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**Corporate Governance Lessons from Transition Economy Reforms**

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## What Is Good Corporate Governance?

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THIS BOOK draws on a rich array of deviant corporate behavior from economies in transition to craft lessons for corporate governance theory. The very first lesson from transition is that standard corporate law theory needs a better definition of good corporate governance. Theorists have long used the term freely, but rarely explained just what they mean. We define corporate governance by looking to the economic functions of the firm. On the basis of this definition, we develop a typology that comprehensively shows all the channels through which bad corporate governance can inflict damage on a country's real economy. Many of these channels are far more visible when approached from the transition angle, but they are present in rich economies, just harder to spot. This definition helps unify such seemingly diverse experiences as Miwa and Ramseyer's nineteenth-century Japanese case in chapter 6 and Coffee's modern Czech example in chapter 7.

In developing our definition, we use the Russian experience in the first post-Soviet decade for our primary case, in part because it exhibits such a rich array of deviant corporate behavior. Overall, Russian industry performed poorly after privatization. The voluminous literature on transition economies explains this poor performance primarily in terms of continued bureaucratic meddling, poor macroeconomic and tax policy, and low human capital; problems in corporate governance often are mentioned as well but little analyzed.<sup>1</sup>

After the fall of Russian communism, state enterprises were privatized rapidly, stock markets created, and a corporate legal code adopted. However, even at its peak, before the 1998 collapse, the total stock market capitalization of Russia's two hundred largest companies only reached about \$130 billion<sup>2</sup>—less than that of Intel Corporation. In early 1999 the numbers were “phenomenally abysmal; if they could sink any further, shares would literally have a value of zero. As it is, the entire market is made up of penny stocks.”<sup>3</sup> These numbers represent a trivial fraction of the apparent value of the underlying corporate assets controlled by Russian corporations.<sup>4</sup> The low prices reflect severe corporate governance problems, including the high probability that the

firms' underlying assets will be mismanaged grossly and that whatever cash flow is produced will be diverted to benefit insiders or reinvested in unproductive projects, as Black, Kraakman, and Tarassova discuss in chapter 4.<sup>5</sup> What were the consequences of these corporate governance problems for the real economy in Russia?

To answer this question, we define corporate governance in a way that looks to the economic functions of the firm rather than to any particular set of national corporate laws. Firms exhibit good corporate governance when they both maximize the firm's residuals<sup>6</sup>—the wealth generated by real operations of the firm—and, in the case of investor-owned firms, distribute the wealth so generated to shareholders in a pro rata fashion. Bad corporate governance is just the failure of a firm to meet one or both of these conditions. Whether managers operate their firms in ways that meet these conditions depends on the structure of constraints and incentives in which they operate, a structure that depends in part, but only in part, on the prevailing legal system—a point that Rapaczynski develops further in chapter 5. In this chapter, we give more precision to the idea of “bad” corporate governance by developing a novel typology of the kinds of damage to the real economy that loosely constrained and poorly incentivized managers can inflict. By canvassing a rich array of deviant behavior, we identify why this damage has been particularly severe in Russia.

Our analysis is not confined to the Russian experience alone; rather, it provokes rethinking of corporate governance theory more generally. For the first time and in a comprehensive way, we link poor corporate governance to real economy effects. We create an analytic tool that identifies the complete set of vulnerabilities to corporate governance problems that may arise in any economy and that helps to generate more tailored policy responses than previously possible. To skip ahead, the chapter works toward table 1.1, which summarizes the complete framework of corporate governance pathologies. We will arrive there by defining what counts as good corporate governance, and then by drilling down to each of the ways that governance can go wrong.

## A TYPOLOGY OF CORPORATE GOVERNANCE FAILURES

### *A. A Simple Definition*

Commentators on transition economies invariably discuss the consequences of “poor corporate governance” but without specifying what that means. What little commentary does exist tends to focus on some idealized set of corporate law rules.<sup>7</sup> In contrast, we measure the quality of corporate governance in terms of the social welfare impact of firm

TABLE 1.1  
 Framework of Corporate Governance Pathologies

<i>I. Nonmaximization of residuals</i>	
<i>Pathology 1:</i> Unreformable value-destroying firms fail to close	Arises when an unreformable value-destroying firm can dissipate cash reserves or salvageable assets. Corporate governance is not the key issue when firm has no reserves or salvageable assets, or when subsidies or unsuitable credits are present.
<i>Pathology 2:</i> Viable firms fail to use existing capacity efficiently	Arises when continued firm operation, if undertaken as efficiently as possible and without new investment, would be a positive net present value (NPV) decision, but costs are not minimized, the best price is not obtained for given output, or a non-profit-maximizing output level is chosen.
<i>Pathology 3:</i> Firms misinvest internally generated cash flows	Arises when a firm uses internally generated cash flow to invest in new negative NPV projects instead of paying out this cash flow to shareholders who could invest the funds better elsewhere in the economy.
<i>Pathology 4:</i> Firms fail to implement positive NPV projects	Arises when a firm identifies but then fails to act on positive NPV projects. Managers tend to be risk averse because they can't diversify away unsystematic risk of a firm's project. If others do not pick up the opportunity, the firm's failure also reduces social welfare.
<i>Pathology 5:</i> Firms fail to identify positive NPV projects	Arises when a firm's managers fail to identify positive NPV projects that the firm is particularly well positioned to find. The possibility of venture financing and spinoffs can reduce the prevalence and social costs of this pathology.
<i>II. Non-pro rata distributions</i>	
<i>Pathology 6:</i> Firms fail to prevent diversion of claims	Arises when some residual owners of a firm manipulate corporate, bankruptcy, and other laws to shift ownership away from other residual owners—often by diluting shares held by outside minority shareholders.
<i>Pathology 7:</i> Firms fail to prevent diversion of assets	Arises when some residual owners privately appropriate assets and opportunities belonging to the firm, but leave the firm's formal ownership structure intact.

decision making. We make no prejudgments about which institutional arrangements work best in any particular country. Indeed, Pistor's and Mahoney's work, in chapters 2 and 3, suggests the challenges of such an enterprise. Under our definition, good corporate governance requires two things: (1) managers must maximize their firm's residuals; and (2) firms, at least investor-owned firms, must distribute those residuals on a pro rata basis to shareholders. Let us consider each element in turn.

The first key feature of a well-governed firm is that its managers make decisions that seek to maximize the residuals that the firm generates over time, discounted to present value. Residuals are defined as the difference between what a firm pays at contractually predetermined prices to obtain its inputs and what it receives for its output.<sup>8</sup> We define this criterion in terms of residual maximization rather than share value maximization to avoid foreclosing the possibility that labor- or consumer-owned firms may be optimal in certain situations.<sup>9</sup> In an ordinary investor-owned corporation, however, the residuals go to shareholders who provide the firm's equity-based capital, which is the only input not obtained at contractually predetermined prices. Thus, for such a firm, maximizing share value is equivalent to maximizing residuals.<sup>10</sup>

The conclusion that it is socially desirable for a firm to maximize its residuals flows from two assumptions, both of which are standard in simple models of the corporation: (1) that the firm purchases its inputs and sells its outputs in competitive markets, and (2) that there are no important externalities or subsidies. Thus, the contractually predetermined prices the firm pays for its inputs (other than its equity-based capital) are equal to the value of what the firm takes from society; similarly, the firm's selling prices for its output equals the value of what it gives to society. Maximizing the difference in value between inputs and outputs maximizes the firm's contribution to society and hence constitutes efficient behavior.<sup>11</sup>

In the case of an ordinary investor-owned firm, the second feature of good governance is that the residuals are distributed to shareholders and in a pro rata fashion.<sup>12</sup> Meeting this second condition is not strictly necessary for one-period, static efficiency. For a single period, all that is necessary is that the residuals be maximized, regardless of who receives them. The pro rata distribution condition is helpful, however, in achieving the efficient allocation of resources over time because pro rata distribution greatly increases the ability of firms to raise capital by issuing new equity.

For a firm to raise capital by selling equity at a price worthwhile to its owners, a firm needs credibly to promise to abide by both principles of good corporate governance—striving to maximize its future residuals and guaranteeing shareholders some determinable proportion of these

residuals as dividends or other distributions. The expectation of eventually receiving such distributions is what makes worthwhile holding a share as a financial instrument and what induces outsiders to provide cash in return for shares. A firm gains credibility in several ways: by developing a record of abiding by its promises, by being subject to a binding legal system, and by structuring incentives so that managers gain if they fulfill their promises and suffer if they do not. If a firm acts contrary to its promises, it undermines its own record and becomes less able to acquire new equity financing.<sup>13</sup> Note, also, that when a legal system fails to punish such a firm, an individual firm's decision to break its promises imposes externalities: investors become generally less willing to buy equity of other firms governed by the same legal system. In other words, weak corporate governance in existing firms poisons the well for new firms that hope to use equity markets.<sup>14</sup>

Defective corporate governance means that a firm does not meet one or both elements of our definition. Most attention in reports on transition economies has focused on problems relating to non-pro rata distributions: for example, when insiders dilute shares of outsiders, loot companies, fail to pay dividends, or engage in other tactics that deprive outside shareholders of their pro rata share of the wealth generated by the firm.<sup>15</sup> Black, Kraakman, and Tarassova, later in this volume, develop a rich portrait of such non-pro rata behaviors. Non-pro rata distributions indeed do help explain low stock prices and the poor performance of the corporate sector. But failure to maximize residuals has the same effect, indeed even more directly. The vast transition economy literature never makes clear which failure dominates in any particular enterprise fiasco. Instead, bad corporate governance becomes a catchall explanation for problems that should be understood as being quite distinct.<sup>16</sup> Pinning down and separating out these distinctions should prove helpful when it comes time to prescribe policy cures.

