Who Tolls the Bells for Firms?

Tales from Transition Economies¹

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Abstract:

Bankruptcy law is regarded as an important mechanism for protecting creditor rights. Much of the current debate focuses exclusively on private creditors, ignoring the role of tax authorities as creditor in insolvent firms. The paper documents the important, if not dominant, role tax authorities play as initiator of bankruptcy in two transition economies, Hungary and Russia. While improved tax enforcement is crucial for tackling the problem of tax arrears and hardening the "soft budget constraint" in the former socialist countries, the paper suggests that the presence of the tax authorities as creditor may also affect the cost of debt financing and may have contributed to the difficulties firms continue to have in obtaining longer term debt finance. This is the case in particular when the tax authorities shift from a low to a high enforcement regime in an environment where firms had already accumulated substantial tax arrears in the past, making the tax authorities senior creditors in bankruptcy. The paper follows Desai et al (2004) in asking for more attention to be paid to the tax authorities as stakeholders in firms. Contrary to Desai et al, however, the paper suggests that describing the role of the tax authorities as minority shareholder understates the powers of the tax authorities. In fact, their claims convert into debt claims once a tax payer defaults making them tax authorities holder of "convertible" equity".

I. Introduction

A central question in the theory of the firm is why firms exist at all (Coase 1937; Alchian and Demsetz 1972; Grossman and Hart 1986). The question, why firms "die" has been much less contentious. The expectation is that once a firm's liquidation value exceeds its value as a going concern, it will exit the market and its assets will be redeployed to more efficient use. Firms do not necessarily exit voluntarily, mostly because their owners or managers have a vested interest in keeping them afloat, if only to protect their jobs. However, creditors may push firms into bankruptcy. They can initiate bankruptcy directly, or they can pursue a firm hard enough so that it seeks bankruptcy protection "voluntarily".

This scenario rests on the assumption that markets work effectively in sorting performing from non-performing companies. This paper challenges the notion that the exit decision is necessarily market driven. It investigates who controls the exit decision for firms in transition economies, i.e. in an environment in which markets are only beginning to emerge after a lengthy transition process. Legal institutions, including formal legal protections of creditor rights, collateral regimes, and bankruptcy procedures were established and designed to further the development of such markets. The actual use of legal institutions, however, has often deviated from the purpose for which they have been created. In all transition economies creditors were slow to use bankruptcy as a means to recover their debt. Instead, as this paper will document, the state in its role as tax creditor has played a crucial role in initiating bankruptcy, imposing financial discipline, and on occasion, re-establishing state control over economic assets.

This outcome is somewhat ironic. A critical goal of economic and legal reforms in these countries has been to "get the state out", and to de-politicize economic decision making. The means to achieve this was the privatization of state owned enterprises, thereby transferring key decision making powers to private agents (Boycko, Shleifer, and Vishny 1995). The notion that once ownership rights had been reallocated the depoliticization of economic decision making could be safely assumed has been widely accepted. If markets still failed to develop, this was attributed to weak laws and/or weak legal institutions (Gray and Hendley 1997). Not surprisingly, the second wave of reforms in transition economies and other emerging markets has focused on strengthening legal institutions to ensure market development (Worldbank 2001).

Removing state agents from a position where they can control a company as owners, however, does not necessarily imply that state control has subsided. Most privatization procedures left a substantial stake at least temporarily in state-ownership. Available evidence on how governments and their agents used these remaining minority stakes suggests that in most cases the state for the most part has been a passive owner. Still, the sheer number of partially state-owned firms in the early transition period suggested that getting the state out was akin to trying to kill the many-headed Hydra (Pistor and Turkewitz 1996). The Hydra metaphor seems even more appropriate when examining the role of the state as creditor of firms *today*. In many transition economies the state emerged as the largest creditor in the economy. Nowadays, the chunk of state credits is not channeled through state owned banks, many of which have been privatized, closed down, or marginalized by the influx of foreign and private banks (Fries, Neven,

and Seabright 2002). Instead, the main source of firm financing by the state has taken the form of tax arrears (Schaffer 1998; Klapper, Sarria-Allende, and Sulla 2002).

The state's role in financing the private sector through un-enforced tax claims raises the specter that the soft budget constraint, the defining feature of socialist economic management (Kornai 1992), has continued well beyond the demise of the socialist system. Examining available evidence in the 1990s, Schaffer (1998) concludes that in many transition economies tax arrears were substantial and that they, rather than direct subsidies, were the greatest source for the soft budget constraint. Similarly, Lambert-Mogiliansky et al. (2003) show that in Russia's regions with governors that were largely hostile to economic reforms have tended to shield companies from liquidation by making extensive use of reorganization procedures, which prolonged the survival of firms that entered these procedures. More problematic perhaps, is how the state exercises the most powerful control right of any stakeholder, namely the power to pull the trigger and force a firm to exit. Exercising this power is a prerequisite for hardening the soft budget constraint in transition economies. Yet, this very power could also be used to re-establish state control over key aspects of economic decision making, and indeed over crucial economic assets. The Yukos case in Russia (which will be further discussed below) suggests that such a scenario is not an implausible one.

This paper presents detailed data from two transition economies, Hungary and Russia on the state's role as the initiator of firms' bankruptcy. Available data on the initiator of bankruptcy proceedings in these countries over the past 5 years show that the state continues to be a powerful stakeholder in firms in these economies. The paper analyzes how the state has used its powers, in particular whether it acted primarily to help

establish financial discipline, enforce its own budgetary claims, or use bankruptcy to regain economic control in the aftermath of privatization. This suggests that the function of bankruptcy proceedings differs remarkably across the two countries. In Hungary it is primarily a disciplining device with the state being slightly more invested in small rather than larger companies. Moreover the primary purpose of state intervention appears to have been to enforce financial discipline. In Russia, by contrast, bankruptcy has become a control device in the hands of a powerful tax service that enforcers not only tax liabilities, but also maintains the official enterprise register, and thus controls entry and exit to the market. On occasion, bankruptcy has even been used to re-establish the state's direct control over key economic assets.

An obvious implication of these findings is an old one, namely that the function of legal institutions, such as bankruptcy, differs widely from country to country and is highly context specific (Trubek and Galanter 1974). Simple quantitative studies that attempt to relate the number of bankruptcies in a given country to the level of creditor rights protection therefore seem somewhat misguided (Claessens and Klapper 2005), as they ignore the identity of those triggering bankruptcy. The same is true for studies that link legal protection to even more remote economic outcomes, such as aggregate data credit market development (La Porta et al. 1998; Levine 1998; Pistor, Raiser, and Gelfer 2000), as they fail to explain the mechanisms that relate the law on the books to financial markets as the observed empirical outcome.

Yet, the major point the paper seeks to make is a different one. As has been noted above, the question who determines the ultimate fate of a firm is hardly addressed in the literature on the theory of the firm, or the theoretical bankruptcy literature. While there is

substantial discussion about allocating the bankruptcy initiation power to either the debtor or the creditor (Baird 1991; Povel 1999; Berkovitch and Israel 1999), the discussion for the most part assumes a simple contractual relation between a private debtor and a private creditor, each maximizing its economic interests. In the real world, however, both debtors and creditors come in different disguise. Debtors may be owned by the state or by various private agents; they may have concentrated or dispersed owners; and they may be more or less connected to politicians or bureaucrats. Creditors come in an even greater garden variety. They may be contractual creditors, i.e. either suppliers of inputs (including human capital inputs) or lenders to the firm. Others may be involuntary creditors, such as tort creditors or the tax authorities in that the role of creditors results from actions taken by the debtor, not from a contractual relation between them and the debtor.

This paper focuses on tax creditors and their role in determining the timing and outcome of bankruptcy. It documents the dominant role the state plays in determining the fate of firms in transition economies, including those that have implemented extensive privatization programs. In these countries, it is by way of enforcing (past) tax liabilities that the state determines the future of firms. The paper thus joins a growing debate about the role of the tax authorities in the corporate governance of firms. This role has been first emphasized by Desai, Dyck, and Zingales (Desai, Dyck, and Zingales 2004). They describe the tax authorities as a "minority shareholder". This characterization stems from the fact that the tax authorities have a claim against the future profits of the firm.

