TITLE: STRUGGLING TO SURVIVE: THE SARATOV AVIATION PLANT AS A CASE STUDY OF RUSSIAN ENTERPRISE ADJUSTMENT

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EXECUTIVE SUMMARY

This case study is based on research at the Saratov Aviation Plant (SAZ) over the last five years. The paper describes the Plant's adjustments in its efforts to survive in a radically changing environment. In consequence, it challenges certain conventional wisdom about the restructuring of Russian industrial enterprises to become competitive in a market economy.

To adjust, enterprises must make changes in three basic areas: (1) corporate governance; (2) relationship with the government; and (3) production profile (including modernization and capital investment). The emerging common wisdom is that soviet managers are handicapped by experience and training, and that restructuring is more likely to take place in enterprises where outsiders are in control or play a significant role in management decisions; and where subsidies from the state have been substantially reduced or eliminated, imposing hard budget constraints. Over time, these assumptions have taken on a predictive character. As indicated in the Contents on the preceding page, these are the parameters of the author's description and analysis.

From her detailed description of SAZ, informative in its own right, the author concludes that it confounds, or greatly modifies, the assumptions. Although controlled and managed by insiders, with continued highly politicized relations with the state, SAZ has made considerable effort to adapt itself to the market environment and to liberate itself from the routine behavioral patterns of state socialism. SAZ has not succeeded, but not for lack of trying, for lack of changes, or through cynical self-serving by management. Nor is it evident that outsiders would have done better, lacking knowledge of both the internal and external workings of the Plant, as well as established ties to the purchase order and supply networks so critical in the transition period. The SAZ case suggests that market conditions and other factors beyond the control of enterprise management may have a strong impact on ultimate success or failure.

Removing state support from enterprises, for example, without simultaneously liberating them from the unwritten-but-understood obligations to fulfill various state obligations and to kowtow to the state on production-related decisions, leaves them in an unenviable and, ultimately, untenable position. Moreover, the case study indicates that, far from providing an atmosphere that encourages self-reliance, the state (particularly oblast' level officials) has continued to meddle in enterprise internal affairs, has persistently not honored its debts, and has complicated related foreign trade agreements.

On methodology the paper notes limits on the utility of surveys or single visit interviews, in favor of the transparency resulting from knowledge and trust developed over time. On theory it emphasizes the benefits of evolutionary theory applied to transition eras.

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STRUGGLING TO SURVIVE: THE SARATOV AVIATION PLANT AS A CASE STUDY OF RUSSIAN ENTERPRISE ADJUSTMENT

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Introduction

The institutional changes facing enterprises over the past decade as Russia has moved toward a market economy have been profound. Profit has replaced plan fulfillment as the key indicator of success. Ultimate responsibility for enterprise success or failure has devolved from the ministries and the plan administrators to the managers. Since the collapse of the Soviet Union in December 1991, the majority of enterprises have been privatized, thereby introducing a new governance structure in which managers formally answer to boards of directors and shareholders rather than to governmental or party structures.¹

How are Russia’s manufacturing enterprises adapting to this new post-Soviet environment? Their capacity to adapt and to flourish is critical to the long-term economic well-being of Russia. Unlike many other countries that have made the transition to a market economy, Russia has a developed industrial base. Although start-up businesses are part of the solution, the real challenge is to reorient the pre-existing industrial enterprises in order that they become competitive in a market economy. Thus far, meeting this challenge successfully has proven very difficult. The past five years have witnessed a sharp decline in aggregate industrial output, as these enterprises have struggled to cope in the new environment. Many enterprises have been forced to operate on a reduced work week or to shut down temporarily, thereby furloughing their workers. The failure to pay workers and suppliers or to pay taxes is endemic.² Bankruptcy looms on the horizon for many.

Why has the transition been so difficult for Russia? There is, of course, no easy answer to this question. Economists generally agree that market success in Russia requires macro-economic stability and micro-economic restructuring. Given that inflation has been brought under control and macro-economic conditions are generally stable, attention has turned to enterprise behavior in seeking an explanation for poor economic performance.³ Many authoritative commentators place primary blame on the managers.⁴ Some have gone so far as to describe the mentality of Russian

¹I would like to thank Cliff Gaddy for his comments on an earlier draft, and Max Chester, Peter Fetzer and Michael Morgalla for their research assistance. Financial support for the field research in Saratov was provided by the International Research and Exchanges Board, the National Council for Soviet and East European Research, and the Center for International Security and Arms Control at Stanford University. Support for the academic leave that allowed me to write the article was provided by the Social Science Research Council and the Graduate School of the University of Wisconsin-Madison.

²Bankruptcy is a common occurrence in Russia, especially among small and medium-sized enterprises.

³Inflation in Russia has generally been under control since the early 1990s.

⁴Some commentators have suggested that the managers are motivated primarily by personal gain rather than by the long-term success of the enterprise.
managers as "suicidal." They argue that the managerial cadre in power at the time of the transition, who were trained to operate in an administrative-command system, have been unable to recognize the need for fundamental change in behavior with the introduction of market reforms, and have been more concerned with preserving (and even expanding) their own personal power and wealth than with the survival of the enterprise. They contend that too many of these managers have continued to rely on subsidies from the state rather than restructuring their businesses in order to become viable. To be sure, there is some truth to the argument. But the reality is considerably more complicated. The image of enterprise managers with their hands outstretched to the government, while surreptitiously absconding with enterprise assets, is a caricature.

This image is based primarily on surveys of industrial enterprises, supplemented by interviews with management. These surveys have rendered an impressive breadth of information about Russian enterprises in transition. Even more important, this work has allowed scholars to isolate conditions that appear to be conducive to restructuring. The emerging common wisdom is that restructuring is more likely to take place in enterprises where outsiders are in control or play a significant role in management decisions, and subsidies from the state have been substantially reduced or eliminated thereby replacing the patron-client relationship with the government with an arms-length relationship. Over time, these assumptions have taken on a predictive character. The presence or absence of these conditions is not an either/or proposition but rather a more/less proposition. "More" presence increases the likelihood that the enterprise will restructure. "Less" presence strongly suggests an inability or unwillingness to restructure.

Extended case studies of Russian enterprises are relatively rare. Their value lies in the enhanced ability to test and refine assumptions in response to real-life experiences. The examination of the behavior and the underlying motivation of economic actors at a specific enterprise in great detail helps to expose the weak points in the prevailing common wisdom about enterprise behavior. Case studies complement survey work by providing greater depth which allows for a fuller understanding of the complexity of the situation for Russian enterprises.

Restructuring in the Russian Context

The Soviet legacy has endowed Russian enterprises with a very specific organizational structure which is fundamentally incompatible with the market. During the Soviet period, enterprises fulfilled both productive and social functions. Not only did they produce goods of value, but they also provided (or helped in providing) housing, child-care, medical care, and even foodstuffs for their workers. The enterprise filled the gap created by the absence of functioning markets for these goods and services. The paternalism of enterprise management toward workers and the corresponding lack of initiative on the part of workers went beyond what was dictated by institutional constraints. The roles became so deeply ingrained that they went unquestioned.
Similarly, the managerial system that grew up was strongly hierarchical, with clearly defined and non-debatable roles for the participants. Within the enterprise, power was concentrated in the person of the general director. The principles of one-man management (edinonachalie) left little room for subordinate managers to question the orders of the general director. The general director was hardly free to act on his impulses: he was, like his subordinates, obligated to obey orders from above. His hierarchical superiors were officials from the industrial ministries and the Communist Party, who controlled such matters as the production profile and the labor force. This patron-client system was reinforced by mutual dependence. The general director relied on ministerial and Party officials to break logjams in the supply networks, whereas the general director was relied upon to meet the production targets established for his enterprise in the plan.

The general director and his subordinates often had to scramble to meet production targets. Failure to do so was not excused by the non-delivery of key inputs. Instead, Soviet managers were expected to take whatever steps were necessary to satisfy the plan. Frequently this entailed the use of intermediaries (the so-called “tolkachi”) to find and acquire the needed inputs. Such behavior was technically illegal in that such goods could sometimes be acquired only through second economy channels, but legal niceties were ignored by all in the pursuit of the higher goal of fulfilling the plan.

The market assumes a high degree of self-reliance and a willingness to take risks. While the administrative-command system did not breed passivity on the part of the managerial cadre, it rewarded a type of initiative that was quite specific to the command economy. These skills were less important in a market context. The skills that were important, such as assessing market position and designing the production profile accordingly, were not developed during the Soviet period. Enterprise management was not permitted to question the parameters set by the plan; its task was to achieve the goals set forth.

The role of the state in a market setting is radically different from its role in a Soviet-style economy. The market requires the state to play a facilitative rather than a dictatorial role in economic transactions. It presumes that economic actors are independent and, while they may develop relationships of mutual dependence, these are sustained by the desire for profits or increased market share and not by commands from governmental or political authorities. In the contemporary context, striking the appropriate balance in the role of the state has become increasingly difficult.

The transition effected a radical change in expectations. Enterprises were expected to focus almost exclusively on their productive functions. Many enterprises transferred their non-productive assets — the so-called “social assets” -- to municipal control. Workers could no longer look to the enterprise to take care of non-work-related needs. Instead, workers were expected to assume greater control over their own lives. The collapse of the ministerial system and the end of any
pretense at a comprehensive national plan for the economy gave general directors virtually complete
control over their enterprises. With privatization and the consequent transition from state enterprise
to corporate form, the general directors ostensibly answered to the shareholders. But, as is the case
for most corporations the world over, the fear of shareholders’ retribution proved to be a weak
constraint. In theory, general directors’ behavior should have been disciplined by the market,
\emph{i.e.}, by the fear of bankruptcy or other sanctions in case of low profits. In the Russian case,
however, bankruptcy has been slow to emerge as a meaningful threat.

In order for Russian enterprises to adjust to these new realities, they have had to make changes
in three basic areas: (1) corporate governance; (2) relationship with the government; and (3)
production profile (including modernization and capital investment).

\textbf{Corporate Structure}. For the most part, Russian industrial enterprises (including those that
have not yet been privatized) have been changed from state owned enterprises into joint-stock
companies of some sort. Indeed, this corporatization has been mandatory. It has given rise to a
different structure for internal governance. Shareholders elect a board of directors, and the board
members then appoint the general director. Thus, shareholders and boards of directors have
replaced ministerial and Party officials as the wellsprings of authority for enterprise management. In
theory, the board of directors (sometimes in consultation with shareholders) should make strategic
choices which are then executed by management. For privatized enterprises in Russia,
maintaining the distinction between ownership and management has been complicated by the fact that
the boards of many enterprises are dominated and sometimes even monopolized by their own
managers, and that a significant portion of the shareholders are also workers at the same
enterprise. This configuration was an outgrowth of privatization, and can be expected to change
over time, but certainly not overnight. The danger of the current situation is that the short-term
material interests in staying employed or in not antagonizing their immediate superiors may cause
these insider directors and shareholders to support top management even when the course of action
proposed is not in the best long-term interest of the enterprise. The question to be addressed in the
Russian case is whether the introduction of a new governance structure has effected any meaningful
changes in how decisions are made and implemented within enterprises.

