

WORKING P A P E R

Political and Economic Outlook for Russia and the Future of the Automotive Industry

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PREFACE

In early 2003, a multinational firm asked RAND Enterprise Analysis to provide their executive management with a broad overview of key political and economic trends and risks in the Russian Federation. They also requested an overview of key developments and trends in the automotive sector.

This Working Paper focuses on political and economic developments and trends in Russia since independence and developments in the automotive sector. It also views likely future developments under President Vladimir Putin through 2008—the end of his second presidential term.

In addition to business leaders, this paper would be of interest to specialists and non-specialists in government and research.

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EXECUTIVE SUMMARY

This Working Paper assesses political developments and trends in Russia since independence and discusses likely future developments under President Vladimir Putin through 2008—the end of his second presidential term. It then evaluates the sources of recent economic growth in Russia and projects economic output and personal incomes through 2002. The third section of the paper analyzes the Russian car market and car manufacturing industry and forecasts automobile sales by volume and segment through 2020.

Political Developments and Trends in Russia

In some respects, the political transition since the end of the former Soviet Union has gone better than feared. Russia did not disintegrate as the USSR did and Boris Yeltsin established an institutional framework and cultural baseline for the potential emergence of a “normal” and “civilized” political system to which he and many other “founding fathers” of Russia aspired. However, imperfections in the reform process combined with Yeltsin’s personal infirmity during his second term fostered a chaotic economic and political environment which undermined support for liberal reforms.

Vladimir Putin has been very popular in Russia because of his success in restoring a sense of political and economic “order.” Since 1998, Russia’s economy has grown rapidly, in part because of the economic policy and institutional changes implemented under Yeltsin, bolstered by a period of relatively high energy prices. The Putin administration also has improved the provision of basic government services, most notably the regular payment of pensions and government salaries. An extensive tax reform introduced during his tenure and spending restraint have put the government budget on a sounder basis. In his second term, we expect that Putin will seek to deepen and extend market reforms and further promote economic restructuring and development.

Putin has utilized the relative stability of his first term as president to set the stage for a more centralized and authoritarian political system. We see a continuation, if not intensification of this trend during his second term in part because of his strong control over the parliament and “administrative resources” of the state and also because a semi-authoritarian government is in line with the stated preferences of a significant share of the population. However, we feel a full-fledged dictatorship is neither generally

desired nor feasible. We expect the Russian public will remain largely politically apathetic and passive. The general quiet that prevailed during the economic and social traumas experienced in the 1990s suggest that Russians will continue to focus on their personal affairs. Political stability is likely to last at least through Putin's second term (2004-2008). We do envision escalating political power struggles as the 2008 elections draw near and candidates jockey for position and influence, should Putin not seek to change the constitutional prohibition against a third term.

How Rich is Russia? How Much Richer Will it Be?

Russia has enjoyed rapid economic growth since 1998. Gross Domestic Product (GDP) has risen by 37 percent, an average annual increase of 6.5 percent per year, one of the highest growth rates among the larger medium-developed economies. The expansion of the last five years has been driven by different sectors at different times. Initially, the sharp depreciation of the ruble in 1998 and 1999 resulted in a surge in non-energy industrial output as Russian manufacturers of foodstuffs, machinery, and metals increased exports or took domestic market share from imports. Output of services fell in 1999, but since 2000 growth in market services has led the recovery.

Russia has a medium-sized economy. In 2002, GDP totaled \$347 billion at market exchange rates; Brazil's GDP was \$452.4 billion and Italy's was \$1,187 billion. Another way of sizing economies is to use purchasing power parity (PPP) exchange rates. Russia's GDP at PPP rates is much higher than at market rates. At PPP rates, Russia's GDP was \$1,042 billion in 2002, about the same size as Brazil's (\$1,324 billion) or Italy's economy (\$1,432 billion) at PPP exchange rates.