According to Desai et al, levying a profit tax and making a credible commitment to enforce such a tax, creates a powerful governance device not only for the state, but

indirectly also for minority shareholders. The effect of a corporate tax on minority shareholders, according to this analysis, depends on the quality of the governance structure in place. When governance structures are weak, i.e. when blockholders control the firm unchallenged by minority shareholders, an increase in the tax rate will increases the blockholder's return to stealing. The more he steals, the lower the firm's profits and thus the lower the effective tax rate the firm will have to pay to the tax authorities. However, they also suggest that strengthening tax enforcement can increase the return to minority investors and thereby enhance overall corporate governance. The intuition is that effective tax enforcement forces the firm to disclose its assets not only to the tax authorities, but also to its shareholders. The authors use Russia as a case study to demonstrate the relation between improved tax enforcement in the Putin era and increases in stock prices of publicly traded firms.

The current paper explores a different relation between tax authorities and private firms. It suggests that depicting the tax authorities as equity holder misses part of the story. While it is true that the tax authorities do not receive a fixed return on their investment as creditors typically do, and instead have a claim against the future profits of the firm, once a firm defaults on its tax obligation, the tax authorities' claims automatically convert into a debt claim. Most importantly, they do yield the power to trigger bankruptcy proceedings against such a firm. It therefore seems to be more appropriate to characterize the tax authorities as holders of "convertible equity".

Still, tax authorities differ from ordinary creditors in important ways. Most importantly, their objectives are not only future repayments of debt owed by a particular firm, but enforcing tax compliance more generally. As a result they may be less inclined

to refinance or defer re-payment. Moreover, tax authorities are designed by law to be more powerful than unsecured creditors. Failure to pay taxes typically allows the tax authorities to unilaterally create a lien over the tax debtor's assets. Furthermore, most bankruptcy codes allow the tax authority to recover prior to unsecured creditors.

The role of the tax authorities as claimant in firms' bankruptcy has been ignored by much of the theoretical bankruptcy literature. The paper hopes to stimulate further inquiry by analyzing the special role of tax authorities as creditors in the context of transition economies. Like a magnifying glass, these countries reveal features of governance structures, which often go unnoticed in developed economies.

The paper is organized as follows. Section II discusses the "initiation problem" in bankruptcy. Section III presents summary data on bankruptcy initiation in Hungary and Russia to demonstrate the extensive role the state plays as tax creditors in firms. Section IV examines available data for Hungary and Russia in greater detail to determine the motivation for state initiated bankruptcies in these two countries. Section V reflects on the role of bankruptcy taking into account the tax authorities as a crucial stakeholder of firms in transition economies and – according to available data – possibly elsewhere. Section VI concludes.

II: Who Should Toll the Bells for Firms?

Firms are creatures of human action. They don't emerge, but are established. Neither do they simply die, but are shut down. This raises the question as to who should have the final say over the death of a firm. For solvent firms, the answer is simple: the firm's

owner as the holder of its residual rights of control (Grossman and Hart 1986) should exercise the power to close down the firm. For insolvent firms, the answer is more complicated. Insolvency implies that the combined claims of all creditors exceed the firm's assets, i.e. that after their claims are enforced there are no assets left over which the owners could exercise their residual rights of control. This seems to suggest that creditors should have the power to initiate a firm's exit. Creditors may, however, suffer from information asymmetries and face a difficult time verifying when a firm is only temporarily illiquid or when it has reached the stage of insolvency. Creditors also face serious collective action problems. Each creditor is better off when enforcing her claim individually, while all creditors as a collective benefit from an orderly procedure, even though some might only be satisfied pro rata, or leave empty-handed (Baird 1991).

It has therefore been suggested that a system that favors the debtor's initiation of bankruptcy is superior to a regime dominated by creditors (Baird 1991). The intuition is that the debtor knows best when the line between temporary illiquidity and insolvency has been crossed. Since the debtor (or agents acting on its behalf), however, has strong incentives to delay, if not avoid, bankruptcy, a regime where debtors are supposed to initiate bankruptcy requires an appropriate incentive structure for the debtor to come forward. Giving the debtor the option to initiate a reorganization procedure and thereby avoiding the immediate liquidation of the firm appears to be such a device. The major benefit of a "soft" reorganization regime is its ability to resolve the initiation problem (Povel 1999). Still, this does not come without cost, as many firms that enter reorganization should probably be liquidated immediately (Baird and Morrison 2005). By

contrast, a pure liquidation regime, i.e. one that makes reorganization contingent on creditor consent, leaves the initiation decision ultimately in the hands of creditors.

Berkovitch and Israel have sought to relate the allocation of the bankruptcy initiation power to the structure of an economy, rather than determining the optimal allocation of these powers in the abstract (Berkovitch and Israel 1999). They characterize economic systems by their respective information structures. They distinguish high and low cost information systems. In low cost information systems, managers and creditors have similar information to determine the future viability of the firm. By contrast, in high cost information systems managers have a significant information advantage over creditors, because of high costs and low quality of information. Another feature that characterizes different economies is the nature of contracting. Some systems are based on relational and long term contracting often intermediated by banks. Other systems use primarily arms length contracting and banks play a less pronounced role. Modeling an optimal bankruptcy regime for systems that share these features, they conclude that developed economies well developed information acquisition technologies that are dominated by relational contracts (bank based systems) a bankruptcy regime should allocate to creditors should the final say over the future of the firm. Economies with similar information acquisition technologies, but arms-length rather than relational contracting, should ensure that both creditors and debtors have decision making powers in bankruptcy. The major difference between the two developed economies is that in bank-centered system information is hard, meaning that the manager can predict the outcome of creditor's investigation into the viability of the firm and thus respond strategically by either initiation bankruptcy himself, or continuing the firm. In marketbase systems, by contrast, information is more dispersed and "soft", making it more difficult for the manager to act strategically. At the same time, in such a system creditors may over-enforce and trigger bankruptcy too often. Debtor initiated bankruptcy thus works as an important defense against over-aggressive creditors in a market based financial system.

Finally, countries with poor information acquisition technologies and bank-centered financing should give debtors a similar defense against over-aggressive creditors. The intuition here is that in an environment with low information quality managers have a strategic advantage over creditors. Creditors can learn critical information only from management, not through their own investigation. A system that exploits managers' superior information, i.e. one that includes a debtor chapter, is thus superior to one that lacks it. However, since managers may abuse their strategic advantage, creditors should also have the option to initiate and control bankruptcy.

It follows that transition economies should have both a debtor and a creditor chapter. Information quality has been notoriously low in the former socialist countries characterized by the absence of market prices, reliable firm specific information, as well as intermediaries that would collect and verify relevant information (Bailey 1995; Pistor and Xu 2005). In such an environment firm insiders are bound to have superior information (Frydman, Pistor, and Rapaczynski 1996). Nevertheless, in most transition economies bankruptcy initiation powers are biased heavily in favor of creditors (Pistor 2000). The rational seems to have been to impose financial discipline on firms after they had existed for too long under a "soft budget constraint" (Kornai 1992). Based on the analysis provided by Berkowitz and Israel, however, a more appropriate strategy may

have been to improve debtors' incentives to initiate bankruptcy than to tilt the balance of powers too much in favor of creditors. The same could be said for most other countries' bankruptcy regimes. While most countries allow both creditors and debtors to initiate bankruptcy proceedings, with the major exception of the US, most favor creditor initiated bankruptcy (Martin 2005). The bias in favor of creditor-initiated bankruptcies has been maintained despite the fact that in recent years many countries have either introduced or strengthening reorganization procedures. However, entry to such proceedings is controlled by creditors whose consent is required before a firm can switch from liquidation into reorganization (Rajan and Zingales 1995; Martin 2005). The US, with its strong pro-debtor chapter 11 regime, is an outlier in international comparison (Baird 1991).

III. Who Tolls the Bells For Firms? – Evidence from Transition Economies

Table 1 below presents summary evidence on who has tolled the bells for firms in two transition economies: Hungary and Russia. This kind of data is notoriously difficult to collect, wherefore the scope of the study had to be limited to only a few countries.²

The table presents the average number of bankruptcies filed in these two countries over a period of four to five years (depending on data availability). It also shows the share of bankruptcy proceedings that have been initiated by debtors or creditors, and differentiates between state creditors and private creditors.

