority shareholders and blockholders on the other. Comparative corporate governance analysis has shown that the conflict that is widely assumed to be at the heart of the governance problem, the principal-agent conflict between shareholders and managers, is not the relevant conflict in many countries.<sup>42</sup> Companies with highly concentrated ownership typically have a shareholder whose stake is large enough to effectively control management. The strong position of a blockholder may, however, endanger the position of minority shareholders. ANTIMANAGE includes legal rules aimed at protecting shareholders against management, and ANTIBLOCK rules are designed to protect minority shareholders against blockholders. The relevance of either set of rules will be determined by the owner-

<sup>41</sup> Black and Kraakman, *supra* n. 12.

<sup>42</sup> Berglöf (1995), *supra* n. 18; Berglöf and Von Thadden, “The Changing Corporate Governance Paradigm: Implications for Transition and Developing Countries”, *Proceedings of the Annual Bank Conference on Development Economics*, (Washington, D.C., The World Bank 1999); La Porta, et al., “Corporate Ownership Around the World”, 54 *Journal of Finance* (1999) 471-517.

<sup>39</sup> Hirschman, *Exit, Voice, and Loyalty; Responses to Decline in Firms, Organizations, and States*, (1970); Coffee, “Liquidity Versus Control: The Institutional Investor as Corporate Monitor”, 91 *Colum. L Rev.* (1991) 1277-1368.

<sup>40</sup> La Porta, et al. (1997), *supra* n. 2.



ship structure of firms. In firms with a high concentration of ownership, minority shareholders will require effective ANTIBLOCK provisions. By contrast, in firms with dispersed shareholdings, ANTIMANAGE provisions are warranted.

ANTIMANAGE is not identical with LLSVsh discussed above. In the oppressed minority variable, for example, LLSVsh lumps together the right of shareholders to sue directors with the right to challenge in court decisions that were taken at the general shareholder meeting. Management is the target of the first right, while other shareholders, in particular, controlling ones, are the target of the latter. We therefore split this variable into two separate ones and use the right to sue management for ANTIMANAGE, and the right to challenge decisions of the shareholder meeting for ANTIBLOCK. ANTIMANAGE also includes self-dealing rules, which require management to abstain from or disclose transactions that compromise their loyalty to the company, while ANTIBLOCK combines some of the voice and exit variables that protect minority shareholders especially against controlling shareholders, including quorum requirements, and put options.

Finally, we create a stock market integrity index (SMINTEGR), which codes rules the primary purpose of which is not the protection of individual shareholder rights, but of the integrity of the capital market. This is a classic example for a functional substitute. The ultimate goal of individual shareholder rights is to effectively control the use of capital by the firm, which should influence the market value of shares and thus their liquidity on the market. However, market liquidity could be equally well, or in some circumstances even better protected with rules that are designed to protect the functioning of the market and are enforced by the state.<sup>43</sup> We use self-dealing, insider trading rules, provisions on the independence of a shareholder registry, and regulations on the supervision of the stock market by a state agency to capture this function.<sup>44</sup> Appendix 1 includes the definitions of the variables used to construct the various indices and explains how they were coded. Appendix 2 reports the level of shareholder protection for these six indices for all 24 transition economies from 1992 through 1998. Table 3 below gives the mean score as well as the percentage of each index for all transition economies and for the three legal families.

<sup>43</sup> Coffee (1999), *supra* n. 37.

<sup>44</sup> Unfortunately, it was not possible to obtain reliable data on changes in disclosure requirements for all countries. Most laws have provisions mandating the annual disclosure of company information to their shareholders. We did not include this variable, because of the lack of variance, and because it does not reflect the extent of disclosure requirements for publicly traded companies.

Table 3: Shareholder rights 1992 and 1998

Indicators	All 24 TEs		CEE/Baltics		SEE		Eurasia	
	1992	1998	1992	1998	1992	1998	1992	1998
LLSVsh (0-6)								
Mean	2.17	3.13	2	3.06	2	2.6	2.4	3.45
% of Index	36.1	52.1	33.3	50.9	33.3	43.3	40.0	57.5
SMINTEGR(0-6)								
Mean	0.96	2.86	1.44	3.44	0.6	2.4	0.7	2.58
% of Index	13.7	40.9	20.6	49.2	8.0	34.3	10.0	36.8
VOICE (0-13)								
Mean	5.89	7.86	4.69	6.72	4.85	6.7	7.4	9.5
% of Index	45.3	60.6	36.1	51.7	32.8	51.5	57.7	73.1
EXIT (0-4)								
Mean	1.06	1.76	1.06	1.67	0.45	0.9	1.4	2.26
% of Index	26.6	44.0	26.4	41.6	10.0	22.5	35	56.9
ANTIMANAGE(0-6)								
Mean	2.58	3.60	2	3.33	2.8	3.6	2.3	3.85
% of Index	38.2	60.1	33.3	55.6	46.6	60.0	38.3	64.2
ANTIBLOCK (0-8)								
Mean	1.85	3.49	1.72	3.53	2	3.3	1.9	3.55
% of Index	23.2	43.6	21.5	44.1	25.0	41.3	23.8	44.4

Source: Database compiled by the author.

The data in column 1 clearly demonstrate the extent of legal reforms since 1992. The average score increased substantially across all indices. Change was particularly great for SMINTEGR and ANTIMANAGE. Interestingly, the focus of corporate law reform as captured by our shareholder indices has not changed over time, at least not for transition economies taken as a group. Shareholder rights that are reflected in the VOICE index were and still are the most developed rights. As noted above, VOICE reflects internal control rights of shareholders, including, but not limited to, minority shareholders. Second in importance is ANTIMANAGE, i.e., those legal provisions that are specifically targeted at management. This reflects the classic corporate governance paradigm with its focus on the conflict between shareholders as principals and management as their agent. Third in order is LLSVsh, i.e., the protection of minority shareholder rights. EXIT, that is legal rules that protect the right to sell shares and, in exceptional situations, give shareholders the right to redeem their investments, is fourth and thus ranks before ANTIBLOCK. The latter index, which captures legal rules that protect minority shareholders against blockholders rather than management are only relatively weakly developed. Finally, last in order are legal rules that ensure the integrity of the capital market, as captured by SMINTEGR.

For 1992 the weakness of SMINTEGR is not surprising. After all, only few stock exchanges had already been established (Warsaw and Budapest)

and many transition economies lacked pre-war experiences with stock exchanges. More interesting is that SMINTEGR still ranks lowest on average in 1998. Whether or not state regulations of securities markets are desirable, is highly disputed in developed market economies.<sup>45</sup> In transition economies and emerging markets, the situation may, however, be quite different. Many of the assumptions on which the quest for deregulation rests in developed market economies, such as transparent information, market intermediaries with superior knowledge of the market that may signal investors' choice, etc., do not hold true in these environments. Case studies of the experience of different transition economies suggest that more stringent regulation of these markets positively correlates with better market development.<sup>46</sup> Moreover, given that courts in the region lack expertise in dealing with shareholder rights, reliance on internal control mechanisms alone may not be sufficient.

The breakdown of transition economies into those with different legal histories does not fundamentally alter the picture presented above. For the Eurasian group, the order is virtually the same with the exception that in 1998 ANTIMANAGE ranks before LLSVsh. A closer look at the transition economies with German and French legacies gives a more refined picture. In the countries with German legal influence, ANTIMANAGE takes the lead in 1998 and pushes VOICE into second place and LLSVsh into third place. This suggests that legal reforms have been primarily aimed at strengthening shareholder rights *vis-à-vis* management. More importantly, SMINTEGR takes the fourth place in this group, and thus ranks higher than in the other two legal families. To be sure, the reform of securities legislation has been quite uneven in these countries. While Poland and Hungary, for example, established an independent securities and exchange commission (SEC) at the outset of reforms, the Czech

<sup>45</sup> Stigler, "Public Regulation of the Securities Markets", 27 *Journal of Business* (1964) 117-142; Jarrell, "The Economic Effects of Federal Regulation of the Market for New Security Issues", 24 *J L&Econ* (1981) 613-675; Coffee, "Market Failure and the Economic Case for a Mandatory Disclosure System", 70 *Virg. L Rev.* (1984) 717-753; Seligman, "The Historical Need for a Mandatory Corporate Disclosure System," 9 *J Corp L* (1983) 1-61; Hopt and Baum, "Börsenrechtsreform in Deutschland", in: Hopt, et al. (eds.), *Börsenreform - Eine ökonomische, rechtsvergleichende und rechtspolitische Untersuchung*, (Stuttgart, Schäffer-Poeschel Verlag 1997) pp. 287-467. The debate is now taking a new turn, where the importance of (some) regulation is acknowledged in principle, but the need for federal versus state (or decentral) regulation debated. See Romano, "Empowering Investors: A market Approach to Securities Regulation", 107 *Yale Law Journal* (1998) 2359-2430.