Five risks that are generally considered to threaten continued growth in Russia:

- 1) Continued high inflation,
- 2) A banking crisis,
- 3) A sharp drop in world market oil prices,
- 4) A worsening business environment, and
- 5) Failure to liberalize trade by joining the WTO.

In our view, the biggest threat to continued economic growth in Russia would be the failure to lower barriers to trade and remove impediments to private business activity. Russia under Putin has made progress in making business law more transparent and reducing the power of the bureaucracy to threaten the activities of legitimate businesses.

Judges have been made more independent and some corrupt officials have been replaced. However, the business environment could easily deteriorate. If it worsens, Russian economic growth prospects would dim.

We project the Russian economy will grow at an average annual rate of 4.0 percent between 2005 and 2020. This is in the mid-range of economic performance in the transition economies after they resume growth. Lower income transition economies have generally enjoyed more rapid rates of growth, but the Central European states have registered growth at around 4.0 percent. Some countries, like the Czech Republic have grown at much slower average annual rates. The poor condition or absence of critical infrastructure, corruption, continued barriers to trade, slow growth in the labor force, and lack of foreign investment make much more rapid growth for Russia highly unlikely.

Outlook for the Russian Car Market to 2020

Currently, most Russian car buyers tend to be in the top 20 percent of the population in terms of income, with most of the remainder falling in the top 40 percent. Russian ownership levels of 154 cars per thousand people are 60 percent of ownership levels in the wealthier Central European states of Poland and Hungary, reflecting lower Russian incomes. However, roughly one in four households in Russia still owns a car, one in two in Moscow.

The Russian market is divided into three distinct segments: new cars sold by the Russian manufacturers, used foreign imports, primarily from Germany and Japan, and new foreign imports. In a market of 1.5 million units, until recently sales of new foreign cars had been well under 100,000 units a year. However, in 2003, sales doubled to 200,000 new imported vehicles. By 2020, should economic growth continue, we project that the Russian market will double to 3 million units per year, most of which will be foreign makes.

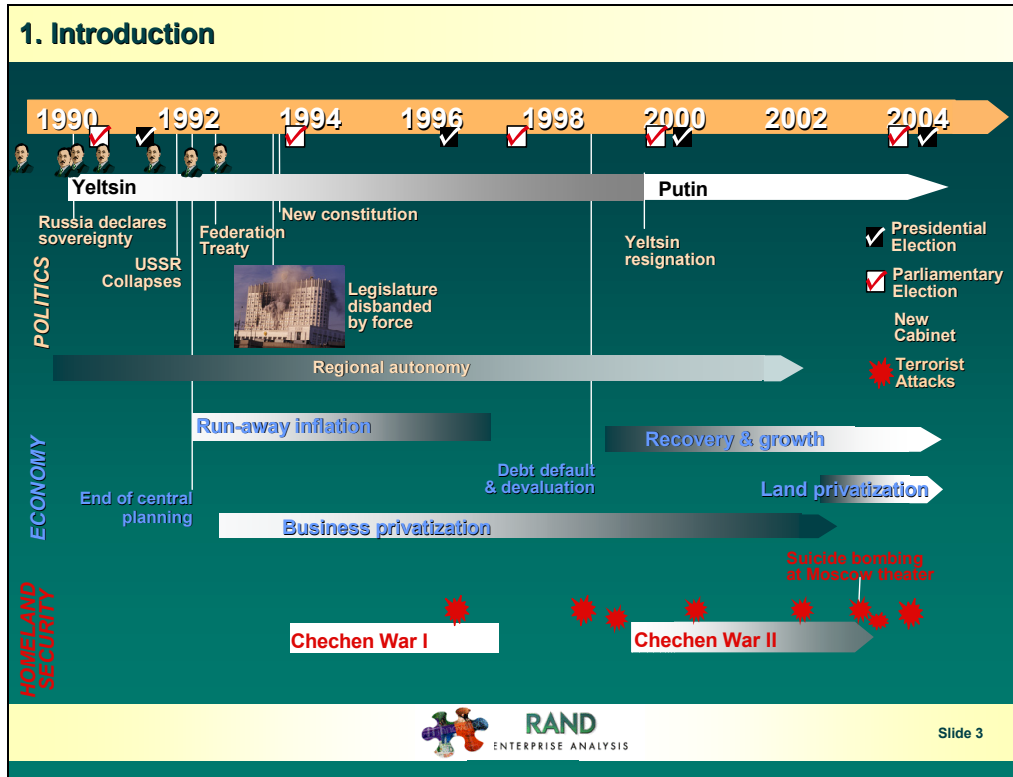
The future of Russian automobile makers is bleak. AvtoVAZ, Russia's largest automobile manufacturer, is plagued by low levels of productivity, poor quality, old assembly lines, and a lack of capital to introduce new models. Despite these problems, AvtoVAZ is likely to be the only remaining independent Russian manufacturer by 2020. Second-tier companies such as GAZ and UAZ, which have been acquired by aluminum and steel giants and are being restructured, are likely to be sold to foreign buyers or closed.