A cautionary methodological note is in order at the outset, however. The study of corporate governance in Russia is hampered by two problems. First, serious firm-level econometric study of corporate governance changes in Russia is difficult, if not impossible, because meaningful hard data on enterprise behavior are hard to come by. Firms did not publish credible accounts of their own performance, because managers hid their ongoing thefts of firm assets from outside shareholders and from others, including labor and the mafia, who likewise sought to steal those assets themselves.<sup>17</sup> Back-tax debts, which pervaded the corporate sector, meant that any reported income might be seized, making the effective tax rate 100 percent.<sup>18</sup> Thus, most income statements and balance sheets were fictional. Perhaps surprisingly, Miwa and Ramseier, in chapter 6, are able to collect more robust corporate data on

nineteenth-century Japan than seems available for twenty-first-century Russia. Second, econometric work testing propositions about corporate governance based on country-level comparisons of economic performance is similarly difficult, as evidenced by Pistor's and Mahoney's work. Good corporate governance is neither a necessary nor a sufficient condition for achieving a developed capitalist economy—it simply helps. Italy, for example, has a vibrant economy even though the governance of its corporations generally would fall far short of the standards set out here.<sup>19</sup> Russia, in contrast, likely would have continued to languish economically absent a solution for some of its other pressing problems even if its firms all fully met these standards. The sample size of countries is small relative to all the other factors that affect national economic performance.

These two problems mean that we are left with anecdotal accounts and surveys as our main sources of empirical information. These sources involve their own biases; nevertheless, they present a reasonably coherent picture of the landscape of corporate governance failures. Imposing a theoretical framework on this picture yields a plausible and informative account of the relationship between corporate governance and national economic performance.

### *B. The Failure to Maximize Residuals*

In this section, we identify five distinct pathologies that loosely constrained and poorly incentivized managers may inflict on firms and that may result in the firms' failure to maximize residuals.<sup>20</sup> We focus first on this prong of bad corporate governance because it is crucial to explaining why insiders sometimes do not operate their firm even to maximize their own joint benefit, a puzzle we take up in part III. As we shall see, the initial structure of ownership makes Russian firms particularly vulnerable to these five corporate governance pathologies. When the initial ownership structures intersect with untenable firm boundaries, the pathologies we identify here become self-reinforcing and even more intractable.

#### 1. PATHOLOGY 1: CONTINUED OPERATION OF VALUE-DESTROYING FIRMS

Any economy has some unreformable value-destroying firms that should be shut down immediately.<sup>21</sup> Continued operation of these firms, even if undertaken as efficiently as possible, represents a negative net present value decision from a social point of view: The cost of operation in the current period results in a social loss too great to be offset by social gains, if there are any, from continued operation in subsequent periods.<sup>22</sup> Despite the social harm, institutional arrangements in

an economy nevertheless may permit such a firm to continue operating. For example, in Russia the Tutayev Engine Factory continued to operate despite the plant manager's estimate that "it costs the plant about 1.33 rubles to produce about 1 ruble in output."<sup>23</sup> In the case of many unreformable value-destroying firms, poor corporate governance is the main cause of their continued operation, and hence the reason for identifying this problem as the first type of potential corporate governance pathology. Firm managers wish to continue operations in order to hold on to their jobs and the associated perquisites.<sup>24</sup> Because they are not constrained by effective corporate governance mechanisms, the managers get their way. In other cases, however, good corporate governance is not necessary to shut down a firm that in fact should be closed. And in yet other cases, good corporate governance is a necessary but not a sufficient condition to close the firm. Making these distinctions is important for identifying effective policy responses.

*a. When Is Corporate Governance Relevant?* Retain the assumption for a moment that an unreformable value-destroying firm purchases inputs and sells outputs in competitive markets; that there are no important externalities; and that credit and other finance is extended to firms only on a reasonably informed, rational basis. Even with no new investment, such a firm's ordinary operations result, in the current period, in a negative cash flow (one that is sufficiently negative that expected future cash flow, discounted to present value, would, even if positive, be unable to offset it). The firm thus would lack enough current cash flow to purchase the inputs it needs to continue production and would lack cash flows in the future to use as a basis to obtain credit or other finance sufficient to cover this deficit.

The importance of corporate governance here depends entirely on whether the firm has any cash reserves or assets with significant salvage value. Without reserves or salvageable assets, the firm would be forced to close immediately, regardless of how much its managers wanted to continue operations, and regardless of how ineffective existing corporate governance mechanisms were in restraining the managers. Russia's generally outmoded factories suggest that many firms lacked assets with any significant salvage value.<sup>25</sup> There was also a general cash shortage.<sup>26</sup> Thus, absent subsidies and problems in the way credit is extended, many firms whose continued operation was value destroying would have shut down promptly even though the corporate governance regime was highly ineffective. Neither improved corporate governance nor an effective bankruptcy regime would have been necessary to eliminate such firms.<sup>27</sup>

For firms with reserves or salvageable assets, however, effective corporate governance is necessary to shut down the firm immediately. Even

if the legal regime reflects a sound model, there is still the problem of enforcement, as Pistor shows in chapter 2. With weak enforcement, managers can indulge their desires to continue operation. Where cash reserves are available, the cash can be used directly to buy the needed inputs. Where the firm has salvageable assets, cash can be raised by selling the assets or using them as a basis for gaining credit. Many value-destroying Russian firms did have assets with significant salvage value.<sup>28</sup> Manufacturing businesses, for example, often were located inside large cities on real estate with far more value in other uses. If a firm has a negative cash flow, its managers nevertheless may be able to keep operating by cashing out the salvage value of these assets to acquire needed inputs. Even with a positive cash flow, closing the firm may be socially desirable once the rental value of the land is counted properly as an opportunity cost.<sup>29</sup>

*b. The Role of Subsidies and Inappropriate Credit and Finance.* Now, drop the assumptions made above concerning subsidies, credit, and finance. Where there is a subsidy, or where credit or finance is extended on other than a reasonably informed and rational basis, a firm can have a positive cash flow even though the social benefit from the firm's output might be less than the social cost of its inputs. Under such circumstances, the firm's continued operation, even though involving a social loss, can be perfectly consistent with maximizing residuals. Corporate governance mechanisms that push a firm's managers to maximize residuals will not lead by themselves to the socially desirable result of closing down these firms. Indeed, for firms without reserves or salvageable assets, the quality of corporate governance is not even relevant. Such firms will be shut down, regardless of the quality of corporate governance, only if the subsidies or inappropriate credit provision is ended.<sup>30</sup>

Russia continued to provide many subsidies, particularly in the energy area.<sup>31</sup> The system by which input suppliers were paid, often involving barter, was highly chaotic, implying that credit was not extended in a rational, well-informed fashion.<sup>32</sup> Workers often became involuntary creditors when firms did not pay them.<sup>33</sup> All this suggests that, while many Russian firms that were continuing to operate should have been shut down immediately, improved corporate governance would not, or would not by itself, have solved the problem. Instead, elimination of subsidies and improvement of the credit process were necessary reforms.

In sum, Russian firms that should have been shut down immediately fall into three groups. The first consists of firms with no cash reserves or assets with significant salvage value that did not benefit from subsidies or unsuitable credit extensions. These firms were presumably closing on their own, no matter how bad their corporate governance mech-

anisms. In the second group are firms with no cash reserves or assets with significant salvage value but that did benefit from subsidies or unsuitable credit extensions. Given the pervasiveness of the problems that existed in the economy, particularly the provision of energy at below world market prices, this second group may well be much larger than the first.<sup>34</sup> Effectively addressing the subsidy and credit problems will cause these firms to close, but they will not close otherwise. Improvements in corporate governance will have no effect on this second group. The third group, which is also large, includes firms with cash reserves or assets with significant salvage value that also benefited from subsidies or unsuitable credit extensions. These firms will not close unless there is both an improvement in corporate governance and an end to the subsidies and unsuitable credit extensions.

*c. The ZiL Example.* Moscow's ailing ZiL truck company is a useful example of a firm in the third group. The company was a "dinosaur"<sup>35</sup> that continued to produce many of the same poor-quality trucks that it did under the Soviet regime, despite the trucks' terrible reputation and scant market.<sup>36</sup> As two reporters note:

The total amount of [postprivatization] state assistance to ZiL through various channels is estimated at approximately \$100 million. . . .

. . . "The plant never regarded the money it received as credits that had to be paid back." . . .

While receiving money for the production of trucks that customers were unwilling to pay for, ZiL continued to ship them out. . . .