<sup>46</sup> Pistor (1999), *supra* n. 17; Coffee (1999), *supra* n. 37. For experiences in other parts of the world see also Rosen, "The Myth of Self-Regulation or the Dangers of Securities Regulation Without Administration: The Indian Experience", 2 *J Comp Corp L & Sec Reg* (1979) 261-302, as well as Pistor and Wellons, *The Role of Law and Legal Institutions in Asian Economic Development*, (Hong Kong, Oxford University Press 1999), ch. 6.

Republic followed suit only in 1998.<sup>47</sup> Yet, by 1998, most of these countries had established a SEC, although insider trading and self-dealing rules are still uneven. Finally, ANTIBLOCK in these countries is more important than are EXIT rules. The weak performance of "exit" can in part be attributed to the fact that many countries with German legal heritage include rules that allow the issuance of bearer as well as registered shares and permit corporate statutes to restrict the right to sell registered shares. Our definition of free exit, which does not permit such exemptions, lowers the EXIT score for these countries.

For the countries with French legal heritage, the strong emphasis on ANTIMANAGE is visible already in 1992 and is retained through 1998. But ANTIBLOCK also received more attention than in other transition economies. By contrast, EXIT is only weakly developed (for similar reasons as the German transition economies). Finally, SMINTEGR has been improved substantially by 1998, but still lags behind the German family scores.

Comparing the level of protection for each index across the three families, the most surprising result is the strong performance of the Eurasian countries, not only in 1998, but also in 1992. In 1992 they rank first on three indices (LLSVsh, VOICE, and EXIT), in 1998 on five of six, excluding only SMINTEGR. The countries of French origin take the lead in two indices in 1992 (ANTIMANAGE and ANTIBLOCK), but perform worse than the German Transition Economies on VOICE and EXIT, and on SMINTEGR also worse than the Eurasian Transition Economies. The fact that these countries do not have any top ranking in 1998 is most likely the result of the slower pace of reforms in South-Eastern Europe for the reasons noted above. The strong performance of the Eurasian countries in 1998 appears to be primarily the result of the strong US influence in reforming the corporate laws in these countries. This is apparent especially in the elaborate provisions on judicial recourse for shareholders (included in LLSVsh, VOICE, ANTIMANAGE, and ANTIBLOCK). However, some provisions go beyond legal protections that are common in the United States. An example is the (mandatory) requirement to transfer the administration of the shareholder register to an independent agency (an indicator included in EXIT).<sup>48</sup> This provision was included in several Eurasian countries in response to the misuse of control over shareholder registers by company insiders.<sup>49</sup> Similar provisions do not exist in other transition economies, where this was less of a problem. Thus, more stringent regulation does not necessarily imply a generally superior law, but may simply reflect a response to problems not known elsewhere. This also suggests that

<sup>47</sup> Pistor (1999), *supra* n. 17.

<sup>48</sup> This requirement typically does not apply to all joint stock companies, but only those which exceed the stipulated number of shareholders, i.e., 500 in the case of Russia and Kazakhstan.

<sup>49</sup> Pistor (1997), *supra* n. 35.

existing problems are not simply a response to weak regulation, or could be easily solved through regulatory intervention. The said provision, for example, has remained rather ineffective. Although rules with identical contents were introduced in Russian privatization regulations, only a fraction of Russian companies implemented them. Moreover, the independence of the depositaries was often doubtful, and control over the depositary by company management has proved to be an easy vehicle for circumventing those rules.<sup>50</sup>

With respect to other provisions, it may be said that countries with a German legal tradition in fact have inferior rules. Most of these countries, for example, include provisions that allow company statutes to restrict the sale of registered shares. Similarly, quorum requirements and supermajority requirements for major transactions, which are captured by VOICE and ANTI-BLOCK, are also weakly developed in several of these countries. Note, for example, that in the Czech Republic, the presence of 30% of shares suffices for a shareholder meeting to take binding decisions, while in most other countries the quorum requirement is 50%.<sup>51</sup>

The further analysis of patterns of legal change, using six shareholder indices that capture different functions and mechanisms to improve the governance of companies, refines rather than refutes our earlier finding that formal legal change in transition economies is converging irrespective of pre-socialist legal heritage. As Table 3 shows, all three legal families have implemented comprehensive legal reforms across the board. The refined analysis has, however, shown that different legal families display similar priorities in the focus of legal change. Still, the improvement of the internal control structure, including minority and anti-management rights, has been foremost on the agenda in all countries. By contrast, anti-blockholder and exit rights, as well as rules aimed at ensuring the integrity of the securities market were also improved, but in 1998 still rank behind our indices which capture primarily internal control rights. Several reasons may account for this. First, the classic conflict between shareholders and management rather than between minority shareholders and blockholders was used as the paradigm for reforming corporate law in transition economies. Second, outside advice came primarily from two sources, the United States and Europe, i.e., legal systems which are recently displaying increasing signs of convergence or at least functional substitution.<sup>52</sup> Third, the lack of attention paid to securities market regulation

<sup>50</sup> Ibid.

<sup>51</sup> In fact, in the early period many of the former Soviet Union republics required 60%. This may, however, be counter-productive, because it decreases the likelihood for a shareholder meeting to reach the quorum.

<sup>52</sup> Berglöf, "Reforming Corporate Governance: Redirecting the European Agenda", 24 *Economic Policy* (1997) 93-119; Coffee (1999), *supra* n. 7.

can be attributed to a combination of ideological bias against regulation – as has clearly been the case in the Czech Republic – and domestic political obstacles. An example of the latter is Russia, where conflicts between the new securities and exchange commission, and the central bank as well as the ministry of finance prevented the strengthening of this institution and the regulatory framework for its operation.

#### 4. TAXONOMY OF CREDITOR RIGHTS

For creditor rights, we construct three cumulative indices in addition to LLSVcr, which we call CREDCON, REMEDY and COLLAT. CREDCON captures the extent to which creditors can control the bankruptcy process. It modifies LLSVcr to account for the difficulties in adapting the first variable to local circumstances, and also includes additional control variables. Recall that LLSVcr includes a variable called restriction on reorganization. This variable reflects concerns about the US Bankruptcy Code. Under this law, a debtor who files for bankruptcy has the option to either file under chapter 11 (reorganization) or chapter 7 (liquidation). No creditor consent or court review is required for either decision. This implies that, even though the winding up of the company may be the economically most efficient outcome, a protracted reorganization procedure can first be initiated, and only after that fails may a firm be forced into liquidation procedures.<sup>53</sup>

The problem with this variable is that in many countries outside the US the law does not know a clear separation between reorganization and liquidation procedures. Instead it may offer only a liquidation procedure, or establish a unified bankruptcy procedure during the course of which liquidation as well as reorganization are options that might be considered. In these countries, the problem La Porta, et al. (1998) want to address does not exist, or is less severe. CREDCON therefore excludes this variable, but employs the other three variables of LLSVcr and adds two more variables: automatic trigger to go into bankruptcy, and creditor consent for adopting a liquidation or reorganization plan. An automatic trigger is a provision that mandates a debtor to file for bankruptcy, in case legally specified conditions have occurred. Several transition economies have experimented with automatic triggers. Hungary came to fame, when it introduced a provision in 1992 mandating companies to file for bankruptcy, in case they were unable to meet their payment obligations for more than three months. This resulted in a flood of bankruptcy

<sup>53</sup> On the pros and cons of the US Bankruptcy Code see Baird, *The Elements of Bankruptcy*, (New York, Westbury 1993) p. 283.

cases.<sup>54</sup> Since courts were unable to deal with these numbers, the legislature was forced to backtrack and relaxed the provision in 1997.

Coding an automatic trigger is somewhat tricky. Most countries use rather forceful language (shall, must) indicating that a debtor who is insolvent is obligated to file for bankruptcy. However, the conditions that trigger bankruptcy, in particular the definition of insolvency, often remain ambiguous. Our coding requires that the law specifies a time period of illiquidity along the lines of the Hungarian example. The last variable captures whether creditor consent is required for adopting a reorganization or liquidation plan. Since most countries in our sample have unified bankruptcy, or include only liquidation procedures, creditor consent at this later stage appears to be more relevant than when bankruptcy is initiated.