Responding to the evolution in Russia's automobile market, foreign firms, including Ford, General Motors, and Renault, have recently begun to invest in assembly operations. By 2020, we project that foreign firms will be responsible for almost two-thirds of the 1.8 million cars forecast to be manufactured in Russia. The market share of new foreign cars, including domestically produced and imports, is projected to run 64 percent of new registrations in 2020.

Russia's government currently lacks the resources and the political desire to provide significant support to Russian manufacturers. The government does provide some incentives, mainly tariff reductions on imported parts to foreign operations. By 2010, Russian and the European Union may have signed a free trade agreement, liberalizing trade in automobiles and components, accelerating cooperation between Russian manufacturers and their foreign counterparts.

1. POLITICAL DEVELOPMENTS AND TRENDS IN RUSSIA: THE FIRST 12 YEARS

To better understand current developments under Putin administration, this political assessment starts with an examination of key political developments during the Yeltsin era in the 1990s and the Putin administration since 2000. This briefing also provides an assessment of near- and mid-term political and policy developments, including the risk of political instability, up to 2008. The arguments reflect research, including extensive field research, that the authors have conducted over many years. They also convey findings from the authors' conversations and interviews with knowledgeable Russian observers, politicians, government officials, and business leaders.



KEY POLITICAL DEVELOPMENTS


This timeline presents some of the more important political and economic events Russia has experienced—beginning with Boris Yeltsin’s declaration of Russia’s sovereignty within the Soviet Union in 1990. In June 1991, Yeltsin was elected to the new position of President that he had created for himself.¹ The prime minister (officially titled “chairman of the government”) who is appointed by the president with the approval of the lower house of parliament, is the head of the Russian government. This arrangement was established in a constitution adopted in late 1993.

Russia embarked on a number of economic reforms in 1992 after the demise of the Soviet regime. The collapse of central planning and the decontrol of prices led to an extended period of runaway inflation that destroyed the savings of a large segment of the population. Privatization of businesses and industry started in the mid-1990s. More recently the government has permitted the privatization and sale of land—processes that are now underway.

¹ In Russia, the President is the head of state and occupies the Kremlin.

Russia's declaration of autonomy and the subsequent collapse of the USSR in 1991 set in motion the declaration of sovereignty by a number of regional governments within Russia. The Republic of Chechnya declared its full independence, as did the Republic of Tatarstan. While Tatarstan reconciled its differences with Moscow in 1994, Chechnya proved more stubborn. Chechen separatists have waged a struggle for independence struggle, including terrorist attacks beyond Chechnya's borders, despite Moscow's efforts to subdue the republic with the massive use of force.