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² Only few countries collect these data at the national level or make them publicly available. Bulgaria was originally included in the study, but it has proved impossible to obtain reliable data on bankruptcy proceedings.

Table 1: Bankruptcy Initiators in Hungary and Russia 1999-2003

All data = average per	Hungary	Russia
year		
Cases initiated	13,597.6	39,953.4
By state creditors	4911.4	34,198.8
	(36%)	(85.6%)
By private creditors	7801.2	1448.2
	(57.4%)	(3.6%)
By debtor	1512.2	4306.4
	(11.1%)	(10.8%)

^{*} See [secondary source]

It is difficult to compare bankruptcy filings across countries, as the propensity of filings depends on a number of factors that are difficult to control for, including economic condition, the quality of firms, the willingness of creditors to refinance, and the incentive structure the law creates for creditors or debtors to file. Still, bankruptcy rates in Hungary at least, are roughly comparable with those of other European economies. A recent study of insolvencies in Europe found that Germany had about 135 insolvencies per 10,000 companies, France 160, and Italy 39. The equivalent number for Hungary was 90 (Creditreform 2005). Similar data for Russia were not available.

More interesting for the purpose of this paper is the identity of the bankruptcy initiator. Particularly striking is the substantial number of creditor filings as well as what appears to be a high share of bankruptcy filings by the state – especially in Russia. As will be further discussed below, the role of the state as initiator bankruptcy poses interesting question in the context of transition economies. However, anecdotal comparative evidence suggests that even in Western market economies, a substantial number of firm bankruptcies are triggered, if not initiated, by the tax authorities.³

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^{**}excluding accelerated procedures against "absentee" debtors.

³ For the US, see (Baird and Morrison 2005) suggesting that especially for small and medium size enterprises the state is often the largest creditor and looms large in bankruptcy proceedings.

The strong bias in favor of creditor (both private and state) initiated bankruptcy proceedings appears to be a feature of the formal law. In Hungary, debtors may initiate a reorganization procedure. However, they have to obtain creditor consent for a moratorium within 30 days after filing. At least half of all creditors must be represented for a valid decision.⁴ If the debtor fails to obtain creditor consent for a moratorium, the court terminates reorganization, opening the way for creditors to bring a liquidation action. Moreover, even if creditor consent has been obtained, management autonomy is serious curtailed in bankruptcy, as the court will appoint a bankruptcy trustee who has the power to approve any financial commitment of the company beyond an amount fixed by the creditors.⁵ In Russia, creditor dominance is even more pronounced in that the decision whether a firm will go into reorganization, whether it will be subjected to administrative management by a court appointed receiver, or whether it enters liquidation proceedings, is made only after bankruptcy has been initiated. ⁶ Thus, the debtor cannot stack the cards in his favor by bringing a reorganization proceeding and, as a result, has little incentives to initiate bankruptcy in the first place.

The fact that creditors dominate the bankruptcy initiation decision in Hungary and Russia is consistent with evidence from Western market economies, with the exception of the United States, where "voluntary" or debtor filings make up more than 90 percent of all bankruptcy filings. What is more remarkable is the share of bankruptcy proceedings that have been initiated by the state. Between 1999 and 2003, 85.6 percent of all

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⁴ Sec. 9 Hung BKR Code.

⁵ Sec. 14 Hung BKR Code.

⁶ See Art. 59 of the Russian Insolvency Code (2002).

⁷ According to the Department of Justice statistics, of 1,618,987 bankruptcies filed in 2004 (including business and non-business bankruptcies), only 602 were involuntary filings. See http://www.uscourts.gov/judicialfactsfigures/table5.01.pdf (last visited, 11 June 2005). Note, however, that the majority of these cases quickly end up in Chapter 7, i.e. in liquidation. See (Morrison 2003).

bankruptcy cases in Russia were initiated by a state agent, for the most part by the tax authorities. Even in Hungary, state initiated bankruptcies account for 36 percent on average between 1999 and 2003. In both countries the tax authorities are the most important state agents involved in bankruptcy. The strong presence of the tax authorities can be explained with by the legacy of tax arrears in transition economies. During the first part of the 1990s, tax authorities did not have the capacity to effectively enforce taxes. Moreover, taxes were levied not only on profits, but on excess wages, effectively imposing an income tax on firms (Martinez-Vazquez and McNab 2000). The effect of this legacy is that the state has become an important creditor in the economy with the discretion to exercise the full range of powers that come with this position.

More important, than simply noting the presence of the tax authorities as creditors is to understand the objectives for exercising creditor rights in different countries. First, the state may have stepped into the void and triggered bankruptcy in an attempt to familiarize private agents with the procedure in the hope that this would eventually give rise to a purely market-driven process (pedagogical function). Second, the state may be in the business of enforcing its own claims to increase revenue for the state budget and improve financial discipline in the long term (creditor function). Third, the state may be using bankruptcy as a means to regain control over decision making, and possibly over key assets in the economy (predatory function).

With respect to the pedagogical function, it is worth noting that the introduction of bankruptcy codes in transition economies on its own did not trigger a wave of bankruptcy filings, despite the fact that many firms experienced serious liquidity problems and a substantial share of them was technically insolvent. Hungary tried to

resolve this problem by introducing a so-called automatic (debtor) trigger in 1992 (Bonin and Schaffer 2002). The law required each debtor who was unable to pay its obligations for 90 days to file for reorganization. The law entered into force in January 1992. The total number of debtor initiated reorganizations almost quadrupled from 724 cases filed in the first quarter of that year, to 2,259 cases filed in the second quarter. The number of bankruptcy filing decreased only after the automatic trigger was removed in 1993. Since then, reorganization cases make up only a tiny fraction of all insolvency cases filed in Hungarian courts (see below for details).

With hindsight, the introduction of an automatic trigger has been judged as a flawed attempt to superimpose market discipline on firms. Comparative analysis revealed that in developed market economies deferring payment for 90 days or more is common practice and does not give rise to immediate enforcement action by creditors (Schaffer 1998). In the context of transition economies, such a drastic action seemed particularly inappropriate, as most firms experienced serious stress during the transition period. Distinguishing potentially viable from non-viable firms in such an environment was an almost impossible task, and not likely one for which the legislature had superior information over either debtors or creditors. The immediate effect of the automatic trigger was to dramatically increase the workload of courts as well as court appointed bailiffs, not the separation of non-viable from viable firms.

Still, the automatic trigger introduced in Hungary to stimulate bankruptcy was a relatively benign measure to trigger bankruptcy when compared with measures taken elsewhere. It forced debtors into bankruptcy under conditions determined by law (failure to pay debt for more than 90 days), but did not allocate discretionary power to a state

agent charged with bankruptcy initiation powers, as was the case in Russia. Russia introduced its first bankruptcy code in 1992, to little effect. 74 bankruptcy cases were brought in 1993; 231 in 1994 and 716 in 1995. Instead, firms were piling up interenterprise arrears as well as tax arrears, which together reached 40 percent of GDP by 1998 (Ivanova and Wyplosz 2002). This outcome may have been the response to the uncertainty over the future of economic reforms in Russia. In an attempt to make the reforms more credible and to force apparently non-viable firms to exit the market, President Yeltsin therefore established a Federal Bankruptcy Agency by decree. The purpose of this agency was to identify large companies that had become insolvent, place them under administrative management and either salvage them or close them down eventually. Between 1998 and 2002, the agency initiated on average 3,890.6 cases per year, or about 10 percent of all cases filed during this period. In 2002, its successor agency was authorized as the sole state agent allowed to file bankruptcy against delinquent firms. However, it proved to be less effective than expected and was formally dissolved in June 2004. Its functions were then merged with the reorganized Federal Tax Services (FTS).

