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RESTRUCTURING: PART I: PASSIVE ADJUSTMENT

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Introduction

This Report consists of two papers, distributed separately as Parts I and II by the National Council. This is Part I.

The papers use case studies to examine the evolution in survival strategies and restructuring of ten formerly state owned enterprises (FSOE) in Russia. The cases provide insights into the role of industrial branch, the impact of privatization, the level of managerial human capital and barriers to further restructuring of FSOEs in Russia. The ten firms were selected among forty or so that had been interviewed over a three-year period beginning in 1994. The forty interviews were conducted in four cities – Moscow, two cities in the Volga region and one in Siberia – although the cases come from only two cities, Moscow and one of the Volga cities. The selection of the ten used in the cases were based on two criteria: 1) a desire to examine changes in managerial attitudes and behavior over multiple years and 2) a desire to obtain a cross section from different branches of industry. The cases allow very detailed examination of the changes in behavior and material conditions of the FSOE, and are divided into two separate papers.

This first paper (Part I: Passive Adjustment) looks at the experiences of six "passive adjusters." In the main, these firms tend to have adopted a "wait and see approach" to restructuring, mostly serving as caretakers for their ailing enterprises. More often than not, these firms are in machinery and light industry.

The second installment (Part II: Cases of Pro-Active Adjustment) examines the cases of four firms that are considered to have been exceptionally pro-active in making the transition to market oriented firms. Three of these firms are from the food branch, while one is a manufacturer of motor vehicle tires. Since priority was placed on follow-up interviews in which the same person was interviewed over time, the analysis is mainly on FSOEs in Moscow and in one of the nearby Volga cities, which, as has been documented, tend to outperform firms in other regions. Experiences of FSOEs from other regions are referred to from time to time in situations where these experiences reinforce or contradict those of the particular firm in our case.

Description of the Sample

Although the firms selected for the case studies are from a relatively narrow geographic area, they form a nice cross section from several industries. As industry tends to be more significant than

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location in determining behavior, this set of cases provides good coverage of the scope of transition strategies and outcomes. No claims are made as to the representativeness of this set of cases with respect to Russian industry as a whole, nor should representativeness be inferred. The proximity of these firms to Moscow, and the mere fact that they consented to multiple interviews, most likely indicate a bias towards the upper end of the distribution of FSOEs in Russia.

The Case Studies

Each case is structured similarly, beginning with a brief historical introduction of the firm as it operated under the centrally planned system, including its employment level, basic assortment and primary customers and suppliers. The central focus of each case study is the physical restructuring of each firm during the transition, including changes in total physical output, employment and, most importantly, the enterprise assortment. Specific coping strategies are examined, when they prove revealing or exceptional. Following the review of the physical circumstances of each firm, the financial situation is examined, including average wages and other related items. The ownership structure and the method of privatization is next examined, along with any substantial changes in managerial personnel or allocation of ownership, for example, managerial purchases of shares held by workers. Each case ends with an assessment of the role of various factors in explaining the firm's restructuring, or lack thereof, during the transition.

Basic Survival Strategies

The FSOEs included in this study are in vastly different circumstances in terms of long-run viability. FSOEs in food processing are adding employment, paying high wages and increasing output. Firms in light industry, MBMW and numerous other branches of heavy industry, for example primary chemical goods, are withering away. These firms are paying below average wages (rarely on time), losing their best workers and have experienced declines in output well in excess of 50 percent since 1992. As we will see, one key difference among poorly performing FSOEs and their more successful counterparts is their relative access to working capital. The prerequisite for survival in Russia's market economy is cash-flow, which requires resolution of non-payments (arrears) problems. Banks tend not to be a viable option as a source of cash for most enterprises because they tend not to concern themselves with lending to FSOEs. Ignoring the industrial sector as a potential profit center is possible because banks have been able to make profits through speculation against the ruble (1992-1995) and through purchases of GKOs (1995-1996). That financial acumen would play a pivotal role in success or failure during the transition should come as no surprise, since the financial system was in many respects the most undeveloped aspect of the former economic system.
Survival in the transition economy is effected through strategies and tactics that may be broadly classified as either defensive (passive) or pro-active. Defensive strategies tend to be adopted by firms in heavy industry, while firms in consumer-related branches tend toward much more pro-active approaches to solving cash-flow and related problems of survival. For those that succeeded a virtuous circle was established: improved cash flow led to higher and more timely wages, financed changes in product mix and enhancements in quality, allowing these firms to demand (and receive) payment in advance, reducing arrears to more manageable levels. In the longer run these firms went on to use their retained earnings to expand their network of retail shops and make more significant improvements in assortment and quality, without the expense of bank credit. As these firms were able to pay wages in a timely manner at levels above market norms, they were able to attract and retain the best workers and to demand long hours and hard work from their employees. As the returns to labor were now significant (in terms of availability of consumer goods) and the threat of unemployment real, workers obliged these demands. Firms that adopted passive adjustment strategies tended to have little to no cash on hand, paid wages late at levels below average, lost their best workers and middle managers and lacked finance for the most basic restructuring projects, however profitable they might have been.

Explaining Restructuring Propensity in Russian Enterprises

The reasons why some FSOEs chose passive strategies while others chose pro-active strategies are not always transparent. Six variables did, however, emerge as predictors of what may be termed "pro-active restructuring propensity": luck, tenure of the director, western training of management, foreign partner/joint venture, degree of monopolization in the market and ownership structure/governance within the firm. Lucky firms with younger directors with some western training, a foreign partner or relationship, situated in a competitive market, in a firm with concentrated ownership were more likely to behave pro-actively. It should be noted, however, that identifying exact relationships among the variables is difficult in that they all tended to move together (i.e., a high degree of multicollinearity exists among these variables) and inferring precise lines of causality is next to impossible. Together the two papers indicate that the restructuring propensity of a FSOE is largely determined by the particular industrial branch in which the firm resides. Ownership structure and method of privatization – in short, governance – contribute positively to restructuring propensity; however, it is difficult to extract the "signal" of governance in FSOE restructuring as good governance correlates positively with viable industries.

