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WASHINGTON'S AND MOSCOW'S FAILED POLICIES TOWARD RUSSIAN DEFENSE REFORM

by

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Preface

Russia and the Soviet Union dominated United States (US) national security planning for almost five decades, until internal forces produced the political transformation that Western military might never achieved. Since that time, US foreign policy has concentrated on limiting regional conflicts and reducing tensions in the Middle East, with only occasional interest in Russia. Most US attention seems more concerned with the health of President Boris Yeltsin than with the health of Russia's fragile market economy.

I believe ignoring Russia at this critical juncture in its political and economic development is shortsighted. Political instability there could have far-ranging impacts on vital US interests in both Asia and Europe. Nevertheless, the US has done little to aid development of the Russian economy. The limited available financial assistance has been applied with little regard for the market principals upon which our own country was founded, and the lessons of US defense downsizing. I sincerely hope this paper points to some new directions for US policy.

I would like to thank Dr. Bill Martel for helping focus my attention on the critical issues, and for arranging a two-week visit to Russia that brought home the challenges that country faces resulting from poorly-developed economic policies. I also want to thank my wife, Cindy, for being a constant source of inspiration, and for spending countless hours reviewing my writing.

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Abstract

The ultimate success of Russia's attempt to establish a democracy will depend on Russia's ability to shift to a market economy and convert the massive, state-run defense industry from the production of military products to consumer goods. Poor government policies and lack of capital have resulted in economic chaos rather than orderly conversion. The Russian policy emphasizing top-down management of conversion runs contrary to the experience of defense firms in the United States (US). Defense conversion in the US has rarely been profitable, even with well-managed companies, suggesting that the Russian top-down approach has little chance of success. Further, the policy of funding defense conversion with arms exports provides no incentives to Russian defense establishments to move toward consumer production. Worse, US aid has been applied poorly and produced few benefits to either country. The Russian economy would benefit more by allowing the skilled workers and managers in the defense establishments to move to more efficient civilian factories, thus accomplishing conversion from the bottom up. Russian conversion policy should emphasize building a strong business infrastructure to attract capital that can replace the income from arms sales. The US government should provide tax incentives and loan guarantees to encourage US companies to form joint ventures with Russian companies.

Chapter 1

Introduction

Russia is in the midst of one of the most difficult social, political, and economic times of its turbulent 1000-year history. Nevertheless, it remains a formidable nuclear power, and thus vital United States (US) interests are closely tied with development of democratic government and political stability in Russia. The ultimate success of Russia's attempt to shed the vestiges of communism and establish a democracy will depend on Russia's ability to shift to a market economy.

Many Russian and Western experts believe the key to a market economy is successfully converting the massive, state-run defense industry to the production of consumer goods. There is considerable merit in this argument and, in fact, US and Russian economic policies have been built around this thesis. When the Soviet Union dissolved in 1991, Russia inherited 75 percent of the production and Research and Development (R&D) facilities in the massive military-industrial complex (MIC)[1], which accounted for as many as 6.5 million people employed in 2000 enterprises.[2] The MIC had a long history of employing the best and brightest personnel available, and was generally regarded as being the most efficient of the Soviet industries.

Yet defense conversion is a difficult process, with few successful examples in the West to draw upon as models. While much has been written about how to convert from

capitalism to communism, little theory exists on how to convert from communism to capitalism. With no experience on conversion, and stressful internal forces to contend with, Russian leaders resorted to Marxist, top-down conversion policies that have resulted in economic chaos. The head of the Russian State Committee for Defense Industry Conversion, Mikhail Bazhanov, when describing the confusion resulting from massive defense spending cuts in 1992, referred to defense *konversiya (convulsion)* instead of *konvulsiya (conversion)*, describing quite accurately the country's painful economic experiences.[3] Seven years into conversion there are very few signs that any of the policies have had an effect, while the lack of funding has forced the government to all but abandon attempts to convert defense industries to consumer production. With so much at stake in both Russia and the United States, both countries need to do more, but finding the right approach has been difficult.

This paper examines the failure of Russian defense conversion, beginning with a review of previous attempts at defense conversion in the United States and Western Europe as models for gauging current Russian and US policies. It then discusses the evolution of Russian and US policies regarding Russian defense conversion and examines the social, economic, and political reasons for the failure of these conversion attempts. Finally, this paper will propose changes that will accelerate the conversion of the Russian MIC to a market-driven, consumer-oriented industry, with specific recommendations for US policy.

Notes

[1] Julian Cooper, *The Soviet Defense Industry, Conversion and Economic Reform* (New York, NY: Council on Foreign Relations Press, 1991), 21.

Notes

[2]Yevgeny Kuznetsov, "Downsizing Defense in the Former Soviet Union," in *Downsizing Defense*, ed. Ethan B. Kapstein (Washington, DC: Congressional Quarterly Inc., 1993), 169.

[3] Kenneth L. Adelman and Norman R. Augustine, "Defense Conversion: Bulldozing the Management," *Foreign Affairs*, Spring 1992, 35.

Chapter 2

Perils of Defense Conversion: An Uncertain Past

> The record of massive defense conversion is one unblemished by success, with two notable exceptions: the defense dominated economies and mammoth military facilities of Japan and Germany, which were converted into civilian production after World War II.[1]

Even well-managed Western firms have had difficulties moving from making products for the defense industry into a market-dominated sector, with history littered with many more failures than successes. For example, the Arms Control and Disarmament Agency conducted studies in 1966 and 1990 on commercial diversification by US defense firms and found very few examples of successful conversion. Studies sponsored by defense contractors suggest that 85 percent of conversion projects will fail.[2] The cases of successful conversion in post-war Germany and Japan are not useful models because their defense industries were destroyed, then rebuilt by benevolent occupiers.

It may seem that a more relevant comparison with the current condition in Russia would be the rapid conversion of US industry following World War II, but again important differences exist. The American effort was closer to a reconversion, as consumer-oriented industries returned to familiar business areas after the war. The American government, anticipating the end of the war, used capital to alleviate shortages. Perhaps the most important factor was that American industries found a strong market waiting for their products, and a cash-rich public that was eager to buy consumer products

after long years of deprivation.[3] Russia, after years of bankrupt communist practices, has no cash to capitalize conversion, and a weak internal market for consumer products.

Models for Defense Conversion

Centrally Managed Conversion Model

Despite defense conversion's difficult history, several models exist upon which policies can be built.[4] The approach attempted unsuccessfully in the former Soviet Union (FSU) is based on a centrally-managed economy, in which the government allocates commercial work and market share to defense enterprises. However, the entire experience of the FSU, in which approximately 20 percent of the defense enterprises were engaged solely in civilian production, suggests that a centrally-planned conversion is unlikely to succeed.[5] Few, if any, examples of successful defense conversion using this model exist.