The relevance of LLSVcr as well as CREDCON depends on the existence and scope of collateral rules in a legal system. The two indices assume that creditors can secure their claims and that information about security interests is readily available. This is not necessarily the case. To capture the existence of legal provisions on security interests, we included the COLLAT index. It does not capture the entire range of possible security interests,<sup>55</sup> but focuses on securing tangible assets, including moveable assets (personal property) and immovable assets (real estate). First, we code whether or not land can be used as a collateral. The privatization of land is still a contentious issue in many transition economies.<sup>56</sup> Where land cannot be freely transferred, its economic value as a collateral is also in question. The appropriate coding of land as a collateral has proved to be difficult, because many countries have enacted legal provisions for mortgaging land, but restrict the enforcement of these rights directly or indirectly. It was not possible to include appropriate variables capturing legal restrictions on the use of land as a collateral, wherefore our index may overstate the extent to which land is actually available and used to secure credits. Second, we code the legal framework for security interests in movable assets. As is well known, civil law jurisdictions for the most part require that a movable asset must be transferred to the creditor in order to establish a legally valid security interest. This is not only cumbersome, but deprives the debtor of the possibility to use the asset for productive use and to enable her to repay the credit. Legal practice in many civil law countries has found ways to circumvent these rigid rules. An example is Germany, where the transfer of full ownership with the contractual obli-

<sup>54</sup> Gray and Hendely (1997), *supra* n. 35.

<sup>55</sup> Wood, *Comparative Law of Security and Guarantees, Law and Practice of International Finance* (London, Sweet and Maxwell 1995).

<sup>56</sup> Oda, "Law on Secured Transaction in Russia", in: Simons (ed.), *The Russian Civil Code*, (The Hague, Kluwer Law International 2000) (forthcoming).

gation to re-transfer ownership after the credit has been repaid has become a substitute for collateral. Obviously, this practice lacks precisely the publicity and transparency which gave rise to the legal rule in the first place that secured assets should be transferred to the creditor. Most of the former socialist countries followed the civil law model and required transfer of the asset for establishing a legally valid security interest.<sup>57</sup> Some countries relaxed this provision early on in the reform process, without, however, creating an alternative for publicity and transparency. The 1992 Russian law on pledge, for example, requires that the debtor keeps a book of the secured interests in his possession.<sup>58</sup>

The EBRD developed a model law for secured transactions with the purpose of improving the legal framework for security interests in transition economies, in particular the possibility to use movable assets as security.<sup>59</sup> Numerous transition economies have used this law to reform their civil codes or related statutes, even though they may not have copied all of the provisions of the model law.<sup>60</sup> Others, Poland in particular, used US law (Section 11 of the Uniform Commercial Code) rather than the EBRD model law.<sup>61</sup> The key element of this reform effort was to establish a registry for security interests in movable assets. Our "COLLAT" index captures, whether security interests can be created without transferring assets to the creditor, and whether a law that regulates the establishment and functioning of a register has been enacted.

Finally, we include an index called REMEDY. The position of creditors can be strengthened by creating a legal framework that allows them to secure their loans and to enforce their rights in an insolvency procedure. These rules, which are captured in the CREDCON and COLLAT indices, give creditors *ex ante* control rights, which they can enforce in a bankruptcy procedure.

<sup>57</sup> Pistor, *op. cit.* n. 1; Summers, "Recent Secured Transaction Law Reform in the Newly Independent States and Central and Eastern Europe", 23 *Rev of Central and Eastern European Law* (1997) 177-203.

<sup>58</sup> For a detailed analysis of Russian law on security interests see Oda, *supra* n. 56.

<sup>59</sup> EBRD, *Model Law on Secured Transactions*, (London, EBRD 1994).

<sup>60</sup> According to information obtained from the EBRD, the following countries have established registers for security interests which used the EBRD model law or US law: Azerbaijan (1998); Belarus (1999); Bulgaria (1996); Estonia (1996); FYR Macedonia (1998); Georgia (1997); Hungary (1997); Kazakhstan (1998); Kyrgyzstan (1997); Latvia (1999); Lithuania (1998); Moldova (1996 – simplified version now under revision); Poland (1998); Romania (1999); Ukraine (1997/99); Uzbekistan (1998). The enactment of these laws, however, is only the first step. Functioning registries for security interests in movables apparently exist as of now only in Bulgaria, Hungary, Latvia, Lithuania, with some reservations in Poland, and apparently since March 1999 in Ukraine.

<sup>61</sup> Summers (1997), *supra* n. 57.

Alternatively, or as a supplement to these rules, the law may allow creditors to impose sanctions on management *ex post*, which go beyond their original contractual rights or claims based on security interests. For instance, creditors may hold management liable for violating bankruptcy rules, or they may challenge the validity of transactions between the debtor and other parties that were carried out in the time immediately preceding bankruptcy. REMEDY addresses these *ex post* sanctions. For liability, we require that creditors can invoke civil liability. Criminal sanctions in extreme cases only, are not sufficient. As far as invalidating transactions that precede bankruptcy is concerned, legal systems differ in the type of transactions that may be invalidated and the time period prior to bankruptcy that is defined as sufficiently sensitive to permit an invalidation claim. To keep matters simple, we only code for the time period and ignore the type of transaction. In particular, we note whether transactions that were carried out three months, six months, one year, or more than one year before bankruptcy was filed, can be invalidated.

Managers may not be the only targets of *ex post* creditor sanctions. REMEDY therefore also includes a variable that asks whether creditors also have recourse against shareholders of the corporation. In principle, shareholders of a company with limited liability are not liable for the debt the company incurred. Yet several countries have developed doctrines that allow creditors in exceptional cases to "pierce the corporate veil". In most countries, this right is limited to extreme cases where shareholders purposely misuse creditor rights. However, some countries have codified piercing the corporate veil provisions in parent-subsidiary relations.<sup>62</sup> Including this variable in our REMEDY index was motivated by a provision in the Russian civil code, which stipulates that a parent company that controls the actions of its subsidiary may be held liable for the obligations of that subsidiary. The drafters of the 1996 Joint Stock Company Act sought to limit the extent to which this provision extends the liability of the parent company by including a provision which requires an explicit contract or a stipulation in the statutes of the subsidiary regarding the parent company's control rights.<sup>63</sup> It is still an open question, how Russian courts will interpret the two rules.

<sup>62</sup> An example is the German law on concerns. Art. 317 of the German law on marketable share companies (*AktG*), for example, states that a company which controls another one *without* having concluded a control contract, may be held liable for damages incurred by that company or its shareholders, if it made that company conclude detrimental transactions without compensation.

<sup>63</sup> Compare Art. 106 of the Russian Civil Code with Art. 6, section 3 of the Joint Stock Companies Act.

Appendix 3 gives the scores for each country from 1992 through 1998 on the four creditor rights indices. Table 4 below reports the mean and percentage changes in 1992 and 1998 for all countries included in the sample, as well as for the breakdown by legal family.

Table 4: Creditor rights 1992 and 1998

Indicators	All 24 TEs		TEs of German origin		TEs of French origin		Eurasian TEs	
	1992	1998	1992	1998	1992	1998	1992	1998
LLSVcr (0-4)								
Mean	1.40	3.23	2.56	3.56	0	3	1.05	3.05
% of Index	34.9	80.7	63.9	88.9	0	75	26.3	76.3
CREDCON(0-5)								
Mean	1.65	3.69	3.11	4.33	0	3	1.15	3.45
% of Index	32.9	73.8	62.2	86.7	0	60	23	69
COLLAT (0-3)								
Mean	0.58	2.04	0.67	1.89	0.4	1.6	0.6	2.4
% of Index	19.4	68.1	22.2	63.0	13.3	53.3	20	80
REMEDY (0-3)								
Mean	0.42	1.38	0.83	1.25	0.2	1.35	0.15	1.5
% of Index	13.9	45.8	27.8	41.7	7	45	5	50

Source: Compilation by author from database of creditor rights. See Appendices 2 and 3 for details.

According to these data, creditor rights were improved substantially in transition economies since the inception of economic reforms. As with shareholder rights, the ranking of the four indices does not change over time for the entire sample. LLSVcr comes first, followed by CREDCON, then COLLAT, and finally REMEDY. However, there are a number of regional variations. In the transition economies of German legal heritage, REMEDY is better developed in 1992 than COLLAT. In these countries, bankruptcy codes with some *ex post* creditor controls were in place at that time already, however, the law on secured transactions, in particular for securing movable assets, was only weakly developed. Obviously, the absence of a well-developed collateral regime renders provisions in bankruptcy codes that deal with the rights of secured creditors, ineffective. This demonstrates that for an adequate assessment of the quality of the law, limiting creditor rights, for example, only to rights of creditors in bankruptcy, without analyzing the conditions for establishing these rights, gives a distorted picture. In comparison to the Central and Eastern European countries (CEEs), the South-Eastern European countries

(SEEs) took longer to put bankruptcy codes in place.<sup>64</sup> For the Eurasian countries, the most dramatic change has been the development of a collateral law. In 1998 it ranks first of the four indices. REMEDY also changed substantially, but still ranks behind LLSVcr and CREDCON.