\textbf{Relationship with the Government}. During the Soviet period, enterprise management operated
under the thumb of the government and the Communist Party. There were both negative and
positive consequences of this lack of autonomy for managers. Among the minuses was the
frustration of having production decisions made by functionaries that were far removed from the
day-to-day realities of the enterprise. Among the pluses was the absence of bankruptcy as a
constraint. The primary concern was not profitability or even revenues, but meeting the production
targets set by the plan. The government compensated the enterprise for any shortfall. This so-called
soft budget constraint gave enterprise management little incentive to operate more efficiently.
Seeking help from the state and/or the Party was bred into managers by the administrative-command system. Indeed, it was the only conceivable response.

By the time the Soviet Union collapsed at the end of 1991, the Communist Party had long ceased to be relevant for industrial enterprises. The same could not, however, be said of the government. Reorienting enterprise management to rely on the market rather than on government for guidance and, ultimately, for survival has proceeded slowly despite the introduction of reforms designed to depoliticize Russian enterprises. These include radically decreasing and even eliminating subsidies from the state, with the goal of hardening budget constraints, and eliminating the state agencies (such as Gosnab) that previously helped enterprises obtain raw materials and other supplies, thereby forcing enterprises to rely on the market. Questions remain as to the extent to which these reforms have reshaped the relationship between enterprises and government (on all levels) in Russia.

Rethinking the Production Profile. The need to reconsider what is produced and how production is organized in light of the constraints imposed by the market is the final and most obvious component of restructuring. With the hardening of budget constraints, Russian enterprises now have to live within their means. As a result, costs of production (including labor, material inputs, energy), and costs associated with obtaining capital investment have become relevant for the first time. Likewise, Russian enterprises have had to become concerned with demand for their goods. No longer can they assume the existence of customers. Imports of foreign goods have brought an end to the Soviet-era shortage economy, in which anything produced, regardless of quality, could be sold. The collapse of the administrative-command economy means ministries and other state agencies have ceased to arrange shotgun marriages between producers and customers. Instead, enterprises are free to sell to, or to buy from, whomever they please. With this increased freedom has come a proportional increase in responsibility for enterprise management. Under these new circumstances, management ought to be thinking about the size and deployment of its labor force, the discontinuation of non-profitable lines of production and the introduction of new marketable products, and the disentangling of productive and social assets.

Case Study of the Saratov Aviation Plant

The subject of my case study is the Saratov Aviation Plant (Saratovskii Aviatsionnyi Zavod or SAZ). SAZ is best known for its production of the Yak-42 civilian airliners, though it also produces other aircraft and a variety of unrelated consumer goods. I have been carrying out research at SAZ for over five years. During that time, I have been witness to the efforts to transform SAZ into a joint-stock company and to become competitive in the global aviation market.

SAZ is a good subject for in-depth study because its experiences represent a rare combination of the unique and the commonplace. For most of its history, SAZ has been a showcase enterprise.
It first became well-known for producing fighter planes that were critical to the Allied victory in World War II.\textsuperscript{24} For the remainder of the Soviet period, it led a charmed existence as part of the military-industrial complex. It retained a leadership role during the initial period of the transition, and has frequently been identified as a “pioneer of privatization.”\textsuperscript{25} Its special status and close relationship with the Soviet state and the Communist Party allowed it to privatize in early 1991, well before any legal norms had been established for the privatization of state enterprises.\textsuperscript{26} \textit{SAZ}'s unusual path to privatization left it in the fairly unique position of having all of the stock owned by \textit{SAZ} workers and managers; the state retained no equity interest. In the years that followed, however, \textit{SAZ} confronted the same problems as other industrial enterprises in Russia. The domestic market for its goods dried up, forcing \textit{SAZ} to scramble to develop a capacity to sell abroad, a function from which \textit{SAZ} management had traditionally been excluded and had been handled centrally by the ministry.\textsuperscript{27} Like most Russian enterprises, \textit{SAZ} struggled to find its way in the new quasi-market environment. By 1994, sluggish sales and cash flow problems had forced \textit{SAZ} onto a three-day work week. Even so, \textit{SAZ} has often been unable to meet its payroll, and delays of many months have become routine. Ultimately, \textit{SAZ} had to resort to periodic suspensions of production activities in order simply to survive.

According to the common wisdom that has emerged from the survey data, the conditions that are conducive to restructuring are generally absent at \textit{SAZ}. Both the management and ownership structure of \textit{SAZ} have been continually dominated (and initially monopolized) by insiders. The refusal to abandon the corporate form of closed joint-stock company (\textit{zakrytoe aktsionernoe obshchestvo} or \textit{ZAO}) clearly illustrates \textit{SAZ}'s commitment to insider control.\textsuperscript{28} The general director remains the same and, more generally, managerial turnover has been minimal.\textsuperscript{29} Although the state holds no stock in \textit{SAZ}, the tradition of close cooperation with the government persists to a considerable extent. Thus, according to the causal factors identified, we should expect to find that \textit{SAZ} has made no serious efforts to restructure. Indeed, \textit{SAZ} is a textbook example of the sort of enterprise that many commentators argue is incapable of adapting to the new market conditions.\textsuperscript{30}

At first glance, \textit{SAZ} seems to confirm the predictions, \textit{i.e.}, it appears not to have restructured. Both ownership and management of \textit{SAZ} continues to be dominated by insiders. The production profile remains unchanged; the key output is still the Yak-42 civilian airliner. \textit{SAZ}'s dependence on the state has persisted, albeit in different forms. Through the case study approach, however, a much more complicated picture is revealed. When the three elements of restructuring are examined in more depth, \textit{SAZ}'s efforts to transform itself from a traditional state enterprise into a firm capable of competing in the global marketplace become apparent.

\textbf{Ownership and Governance Structure.} The process by which \textit{SAZ} privatized, in which the Soviet government sold the assets to the workers, gave rise to one hundred percent employee-ownership.\textsuperscript{31} Since then, \textit{SAZ} has had numerous opportunities to open up to outside owners, and
has gone out of its way to avoid doing so. For example, when SAZ became a joint-stock company in 1993, the choice was made to limit stock ownership to employees. In order to encourage votes in favor of the closed form among workers (who had to approve the change in corporate form), SAZ management stressed that money in Russia was concentrated in "criminal structures," thereby whipping up fear of mafia infiltration. The prospect of legitimate outside investors that might bring much-needed capital was not raised. The monopoly of employees on stock ownership was broken in 1994, but only slightly and only for long-term SAZ business partners hand-picked by the general director, and subsequently affirmed by a majority of shareholders. Another fork in the road came with the passage of a new joint-stock company law in late 1995 which required re-registration during the first half of 1996. The law reflected the strong governmental preference for limiting the closed joint-stock company form to firms with a small number of shareholders (less than 50). The law contains an exception that allows pre-existing closed joint-stock companies to retain this form. SAZ took advantage of this grandfather clause, thereby going against prevailing government policy.

Although insiders consistently dominated the ownership of SAZ, no single individual or group held a controlling interest. Instead, ownership was widely dispersed among SAZ employees. This was by design. Prior to 1996, the charter (ustav) imposed upper limits on the amount of stock that could be owned by any individual. Stock ownership by the board members was also restricted. The purpose of including such a provision was to signal employees that privatization represented a decisive change, i.e., that management was not exchanging its de facto control during the Soviet era for legal ownership in the post-privatization era. At the time of the annual shareholders’ meeting in 1995, the nine members of the board of directors owned only 0.684 percent of SAZ’s outstanding stock.

The levels of insider ownership and insider representation on the board of directors have become routine questions when analyzing Russian enterprise behavior because it is assumed that domination by insiders tends to preserve the pre-privatization status quo within the enterprise, and thereby discourage restructuring. Outsiders represent fresh blood, in that they are not beholden to the existing managerial structure, and are perhaps better able to view the enterprise’s situation objectively.

As has been noted above, insiders have virtually monopolized stock ownership at SAZ. Similarly, until 1995, the board of directors was composed solely of top-level SAZ managers. At that time, three Moscow businessmen were elected to the board. As non-SAZ-employees, these men are outsiders, but upon closer examination their status is less clear. All three were proposed as candidates at the insistence of the general director. Three SAZ managers were “convinced” to give up their seats on the board so that these outsiders could run without opposition. All three were intimately familiar with SAZ and, more generally, with the Russian aviation industry. Two were affiliated with the Yakovlev Design Bureau (as general director and chief designer), which has
traditionally been the primary source of R&D for SAZ, and the third was the president of a marketing firm with which SAZ had been working for some time.\textsuperscript{39} Thus, while these businessmen were technically outsiders, their long-time connection with SAZ and with its general director made it unlikely that they would raise any serious challenge to his policies. Yet in contrast to the directors of SAZ who, as managers, are subordinate to the general director, these outsiders did not owe their jobs or their reputations solely to the general director of SAZ. They also brought their collective experience in the aviation industry to the table, thereby introducing new information to the discussion. This distinction between the roles of inside directors as active managers and outside directors as ratifying or vetoing strategic choices is familiar throughout the advanced industrialized world.\textsuperscript{40}

More interesting than the composition of the board is the question of how SAZ is managed, i.e., whether becoming a joint-stock company and the attendant structural changes have made any noticeable difference. Like most Russian enterprises, SAZ has a tradition of one-man management (edinonachalie). The current general director of SAZ was first appointed by the ministry in 1988 when he was only 44. He was subsequently elected by the workers and has consistently been elected to the board of directors.\textsuperscript{41} He has been singled out for praise by Westerners for his foresight and intuitive understanding of the market.\textsuperscript{42} But he is seen quite differently by his workers and by other residents of Saratov. Among these groups, who know him better, he is viewed as a prototypical “red” director.\textsuperscript{43} No one disputes his tremendous personal charisma. During the Soviet period, orders from the general director were obeyed without question, though it was understood that the general director’s freedom of action was constrained by his need to fulfill the plan and otherwise satisfy ministerial and party bureaucrats. With privatization, however, these bureaucratic masters disappeared for the most part. According to the new structure, the general director was now accountable to the board of directors and, ultimately, to the shareholders. But what did this mean in practice?