2 By 1995 and more so in 1996 scheduling interviews with managerial personnel in successful establishments became increasingly difficult as the opportunity cost of speaking to an American economist became significant. This problem was most acute in Moscow where the opportunity cost is greatest.
Lucky firms attract and retain good managers and workers who are receptive to learning new methods and techniques. These firms are more likely to institute good governance structures because the returns to doing so are higher than in their less fortunate brethren. Finally, the good fortune of these firms has left them with the cash on hand to pro-actively restructure their operations, attract foreign investment, train managerial personnel in western business practices and secure financing for further expansion and restructuring.

By contrast, firms in difficult industries, such as machinery, suffer from severe overcapacity, require massive amounts of new physical capital to restructure and also face highly elastic (short to medium-run) demand for their products. Firms in these industries have spent a significant fraction of the transition period on the sidelines. Managers in machinery and related branches of heavy industry tend to see their salvation in government assistance of one form or another and they tend to be very reluctant to cede control to outsiders for fear of foreclosure, even if outsiders would bring desperately needed working capital to the firm. These managers tend to be hostile to the whole experience of the transition, including western business practices, and they are generally pro-communist. Governance in these firms remains "poor" in the sense that old directors remain in control and insiders control large blocs of equity. Tight money and stabilization since 1995 has induced these managers to revert to their former dependence on barter – a situation that has been referred to as the "re-demonetization" of the Russian economy.³

³ Rick Ericson at the AEA meetings in New Orleans, January 1997.
INDUSTRY AND GOVERNANCE IN RUSSIAN ENTERPRISE RESTRUCTURING
Surviving in the Transition: Part I: Passive Adjustment

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1: Basic Strategies

In contrast to the highly entrepreneurial and aggressive strategies which will be described in the companion paper, management in numerous FSOEs have essentially served as caretakers watching their establishments wither away. It should be noted that in most cases these were not their preferred strategies. Due to a lack of available financing, either in the form of cash flow or access to credit, these firms rarely, if at all, were able to introduce new products or re-tool their operations in order to increase capacity/output of their advantageous products. For these firms the "payability" of their customers, and the relatively high elasticity of demand for their products, have led to significant declines in output in the early phase of the transition. These firms may have altered their mix of output, but only in a passive manner (i.e. reducing production of certain products as sales decline).

Employment in these firms has also significantly declined, usually not through layoffs but through attrition as these firms have failed to maintain competitive wage payments. Of course, it is the best-skilled workers who are the first to go, leaving behind only those workers with no opportunities elsewhere. Arrears are also significant problems for these firms, as they are generally removed from the final customer and find it difficult to extract payments from their customers. Thus, these firms have difficulty in maintaining a reliable source of cash flow and consequently have fewer resources with which to effect significant change in their operations. These firms continue to exist through extensive use of barter, preferential government subsidies (usually in the form subsidized credit) and tax preferences and sales of one or two products within their profile.

Stabilization in 1995/96 has increased their reliance on barter, returning these firms to operational rules reminiscent of the old system. As these firms are generally in heavy industry, they are producing with very specific, inflexible, physical and human capital. Changes in their profile are prohibitively expensive and would require substantial investment and a long payback period. By 1996 many of these enterprises had plans to change (or had recently changed) their profile in what they would hope would be a substantial way, but they had little to show for it in the summer of 1996. Six cases of FSOEs in this category of passive adjustment with relatively grim prospects are examined below, along with a summary and conclusion.
2: Cases from the Machinery Branch:
A Machine Tool Firm in Moscow

Begun from a machine shop in pre-revolutionary Russia, this Moscow-based machine tool manufacturer was a leading designer and producer of metal working lathes in the FSU. Industrialization in the 1930s created an insatiable demand for machine tools, which this greatly expanded firm was expected to meet. The firm's main production centered around a "simple lathe" originally produced in 1957, upgraded over the years to include higher tolerance and numerically controlled variants. By 1990, 90 percent of the firm's 5,000 unit capacity was dedicated to the production of numerically controlled lathes. In 1994 production of numerically controlled lathes had fallen to 200 per year with continued decline in 1995. As the numerically controlled variants were six times more expensive than the simple model, and more difficult for customers to repair, the simpler model was preferred by most customers. Sales of the simpler variants increased from 100 units in 1990 to 1,800 in 1994, and although the production of the simpler model kept the company going, its lower price did not provide a commensurate financial boost in the period of rampant inflation.

By 1995, in order to take advantage of the high rents in Moscow, the firm relocated its headquarters to its remaining manufacturing site and leased office space in its former headquarters. Although output had stabilized in 1995, due mostly to an increase in exports, employment declined dramatically from 3,400 in 1994 to 1,000 in 1995. This decline in employment was due primarily to average wages that were roughly 80 dollars per month, among the lowest in Moscow, and not always timely. As elsewhere, skilled workers would be the first to leave, and both the 1994 and 1995 respondents identified retention of skilled workers as one of their biggest problems. As we will see below, retention of workers is not a significant problem outside of Moscow, as opportunities for workers are considerably fewer in the outlying regions.

In terms of its product profile, two rays of hope existed for this firm. One was a state-of-the-art hot water heater, suitable for dachas and single family homes, which in 1995 had only recently begun production. The other was a so-called "hobby lathe" that was selling quite well; however, they had capacity to make only 75 per month. The real constraint here for both products was access to credit. The firm had survived the early phase of the transition on government credit. In 1995, however, the firm had to rely on commercial credit at a 215% interest rate. The respondent indicated that "if credit and money, in 9 to 12 months we would have a new product."