Looking at the level of creditor rights across regions, the most notable fact is that countries with German legal heritage offered substantially better creditor protection as of 1992 than all other transition economies on the four creditor rights indices. By 1998, Eurasian countries have taken the lead in COLLAT and REMEDY. Indeed, for the latter, the CEEs rank only third in 1998 despite the fact that they also show improvements in this index since 1992. A possible explanation is that the Eurasian and SEEs compensated the initially weak protection of *ex ante* creditor rights with very strong *ex post* rights in response to the problems creditors experienced when trying to enforce their claims.

As far as COLLAT is concerned, the Eurasian countries have not only caught up with, but have superseded the CEEs in reforming the legal framework for security interests in movables. However, many of the registers that have been established recently are not yet in operation.<sup>65</sup> The high ranking of the Eurasian countries also disguises the fact that land is often not usable for securing loans, because of continuing legal uncertainties about the eviction of present users of the land and subsequent sales.<sup>66</sup> As noted above, legal provisions that in principle permit using land for mortgages (hypothec) therefore overstate the relevance of these laws for commercial practice.

The analysis of changes in different type of creditor rights does not fundamentally challenge our earlier convergence proposition, but sheds light on the dynamics of change. Most importantly, the patterns that are emerging suggest that legal change happened not at the outset of reforms, but that the law was amended in response to apparent problems. In other words, it was primarily reactive rather than pro-active. In fact, there is evidence that countries shopped around for finding solutions for particular problems, even though they may be inconsistent with the initial choice of a particular legal system as their model. An example is the rather broad piercing the corporate veil provision found in Russia today. It was copied from continental European civil law systems,<sup>67</sup> whereas the 1996 Russian corporate statute was largely modeled after US law. Interestingly, most of the CEEs and SEEs have not

<sup>64</sup> Note: since we do not code for law in the former Yugoslav republics, our coding is likely to overstate the absence of law in this region.

<sup>65</sup> Information obtained from the EBRD.

<sup>66</sup> Oda (1999), *supra* n. 56.

<sup>67</sup> Note that they were first included in the Civil Code, which borrowed heavily from the Dutch Civil Code.

included similar provisions in their corporate statutes. An explanation, which would be consistent with the retroactive story, is that they have not (yet) encountered similar problems of parent-subsidiary relations.

A second pattern we find is compensatory (or over-) protection in countries with initially weak laws. The strong emphasis on *ex post* creditor protection in Eurasian and SEE transition economies, in particular, show that weak initial protection has led not only to a strengthening of overall creditor rights, but in particular of *ex post* control rights (REMEDY). These rights, which allow creditors to invalidate transactions that were carried out in the period preceding the opening of bankruptcy procedure, and to increase the pool of debtors by holding shareholders (in particular parent companies) liable for debt incurred by the company, may indeed increase the pool of assets available for distribution. However, the extended liability of shareholders changes the relative rights and obligations of shareholders vs. creditors in the corporation in favor of creditors. Unless the enforcement of such provisions is limited to extreme cases that are typically captured by piercing the corporate veil provisions,<sup>68</sup> they may cause concern among equity investors about the reliability of the limited liability provisions that are an essential part of corporate statutes. Thus, differences in initial legal conditions may shape the path of subsequent law reforms. They will take into account not only the initial weaknesses, but also respond to the problems that have occurred in the meantime and which may, at least in part, be attributed to these weaknesses. This may result in overreactions, which are understandable, but may have longer term implications for the balance of rights of different stakeholders in the company.

## 5. CORPORATE GOVERNANCE BY DESIGN?

The above analysis of the development of shareholder and creditor rights in transition economies shows that lawmakers have not been seriously constrained by the historical ties of their country to a particular legal family. If history was not a major determinant of legal change, other factors may be more relevant. In particular, legal change may have been influenced by the choice between alternative corporate governance models. The corporate governance literature typically distinguishes two major corporate governance models, one based on equity finance and control primarily by capital markets, the other on debt finance and control by banks in the dual role of shareholders and

<sup>68</sup> Avilov, et al., *General Principles of Company Law for Transition Economies*, (OECD, 1999), strongly advocate that such provisions should be strictly limited to these cases.

major creditors.<sup>69</sup> The former is typically associated with the United States and the United Kingdom, the latter with Germany and Japan.

At the beginning of the transition process there was a lively debate, which of these two models would be most appropriate for transition economies. Given the state of the banking sector, many cautioned against giving banks control rights over enterprises.<sup>70</sup> Others warned against relying on equity market control, in light of the underdeveloped state of stock markets in the region.<sup>71</sup>

The actual development of financial markets in transition economies diverge from both models. The overall trend seems to be towards a control model, i.e., relatively concentrated ownership.<sup>72</sup> However, control does not necessarily imply debt financing or control by creditors rather than equity holders, as both equity and debt financing remains highly underdeveloped, and many companies rely on retained earnings or capital investments by strategic owners. As far as banks, as potential agents of corporate governance, are concerned, short-term rather than long-term lending is still the norm,<sup>73</sup> with only modest progress in expanding the maturity of lending activities over time. With respect to the Czech Republic, some authors had earlier asserted that firms controlled by voucher funds which in turn are controlled by banks outperform other firms,<sup>74</sup> suggesting that a bank-based corporate governance model similar to the German one may be emerging in this country. Meanwhile this has given way to a more sober assessment, namely that the better performance of these companies' shares reflects the fact that investment funds con-

<sup>69</sup> Roe, "Some Differences in Corporate Structure in Germany, Japan, and the United States", 102 *Yale LJ* (1993) 1927-2003; Berglöf (1995), *supra* n. 18; Aoki, "Controlling Insider Control: Issues of Corporate Governance in Transition Economies", in: Aoki and Kim (eds.), *supra* n. 18, pp. 3-32.

<sup>70</sup> Rostowski, "The Banking System, Credit and the Real Sector in Transition Economies", in: Rostowski (ed.), *Banking Reform in Central Europe and the Former Soviet Union*, (Budapest, CEU Press 1995) pp. 16-41; Dittus and Prowse, "Corporate Control in Central Europe and Russia: Should Banks Own Shares?", in: Frydman, et al. (eds.), *Corporate Governance in Central Europe and Russia*, (London, Central European University Press 1996), Vol. 1, pp. 20-67.

<sup>71</sup> Corbett and Mayer, "Financial Reform in Eastern Europe: Progress with the Wrong Model", *Oxf. Rev. Econ Pol* (1992).

<sup>72</sup> Berglöf (1995), *supra* n. 18.

<sup>73</sup> Buch, "Creating Efficient Banking Systems", in: Sieber (ed.), *Kieler Studien*, (Tübingen, J.C.B. Mohr 1996); Baer and Gray, "Debt as a Control Device in Transitional Economies: The Experience of Hungary and Poland," in: Frydman et al. (eds.) *supra* n. 70, vol. 1, pp. 68-110; EBRD, *Transition Report - Financial Sector in Transition*, (London, European Bank for Reconstruction and Development (EBRD) 1998).

<sup>74</sup> Claessens, et al., *Ownership and Corporate Governance: Evidence from the Czech Republic*, *International Symposium on Capital Markets and Enterprise Reform* (Washington D.C., World Bank 1996).

trolled by major banks tend to loot less than funds not controlled by major banks.<sup>75</sup> However, this does not imply that the banks or their funds finance or control these firms effectively.

It may still be too early to expect the emergence of clearly distinguishable governance models in the region. Still, our data on the patterns of change in shareholder and creditor rights may offer some insight into the preferences of policy-makers in different countries for either model. We therefore compare the level of shareholder vs. creditor rights protection at the beginning of the transition process and as of today, and analyze the scope of change in different regions. For this analysis, we use the sum of all shareholder rights (SUMsh) and creditor rights (SUMcr) indicators rather than the various indices we have constructed.<sup>76</sup> As before, we use the percentage of the total indices for comparison. Table 5 below reports the results.

Table 5: Shareholder vs. creditor rights

	All 24 TEs		German TEs		French TEs		Eurasian TEs	
	1992	1998	1992	1998	1992	1998	1992	1998
SUMsh								
Mean	8.1	13.99	8.31	13.19	6.65	10.9	10.58	16.25
% of Index	38.72	60.82	36.1	57.34	28.91	47.4	46.0	70.65
SUMcr								
Mean	3.40	9.28	5.75	9.72	0.8	8.35	2.6	9.35
% of Index	24.3	66.3	41.1	69.4	5.71	59.64	18.6	66.8

Source: Compilation by author using shareholder and creditor rights database.