The general director himself recognized the problem. In an April 1991 interview, he commented:

“Do you think it is possible to fall asleep as the director of a state enterprise and wake up as the director of a [privatized] collective enterprise? This sort of metamorphosis is possible only on paper. In real life, everything is more complicated ... Most difficult is to change people’s psychology.”\textsuperscript{44}

During the period immediately following privatization, there is little evidence that the presence of the board and/or the shareholders acted as a constraint on the general director. During 1992 and 1993, both his private remarks and his public behavior indicated that he felt himself to be beyond reproach. He assumed and enjoyed the almost complete trust of the worker-shareholders. As a result, the fear of shareholders’ rejection of his policies, which could have acted as a constraint, was completely
absent. When discussing proposals for large-scale joint ventures which by law required shareholder approval, he was dismissive of this requirement because he felt confident that anything he proposed would automatically be approved by the worker-shareholders. He was right. Workers might have occasionally grumbled privately about his decisions, but they almost never voiced these complaints in public, nor did they vote against him or his policies. For example, in 1993, many workers were concerned about his decision to hold firm on the price of Yak-42s in negotiations with China, fearing that this might cause the entire transaction to collapse. In private conversations, mid-level managers complained about what the general director's penchant for travelling abroad, noting that no sales had yet to result from one of these trips. But no one grilled the general director on this (or any other topic) at the annual shareholders' meeting or at any other public venue. In fact, the general director was the biggest vote-getter among the candidates for the board of directors, which he took as a strong personal endorsement.

The reticence of the SAZ shareholders had several sources. Perhaps the least important was a fear of being fired, which would seem to be the most likely. In the initial post-privatization period, SAZ management had not yet begun downsizing, and was still insistent that it would not be necessary. When questioned, workers and mid-level managers did not identify fear of retribution as a reason why they did not speak out. Instead, their motivation was more amorphous. They were surprised by my question, as if challenging the general director was simply beyond the pale. Their responses were typically some variation on “that is not how we do things here.” To some extent, their behavior evidences respect for the office built up over the decades of Soviet-style edinonachalie. Their instinct was to obey orders, not to question their legitimacy. The striking public speaking skills of this particular general director were also relevant, as was the absence of alternative candidates for the top position.

The situation has not remained stagnant. As conditions at SAZ deteriorated due to the lack of orders for planes, and a reduced work-week was introduced and workers began to be furloughed and laid off, workers and mid-level managers became more strident in their complaints and more willing to assign blame publicly to the general director. The change has come gradually. In the summer of 1994, SAZ workers threatened a sit-down strike over delays in wage payments. SAZ management was able to forestall a crisis with promises to pay all back wages and with claims of soon-to-materialize orders for Yak-42s. A year later, such promises fell on deaf ears. In September 1995, the SAZ workers staged a “meeting” to protest late wage payment. This amounted to a one-day strike. By shutting down a key bridge, they were able to paralyze all activity in the Zavodskoi region of Saratov where SAZ is located. Promises from SAZ management were not sufficient to quell the discontent. The oblast' governor had to step in and guarantee the payment of back wages.
The non-payment of wages was, of course, the catalyst for these public events. But the dissatisfaction of the worker-shareholders went far deeper. By the summer of 1994, they were ready to air their complaints about the general director. They held him personally responsible for the lack of orders for planes, and belittled his strategy of seeking foreign markets (in light of the inability of Russian airlines to pay for planes) as simply an excuse for foreign travel. It became increasingly difficult for the general director to justify his behavior. His rosy scenarios for the future of SAZ in which they would return to full production were dismissed as fairy tales (skazki). The worker-shareholders grew immune to his rhetorical tricks, and privately referred to him as a “snake charmer” (zaklinatel’ zmei). By the spring of 1996, relations had deteriorated to such a point that a petition to recall the general director (and the other board members) was being circulated at SAZ. A public meeting was held at which the general director was held up to ridicule and was embarrassed through a series of personal questions. Only the disorganization of the shareholders and the absence of an obvious replacement saved his job.

As a result of these criticisms, the general director began to modify his behavior in two somewhat conflicting ways. He cut back on his foreign travel, and declined invitations that were not completely work-related. In private conversations, he candidly admitted that he did so in order to placate the workers. He also began to spend less and less time in Saratov, preferring to work out of the Moscow office of SAZ. Indeed, in 1996, for the first time since privatization, the general director did not attend the annual shareholders’ meeting, preferring instead to travel to China as part of an official presidential delegation. On one level, his decision can be seen as part of a strategy to increase SAZ’s business, since potential customers are unlikely to be found in Saratov. His behavior can also be seen as a way of physically distancing himself from his critics. Either way, there can be no doubt that the relationship between the general director and the worker-shareholders has undergone a fundamental change in the years following privatization. Given that almost all SAZ shareholders were also workers, it is sometimes difficult to determine in what capacity they are acting or to which set of concerns the general director is responding. But this overlapping of roles is common to many Russian enterprises. SAZ provides a clear and specific example in which, notwithstanding their close proximity and insider status, crises induced by the transition to the market have caused worker-shareholders to shift their behavior vis-a-vis the general director, namely to criticize publicly his management of the enterprise.

A third modification, forced on the general director from the outside, was aimed at restricting his authority. Since privatization, he had consistently served as both general director and chairman of the board of directors. The new joint-stock company law forbids these two positions to be held simultaneously by the same person. The SAZ charter has been changed and, following the shareholders’ approval of the new charter in April 1996, the general director stepped down as
chairman of the board. Interestingly, this formalistic change in titles has produced few changes in the balance of power among managers.

Although the precondition of outsider influence was absent at SAZ, critical changes in internal governance nonetheless took place during the five-year period of the study. To be sure, change did not come quickly. Nor did it come in response to pressure from outside owners. Instead, change came as a result of gradual shifts in worker-shareholders' expectations and market pressures.

**Relationship with the Government.** An enterprise like SAZ cannot easily be disentangled from the government. As a prominent enterprise within the military-industrial complex, SAZ has enjoyed close ties with the Soviet government. Indeed, these connections were exploited to convince then-Prime Minister N.I. Ryzhkov to liberate SAZ from state control by selling the assets to SAZ workers.

Like other large enterprises, SAZ fulfilled many state functions during the Soviet period, and changes have come slowly. SAZ was responsible for housing and other social services. It did not transfer these assets and the related responsibilities to the municipal government (although the idea was much discussed) because it did not believe that the municipality had the resources necessary to maintain the assets. There are many other examples of putative state functions that SAZ continued to perform. For instance, it was still held responsible for organizing polling stations in the area adjacent to the plant. This is a carryover from the days when the Communist Party committee within the plant would exercise this function. The partkom is defunct, and SAZ now has to pay its workers to prepare the 12 polling stations and to organize the voting on election days. Between December 1995 and 1996, for example, Saratov has had elections for the State Duma, the oblast' duma, the Russian presidency (including a run-off), oblast' governor, and Saratov mayor. For this work, SAZ receives no reimbursement from the state, either directly or indirectly in the form of tax breaks. When questioned as to why they continue to fulfill these state functions, without exception managers say that SAZ has no choice; they fear the state's retaliatory capacity. When questioned about the specifics of what the state might do, the list always begins with the undermining of supplier relations. Thus, SAZ is concerned about state interference in market-based relationships, and not primarily with maintaining subsidies. The theme of such conversations is that the influence of the state is woven into every aspect of SAZ's business in ways that are never acknowledged or articulated.

SAZ tried very hard to liberate itself from the bear hug of the state. In the years immediately following privatization, the rhetoric of the general director and his deputies stressed the importance of not depending on the state. SAZ began the conversion process in 1988, and so was prepared for the sharp decline in state orders that came in the late 1980s and early 1990s. Both privately and publicly, SAZ management stressed the need to look outside Russia for new markets. In March 1993, the SAZ board of directors identified the opening of foreign markets as its top priority.
Relying on Russian airlines for sales was deemed too risky. The future of Aeroflot was in question, and no Russian entity seemed to have the resources necessary to buy a plane. Within the former Soviet Union, SAZ primarily sold planes through barter. Most of these planes went to SAZ’s suppliers and, in return, SAZ’s debts were forgiven and the relationship was saved. Except for sales to Chinese airlines in 1991-93, SAZ was largely stymied in its efforts to penetrate foreign markets during this period.

To be successful, depoliticization must be a two-way process. In addition to the enterprise relying for survival on the market rather than on the state, the state must also cease interfering in the business of the enterprise. One way of forcing enterprises to become self-reliant is to stop the flow of subsidies, i.e., to cease bailing them out when debts exceed revenues. As a general matter, determining whether an enterprise receives state subsidies is not easy. Subsidies have become increasingly opaque. They have taken on new forms, such as below-market-interest loans funneled through commercial banks, that are not always immediately visible.

SAZ is no exception. Direct subsidies have clearly dropped off. Between 1988 and 1993, state orders decreased from 55 percent of production capacity to less than 5. Support from the state for reconstruction and renovation projects has also dried up. For example, a plan to automate a portion of the production line, begun in the late 1980s with great enthusiasm in collaboration with the Ministry of Science, now stands abandoned due to lack of capital. SAZ continues to receive some R&D support from the state for its work on the vertical take-off plane, but even this is a fraction of what it would have been in the Soviet era. In response to the questions about direct and indirect state subsidies that I have been asking since 1993, the general director and his deputies consistently deny that SAZ receives subsidies. Their denials are vociferous, and laced with pride at their ability to survive independent of the state. Although I have been able to uncover several instances where SAZ received loans at below market rates between 1993 and 1996, these loans were informally collateralized by the debts owed to SAZ by the Russian government, which it refused to pay. The very fact that the top managers viewed getting help from the state in negative terms, rather than as an entitlement, indicates an important shift in thinking.

The attitude of the general director toward state support began to change in the summer of 1996. Through his travels abroad and his contact with foreign businessmen, he had come to understand that the major aviation companies, such as Boeing and Airbus, receive generous support from their governments. He began to question why the Russian government had done so little to help its domestic aviation industry, and had opened the Russian market to foreign competitors. Indeed, in 1994, SAZ’s efforts to finalize a sales contract with a Chinese customer were undermined when the Russian government procrastinated on signing an inter-governmental trade agreement with China. Over time, the level of frustration increased. Two events catalyzed the general director into action. First, the Russian government indicated that it was considering providing assistance to the
Dutch aircraft builder, Fokker, in connection with the effort by a Russian consortium (including the Yakovlev Design Bureau) to acquire Fokker. At a Moscow press conference in August 1996, the general director said: "I wish well to my competitor, Fokker ... The puzzling thing is why we cannot find money for Russia, but we seem to have the money to send there." He noted that the amount of money in question, $216 million in Western bank credits to be backed by the Russian government, would be sufficient to resolve the financial problems of at least three Russian aviation plants, including SAZ.