Diversification Model

A more market-oriented approach calls for defense companies to use their existing manufacturing and technological expertise to diversify their product lines by producing consumer goods to compete in a free market. Pure plant-level conversion, a type of diversification in which existing facilities and workers begin to manufacture consumer products, is appealing because it involves the least investment; however, this model is seldom practical. The process of rebuilding highly-specialized production line(s) and retraining workers is simply not economical in most cases.[6] US defense firms have tried diversification during each reduction in military spending with very poor results. Nevertheless, in a few special situations the diversification model can work. As

examples, Kavilco was able to apply sensor technologies acquired in its defense business to automotive and machine tool industries, and Rockwell profitably transferred its Goss Colorliner printing process of imaging technologies developed for the military.[7] Other examples of successful conversion using the diversification model suggest that firms are more likely to succeed when they stay close to their existing expertise. Britain's Vickers Defense Systems is using its experience in building tanks to perform precision machining on large metal parts, such as those needed for offshore oil drilling. However, a recent United Nations study suggests this may not prove economical in the long term. A Japanese case study also casts doubt that the approach used by Vickers is commercially viable.[8]

These examples suggest the diversification model is most successful when the defense firm possesses a unique, high-technology process that it is able to apply to a particular consumer product. While diversification may be practical for some Russian defense enterprises, its narrow applicability to a few special circumstances makes it a poor model for the entire Russian MIC.

Acquisition Model

A third approach closely related to diversification is acquisition. In this case firms gradually move into consumer markets by mergers and acquisitions with existing commercial firms, although this too is a risky method. One study conducted for General Dynamics revealed that 80 percent of commercial acquisitions by defense contractors proved financially harmful.[9] Grumman lost 15 million dollars from 1983 to 1985 when it tried building mass-transit busses. McDonnell-Douglas lost 333 million dollars in 1989 after purchasing a commercial information systems company.[10]

Despite these failures, some companies have used acquisitions to make successful transitions. For example, Raytheon Corporation bought Armana, Caloric, and Heath, and was able to increase commercial sales from 15 percent in 1964 to 50 percent in 1970, maintaining an equal split between commercial and defense business until the 1990s. However, many analysts believe Raytheon's recent acquisition of Hughes Electronics and Texas Instruments Defense Systems and Electronics Group, following purchases of E-Systems and Chrysler Corporation's defense units, signals Raytheon's abandonment of its commercial business sectors and a return to pure defense work.[11] Nevertheless, Raytheon's example demonstrates that successful operations can grow over a long time, generally in the range of 10 to 20 years.[12] Despite Raytheon's success, the inherent financial weakness found in nearly all Russian civilian businesses suggests that few defense establishments could become financially stronger through acquisitions, and that this model has very limited applicability in Russia.

Substitution Model

The substitution model calls for transferring key technologies and expertise by allowing existing consumer industries to hire away skilled defense industry workers and buy or rent desirable existing defense equipment. This approach enjoys a number of advantages over the other models, primarily because it overcomes the basic weaknesses that prevent defense industries from being competitive in the civilian marketplace. Defense contractors, whether in Russia or the United States, lack experience in marketing techniques, and generally deal in low volume production lines of high-cost items. Distribution networks and market research are not necessary in the defense business and

thus usually do not exist. Because of the contracting methods used, defense firms do not need outside financing and generally do not incur financial risk in new ventures.

Finally, and perhaps most importantly, every company has a distinct culture and way of doing business that it has adopted over a number of years. Changing the corporate culture is a very hard thing to do. In the West, those firms that do both commercial and defense business usually create totally separate business divisions to insulate the commercial portion from the higher overhead rates typical of government business. While this effectively prevents any synergy of the two product lines, companies believe that it is more important to reduce the chance of contaminating either corporate culture.[13]

Spectra Enterprise Associates, a venture capital firm, successfully employed the substitution model. It invested 25 million dollars from 1986 to 1992 to launch 17 electronics companies that had sprung from military research; and of these 13 were successful. Seventy percent of the revenues of the successful companies came from commercial contracts, with the remainder in military R&D work.[14]

While the substitution model enjoys the greatest probability of success for the Russian economy as a whole, there are disadvantages as well. Widespread application of the model would fragment the MIC and destroy much of Russia's defense industrial base, raising issues of national security in a nation that has historically placed defense of its borders as a very high priority. As will be discussed later, this issue has already hampered the slow pace of defense conversion.

Notes

[1] Adelman and Augustine, 26.
[2] Ibid., 27.

Notes

[3] Many other factors differentiate the situation in post-World War II America from the current predicament in Russia. See Kuznetsov, 162-163.

[4] Adelman and Augustine, 42-43.

[5] Cooper, *The Soviet Defense Industry, Conversion and Economic Reform*, 14.

[6] Richard T. Minnich, "Conversion: An Industry Perspective," in *Downsizing Defense*, ed. Ethan B. Kapstein (Washington, DC: Congressional Quarterly Inc., 1993), 113.

[7] Ibid., 126.

[8] Bernard Udis, "Defense Spending in Western Europe," in *Downsizing Defense*, ed. Ethan B. Kapstein (Washington, DC: Congressional Quarterly Inc., 1993), 150.

[9] Adelman and Augustine, 28.

[10] Jacques S. Gansler, *Defense Conversion, Transforming the Arsenal of Defense* (Cambridge, MA.: The MIT Press, 1995), 75-76.

[11] "Deals Transform Raytheon into Defense Giant," *The Montgomery Advertiser*, 17 January 1997.

[12] Gansler, 74-75.

[13] Ibid., 36.

[14] Ibid., 78-79.

Chapter 3

The Failure of Russian Defense Conversion

An Overview of the Russian Military-Industrial Complex

Based on the experience of Western defense firms since WW II, converting the Russian MIC to production of consumer goods is a formidable task. The only factor that gives Russian defense industries an advantage over their Western counterparts attempting conversion is that they are not trying to penetrate crowded consumer markets, dominated by well-established firms that already understand their customers.[1] However, the organizational makeup, size, and geographic distribution of the MIC present unique problems for conversion that are not encountered in the West.

During the Soviet era, the MIC was centrally-directed by eight Ministries organized under the USSR Military-Industrial Commission, or VPK, responsible for nuclear weapons, machine building, ground forces equipment, aviation, shipbuilding, radio and radar electronics, electronic components, and communication equipment.[2] These ministries had a high degree of vertical integration. For example, the Aviation Ministry, Minaviaprom, controlled everything from production of aluminum to growing rubber plants for aircraft tires.[3]

The true size of the Russian MIC is difficult to determine given the manner in which statistics were kept under the FSU, and the secrecy within the Ministry of Defense.[4] The actual number of people working in defense factories in 1989 was estimated at 4.8 to 5 million; however, this does not include all the people employed by the eight ministries in supporting jobs. When these people are included the number swells to about 12 million, accounting for roughly 10 percent of the total work force.[5] However, other estimates put the percentage of people employed by the MIC as high as 25 percent.[6] In any case, defense spending dominated the Soviet economy as more than 20 percent of the Gross Domestic Product (GDP) was devoted to defense, in comparison to less than 5 percent in the US during the same time period.[7, 8] It is equally difficult to get a firm understanding of the total scope of the MIC because numerous establishments have merged into production and research associations. It is estimated that when conversion began in 1989 there were 5000 production establishments, and perhaps 600 to 800 R&D establishments.[9]