There is also substantial evidence that an important concern for the state to enforce bankruptcy was to increase revenue and to enhance financial discipline in an attempt to bolster voluntary compliance with tax claims. A comparative study on tax arrears in transition economies documented that in Hungary the stock of tax arrears amounted to 6.9 percent of GDP in 1994, whereas in Russia it had reached 12 percent of GDP in 1996 (Schaffer 1998) and close to 17 percent in 1998 (Ivanova and Wyplosz 2002). Schaffer argues that the stock of tax arrears as such does not necessarily give rise

to concern, as long as taxes are paid eventually. Of greater concern is the flow of tax liabilities that is not getting paid at all or is being written off, as the flow of tax liabilities indicates the continuing indirect subsidization of firms, i.e. a soft budget constraint. The best indicator for a flow problem is an increase in the stock of tax arrears over time, as new tax arrears are being added to old ones that remained uncollected. Estimating the flow of tax arrears in transition economies, he finds for Hungary a total of annualized flow in the amount of 1.2 percent of GDP in 1993, and 0.7 in 1994. For Russia, the flow stood at 2.1 percent in 1994 and reached 7.3 percent in 1996.

To put these numbers in perspective, it is worth considering the size of the credit market in the two countries. As noted above, tax arrears were often used as substitutes for private debt finance by companies that either did not have access to the credit market, or preferred to rely on the soft budget constraint supplied by the state over subjecting themselves to possibly more stringent enforcement practices by private creditors. The size of the private credit markets is commonly measured by the total claims deposit taking institutions hold against the private sector, divided by GDP. Recent data suggest that in Hungary today the credit market is 34 percent of GDP, and 16 percent in Russia (Djankov, McLiesh, and Shleifer 2004). Taking current figures as a benchmark, the total stock of tax arrears in Russia in 1998 (17% of GDP) was larger than the private credit market, and the flow of tax arrears about half its size. The data are less dramatic in Hungary, but nonetheless suggest that the state continues to play an important role in the economy by influencing, if not determining, a firm's exit decision.

Finally, for Russia at least there is evidence that bankruptcy has come to be used extensively as an instrument of state control over the economy, and, on occasion as a

means for re-establishing state ownership over key economic assets. The liquidation of Yuganskneftegaz, the subsidiary of Yukos, and the transfer of its assets to the state-controlled Rosneft company in 2005 is the most glaring example. In addition, bankruptcy proceedings have been used by the tax authorities not only to enforce tax claims, but also for enforcing mandatory enterprise registration requirement. A new law passed in 2002 "Concerning State Registration of Companies designated the Federal Tax Service" as the registering organ for all companies. Failure to comply with registration requirements may result in liquidation actions brought by a state agent according to the Russian Civil Code. In effect, the tax authorities have been empowered to close down firms that opted for the grey economy by failing to register with the state and/or to pay taxes.

In sum, there is evidence that state initiated bankruptcy in Hungary and Russia may have served multiple purposes. To see which of these dominated in each country, the following section examines state-initiated bankruptcies in Hungary and Russia in greater detail.

III. Bell Tolling Strategies: Hungary and Russia Compared

A special feature of the state acting as creditor and enforcing its tax liabilities is that the state has more extensive enforcement powers than private creditors. In theory, therefore, the tax authorities could overcome the information disadvantage creditors tend to have vis-à-vis managers in an environment where information is costly and of low quality (Berkovitch and Israel 1999). Vesting the tax authorities with such powers,

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⁸ Art. 61 of the Russian Civil Code states the grounds on which liquidation petitions may be brought. They include irremediable violations of the law; continuous violations, and failure to comply with registration requirements, among others.

however, also raises the prospect of excessive tax enforcement at the expense not only of the debtor, but also of private creditors.

The extent of the tax authorities' enforcement powers differs across countries. They are expansive and relatively unchecked in Russia, but have been more limited in Hungary (Frank 2002), at least after the intervention of the Hungarian Constitutional Court.

Hungary enacted a law establishing a "Tax and Financial Control Administration" (the Hungarian acronym is APEH) in 1998 with a criminal investigation department.⁹ The latter was given the power to, among others, "conduct *clandestine* collection of information in order to prevent, detect, obstruct criminal acts falling within the sphere of criminal investigation activities". These sweeping powers were curtailed after the Hungarian Constitutional Court deemed them in violation of the constitution. 10 Still, even under the revised tax codes, the tax authorities have extensive investigatory powers that include, among others, the power to enter any room that is necessary for inspecting, to examine documents, request information from the tax payer or his representative, and investigate other taxpayers in contractual relationship with the tax payer to the extent necessary. 11

In Russia, a specialized police force, the Federal Tax Police existed until recently (Frank 2002)¹² with the power to investigate criminal aspects of tax evasion. The Federal Tax Police's powers included the power to conduct inquiries into tax crimes as well as administrative law violations; to participate in audits at the request of tax authorities and

⁹ Act XCIII of 1990 on Certain Duties of the Tax and Financial Control Administration.
¹⁰ Ruling 3/2001 of the Hungarian Constitutional Court.

¹¹ Section 98 of Act XCII of 2003 on the Rules of Taxation.
12 Arts 36 and 37 of the Russian Tax Code and the Law "On Federal Departments of the Police"

to carry investigations where a crime was indicated. The function and personnel of the Federal Tax Police have meanwhile been transferred to the Ministry of Internal Affairs, ¹³ without diminishing, however, the sweeping investigatory powers associated with tax enforcement.

The tax authorities' powers are not limited to investigations. They also include bankruptcy initiation powers, priority rules, as well as their ability to impose a lien on the debtors' assets. In both countries tax authorities have the power to initiate bankruptcy proceedings. In Russia, this follows directly from the bankruptcy law, which lists the tax authorities as one of the state organs that can file for bankruptcy. ¹⁴ In Hungary this follows from the notion that *any* creditor has the right to bring bankruptcy proceedings against an insolvent company. ¹⁵ In both countries the tax authorities have the power to *unilaterally* attach property of a tax payer in default and can thus initiate execution proceedings against the tax payer's assets. ¹⁶ Note, however, that tax authorities must take specific action to impose a lien ¹⁷ and that – in contrast to the US, for example, a lien does not attach automatically when a company defaults on its tax liabilities.

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¹³ Presidential Decree No. 306 of March 11, 2003.

¹⁴ The first Russian bankruptcy law of 1992 lists in addition to the debtor and creditors only the Procuracy, an organ comparable to an attorney general with extensive criminal and civil enforcement powers, but does not explicitly mention the tax authorities. Art. 11 (3) of the 1998 Insolvency Code declares that the rules on creditors should be also applied to tax authorities. In addition, the same provision mentions the Russian Federation and its subjects as potential initiators of bankruptcy. The power to represent the interests of the Russian Federation was delegated in separate decrees (in 1998 to the FSFO) Art. 7 of the 2002 Insolvency Code allows authorized state agencies with monetary claims against the debtor to file a bankruptcy case.

¹⁵ See Section 22 Act XLIX of 1991 on Bankruptcy Proceedings, Liquidation Proceedings and Members' Voluntary Dissolution (as amended) (hereinafter Hungarian bankruptcy code).

¹⁶ See Section 150 of the Hungarian Rules of Taxation, op cit at note 11.

¹⁷ For Hungary see ibid. For Russia, see Art. 73of the 1998 Tax Code of the Russian Federation (as amended), which requires an agreement between the tax authorities and the tax subject for a pledge to arise. Note, however, that the Russian tax authorities have the power to initiate enforcement actions against a defaulting tax payer by seizing bank accounts and property outside a court procedure. See Art. 46 of the Russian Tax Code.

The following analysis explores additional evidence to determine the objective function of the tax authorities in their enforcement practice.

The Case of Hungary

Hungary was among the first of the former socialist countries to enact a bankruptcy code as early as 1991. As previously noted, apart from a brief episode during which reorganization proceedings skyrocket as a result of the introduction of an automatic debtor trigger, liquidation is the procedure of choice in Hungary. Since 1999, only 40 reorganizations have been filed on average in a given year. By contrast the average number of newly filed liquidation procedures per year has been in excess of 14,000.¹⁸

Recall that the share of bankruptcy proceedings initiated by the Hungarian tax authorities averaged 36 percent over the past five years. These numbers somewhat understate the actual involvement of the state in shutting down firms. The reason is that these numbers reflect only the bankruptcy proceedings actually filed in court. Data compiled by the tax authorities suggest that the share of all liquidations that resulted from enforcement actions of the tax authorities had initiated was substantially higher, reaching as high as 85 percent in 2001 (see Table 2).