The second event that crystallized his thinking was Aeroflot's September 1996 decision to buy planes from Boeing. Although Aeroflot had been flying Boeing planes for several years, the SAZ managers consoled themselves with the knowledge that these planes were only leased. They assumed that when Aeroflot began to buy planes again, it would look within its own borders. Beginning in the fall of 1996, the SAZ general director spoke out publicly and challenged the Russian government to support the domestic aviation industry more actively. The Aeroflot decision served as something of a wake-up call for the Russian aviation industry more generally, and provoked an increased in lobbying and other activities. Aeroflot attempted to placate the Russian manufacturers by agreeing to purchase 20 Il-96 planes produced in Voronezh. This decision, however, did little to console the makers of the Yak-42 in Saratov.

Subsidies are, however, only one of the mechanisms used by the state to exert influence over the activities of enterprises. In the case of SAZ, at the same time it was seeking to break free of state control, the state continued to influence and sometimes dictate the identity of buyers. Through 1994, the ministry carried on the role it played during the Soviet period of identifying buyers. As in the past, SAZ was obligated to negotiate with these buyers, which consumed the time and energy of top management. Although the ministry could no longer prescribe the terms of the sale, its recommendations still had to be taken quite seriously. In an interview published in the factory newspaper in early 1994, the general director pointed out that, during 1993, "the state [acting through the ministry] placed orders for 11 planes, signed contracts for 4 planes, and paid only for 40 percent of these. ... We have had to reorient the rest of the planes to the Chinese and Middle Eastern markets." The inability of the buyer to pay would often become apparent only after the plane had been fitted to the specifications of the buyer. In the past, SAZ had been little troubled by such problems because the ministry would simply provide the necessary subsidies to the buyer. With the hardening of budget constraints, such payments were no longer possible. Through no fault of its own, SAZ remained locked into the old pattern of doing business. It could not refuse the "suggestions" of the ministry, given that the ministry still controlled the certification process for the aviation industry. SAZ was eventually able to free itself from this arrangement, but not before it incurring substantial losses.
In order to generate capital, SAZ sold military goods abroad in late 1993. The goods were sold through the Russian state licensee for such activities, Rosvooruzhenie, for approximately $26 million. SAZ has had great difficulty in recovering these funds. Different explanations of the reasons for Rosvooruzhenie's failure to pay have been advanced. Initially, the general director said that Rosvooruzhenie had reorganized itself into a new legal entity (which was quite common in 1993-94) and that its management denied liability for debts of the predecessor entity. Legally, such a claim was nonsensical, but SAZ's general director did not regard appealing to the arbitrazh court as feasible. He was convinced that the problem could only be resolved through personal diplomacy. By calling on the ties that remained between SAZ officials and the Russian government, the general director succeeded in having the debt acknowledged by Rosvooruzhenie. But SAZ remained unpaid because the debt had not been acknowledged by the Ministry of Finance and made part of the state budget. Once again, the general director and his deputies called on the traditional political patrons of SAZ in Moscow for help in getting this debt paid. The money came, but too slowly and irregularly to allow SAZ to satisfy its payroll and other financial obligations. By the fall of 1995 (almost two years after the sale), SAZ was still owed $21 million.

By September 1995, the situation at the plant had reached a crisis point. The general director took advantage of the workers' rage (reflected in the one-day strike discussed above) to mobilize them for a protest march and demonstration. The organization of the protest bore an eerie similarity to the staged mass events of the Communist era. Management worked closely with trade union officials. SAZ's poster shop prepared placards, which criticized the Russian government for not paying its debts to SAZ and blamed the government for the hardships being experienced by workers whose wages had been long delayed. The placards did not, however, demand subsidies. The workers, led by the general director, the chairman of the trade union committee and the local deputy to the State Duma, marched from the plant to the central square in Saratov, which directly faces the headquarters of the oblast' government. They were accompanied by vans equipped with loudspeakers which informed bystanders about the many contributions SAZ had made to the country. In order to boost the number of participants, managers were ordered to march as well. After the speeches were over, buses from the plant took the workers back to the plant, just as they used to do for May Day or Revolution Day celebrations. Given the realities of post-Soviet Russia, SAZ had little choice but to behave in a politicized manner in order to be paid for a legitimate debt.

In the wake of the strike and the protest march, a meeting was held at the Palace of Culture (Dvorets kul'tury) of SAZ, at which the governor of Saratov oblast' attempted to address the concerns of SAZ workers and management. The atmosphere was openly hostile. The governor had little choice but to promise that workers would be made whole through the payment of back wages, and to promise his assistance in recovering the amounts owed to SAZ. According to SAZ managers, the money to pay wages came not in the form of a direct subsidy from the oblast' government, but
from loans made by local commercial banks to SAZ at below-market rates at the request of the governor. According to SAZ management, these loans would be repaid when SAZ recovered the amounts owed to it. This circularity of debt is, of course, a familiar story in post-Soviet Russia.

The loans were a stop-gap measure. Although SAZ did sell several planes in the first half of 1996, the sales were to Gazprom which paid not in cash but in its own accounts receivables. With some considerable effort, SAZ was able to trade these notes for items of value, but very little cash came out of these transactions. As a result, the first half of 1996 was marked by delays in wage payments and general worker-shareholder unrest. By May, a petition was being circulated calling for the recall of the general director and the board of directors. A group of shareholders then wrote a letter to the oblast' governor asking for his help in resolving the problems at SAZ. The governor responded by ostensibly firing the general director. An announcement was broadcast on an oblast'-wide radio station that the general director of SAZ had been removed (snyal). At that time, the general director was in Cuba on a business trip, and was completely out-of-touch with Saratov due to the inadequacies of the Cuban telephone system. Upon his return, he refused to accept this dismissal and, in fact, the dismissal remained an empty threat. Legally, the governor's action was totally baseless. SAZ was, of course, a completely private entity, and no Russian law gave the governor the authority to dismiss its general director. But the very fact that the oblast' governor believed he had the power and authority to fire the general director of a completely privatized plant is compelling evidence that the legacy of the Soviet administrative-command system lives on. In a remark published in the local paper, the governor suggested that SAZ could survive only by being re-nationalized. Although the general director kept his job, he did modify his behavior vis-a-vis the governor. The level of deference increased, at least superficially. The general director resumed the practice of notifying the governor in person of any international travel, which he had ceased doing when SAZ privatized. The general director was also forced to endure a public meeting, chaired by the governor, at which the SAZ worker-shareholders heaped abuse on him. For someone accustomed to public adulation, the meeting was deeply humiliating and illustrated the extent to which the tables had been turned.

The relationship between SAZ and the government has zigzagged since its privatization in 1991. SAZ has made a good-faith effort to survive on its own, but has had to deal with interference from the oblast' government, culminating in a Soviet-style attempt to fire the general director. The relationship with Moscow has also had its ups and downs. SAZ has been unable to recover on legitimate debts owed to it by the Russian government. If SAZ's efforts to sell its planes abroad had met with more success, these unpaid debts would undoubtedly recede in importance. SAZ management must answer for these failures, but cannot be held responsible for the recession in the aviation market. On a superficial level, the general director's public calls for increased state
support for the aviation industry may seem to indicate a low level of depoliticization, but the reality is considerably more complicated.

Rethinking the Production Profile. At the most basic level, the production profile of SAZ has not changed since privatization. At that time, the Yak-42 civilian airliner was considered to be the key output, and it remains so. More importantly, SAZ management continues to be firmly committed to being part of the aviation industry. Within these parameters, however, SAZ has experienced considerable changes in how it goes about producing, the precise nature of the product mix, and to whom it markets and sells its output.

The critical point to be made is that SAZ management has not sat back and waited for opportunity to find it, nor has it relied blindly on state subsidies. Instead, it has been searching for its place in the global aviation marketplace. Part of this effort has been devoted to marketing the Yak-42 to potential new customers both abroad and within Russia. But SAZ management also sought to establish relationships with foreign and domestic partners that would yield new production opportunities. Closer to home, the shape of SAZ has been altered dramatically. In particular, the social assets have been spun-off to a subsidiary (Zhil'e SAZ), and the labor force has been reduced and reallocated.

SAZ's External Relations. In terms of its external relations, the years since privatization can be broken down into three relatively distinct periods, during which SAZ management pursued different strategies. The first few years (1991-92) can best be regarded as an exploratory period. As a result of its privatization and the opening of the Russian economy, SAZ was finally free to set its own agenda and management seemed to revel in this new-found independence. Management aggressively pursued opportunities to sell Yak-42s to China, and succeeded in selling six planes in 1991. They continued to pursue the course of defense conversion set in the late 1980s, and to work on new product development. One project flight-tested during this period was the Yak-54, a new sport or training plane that would seat two people. SAZ management also began to work with the Center for Defense Conversion at the Institute of USA and Canada (ISKAN) on questions of internal management and potential joint venture partners. ISKAN arranged the first trip to the US for SAZ's general director, during which he visited Boeing and other American aviation plants. Other foreign trips followed. SAZ experimented with leasing Yak-42s to airlines in geographic regions where its planes were unknown, such as East Asia and Latin America. During this immediate post-privatization period, SAZ exhibited great confidence in its ability to succeed on its own.

As the initial success in China turned out to be a flash in the pan, SAZ management grew discouraged about its ability to survive on its own in what it quickly discovered was an incredibly competitive global aviation market in regional (short-haul) civilian airliners. By 1993, the excitement of independence was giving way to nervousness about the ability to survive over the long run. In response, SAZ management sought strategic allies. Over the next two years, SAZ worked in
tandem with the Yakovlev Design Bureau (Opyno-konstruktorskoe biuro imeni A.S. Yakovleva). The relationship was, of course, pre-existing but grew deeper and more comprehensive. The institutional closeness of SAZ and the Design Bureau was paralleled by a personal bond between the general director of SAZ and the chief designer (general'nyi konstruktor) of the Design Bureau, who were of approximately the same age and background.

Together, they created the Yak Corporation (Korporatsiya Yak) which served as a vehicle for joint ventures and other investments. They simply contributed assets to the Yak Corporation to support various projects on a case-by-case basis. A number of transactions were contemplated. In late 1993, for example, two Fortune 500 companies proposed a joint venture with the Yak Corporation. Negotiations founded and then collapsed over a number of issues, including valuation of Yak-42s. In 1994, a joint venture was signed with IAI, an Israeli company, for the joint design and production of a new 19-seat executive jet, the Galaxy. In anticipation of promised investment, SAZ spent its own resources to retrain its workers and retool the production line. The Galaxy bore some resemblance to the Yak-40, which SAZ produced during the 1970s, and would have been a good compliment to the Yak-42. Before serial production could begin, however, the joint venture fell apart. SAZ officials placed blame on the Design Bureau for failing to complete its work in a timely fashion. Not surprisingly, the Design Bureau found fault with SAZ, claiming that IAI reneged because SAZ had not met the production schedules.