. . . From force of old Soviet habit, it kept pushing to fulfill a plan that was long gone, at a time when it should have been cutting production and thinking about structural reorganization.<sup>37</sup>

As the company continued to fall apart, Moscow mayor Yuri Luzhkov acquired a controlling stake for the city in the firm but kept incumbent management in place.<sup>38</sup> Consistent with Rapaczynski's findings in chapter 5, these corporate insiders performed poorly, despite privatization. Rather than closing the firm and liquidating its main assets, the mayor reportedly began ordering city services to buy ZiL vehicles only.<sup>39</sup> He also secured a large new line of credit on the basis of the firm's main asset, "tens of hectares of prime land in south Moscow with a potential market value of hundreds of millions of dollars."<sup>40</sup> The mayor's plans were to relocate the firm's production facilities, raise about \$35 million by selling forty-nine-year leases to some of the land, and then transfer the new funds to the company rather than to shareholders or to more viable firms.<sup>41</sup> But, as one commentator suggested, "it is not clear that even Luzhkov can create a market for ZiL trucks."<sup>42</sup>

Shutting down the firm at the outset likely would have been the residual-maximizing decision. The government could have targeted its limited subsidies to providing a social safety net for workers,<sup>43</sup> and the land could have been sold to its highest-value users at a price that would have substantially benefited shareholders.<sup>44</sup> As it was, outside shareholders “realized that, despite the municipal and federal authorities’ special treatment of this flagship of the automotive industry, the enterprise was a hopeless failure, and [when] they tried to exert some direct influence on the situation . . . [it] proved to be not such an easy thing to do.”<sup>45</sup>

## 2. PATHOLOGY 2: FAILURE TO USE EXISTING CAPACITY EFFICIENTLY

The second type of pathology arises when continued operation, if undertaken as efficiently as possible and without new investment, would be a positive net present value decision, but operation is not done as efficiently as possible. Costs are not minimized, the best price is not obtained for a given level of output, or a non-profit-maximizing output level is chosen—again, all common problems in Russia.<sup>46</sup> Thus, residuals are not maximized. Such firms should not shut down, but they should deploy existing facilities more efficiently.<sup>47</sup> Their residuals shortfall represents a social welfare–diminishing corporate governance failure.

Consider, for example, the Baltic Shipping Company (BSC), “Russia’s oldest and best known shipping enterprise.”<sup>48</sup> Under the Soviets, the firm already had wide experience working on world markets, but they relied on inexpensive Russian fuel to cover for management deficiencies, and these deficiencies, unlike the low fuel prices, persisted into the postprivatization period:

Nearly everyone admits that the management at BSC has simply not been up to the challenges of a new economy. . . .

In his parting words, former president Filimonov, who retains a place on the board, pretty much admitted the management could not adapt. “Those titles we’ve become accustomed to hearing, such as deputy chief of finances, are simply not those functions that these people have become used to fulfilling.”<sup>49</sup>

Although the firm could have been profitable, BSC faced a “spiral of decline” that could “lead to the company’s fleet disappearing completely.”<sup>50</sup> According to one official, “It’s difficult to say how many ships we have in operation, because at any moment, we could get another call saying another ship has been seized [by creditors].”<sup>51</sup>

The widespread existence of Pathology 2 may mask the potential extent of Pathology 1. If firms generally are not using their inputs efficiently, the marginal products of these inputs are likely to be lower, and thus, in a competitive economy, the price that needs to be paid for them

and the opportunity cost of their use will be lower as well. A wholesale reduction in Pathology 2 will increase the price and social opportunity cost of at least some, and quite possibly all, major classes of inputs.<sup>52</sup> Input price adjustments may sharply increase the number of firms displaying Pathology 1 as the increased opportunity cost of their inputs makes their continued operation socially undesirable.

### 3. PATHOLOGY 3: MISINVESTMENT OF INTERNALLY GENERATED CASH FLOW

The third type of pathology arises when a firm uses its internally generated cash flow to invest in new negative net present value projects. Instead of making bad investments, such a firm should pay out this cash flow to shareholders. Shareholders could invest these funds better elsewhere in the economy.<sup>53</sup> An example of Pathology 3 includes the seemingly responsible act of using funds labeled by accountants as depreciation to replace worn-out plant and equipment, if doing so is a negative net present value project. Pathology 3 can arise in conjunction with, or independently of, Pathology 2. Significant indirect evidence from two sources suggests that Pathology 3 is widespread in Russia.

First, consider the paucity of interfirm cash flows in Russia. In any economy, good investment opportunities are unlikely to be spread so evenly among existing enterprises that interfirm transfers of cash flows through capital markets are not called for. Nor is the quality of existing firms' opportunities likely to be consistently superior to the opportunities that could be found by new firms. Thus, some existing firms (capital-surplus firms) will have cash flows greater than what is needed to fund all their positive net present value projects; other existing firms (capital-deficit firms) will have insufficient cash flows to fund all such projects. In addition, there will exist new firms that have positive net present value projects but that, by definition, have no cash flows at all. Thus, interfirm cash flow transfers are called for from surplus firms to deficit firms and new firms. In a market economy with clearly distinct firms, these transfers are accomplished when surplus firms pay dividends and deficit firms and new firms enter the capital markets, through, for example, the offering of new equity. In Russia, firms paid little or nothing in the way of dividends<sup>54</sup> and equity finance was negligible.<sup>55</sup> The lack of interfirm transfers strongly suggests that the surplus firms were instead displaying Pathology 3 and likely investing in negative net present value projects.<sup>56</sup>

The second source of indirect evidence for Pathology 3 relates to firms' failure to make pro rata distributions of residuals. One way that controlling shareholders can divert a disproportionate share of residuals to themselves is to have the firm invest in projects personally benefiting these shareholders. On balance, controlling shareholders may

prefer to fund such projects, even if they have a negative net present value—their personal benefits more than outweigh the reduction in share value from implementing the project. Controlling shareholders will be able to indulge these preferences if the mechanisms to constrain non-pro rata distribution of dividends are weak. The abundant evidence of non-pro rata distributions in Russia also strongly suggests that Pathology 3 is still likely to be prevalent.

#### 4. PATHOLOGY 4: FAILURE TO IMPLEMENT POSITIVE NET PRESENT VALUE PROJECTS

The fourth pathology of residual nonmaximization arises directly or indirectly when a firm identifies, but then fails to act on, positive net present value projects. If others do not pick up the opportunity, the firm's failure reduces social welfare, because of the forgone chance to deploy funds to produce a return greater than the cost.

Pathology 4 is a direct result of corporate governance failures in cases in which managers, because of weak control mechanisms, reject a positive net present value project because they wish to avoid personal risk. Managers tend to be risk averse because they cannot diversify away the unsystematic risk associated with any individual firm project. If managers can get away with it, they may reject projects with high expected returns if the projects have high unsystematic risk as well, even though such rejections are not in the interests of shareholders or society as a whole. By contrast, portfolio shareholders, who can diversify their holdings, are risk neutral with respect to unsystematic project-level risk. Management risk aversion causes problems everywhere, but the problems were likely accentuated in established Russian firms because incumbent managers typically internalized a high degree of risk aversion through Soviet-era careers in which punishment for major mistakes far exceeded gains from major successes.<sup>57</sup> Rapaczynski's work in chapter 5, this volume, reinforces this view that the type of private owner matters, with firms controlled by the prior incumbent managers typically undergoing less successful restructuring.

Corporate governance failures also can lead firms indirectly to forgo positive net present value projects. Consider a firm with willing managers and with the prospect of a value-creating project that is nevertheless unable to proceed because financing is unavailable at a price equal to the capital's social opportunity cost.<sup>58</sup> The lack of financing may be an externality imposed by corporate governance failures in other firms. When firms generally fail to make pro rata distributions and to maximize residuals, they may severely undermine the ability of firms with good projects to acquire financing through new equity offerings. Banks are the usual alternative sources for outside finance, but in Russia, banks are still providing little long-term corporate lending. The lack of a vibrant new eq-

uity market or of bank financing proves fatal for good projects in firms that do not generate sufficient internal funds to self-finance the project.<sup>59</sup>

In Russia, failures by established firms to take advantage of what appear to be positive net present value projects have been spectacularly large. Consider, for example, the saga at Segezhabumprom, one of Russia's biggest pulp and paper mills.<sup>60</sup> Swedish owners acquired a 57 percent stake in the firm, while a major pulp distributor and the Karelian regional government controlled most of the rest of the shares. Early in the relationship, when the town of Segezha had run out of fuel oil, the Swedes were sufficiently enthusiastic that they agreed to “burn expensive wood chips, normally used in paper production, to prevent the town from freezing.”<sup>61</sup> Later, the Swedes identified, and committed to make, more than \$100 million in new investments. However, the modernization plans provoked local suspicion that there would be job losses, prompting a campaign to force the Swedes out, in a drive that included judicial findings that the Swedes' initial share purchases had been illegal.<sup>62</sup> A breakpoint occurred when the Russian co-owners—the regional government and the major distributor—refused to cofund the working capital to keep the plant open.<sup>63</sup> By the end of this episode, the Swedes had abandoned the investment and written off their ownership stake, but only after the existing managers and local government officials had driven them off, using “mafia-style threats against [their] staff.”<sup>64</sup> A story of this sort is likely to scare off even a determined large-scale investor, which in most countries could protect itself using the control powers that come with large shareownership. The story is even more discouraging for individual noncontrol portfolio investors. As discussed further in part V, events such as those at Segezhabumprom also suggest that Russian corporate law enforcement may be so weak that the results of the ordinary processes of corporate decision making are not respected by officials charged with enforcing property rights. Incumbent managers still appear to have *de facto* property rights in assets whose title is nominally in the hands of the corporation.