Table 2: Hungarian Tax Authorities as Bell Tollers

Ī	Liquidation	Tax	Average amount	Average amount
	Announcements	Authority	of outstanding	of outstanding
		initiated	Credits	Credits for Tax
L		cases as	(in million	initiated

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¹⁸ Note that when comparing these data with filing data in the US, reorganization appears to be very low, as by far the majority of filings in the US are for Chapter 11 proceedings. However, over 60 percent of these filings are thrown out and end up in liquidation. See (Morrison 2003).

		Share of Total	Forints)	Liquidations (in million Forints)
1993	2593	22.9	10.1	11.1
1994	2484	43.9	13.1	10.3
1995	2799	63.8	8.3	13.2
1996	3078	39.3	9.2	23.5
1997	3171	36.9	14.1	26.2
1998	3288	57.4	16.7	15.3
1999	3495	59.7	22.4	25.9
2000	4468	78.7	16.1	15.1
2001	5762	85.2	11.3	11.9
2002	5845	83.6	9.9	10.9
2003	7660	72.9	11.7	9.2
Average	4058	58.6	13.9	15.7

Source: APEH, various annual reports.

Comparing the number of new filings, it turns out that tax authorities increased their filings between 1999 and 2003 by a factor of 2.6 (from 2,430 to 6,333), whereas private creditors increased their filings from 5,529 to 8,428, or by a factor of 1.5. This difference does not explain the substantial larger share of liquidation cases that had been initiated by the tax authorities, which seems to imply that cases that were initiated by the tax authorities were resolved more quickly than those filed by private creditors. This does not necessarily mean that court's favored tax authorities, but may simply suggest that the tax authorities filed predominantly against firms that were "easy" liquidation cases, i.e. those with no assets left to be distributed. There is some evidentiary support for this. First, the tax authority's recovery rate is only 0.3 percent (as of 2003), even lower than the 1 percent recovered on average by other creditors. According to the tax authorities' own account, the reason is that 4/5 of all liquidation proceedings are accelerated proceedings against firms with no assets left to distribute. Second, the level of

¹⁹ Quote APEH reports.

²⁰ Bulleting, Information on the Operations of APEH in the Year 2003, 13 th Annual Report, Budapest, 2004.

outstanding claims against firms was higher for firms for which the tax authorities initiated bankruptcy (Forints 15.7 Mln, or the equivalent of US\$ 2,000 on average) ²¹ than for all other firms (Forints 13.9 Mln; see Table 2 above). In the absence of information about the debt/asset ratio of these firms, this is not conclusive evidence that the tax authorities tended to file against higher leveraged firms, but is at least indicative. Finally, there is some indirect evidence that in Hungary the tax authorities tend to pursue smaller rather than larger firms on average. Using legal form as a proxy for size, which can be justified on the grounds that joint stock companies tend to be larger than either limited liability companies, partnership or cooperatives, we find that the state has been most active in pursuing relatively small firms. Between 42 and 66 percent of all liquidations filed against limited partnerships, and close to 30 percent against liability companies (LLC), were filed by the tax authorities. In the case of joint stock companies, tax authorities have been much more timid and initiated only 4 to 7 percent of all liquidation proceedings.

Tabel 3: Liquidation Proceedings by Type of Company

	SOEs	Cooperatives	Limited	LLC	Joint	Others
			Partnership		Stock	
					Company	
1999	8 (1)	255 (45)	1822 (765)	6040 (1591)	824 (65)	171 (64)
2000	6 (0)	311 (68)	2907 (1477)	8257 (2453)	923 (59)	309 (115)
2001	9 (1)	286 (85)	3944 (2267)	10008 (2937)	789 (47)	421 (210)
2002	9 (4)	250 (78)	4196 (2647)	10384 (2802)	788 (43)	335 (153)
2003	9 (0)	209 (56)	4888 (3249)	10369 (2952)	879 (40)	364 (164)

Note: Numbers in brackets indicate the number of liquidation proceedings that were initiated by state agents.

To summarize, in Hungary tax authorities play an important role in determining the ultimate fate of firms, particularly of small and medium size firms. On average, 58

²¹ The current exchange rate is US\$1=HUF 196.

percent of all liquidations that were announced between 1993 and 2003 were initiated by the tax authorities. This evidence suggests that the state plays a crucial role in enforcing financial discipline. The fact that the state is less present in larger companies may be interpreted either as evidence that the state is tolerating a soft budget constraint for larger firms, or as an indicator that for large firms the "exit market" is working effectively and that the state has little role to play in either imposing financial discipline or ensuring that firms that have effectively closed down are erased from the books. Over several years it appeared that tax arrears were brought under control. However, recent steep increases in tax arrears, including in corporate tax arrears suggest that the problem has not been brought under control.²²

The Case of Russia

In Russia the first bankruptcy law was enacted in 1992 and was revised in 1998²³, and again in 2002²⁴ – with additional minor changes added in the intervening years.

Under all three variants of Russia's bankruptcy law, bankruptcy can be initiated by the debtor, the creditor, or an organ of state power. The 1998 law explicitly named the tax authorities as well as "other organs of state power" as potential bankruptcy initiators. A government decree, however, designated the Federal Service of Russia for Financial Recovery and Bankruptcy (FSFO) as the relevant body to represent the state in bankruptcy proceedings. ²⁵ Its powers were further strengthened after the enactment of the 2002 Insolvency Law, when it acquired the status of the exclusive representative of the

 $^{^{22}}$ Between 2003 and 2004 there has been a 50% increase in total tax arrears and a []% increase in corporate tax arrears. [ADD DETAILS].

²³ Federal Law No. 6-FZ of 1 August 1998 "On Insolvency".

²⁴ Federal Law No. 127-FZ of 26 October 2002.

²⁵ Government Decree No. 202 of 17 February 1998.

state's interests in bankruptcy. Yet, in 2004 this agency was abolished and its functions merged with the re-organized Federal Tax Service, ²⁶ which thereby became the most important body to represent the state in bankruptcy cases.

As noted above, the market response to the first enactment of a bankruptcy law was rather muted with only few actions taken by creditors. Bankruptcy proceedings accelerated in the mid 1990s – in part because of changes in the bankruptcy law that empowered creditors, in part, because of tightened economic conditions as inflation was finally brought under control. Newly filed bankruptcy cases further accelerated after 2000, with a new peak of over 100,000 cases filed in 2002 (see Table 4 below). By 2003, numbers were back to about 14,000 new filings per year. The data suggests that bankruptcy enforcement has increased considerably since 1998. However, they also indicate that 2002 was an outlier year, when new tax filings spiked to levels not seen previously or since.

Table [4] Who is Tolls the Bells for Firms in Russia?

	1998	1999	2000	2001	2002	2003
BKR Inititated by Debtor	2600	3097	3476	4654	4925	5380
	(20.7)	(20.7)	(14.8)	(8.4)	(4.6)	(40.6)
Private Creditors only	3170	3435	4726	5289	7122	2920
	(25.3)	(22.9)	(20.2)	(9.5)	(6.7)	(22.0)
Tax authorities	4037	5922	10865	37767	87634	4963
	(32.2)	(39.6)	(46.2)	(68.0)	(82.3)	(37.4)
Federal BKR Authority	2033	1660	3603	6631	5526	
	(16.2)	(11.1)	(15.3)	(11.9)	(5.2)	
Other State	713	859	840	1171	1273	
	(5.7)	(5.7)	(3.6)	(2.1)	(1.2)	
TOTAL	12553	14973	23510	55512	106480	13263

Note: Numbers in brackets indicate share of total

 $^{^{26}}$ Decree No. 506 of the Russian Federation "On the Approval of the Regulations on the Federal Tax Service" of 30 September 2004, as amended on 11 February and 14 March 2005.

Closer inspection of the data reveals that the rise of the state as bankruptcy initiator may be somewhat less dramatic than Table 4 suggests, even though it is still substantial. A sizeable share of all bankruptcies filed were accelerated procedures against so called "absentee debtors", i.e. those that had not registered or filed their taxes for a number of years. In fact, 81,251 of the bankruptcy cases filed in 2002, when the total came to 106,647, or 76 percent, were filed against such absentee firms. This suggests that a large number of bankruptcy cases were brought to clean up the books of the tax authorities and the company registrar, which since 2002 is kept by the tax authorities. It also indicates that the tax authorities were taking their new role as company registrar and enforcer of mandatory registration requirements quite serious. Still, even when discounting these cases the share of bankruptcies brought by the state dwarfs those brought by debtors or private creditors (see Table 5 below).