The data show that at the outset of reforms shareholder rights on average were better protected than creditor rights. Legal reforms introduced since have not changed this ranking, although the difference has declined from 14.42 to only 5.48 percentage points (column 1). In the CEEs, creditor rights are better protected in both time periods. In the SEEs, creditor rights were only weakly protected at the outset of reforms, but in 1998 were better protected than were shareholder rights. Finally in the countries of Eurasia, shareholder rights are better protected in both periods, although the gap between shareholder and creditor rights protection has decreased substantially between 1992 and 1998 from 27.4 to only 3.85 percentage points.

<sup>75</sup> Coffee, "Inventing a Corporate Monitor for Transitional Economies: The Uncertain Lessons from the Czech and Polish Experiences", in: Hopt, et al. (eds.), *Comparative Corporate Governance - The State of the Art and Emerging Research* (Oxford, Clarendon Press 1998) pp. 67-138.

<sup>76</sup> Obviously, this can be only a rough estimate of the relative importance of shareholder and creditor rights, as the variables included are not encompassing, and not all variables may have equal weight.

The clearest indication of a preference for one group of stakeholders over the other can be found in transition economies of German origin. Given the relatively high level of creditor protection at the outset of reform, this may be the result of path dependent legal development rather than an independent policy choice at the time economic reforms were introduced. It is interesting to note that the only countries, which according to the EBRD have “experienced growth in both deposit taking and lending to the private sector beyond that of nominal GDP” since 1993,<sup>77</sup> namely Croatia, the Czech Republic, Estonia, Poland, the Slovak Republic and Slovenia, can all trace their legal origin back to the German civil law family. This certainly requires further research.

Another indication for policy choices that may have determined a particular governance model is the privatization strategy pursued in different countries. Mass privatization programs were expected to lead to relatively dispersed shareholder ownership, i.e., to a governance model that would rely heavily on market control rather than on control by blockholders.<sup>78</sup> Following the logic of La Porta, et al., the success of this strategy was highly dependent on the existence of well defined minority shareholder rights. Absent effective legal protection of minority stakes, investors holding small stakes were unlikely to hold on to their shares for long. The predictable result was the concentration of ownership in privatized companies. This suggests that only a combination of privatization strategy and a compatible legal framework could have resulted in a more dispersed ownership structure.

In order to analyse, whether those countries that chose mass privatization programs made reasonable efforts to develop complementary protection for minority shareholders, Table 6 reports the scores of LLSVsh from 1992 through 1998 for all countries that used voucher privatization as the primary privatization method according to the EBRD transition report.<sup>79</sup> We also indicate the beginning of privatization to see whether improvements in minority shareholder rights preceded or followed privatization.

<sup>77</sup> EBRD (1998), *supra* n. 19, p. 118.

<sup>78</sup> Boycko, et al., “Voucher Privatization”, 35 *Journal of Financial Economics* (1993) 249; Frydman and Rapaczynski, “Markets and Institutions in Large Scale Privatization: An Approach to Economic and Social Transformation in Eastern Europe”, in: Corbo, et al. (eds.), *Reforming Central and Eastern European Economies: Initial Results and Challenges*, (Washington, D.C., The World Bank 1992) pp. 253-274; Classens et al., (1996), *supra* n. 74.

<sup>79</sup> EBRD (1998), *supra* n. 19.

Table 6: Mass privatization and minority shareholder protection

Country	Beginning of privatization	LLSVsh 92	LLSVsh 94	LLSVsh 96	LLSVsh 98
Armenia	1994	2.5	2.5	5.5	5.5
Azerbaijan	1997	2.5	2	2	2
Czech Republic	1992	2	2	3	3
Georgia	1995	2.5	2.5	3	3
Kazakhstan	1994	2.5	2.5	2.25	5.25
Kyrgyzstan	1994	2.5	2.5	2.25	2.25
Latvia	1994	3.5	3.5	3.5	3.5
Lithuania	1991	2.5	3.75	3.75	3.75
Moldova	1993	3	3	3	3.5
Russia	1992	2	2.5	5.5	5.5
Ukraine	1994	2.5	2.5	2.5	2.5
Mean mass-priv. TEs	-	2.55	2.66	3.3	3.61
Mean other TEs	-	1.85	2.23	2.67	2.71
Mean (24 TEs)	-	2.17	2.43	2.95	3.13

Source: EBRD (1998), *supra* n. 73 and compilation by author from shareholder and creditor rights database.

For the eleven countries that used vouchers as the primary privatization method, the mean of LLSVsh is somewhat above the mean for the entire sample in all years since 1992, and substantially higher than in countries that did not pursue mass privatization strategies. In fact, the difference between the sample means has increased over time from .7 (1992) to .9 (1998). Yet, even in countries that pursued mass privatization strategies, the level of minority shareholder protection was quite low in 1992 when compared to the average of the common law family, which is associated with relatively dispersed share ownership and liquid capital markets (see Table 1 above).<sup>80</sup> Moreover, with respect to this index, improvements were made in most countries only after mass privatization began, in several even only after it ended. In the Czech Republic, for example, mass privatization ended in 1995, but the revision of the commercial code, which improved the position of minority shareholders, had to wait until 1996. Similarly, in Russia, mass privatization ended in July 1994, but it took until 1996 for the new Joint Stock Companies Act to enter into force. This suggests that legal reform was to a significant degree response driven. The fact that improvements in the level LLSVsh were less pronounced in countries that did not follow mass privatization strategies lends further support to this proposition. Note that in those countries that did not implement mass privatization programs the mean of LLSVsh in 1998 was only slightly higher than in 1992. In other words, the importance of effective minority shareholder protection was realized to a much greater extent in countries that

<sup>80</sup> La Porta, et al. (1997), *supra* n. 2.



had pursued mass privatization strategies than in countries that used either management-employee buy-outs (MEBs) or direct sales as the primary privatization method.

This response pattern of lawmaking is not uncommon. Much of the historic development of corporate law in Europe and the United States seems to follow this pattern.<sup>81</sup> The differences between these countries and transition economies that experimented with mass privatization, however, is that the latter attempted to implement a fundamental change in the ownership structure and governance of companies. The failure to provide effective minority shareholder protection *ex ante* has seriously limited, if not undermined, this attempt.<sup>82</sup> Perhaps the response pattern of legal change suggests that a change of regime of the scale attempted by some transition economies is simply not feasible, precisely because policy and law-makers tend to react to rather than lead economic change. This would call for a more gradual policy approach which takes into account the lag-effect of legal and institutional response.

It remains an open question, whether the strengthening of minority shareholder rights *ex post* will substantially alter the trend towards concentrated ownership which is prevalent in the region, including in countries that used

<sup>81</sup> Blumberg, *The Multinational Challenge to Corporation Law* (New York, Oxford University Press 1993) p. 316; Dunlavy, "Corporate Governance in the Late 19th Century Europe and USA – The Case of Shareholder Voting Rights", in: Hopt, et al. (ed.), *supra* n. 75, pp. 5-39. Accounts of the development of corporate law in the US and Germany since the 19th century show a close interaction between legal and economic development. See Assmann in: Hopt and Wiedemann (eds.), *Aktiengesetz: Großkommentar*, Introduction, Vol. I for Germany, (Berlin, Walter de Gruyter 1992). For a summary of the development in the US, cf. Coffee, "The Mandatory/Enabling Balance in Corporate Law: An Essay on the Judicial Role", 89 *Colum. L Rev.* (1989) 1618-1691 and Black and Kraakman, *supra* n. 12. Note also that the enactment of extensive minority shareholder protection in the US in 1933/4 follows on the heels of the publication of the famous book by Berle and Means, *The Modern Corporation and Private Property*, (New York, Council for Research in the Social Sciences, Columbia University 1932), in which they point out the weakness of dispersed small shareholders *vis-à-vis* company management. Response driven legal evolution has also been observed for the development of corporate law and securities regulations in emerging markets in Asia. See Pistor and Wellons, *op. cit.* n. 46.