##### 5. PATHOLOGY 5: FAILURE TO IDENTIFY POSITIVE NET PRESENT VALUE PROJECTS

The fifth type of pathology arises when a firm's managers fail even to identify positive net present value projects that the firm, through its specialization and the resulting accumulation of knowledge, is particularly well positioned to find.<sup>65</sup> Organizational capacity to identify these opportunities is related to the incentives available to firm employees for identifying such projects as well as the incentives for them to help one another in a joint endeavor to do so.<sup>66</sup>

In the United States, venture capital significantly reduces the social costs of Pathology 5 by making available funds for promising projects

that employees identify, but managers misassess. Venture capital also significantly lessens the effects of Pathology 4 on the U.S. economy by making spinoffs possible whereby employees suggesting promising projects can implement the proposal by creating a new firm, despite the employer's rejection. The possibility of getting rich in a spinoff gives employees substantial incentives to identify positive net present value projects even if they work for firms that ultimately may not implement the ideas.<sup>67</sup> Furthermore, when spinoffs occur, Pathologies 4 and 5 do not harm the economy, because the project is implemented anyway.<sup>68</sup>

In Russia, venture capital has not been readily available.<sup>69</sup> Therefore, Pathology 5 is likely to be more prevalent in Russia than in the United States, and Pathology 4 is likely to be more damaging. Ronald Gilson and Bernard Black have argued persuasively that a necessary condition for developing venture capital is a vibrant equity market.<sup>70</sup> Miwa and Ramseyer's Japanese textile example in chapter 6 in this volume reinforces the view that even a developing economy can create a significant public equity market under certain conditions. But Russia will not be able to develop such a market until most of its firms begin to try to maximize residuals and give pro rata distributions.<sup>71</sup> Again, we see the cumulative, self-reinforcing tendency of multiple corporate governance pathologies.

### *C. The Failure to Make Pro Rata Distributions*

The second feature of good corporate governance is that a firm makes the residuals it generates available on a pro rata basis to the residual claimants, that is, to the common shareholders in an investor-owned company. Much of modern corporate law has been built around this principle, not only in rules requiring that dividends and distributions be made pro rata, but also in the basic fiduciary rules policing non-arm's-length transactions involving insiders and the corporation.<sup>72</sup> In post-privatization Russia, violation of this second feature has been the most visible and widely reported symptom of bad corporate governance. Just as nonmaximization comes in different flavors, Russian firms have exhibited a wide range of non-pro rata distributions, which we simplify into two main groups, each with many variations, explored in more depth by Black, Kraakman, and Tarassova in chapter 4. Loosely, one type is what we call "diversion of claims" and the other, "diversion of assets." We explore each in turn.

#### 1. PATHOLOGY 6: DIVERSION OF CLAIMS

To give just a few illustrations, ranging from blatant to subtle, managers divert claims of the corporation when they refuse to register share

purchases by outsiders,<sup>73</sup> refuse to recognize board directors properly elected by outside shareholders,<sup>74</sup> dilute stock in ways that freeze out outsiders by issuing shares to insiders for inadequate consideration,<sup>75</sup> or engage in fake bankruptcies that wipe out shareowners' interests.<sup>76</sup> The key feature of these non-pro rata distributions is that the people perpetrating them, usually insider owner-managers, are keeping the firm, including its assets and opportunities, intact. They gain instead by manipulating the corporate legal system and the bankruptcy law and other laws in an effort to reduce or eliminate the claims of some or all of the firm's shareholders on the firm's residuals—usually wiping out the outside minority shareholders.<sup>77</sup> As one investor put it, "A 51% shareholding interest in a Russian company conveys to the owner a license to steal from the remaining 49%."<sup>78</sup>

In one notorious case that dragged on for years, the incumbent manager at Kuban Gypsum-Knauf refused to vacate even though he had been fired by the majority owner, a German company.<sup>79</sup> Supported by the local government, the manager installed Cossack guards, held his own shareholder meetings, locked out the owners, diluted the owners' stock, and ignored dozens of court rulings against him over the years.<sup>80</sup> Finally, and for the first time in Russia, the German owners were able to wrestle their way back in, following intervention by a commission headed by the prime minister.<sup>81</sup> According to one Knauf lawyer, "It's a sort of legal nihilism. . . . The farther from Moscow, the less attention they pay to the legal side of things. There is no understanding of a final court decision."<sup>82</sup>

And managers were not the only ones diverting control. Reports suggest that local and regional governments with minority-share interests began engaging in the same game, forcing firms into bankruptcy over unpaid taxes and then asserting control, in essentially a form of renationalization in cases where tax rates are absurdly high, exceeding 100 percent marginal rates.<sup>83</sup> Also, outside shareholders such as those associated with financial-industrial groups (FIGs) have taken over firms, replaced managers, and then also froze out minority shareholders, including employees.<sup>84</sup>

Many of these tactics are familiar to students of the history of Western corporate law, as Mahoney explores in chapter 3, but in Russia this game seems limited only by the creativity of those controlling the firm: the Russian regulatory apparatus has been notoriously ineffective in controlling such diversions. To give one example, in late 1997, insider shareholders had the Sidanko oil company offer exclusively to themselves, for nominal consideration, a form of bonds that were convertible into Sidanko shares.<sup>85</sup> Once the conversion occurred, the remaining shareholders would see their ownership stake diluted down to one-third

of their original claim, yet the company gained no significant new assets.<sup>86</sup> The only unusual aspect of this share dilution was that for the first time in its history, the Russian Securities and Exchange Commission, in the glare of particularly intense negative press about the scheme, intervened, in early 1998, and blocked the issuance of the convertible bonds. As a result, the majority insiders agreed to negotiate with minority shareholders.<sup>87</sup> Such regulatory oversight has been extremely rare in Russia. But even this victory was Pyrrhic. Since then, Sidanko insiders apparently have forced the company into a fake bankruptcy, effectively freezing out another major shareholder, British Petroleum, which had invested \$500 million in the firm for 10 percent ownership, a stake now apparently worthless despite the valuable assets that the reorganized firm will control.<sup>88</sup>

Professor Coffee, in his comparison in part IV of the relatively successful Polish privatization experience and relatively unsuccessful Czech experience, gives considerable credit to well-enforced securities law rules requiring ownership transparency and prohibiting any person or group from crossing a certain percentage of ownership threshold without making a tender offer for all the firm's shares. In countries with relatively weak corporate laws, such securities law rules may be necessary conditions to prevent widespread diversion of claims. The Russian experience, however, suggests that so many things were wrong that they would not constitute sufficient conditions.<sup>89</sup>

## 2. PATHOLOGY 7: DIVERSION OF ASSETS

The second major class of non-pro rata distributions, and the last pathology in our framework, involves direct diversion of assets and opportunities belonging to the firm. The key feature of this type of corporate governance failure is that insiders leave the ownership structure intact as they hollow out the firm.<sup>90</sup> For managers, diversion of assets may be accomplished by outright looting of the firm—taking cash or assets belonging to the firm and effectively giving title to themselves.<sup>91</sup> Or it may take the form of sweetheart business deals with firms controlled by insiders or their families,<sup>92</sup> using, for example, transfer-pricing agreements that move profits to subsidiaries or parents in which the insiders have a larger interest.<sup>93</sup> According to one report, “Protecting sweetheart financial deals is behind much of the hostility to outside investors. Virtually every Russian enterprise, big or small, is surrounded by “independent” companies set up by managers or their families. In many cases, sales and purchasing contracts are structured to go through these firms, raking off profits from the main enterprise.”<sup>94</sup>

Russian firms also engage in non-pro rata distribution of residuals when they continue to pay for redundant shareholder employees or

when they provide public services without compensation or relief from reasonably and equitably imposed tax obligations. The experience of Tatneft shows a simple but creative form of non-pro rata distribution in favor of a local-government shareholder. According to one report,

Tatneft is the victim of parasitism, pure and simple. . . . [Regional] bureaucrats who control the company essentially were under orders to borrow as much money as possible on international capital markets to support the region's economy and the government's pet programs. . . .

. . . The company piled on almost \$800 million in debt in 1997 alone, and now has over \$1 billion of the stuff on its balance sheet. Tatneft was forced to make sizeable loans to the regional government (now broke).<sup>95</sup>

Neither the diversion of assets nor the diversion of claims noted in the previous section necessarily decreases social welfare in a static analysis—the diversions merely redistribute wealth from one group of owners to another. But moving to a dynamic analysis changes the story. If outsiders do not believe that they will receive pro rata distributions, then they will be unwilling generally to treat shares as financial assets, and they will be unwilling to provide equity finance in exchange for anything less than total control.<sup>96</sup> So the prevalence of diversion imposes a substantial externality on the Russian enterprise sector. Because potential outside investors cannot protect against ex post diversions of their investments in firms that turn out to be successful, they have little ex ante incentive to invest on terms that would be appealing to firms with positive net present value projects.<sup>97</sup>

#### *D. A Simple Framework Meets Complex Failures*

Table 1.1 above summarizes our framework of Russia's corporate governance pathologies. Real-world cases do not fit neatly into one or another of the boxes we describe, but rather represent complex mixtures of several failures. To start, if managers are neither sufficiently constrained nor given incentives to prevent the diverting of claims, they similarly will be able to divert assets—both types of diversion may be undertaken at once, often in ways that are hard to tease apart.<sup>98</sup> Next, there is a potential interaction between the failure to make pro rata distributions and the failure to maximize residuals.