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The watch manufacturer examined below was using a similar strategy of renting out its headquarters to new businesses. According to the respondent, these rental payments were "the main reason wages are 420,000 rubles (roughly 100$)."

Employment in this firm in 1990 was roughly 6,000 workers and white collar personnel.

As was typical in many heavy industry establishments, management in the firm seemed to find it difficult to wean themselves from dependence on government assistance, with the 1995 respondent indicating that "we expect a big order (hot water heaters) from Luzhkov."
Russia's underdeveloped credit market hit this machine tool firm from both sides, as was true for all producers of durable goods. On the one hand, the firm could not retool its production and increase sales of its quick-selling hobby lathe or their new hot water heater, due to lack of credit. On the other hand, as customers also lacked credit to retool their own facilities and could always put off purchases of durable goods through temporary repair of existing machinery, sales of machinery stagnated.

By 1995 the firm's financial situation was desperate and only lax bankruptcy enforcement explained the firm's continued existence. In 1994 accounts payable exceeded receivables by almost four times. 1995 results indicate similar ratios, although payables almost doubled in nominal rubles. The respondent hinted that the financial situation had grown more desperate (evidenced also by the fact that they were vacating their headquarters), as they were now cut off from low interest government loans and forced to rely on commercial credit.

The firm was privatized under variant 2, with a 51% share to insiders. Gosimushestvo (state privatization committee) and the Ministry for Industry held a 40 percent stake, while 9% was sold at auction, mainly to managers. In spite of the large state share, the respondent indicated that management was left to its own devices in day-to-day decision making, although on strategic matters the state did have a voice in company affairs.

The experiences of this firm are in many ways typical among firms in heavy industry. Managerial personnel in distressed FSOEs are frequently cognizant of what needs to be done in order to effect greater change in their operations. Systemic constraints, usually in the form of access to credit, and an inability to solve cash flow problems tend to be significant obstacles to further restructuring. For these FSOEs the more stable macro-economic environment that should encourage the development of credit markets may improve their prospects. Although evidence from 1996 suggests that lower inflation has yet to translate into improvements in credit access or bank willingness to lend, direct investment in exchange for equity is becoming more frequent.7

Nevertheless, managerial personnel in these distressed firms tend to look toward the government and not their customers (or potential ones) for their salvation, resulting in frequent missed opportunities. Governmental dependency, which tends to be more pronounced among managers in heavy industry, is likely a legacy of the old system in which managers in heavy industry had relatively less discretion in terms of assortment and customers than their counterparts in light and food industries.

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7 See Blasi (1997) Kremlin Capitalism: Ithaca, Cornell University Press. Several directors interviewed in 1996 were actively seeking outside partners who could provide restructuring capital in exchange for equity. In a few cases the directors were willing to give up a controlling interest in exchange for capital.
The Excavator Plant on the Volga

Much like its counterpart in Moscow, the excavator factory had a long history and excellent reputation within the Soviet machinery industry as a producer of medium-sized excavators that were reliable, relatively inexpensive and easy to repair. The facility controlled 20 percent of the Russian market and faced additional competition from imports. Like most of its peers in machinery, its reputation resulted from its engineering expertise, and the factory's directors were always drawn from the ranks of chief engineers, rather than from bookkeeping or the planning department. Within the region, the excavator factory was one of the most prestigious employers, providing excellent benefits and paying among the highest wages in the region. Workers enjoyed access to milk, bread and sausage from the factory's collective farm and food processing facilities, flowers from the firm's greenhouse and building materials, at the discretion of the director, for constructing their dachas.

In 1991 the firm produced near capacity, producing 4,013 excavators a month using roughly 4,200 workers. Output and employment have declined steadily in the intervening years, with gross output falling by 40 percent of from 1990 to 1996. Although each year respondents indicated that employment did not change from the previous year, the following figures were provided at each interview: 1992, 4,200 employees; 1994, 4,000 employees (no change from 1990, according to the respondent); 1995, 3,500 to 3,700 employees (not changed from 1990, according to the respondent); 1996, 2,500 to 3,000 according to two separate interviews in 1996 (no claim was made as to the degree of change in employment levels.).

Before transition, over 90 percent of the factory's production was devoted to three basic variants of excavators: a wheeled trenching excavator, a caterpillar tracked trenching excavator and a wheeled jack hammer used for demolition. A major upgrade in the basic production of the factory was initiated in the late 1960s under the initiative of the chief engineer, who was appointed director in 1970. Since that time the basic model has remained more or less unchanged. On the side, the firm produced kitchen sinks and drains as part of its required profile of articles of "cultural significance and household use" (consumer goods). Plans were in the works for a small roto tiller. The firm was reported to have introduced several new variants of excavators in 1996, in a range of smaller and heavier sizes, using various sized engines, which together accounted for twenty percent of sales.

The firm's finances had been rumored in 1994/95 to be in very bad shape and was alleged to be on the verge of bankruptcy. As the director was somewhat embarrassed about this financial

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9 According to the factory history, record production for the factory was 5,533 excavators attained in 1973. Annual production of 4,000 or so seemed to be the norm, however.
10 In 1992 the excavator plant purchased its engines from nearby Byeloruss factory in Minsk. By 1995 half of its engines came from Byelorussia and half from the Rybinsk factory to the Northeast on the Volga River. In 1996 the respondent indicated that there were plans to make engines in house, but no firm time line was provided.
situation, he refused interviews in 1994/1995. It was therefore very surprising to hear of the addition of new products (verified by two separate interviews) in 1996. The interesting question is how the firm was able to finance the changes in assortment.