<sup>82</sup> Pistor, "Privatization and Corporate Governance in Russia: An Empirical Study" in: McFaul and Perlmutter (eds.) *Privatization, Conversion and Enterprise Reform in Russia* (Boulder, Westview Press 1995), pp. 69-84; Pistor, *supra* n. 35; Coffee, "Institutional Investors in Transitional Economies: Lessons from the Czech Experience", in: Frydman et al., *supra* n. 70; Black, Kraakman and Tarassova, *Russian Privatization and Corporate Governance: What Went Wrong?* (Stanford, John M. Olin Program in Law and Economics 1999). Among economists, there was little interest in the extent and effectiveness of the law at the outset of reform. In their attempt to explain the extremely low valuation of Russian companies in privatization, Boycko, et al., do not even discuss the possible role of the weak legal environment: Boycko, et al., "Privatizing Russia", *Brookings Papers for Economic Activity* (1993) 139-180. But see Sachs in his comments to that paper, *ibid.*, p. 181 with reference to Pistor (1995, *ibid.*).

mass privatization programs. There are several reasons to be cautious about this. First, the absence of effective minority shareholder protection has caused a loss of confidence with many small investors, which will take time to recover. Second, securities market protection remains weak in most transition economies. To the extent the emergence of viable securities markets in the region is dependent on effective market oversight,<sup>83</sup> improvements in the level of minority shareholder protection alone will not be sufficient. As the data in Table 7 below reveal, improvements in the level of SMINTEGR also tended to respond to rather than precede mass privatization. More importantly, the mean of the sub-sample of countries that implemented mass privatization programs in 1992 was only marginally higher than of the countries that pursued other privatization strategies, and was equal to or even lower than the control group in the subsequent years.

Table 7: Mass privatization and securities market regulation

Country	Start of priv.	SMINTEGR 92	SMINTEGR 94	SMINTEGR 96	SMINTEGR 98
Armenia	1994	0	3	5	5
Azerbaijan	1997	1	1	1	1
Czech Republic	1992	3	3	4	5
Georgia	1995	0	0	0	0
Kazakhstan	1994	1	1	5	6
Kyrgyzstan	1994	0	0	2	2
Latvia	1994	1	1	1	1
Lithuania	1991	2	1	1	1
Moldova	1993	1	2	2	4.75
Russia	1992	2	3	3	3
Ukraine	1994	1	1	1	1
Mean mass-priv. TEs	-	1.09	1.45	2.27	2.27
Mean other TEs	-	0.84	1.46	2.53	3
Mean (24 TEs)	-	.95	1.45	2.41	2.86

Source: EBRD (1998), *supra* n.73, and author's compilation.

Third, the environment in which companies operate may make dispersed, or non-control ownership structures (NCS), unsustainable.<sup>84</sup> Explaining the prevalence of concentrated ownership structures around the world,<sup>85</sup> Bebchuk argues that in the presence of private benefits of control those holding control rights are unlikely to relinquish them.<sup>86</sup> Should NCS be established in such

<sup>83</sup> Pistor, *supra* n. 17.

<sup>84</sup> Bebchuk (1999), *supra* n. 17.

<sup>85</sup> La Porta, et al., *supra* n. 42.

<sup>86</sup> Bebchuk (1999), *supra* n. 17.

an environment, they are unlikely to be sustained. Bebchuk suggests that the law may increase the level of private benefits by not preventing self-dealing transactions or insider trading.<sup>87</sup> The weakness of legal rules precisely in this area of the law displayed by transition economies that pursued mass privatization strategies (see Table 6 above), can therefore help explain, why control structures (CS) have come to dominate in these countries despite the theoretical bias of mass privatization strategies for NCS. This may have compounded other private benefits, including the desire by incumbent management and employees to ensure the survival of and to retain their position in the company.<sup>88</sup>

To conclude, there is little evidence in our data that countries chose particular legal rules with a certain governance structure in mind. The initial level of shareholder and creditor rights protection was the result of historical accident rather than clear policy choice. Subsequent change was made primarily in response to emerging problems, the scope of which were determined by the choice of economic reform strategies. Countries that experimented with radical economic reform without having adequate legal protection in place (in particular SMINTEGR), were at greater risk to experience strong negative reactions in the development of financial markets. This has given way to legal reforms aimed at remedying the shortcomings. The new laws, however, typically came too late to prevent certain market developments in response to the earlier weaknesses, including a development towards concentrated ownership of companies or the formation of company groups, and the loss of confidence by small investors in the market. The pattern of reform, where economic reforms (privatization, price liberalization, etc.) typically preceded legal reforms, has meant that incumbents who held *de facto* control rights had an advantage over new title holders with weak rights to protect them. This has increased the private benefits of control for incumbents and decreased the likelihood that they would voluntarily relinquish their control rights. Improvements of the law typically came too late to further the intended re-allocation of rights. Rather it secured control rights gained by whatever methods and thus has undermined, rather than built, a broader constituency for legal reform. The new laws are therefore likely to be less effective now than if they had been enacted at the outset of reforms.

Countries that pursued less radical economic reforms, were often not slower in reforming their legal systems. While they may have foregone the

<sup>87</sup> Ibid.

<sup>88</sup> Frydman, Pistor and Rapaczynski, "Investing in Insider-Dominated Firms: A Study of Russian Voucher Privatization Funds", in: Frydman, et al. (eds.), *supra* n. 70, pp. 187-241. Filatov, et al., *Insider Control and Managerial Entrenchment in Privatized Firms in Russia: Analysis and Policy Implications* (Nottingham, University of Nottingham Business School 1999).

opportunity of radically altering the structure of their economies, they also did not confront the negative results the more radical reformers had to face in light of the weak institutional infrastructure. A proposition that follows from this analysis is that countries that implemented economic reforms more gradually and tied them in with legal and other institutional reforms have developed more effective institutions than those that pursued a radical reform agenda.

## 6. CONCLUSION

Transition economies have introduced remarkable changes in the laws that govern shareholder and creditor rights over the past years. Change has been more extensive in countries that exhibited lower levels of protection at the outset of reforms. Pre-socialist legacies have not impeded or shaped the scope of reforms to a significant degree. Most countries went beyond the average level of legal protection found in legal families to which they once belonged. This suggests a strong trend towards convergence of statutory law across transition economies.

Yet, there are notable differences in the pattern of legal change in different countries, suggesting that a simple convergence story does not do justice to the complexity of legal change. In particular, initial preferences for shareholder vs. creditor rights have not been levelled out completely, as the still comparatively strong level of creditor protection in countries of German legal heritage suggests. Policy choices mattered for the scope of legal reform in particular areas of the law, such as minority shareholder protection. Countries that pursued mass privatization strategies improved this set of rules considerably more than others did. Curiously, however, they neglected the related area of securities market regulation, where improvements lagged behind in comparison to countries that relied on more conventional methods of privatization. Weaknesses in this area of the law can explain why the potential for a more dispersed ownership structure and relatively liquid stock markets created by mass privatization programs was not sustained after privatization.

The high level of statutory legal convergence is largely the result of an external supply of legal solutions. We cannot quantify the influence of domestic vs. external forces in shaping legal reform. However, the strong similarities between laws that were influenced by identifiable groups of foreign advisors (US vs. EU) suggests that the contents of legal rules that were enacted in response to certain problems was strongly influenced by the group of advisors that dominated in a given country. How these externally supplied rules have been received in the different countries, and whether they are followed and enforced by domestic legal institutions, are questions that cannot be captured

by a simple analysis of changes in the law on the books and require further analysis.<sup>89</sup>

These features of the past reform process influence not only the evolving legal system, but also the emerging governance structure of firms. Weaknesses in the governance structure that are noted today are often attributed to weaknesses in the law, which in turn leads to new proposals for improving statutory law. The evidence of the quality of the law on the books, however, suggests that this is at best a partial story. The level of shareholder and creditor rights protection in transition economies today is higher than in many other countries. Other factors, including the dynamic of the reform process and its impact on the development of effective institutions to enforce the new law, need to be analysed more closely in order to understand the remarkable difference in the governance of firms despite the trend towards convergence of the law on the books.

<sup>89</sup> A first attempt is made in Pistor et al. (2000) *supra* n. 3. Using data on the effectiveness of legal institutions (legality) they show that countries differ remarkably in this respect and that these differences can explain differences in financial market development in transition economies. Using a large sample set (which excludes transition economies), Berkowitz, Pistor and Richard, show that domestic demand for a transplanted legal order is an important determinant for the long-term development of legality (Berkowitz, Pistor and Richard, *Economic Development, Legality and the Transplant Effect*, EBRD mimeo (1999)).