Some tactics used to effect a non-pro rata distribution of a firm's wealth have no direct effect on residual maximization. This generally would be true of diversion of claims and of brazen, outright theft of assets. Other tactics, however, do reduce a firm's residuals; for example, when owner-managers grant themselves unjustifiably large perquisites,<sup>99</sup> make non-arm's-length sweetheart deals involving the company and its

insiders,<sup>100</sup> or engage in direct thefts of assets that require considerable efforts to cover up.

Finally, a management intently focused on, and especially skilled in, diversions may have neither the time nor the ability to give adequate attention to maximizing residuals as well. Consider AvtoVAZ, Russia's largest automaker coming out of the Soviet era. The company evidenced several of the pathologies of nonmaximization of residuals: it continued to employ 114,000 workers and essentially constituted the town of Togliatti; production took 450 worker-hours per car, compared with 15 worker-hours for Toyota; seven of ten current production models were designed in the 1970s; the firm lacked working capital; and the size of the plant made changeover to new production extremely expensive.<sup>101</sup> Poor management undermined the company in many ways: working capital disappeared, "insider deals and criminal groups sap would-be profits, and attempts at reform have been half-baked at best."<sup>102</sup> According to one analyst, "The company is going to die a death by a thousand cuts. It's just going to sit there . . . until someone sees the potential value in some of its assets, strips them out and creates a different franchise or does a complete management overhaul."<sup>103</sup> With its mix of management failures, the company became the country's largest tax laggard.<sup>104</sup> To get an extension on tax arrears, the firm guaranteed that it would dilute its stock enough to give 51 percent of voting shares to the government if the firm missed two tax payments.<sup>105</sup> But then the firm proved unable to finish cars, because "almost the entire amount of income [was] used to pay taxes."<sup>106</sup> After missing several tax payments, AvtoVAZ agreed to what amounted to renationalization.<sup>107</sup>

And so, with AvtoVAZ in mind, we turn to part II and examine in more detail how firm performance is linked to the key elements of good corporate governance. That is, how do the mediating effects of law, owners and managers, and stock markets affect firm behavior and its impact on the real economy?

## NOTES

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1. See, e.g., *Organisation for Econ. Co-operation and Dev.* (OECD), OECD Economic Surveys 1997–1998: Russian Federation 129–35 (1997) (listing "barriers to restructuring and investment: corporate governance, capital markets, the tax system, and regional protectionism"); Anders Aslund, *A Crisis of Confidence*, *Moscow Times*, June 3, 1998, at 8, 1998 WL 11690335 (noting that "the fundamental issue is . . . not primarily macroeconomic. All along, Russia has suffered from serious

problems in corporate governance”). See also ch. 4, this volume, in which Black, Kraakman, and Tarassova offer a comprehensive account of Russian privatization failures.

2. See Gary Peach, *1997 an Outstanding Year Despite Market Narrowness*, Moscow Times, Jan. 13, 1998, Lexis, World Library, Mostms file. This peak represented an elevenfold improvement over 1994, when total stock market capitalization, based on voucher auctions prices, was less than \$12 billion. See Maxim Boycko et al., *Privatizing Russia* 117 (1995). By the summer of 1998, “the Moscow Times index of 50 leading shares hit an all-time bottom, lower than its starting level four years ago.” Katy Daigle, *Bill Improves Shareholder Rights in Russia*, Moscow Times, July 14, 1998, Lexis, World Library, Mostms file; see also, e.g., Patricia Kranz, *Fall of an Oligarch*, Bus. Wk., Mar. 1, 1999, at 44, 44 (“From its peak in October, 1997, the market capitalization of [these] three big industrial holdings—Sidanko Oil, Svyazinvest Telecommunications, and Norilsk Nickel—has dropped from about \$31 billion to \$3.8 billion”).

3. Gary Peach, *Poor Management Destroys Sberbank, Tatneft, MGTS*, Moscow Times, Dec. 15, 1998, at 14, 1998 WL 11691867.

4. Put another way, as measured by stock prices, a barrel of proven oil reserves owned by a Russian oil company was worth about one-twentieth of a similar barrel owned by a Western oil company. See Boycko et al., *supra* note 2, at 120; *Das Kapital Revisited*, Economist, Apr. 8, 1995, Survey, at 15, 16 (“[A] barrel of oil in the ground owned by a Russian company is worth 10 cents. A barrel owned by a Western company is worth \$5.50”). This disparity is striking because oil is a quintessential export product with a uniform and well-recognized global value. Of course, poor corporate governance is just one important factor in the low stock price equation; other factors include political instability and expropriation risk.

5. See also Floyd Norris, *The Russian Way of Corporate Governance*, N.Y. Times, Apr. 5, 1999, at A20 (noting that Russia’s second-largest oil company stock value declined 98 percent in part because of poor corporate governance).

6. A firm’s residuals are defined as the difference between what a firm pays at contractually predetermined prices for its inputs and what it receives for its outputs. See ch. 1, sec. I.A for a more precise statement of this definition.

7. See, e.g., OECD, *OECD Principles of Corporate Governance* (1999) (outlining principles of corporate governance recommended for OECD countries).

8. Note that cost of inputs includes expenditures for real investment. Thus, in any given period, a firm’s cash flow from operations—its cost of inputs other than real investment minus its revenues from sale of output—either can be distributed to the firm’s residual claimants during that period, in which case they become residuals in that period, or can be expended to purchase real investment assets. The rationale for such reinvestment is to create a larger firm cash flow in some subsequent period that then would be available for distribution as residuals to residual claimants.

9. See generally Henry Hansmann, *The Ownership of Enterprise* (1996) (discussing circumstances in which labor-owned, customer-owned, and other types of firms may succeed).

10. See Oliver Williamson, *Corporate Governance*, 93 Yale L.J. 1197, 1198–1200 (1984) (discussing problems created by multiple classes of corporate constituencies).

11. We make the standard assumptions that the firm purchases its inputs and sells

its outputs in competitive markets and that there are no important externalities or subsidies, but not because we believe they are consistently true in Russia or any other country—clearly they are not. Instead, we make these assumptions because they allow us to focus on the social welfare effects of activities that take place within the firm in reaction to the constraints imposed directly by the legal system and by the firm's markets for inputs, outputs, and capital. Such a focus allows us to separate out more precisely the different problems in the Russian economy. Thus, these assumptions allow for more precise policy analysis. Their standard nature also makes it easier to draw larger corporate governance lessons from the Russian experience because most analyses of corporate governance problems in other countries make the same assumptions.

12. See Richard A. Brealey & Stewart C. Myers, *Principles of Corporate Finance* 5, 63 (6th ed. 2000). Fast-growing firms, such as Microsoft, frequently reinvest all operational cash flow rather than pay dividends. Nevertheless, the only reason to hold shares in such a company is the prospect that, at some point, it will make pro rata dividends or other distributions to its shareholders. See *supra* note 8 (discussing reinvestment of cash flows from operations).

13. See Bernard S. Black, *The Legal and Institutional Preconditions for Strong Securities Markets*, 48 UCLA L. Rev. 781 (2001).

14. See *id.*; see also Andrew Jack, *Pouring Oil on Troubled Waters*, Fin. Times (London), Jan. 19, 2000, at 21 (noting that, because of poor corporate governance, “foreigners were also far less keen on the Russian stock market last year. . . . There was a net outflow of \$400 million in portfolio investment during the first nine months of 1999, compared with an inflow of \$8 billion for all of 1998”).

15. See, e.g., Black, Kraakman, and Tarassova *supra* note 1, at 1765 (focusing on self-dealing explanations for poor Russian corporate performance).

16. The mixed corporate governance problems may be difficult to tease apart. For example, one commentator notes that “problems range from murder to bad market trends, but all boil down to basic corporate governance: Directors and their cohorts appear to have milked or outright plundered the companies to the detriment of any outside shareholders, real or potential.” Mark Whitehouse, *The Other Side of the Boom*, Moscow Times, Sept. 16, 1997, Lexis, World Library, Mostms file. When insiders gut a firm, they could be failing to maximize residuals according to several of the pathologies we identify as well as making non-pro rata distributions.

17. See World Bank, *World Development Report 1996: From Plan to Market* 55 (1996); Dmitru Vasilyev, *Remarks at the Luncheon of the American Chamber of Commerce in Russia* (Dec. 4, 1998), in Lexis, News Library, Sovnws file (stating that “at present . . . the board of directors and the excessive power of the director make theft of company assets possible”).

18. See Anna Meyendorff, *Barter in Russia* 17 (Dec. 1998) (unpublished manuscript, on file with the authors).

19. See Luigi Zingales, *The Value of a Voting Right: A Study of the Milan Stock Exchange Experience*, 7 Rev. Fin. Stud. 125, 146 (1994) (suggesting that huge control premium for shares of Italian firms shows poor corporate governance regime).

20. Note that we continue to assume that the firm purchases its inputs and sells its outputs in competitive markets and that there are no important externalities or subsidies. Therefore, the firm's input costs should reflect the social opportunity

costs of continued operation and its output prices should reflect the social benefits of production.