As we have seen in the previous case, financing changes in assortment is a significant barrier for all firms, but is perhaps more costly in the case of machinery firms, which utilize very specific, capital-intensive technologies. In 1996 the respondents indicated that in the case of the excavator factory, retooling to accommodate a wider range of engines was relatively inexpensive and few changes to the basic chassis were necessary to accept engines of various sizes. What finance that was required came from retained earnings. Nevertheless, such finances must have been very meager, as both respondents indicated in 1996 that 70 to 90 percent of sales were in the form of barter and the remainder for cash. When pressed further on the question of finance for the new products, the respondents revealed that this was the primary cause of their tendency toward late payments. The relatively low wages and reduced work week in summer of 1996 induced a significant decline in employment from 1995 to 1996. Both respondents indicated that the factory was, however, generally (but not always) timely with its wage payments.

The excavator plant was privatized under the Chubais program in 1992/93 under variant 2 (initial 51% share to insiders and pensioners). As often happened in Russia’s privatization, insiders ended up with a 100% of the stock, and managers were reported to be purchasing from workers, in order to block outsiders from obtaining a stake in the firm. In addition, the director was reported to have had a significant share of the equity of the firm, which would appear to further reduce the likelihood of their emerging a functional governance structure, especially since the top management (director and chief engineer) had held their positions for 26 years. In spite of these barriers, the director was voted out in the 1996 shareholders’ meeting, but he was allowed to remain as chairman of the board. In a significant break with tradition, the new director was reported to have a background in purchasing and marketing rather than engineering. One respondent indicated that the former director was replaced due to his "big head methods of treating people, and missed opportunities."

The excavator factory would appear to have significantly better prospects than many of its peers in the engineering branch. It has a new, relatively young director and a good quality product with a solid reputation within Russia as well as in its many countries of export. And it has several new variants of its basic product (apparently under production). An encouraging sign is that the firm has stuck to its knitting and not attempted to diversify into product lines in which it has no expertise. The real question is, can this firm survive in the medium term until the market for durable goods recovers and cash flow improves to sustainable levels?

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It was possible to interview the director in 1992 and 1993. For subsequent years interviews were obtained with the chief engineer and/or technical director.
A Metal Fabricator on the Volga

Another large machinery firm in the Volga region manufactured undercarriages for railway cars. The enterprise was relatively new, constructed after World War II to meet the needs of the nearby railway car factory. As the firm was set up to process metal straight from the mill into massive undercarriages for rail cars, it possessed intrinsically flexible capital stock that, in principle, could be put to a wide variety of uses. The chief engineer claimed that his factory could process any steel from 1 to 200 mm thick. The firm could also process some nonferrous alloys. The ability to deal with such a wide variety of raw steel, with flexible, albeit not necessarily inexpensive, capital stock placed the firm in a potentially advantageous position vis à vis other machinery firms.

In spite of these potentially more fortunate circumstances, the situation at the firm was as bleak as those of most machinery firms. Output (measured in tons) had declined 40 percent since 1990, with no recovery or bottoming out in the intervening period; however, in 1996 the respondent indicated that a big order might be forthcoming from the Ministry of Rails which would improve the firm’s situation significantly.12 From 1995 to 1996 the metal fabricator’s situation appeared to have worsened. In 1995, based on the firm’s ability to perform almost any type of metal fabrication and its willingness to accept any order no matter how small, respondents expressed some optimism as to their future prospects. Plans were in the works to begin producing an asphalt plant and for modernizing production with Italian equipment. The respondents claimed that their establishment was profitable, although they conceded that they were two months behind in paying wages, explaining the one-third decline in employment from 1990 to 1995, to 2,100 employees.

In spite of the fact that plans seemed to have moved forward on the asphalt plant and the modernization of their primary production, the situation in 1996 appeared much worse. Employment had fallen another 30 percent to less than 1,500 workers. Wages were below the regional average and were now three months late. Total output fell another 15 percent over 1995 levels, and only 40 percent of employees were working a full week. All were reduced to four days a week in June. Fringe benefits were also significantly curtailed. Reflecting the dire financial circumstances, the lights in the hallways of the factory were turned off in order to save expenses on electricity.13 When asked about the firm’s profitability, the respondent made no pretenses as to the firm’s situation:14

It is impossible for us to be profitable with the current volume of output. (We) would need to increase this two times. This is the problem of all large enterprises.... We have enough orders, but no working capital. We can’t buy materials. Most debts in MBMW due to tight

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12 The firm was caught up in a dispute between Minrail and the previous management of the rail car factory and was withholding orders from the rail car factory until its management was changed.
13 By 1996 energy prices had risen sufficiently and real wages had fallen sufficiently that for many firms energy expenses were close to wage expenses as a fraction of total costs.
14 The respondent in both years was the same, so the different response is likely to reflect changes in the firm’s situation rather than the perceptions of different managers.
money and high taxes.... If today applied bankruptcy law then 80 percent of enterprises bankrupt, including this one.

As alluded to above, the firm's basic assortment had not undergone major changes. Seventy percent of its profile was in subassemblies for the rail car facility, fifteen percent of its profile was in steel fences, staircases and reservoirs for constructing dachas, 10 percent of production in office furniture and the remaining 5 percent was in miscellaneous steel products sold to private citizens for various uses. As demand for heavy structures declined, the share of production in these residual categories increased. A shop floor tour revealed a significant fraction of the firm's capacity lay unused, with entire shops shut down. The respondent explained that "Our plant is unique. We can produce very complicated structures. Now demand is only for simple structures, so now we have competition."