Defense conversion in Russia is complicated by the geographic distribution of the MIC. Approximately 72 percent of the production and 84 percent of the R&D establishments were in Russia, with the majority of the remainder in Ukraine. However, the former republics have some critical components of the MIC. For example, virtually all armament testing was done in Kazakhstan, and that country is also the site of the Baikonur (Tyuratam) Space and Missile Center. Uzbekistan and Kyrgyzstan were heavily involved in uranium mining and processing. According to one senior official in the MIC, "without inputs from other former Soviet republics Russia can produce only 17 percent of the military hardware it requires."[10]

Within Russia itself many of the facilities were concentrated in certain areas. Moscow, for example, was the administrative center, with military production accounting for a third of the city's industrial output and employing one fourth the work force. Saint Petersburg had 150 enterprises and 26 research institutes, employing 700,000 people. The economies of many towns were totally dependent on the MIC. For example, in Korov, 90 percent of the industry was military-related. Of special significance are the closed cities, which were built entirely to support highly-secret military activities. Several hundred thousand people in each closed city were devoted exclusively to military-related activities. Access by Russians and outsiders was strictly controlled, even to the point that inhabitants were given bonuses not to go on vacation outside the city.[11]

The Soviet MIC, inherited for the most part by Russia, was considered the jewel of Soviet industry, and was generally regarded as the most efficient in the country.[12] Many Russian officials still believe that most factories in the MIC are on a par with those in the West, and given proper financing and access to markets could compete in the world's economy.[13] In reality, the defense industry was probably no more efficient than many other industrial sectors in Russia; it was simply shielded from the shortcoming and inefficiencies of the communist system. The MIC received the most qualified engineers and scientists, the best managers and most capable workers, and was generously funded. The prices of materiel inputs were kept artificially low, and defense plants seldom financed overhead costs, such as depreciation or research and development.[14] Perhaps most importantly, the defense industry was shielded from the chronic shortages that plagued the rest of the county's industries. The truth is that most of the Russian factories are more archaic than Russian leaders believe. It is estimated that Russian defense

factories employ 33 to 50 percent more employees than equivalent factories in the West.[15] Some US executives estimate that much of the equipment in Russian defense plants is 20 to 30 years behind comparable plants in the West.[16]

Evolution of Russian Defense Conversion Policy

Government Funded Conversion

Soviet, and later Russian, policies regarding conversion evolved with changing economic realities. Mikhail Gorbachev officially began defense conversion in December 1989 in conjunction with a unilateral cut in the Soviet budget for weapons procurement of more than 19 percent over 1989 to 1991.[17] However, conversion actually began nearly two years earlier when Gorbachev moved 230 enterprises of the disbanded Ministry of Machinebuilding for the Light and Food Industries under the VPK. In the summer of 1989, Gorbachev directed another step toward conversion by moving a number of equipment supply enterprises under the VPK that had previously been under civilian control.[18] These earlier events are significant because they signaled that Soviet policy would be based on the centrally-directed conversion model, and would include moving unrelated civilian industries under MIC control, all using government financing. Given the Soviet belief that the defense industries were better managed and more efficient than the industries in the civilian sector, this is consistent with the actions of a centrally-controlled economy. However, experience in the West has shown this approach is rarely successful. Not only are defense plants ill-prepared to make consumer goods, but a centrally-directed conversion policy that ignores market forces is contrary to Western experience. Furthermore, this policy was unlikely to satisfy consumer demands if only

because the production of consumer goods would always be secondary to military production. Nevertheless, a centrally-directed policy involving plant-level conversion remained central to Soviet, and later Russian conversion policy.

One economic advisor to President Yeltsin on defense conversion estimated the cost of conversion at 150 billion rubles, which was later increased to $150 billion dollars, or about two years' of Russia's GDP in mid-1992 dollars.[19] The government could only afford to finance defense conversion between July 1992 and January 1993, but the inflation rate of 2,650 percent in 1992 and 940 percent in 1993 meant that the government could fund very little conversion. By mid-1993 government squabbling, continuing drops in MIC output, and growing budget shortfalls forced the government to nearly halt conversion projects altogether. However, other attempts were made to continue financing conversion, sometimes to the detriment of the economy and efforts at conversion in general. For example, in 1994 the Russian Central Bank allocated 700 billion rubles for conversion at a 10 percent interest rate at time when inflation exceeded 400 percent.[20]

This policy of centrally-directed, plant-level conversion led to some bizarre results. For example, the Ministry of Aviation Industry was given responsibility for processing fruits and vegetables, and making starch, syrup, and pasta. The ministry charged with making nuclear weapons began producing cheese-making equipment.[21] Another defense plant started producing titanium wheelbarrows that would undoubtedly last 1000 years, but probably cost $10,000 each if the actual cost was passed on to the consumer. It remains unclear whether any were actually sold.[22] While it is hard to tell whether defense conversion actually had any real effect given the notoriously poor Russian record keeping, the production of consumer goods reportedly rose from 40 percent of total

output in 1988 to 60 percent in 1991.[23] However, it must be remembered that defense procurement was dropping rapidly throughout this period, which accounts for some increase in the percentage of consumer goods.

A major change in Russian conversion policy evolved in 1992 following a drastic 68 percent cut in orders for military hardware compared to the previous year.[24] Spending on military research and development also dropped 33 percent in 1992, following an even larger 50 percent cut in 1991.[25] By early 1992, 21 percent of defense enterprises were almost bankrupt, and 43 percent were on the verge of bankruptcy.[26] The gradual conversion to consumer production envisioned by Russian leadership quickly threatened to collapse. Making the situation even worse was economic crisis in Russia. It soon became apparent that the 41 billion rubles promised for conversion in 1992 would not be available from the central government. The defense establishments used most of the money that was provided to pay off debts to other establishments, and to pay workers, rather than for conversion.[27]

Even if the money could be found, it would only account for a small portion of the 150 billion dollars required, and it was soon apparent that the government simply did not have those kinds of reserves. One government official described the major shift in government policy when he wrote that, "For Russia, the sale of weapons and military materiel is a required and inevitable process in this respect,"[28] and that "the market for the weapons trade. . .is an elite market, fully comparable to the diamond market."[29]

Conversion Through Arms Sales

This new approach to funding conversion with arms sales was referred to as "economic" conversion, as opposed to the "physical" conversion that marked policy from

1989 through 1991. In contrast with physical conversion in which the defense establishments would be converted to production of consumer goods, economic conversion focused on using arms exports to achieve financial self sufficiency. Profits could be used to finance diversification to consumer products, and fund military activities as well.[30] This new policy was apparent at the February 1992 Abu Dhabi military show when Russian arms manufacturers presented a wide range of state-of-the-art weapons. Previously, Russia never allowed its latest products to be shown to the world or marketed for export.[31]