21. For some American examples, see James Surowiecki, *Why Won't Anyone Pull the Plug on UPN?* New Yorker, Apr. 3, 2000, at 32, 32 (puzzling over question why “companies and divisions are kept afloat long after they’ve stopped creating value and started destroying it. Plenty of businesses exist only—well, because they exist”).

22. More precisely, for a firm to fall into this category, two requirements must be met. First, the social benefit from the firm’s output in the current period must be less than the social cost of its inputs. Second, after comparing the social benefits and costs for each subsequent period, and discounting the difference to present value, the aggregate of these discounted differences must be either negative or, if positive, less than the deficit in the current period. In terms of current operations, this assumes that the firm operates at lowest possible cost for the level of output chosen and that it chooses the level of output that will maximize its cash flow from operations. In terms of decisions made in the current period that affect future periods, this assumes that the firm follows an optimal investment policy, which commonly would mean undertaking no investment at all.

23. Maura Reynolds, *A Russian Company Town’s Miracle*, L.A. Times, Mar. 5, 1999, at A1.

24. See European Bank for Reconstruction & Development (EBRD), Transition Report 1998, at 32 (1998) (noting lack of effective checks on insider managers in transition economies); *id.* at 142 (describing conflict of interest between “private objectives of managers” and investors in bank privatizations); Roman Frydman et al., *Investing in Insider-Dominated Firms: A Study of Russian Voucher Privatization Funds*, in 1 Corporate Governance in Central Europe and Russia 187, 219–20 (Roman Frydman et al. eds., 1996); Cheryl W. Gray & Kathryn Hendley, *Developing Commercial Law in Transitional Economies: Examples from Hungary and Russia*, in The Rule of Law and Economic Reform in Russia 139, 154 (Jeffrey D. Sachs & Katharina Pistor eds., 1997); Meyendorff, *supra* note 18, at 15. For an analysis of the same phenomenon in the American context, see Surowiecki, *supra* note 21, at 32 (noting that “the value that the [firm] is destroying can seem distant; the rewards it brings to those on [the] payroll are immediate”).

25. See Maura Reynolds, *Yeltsin Legacy Impressive but Clouded*, L.A. Times, Jan. 1, 2000, at A1 (stating that “shareholders have no guarantee that their stock certificates have real value”).

26. See Meyendorff, *supra* note 18, at 16.

27. See World Bank, *supra* note 17, at 45 (noting that government policies such as macroeconomic stabilization and credible commitment to reform play largest role in whether enterprises in transition economies actually adjust).

28. See EBRD, *supra* note 24, at 33 (describing how loss-making Russian firms use various devices to solve cash flow problems); World Bank, *supra* note 17, at 55 (describing how Russian corporate insiders divert assets to other firms they also control).

29. See Brealey & Myers, *supra* note 12, at 123 (describing alternate use of land as opportunity cost).

30. See EBRD, *supra* note 24, at 33 (showing how subsidies and credit extension support failing Russian firms); World Bank, *supra* note 17, at 45.

31. See World Bank, *supra* note 17, at 45 (noting drop in direct subsidies but significant increase in tax arrears and ad hoc tax exemptions); *IEA Urges the Elimination of Subsidies in Developing Nations*, Petroleum Economist, Dec. 1999, at 59, 59 (noting that sizable subsidies remain in Russia's energy sector); *Coal Sector to Develop Without State Subsidies*, BBC Summary of World Broadcasts, Feb. 11, 2000, Lexis, News Library, Non-U.S. file (relaying ITAR-TASS report of February 1, 2000, that Ministry of Fuel and Energy set goal of subsidy-free energy industry for 2000).

32. See Clifford Gaddy & Barry W. Ickes, To Restructure or Not to Restructure: Informal Activities and Enterprise Behavior in Transition 6–7 (William Davidson Inst. Working Paper No. 134, 1998), available at (<http://eres.bus.umich.edu/docs/workpap-dav/wp134.pdf>) (discussing causes of pervasive barter in Russian economy); Meyendorff, *supra* note 18, at 3 (indicating that Russian firms increasingly are using barter trade, which is inefficient means of transacting business).

33. For purposes of this analysis, workers can be considered involuntary creditors, but only for the wage arrears that have accumulated during the period before sporadic wage payment became their firm's ordinary and usual behavior. Once the pattern of sporadic payment becomes expected and there is no reasonable prospect that the arrears are going to be paid, the practice is more appropriately viewed as a de facto wage reduction. At that point, the decision of workers to stay in the firm's employment suggests that the alternatives available to them were no more desirable. Thus, the de facto lower level of wages is presumably a reasonable measure of the social opportunity cost of their labor.

34. The Soviet Union built its whole manufacturing sector on a base of deep energy resource subsidization. These subsidies continued to a considerable extent through provision of these resources at prices below the world level, a problem that was somewhat disguised by the prevalence of barter transactions. Most of the firms that resulted from the privatization of this sector would have been unprofitable in an open economy. See Gaddy & Ickes, *supra* note 32, at 7–8.

35. Peter Galuszka & Patricia Kranz, *Look Who's Making a Revolution: Shareholders*, Bus. Wk., Feb. 20, 1995, at 60, 60 (noting that ZiL has been “turning out the same basic truck for 30 years”).

36. See Michail Berger & Dmitry Dokuchayev, *Divided Authority at ZiL: The Giant Can No Longer Live in the Old Way but Doesn't Yet Want to Live in the New Way*, Current Dig. Post-Soviet Press, May 15, 1996, at 10, 10–11 (quoting Aleksandr Yefanov, head of Mikrodin Company).

37. *Id.* (quoting Aleksandr Yefanov); see also James Rupert, *Post-poll Jitters for Russian Industry*, Int'l Herald Trib., July 6–7, 1996, at 9 (“If Mr. Yeltsin now gets serious about ending state support for dying industries, ZiL faces desperate times. Despite having been privatized, the plant seems to be having trouble weaning itself from Soviet-style subsidies”).

38. Moscow increased its stake to 60 percent by buying the 30 percent stake previously owned by Mikrodin, the main outside shareholders, who had, for a short period, brought in new management before the city government, labor, and the old managers intervened. See Sergey Lukianov, *Mayor Pulls Out Stops to Rescue ZiL*, Moscow Times, Sept. 27, 1996, at 12 (“Luzhkov blamed Mikrodin for failing to boost production. He said lack of proper management was the main reason”); Elizabeth Sullivan, *Reforms Sour for Disenfranchised*, Plain Dealer (Cleveland), June 9, 1996, at

1–A (outside managers were “forcibly escorted off the premises by the security forces of the old” managers).

39. See Lukianov, *supra* note 38, at 12; *ZiL Takes Alternative Road to Capitalism*, Russia Express Briefing, Jan. 13, 1997, 1997 WL 9450577.

40. Poul Funder Larsen, *Buying Land Is Next Hurdle for Private Firms*, Moscow Times, Nov. 26, 1996, at III (stating, “Most of Russia’s 120,000 privatized firms do not own the land they stand on. They do not even have a clear lease agreement. Instead, they occupy the land under a Soviet-era concept of temporary management which gives city officials a big say in how the land is used and gives companies few rights to sublet, sell or redevelop”).

See also Lukianov, *supra* note 38, at 12 (noting that rescue plan includes local and federal tax breaks, direct subsidies, guaranteed purchases of ZiL output by city, and auctioning some ZiL real estate, “with 70 percent of the proceeds going to the company and 30 percent to the city government”).

41. See Larsen, *supra* note 40, at III.

42. David Hoffman, *The Man Who Rebuilt Moscow: Capitalist Style Could Propel Mayor to National Power*, Wash. Post, Feb. 24, 1997, at A1.

43. See *Moscow Truck Maker Mulls Upgrade Plans*, BBC Summary of World Broadcasts, Jan. 22, 1999, Lexis, News Library, Non-U.S. file. As it was, “the plant stopped housing construction long ago, and the plant workers, dissatisfied that they have not received the apartments once promised to them, intend to petition the International Court of Justice in the Hague.” *Id.*

44. Cf. Michael A. Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets*, 111 Harv. L. Rev. 621, 639 (1998) (suggesting difficulties in selling land because of fragmented ownership in Russian enterprise assets).

45. Berger & Dokuchayev, *supra* note 36, at 10–11.

46. As one account notes: “Eyeing [outside investors] warily are entrenched company directors, many of whom enjoy virtually unchecked command of the production lines they’ve presided over for decades. Outside investors allege these “Red Directors” are used to running enterprises according to Soviet tenets: overpricing supplies, underpricing output and pocketing the rest.” Natasha Mileusnic, *The Great Boardroom Revolution*, Moscow Times, July 16, 1996, at I.

47. One investment banker looking over the Volga Paper Company “noticed huge, dust-covered crates packed away in the corner of the factory. They contained \$100 million worth of brand-new Austrian-made equipment. The Russians hadn’t bothered unpacking the stuff.” Paul Klebnikov & Caroline Waxler, *The Wild East*, Forbes, Dec. 16, 1996, at 348, 349.

48. Rachel Katz, *The Strange Case of the Disappearing Ships*, Moscow Times, May 14, 1996, at VII.

49. *Id.*

50. *Id.*

51. *Id.* (quoting Yuri Sukhorukov, foreign affairs chief, Baltic Regional Organization of the Seafarers Union of Russia).