The metal fabricator was privatized under variant 2, with 80 percent of the initial distribution of shares in the collective and 20 percent allocated to the ministry/state. By 1996 the allocation had changed slightly, with 51 percent held by the collective, 30 percent by large enterprises and 20 percent in state hands. In 1996 ownership structures had become more formalized and a board of directors was to be elected the week of our visit. The board was to consist of seven members, one of whom would be the trade union leader. By law the director of the factory was not permitted to also assume the chairmanship of the board, which in most insider-controlled companies fell to officers of the company. This restriction was observed at this firm. As was common among managerial personnel in heavy industry, the respondent was not in support of privatization: "Wrong way was to give workers ownership without outsiders...gives freedom, but no orders." When inquiries were made as to the interference of the state in affairs of the company, given its 20 percent stake, the response was "We would like the state to interfere (in our affairs)!"

An Assessment of Machinery Cases

All three firms in machinery are in difficult circumstances, and their experiences do not appear atypical when set alongside other machinery firms interviewed in this study. Most machinery firms produce products using outdated, inflexible capital, which most potential customers lack the financing to purchase. Potential customers that might have access to resources have delayed purchases of durable goods until some, as yet unrealized, future date. Moreover, their circumstances appear to have only gotten worse in the more stable economic conditions of 1996. Stabilization further restricted their access to cash, leading to an increased dependence on barter. The 1996 interviews revealed 70 to 90 percent of production for machinery firms was being bartered in June/July 1996. Although many machinery firms have undertaken some structural adjustments, most of these changes represent reactive responses to external conditions rather than more pro-active restructuring in their operations. More importantly, managerial personnel in the machinery branch,
more than their colleagues in other branches, tend toward a latent dependency on the state and continually look to the government for guidance, subsidies and other preferential treatment.\textsuperscript{15}

The preoccupation with maintaining these paternal links has resulted in missed opportunities for many machinery firms. Few machinery firms have made the most leverage out of the consumer goods in their profiles, watching passively as the share of total production in consumer goods increased, but taking no obvious action to accelerate the process. (They did not, for instance, switch production from intermediate goods to final goods, or expand the range of offerings of their consumer goods.)\textsuperscript{16} Inquiries to managerial personnel as to why not attempt such changes were met with responses ranging from slightly bewildered to somewhat hostile. The more hostile responses intimate that were the firm to make such changes it would no longer have an identity as producer of heavy machine X or Y, which is strictly preferred to producing consumer goods A or B. In other words, managerial obstenance, nested in the governance structure skewed heavily towards insiders and incumbent managers, explained some of the passivity of machinery managers. Nevertheless, managerial turnover, even among these insider controlled firms, appeared to be increasing in 1996 and one of our cases had its longstanding director removed in 1996.\textsuperscript{17} Whether or not this translates into improved performance in the future remains to be seen, but it is likely that passive managers will become less common in Russian industry.

3: Cases from Light Industry and Consumer Durables

Like their counterparts in machinery, firms in light industry are in difficult circumstances. Output has fallen significantly, cash flow is unreliable and meager, low wages induce skilled workers to leave and much of their capital is outdated. "Payability" of customers is generally the biggest problem of light industry firms, although taxes and non-payments are often cited by managers as big headaches. Nevertheless, light industry firms are in many respects in a more advantageous situation than their counterparts in machinery. They have more flexible capital stock, produce a wider assortment and are closer to the final customer, making direct sale and improved cash flow easier. General economic recovery would see many of these firms in a significantly more profitable situation. On the downside, however, light industry firms face significant competition. Barriers to entry are low relative to those in machinery, imported goods have a significant share of the Russian

\textsuperscript{15} With few exceptions, managers in machinery firms supported communist leader Gennady Zuganov in the 1996 election.

\textsuperscript{16} This contrasts markedly with the statement by one director of an enterprise that produced household electrical equipment, who stated that one of his biggest problems was getting his customers to try his new products. Customers preferred to keep purchasing the older, and readily accepted, variants.

\textsuperscript{17} See Blasi (1997) for additional evidence on increasing managerial turnover in 1995/96.
market and domestic producers are in greater abundance in most light industry product groups. Like most firms in Russia, light industry firms were privatized under variant 2, ceding majority holding to workers and managers. As these firms are relatively unattractive from an investment perspective, they have significant difficulty attracting outside capital. Managerial turnover is also low, with average tenure of the director in excess of ten years.

A Fabric Firm in Moscow

A Moscow-based producer of fabrics, produces and processes fabric from raw cotton and also dyes fabric from other producers into patterns and solid colors. The firm has a long history, dating back to 1798 when it specialized in dying and processing cotton fabric. In the 19th century additional lines were added which allowed the firm to process raw cotton into threads and also weave these threads into fabric ready for processing. Since the firm is primarily concerned with processing the final fabric, its basic assortment is mostly a function of the mix of solids, plain and patterned fabrics it is capable of producing. In 1990, 15 to 20 percent of its output was white, 15 to 20 percent in single colors and the remainder in various patterns. This mix has undergone relatively little change in the transition, with a slight movement in favor of more patterns. Within each broad category endless variants are possible, giving the firm a significant degree of flexibility in what it is able to offer its customers.

As has been true for most of the fabric industry, despite this flexibility in assortment, the transition has been very difficult. Output measured in square meters had fallen by 75 percent from 1990 to 1995, and employment by 31 percent. Unlike some firms in light industry, the fabric producer’s decline in output had been uninterrupted since 1990 and showed little sign of abating. The respondent indicated, however, that 1990 figures represented 99 percent of capacity and that a more realistic utilization rate would place their output decline at something closer to 50 percent. In the 1995 interview it was explained that:

"The fall in output is not related to price liberalization. The main reason is supply from Uzbekistan. The (Russian) government has made an effort to fix supply to half of what it was in 1994, no success yet."