In April 1992, Andrei Kokoshin was appointed First Deputy Minister of Defense, which was the first time the Russian armed forces had a civilian in a top post.[32] Kokoshin had a strong academic background and was well-acquainted with the latest Western thinking on defense conversion. Responsible for the military-technical policy of the Russian armed forces, Kokoshin pushed for a national industrial policy (NIP) to shape the defense industry. The NIP, unveiled in August 1992, had two principal goals. First, the reformed defense industry was to be the core of the Russian economy, forming what Kokoshin called locomotives for its development. Second, the defense industrial base would have the capability to develop and produce world-class weaponry.[33]

A central theme of the NIP was the formation of "financial-industrial" groups, incorporating both military and civilian institutions. The primary purpose was to use the private banking sector to finance conversion projects the government could not afford.[34] The hope was that banks, insurance industries, and other commercial institutions would dominate the research and production facilities of the defense industry. The financial-industrial groups were evidently patterned after the experience of Japan and South Korea,

that have similar institutions. The goal was for these groups to produce high-technology, dual-use products that would serve both military and civilian customers, a policy currently in favor in US defense planning.[35] Foreign participation would be allowed in areas that would not threaten Russian national security.[36]

Ironically, dual-use technologies have been common throughout the Russian MIC for many years, especially in the aviation sector. Unfortunately, it is difficult to meet consumer needs with military technologies except in very rare cases.[37] Nevertheless, with the West encouraging dual-use technology in its own defense conversion, it appears this approach will remain part of Russian policy, even though it is not clear that widespread application of dual-use technology is a successful business practice.[38]

Privatization, which started in Russia as part of Boris Yeltsin's economic reform in October 1992, came more slowly to the MIC because of security concerns, although it too played an important role in defense conversion policy. Considerable disagreement developed over privatization among the ministers, who saw an important power base disappearing, the military, who saw privatization as weakening the security of the country, and the MIC itself, who opposed efforts to cut off guaranteed government funding. Nevertheless, in February 1993 President Yeltsin directed privatization to commence with a minimum of restrictions, and later expanded the categories of enterprises that could be sold. He also directed that Roskomoboronprom, the Committee for the Defense Branches of Industry, be the leading body for the implementation of state policy in the defense sector, regardless of ownership.[39]

It is not clear that privatization has provided any real benefits to conversion. Many of the workers and managers in the privatized plants often collected more than 70 percent

of the shares, leading to large concessions to the managers. According to Russian presidential candidate Grigorii Yavlinsky, "What we have seen so far is not privatization, it is collectivization, which put the workers in charge of enterprises. Their interest is in increasing wages, not investment."[40] Adding to the policy confusion, neither Kokoshin nor Roskomoboronprom has promoted privatization, although it clearly is favored by Yeltsin.[41]

Since 1994, Russian policy on defense conversion has evolved little to deal with the many problems faced by the MIC. One observer stated, "Russia's six-year old attempt to convert its military industrial complex into a competitive part of the country's nascent market economy is in disarray, producing few practical results."[42] The lack of funds and bitter in-fighting among various ministries have resulted in bureaucratic gridlock, essentially cutting the industries loose to fend for themselves.

By the latest accounts, Russian defense conversion has largely failed. Factory output from the MIC declined 30 percent in March 1996 compared to the same period the prior year. The government owes the MIC $4.8 trillion rubles for prior orders in 1994 and 1995. Furthermore the government was only able to pay 250 billion rubles of the 1.4 trillion promised for conversion in 1995, a mere 18 percent of the total. Not a single new aircraft was purchased in 1995, despite a need for modernization.[43] The many reasons behind this colossal failure will be discussed next.

Notes

[1] Adelman and Augustine, 29.
[2] Cooper, *The Soviet Defense Industry, Conversion and Economic Reform*, 6-11.
[3] Adelman and Augustine, 32.

Notes

[4] Vladimir G. Treml, "Problems with Soviet Statistics: Past and Present," in *Defense Conversion, Economic Reform, and the Outlook for the Russian and Ukrainian Economies*, ed. Charles Wolf, Jr. et al. (New York, NY St. Martin's Press, 1994), 19-37.

[5] Cooper, *The Soviet Defense Industry, Conversion and Economic Reform*, 13.

[6] Kathryn Wittneben, "Defense Conversion: An Overview," in *After the Cold War: Russian-American Defense Conversion for Economic Renewal*, ed. Michael P. Claudon et al. (New York, NY New York University Press, 1993), 1.

[7] Sergei V. Kortunov, "Defense Conversion in Russia: The Need for Multinational Support," in *After the Cold War: Russian-American Defense Conversion for Economic Renewal*, ed. Michael P. Claudon et al. (New York, NY New York University Press, 1993), 58.

[8] Considerable debate exists over the exact percentage of the Russian economy devoted to military production. For example, a senior official at the Institute of Canadian-American Studies in Moscow estimated 35 to 55 percent of the GDP went to defense. Interview with author, 17 September 1996.

[9] Cooper, *The Soviet Defense Industry, Conversion and Economic Reform*, 14.

[10] Keith Bush, "Conversion and Privatization of Defense Enterprises in Russia," *RFE/RL*, 3, no. 17 (29 April 1994): 21.

[11] Ibid., 23-27.

[12] Adelman and Augustine, 32.

[13] Mikhail Malei, "The Destiny of Conversion is that of Russia, "*Military Technology*, March 1993, 55.

[14] Bush, "Conversion and Privatization of Defense Enterprises in Russia," 19.

[15] Adelman and Augustine, 30.

[16] Kathryn Wittneben, "Perspectives and the Role of US Business in Russian Defense Conversion," in *After the Cold War: Russian-American Defense Conversion for Economic Renewal*, ed. Michael P. Claudon et al. (New York, NY New York University Press, 1993), 83.

[17] Cooper, *The Soviet Defence Industry, Conversion and Economic Reform*, 2.

[18] Ibid., 32.

[19] Keith Bush, "Aspects of Military Conversion in Russia," *RFE/RL* 3, no. 14 (8 April 1994): 32.

[20] Ibid., 32.

[21] Adelman and Augustine, 31.

[22] Ibid., 33.

[23] Kathryn Wittneben, "Perspectives and the Role of US Business in Russian Defense Conversion," in *After the Cold War: Russian-American Defense Conversion for Economic Renewal*, ed. Michael P. Claudon et al. (New York, NY New York University Press, 1993), 29.

[24] "Arms Industry: Will It Save or Crush Economy?," *The Current Digest* XLV, no 4 (1993): 13.

[25] "Russia's Swords and Plowshares," *U.S. News and World Report*, 18 January 1993, 54.

Notes

[26] Steven Gallant, "The Failure of Russia's Defense Conversion," *Jane's Intelligence Review*, July 1994, 305.

[27] Bush, "Aspects of Military Conversion in Russia," 32-33.