52. If the efficiency gains are spread evenly around all classes of inputs, the effect on the marginal product of each would be positive. If the gains were concentrated primarily with respect to one class of inputs, for example, labor, the effect on marginal productivity is, as a theoretical matter, ambiguous. On the one hand, the gains

increase the number of effective units of labor represented by each actual unit. On the other hand, the increase in effective units of labor relative to other inputs decreases the marginal product of each effective unit of labor. If the first effect outweighs the second, then the marginal product of labor will increase even if the more effective use of labor is the primary efficiency gain from restructuring. Whether this is the case depends on the elasticity of substitution of labor for other inputs. Empirical studies of the United States and other developed economies suggest that the elasticity is large enough that the marginal product of labor would increase even under these circumstances. For a more detailed discussion of these points, see Merritt B. Fox, *Securities Disclosure in a Globalizing Market: Who Should Regulate Whom*, 95 Mich. L. Rev. 2498, 2562–69, 2630–31 (1997).

53. See Brealey & Myers, *supra* note 12, at 178.

54. See Merton J. Peck, *Russian Privatization: What Basis Does It Provide for a Market Economy?* 5 Transnat'l L. & Contemp. Problems 21, 32 (1995); John Thornhill, "World's Last Greatest Emerging Market" *Back in Favor*, Fin. Post (Toronto), July 18, 1997, at 49, 1997 WL 4100028.

55. See Vladimir Popov, *The Financial System in Russia Compared to Other Transition Economies: The Anglo-American versus the German-Japanese Model*, 49 Comp. Econ. Stud. 1, 26 (1999) (finding that equity financing accounts for less than one percent of capital investment in Russia).

56. The lack of interfirm transfers undoubtedly is also in part caused by various techniques that managers use to make non-pro rata distributions that result in cash flow diversions to accounts that they control overseas. Because of these diversions, the firms involved have less cash, if any, available to pay dividends. To the extent that a foreign destination was chosen for these diversions because of a desire to protect what at home would have been considered stolen money or because it assists an attempt at tax evasion, the expected returns of the foreign investment funds by these diversions are likely to be lower than those of some of the unfunded projects of Russian firms. The idea here is that absent any distortions on transnational capital flows, the risk-adjusted expected return on investment opportunities in Russia should equal those abroad even if there are fewer good investment projects in Russia because of the Russian economy's serious problems. The diversions cited here represent a diversion that creates a capital shortage in Russia relative to the quality of its investment opportunities. The reductions in residuals resulting from such diversions are examples of the complex mixture of corporate governance failures in which the method by which a non-pro rata distribution is undertaken leads to a failure to maximize residuals as well, a point discussed in more detail *infra* sec. I.D.

57. The average age of enterprise directors was still more than fifty years. See Joseph R. Blasi et al., *Kremlin Capitalism: The Privatization of the Russian Economy* 203 table 10 (1997). The OECD notes that "these directors were trained under the Soviet system. Although management skills were often important for promotion (as were political ties) during Soviet power, entrepreneurial ingenuity for successful restructuring or reorganization involving risk was usually not rewarded." OECD, *supra* note 1, at 158 n.171.

58. It is hard to get a sense of the extent of this problem for established (as opposed to new) Russian firms. Many firms face one of three choices: continued operation in its current form, massive investment to build an entirely new factory, or

dissolution. Often, continued operation in the firm's current form would be a highly inefficient choice because there is no market for its product at prices sufficient to pay for the inputs and for any opportunity costs associated with its fixed assets. And funds for a massive investment in a new factory are often not available. As a result, "[t]he conflict between production-oriented Soviet-era management and aggressive new owners has been played out at hundreds of factories across the country. The fledgling entrepreneurs have lacked the massive capital required to make the ageing red giants profitable and their attempts to make money by shutting them down and selling off their assets have proven politically explosive. As a result, privatisation has often failed to deliver effective restructuring." *ZiL Takes Alternative Road to Capitalism*, *supra* note 39. It is not clear whether the lack of funds is solely the result of capital market defects that arise from economy-wide corporate governance problems or whether, even without these problems, the new factory would be an insufficiently promising investment project to get funded. In general, entrepreneurs seem likely to claim the former reason.

59. Non-pro rata distributions that result in cash flow diversions to accounts that managers control overseas also may result in firms without sufficient internal resources having to forgo projects that have a positive net present value when discounted at a rate reflecting capital's true social opportunity cost. *See supra* note 56 (discussing diversions).

60. *See* Greg McIvor, *Risk and Reward in Equal Measure*, *Fin. Times* (London), Mar. 3, 1998, at 17.

61. *Swedish-Owned Paper Mill in Karelia Paralyzed by Fuel Shortage*, BBC Summary of World Broadcasts, Jan. 3, 1997, available in Lexis, News Library, Non-U.S. file.

62. *See* McIvor, *supra* note 60, at 17.

63. *See* Greg McIvor, *Assi Hurt by Russian Plant Write-Off*, *Fin. Times* (London), Feb. 13, 1998, at 29.

64. McIvor, *supra* note 60, at 17; see also *infra* notes 85–87 and accompanying text (discussing Sidanko story).

65. *See* Whitehouse, *supra* note 16 (describing paper and pulp company that failed to produce more paper in face of declining pulp prices and suffered financially).

66. *See* Joseph Bankman & Ronald Gilson, *Why Start-Ups?* 51 *Stan. L. Rev.* 289, 301–4 (1999) (arguing that providing incentives to individual employees to develop innovations may hamper overall research and development efforts of firms, as individuals may hoard information that is useful to other research and development personnel in effort to protect their proprietary claim over information).

67. *See id.* at 306.

68. A record of successful spinoffs demonstrates a failure in the finance processes of established firms and hence shows some mix of Pathologies 4 and 5. One study of the semiconductor industry shows the reason that proponents of successful spinoffs took their ideas elsewhere is that top management of employer firms simply did not perceive the ideas to be worth substantial investment. *See* Merritt B. Fox, *Finance and Industrial Performance in a Dynamic Economy: Theory, Practice, and Policy* 305 (1987).

69. *See* World Bank, *supra* note 17, at 64 fig. 3.2 (showing that direct foreign investment inflows as percentage of 1994 GDP is lower for Russia than for several other transition economies).

70. See Bernard S. Black & Ronald J. Gilson, *Venture Capital and the Structure of Capital Markets: Banks versus Stock Markets*, 47 J. Fin. Econ. 243, 245 (1998) (explaining that vibrant venture capital market is dependent on ability of venture capitalists to exit from start-ups through initial public offerings, because venture capital providers desire exit mechanism that will allow them to enter into implicit contracts with entrepreneurs concerning future control of firms).

71. See, e.g., Norris, *supra* note 5, at A20 (concluding, “If Russia is ever to become an economic success story, its oil will play an important role. But before that happens, a Russian Morgan—someone who understands Russian capitalism and earns the trust of overseas investors—will have to come along to assure that a dollar invested is not sure to become a dollar stolen. The Yukos affair shows Russia is a long way from that goal”).

72. Frank Easterbrook and Daniel Fischel argue that this statement of basic norms in corporate law needs refinement. Unequal divisions of gains from corporate activity will be tolerated, they suggest, provided that the transaction makes no shareholder worse off. See Frank H. Easterbrook & Daniel R. Fischel, *The Economic Structure of Corporate Law* 143–44 (1991). Their refinement is valid to an extent, but whether the refinement should be stated so broadly is irrelevant to our discussion of the Russian situation. Few of the many blatant violations of the principle against non-pro rata distributions that we see in Russia possibly could be justified as necessary to permit transactions that leave no shareholder worse off.

73. See, e.g., David Fairlamb, *Moscow Madness*, Institutional Investor, July 1995, at 132, 134 (“Some companies think nothing of striking shareholders’ names off registers if they look like they’re becoming a nuisance”); Mileusnic, *supra* note 46, at I (“One notorious incident involved Krasnoyarsk Aluminum, which deleted from its share register—the only legal proof of ownership—a 20 percent stake held by the British Trans World Group, effectively wiping out its holding”).

74. One long-running case involves the Novolipetsk Metal Factory, one of Russia’s largest metal producers. Western investment funds were unable, over the course of several years, to place anybody on the board of directors, despite controlling more than 40 percent of the firm’s shares and despite cumulative voting rules that should have guaranteed them some voice. See Mark Whitehouse, *Novolipetsk Slams Foreign Investors*, *Moscow Times*, Mar. 15, 1997, at 10. According to Novolipetsk’s chairman, Vladimir Skorokhodov, “In Russia’s special situation, the master is, after all, not the shareholder.” *Id.*; see also Mileusnic, *supra* note 46, at I (describing Western investors’ unsuccessful attempt to gain board seats); John Thornhill, *Risks of Russian Market Exposed*, *Fin. Times* (London), Mar. 25, 1997, at 2 (same). Finally, in 1998, the outside investors were able to win seats on the board after the general director switched sides in this “marquee shareholders’ rights case.” *Shareholders Win Two-Year Case, Can Appoint Board Members to Firm*, *Int’l Sec. Reg. Rep.*, Jan. 29, 1998, at 10, 10.

75. See Geoff Winestock, *Ship Firm Managers, Shareholders Face Off in Russia*, *J. Com.*, Apr. 24, 1995, at 10A (reporting,

Managers have seen their position change dramatically over the last year with the public sale of their stock to outside investors. Shareholders, for one, have started to ask for higher profits and a voice in the company.

Investors charge that management decided on a simple solution to the problem. They unilaterally issued themselves enough shares to take back control of their companies).