Table [5]: BKR Filings in Russia without Absentee Debtors

	1998	1999	2000	2001	2002	2003
BKR Inititated by Debtor	2600	3097	3476	4654	4925	5380
	(18.5)	(21.2)	(20.4)	(19.5)	(17.3)	(48.3)
Private Creditors only	3170	3435	4726	5289	7122	2920
	(22.5)	(23.5)	(27.8)	(22.1)	(25.0)	(26.2)
All State	8319	8083	8797	13977	16457	2834
(Tax, Fed BKR, Other)	(59.0)	(55.3)	(51.8)	(58.4)	(57.7)	(25.5)
TOTAL	14089	14615	16999	23920	28504	11134

Note: Share of total is given in parentheses. Source: Bankruptcy data made available by the Supreme Arbitrazh Court.

The data show that the state, and in particular the tax authorities, were responsible for more than 50 percent of all bankruptcy filings in all years since 1998, except for 2003, when the share dropped to only 25.5 percent. Whether this is only a short relapse is difficult to say. Data for the first nine months of 2004 have only recently become

available.²⁷ They suggest that the total number of bankruptcies is slightly up at 15,578 for the first 9 months of the year, or an estimated 20,000 for the entire year. The identity of the bankruptcy initiator is not available from this source.²⁸ Still, there is little doubt that the tax authorities are continuing to play a major role in initiating bankruptcy. In fact, the FTS has brought action with the Russian constitutional court demanding that the statute of limitation for past tax liabilities should be relaxed. This would allow for the enforcement of tax liabilities dating back to the early 1990s when tax arrears skyrocketed.

There is also some indication that the Russian tax authorities are more aggressively enforcing against larger firms than their Hungarian counter parts. As noted above, the average debt of firms against which the tax authorities foreclosed in Hungary was about US\$2,000 and the recovery rate against these firms 0.03 percent, or US\$ 60 per firm. Contrast this with the Russian authorities' claims that they collected R 2,000 bn (US\$72 Mln) for the 2004 budget, up 17.7 percent on the year. Using 2003 bankruptcy data, this would suggest a recovery of, on average, US\$2,000 per firm. Moreover, in an interview Serdyukov, the head of the Russian Tax Service, claimed that the Russian Tax Authorities were involved in 47,000 bankruptcy cases and contemplated another 17,000. Moreover, he explicitly stated that a major goal of these proceedings was to generate

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²⁷ The official gazette of the Russian Supreme Arbitrazh (Commerical Court), the Vestnik Vyshego Arbitrazhnogo Suda, publishes aggregate litigation data. See Vestnik (2005) No. 2 at pp. 36 for recent data. ²⁸ Data on the size of companies that have been targets of state initiated bankruptcies are also not available. However, there are some indicators that the bulk of companies that have been liquidated or auctioned off as the result of enforcement actions are not marginal players in the economy. Available data single out state owned enterprises, monopoly companies, farmers, and individual entrepreneurs, among others, to assess the impact of bankruptcy on the economy. These companies taken together account for only 9 to 14 percent of all bankruptcy cases in a given year.

²⁹ Much of this increase can probably be attributed to the auctioning of Yugansneftegas, the subsidiary of Yukos, in order to pay for tax claims.

³⁰ This calculation obviously over-states the likely recovery rate, as it uses only bankruptcy cases, not other tax enforcement actions.

funds for the state budget.³¹ This suggests that even though the majority of enforcement actions are being brought against absentee firms, the tax authorities are not shy in taking on large companies. This is further supported by anecdotal evidence, such as the Yukos case, and recent enforcement actions that have been initiated against companies with foreign investments as most recently in the cases of VimpelCom, Norway's Telenor, and JT International, a unit of Japan Tobacco.³² The enforcement practice of Russia's Tax Service has raised substantial concerns among private investors. In response, the Russian parliament (State Duma) is now discussing yet another revision of the bankruptcy law with the explicit goal of reigning in the tax authorities.³³ Even President Putin has announced a halt on aggressive tax enforcement.³⁴

On the positive side, Russia's tax arrear data have improved considerably since Putin has come to power. While in 1998 the amount of past tax arrears equaled 91 percent of all tax obligations, by 2003 this number had declined to only 42 percent. Interestingly, however, during the same period, corporate tax arrears as a share of total arrears increased from only 16.5 percent in 1998 to 42.9 percent in 2002, although it declined again to 32.3 percent in 2003. This evidence suggests that tax discipline has improved in general, but that tax discipline in the corporate sector has not, and may even be declining – notwithstanding the tax authorities' aggressive enforcement practices. In

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³¹ "Russian Tax Service to Meet 2005 collection target, says its chief", BBC Monitoring, 26 April 2005 (available from ISI Emerging Markets).

³² "In Russia, The Tax authorities Cometh – Again and Again", in Business Week Online, March 7, 2005.

³³ "The Government Introduced Amendments to the Law", Izvestiia Bezekon Report, 26 April 2005 discussing a proposal to amend the 2002 Insolvency Code. The report states while "earlier unprincipled creditors could destroy the enterprise, now the state, which is interested in immediate tax debts, took this function.

³⁴ "Putin Proposes Profit Tax Improvements" in Russica Izvestiia, May 26, 2005 (available from ISI Emerging Markets).

fact, the nominal value of corporate tax arrears is still almost double of what it was in 1998 (Table 6 below).

Table [6]: Tax Arrears in Russia

All amounts in billion	1998	1999	2000	2001	2002	2003
Rubles						
Tax Obligations	259	371.6	461.7	475	521.8	520.4
Payments past due	235.6	335.7	354.2	237.7	209.6	220.8
Past due as share of Tax	91.0	90.3	76.7	50.0	40.2	42.4
Obligations						
Corporate Tax arrears	38.8	69.0	91.0	88.3	88	71.4
Corporate tax arrears as	16.5	20.6	26.9	37.2	42.9	32.3
share of all arrears						

Source: Goskomstat.

IV. Debt Finance in the Shadow of the Tax Authorities

This section explores the likely impact the presence of the tax authority has on a firm's debt structure. As suggested by Desai et al (2004), in every taxed firm the tax authorities are an important, albeit understudied, stakeholder. While agreeing with this basic proposition, this paper argues that the role of the tax authorities is only incompletely described as equity holder and instead more akin to the holder of a "convertible equity claim", i.e. an equity claim that automatically converts into a credit claim once the firm defaults on its taxes. Contrary to Desai et al, the presence of the tax authorities thus has not only implications for shareholders, but also for creditors of the firm. This section will therefore discuss the likely impact the presence of the tax authorities has on a firm's debt structure. To place this analysis into the broader analysis of bankruptcy and debt finance, the section first summarizes some of the recent theoretical literature on bankruptcy and debt finance.

The bankruptcy literature has shown that firms' debt structure is influenced in important ways, not only by the bankruptcy regime (Bebchuk and Fried 1996), but also

by the number of creditors a firm has. Dewatripont and Maskin (1995) distinguish between centralized and decentralized credit markets, where the level of centralization is determined by the number of capital providers. They suggest that the ex ante decision to finance a particular project is determined in large measures by the likelihood that a project will be refinanced at a later stage. In the presence of multiple creditors refinancing becomes more difficult, mostly as a result of the coordination problems among them. On the positive side, this coordination problem serves as a commitment device at the ex ante stage not to re-finance non-viable projects, thus reducing the costs of debt finance.

Following this basic intuition, Bolton and Scharfstein (1996) model a firm's optimal debt structure as being contingent on the number of the creditors this firm has. They suggest that the relative costs and benefits of having multiple creditors depend on the likely cause of insolvency: liquidity or strategic default. Liquidity default means that a creditor does not have the cash to pay its debt obligations as they become due. Strategic default means that the firm's manager diverts firm assets to himself rather than using funds to fulfill the firm's debt obligations. Facing the possibility of strategic default, creditors may be unwilling to lend. In order to optimize their ability to obtain external debt finance, firms with low credit quality should therefore choose a single creditor and grant security interests only to a single creditor. This maximizes the creditor's liquidation value and thus lowers the firm's cost of debt finance. Firms with high credit quality, by contrast, should borrow from multiple creditors, as this reduces the incentives for and thus the likelihood of a strategic default. This follows from the intuition that firms will have to pay more to fend off a liquidation threat by multiple as opposed to single

creditors, because the value of the firm increases with every creditor that is bought off when that creditor forecloses against the firm's assets. By implication, a firm with multiple creditors is less likely to stage a strategic default.