[28] Mikhail Malei, "The Destiny of Conversion is that of Russia," 53.

[29] "Arms Industry: Will it Save or Crush Economy?" 14.

[30] Speaking on economic conversion, Mikhail Malei said, "The essence of economic conversion lies on orienting Russia's MIC towards exports for the next four years, and by exporting the products of the defense complex it's possible to find the necessary funds to carry out physical conversion of enterprises." Gallant, 305.

[31] E. Kogan, "The Russian Military-Industrial Complex after the Watershed," *The Journal of Slavic Military Studies*, 6, no. 3 (September 1993): 446.

[32] Cooper, "Transforming Russia's Defense Industrial Base," *Survival*, 35, no. 4 (Winter 1993): 148.

[33] Ibid., 150.

[34] Ibid., 151.

[35] William Perry, "U.S. Military Acquisition Policy," Comparative Strategy, 13, no. 1 (1994):19-24.

[36] Cooper, "Transforming Russia's Defense Industrial Base," 150.

[37] Many scholars believe that dual-use technologies can be used to maintain a strong defense industrial base while allowing defense companies to successfully compete in commercial markets. See Gansler, 85-102.

[38] Cooper, "Transforming Russia's Defense Industrial Base," 160.

[39] Ibid., 157.

[40] Bush, "Conversion and Privatization of Defense Enterprises in Russia," 20.

[41] Ibid., 21.

[42] Paul Mann, "Aviation Emerges as Road Map to Russian Defense Conversion," *Aviation Week and Space Technology*, 6 May 1996, 48.

[43] Igor Khripunov, "Russia's Dangerous Weakness," *Armed Forces Journal*, June 1996, 39.

Chapter 4

Why Russian Defense Conversion Failed

Russian defense conversion has failed because of political, social, and economic factors, many of which were outside the control of the Russian government. Perhaps the largest impediment to defense conversion is the political legacy of eight decades of communism. Russian leadership, with no other experience upon which to draw, repeatedly turned to centrally-directed, top-down conversion policies that were little different from the economic policies that led to the need for conversion in the first place. Conversion was treated as though it was something that could be planned, rather than letting the industries react to market needs. The State Committee for Conversion attempted to catalog the available technologies and decide which industries would receive each one for conversion.[1] Until the Russian leadership recognizes that conversion must be driven by market needs, conversion will be inhibited, rather than aided, by government policy.

Another political problem inherited from the communists is the tradition of a strong military to protect the state. Throughout the difficult years of 1992 through 1993 there was no revised defense doctrine to address Russia's new place in the world order. In November 1993, President Yeltsin signed, "Main Provisions of the Military Doctrine of the Russian Federation," without public debate or legislative approval. Throughout 1995

the Federal Assembly urged the government to draft a more useful policy, but to no avail.[2] Finally, in 1996 President Yeltsin sent a draft to the Duma, which has yet to be approved.[3] Undoubtedly the highly divisive conflict in Chechnya has weakened the National Security Advisor and Defense Ministry, making it difficult to agree on a policy. As a result the Ministry of Defense has continued to place large orders without regard for actual need. The poor showing in the war in Chechnya, and the stunning success of the US in the Persian Gulf War, both play on historical Russian insecurities, which military leaders used to push for a larger budget and more orders, all of which kept the MIC tied to its traditional funding source.

A further problem is the disagreements between reformers and more nationalistic military leaders. Russian generals, who control all decisions on creating joint ventures with Western companies and privatization of Russian establishments, are reluctant to relinquish traditional relationships. At the same time, they discourage conversion by promising more orders than they can pay for, thus enticing defense establishments to minimize consumer production.[4] It makes little sense to make those whose mission is national defense responsible for dismantling the MIC. Acting Finance Minister Sergei Dubinin complained that the Defense Ministry placed orders with the MIC for 28 trillion rubles in 1994, although its budget was only 5 trillion rubles.[5] Until 1994, Russian factories were required to maintain reserve capacity for war time mobilization, hampering conversion even more. President Yeltsin finally ended this by Presidential decree, but not until after five years of wasted capacity.

The problems of a centrally-directed conversion and the political strength of the Russian military combined to promote the policy of economic conversion through arms

sales. This has kept the MIC tied to its past and encouraged managers to continue old business practices. While arms sales may seem attractive as an interim measure until the government's cash shortage is corrected, the growing competition in the arms market makes it unlikely that Russia's revenues from arms sales will continue to grow. As the true cost of producing weapon systems are finally realized and passed on to the world customer, Russian systems will become less attractive. As long as arms sales are doing well, or there is hope that sales can be improved, the money earned from existing sales will be rolled back into R&D for military equipment, not consumer goods. Rather than being a locomotive for the economy as envisioned by Kokoshin, the MIC will draw away critical resources needed elsewhere, as it has for the past 50 years of the Cold War. If the nationalistic politicians continue to gain political power, defense conversion will be slowed even more as arms exports are promoted. Duma representative Zhirinovsky publicly claimed that Russia could quickly push defense exports up to 30 billion dollars per year.[6] Such inflammatory comments, unbelievable as they seem to those in the West, only increase political friction.

The social conditions inherited from the communist government also played a role in the failure of Russian defense conversion. Workers in defense plants, especially in the closed cities, live in housing furnished by the establishment where they work. Social services, including clinics, kindergartens, child care, vacation resorts, and even farms, are also provided as part of a worker's compensation.[7] As employment conditions change, a worker cannot easily pack up and move to a more favorable area as defense workers routinely do in the US. Not only is there no housing market, but state-provided services we take for granted, such as unemployment compensation, are only now under

development. As a result, workers lack the geographic mobility to adapt to changing labor market. Defense establishment management, aware of the plight of workers and unable to pay the unemployment compensation as required by Russian law, are reluctant to terminate their employment, leading to massive under employment where workers may only work a few hours a day. This exaggerates the employment figures and makes the economic situation seem much better than it actually is, while leaving the factories even more inefficient.[8] As establishments add the overhead burden of under-employed workers to the price of its consumer goods, they become less competitive in the market. Nowhere is this more of a problem than in the closed cities, which were built entirely to support the defense establishment. Without worker mobility, and a social safety net to support unemployed workers, Russian leaders have few options without risking total social chaos.

The large bureaucratic institutions the MIC inherited from the Soviet era have also dampened conversion, stifling decision making and innovation, and making the industries less profitable. The vertical integration of the defense industries led to economic inefficiencies no Western firm could tolerate. US defense firms learned long ago to focus on their core competencies, such as design and assembly of airplanes, or engines, or tanks, and leave production of the smaller components to specialty firms who understand how to produce them most efficiently. This is not the case in Russia today. For example, Leninetz, a privatized holding company in Saint Petersburg, consists of 38 enterprises that include 11 research facilities, 16 factories, an airport, 12 helicopter plants, and a test site. Products range from avionics for military fighter aircraft to vacuum cleaners.[9]

Perhaps the most troublesome economic problem is the poor business climate, which has proved to be a problem for both Russian and outside investors. Such things as transfer of property ownership and exchange of funds that we take for granted are not easily accomplished in Russian transactions, particularly when dealing with defense. Investors are reluctant to close deals as long as uncertainties remain over such basic issues. Further hampering the business climate is the ruble, which cannot be converted on the international market. This creates a situation where profits cannot be taken out of the country, dampening the enthusiasm of outside investors. Finally, the tax structure is so complicated and burdensome that it is difficult to be profitable, generate capital, or attract internal and external investors.