The finger-pointing that accompanied the collapse of the joint venture undermined the foundation of the relationship between SAZ and the Design Bureau. Perhaps the breach was inevitable, given that it was a partnership where the parties were less than entirely equal. The Design Bureau’s economic resources and political connections dwarfed those of SAZ. Even more potentially incendiary was the power of the Design Bureau to award to, or withhold from, SAZ the production work that is its lifeblood. To some extent, therefore, the relationship was one of patron and client. The unravelling of the joint venture revealed that the Design Bureau had protected only its own financial interests in the joint venture agreement. In the words of the SAZ general director, "as a result of a vulgar approach to the commercial aspects of the contract, the idea [of the joint venture] was ruined." SAZ management had assumed that the Design Bureau would look out for both of them in structuring the joint venture. Indeed, SAZ was not even a party to the agreement. Just as SAZ management was struggling to absorb that information, it learned that the Design Bureau had awarded the lucrative contract to build Yak-130 fighter jets to another aviation plant. The effect of what was perceived by SAZ as a double-barreled betrayal by the Design Bureau was to destroy the personal relationship between the two principals. As an entity, the Yak Corporation lived on, but SAZ ceased to be an active participant.
Despite his anger over the Israeli joint venture, the general director of SAZ had not criticized the Design Bureau publicly because he did not want to risk destroying the institutional connection completely, thereby leaving SAZ out in the cold. In a private conversation in July 1996, he repeated that he could not safely vent his feelings publicly. Less than a month later, the SAZ general director held a highly-publicized press conference in Moscow at which he went on the record opposing the plans of the Yak Corporation, spearheaded by its chief designer, to acquire Fokker. He made it clear that he had not been consulted. In response to a question as to the likelihood that such an acquisition would take place, he responded:

"I proceed only from media reports. I have no access to official documents. I know just as much as you do reading the papers. But being the head of an enterprise, the Saratov Aviation Plant, as someone who is fighting for the market, for investment and for partners, I cannot stand idly by. I have to react to what is published ..."  

He was given several opportunities to criticize the Design Bureau and specific individuals, but he pointedly refrained, noting that such comments would likely be of little interest to journalists. But at the press conference and in subsequent print interviews, he left little doubt as to his feelings.

As the Design Bureau has receded in importance, SAZ has pursued a new strategy that mixes a strong sense of individualism with reliance on domestic partners, a continued exploration of foreign markets for SAZ output, and calls for the Russian government to demonstrate its commitment to the domestic aviation industry. The difficulties experienced by SAZ and other Russian aviation firms have contributed to a strong push by industry leaders for the creation of an industry-wide financial-industrial group ("FIG"). SAZ management has participated in such discussions. Several proposals have been put forward, and such FIGs are beginning to take shape, but SAZ has yet to commit formally to membership in any group. At the same time, SAZ’s first priority continues to be obtaining orders for its planes. Among the countries visited by the general director during 1996 in search of orders for Yak-42s were China, Taiwan, Cuba, and Iran. Domestically, multiple Yak-42s were sold to Gazprom during 1996. These planes were outfitted for executive use, a marketing strategy initiated a year earlier. SAZ won the first foreign sales (to the United States) of its new two-person training plane, the Yak-54. During this period, the general director also renewed SAZ’s commitment to the development of the vertical take-off plane, known as the EKIP. During 1994, he travelled to the United States and elsewhere to talk with possible investors, but then put the project aside in favor of working with the Design Bureau (which is not involved in the EKIP). Beginning in mid-1995, his enthusiasm for the project returned.

Only time will tell whether this most recent strategy will succeed. For purposes of the analysis of restructuring, the pattern is more important. In contrast to the predicted behavior of an insider-dominated firm with close ties to the government, SAZ has consistently demonstrated initiative in seeking out new partners and alliances. Moreover, it has demonstrated a willingness to
reconsider and shift strategies when necessary. These are not the hallmarks of a firm that is waiting for handouts from the state, but of a firm trying to adjust to the new market environment.

SAZ's Internal Relations. Turning the focus to the internal development of SAZ, the pattern of pushing forward gradually is again apparent. Looking first at the critical question of manpower, SAZ has put aside the attitudes of state socialism. The shift in thinking did not come automatically with privatization. Indeed, in an interview published in the factory newspaper a year after SAZ privatized, the general director's rhetoric had changed little. He promised that "despite the profound structural changes at our enterprise, none of our workers or engineers will end up on the other side of the factory gates." He regretfully admitted that "some departments (otdely) may have to be eliminated," but contended that no one "would be tossed aside arbitrarily," and that anyone affected would be given a "choice of whether to remain with the collective or to search for happiness elsewhere." By 1994, however, SAZ management was forced to face the inevitability of layoffs. By the end of 1996, the work force had been reduced by one-third from its pre-privatization levels. Although some layoffs did take place, most left voluntarily in search of higher wages. In all likelihood, these official figures understate the actual reductions. Many workers who remain on the books formally, but who have mostly been on furlough since mid-1994, assume that they will never be recalled. Indeed, the efforts of the general director to convince them of the rosy future just ahead for SAZ have become a subject for ridicule.96

SAZ management has taken advantage of the work slowdown to reconsider the labor distribution throughout the plant. New plans have been developed for how to use the remaining workers more efficiently. Some production shops (tsekhy) have been merged in order to eliminate duplication of effort. The automation of certain production functions and the computerization of many accounting and inventory functions has rendered certain positions redundant, and these have been eliminated. SAZ's plans to further increase the level of automation have had to be put on hold due to the lack of capital.

The structure of management has also been the subject of keen debate. Managers studied organizational charts from Western companies, picked out what was relevant, and adapted it to their circumstances. The resulting changes represented a compromise that did not go as far as some demanded, but seemed to go too far for others. The explicit goal was to shift both the institutional structure and the underlying attitudes from those of a Soviet-era state enterprise to those of a market-based firm. SAZ recognizes this to be an ongoing process.

SAZ has struggled with the question of what to do about its social assets. At the time of privatization, SAZ (like other Soviet-era enterprises) presided over a virtual empire of housing, childcare, recreational, and medical facilities.97 As a result of privatizing before clear norms had been established, SAZ retained more control over these assets than many other enterprises. Initially, SAZ managers strongly resisted the suggestion that these assets ought to be somehow detached from
productive assets. They saw them as a source of pride for SAZ workers, rather than as a drain on profitability. At the same time, no one at SAZ -- not even the deputy director who was responsible for these social assets -- knew the percentage of SAZ's revenue that went to maintain this empire. When pressed, managers gave estimates that typically ranged around 40 percent. But such issues did not concern them in the early days of privatization.

The defensiveness receded gradually. Over time, SAZ managers and shareholders began to understand that potential investors might look askance at the extent to which these non-productive assets had been integrated into the financial obligations of the plant, and would be concerned that their production-related investment might be diverted to them. The realization came more quickly to management. Worker-shareholders found it hard to let go of the benefits of the old system. Often annual shareholders' meetings degenerated into question-and-answer sessions related to housing problems. An appreciation of the deeply ingrained character of workers' expectations led SAZ management to retain the housing stock. The general director and his deputies frequently remark that even if the housing would be transferred to the municipal authorities, SAZ workers would continue to come to them out of habit when repairs were needed. They have seen little point, therefore, in transferring legal title. Indeed, SAZ management initially resisted privatizing the housing stock, and set up an office to assist apartment dwellers with privatization only in 1995. As a rule, when former SAZ apartments are privatized, the residents sign a maintenance contract with a subsidiary of SAZ. In the past, repairs were done for a nominal charge; SAZ management is working to raise the charges to market rates, but fears that doing so in one fell swoop would be too great a shock for the residents.

As a general matter, SAZ has pursued a mixed strategy of turning over some assets to municipal control, while retaining a firm grip on others. The criteria for distinguishing between the two categories was the importance of the assets to the daily lives of workers. To be blunt, the more workers depended on a service and so were likely to complain about its absence, the more tightly SAZ held on. Chief among the retained assets was the housing. The first to lose support from SAZ were the schools and medical clinic. SAZ had never believed itself to be the owner of these facilities, and had previously contributed to them only out of a sense of moral obligation. As resources dwindled, such expenditures could no longer be justified. Responsibility reverted to the municipality, though the school directors and the chief of the clinic continued to pester SAZ for money. SAZ did not divest itself of its sports facilities but, for the most part, they declined due to the lack of maintenance. Child-care facilities were a dicier question. The male-dominated top management was slow to appreciate the tremendous importance of child care to workers. Although SAZ closed seven kindergartens in the two years following privatization, the other 13 remained open and the preferential rates for SAZ workers were kept in place.
During 1993 and 1994, top-level managers explored the idea of separating the social assets from the productive assets. At the annual shareholders' meeting in March 1995, a proposal to spin off the social assets into a wholly-owned subsidiary, a joint-stock company known as "Housing SAZ" (Zhil'ë SAZ), was approved. Although legally independent, Zhil'ë SAZ has had little freedom to act on its own. The general director of Zhil'ë SAZ continued to serve simultaneously as the deputy director of SAZ for social questions. For the first two years of its existence (and for the foreseeable future), Zhil'ë SAZ survived solely on the basis of subsidies from SAZ. Its own revenues from repairs of privatized apartments within the SAZ complex and rent paid on retail space were insufficient to compensate for the immense costs of running the social sphere. Zhil'ë SAZ (like SAZ before them) was not legally entitled to recover the market cost for energy or housing from residents. Thus the operation inevitably runs at a deficit. On the positive side, at least now that the assets have been spun off, the amount being diverted from capital reconstruction and other production-related expenses to the social sphere can be better quantified.

Looking generally at SAZ's behavior since privatization with regard to its own internal structure, it is clear that efforts have been made to adjust to the new realities of the market. Perhaps SAZ management could have made better choices or could have moved more quickly. But the changes required -- both in terms of structure and attitudes -- were profound and could only be absorbed gradually.

**Reconsidering Restructuring in Light of the Case Study**

SAZ represents a prototype of the Russian enterprise that prevailing common wisdom predicts would not engage in restructuring. Neither of the conditions identified as conducive to restructuring was present at the time of privatization, nor did they emerge during the years that followed. Since its privatization, SAZ has been controlled by insiders and its relations with the state continue to be highly politicized. This leads to a prediction of complacency on the part of SAZ. Superficially, SAZ might seem to bear out the prediction. The basic facts are inescapable. The production profile has remained largely unchanged since privatization. The board of directors remains dominated by insiders; outsiders have no voice in enterprise management. The government (on both the national and oblast' levels) has periodically stepped in to help the plant through financial crises. Yet by examining the activities of the plant in great detail over an extended period it becomes clear that SAZ has made considerable effort to adapt itself to the market environment and to liberate itself from the routine behavioral patterns of state socialism.