## APPENDICES

### APPENDIX 1: CODING OF SHAREHOLDER AND CREDITOR RIGHTS INDICES

#### Shareholder rights

Nr	Indicator	Value	LLSVsh*	SMINT	VOICE	EXIT	ANITMG	ANTIBL
1	Mandatory One-Share-One Vote Rule	1/0	(X)		X			
2	Proxy by mail (not sufficient: authorization of ps)	1/0	X		X			
3a	Shares NOT blocked before the meeting	1/0	X		X			
3b	NO registration cut-off date before the meeting	1/0	X		X			
4a	Cumulative voting for election of members of board (supervisory board)	1/0	X		X			X
4b	Other rules to ensure proportional board representation	1/0	X		X			X

Nr	Indicator	Value	LLSVsh*	SMINT	VOICE	EXIT	ANITMG	ANTIBL
5a	Shareholders may take judicial recourse against decisions by executives, (supervisory) board	1 = direct and/or derivative suit by individual shareholder or minority group (not more than 10%) 0,5 if legal claim is limited to nullifying decisions of the board and does not include liability of management 0 if shareholders cannot sue or have to request supervisory board to sue	X		X		X	
5b	Shareholders may take judicial recourse against decisions taken by the Shareholder Meeting	1 = judicial recourse provided 0 = no such provision	X		X			X
6	Current shareholders have a preemptive right in case new shares are issued by company	1 = preemptive right mandated by law, which may be changed only by decision of shareholders 0 = no preemptive right, or only optional	X		X			X
7	Shareholders, representing not more than 10% of total shares may demand convocation of extraordinary shareholder meeting	10% = 1 20% = 0,5 0 = more than 20% of shares required for calling extraordinary shareholder meeting	X		X		X	
8	Corporate statutes specify the amount of dividends to be paid out to shareholders	1 = proportion of profits set aside for paying dividends 0 = no such provision	(X)					

9	Executives (incl. General Directors) are appointed/dismissed by the board (supervisory board) rather than the shareholder meeting	1 0,5 if board appoints, but general meeting dismisses 0 if shareholder meeting appoints and dismisses			X		X	
10	Members of the management/supervisory board may be dismissed at any time without cause	1 = if law does not specify conditions for dismissal 0 = if law requires specific cause (including violation of contract)			X		X	
11	At least 50% of total voting shares must be represented at a SHM for it to take binding decisions	1 = 50% or more of total shares required for quorum 0 = less than 50% required			X			X
12	Audit commission may be called by minority shareholder representing not more than 10% of shares	1 = if 10% of shares required 0,5 = if 20% of shares required 0 = if more than 20% required or not regulated			X		X	
13	Fundamental decisions, including charter changes, liquidation of companies, sale of major assets, require qualified majority (at least 3/4)	0,5 for charter changes and liquidation only 0,75 the above plus changes in charter capital, and/or company reorganization (incl. mergers, takeovers) 1 for the above and sale of major assets			X			

Nr	Indicator	Value	LLSVSH*	SMINT	VOICE	EXIT	ANITMG	ANTIBL
14	Board (supervisory) board members are elected by shareholders (no mandatory representation of employees or the public)	1/0			X			
15	Right to transfer shares is not restricted by law and may not be limited by charter	1 = if the right to freely transfer shares cannot be restricted by statute 0 = if this right can be restricted, even only for registered shares				X		
16	Formal requirements for the transfer of shares are limited to endorsement (bearer shares) and registration (registered shares)	1 = no additional formal requirements 0 = notarial certification, documentation of contracts etc. required for valid transfer				X		
17	Minority shareholders have a put option (may demand that their shares are bought by the company at fair value) in case they have voted against major transactions, including mergers, reorganization, sale of major assets, charter changes etc.	1 = put option by law 0 = not regulated				X		X
18	Mandatory take over bid (threshold)	1 for 25% or less 0,75 for >30% 0,5 for > 50%				X		X

19	Conflict of interest rules, including rules on disclosing conflict and abstaining from voting are included in the law	1 = transaction specific conflict of interest rules 0 = no such rules, even if some competition rules (i.e. members of the board may not serve on boards of other firms) are included		X				X
20	Shareholder register must be conducted by independent firm (NOT the issuing company)	1 = mandatory rule for publicly traded companies, including companies exceeding a legally specified number of shareholders 0 = if register is administered by the company		X				
21	Insider trading prohibited by law	1 = rules against insider trading exist 0 = no insider trading rules		X				
22	Acquisition of larger blocks of shares triggers mandatory disclosure (threshold)	1 for 10% 0,75 for 25% 0,5 for 50% 0,25 for more than 50% 0 if no mandatory disclosure		X				X
23	A state agency conducts capital market supervision	1 = if the task of supervising the securities market is assigned to a designated state agency 0 = if no such agency exists		X				
24	Capital market supervision is formally independent	1 = if the agency is independent and neither part of or directly subordinate to a government ministry (i.e. ministry of finance)		X				

\* LLSVsh includes 6 separate indicators. I have decomposed some of their indicators into two separate ones. Note, for example, that indicators 4a and 4b as well as 5a and 5b are each one indicator in their data base. To achieve comparable results with LLSV, they should therefore be computed as  $(4a + 4b)/2$  and  $(5a + 5b)/2$  respectively. With respect to indicators 3a and 3b, LLSV use only 3a. I have added 3b, because registration of shares prior to the shareholder meeting has similar effects as blocking shares. Although trading remains possible in the first case, trading shares after the registration date will have no influence on voting at the shareholder meeting. Again, the two indicators could be computed as  $(3a + 3b)/2$ . Indicators that were originally coded by La Porta et al., but were not included in their cumulative index are in paranthesis.

## Creditor rights

Indicators	Value	LLSVcr	CREDCON	COLLAT	REMEDY
1 Restrictions for going into reorganization (i.e. creditor consent)	1/0	X			
2 NO automatic stay on secured assets	1/0	X	X		
3 Secured assets first	1 = first or after costs of bankruptcy procedure are met 0.75 = second after costs and other creditor category 0.5 = third after costs and other two creditor categories 0.25 = fourth after costs and other creditor categories 0 = priority not different from unsecured creditors	X	X		
4 Management does not stay (receiver)	1/0	X	X		

5 Legal reserve: minimum percentage of total shares required to avoid voluntary dissolution	0 for no restriction 0.5 for simple majority 1 for qualified majority	(X)			
6 Automatic trigger to file bankruptcy (i.e. if debtor unable to meet obligations for more than 90 days)	1/0		X		
7 The adoption of a reorganization or liquidation plan requires creditor consent	1/0		X		
8 Establishing a security interest in movable assets does NOT require transfer of asset	1/0			X	
9 Law requires establishment of register for security interests in movables	1/0			X	
10 An (enforceable) security interest in land may be established	1/0			X	
11 Legal provision that allows creditors to pierce the corporate veil	1/0				X

Indicators	Value	LLSVcr	CREDCON	COLLAT	REMEDY
12 Management can be held liable for violating provisions of insolvency law (lower threshold than criminal activities required)	1/0				X
13 Transactions preceeding the opening of bankruptcy procedures may be declared null and void	0.25 = 3 months prior to bankruptcy 0.5 = 6 months prior to bankruptcy 0.75 = 1 year prior to bankruptcy 1 = more than 1 year				X

Note: La Porta et al. (1998) code 1/0 and do not use the scaled coding proposed vor variable 3. Indicators that were originally coded by La Porta et al., but were not included in their cumulative index are in paranthesis.

APPENDIX 2: SCORES FOR SHAREHOLDER RIGHTS INDICES (1992-1998)

Country	LLSVsh					SMINTEGR				
	1992	1994	1996	1998	1998	1992	1994	1996	1998	1998
Albania	3	3	3	3	3	1	1	1	1	1
Armenia	2.5	2.5	5.5	5.5	5.5	0	3	5	5	5
Azerbaijan	2.5	2	2	2	2	1	1	1	1	1
Belarus	1.5	1.5	1.5	1.5	1.5	1	1	1	1	1
Bosnia	0	0	0.5	0.5	0.5	0	0	0	0	0
Bulgaria	4	4	4	4	4	1	1	5	5	5
Croatia	0	2.5	2.5	2.5	2.5	0	1	6	6	6
Czech Rep.	2	2	3	3	3	3	3	4	5	5
Estonia	2	2	3.75	3.75	3.75	0	2	4	4	4
FYR Macedonia	0	0	2.5	2.5	2.5	0	0	1	5	5
Georgia	2.5	2.5	3	3	3	0	0	0	0	0
Hungary	2.5	2.5	2.5	3	3	3	3	3	5	5
Kazakhstan	2.5	2.5	2.25	5.25	5.25	1	1	5	6	6
Kyrgyzstan	2.5	2.5	2.25	2.25	2.25	0	0	2	2	2
Latvia	3.5	3.5	3.5	3.5	3.5	1	1	1	1	1
Lithuania	2.5	3.75	3.75	3.75	3.75	2	1	1	1	1
Moldova	3	3	3	3.5	3.5	1	2	2	4.75	4.75
Poland	3	3	3	3	3	4	4	4	4	4
Romania	3	3	3	3	3	1	1	1	1	1
Russia	2	2.5	5.5	5.5	5.5	2	3	3	3	3
Slovak Rep.	2.5	2.5	2.5	2.5	2.5	0	2	2	2	2
Slovenia	0	2.5	2.5	2.5	2.5	0	3	3	3	3
Ukraine	2.5	2.5	3	3.5	3.5	1	1	1	1	1
Uzbekistan	2.5	2.5	3.5	3.5	3.5	0	0	2	2	2