The state of the Russian MIC also led Russian leaders to be overly optimistic about conversion. Because the MIC was able to produce military hardware that was generally on a par with that available from Western firms, officials believed the MIC consisted of world-class organizations. However, the prices the government paid for weapon systems were frequently a secondary consideration, provided the systems met performance requirements.[10] What Russian leaders failed to realize was that there is a great deal of difference between the ability to produce an item, and the ability to produce an item that is attractive to the customer at a competitive price. In reality, much of the manufacturing capability in Russia still relies on manual labor instead of automated processes, making it doubtful that Russian products can meet current quality expectations, and compete economically on the world market, even with the lower labor costs.

Clearly Russian policy on defense conversion failed to address the staggering problems the country faced in converting the MIC to market-driven enterprises.

Unfortunately, as will be discussed next, the scant US aid Russia received to help in defense conversion did little to point Russian leaders toward policies with a greater chance of success.

Notes

[1] Adelman and Augustine, 35-36.

[2] Khripunov, "Russia's Dangerous Weakness," 38.

[3] Senior official at the Institute of US-Canadian Studies, interview with author, 17 September 1996.

[4] Geoff Winestock, "Russians Divided on Defense Conversion," *The Journal of Commerce*, 10 April 1995, 2A.

[5] Bush, "Aspects of Military Conversion in Russia," 32.

[6] Cooper, "Transformation of the Russian Defense Industry," 446.

[7] Bush, "Conversion and Privatization of Defense Enterprises in Russia," 19.

[8] Bush, "Aspects of Military Conversion in Russia," 33.

[9] Senior official at Leninetz, interview with author, 24 September 1996.

[10] Bush, "Conversion and Privatization of Defense Enterprises in Russia," 19.

Chapter 5

The Failure of US Policy

Although Russian policy regarding conversion seems to have little firm basis in Western economic experience, the historical foundation for US policy toward Russian defense conversion is no more sound. In 1993 Deputy Secretary of Defense William Perry first formulated US policy toward Russian defense conversion, which resulted in the establishment of a joint US-Russian committee on defense conversion, with Perry as cochairman for the US, and Deputy Minister of Defense, Andrei Kokoshin, and Economic Minister Valeriy Mikhailov co-chairmen for the Russians. The goal of the committee was to look at specific projects that the US could fund to assist Russian conversion.[1]

The vehicle for direct US assistance for Russian defense conversion was the Nunn-Lugar Act, which was originally intended to reduce the Russian military threat by dismantling nuclear weapons, but later was amended to provide economic assistance for defense conversion. Nunn-Lugar programs, administered by the Defense Nuclear Agency and supported by the Commerce Department, use US government funds and matching private investments to form joint ventures between US firms and Russian defense establishments. It was not until 1994 that the first four contracts for approximately $20 million were awarded. Joint ventures were formed with Rockwell International to

produce a satellite-based traffic control network, Hearing Aids International to produce hearing aids, International American Products to produce dental chairs, and Double Cola to produce soft drinks.[2] The last venture, between Double Cola Company and NPO Mashinostroyenia, one of Russia's top design bureaus with expertise in missiles and spacecraft, created more animosity than goodwill and did little to further Russian defense conversion.[3] Only a handful of Russians were actually employed, few of whom were skilled defense workers, and little or no actual conversion resulted from the project.

Private US efforts to aid Russian defense conversion have fared somewhat better. In 1995 the Overseas Private Investment Corporation (OPIC) committed to investing $500 million dollars in the FSU.[4] Although it is too early to tell if this approach will be more successful the initiatives resulting from the Nunn-Lugar Act, initial results are promising. OPIC gave a $16 million loan guarantee to Hamilton Standard Holdings, Incorporated, a subsidiary of United Technologies Corporation, to convert environmental control systems in military aircraft into systems suitable for civilian aircraft. It has also provided a general commitment for a $250 million joint venture between Pratt and Whitney and a Russian engine manufacturer to produce commercial jet engines.[5]

The small amount of direct aid for conversion provided by the Nunn-Lugar Act has had only a marginal impact. While the demonstration of US commitment to aid Russia in its economic transformation has political value, Nunn-Lugar has been a source of irritation, not only for the inefficient way that joint ventures were formed, but for the way the money was spent. The Nunn-Lugar legislation mandated that the majority of the money be spent for US personnel, travel, and office expenses, which left little for Russian conversion.[6] Most of the budget went to US companies to study Russia, with little left

over to actually spend in Russia itself.[7] US assistance was also hampered by the economic conditions in the US, where demands for large budget cuts and aid for the ailing US MIC left little money for Russian conversion.

The Nunn-Lugar aid has had only a negligible impact on Russian defense conversion, and encourages the use of defense conversion models with small chances of success. A more proactive, and realistic, US policy is needed that does not depend on large amounts of direct US government funding. This, and the necessary changes in Russian policy, will be addressed next.

Notes

[1] Perry, 19-20.

[2] Jeffrey M. Lenorovitz, "U.S.-Russian Teams Get Pentagon Funds," *Aviation Week and Space Technology*, 8 August 1994, 27.

[3] Adi Ignatius, "U.S. Stirs Russian Resentment with Plans for Defense Conversion," *Wall Street Journal*, September 19, 1994, A10.

[4] Winestock, 3A.

[5] Ibid., 3A.

[6]Igor Khripunov, "Delusions v. Conversion," *Bulletin of the Atomic Scientists [GTBA]*, 50, no. 4 (July 1994) 12.

[7] Senior official at the US Consulate in Saint Petersburg, interview with author, 23 September 1996.

Chapter 6

New US and Russian Policies Toward Defense Conversion

The failure of Russian attempts to manage defense conversion does not imply that defense conversion will not take place. As long as Russia stays committed to a capitalist economy, market forces will result in conversion of one form or another. However, the economic chaos resulting from failed conversion policies could threaten the stability of Russia's democratic experiment. Those from the old guard with a stake in maintaining the huge Russian MIC could well revive nationalistic attitudes, threatening the stability of Europe and send economic and political shock waves all the way to the United States.