**Reconsidering the Assumptions.** Theories are, of course, not based on single case studies, and the empirical richness of case studies can be expected to draw out nuances that are not apparent at a
higher level of abstraction. But when a case so completely confounds the common wisdom, it is important to step back and consider the underlying assumptions.

**Role of Outsiders.** Notwithstanding the absence of outsiders among ownership and management of SAZ, restructuring took place. This suggests that the importance of outsiders may be overstated. Implicit in much of the scholarly writing on enterprise behavior during the transition in Russia are two inter-related assumptions about how managers think and behave. The first is that carry-over managers were either incapable of understanding the need for profound restructuring as a result of market reforms or incapable of articulating and implementing the necessary changes. The second is that managers from the outside, i.e., those who had spent their work lives at other enterprises, would undoubtedly do a better job.

The SAZ case study suggests that this blanket condemnation of carry-over managers is overstated. In analyzing restructuring, it is important to distinguish between not trying and not succeeding. Many commentators paint with a broad brush and assume Russian managers are not interested in the survival of their plants. This was not true at SAZ. SAZ management clearly understood the need for profound change, and even instituted internal reforms in anticipation of the introduction of macro-level market reforms. Given the uncertainties of the late 1980s when SAZ began its program of defense conversion and opening foreign markets, these actions were quite risky for individual managers and for SAZ as a whole. The risk-taking strategy continued throughout the post-privatization period. Moreover, the changes they made did not represent minor tinkering, but major overhauls. This is particularly evident in their strategy vis-a-vis external relations. Some commentators might argue that specific decisions have been less than optimal. SAZ managers themselves recognize that they have made mistakes. But to be fair, even with the advantage of hindsight, it is difficult to say precisely what SAZ could have done that would have guaranteed success.

As to the second assumption, perhaps SAZ would have performed better if it had been turned over to outside managers. This is now a moot question. Outsiders have an apparent advantage in that they begin with a clean slate. Unlike carry-over managers, they are not burdened by loyalties and other types historical ties within the enterprise. But it often seems that the outsider is presumed to be perfectly trained to operate in the transition economy and impervious to opportunistic impulses. A more realistic assessment recognizes that the lack of detailed personal knowledge of how the plant operates and the unfamiliarity with long-term suppliers can put the enterprise at a serious disadvantage. This is particularly true in the transition context when obtaining purchase orders and/or extensions of debt rest more on informal personal ties than on arms-length negotiations.

**Hard Budget Constraints.** In analyzing the likelihood of restructuring, there has been a tendency to equate depoliticization with hard budget constraints. In the words of Blasi, et al., "managers will not change their ways radically if they feel no hard budget constraint: they will have
no incentive to restructure if the government has not set a tough limit on the aid it will give." The assumption is that eliminating subsidies will provide the incentive necessary to change behavior. But perhaps too much emphasis is being placed on this external jolt, and too little credit is being given to the capacity of Russian managers to appreciate the need to adjust and act accordingly. After all, restructuring at SAZ -- in the form of defense conversion -- predated both privatization and the reduction in state orders. This is not to deny that a link existed between hard budget constraints and restructuring activity at SAZ. Other aspects of restructuring (such as layoffs and reductions in support of social sphere) came only after the budget constraints had been somewhat hardened.

Reconceptualizing Restructuring. Commentators tend to define restructuring in terms of end-results. According to Blasi, et al., "to restructure a company is to introduce all the management skills and investment capital necessary to enable it to design and sell at a profit the products and services that the customers want." In other words, restructuring has occurred only if the enterprise becomes capable of competing within the market. The reasoning is somewhat tautologous. More helpful would be a distinction between successful and unsuccessful restructuring. The SAZ case study hints that the same basic behavior might be observed in both types of restructuring, and that market conditions beyond the control of enterprise management may have a strong impact on the ultimate outcome. This allows for a more nuanced approach to Russian enterprise behavior during the transition.

Corporate Governance and Managerial Style. The SAZ case study suggests that too much emphasis may have been placed on opportunism as the key motivator of Russian managers. This is not to deny that Russian managers have engaged in unprincipled capital accumulation at the expense of workers and shareholders. But a more balanced view would recognize that these selfish tendencies are counterbalanced by the strong desire of these managers not to be the captain of a sinking ship. The paternalism that permeated Soviet state enterprises (and continues to be a factor in the post-Soviet era) does not have entirely negative consequences. Similarly, the much-criticized dominance of insiders might have a silver lining. At SAZ, the fact that the general director and his deputies have spent virtually their entire adult life at this plant working their way up the ladder means that SAZ’s setbacks are for them not merely business reversals, but that they take on a deeply personal meaning. The top management has literally grown up with the workers, and is mortified by what has happened. At his August 1996 press conference, the general director of SAZ said:

"Another point is that I am a citizen of this country and a citizen of Saratov. And I am very concerned about the situation here. ... I want [the SAZ workers] to have jobs, to get wages, to be able to cope with their problems and live normally. ... Looking straight into my workers' eyes, I would like to explain what is going on. ... I have to sort things out, comprehend and make it plain to the shareholders. I am accountable to them, and
they keep asking me strictly why certain things happen, and what I did to prevent them. If I fail to do so, then they don't need such a chief. ... I am responsible to a lot of people."103

By focusing so exclusively on the benefits that might have come from bringing in outsiders to manage the plant, the traditional theory fails to recognize the positive energy that is generated from the presence of insiders with a strong vested interest in the survival of the plant. On a more practical note, only insiders understand how to manipulate the supply and other networks that have grown up over the years.

The managerial style bred by state socialism was not conducive to making the sort of fundamental changes required for restructuring. General directors were unaccustomed to being questioned. To some extent, such discipline is necessary to a hierarchical organization such as an enterprise and is routinely present in Western corporations. The principles of Soviet-era one-man management pushed beyond what was needed to bring a sense of order to the enterprise. The give-and-take that would be helpful to generating ideas about how to reform is unlikely to develop. The SAZ case study provides evidence of how difficult it can be to penetrate the authoritative aura that surrounded the general director. But the case study also shows that such penetration can take place if given sufficient time. Moreover, external pressures created by the market may be just as effective as the demands of outside investors or the cessation of subsidies in forcing changes in the behavioral patterns of management. These changes may not come as quickly as if forced by outsiders or by the abrupt hardening of budget constraints. But they may be more effective over the long run because they have been generated by the workers, i.e., from within the enterprise.

Relationship with the Government. The SAZ case study shows that hardening the budget constraints is only one piece of a very complicated puzzle. Thanks to the decades of state socialism, the activities of industrial enterprises and government have been woven together in a way that is now difficult to unravel. Removing state support from enterprises without simultaneously liberating them from the unwritten-but-understood obligations to fulfill various state obligations and to kowtow to the state on production-related decisions leaves them in an unenviable and, ultimately, untenable position.

The appropriate role for the state vis-a-vis industrial enterprises during the transition from state socialism is difficult to identify. Two countervailing forces are at work. On the one hand, in order for the market to operate the Soviet-era role of the state as micro-manager has to be phased out. On the other hand, the state cannot simply disappear. Although some commentators contend that "true restructuring will obviate the need for further government assistance," this is unrealistic in any market economy.104 At a minimum, the state needs sufficient power and authority to create market institutions that have built-in incentives to encourage use. Ideally, it should play a facilitative role.105
The SAZ case study suggests that, to some extent, just the opposite has been true in Russia. Far from providing an atmosphere that encourages self-reliance, the state (particularly oblast' level officials) has continued to meddle in SAZ's internal affairs. In its dealings with SAZ, the state itself has demonstrated a lack of respect for market institutions by persistently not honoring outstanding debts. The Russian state has also shown a lack of sensitivity to the facilitative role played by states in most Western countries with respect to their interactions with their domestic aviation industries. The Russian government complicated an already difficult negotiation for SAZ with the Chinese by dragging its feet on a related trade agreement.

Rethinking the Production Profile. Generally absent from the literature on restructuring is any serious consideration of factors beyond the control of the enterprise. Perhaps this stems from the presumption of macro-economic stability. SAZ faced tremendous obstacles as it took on responsibility for marketing and selling its own planes. With the disintegration of Aeroflot, Russian airlines were in chaos and so lacked the resources necessary to buy new planes. The infrastructure needed to support complex transactions, i.e., the legal and financial mechanisms typically used to finance the acquisition of planes in the West, was slow to develop in Russia. When SAZ looked outside the Russian borders, it found a global depression in the aviation market. Its efforts were also hampered by the fact that its planes were not certified by Western authorities (such as the FAA).

Presumably the adherents of the theory would argue that SAZ should have reoriented its production away from aviation. From a practical point of view, this would not have been out of the question. As an assembly plant, SAZ has machinery that could be adapted to other purposes without tremendous difficulty. But as the tortuous process of adjustment within the U.S. automobile industry and the steel industry illustrate, fundamental changes in direction rarely come quickly or painlessly. Enterprises, such as SAZ, that have enjoyed industry leadership in the past and take pride in their past economic and patriotic contributions may find it particularly difficult to abandon their traditional mission.

Methodological Approaches. Most of the work on enterprise behavior has employed quantitative methods. Surveys are, of course, a valuable tool, but have certain limitations. The subject-matter under study is highly sensitive, and it stands to reason that respondents might not be entirely candid. To be sure, the designers of survey instruments take this into account, but despite their best efforts, the desire on the part of Russian managers to present themselves and their enterprises in the most positive light may lead to results that are at odds with the truth. Many research teams have attempted to ameliorate this effect by supplementing the surveys with less structured interviews with key managers. Typically, these are one-time encounters or, at best, may extend for several days. The scholars often find managers evasive. This tends to confirm the sensitive nature of the information being sought. A basic level of trust is helpful to obtaining such information. Trust is not easily given, and cannot be expected in a one-time conversation with an
outsider (who often arrives in the company of government representatives). At best, this methodology provides a snapshot of enterprise behavior at a particular point in time.

An alternative methodology is presented by the SAZ case study. When I began to interact with SAZ managers in early 1992, I had the same experience of equivocation. Over time, I gradually established a foundation of trust, which allowed me to ask sensitive questions and get reliable answers. I also developed a network of managers and workers throughout the plant with whom I spoke regularly over the five years of the study. This lessened the danger of the information being skewed by individual personal agendas within SAZ. By sustaining the study over five years, it has been possible to observe the evolution of attitudes and behaviors. The two methodologies -- quantitative and qualitative -- obviously complement one another.