Country	VOICE					EXIT				
	1992	1994	1996	1998	1998	1992	1994	1996	1998	1998
Albania	7.75	7.75	7.75	7.75	7.75	1	1	1	1	1
Armenia	8	8	12	12	12	1	1	3	3	3
Azerbaijan	8	7.5	7.5	7.5	7.5	1	1	1	1	1
Belarus	6	6	6	6	6	1	1	1	1	1
Bosnia	0	0	3.5	3.5	3.5	0	0	0	0	0
Bulgaria	10.75	10.75	10.75	10.75	10.75	0	0	2	2	2
Croatia	0	5.25	5.25	5.25	5.25	0	1	1	1	1
Czech Rep.	3.5	3.5	4.5	4.5	4.5	1	1	2.5	2.5	2.5
Estonia	6.75	6.75	9.5	9.5	9.5	2	1	2	2	2
FYR Macedonia	0	0	5.75	5.75	5.75	0	0	0.5	0.5	0.5
Georgia	8	8	9	9	9	1	1	0	0	0
Hungary	6.25	6.25	6.25	6.75	6.75	1.5	1.5	1.5	1.5	0.5
Kazakhstan	8	8	7.25	12.5	12.5	1	1	3	3	3
Kyrgyzstan	7	7	9.25	9	9	1	1	2	2	2
Latvia	7.25	7.25	7.25	7.25	7.25	1	1	1	1	1
Lithuania	8.25	9.75	9.75	9.75	9.75	1	1	1	1	1
Moldova	7.75	7.75	7.75	9	9	2	2	2	4	4
Poland	6.25	6.25	6.25	6.25	6.25	3	3	3	3	3
Romania	5.75	5.75	5.75	5.75	5.75	1	1	1	1	1
Russia	6	7	12	12	12	3	3	3.75	3.75	3.75
Slovak Rep.	4	4	4	4	4	0	1	1	1	1
Slovenia	0	6.25	6.25	7.25	7.25	0	3	3	3	3
Ukraine	8	8	8	8.5	8.5	2	2	2	2	2
Uzbekistan	8	8.25	10	10	10	1	2	3	3	3

Country	ANTIMANAGE					ANTIBLOCK				
	1992	1994	1996	1998	1998	1992	1994	1996	1998	1998
Albania	5	5	5	5	5	3	3	3	3	3
Armenia	2.5	2.5	5	5	5	2	2	4.5	4.5	4.5
Azerbaijan	2.5	3	3	3	3	2	1	1	1	1
Belarus	1.5	1.5	1.5	1.5	1.5	1	1	1	1	1
Bosnia	0	0	1.5	1.5	1.5	0	0	0	0	0
Bulgaria	5	5	5	5	5	3	3	5	5	5
Croatia	0	4	4	4	4	0	2	3	3	3
Czech Rep.	2	2	2	2	2	1	1	4.5	4.5	4.5
Estonia	2	2	4.5	4.5	4.5	1	1	4	4	4
FYR Macedonia	0	0	2.5	2.5	2.5	0	0	3.5	3.5	3.5
Georgia	2.5	2.5	4	4	4	2	2	2	2	2
Hungary	2	2	2	4	4	2.5	2.5	2.5	2.5	4.5
Kazakhstan	2.5	2.5	3.5	5.5	5.5	2	2	3	3	6.25
Kyrgyzstan	1.5	1.5	3.5	4	4	2	2	3	3	3
Latvia	3	3	3	3	3	3	3	3	3	3
Lithuania	4	3.5	3.5	3.5	3.5	2.5	3.5	3.5	3.5	3.5
Moldova	2	2	2	3	3	2	2	2	2	6.25
Poland	3	3	3	3	3	4.5	4.5	4.5	4.5	4.5
Romania	4	4	4	4	4	4	4	4	4	4
Russia	3	3	5	5	5	2	2.5	6	6	6
Slovak Rep.	2	2	2	2	2	1	1	1	1	1
Slovenia	0	3	3	4	4	0	3.75	3.75	3.75	3.75
Ukraine	2.5	2.5	2.5	3	3	2	2	2	2	2
Uzbekistan	2.5	2.5	5	5	5	2	2	3.5	3.5	3.5



APPENDIX 3. SCORES FOR CREDITOR RIGHTS INDICES (1992-1998)

Country	LLSVcr					CREDCON				
	1992	1994	1996	1998	1998	1992	1994	1996	1998	1998
Albania	0	0	3	3	3	0	3	3	3	3
Armenia	0	0	0	3	3	0	0	0	4	4
Azerbaijan	0	3	3	4	4	0	4	4	3	3
Belarus	2	2	2	2	2	3	3	3	3	3
Bosnia	0	0	0	4	4	0	0	0	4	4
Bulgaria	0	3	3	3	3	0	4	4	4	4
Croatia	0	0	4	4	4	0	0	5	5	5
Czech Rep.	3	3	3	3	3	4	4	4	4	4
Estonia	3	3	3	4	4	4	4	4	4	4
FYR Macedonia	0	0	1	1	1	0	0	0	0	0
Georgia	0	0	2.75	2.75	2.75	0	0	2.75	2.75	2.75
Hungary	3.75	3.75	3.75	3.75	3.75	4.75	4.75	4.75	3.75	3.75
Kazakhstan	1.5	1.5	1.5	2.75	2.75	1.5	1.5	1.5	2.75	2.75
Kyrgyzstan	0	0	0	3	3	0	0	0	3	3
Latvia	4	4	4	4	4	4	4	5	5	5
Lithuania	4	4	4	3	3	3	3	3	3	3
Moldova	3	3	3	4	4	3	3	3	4	4
Poland	2.25	2.25	2.25	2.25	2.25	4.25	4.25	4.25	4.25	4.25
Romania	0	0	4	4	4	0	0	4	4	4
Russia	0	3	3	2.5	2.5	0	3	3	3.5	3.5
Slovak Rep.	3	3	3	4	4	4	4	4	5	5
Slovenia	0	4	4	4	4	0	5	5	5	5
Ukraine	4	4	4	4	4	4	4	4	4	4
Uzbekistan	0	2.5	2.5	2.5	2.5	0	4.5	4.5	4.5	4.5

Country	COLLAT					REMEDY				
	1992	1994	1996	1998	1998	1992	1994	1996	1998	1998
Albania	0	1	1	1	1	1	1	2	2	2
Armenia	0	0	2	2	2	0	0	0	1	1
Azerbaijan	0	0	1	3	3	0	0.5	0.5	1.75	1.75
Belarus	1	1	1	1	1	0.75	0.75	0.75	0.75	0.75
Bosnia	0	0	0	0	0	0	0	0	0.75	0.75
Bulgaria	1	1	3	3	3	0	2	2	2	2
Croatia	0	0	1	1	1	0	0	2	2	2
Czech Rep.	1	1	1	1	1	1	1	1	1	1
Estonia	0	3	3	3	3	1	1	1	1	1
FYR Macedonia	1	1	1	3	3	0	0	0	0	0
Georgia	0	2	2	3	3	0	0	0	0	0
Hungary	1	1	3	3	3	1	1	1	1	1
Kazakhstan	2	2	2	3	3	0	0	1	2.75	2.75
Kyrgyzstan	0	0	1	3	3	0	0	0	2.75	2.75
Latvia	0	0	0	1	1	0.75	0.75	0.75	1	1
Lithuania	1	1	1	3	3	0.75	0.75	0.75	0	0
Moldova	0	1	2	3	3	0	0	1	1	1
Poland	1	1	1	3	3	1.5	1.5	1.5	1.5	1.5
Romania	0	0	0	1	1	0	0	2	2	2
Russia	1	1	1	2	2	0	0.5	1.5	2.5	2.5
Slovak Rep.	1	1	1	1	1	1.5	1.5	1.5	2	2
Slovenia	1	1	1	1	1	0	1.75	1.75	1.75	1.75
Ukraine	2	2	2	2	2	0.75	0.75	0.75	0.75	0.75
Uzbekistan	0	0	0	2	2	0	1.75	1.75	1.75	1.75