2.1 The Yeltsin Legacy: First Term, 1991–1996



Independence by Default

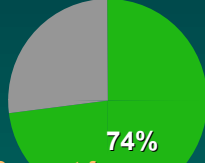
Prior to the collapse of the USSR, Yeltsin campaigned for sovereignty, not independence

Independence was not strongly desired or anticipated among elites and masses

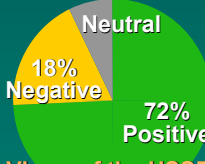
People worried that independence would stimulate Russia's break-up

Independence declarations by other republics left Russia no option


Even today, most Russians regret the break-up of the USSR



74%
Support for preserving USSR, March 1991



72% Positive
18% Negative
Views of the USSR, 1998–2001



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THE YELTSIN LEGACY: FIRST TERM, 1991–1996

Independence by Default


Russia emerged as an independent nation by default. In his power struggle with Soviet leader Mikhail Gorbachev and his efforts to gain control over the economic assets of his republic, Boris Yeltsin, campaigned for greater sovereignty for Russia, not outright independence. Unlike in other Soviet republics, independence was neither anticipated nor strongly desired among both elites and masses—a fact reflected in a nationwide referendum on the status of the USSR conducted in March 1991. Indeed, many Russians at that time worried that independence would stimulate regionalism within Russia and threaten Russia's integrity. However, the independence declarations made by other Soviet republics starting in August 1991, such as the Baltic States and Ukraine, left Russia with no alternative but independence.

Interestingly, public opinion surveys conducted by the Russian Center for Public Opinion (VTsIOM) and other organizations reveal that a substantial majority of Russians polled view the USSR in a positive light; this share grew throughout the 1990s. This can be interpreted not necessarily as a desire for a return of the Soviet political system, but as

a sign of nostalgia for some positive elements of the Soviet lifestyle (such as stable and undemanding employment, cheap housing, a low crime rate, a sense of public orderliness) and nostalgia for Russia's leading role within the USSR and the USSR's superpower status in the world. Nonetheless, while Russians continue to regret that the Soviet Union broke-up, most today are reconciled to this fact. Accordingly, while some observers have warned that Moscow seeks to extend its control over its former Soviet neighbors, there is very little support among elites or the masses for any effort to reconstitute the Soviet Union.

2.1 The Yeltsin Legacy: First Term, 1991–1996

Threat of Separatism Contained



89 regional governments

Several regions have non-Russian majorities

2 predominantly Moslem regions declared complete independence

22 regions declared "sovereignty"

In early 1990s many regions asserted

- Rights to tax revenues
- Rights to natural resources
- Supremacy of local laws

In 1992, 87 regions sign Federation Treaty

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Threat of Separatism Contained

While some have worried about an expansionist Russia, others have warned that the Russian Federation might suddenly collapse like the USSR did.

The Russian Federation currently is made up of 89 regional governments, formally called “subjects of the federation.” Roughly two dozen regions with non-Russian ethnic populations have special designations as “autonomous republics” and “autonomous areas”—designations that date back to the Stalin era. With the weakening and ultimate collapse of Soviet power in the early 1990s, many regions in Russia started to assert their autonomy in a number of ways. Regions with major industries started withholding tax revenues. Regions rich in minerals and other natural resources asserting their rights to those goods produced on their territories. Many regions, including those seeking to reassert their unique cultural identities, proclaimed that local laws took supremacy over those of the federal government. In what was dubbed the “parade of sovereignties,” 22 regional government authorities formally declared various degrees of sovereignty from Moscow. Two republics with large Moslem populations—Tatarstan and Chechnya—formally declared their independence.

Yeltsin used a combination of pressure (including a display of force in Chechnya) and concessions (formalized in power-sharing agreements) to help keep Russia intact. In 1992, 87 regions signed a treaty of federation. In 1994, Tatarstan formally agreed to join the federation. With the exception of Chechnya, no region has seriously attempted to become independent. Regional leaders recognized that independence was not a viable or desirable option due to, among other factors: economic interdependence; cultural affinities; and a lack of international ties and support.

Today, separatist pressures have eased. Moreover, the special privileges granted by Yeltsin have been whittled away and largely revoked in recent years as the central government has gained in power and authority.