Theoretical Insights

Theories Derived from Neoclassical Economics. The prevailing common wisdom about enterprise restructuring in Russia draws heavily on neoclassical economics. At the heart is a presumption that actors behave rationally and, to that end, that they act to maximize their interests. From this stems a belief that the proper reform and realignment of institutions will stimulate restructuring on the part of industrial enterprises. This harkens back to the shock therapy debate. In essence, the claim is that radical and rapid changes in the external environment will provoke similar changes within enterprises. In the Russian context, the introduction of private property and the mass privatization of industrial enterprises was critical to the endeavor. The effect was not only to give property owners a stake in the perpetuation of reform, but also to effect a radical society-wide change in expectations.

The apparent failure to restructure (or at least not to restructure as quickly as had been desired) was blamed on the managers. To some extent, this undermines the original theory, since new incentives were apparently not strong enough to counteract their will. The solution is to rid the system of these old “red” directors and to replace them with outsiders (both Russians and foreigners) with the necessary management skills and investment capital.

This approach is helpful but not fully satisfying. The dynamic identified, in which fundamental institutional reforms effect some sort of change in behavior by enterprises, is undeniable. Similarly, it stands to reason that enterprise directors will be eager to preserve and expand their power during the reform period. But the theory falls short in two respects. For the most part, it fails to look inside the enterprise. Attention is focused on changing the incentives that act upon the enterprise. What goes on inside the enterprise and why the enterprise might pursue certain policies that are pro- restructuring, while resisting other aspects, is left unexplored. In addition, the extent to which the traditional explanation demonizes the existing managerial class
while lionizing outside managers and investors is troubling. No one would dispute that many of these managers have feathered their own nest at the expense of the enterprise, but what is missing from the traditional explanation are the positive aspects of having managers that are deeply embedded in the networks that undergird the economy. As a result of the Soviet managerial style of edinonachalie, the general directors often have relationships and information that is specific to them and lose much of their value when shared with others. On the flip side, there is little effort to explain why outsiders would be any less willing to take advantage of the laxity of legal norms to enrich themselves. In fact, in the absence of personal ties to the enterprise, these outsiders might have fewer compunctions about such behavior. In addition, the bright line drawn between insiders and outsiders dims in view of the similarity of the socialization process all managers underwent during the Soviet period.

Evolutionary Theories of Change. In contrast, evolutionary theories of how economic behavior changes shift the focus to the enterprise. While not denying the relevance of changes in incentives, the theory identifies factors that play a role inside the enterprise in stimulating or retarding change. The inquiry goes far beyond questioning whether there has been managerial turnover. It pays more attention to the actual environment in which enterprises operate, and considers the level of instability and the nature of information available to managers to be part of the explanation. The theory recognizes the difficulty of changing long-standing patterns of behavior, and uses this insight to explain why change often comes slowly and incrementally, rather than in big spurts. This insight is likewise helpful in understanding why enterprise management might first change its behavior in external relations, since the routines in this area are likely to be newer and less entrenched. The theory identifies bounded rationality as another factor affecting the willingness and even the capacity of enterprise management to change. It is particularly useful in making sense of the slowly changing corporate culture and the tendency to passivity (at least initially) on the part of many Russian workers.

Evolutionary theories of how economic behavior changes appear to be more helpful in explaining what has happened at SAZ. The desire or need to maintain pre-existing routines may vary across different issues, which explains why certain aspects of adjustment began almost immediately at SAZ, while others took time to build a consensus within management and the workforce. For example, the need to sell planes was obvious to all. Just as obvious was that, during the early 1990s, Aeroflot lacked the financial wherewithal to purchase new planes. Thus, the speed with which SAZ reoriented itself to foreign markets is not surprising. Other issues, such as layoffs and divesting social assets, created more dissension. One cause of the discord was the more immediate personal stake of individual workers and managers in such changes. They required lifestyle changes and the sacrifices were apparent, which was certainly not the case for the decision to change the marketing strategy for the Yak-42. The consequences of that strategic change were felt only
gradually, and were mixed with other causal factors. But equally important was a sense that important traditions at SAZ were being abandoned with the beginning of layoffs and the spinning off of social assets. Like other enterprises, SAZ had been much more than merely a place to work during the Soviet period. But the post-privatization changes signalled that the reign of collectivism was over. Such changes are undoubtedly essential if SAZ is to survive in the market environment, but moving too quickly risked losing the enthusiasm of the work force for the changes.

Evolutionary theories make an effort to accomodate the messy reality of the transition for Russian enterprises. The underlying assumptions are less rigid and mechanistic than those typically found in neoclassical economics. This, in turn, allows for more subtlety in the explanations. But its usefulness as a policy tool is limited by the inability to identify clear criteria that are likely to facilitate or stymie restructuring. No mechanism exists for distinguishing between enterprises. Instead, the analysis requires a thorough understanding of the internal politics of the enterprise, which may have certain commonalities, but can be expected to vary among enterprises.

Need for Synthesis. Thus, each approach has its positive and negative features. The purpose of this article is not to demonstrate the superiority of one or the other approach, but to participate in a dialogue designed to synthesize the best aspects of each. By doing so, and also incorporating certain transition-specific aspects, a more powerful approach may be created.

ENDNOTES


8. See Berliner, Factory and Manager in the USSR.


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21. At the 28th Congress of the Communist Party during the summer of 1990, a decision was taken to cease the practice of having the Party direct the Soviet economy. This broke the power of the Party organizations within the enterprises. See Burawoy and Hendley, “Between Perestroika and Privatization,” for an inside view of the role of the Party committee in enterprise management in early 1991. The capacity of the Party to dictate policy on the national level was effectively terminated with the abortive coup of August 1991, after which the Party was declared illegal.


23. Other Western scholars have written about SAZ. My work can be distinguished because it is based on long-term sustained contact with, and field research at, SAZ. In 1992, I spent two weeks at SAZ in January as part of a delegation from Stanford University, and in March participated in a one-week seminar for SAZ managers held near Washington, D.C. In 1993, I spent March-May in Saratov. The general director then visited Madison, WI, for a week in September, and I spent much of November in Saratov. In 1994, I was in Saratov for two weeks in March and, from June through November, spent much of my time in Saratov. In 1995, I spent the summer in Saratov, and met with the general director in Moscow in November. In 1996, I spent a week in Saratov in March, and returned for several weeks in June. My time at SAZ has been spent talking with managers at all levels, attending meetings of managers (including board of directors meetings and annual shareholders’ meetings), and reviewing corporate documents, contracts, and copies of the in-house newspaper. While not in Saratov, I have kept in close contact with SAZ through telephone conversations, and telex, fax and e-mail communication. The authors of some of the other “case studies” had not conducted independent research at the plant. E.g., Philippe Aghion, Olivier Blanchard, and Robin Burgess, “The Behaviour of State Firms in Eastern Europe, Pre-Privatization”, European Economic Review, 38, 6, 1994, pp. 1327-49. Still others have based their conclusions on brief visits to the plant in the early years of the transition, with no follow-up investigation of whether conditions had changed. E.g., John A. Battilega, “A Case Study of Russian Defense Conversion and Employee Ownership”, in Privatization, Conversion, and Enterprise Reform in Russia, eds. Michael McFaul and Tova Perlmutter (Boulder: Westview Press, 1995), pp. 169-88; Michael McFaul, “The Allocation of Property Rights in Russia: The First Round”, Communist and Post-Communist Studies, 29, 3, 1996, pp. 295-97.


26. SAZ management first presented its ideas about privatization (or de-statization) to then-Prime Minister N.I. Ryzhkov at the 28th Congress of the Communist Party during the summer of 1990. Ryzhkov subsequently visited SAZ at the end of July 1990. See generally Kathryn Hendley, "Legal Development and Privatization in Russia: A Case Study", Soviet Economy, 8, 2, 1992, pp. 130-52.

27. The Aviation Ministry had a subunit, known as AviaEksport, which handled all sales abroad of Russian planes. SAZ had a relationship with AviaEksport, but was not permitted to maintain a continuing relationship with the buyers of its planes.

28. The 1995 joint-stock company law attempts to limit closed joint-stock companies to entities with less than 50 shareholders. But article 94-4 of this law provides that closed joint-stock companies that were formed prior to this law and that have more than 50 shareholders are entitled to retain their status as closed joint-stock companies. M.Iu. Tikhomerov, ed., Kommentarii k Federal'nomu zakonu ob aktsionernykh obshchestvakh (Moscow, 1996), pp. 364-68. See also "Ob aktsionernykh obshchestvakh," Sobranie zakonodatel'stva RF, no. 1, art. 1, 1996.

29. During the five years of my case study, only two top level managers -- deputy director (zamschiev directora) -- have left. On the surface, both departures were voluntary. Both were replaced through promotions from within rather than by bringing in an outsider.

30. For a critique of closed joint-stock companies, see Boycko, et al., Privatizing Russia, pp. 75-77.

31. SAZ initially took the corporate form of a "collective enterprise" (kollektivnoe predpriatie). This was a property form recognized by Soviet, but not by Russian property laws. When the Soviet Union ceased to exist, SAZ had to assume a corporate form recognized under Russian law. It first became a limited liability company (tovarishchestvo s ogranichennoi otvetstvennost'iu), and then a closed joint-stock company. See Hendley, "Legal Development and Privatization."

32. SEPO (the Saratov Electromechanical Production Organization), the other Saratov plant that was privatized in the same way and, in fact, was covered by the same governmental decree, diverged from SAZ at this point and became an open joint-stock company. For additional background on SEPO, see Clifford G. Gaddy, The Price of the Past: Russia's Struggle with the Legacy of a Militarized Economy (Washington, D.C.: Brookings Institution, 1996), pp. 131-47.

33. The non-SAZ-workers who have approved as stockholders include an official of the Saratov bank where SAZ maintains its primary account, the chief designer of the Yakovlev Design Bureau in Moscow, officials of Moscow marketing firms that handle SAZ's account, and an American business consultant.

34. Initially, the chairman of the board of directors was limited to 0.2 percent of the total outstanding shares and other members of the board were limited to 0.15 percent. In 1994, the shareholders approved an amendment to the charter that increased the percentages to 2.4 and 1.8, respectively. Prior to the 1995 annual shareholders' meeting, the amounts owned by the board were disclosed. On average, each member owned 0.76 percent. These restrictions were eliminated when the charter was rewritten in 1996 in response to the new joint-stock company law.

35. From a comparative perspective, the level of ownership by top-level SAZ officials was rather low. In a December 1993 survey, Blasi and Shleifer found that top management owned, on average 8.6 percent of outstanding stock. All insiders owned, on average 65 percent. "Corporate Governance", p. 80.


37. See Useem, Executive Defense, pp. 182-89, 201-6. Useem documents that, in the ten largest leveraged buyouts from 1986 to 1988, the representation of outsiders on the board actually decreased following the takeovers. Ibid., p. 184. This indicates that the correlation between outsider ownership and outsider representation on the board is not automatic.