Implications for Russian Policy

It is easy to point to the errors in Russian policy regarding conversion. Given the many obstacles the country had to overcome, it is perhaps unrealistic to expect defense conversion to fare better than it has. It should be pointed out that the US has also had a hard time settling certain policy issues following the end of the Cold War as well, including defense conversion. The US military, like its Russian counterpart, is still searching for the correct military size and appropriate doctrine for the post-Cold War era. Russian and US defense industries have both reacted to the forced downsizing resulting from budget cuts in similar ways, searching for ways to expand the arms export market,

while maintaining the defense industrial bases. In reality, current US efforts at defense conversion have faired little better than those in Russia, although the US has been spared the economic turmoil because it faced much smaller defense cuts as a percentage of GDP, and had a vibrant economy to cushion the impacts and absorb displaced workers. It should also be pointed out that despite the many failures, there are a few success stories, such as portions of the Russian aviation industry.[1] Still, there are actions that the Russian leaders must take to hasten defense conversion and make it less disruptive to the fragile Russian economy.

Russian leaders must decide on the appropriate size for the Russian military based on their view of their nation's post-Cold War security needs. The Russian MIC will not disappear following conversion; it will only downsize just as the US defense industry is doing currently. As in the past, the MIC will continue to provide the tools needed by the Russian military for national defense. Once the size of the military is agreed upon and a procurement budget established, the defense industries will have a better idea who will survive the conversion and can then plan for the future. Just as in the US, there will be mergers, bankruptcies, and a few establishments that shift successfully from defense to civilian production. What will finally emerge will be a much smaller MIC that is sized correctly for what it must produce. Given the monopsonistic nature of the business, it is unlikely that defense industries will ever match their civilian equivalents in efficiency, but by clearly separating defense plants from consumer production, those inefficiencies will be isolated to a small part of the total industrial base.[2]

Arms sales do not provide any long-term solutions to conversion, but they remain a major source of hard currency for the country. As long as exports are not subsidized by

the Russian government, competition on the international market will only serve to increase the efficiency of the MIC and lower overhead rates, just as in the US. The problem arises in defining what constitutes a government subsidy. It is unlikely right now that the defense plants even fully understand what it is costing them to produce military hardware because they still receive "free" items such as electricity, and parts and components "provided" by other MIC establishments.[3] Once actual costs are defined, Russian arms products will be much less competitive. Russian leaders must resist the temptation to subsidize the industry to keep exports high. If arms exports actually show a profit, the MIC establishments should be allowed to keep what they earn for reinvestment in the Russian MIC and economy.

Russian policies aimed at converting defense industries to production of consumer goods should be abandoned. Rather than direct limited government capital at defense enterprises, the capital should be made available to the private sector, which can hire skilled defense workers or buy defense factories if desired. The workers and engineers, who are the most valuable resource in the MIC, should be allowed to move where they can be most productive to the economy. Centrally-directed conversion, in which a bureaucratic agency decides what should be built, has not worked and merely keeps inefficient factories making goods that no one wants. The output of factories must be market-driven to meet the needs of consumers. By encouraging the production of such mundane things as diapers, food, and simple appliances instead of high-tech items, a strong consumer market will be created more quickly than trying to dictate production from above. Furthermore, it is unlikely defense plants will shed their corporate culture acquired over many years of doing business only with the government.[4] As difficult as it

will be for Russian civilian factories to adapt to a market economy, it will be many times harder for a defense plant used to extreme secrecy and unlimited funding. Experience in the West has shown that MIC managers will not be able to readily adapt to the new business climate. As market forces emerge, natural adjustments will take place. Despite all the turmoil, this is already occurring is some areas. Defense workers now are paid less than their civilian counterparts, forcing those who are able to do so to leave for industries that pay better wages.[5]

While a market approach is contrary to the policies adopted by Mikhail Gorbachev in 1989 and endorsed in one form or another ever since, it is far more likely to result in a profitable enterprise. The technologies and expertise from the MIC that can be used by civilian companies will be adapted to consumer production; the remainder will be abandoned. As painful and wasteful as it may seem, in the long run a healthier, more profitable industry will result. The level of technology and production capability in the MIC are not nearly as advanced as many in Russia believe, which will result in many failures, a natural outcome of conversion to a market economy. Nevertheless, capitalizing the private sector offers the best hope for transforming Russia's MIC.

The Russian MIC inherited a large bureaucracy from the Soviet government that encourages meddling. Since the breakup of the FSU, the number of bureaucrats has almost doubled, even though there are many fewer people to govern, and the Communist party is no longer included in the government. Unfortunately, many of the new bureaucrats have created jobs for themselves in licensing businesses. This adds no value to the economy and levies an additional burden on the entrepreneur trying to start a new business.[6] For example, a street vendor in Saint Petersburg recently stated that he was

paying $700 per month in fees to operate three stalls in an open-air flea market that sold souvenirs to tourists.[7]

The formation of financial-industrial groups has helped other countries, but there is a possibility that they will only add to the tremendous overhead costs in Russia. Similarly, encouragement of dual-use technologies, while a popular idea in the West, has not been proven to be anything more than a government subsidy, with the accompanying bureaucratic infrastructure. Under the guise of dual-use technology and financial-industrial groups, the Russian MIC may try to maintain its traditional way of doing business. The financial-industrial groups will be so large and politically powerful that they could easily influence the government to maintain financial support for the MIC.[8] If the industry is to become efficient, this unnecessary overhead must be shed.

The social upheavals and worker displacements caused by MIC downsizing must not be allowed to disrupt the social fabric of the country. The closed cities will need special attention to prevent widespread economic upheavals. Workers must be assured they will have access to unemployment compensation, retraining, and other basic social services. By providing a place for workers to go, they will be more likely to move to more profitable industries.

The enormous amount of capital needed to jump-start the private sector in Russia will not come from arms sales, nor from the cash-poor central government, but from private investors in and out of Russia. As long as issues such as ownership, tax laws, currency conversion, privatization, and contract laws are subject to dispute, investors will be reluctant to put money into Russian business ventures. The weakened judicial branch of the Russian government must assert itself and establish a strong rule of law so that

investors can be assured contracts will be honored, and that business ventures will not be invalidated by a government decree. With many other countries in Asia, South America, and elsewhere offering superior business climates and more stable governments, Russian politicians must enact changes that make their country more attractive to foreign investment. Compared to many of the other actions needed, this is one the central government can implement quickly, assuming they can overcome internal disputes, and could provide some of the largest benefits.

Russia itself can also provide economic incentives for external investors. The Duma is presently considering laws that would use the country's huge reserve of natural resources as collateral against loss of capital by foreign investors.[9] The city of Saint Petersburg will provide a 100 percent guarantee for certain joint venture projects.[10] These initiatives, and others under consideration to attract foreign investors, could form the basis of a much better conversion policy than the one currently in place.

Implications for US Policy

Certainly much of Russia's difficulty in converting its MIC to a more productive contributor to their economy can be attributed to misguided policies and the tremendous problems inherited from seven decades of communist rule. US policy and economic aid has had little economic impact, though some could argue it has had political value. Still, with limited funds available, policy makers would like to maximize the return on investment. Before deciding on what new direction, if any, the US should adopt, it is worth examining what US national interests are at stake, and the value of additional investment in Russian defense conversion.