See also Gary Peach, *Financial Ethics Crackdown Bodes Well for Shareholders*, Moscow Times, Feb. 24, 1998, available in Lexis, World Library, Mostms file (“Dalmoreprodukt, Russia’s largest seafood exporter, is in the process of watering down outsiders’ interest by means of an insider share issuance for select major stakeholders, managers, and employees”).

76. See, e.g., Andrew Higgins, *As One Bank Shows, Bankruptcy in Russia Is a Real Cat Fight*, Wall St. J., Apr. 5, 1999, at A1 (reporting, “Just as Russia’s earlier drive to put state property in private hands often yielded cozy inside deals instead of a spur to efficiency, bankruptcy has mutated into a cat fight often involving shadowy cabals and allegations of asset stripping. ‘Many enterprises are being artificially bankrupted, to be taken over by some groups,’ Prime Minister Yevgeny Primakov [said]”).

See also Kranz, *supra* note 2, at 45 (“In regions across Russia, both local governments and creditors have filed bankruptcy suits against subsidiaries of Potanin’s Sidanko Oil. The suits ostensibly seek payment of back taxes and delinquent energy bills. But the real prize could be Sidanko’s oil assets”).

77. See Norris, *supra* note 5, at A20 (citing Yukos example, in which minority shareholders were barred from voting:

A judge had ruled that since the minority holders all planned to vote the same way, they must be in league with one another and therefore in violation of antitrust laws because they had not registered as such. The minority shareholders were not invited to the hearing that led to the ruling.

The shareholders managed to get another judge to rule that they could vote at one of the meetings. But his ruling was simply ignored).

78. *Investor Hell*, J. Com., June 15, 1998, at 6A (editorial) (quoting E. Michael Hunter, president of Dart Management).

79. See Lyudmila Leontyeva, *Red Director’s Stronghold in Kuban*, Moscow News, Oct. 30, 1997, in Lexis, World Library, Mosnws file.

80. See Mark Whitehouse, *Germans Cry Foul in Gypsum Plant Feud*, Moscow Times, Nov. 29, 1997, in Lexis, World Library, Mostms file; Mark Whitehouse, *Under Siege*, Moscow Times, Dec. 9, 1997, in Lexis, World Library, Mostms file.

81. See Katy Daigle, *Nemstov Hails Win for Investors’ Rights*, Moscow Times, Mar. 10, 1998, at 13, 1998 WL 11690493.

82. Mark Whitehouse, *Take ‘Em to Court*, Moscow Times, Feb. 10, 1998, in Lexis, World Library, Mostms file (quoting Innokenti Ivanov).

83. See Elizabeth V. Mooney, *Russia Must Implement Tax, Corporate Governance Reforms*, RCR Radio Comm. Rep., Feb. 28, 2000, at 26, 2000 WL 9540310 (“‘The tax burden is arbitrary and capricious, frequently more than net earnings because companies are taxed on gross income,’ [Professor Richard E.] Ericson said. ‘This amounts to confiscation of the capital available for investment’”).

84. See EBRD, *supra* note 24, at 143 box 8.1 (discussing financial-industrial groups (FIGs) and need to limit their powers); see also *infra* notes 214–27 and accompanying text (discussing FIGs).

85. See Jeanne Whalen, *FSC Cracks Down on Yukos, Sidanko*, Moscow Times, Feb. 19, 1998, in Lexis, World Library, Mostms file (noting that Russian Federal Securities Commission action to cancel offering perhaps marks “turning point” (quoting attorney Walter Rieman)); Jeanne Whalen, *Shareholders Rights: Round 2*, Moscow Times, Feb. 17, 1998, available in Lexis, World Library, Mostms file (reporting subsequent developments). In the interest of full disclosure, the authors of this chapter state that they served as consultants to some minority shareholders in this matter.

86. See Whalen, *Shareholders Rights*, *supra* note 85 (stating that convertible bond issue excluding minority shareholders would have tripled Sidanko’s charter capital).

87. See *Sidanko Offers Settlement to Minority Shareholders*, Russia & Commonwealth Bus. L. Rep., Mar. 25, 1998, in Lexis, News Library, Rcbldr file.

88. See *Dilemma over BP Role in Oil, Gas Industry*, BBC Summary of World Broadcasts, Nov. 12, 1999, available in Lexis, News Library, Non-U.S. file; Vitaly Makarchev, *British Petroleum—Amoco Intends to Secede from Sidanko*, TASS, Nov. 22, 1999, available in Lexis, Europe Library, Tass file.

89. See ch. 7, sec. IIIA.

90. See, e.g., Mooney, *supra* note 83 (“Asset stripping and its companion, transfer pricing, are two other commonplace occurrences that victimize investors. [According to one analyst], ‘asset stripping involves transactions with affiliates on non-market terms, and it siphons assets from minority shareholders. . . . Transfer pricing involves the sale of goods and services at below-market prices.’” (quoting Lee Wolosky)).

91. See, e.g., Edwin Dolan, *Resisting Shock of New*, Moscow Times, Apr. 8, 1997, at 10 (calling some insider managers “simply bandits”).

92. See Daigle, *supra* note 2 (“In Russia, company directors and managers are routinely accused of insider dealing, which includes everything from accepting bribes to act against their company’s interests to selling assets or shares to relatives or friends”).

93. See, e.g., Jeanne Whalen, *Navigating the Russian Subsidiaries Minefield*, Moscow Times, Mar. 10, 1998, at III, 1998 WL 11690632 (“Share swaps aside, transfer pricing is the practice most feared by subsidiary shareholders. Holding companies force subsidiaries to sell their oil at below-market prices, and then resell it for a profit that is kept by the holding company”); Whalen, *Shareholders Rights*, *supra* note 85 (discussing transfer pricing at Tomskneft, about which one minority shareholder protested, “tax debts and the cost of production are left with the subsidiaries, while profits are illegally upstreamed to the parent” (internal quotation marks omitted)).

94. Patricia Kranz, *Shareholders at the Gate*, Bus. Wk. (int’l ed.), June 2, 1997, at 60, 1997 WL 8270209.

95. Peach, *supra* note 3.

96. See, e.g., Blasi et al., *supra* note 57, at 165.

97. See *id.*

98. Consider the recent looting of Moscow City Telephone Network (MGTS). Even though it is the largest telecommunications company in Russia, its share price dropped 95 percent from its high. According to one report, majority ownership was transferred from a public body “to a secretive outfit that has links both political and economic to Moscow Mayor Yury Luzhkov. Any growth potential for the stock has thus been eliminated. . . . It is safe to say that [the new owners] have no concern for

shareholders of MGTS. What [they] care about, though, is getting Luzhkov elected to the presidency, so MGTS' available cash will be utilized accordingly." Peach, *supra* note 3; see also Gary Peach, *Mayor's Industrial Policy Carries Big Costs*, *Moscow Times*, Dec. 8, 1998, at 16, 1998 WL 11691775 (noting that diverting control of "prize municipal assets" ensures that these firms' "bountiful cash flow" will be available to help Luzhkov "meet the presidential challenge in 2000").

For another complex diversion example, see Alan S. Cullison, *Russian Share Shuffle Maddens Investors*, *Wall St. J.*, July 23, 1999, at A12 (discussing Yukos Oil company's quiet transfer of bulk of its two most valuable petroleum-producing assets to offshore entities); see also Alan S. Cullison, *Yukos Transfers Two Oil Units to Offshore Firms*, *Wall St. J.*, June 4, 1999, at A12 (noting earlier part of saga in which the tycoon who controls Yukos had "barred minority investors from shareholder meetings at three Yukos subsidiaries and pushed through permission for massive share issues that will dilute investors' holdings").

99. See, e.g., Blasi et al., *supra* note 57, at 87.

100. The perquisites are unlikely to give the insiders as much utility as the cash that they would cost. See Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure*, 3 *J. Fin. Econ.* 305, 312–13 (1976) (outlining increase in appropriation as owner-managers' percentage of equity decreases). The sweetheart deals are unlikely to be with the least cost provider of the service or good needed.

101. See Alexander M. Jenkyn, *Russian Auto Manufacturers, Hobbled by Inefficient Management, Look to Foreign Investors*, *East/West Executive Guide*, May 1997, available in Dow Jones Interactive (<http://djinteractive.com>).

102. Mark Whitehouse, *Slow Death*, *Moscow Times*, June 16, 1998, in Lexis, World Library, Mostms file (recounting at length AvtoVAZ's management difficulties and slow decline).

103. *Id.* (quoting automobile analyst Victor Frumkin).

104. See *Russia's Nemtsov Threatens Asset Seizures, Bankruptcies over Huge Tax Arrears*, AFX News, Sept. 23, 1997, available in Dow Jones Interactive (<http://djinteractive.com>).

105. See *Avtovaz to Issue New Shares*, *Russian Bus. News Update*, Sept. 1, 1997, 1997 WL 9832802.

106. *Auto Giant Labours under Tax Burden*, BBC Summary of World Broadcasts, June 5, 1998, in Lexis, News Library, Non-U.S. file (quoting AvtoVAZ chairman Vladimir Kadannikov).

107. See Kirill Koriukin, *Debt-Laden AvtoVAZ Hands State 50% Stake*, *Moscow Times*, Dec. 31, 1998, 1998 WL 11692046.