Related to this, the respondent cited high transport costs that "kills deals" and customs clearance as significant problems for the firm’s operations, also noting that a single currency among FSU republics would be of significant help. Employment declines were due mainly to attrition

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18 Managers from light industry typically report ten or more domestic competitors with the expectation that more will exist in the future (assuming economic recovery). Typically, machinery firms report two or three competitors with little expectation that more are on the way.

19 Another firm in the same industry, located in one of the Volga cities, had purchased new trucks so that it could bypass the rail system, which had gotten too expensive to use.
and it was stated policy to try to save jobs, which the respondent explained simply as the result of "Russian mentality."

Average wages were well below the Moscow average and more in line with wages outside of Moscow. Wage differentials among employees and managers were relatively small; the respondent indicated (in 1995) that managerial wages were only 60 percent above the average for all employees.\(^{20}\) Although average wages were highest in 1996, measured in dollars, they were insignificantly above 1994 levels and, given the dollar price inflation in Moscow, they had most likely fallen in terms of real purchasing power. Although low inflation was better for production (the firm had not raised prices in 15 months), as a consumer the respondent indicated that "prices are two to three times higher than the official indexes, bread prices are higher. Although inflation falls, the population has no money to pay."

As suggested by the uninterrupted decline in output, stagnant real wages and declines in employment, the firm's financial situation grew steadily worse over the three years of interviews. Rate of return on sales (what respondents refer to as profitability) fell each year until 1996 at which time it was "catastrophically low," less than 3%.

In spite of this rather grim situation, the firm's management was able to make some pro-active moves to enhance their prospects. For many years the firm had sewn garments from wasted scraps, which it was able to sell directly to consumers for cash. The volume of production was not large, amounting to roughly 1.5% of total sales and employing about 50 workers. As this line of work ensured a more reliable cash flow, management sought to expand it somewhat. By 1995 employment had tripled and self-sewn garments accounted for almost three percent of sales. Important barriers to further expansion of this more lucrative line of business were finding and training specialists who could sew quality garments and outdated sewing machines that were in need of upgrade and replacement.

The firm also had a factory store located on site, one other shop in Moscow and planned to open an additional store in the near future. The respondent offered that they would like to open more shops and that they were an important part of the firm's strategy, but that payability of the population was low. The shops were major contributors to cash flow, accounting for one-third of the cash transactions of the firm and ten percent of total "sales." In other words, 70 percent of production was for barter. Like most Russian firms in distress, physical production was bartered for energy, tax obligations and raw materials.\(^{21}\) As noted elsewhere, restrictive monetary policy increased many firms' dependence on barter in 1996. A new law signed in May of 1996 was to

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\(^{20}\) This figure represents base wages only. It is unlikely to include bonuses and would not apply to the director, although the respondent was not specific.

\(^{21}\) In 1996 a similar firm outside of Moscow reported that it was paying a large fraction of its wages with physical production.
eliminate barter trade in 1997, but the respondent was dubious as to the government's ability to
effect this change in business relations.

The fabric producer was privatized under variant 2 in the summer of 1994 with insiders
receiving 51 percent of the shares. The remaining 49 percent was sold at auction and purchased by
"connected" enterprises. In the 1994 interview the respondent echoed a sentiment heard frequently, "I
don't feel like an owner because of free distribution of shares."22 This sentiment seemed to fade
in 1995 and 1996 as the respondent expressed stronger opinions as to ownership and governance of
the firm. In 1995 and 1996, as in many enterprises, management was buying stock from workers,
although exact percentages were not available. The respondent indicated in 1995 that workers "only
care about salary, they will never become owners. The more shares that management owns, the
more efficient will be (our) operations." In 1996 it was offered that "...privatization is not very
effective, workers don't understand implications of decisions...workers are really outsiders, never
any problems with management or board of directors." In short, incumbent management, as in many
Russian enterprises, had free reign in the affairs of the firm.

The firm's governance structure, weighted heavily toward insiders and incumbent managers,
appears stereotypical among Russian firms. This structure correlates with the comparative reticence
of the firm in integrating downstream in order to improve its cash flow. This timidity was
particularly evident in 1994 when managerial efforts appear directed toward influencing government
policy toward light industry and in maintaining preferential loans. By 1996, however, management
seemed significantly more aggressive in expanding their retail operations and was clearly giving this
high priority, as evidenced by the expansion and make-over of the company shop. Moreover,
management seemed willing to consider an increasingly wide range of options in order to save the
company. When asked about the firm's future plans, the respondent indicated that "maybe we should
think about fixed assets and sell equipment that does not fit our profile. We are also considering
changing location."23 In sum, by 1996 management seemed to have mastered the basics of the new
economy. Primary importance was now on cash flow. Basic concepts of opportunity cost were well
understood, and management appeared willing to consider major operational changes if necessary. It
is difficult to state directly whether or not these attitudinal shifts were the result of the less diffuse
ownership structure or were simply the result of managers learning the ropes of the market economy
over the years.

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22 Privatization under variant 2, which technically did not give concessions to insiders in the form of free shares, did
permit purchase of shares through company funds. More importantly, the share price was based on book value of assets
as of January 1, 1992 and was unadjusted for inflation. Essentially, then, shares were given away to insiders.
23 The firm had an excellent Moscow location near the White House and Moscow River, which would undoubtedly fetch
high rents should the firm decide to vacate.
A Textile Firm on the Volga

The second case from light industry, a textile firm on the Volga, produces woolen and blended woolen fabrics and also a small amount of woolen threads. As with many light industry firms, the firm had operated with a significant degree of independence, especially during the perestroika reforms under Gorbachev. For much of light industry the precise mix of output was determined via annual and biannual trade fairs in which potential customers would place orders with potential suppliers in a fairly decentralized bargaining arrangement. As the system became more and more decentralized in the late 1980s, these orders reflected the preferences of final consumers. For this textile firm, trade fairs resulted in the conclusion of 300 contracts per year in 1990, which according to the director were po zakaz (made to order). These firms, therefore, should have a relative advantage in navigating the uncertain environment of the transition compared to counterparts unused to responding to direct requests from customers.