Although the US economy could benefit from another strong foreign market, the real US national interests at stake are centered on developing a stable, democratic political system in Russia. The historical lessons of Japan and Germany suggest that international economic policies can have an impact on emerging government systems. In the 1920s both countries were on the path toward liberal, democratic governments, encouraged by abundant overseas trade and investment opportunities. When the worldwide depression in the 1930s changed the international situation, the governments were subjected to economic hardships, and the trends toward democratization quickly vanished.[11] Already, Russia's experiment with democracy and capitalism is under intense internal pressure. The dismal economic situation in Russia has resulted in the once immensely popular President Yeltsin barely winning the 1996 presidential election, and extreme Russian nationalist Vladimir Zhirinovsky making a strong showing in the election. Even President Yeltsin, one of the strongest supporters of democracy, has resulted to autocratic measures in order to keep the economy going. Thus, the continuation of Russia's fragile democracy hinges on the success of the economic transition. Finding productive employment for military officers, ex-communist party officials, scientists and engineers, and industrial leaders would give these individuals a strong stake in ensuring that democratization continues. Failure of capitalism could well mark the return to a nationalistic, militaristic regime, threaten the young democracies in eastern Europe, and possibly even dismantle the gains made in disarming Europe.

It seems clear that US national interests are served by ensuring that the Russian experiment with capitalism survives, but the difficult question remains of how to accomplish this. Russian policy for economic transformation has focused on converting

the MIC using a centrally-managed model, and Nunn-Lugar has endorsed this approach, although with little real money. But the reality is that US policy is not rooted in a strong historical foundation

As discussed earlier, the overwhelming historical evidence from US experience with defense conversion certainly suggests that adopting policies based on the substitution model would be far more productive. In some respects the Nunn-Lugar approach is simply another variation of the centrally-directed conversion model adopted by the Russians, in which bureaucrats US and Russian in this case decide which ventures should be pursued.

With so much at stake, the limited US aid available must be applied in a more beneficial manner that leverages the investment. The only way to do this is through the private sector, bypassing as much of the bureaucracy in both countries as possible. It is critical US policy makers recognize the real future of the Russian economy is in the consumer sector.

Russian companies desperately need US capital, but not in the MIC. The real free market in Russia will grow from producing consumer goods, not high tech-military items. The US government should provide tax incentives and loan guarantees to incentives US companies to form joint ventures with Russian companies. Because of the changing political climate and risky business environment, outside investors are naturally reluctant to invest in Russia; yet the payoffs could be high. Russia possesses a huge pool of talented, highly-educated engineers and scientists who earn a fraction of what their counterparts in the West are paid.[12] By encouraging investment and reducing the risks for individual companies, the US government could stimulate the Russian economy much

more than with direct aid. Private industry in the US would benefit by gaining a foothold in a large emerging market. More importantly for Russia, their firms would benefit by gaining new capital to modernize, access to established distribution networks, and Western experience in marketing and meeting the demands of consumers. A very important side benefit is that a pledge of loan guarantees would send a strong signal to Russian politicians that the US is committed to helping their economy, strengthening the position of more liberal reformers.

Euroconsult, a large respected study organization similar to the Brookings Institution, said in 1993 that joint ventures between US and Russian partners, "in the longer term may form the nuclei of truly private companies."[13] There is evidence to suggest that joint ventures can work, even in unlikely circumstances. Leninetz, a major defense company in Saint Petersburg, has formed a very successful joint venture with Gillette to produce razors.[14]

There is growing evidence that capitalization of the Russian private sector could yield dramatic results. As opposed to the MIC, which is heavily in debt and whose production is in precipitous decline,[15] portions of the private sector are doing quite well.[16] Russia's private economy has been growing by 15 to 150 percent annually, depending on the industry. Many managers of private companies have reported their companies have doubled sales and profits the past two years. Even more important for Russia, the profits are being reinvested rather than exported to foreign banks as was common just a few years ago.[17] Recent data suggest that US companies see Russia as less risky and entry as potentially more lucrative than just a few years ago.[18] Given these factors, even relatively modest loan guarantees by the US government could yield a dramatic increase in the

number of private companies establishing businesses in Russia, with little risk of losses. At the very least, this approach would yield substantially larger benefits for the Russian economy that the current Nunn-Lugar approach.

It is time for new approaches to defense conversion in Russia. Policy makers in both the US and Russia should abandon their attempts to direct conversion from above, and instead encourage the blossoming private sector. Russia must create a better business environment to attract internal and external capital, and to ease the transition for displaced workers. The United States should recognize the importance of a stable Russian government to American national interests and take a more active role in promoting growth in the Russian economy. Fortunately, there are many indicators that this can be done with relatively little actual investment. The key is not to finance conversion programs in the Russian MIC, but rather to leverage the tremendous power of the American private sector by providing tax incentives and loan guarantees to US companies investing in private Russian companies. US policy will not determine the outcome of Russia's attempt at a capitalist economy, but it can make a difference. Too much is at stake not to get it right.

Notes

[1] Mann, 48-49.

[2] Private firms are up to 30 percent more efficient than publicly owned facilities, similar to the Russian MIC. Gansler, 85.

[3] A senior official with Leninetz stated that they receive no direct or indirect subsidies from the government. In fact, he complained that electrical rates had risen six times in the past year, causing them severe budget problems. It is not clear this is universally true across the MIC. Interview with author, 24 September 1996.

[4] A good example is the Kirov-Catepillar joint venture in Saint Petersburg. Kirov will not give up factory space for expansion even though it is presently unused. Senior official at the US Consulate in Saint Petersburg, interview with author, 23 September 1996.

Notes

[5] Erik Whitlock, "Defense Conversion and Privatization in St. Petersburg," *RFE/RL* 2, no. 24 (11 June 1993): 22.

[6] Senior official at Moscow University, interview with author, 18 September 1996.

[7] The vendor, a former YAK-38 pilot who was unable to live on his retirement pension, did not state how much of the $700 was payment to government officials and how much went to legitimate fees. Interview with author, 25 September 1996.

[8] Cooper, "Transforming Russia's Defense Industrial Base," 446-447.

[9] Senior official in Russian Duma, interview with author, 20 September 1996.

[10] Senior official in Leningrad District, interview with author, 23 September 1996.

[11] Edward D. Mansfield and Jack Snyder, "Democratization and War," *Foreign Affairs* 74, no. 3 (May-June 1995): 95.

[12] For example, according a senior official, the average engineer at Leninetz earns about $140 per month. Interview with author, 24 September 1996.

[13] Craig Covault, "95,000 Russian Layoffs, Launch Breakdown Feared," *Aviation Week and Space Technology*, 15 November 1993, 27.

[14] Senior official at Leninetz, interview with author, 24 September 1996.

[15] Khripunov, "Russia's Dangerous Weakness," 39.

[16] Avraham Shama, "Inside Russia's True Economy," *Foreign Policy* no. 103 (Summer 1996): 111-112.

[17] Ibid., 120.

[18] Ibid., 125.

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