Berglöf et al (2000) take the analysis a step further. Fully endogenizing the need for a bankruptcy regime, they show that the probability of strategic default may increase rather than decrease in the presence of multiple creditors. The reason is that firms with multiple creditors are often over-leveraged. While each individual claim may be fully enforceable, the sum of claims is mutually inconsistent. At the margin this increases the incentive for strategic default. The main function of bankruptcy law thus is to make creditor claims consistent at the ex post stage – which should influence the parties' behavior at the ex ante contracting state.

The analysis presented here builds on the important insights that the choice of a firm's debt structure is determined in large parts by the probability of and the reason for default. As Bolton and Scharfstein (1996) have shown, the number of creditors and the allocation of security interests among them may influence the probability of strategic default. The contribution of this paper is to suggest that all firms subject to taxes have more than one creditor, but that public and private creditors may differ in important ways and at times may have conflicting interests. In fact, the presence of the tax authorities as substantial creditor may crowd out private creditors. For firms that have not accumulated tax arrears, however, the presence of the tax authorities may be beneficial, as tax authorities may help overcome the problems creditors face vis-à-vis their debtor firms.

Contracting in the Shadow of the Tax Authorities

When a firm pays its taxes as they become due, the tax authorities have an equity type claim against the firm. They receive a substantial share of the firm's profits, without exercising voting rights or other procedural rights typically associated with equity claims. Once the firm defaults on its taxes, however, this claim is converted into a debt claim – with typically additional enforcement powers attached to it. Depending on the relevant laws in place, the tax authorities may exercise even greater powers than an ordinary creditor. In particular, the tax authorities may unilaterally create a lien over the firm's assets; in some jurisdictions such a lien is automatically created upon default. Alternatively, the tax authorities may initiate enforcement actions outside a court procedure, as is the case in Russia. 35 Moreover, even without securing their claims, tax authorities typically have priority over the claims of unsecured creditors. This is the case both in Russian and in Hungary. Specifically, the priority rules of the 1998 Russian bankruptcy code provided that claims of the state, including the tax service, would be satisfied after secured creditors, but prior to unsecured creditors. ³⁶ Similarly, in Hungary, unsecured tax claims are satisfied prior to all other unsecured creditors.³⁷ Finally, the tax authorities' objective function differs from that of private creditors. In particular, they may be less willing to re-finance a firm even if this would enhance the likelihood that past arrears will be re-paid, because re-financing may undermine tax moral. In the interest of general tax compliance, tax authorities are therefore more likely to "exit" a firm that could still be viable than private creditors.

³⁵ The tax authorities can forward a cash collection order to the bank of the taxpayer or tax agent, ordering the bank to withdraw funds form the account (Art. 46 (2) Russian Tax Code).

³⁶ Art. 106 of the 1998 Bankruptcy code (Russia). See also Art. 135 of the 2002 Bankruptcy Code. []. ³⁷ Art. 57 (1) Hungarian Bankruptcy Law (1993 as amended).

Private creditors of the firm are safe to ignore any claims of the tax authorities as long as the firm does not default on its tax. Interests are paid from gross income ensuring that private creditors get paid before the "equity" claim of the tax authorities is realized. By implication, private creditors also do not benefit when a firm defaults on its tax in the same way equity holders might benefit from the additional liquidity.

The private creditors' cost-benefit analysis changes, however, once a firm has defaulted on its tax obligations. At this point, the tax authorities can take enforcement actions, including liquidation actions in a bankruptcy proceeding. Senior secured creditors are not harmed as their claims will usually be satisfied prior to those of the tax authorities. Unsecured creditors, however, may be squeezed out by the tax authorities' enforcement actions. If private creditors expect the debtors to default on their taxes they should therefore secure their claims – which increase the cost of debt finance.

The key question creditors in transition economies face is whether to lend to firms that have already accumulated tax arrears. Suppose the tax authorities were only another private creditor. If a firm was already highly leveraged, a new creditor would be reluctant to lend to that firm, and will do so only if it can secure its claim and/or charge a substantial premium. The same reasoning applies in principle to a situation where the tax authorities are the senior creditors. The calculation will be undoubtedly influenced by the effectiveness of tax enforcement and the objective function of the tax authorities, in particular whether they act primarily as predators or in a more benign role as claim enforcers. Where tax enforcement is lax, creditors might ignore past arrears. The risk they face is that enforcement practices might change in the future and that past tax liabilities may trigger the insolvency of a firm that would otherwise be viable. The implications are

clear: In an economy with a history of tax arrears, creditors will be reluctant to lend to firms, and if they do lend, they will do so only at additional costs to the firm. As a result, firms' access to external sources of funds is more limited than it would be absent such a history.

The reluctance of private creditors to lend is likely to increase when a country moves from a weak enforcement state to a high enforcement state, as happened in Russia under Putin. While the probability of being targeted by the tax authorities may not be high for every firm in the economy, the effects of enforcement actions could be disastrous for the firms and its creditors, as suggested by the Yukos case. In this case, the state was able to recover its tax losses (and perhaps even more). By contrast, private creditors of the company, including foreign creditors, are still fighting to realize their claims.³⁸

This suggests that the accumulation of tax arrears may have impeded the development of private credit markets in the transition economies. These countries confronted a dilemma. Creating a viable tax regime was important to generate revenue and – according to Desai et al (2004) – could under certain conditions improve financial discipline. However, in the early days tax authorities were too weak to enforce compliance, which was on the low side anyhow, because voluntary tax payments were not part of the socialist system from which the firms had only emerged. Moreover, private credit markets had not yet developed, wherefore firms had little choice but to shift

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³⁸ "Western Creditor Banks Called YUKOS' subsidiary Tomskneft VNK to Repay the Credit Granted to the Parent Structure", WPS, May 26 2005 (available from ISI Emerging Markets). In March 2006 foreign creditors initiated bankruptcy proceedings against Yukos to recover their claims. At the same time they learnt that Rosneft had bought up most of the outstanding debt, apparently in an attempt to rid the company of Yukos' creditors' claims prior to going public. See Andrew Kramer, "Yukos sued by Banking Consortium", Herald Tribune, 10 March 2006, available at http://www.iht.com/articles/2006/03/10/business/yukos.php (last visited 19 March 2006).

to other sources of funds, including non-payment of tax obligations. Over time, tax authorities became more effective and began to collect more systematically. This, however, created additional uncertainties for private creditors who had to reckon with enforcement actions for past tax liabilities. Thus, the presence of the tax authorities as major creditor in many transition economies may help explain why private credit markets have been slow to develop. In fact, while more developed than equity markets on average, credit markets in transition economies tend to be smaller than those of countries with similar levels of GDP (Pistor, Raiser, and Gelfer 2000). Moreover, survey of firms in the region suggest that access to external finance remains difficult for most (Fries, Neven, and Seabright 2002) (Brown and Maurer 2005) - and this despite the fact that the banking sector has been reformed substantially and legal protections for creditor right have been put into place (Pistor, Raiser, and Gelfer 2000; Klapper, Sarria-Allende, and Sulla 2002; Haselmann, Pistor, and Vig 2006).

VI. Concluding Remarks

The paper started off with a simple question: Who tolls the bells for firms? It examined bankruptcy practices in two transition economies, Hungary and Russia.

Available data revealed that the tax authorities play an important, and at times dominant, role as bell tollers in these countries. This stems from the critical role the state has played as "involuntary creditor" during the transition period when it was either unable or unwilling to enforce taxes. Without access to alternative sources of external finance, many firms resorted to non-payment of taxes as an additional source of liquidity. These

findings prompted an analysis of the impact the presence of the tax authorities may have on the debt structure of firms.