Evidence of these advantages was the somewhat smaller decline in total output during the transition and emerging recovery in 1995 and 1996. From 1990 to 1994 total output fell by 30 percent, with an additional ten percent decline in 1995. However, by June of 1995 orders were recovering from 1994/95 lows, and output was nearing pre-transition levels by 1996. The director, however, indicated that economic conditions were softening in late Spring of 1996 and was uncertain as to the durability of the recovery. Following the declines in output were similar declines in employment, from roughly 2,300 workers and employees in 1990 to 1,700 by 1994, a nearly 30 percent decline. Increases in output in 1995 and 1996 did not translate into similar changes in employment, which remained constant over subsequent years.

The ability to flexibly change assortment proved advantageous during the transition and the director indicated that 70 percent of their assortment was changed every year as new orders dictated. Nevertheless, the firm had to scramble to make a profit, and in 1994 the firm covered only variable costs and then with the help of loans from the central bank. By 1995 profitability had improved and the director reported profits increased by eight to nine times over 1994 levels. Most of the recovery in profits and output was attributed to declining competition as increasing numbers of competitors left the industry in 1995 and 1996. The most likely explanation for the firm’s unusual ability to hang on while its competitors went out of business is the relatively low wages paid out by the firm. Average wages, measured in dollar terms, were unchanged from 1994 to 1996 and were among the lowest of all firms interviewed over the three year period, well below $100 a month.

In addition to the decline in competition, management had implemented some substantial changes that improved cash flow, keeping them afloat. An important factor contributing to the improvement in 1995 was increased reliance on pre-payment and more rapid confirmation of payment through the banking system, improving cash flow and decreasing expenses on short-term
The director also was willing to "take orders other enterprises refused" and paid attention to timely fulfillment of contracts, all while maintaining quality.

An additional factor contributing to the reversal of fortune at the firm was an apparent change in the director's thinking. In 1994, the firm was dependent upon credits from Gosbank, and the director focused his energies toward Moscow. When asked about pricing in 1994, he responded "We get no new instructions on pricing from Moscow, so we keep the old ones." He also offered that "We really don't know what our costs really are." In the 1995 interview he was able to provide specific details as to pricing policy, costs and rate of return (not including depreciation), while in 1996 he was examining a proposal to sell a significant block of equity, up to and including a controlling interest, to an outside investor in exchange for capital to retool operations. It must be noted that this director had been in his position for nearly 20 years, and he fit most caricatures of the "red director" (long incumbency in his position, engineering background, conservative outlook et cetera).

In addition to the director's apparently flexible outlook, the ownership structure of the factory was somewhat atypical. Unlike most Russian firms, the factory was privatized under the provisions governing leased enterprises and therefore did not participate in voucher privatization. The firm was also unusual in that an outsider held a sizeable interest in the firm. In the case of this factory the outsider was a large St. Petersburg enterprise that had acquired a 40 percent stake in the firm and "was buying more," according to the director. The presence of the outsider did not seem to greatly impact the operations of the firm as the director indicated "they are only interested in money," but they did choose much of the board of directors and were ultimately responsible for re-appointing the director to his position. Moreover, the St. Petersburg firm had become involved in choosing some of his staff. It appears obvious in retrospect that the ownership structure and the director's attitude were correlated. Nevertheless, the positive assets of an apparently good governance structure and open-minded manager did not translate into good prospects for the firm. The director never articulated a long-term plan or strategy for the firm and focused his attention on "preserving the enterprise in order to survive" – a goal that had not changed during the three years of interviews.

A Case in Consumer Durables: A Watch Factory in Moscow

Several light industry/consumer goods firms interviewed in this study were able to flexibly change assortment at low cost, but were in durable goods industries in which customers could put off purchases until some future date. For these firms "payability" of consumers is their biggest problem.

In 1994 the director indicated that bank clearing took one month on average; by 1995 this had been reduced to one week – still lengthy by western standards, but of significant help nevertheless.

The unwillingness to speak about the future may have been due to Russian reluctance to speak about the future for fear of bad luck; however, in interviews in 1994 and 1995, the director dismissed such questions with remarks such as "cannot plan for the next five days, much less five years."
overall. Their desperate situation has repercussions on all aspects of their operations, placing their survival in serious question, even though economic conditions may improve in the medium term. This case focuses on the experience of one of these firms, a large watch factory located in Moscow, although its story is repeated throughout much of Russian industry.

The watch factory produces watches and alarm clocks using both quartz and mechanical elements. The transition had seen large, uninterrupted declines in production with 1996 output at 45 percent of pre-transition levels. Roughly 60 percent of the firm's production was in alarm clocks and 40 percent in watches, a ratio that remained essentially unchanged during the transition. The firm produced numerous variants of each by changing the faces attached to one of six basic mechanisms. The assortment of faces could be flexibly changed to meet changes in demand, although altering the basic mechanisms was presumably a significant undertaking.

A comparison of the company's promotional materials from 1994 to 1996 indicate a significant reduction in the number of variants and a decrease in the number of basic mechanisms of both watches and clocks offered for sale. The most significant change in the firm's mix was an initial increase in the proportion of production in quartz mechanisms from one quarter in 1990 to fifty percent by 1994, and a subsequent reversal after 1994. By 1995 the respondent indicated that they had stopped producing quartz mechanisms due to low "payability" of its customers (although promotional materials still listed quartz watches and clocks in 1996). The firm was able to export a significant fraction of production, although the high value of the ruble in 1996 had reduced exports to 20 percent of (the smaller) total production, from levels nearly twice that in 1994/95.