38. When the joint-stock company was created in 1993, the chairman of the trade union committee tried to have one seat on the board reserved for a worker representative (such as himself). This effort failed. The board has been true to its stated purpose of exercising management functions.

39. This firm (Dakono-Air) had been instrumental in the leasing of Yak-42s in new markets, such as Cuba, Peru, Iran, Pakistan, and the Philippines, as a means of stimulating demand.

The general director began his work life at SAZ and progressed rather swiftly through the ranks of management. With the exception of one year as an instructor for the oblast Communist Party organization in the early 1980s, and 1985-86, when he worked at another Saratov enterprise, he has spent his entire career at SAZ.


For example, in a report aired on the nightly television news program “Vremya” soon after the first round of the presidential elections in June 1996, a SAZ worker said that he believed that the general director had been working energetically for the election of the Communist Party candidate, Zyuganov. Empirically, this statement was incorrect, but the existence of such a belief among SAZ workers demonstrates that the general director does not enjoy the reputation of democratic reformer among locals that he does among many Western observers.


Through 1993, in interviews published in the SAZ newspaper, the general director and his subordinates continued to insist that the economic difficulties being experienced would not require either reducing the five-day work week or laying off workers. Layoffs did not begin in earnest until the summer of 1994.

This September 1995 incident is discussed in more detail below in the analysis of SAZ’s efforts at depoliticization.

Until December 1995, the governor of Saratov oblast’ was lu. Belykh. According to political insiders in Saratov, Yeltsin dismissed Belykh as a result of his dissatisfaction with the results of the elections for the State Duma held in December 1995. In April 1996, Yeltsin appointed D.F. Ayatskov to serve as governor. He won popular election in September 1996.


In particular, he declined an invitation to speak at a seminar at the research division of the World Bank in the late fall of 1995, even though that trip was would have given him an opportunity to network with both Bank officials and potential business partners. In 1992 and 1993, by contrast, he visited the United States several time for academic conferences that held out little promise of acquainting him with potential investors.

High levels of ownership by workers was common among privatized Russian enterprises. See Aslund, How Russia Became a Market Economy, pp. 230-44.

At his August 1996 press conference, the general director commented that, “ Even if the residential quarters are taken away from me — 50,000 people live there — when something breaks down in their homes, they come to me. They have developed this habit.” “Press Conference Regarding the Russian Aircraft Industry”, Official Kremlin International News Broadcast, August 5, 1996.


For example, SAZ bartered planes to the Smolensk plant that manufactured the wings, and to the Zaporozhe plant that supplies the engines for the Yak-42. Other planes have gone to Gazprom and to the Balakovskii atomic energy plant pursuant to barter arrangements. Barter has been a constant fact of life for SAZ, both before and after privatization.

Commander, et al., comment on the opaque character of subsidies in the post-Soviet era, and the consequent difficulty of documentation. Enterprise Restructuring, pp. 5-6.


61. E.g., Nikolai Manvelov, “Rynochnye otmosheniya ne meshayut SAZu vypuskat' samolety”, Kapital, August 1996, p. 14; See generally “Im Stalin dal'nye ruki-krylya, a Chernomyrdin - plamennyi privat”, Delovye ludi, 73, January 1997, p. 44.


64. Sometimes payment problems became apparent only after delivery. SAZ contemplated repossessing two Yak-42s that had been sold to Kazakhstan in 1994 due to non-payment. In June 1996, the Kazakh government still owed SAZ 2.4 million US dollars. The legal mechanisms for recovering debts from CIS countries had not been completely worked out. The option of requiring one hundred percent prepayment, which many Russian enterprises resorted to during this period, was not feasible due to the high price of planes. Other aviation plants faced similar problems. E.g., Mikhail Birin, “Chinovniki vysokogo poleta riskuiut: Dva samoleta pravitel'stvennoi aviakompanii derzhatsya v vozdlukhe na ‘chesnom slove’”, Vek, 45, 1996, p. 2.


66. According to a letter written by the local deputy to the State Duma, A.N. Gordeev, to Yel'tsin, both Chernomyrdin and Soskovets (then a deputy prime minister) had signed an order supporting the return of this debt to SAZ. Kislov, “Chto khuzhe-- bez poluchki ili bez raboty”, Izvestiya, January 30, 1996, p. 2.

67. The trade union at SAZ is part of the Federation of Independent Trade Unions (FNPR), the successor to the Soviet-era official trade union. Management made a half-hearted effort to get rid of the union following privatization, but failed. Conversations with workers and managers on various levels reveal the general irrelevance of the trade union as a protector of workers' rights. Most viewed the trade union as the distributor of vacations and other perquisites. As these grew less common, the mission of the trade union grew increasingly unclear.

68. Among the slogans on the placards were: “Government! Honor the Debt of 26 Million Dollars” and “Hungry Children — A Country Without a Future.”

69. The local deputy was A.N. Gordeev, who has been a prominent member of the Communist Party. Prior to entering politics, Gordeev worked at SAZ.

70. The governor also announced the firings of two other general directors. One was the general director of SEPO which was, like SAZ, a completely private entity. The other was the general director of Korpus, a defense plant that had yet to privatize. Neither of these public firings actually resulted in the removal of the general director.


73. As a methodological note, it is worth pointing out that the local newspapers in Saratov contained no reports of these attempted firings, though they were the talk of the town during the summer of 1996. Each of the local papers did carry a story about the meeting at which the SAZ general director was publicly humiliated, but none mentioned the effort of the governor to fire him. E.g., K. Agababian, “U zavoda ‘vyrastut krylya’ tol’ko pod krylom gosudarstva”, Saratovskie vesti, June 18, 1996; Liubov’ Sharshavova, “Delo plokhiye, no idut khorosho”, Saratov, June 19, 1996, p. 2.

Prior to privatization, SAZ was largely limited to consulting with the scientific-research institutes \( (nauchno-issledovatel'skie instituty) \) of the Aviation Ministry. It worked with these institutes on the initial privatization plan which, in retrospect, was far from ideal. It is worth pointing out that the ISKAN group with which SAZ collaborated was headed by Andrei Kokoshin, who went on to become a Deputy Minister of Defense.

On of the stops on this tour was the Center for International Security and Arms Control at Stanford University, which is where we first became acquainted in December 1991.

On the leasing of Yak-42s in Pakistan, for example, see Tahir Ikram, “Private Pakistani Airlines Strive to Outshine PIA”, \textit{The Reuters Asia-Pacific Business Report}, September 2, 1995.

A thorough analysis of the failure of this initial strategy is beyond the scope of this article, but SAZ’s underappreciation of the importance of marketing certainly played a role. Because its first success came as a result of the personal negotiating skills and charisma of the general director, SAZ mistakenly assumed that his charms would win them more contracts. To be sure, the good press about the general director opened the door of many foreign companies, but SAZ proved incapable of following-through on these promising contacts. Although a marketing department was set up, it was staffed by retread SAZ managers rather than by trained specialists. SAZ was also slow to appreciate the need to establish an independent servicing capability for planes sold abroad if it expected to compete with the Western giants. Such initial problems with marketing were common to Russian defense plants. See Kevin P. O’Prey, \textit{A Farewell to Arms? Russia’s Struggles With Defense Conversion} (New York: Twentieth Century Fund Press, 1995), p. 71.

A Smolensk enterprise that manufactured the wings for Yak-42s was also part of the Yak Corporation, though largely a silent partner. The Yak Corporation was originally named \textit{Skorost’}.

The form sometimes left Western investors puzzled. The Yak Corporation appeared to have enormous assets, but the appearance was illusory. Russian observers were also taken in. Kokoshin often cited the Yak Corporation as a successful financial industrial group. See O’Prey, \textit{A Farewell to Arms?} p. 74.


The Yak-40 was a 30-seat plane. Over 1200 were manufactured, and continue to fly in the former Soviet Union as well as 19 other countries.

“IAI Shifts Initial Production from Russia to Israel to Keep Galaxy on Schedule”, \textit{The Weekly of Business Aviation}, 61, 14, October 2, 1995, p. 142.

The Design Bureau has faced its own financial crises in recent years. For example, in December 1996, the Moscow telephone company cut off almost all telephones due to massive unpaid bills. Viktor Anoshkin, “Moscow Phone Company Cuts Off Plane-Maker Yakovlev”, \textit{Reuters European Business Report}, December 2, 1996.


The chief designer had built up an expectation that SAZ would get this contract when, at the annual shareholders’ meeting in March 1995, he promised that the manufacture of test planes would soon be transferred to Saratov.

The idea that SAZ would switch allegiance to another design bureau, e.g., the Tupolev or Ilushin design bureaus, was not feasible in the Russian context.


There are varying opinions among industry leaders about whether the FIG should be vertical, \textit{i.e.}, concentrate principally on plane manufacturing, or whether the FIG should expand its horizons to other ventures.

Other Russian aviation plants were also seeking these same markets. \textit{Aviakor}, a Samara-based manufacturer of Tu-154s, signed a contract in August 1996 to supply 12 planes to Iran. See Vladimir Ul’yanov, “Samara otpravit’ v Iran dvennaiat’ Tu-154M”, \textit{Delovoi mir}, 7, August 16-22, 1996.

94. The term EKIP is an abbreviation for ecology and progress (ekologiya i progress).


97. At the time of privatization, SAZ controlled over 300 buildings containing residential housing, 3 dormitories and 20 kindergartens. It contributed to the maintenance of 4 schools, a medical clinic, various sports facilities and summer camps for children, although the details of SAZ’s contributions were handled by the trade union committee and not by management.

98. Conversations with journalists in the spring of 1993 revealed that residents of SAZ housing had been sending complaints to local newspaper about SAZ’s refusal to privatize its housing. The journalists advised these residents to pursue the matter in the courts, but the residents were reluctant to do so.

99. Management claimed that the closures were due to low enrollments, but the protests of women workers suggest that alternatives were not available.

100. Blasi, et al., Kremlin Capitalism, p. 128.

101. Ibid., p. 124.


106. When Boeing was working to establish itself in the Chinese market, the U.S. government worked with the company. The Chinese were given the impression that the purchase of Boeing planes might soften the U.S. stance on trade and other nagging problems.

107. The experience of corporate takeovers in the U.S. during the 1980s suggests that outsiders are not always interested in managing the target company over the long run. E.g., David Carey, “Can Raiders Run What They Raid?” Fortune, June 4, 1990, pp. 193-204.


112. The miners, who adopted strikes as a part of their strategy in dealing with management and the state, constitute an exception. Other professions that engaged in aggressive tactics can be identified. But the vast majority of workers remained passive during the transition, and adapted to the conditions created by management. This remained true even in the face of delays in paying wages and furloughs of workers.