The paper argued that while effective tax enforcement is important to harden the soft budget constraint, in the context of transition economies a shift from a low to a high enforcement regime raises two major concerns. First, tax enforcement may be used as a means for the state to re-instate control over critical parts of the economy as has happened in the Yukos case. Second, even if the tax authorities' intentions are less predatory, improved enforcement may, at least in the short term, crowd out private creditors. Given that most firms accumulated tax arrears during the transition period, enforcement actions may drive a firm into insolvency that would otherwise viable. This negative effect of the tax authorities as residual claimants of firms may go far beyond what bankruptcy data reveal. As discussed, in Hungary the tax authorities triggered that majority of all liquidation cases over the past 5 years, even though they initiated only 36 percent of all bankruptcy cases. Thus, the fact that firms continue to lack access to external sources of funds, including debt finance, may at least in part be attributed to the shadow of the taxman.

How the tax authorities may affect the debt structure of firms in other economies requires further studies. There is some evidence that for small and medium size firms in the United States the tax authorities also play a critical role in initiating bankruptcy (Baird and Morrison 2005). Anecdotal evidence from Spain, the United Kingdom, and France, point into similar directions. This suggests that the question as to who tolls the bells to firm may be an important question to ask for beyond the narrow context of transition economies.

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³⁹ I thank Fernando Gomez, John Armour, and Gerard Etillerand for pointing this out to me.

References:

- Alchian, Armen A., and Harold Demsetz. 1972. Production, Information Costs, and Economic Organization. *American Economic Review* 62:777-795.
- Bailey, Michael. 1995. Accounting in Transition in the Transitional Economy. *The European Accounting Review* 4 (4):595-623.
- Baird, Douglas G. 1991. The Initiation Problem in Bankruptcy. *International Review of Law and Economics* 11 (223-232).
- Baird, Douglas G., and Edward R. Morrison. 2005. Seriel Entrepreneurs and Small Business Bankruptcies. *Columbia Law and Economics Working Paper No.* 265.
- Bebchuk, Lucian Arye, and Jesse M. Fried. 1996. The Ueasy Case for the Priority of Secured Claims in Bankruptcy. *Yale Law Journal* 105:857-934.
- Berglöf, Erik, Gerard Roland, and Ernst-Ludwig von Thadden. 2000. An Incomplete Contracts Approach to Corporate Bankruptcy.
- Berkovitch, Elazar, and Ronen Israel. 1999. Optimal Bankruptcy Laws Across Different Economic Systems. *Review of Financial Studies* 12 (2):347-377.
- Bolton, Patrick, and David S. Scharfstein. 1996. Optimal Debt Structure and the Number of Creditors. *Journal of Political Economy* 104 (1):1-25.
- Bonin, John P., and Mark Schaffer. 2002. Revisiting Hungary's Bankruptcy Episode. In *Designing Financial Systems in Transition Economies: Strategies for Reformin Central and Eastern Europe*, edited by A. Meyendorff and A. Thakor. Cambridge, Mass
- London: MIT Press.
- Boycko, Maxim, Andrei Shleifer, and Robert Vishny. 1995. *Privatizing Russia*. Cambridge, Mass.: MIT Press.
- Brown, Martin, and Maria Rueda Maurer. 2005. Bank Ownership, Bank Competition, and Credit Access: Firm-Level Evidence from Transition Countries. *ssrn.com*.
- Claessens, Stijn, and Leora Klapper. 2005. Bankruptcy Around the World: Explanations of Its Relative Use. *American Law and Economic Review* 7 (1):253-283.
- Coase, Ronald H. 1937. The Nature of the Firm. Economica (November):386-405.
- Creditreform. 2005. Insolvenzen in Europa: 2004/05, edited by C. W.-u. Konjunkturforschung: Creditreform.
- Desai, Mihir A., Alexander Dyck, and Luigi Zingales. 2004. Theft and Taxes. *ECGI Finance Working Paper* 2004 (63).
- Dewatripont, Mathias, and Eric Maskin. 1995. Credit and Efficiency in Centralized and Decentralized Economies. *Review of Economic Studies* 65:541-555.
- Djankov, Simeon, Caralee McLiesh, and Andrei Shleifer. 2004. Private Credit in 129 Countries.
- Frank, Gregory. 2002. Police Enforcement of Tax Arrears Collection: Political Opportunism or the Last Reosrt for Transition States. *IDS Bulleting* 33 (33):77-83.
- Fries, Steven, Damien Neven, and Paul Seabright. 2002. Bank Performance in Transition Economies. *William Davidson Working Paper Nr. 505* (September).

- Frydman, Roman, Katharina Pistor, and Andrzej Rapaczynski. 1996. Investing in Insider-Dominated Firms: A Study of Russian Voucher Privatization Funds. In *Corporate Governance in Central Europe and Russia*, edited by R. Frydman, C. W. Gray and A. Rapaczynski. Budapest, London, New York: CEU Press.
- Gray, Cheryl W., and Kathryn Hendley. 1997. Developing Commercial Law in Transition Economies: Examples from Hungary and Russia. In *The Rule of Law and Economic Reform in Russia*, edited by J. D. Sachs and K. Pistor. Boulder, Co.: Westview Press.
- Grossman, Sanford J., and Oliver D. Hart. 1986. The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration. *Journal of Political Economy* 94 (4):691-719.
- Haselmann, Rainer, Katharina Pistor, and Vikrant Vig. 2006. How Law Affects Lending. *ssrn.com*.
- Ivanova, Nadezhda, and Charles Wyplosz. 2002. Arrears: The Tide that is Drowning Russia. *Russian Economic Trends* 11 (2):19-30.
- Klapper, Leora, Virginia Sarria-Allende, and Victor Sulla. 2002. Small- And Medium Size Enterprise Financing in Eastern Europe. *World Bank Policy Research Paper* 2933
- Kornai, Janos. 1992. *The Socialist System: The Political Economy of Communism*. Princeton, N.J.: Princeton University Press.
- La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny. 1998. Law and Finance. *Journal of Political Economy* 106 (6):1113-1155.
- Lambert-Mogiliansky, Ariane, Constantin Sonin, and Ekaterina Zhuravskaya. 2003. Capture of Bankruptcy. *unpublished working paper*.
- Levine, Ross. 1998. The Legal Environment, Banks, and Long-Run Economic Growth. *Journal of Money, Credit, and Banking* 30 (3):596-613.
- Martin, Nathalie. 2005. The Role of History and Culture in Developing Bankruptcy and Insolvency Systems: The Perils of Legal Transplantation. *Boston College International and Comparative Law Review* 28:1-76.
- Martinez-Vazquez, Orge, and Robert M. McNab. 2000. The Tax Reform Experiment in Transitional Countries. *National Tax Journal* 53 (2):273-297.
- Morrison, Edward. 2003. Bankruptcy Decision Making: An Empirical Study: Columbia Law School.
- Pistor, Katharina. 2000. Patterns of Legal Change: Shareholder and Creditor Rights in Transition Economies. *European Business Organization Law Review* 1 (1):59-110.
- Pistor, Katharina, Martin Raiser, and Stanislav Gelfer. 2000. Law and Finance in Transition Economies. *The Economics of Transition* 8 (2):325-368.
- Pistor, Katharina, and Joel Turkewitz. 1996. Coping with Hydra State Ownership After Privatization. In *Corporate Governance in Central Europe and Russia*, edited by R. Frydman, C. Gray and A. Rapaczynski. Budapest, London, New York: CEU Press.
- Pistor, Katharina, and Chenggang Xu. 2005. Governing Stock Markets in Transition Economies: Lessons from China. *American Law and Economics Review* 7 (1):184-210.

- Povel, Paul. 1999. Optimal "Soft" or "Tough" Bankruptcy Procedures. *Journal of Law Economics & Organization* 15 (3):659-684.
- Rajan, Raghuram G., and Luigi Zingales. 1995. What Do We Know about Capital Structure? Some Evidence from International Data. *Journal of Finance* 50 (5):1421-1460.
- Schaffer, Mark E. 1998. Do Firms in Transition Have Soft Budget Constraints? A Reconsideration of Concepts and Evidence. *Journal of Comparative Economics* 26 (1).
- Trubek, David M., and Marc Galanter. 1974. Scholars in Self-Estrangement: Some Reflections on the Crisis in Law and Development Studies in the United States. *Wisconsin Law Review* (4):1062-1102.
- Worldbank. 2001. World Development Report: Building Institutions for Markets. Washington DC: Oxford University Press.