As indicated by the narrowing of its assortment, the firm had come upon hard times. What was once a large firm by Russian standards, with 11,000 workers in 1990, employed slightly more than 3,000 employees by 1996. Declines in employment mirrored those in physical production and both had occurred without interruption. Inquiries revealed that attrition was brought about through low wages that were well below Moscow norms. In short, the firm was becoming decapitalized, losing its youngest, most highly skilled workers to the robust Moscow labor market which offers lucrative opportunities to skilled workers.

Measured in dollar terms, average wages stagnated after 1995, although dollar costs of living in Moscow continued to increase. Major contributions to stagnant wages were rising energy and utility costs and high taxes. In 1996 costs on basic utilities (electricity and water) were comparable to payroll expenses and taxes on sales, profits and pension obligations exceeded the entire payroll by almost 15 percent! Equally important for the firm was stabilization and increases in the real value of the ruble which hurt hard currency exports and directly the bottom line of Slava. Nevertheless, exports were still important for the firm and were the basis of their access to credit and therefore

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26 This may have accounted for the reduction in the production of quartz mechanisms, as these would most likely compete on world markets.
working capital. The respondent indicated that "low inflation helped a little, but 1994 was preferred when government had a role in the economy. We would need a lot to get back to 1994."

In spite of the fact that retailers (kiosniki) were able to mark up their products by 100 percent, the firm had made little effort to engage in self-selling their products directly on the street. The firm did possess one store on the factory site that sold nearly one percent of total production, but the value of this outlet was primarily to gauge consumer demand rather than serve as a source of cash flow. The respondent indicated that it would be prohibitively expensive in Moscow to establish a retail network that would have a significant impact on cash flow. A substitute for one's own retail network was cultivation of a few reliable dealers who could be counted on to pay regularly. These types of relationships seemed to be more prevalent by 1996, and the respondent indicated that they had established "20 constant dealers, 8 with special contracts (we) do not doubt their business and trust them to pay." Nevertheless, non-payments remained a problem for this firm. As was true throughout Russia in 1996, macroeconomic stabilization had exacerbated cash-flow problems for many firms and made non-payments more severe. The sentiment that non-payments were more severe in 1996 represented a change in opinion from 1995 when the respondent offered that non-payments were less of a problem as compared to 1993 and 1994.

The firm is governed with a typical Russian structure: insider control with little outside oversight or influence. The firm was privatized in 1991 as part of then prime minister Ryzhkov's experiment aimed at gradually marketizing the Soviet economy. The initial distribution of ownership was 63 percent to insiders, 37 percent to the state. As of 1996 more than 7,000 workers and pensioners remained as owners and the respondent indicated that workers had a "large voice in company affairs," going so far as to oust management in one production shop. Unlike many insider-controlled firms, management did not seem to be increasing its stake in the company and the respondent indicated that management controlled just five percent of the firm. The respondent offered that workers were looking to sell to outsiders, but that management convinced them that outsiders "would turn the factory into warehouses." The sentiment that outside owners would turn existing capacity into office or warehouse space was frequently expressed by managers located in Moscow due to its high rents.

By most standards the firm's board of directors was large, numbering 26 members, all but one of whom were from within the firm (the sole outsider represented the state's share). Allocation of seats on the board was determined on the basis of the size of the various production shops that made up the firm. Actions by the board were based on consensus and no actions were taken unless 80 percent or more of the board consented in advance of the formal motion. "We don't want to waste time arguing," according to the respondent.

The watch factory's prospects do not appear promising: it is in an industry in difficult circumstances, it is losing its best workers, its assortment is narrowing and it is under increasing financial pressure as costs rise. Much of its difficulties are likely the consequence of significant
overcapacity and over-employment in the industry. According to the latest U.S. Census of manufactures, the entire watch and clock industry employed only 7,700 workers, accounting for 843 million dollars in shipments. In other words, measured in terms of employment the single watch factory is comparable in size to the entire U.S. watch industry, although it produces less than one-tenth the value of output of the U.S. industry.\(^{27}\) These comparisons should be taken with caution as the situations in the two countries are of course vastly different and industry level comparisons obscure differences in market specialization at the sub-commodity level. The comparison is telling, however, as one indicator of excess capacity and relative efficiency between these two countries.

Given the excess capacity inherited from the pre-transition times, the firm's predicament would be grave under the best management; however, existing management has tended towards passive strategies that have done little to fundamentally alter the firm's situation. No obvious efforts have been directed at more aggressive product diversification or implementation of other measures, such as integration of retail outlets or movement upscale to emulate foreign competitors, that might improve their financial situation. The firm’s ownership structure is undoubtedly a contributing factor to this passivity.

4: Conclusion

These cases illustrate the dire straits facing many FSOEs in Russia's transition economy. The experiences of these FSOEs are not isolated cases and their stories are repeated throughout Russia in countless instances. When listening to the stories of survival in Russia’s transition it is natural to sympathize with the difficult circumstances of managers, leading immediately to consideration of assistance of one form or another. Undoubtedly, much could be done to improve the situation of these FSOEs; however, it is a slippery slope as such polices risk re-instituting soft budgets with little assurance that pro-active behavior and restructuring will be forthcoming from (mostly) incumbent management. The following installment of pro-active cases tempers these rather bleak stories. The pro-active cases demonstrate that many Russian managers are capable of aggressive restructuring and adept maneuvering in Russia’s turbulent transition, suggesting that overt governmental intervention may not be necessary in the majority of cases.