2.1 The Yeltsin Legacy: First Term, 1991–1996



New Political Institutions

Popularly ratified constitution (1993)

- Powerful presidency
- Bicameral legislature
- Federalist system of government based on power-sharing with regions
- Independent constitutional court

Contested elections

Multi-party system

Russians recognize that their political institutions work poorly, but believe they are better than the alternatives



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New Political Institutions

During his first term as president from 1991 to 1996, Boris Yeltsin played an important role in creating new political institutions to supercede the failed ones of the Soviet era. One of Yeltsin's most important achievements in the political arena was the drafting and ratification by nationwide referendum in late 1993 of a new federal constitution. Key features of the Yeltsin constitution include a powerful "super-presidency", a bicameral legislature, a federal system of government based on power-sharing with regions, and an independent constitutional court. In contrast to the show elections run by the Communist Party in the Soviet era, two important developments of the Yeltsin era were the advent of periodic elections for positions at all levels of government. Most elections have had multiple candidates representing different political parties and factions.

It should be noted, however, that there is widespread recognition that Russia's new political institutions do not work as they are supposed to. For example, Russians have serious and well-justified questions about the significance and fairness of the frequent elections in which they are asked to participate. This includes the 1993 constitutional

referendum which many believed was rigged. They also have strong reservations about the performance of political parties and effectiveness of the parliament. Nevertheless, there is widespread and growing belief that the current political institutions are better than those of the Soviet past.

2.1 The Yeltsin Legacy: First Term, 1991–1996



New Political Culture

Legitimacy of private property and free enterprise

Limited state role in industry and commerce

Media freedom

Greater respect for civil liberties and human rights

Emergence of independent political movements and civic groups

Openness to foreign ideas



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New Political Culture

In addition to the creation of new political institutions, during his first term in office Boris Yeltsin fostered the development of a new political culture and political norms. This process, which started with the *glasnost* policy of Mikhail Gorbachev, represented a fundamental break with the monolithic Soviet culture and ideology. Key elements of this new political culture included:

- Recognition of the value and legitimacy of private property and free enterprise
- A belief the state should play a limited supporting role in industry and commerce and in the development of free markets more generally
- Greater support for media freedom
- Greater respect for civil liberties and human rights, such as freedom of religion
- Emergence of thousands of independent political and social movements and civic groups
- Openness to foreign ideas, including the freedom to travel abroad.

Although these new norms were far from universally accepted and have still not been internalized by a significant minority of the population, they spread far more rapidly and widely than many expected.

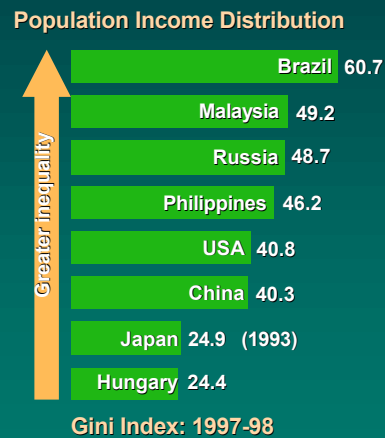
In sum, the rise of new political institutions and culture in the early 1990s greatly diminished the dangers of a restoration Soviet-style power or the occurrence of a Soviet-style break up—arguably Boris Yeltsin’s most important legacies.

2.1 The Yeltsin Legacy: First Term, 1991–1996



Problems of Transition Create Dissent

Mass unemployment
 Non-payment of wages
 Runaway inflation
 Loss of savings
 Deep poverty
 Collapse of social safety net
 Decay of public services
 Huge disparities in wealth
 Absence of law & order
 Sense of national impotence



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Problems of Transition Create Dissatisfaction

Despite the new political institutions created and the new freedoms Russians enjoyed by the mid-1990s, the country had not become the “normal society”—generally understood to mean a prosperous and stable liberal market democracy—that its leaders proclaimed as their goal. Many problems and concerns associated with the post-Soviet reform era quickly emerged in the early 1990s, including the following:

- Mass unemployment as the result of the collapse of Soviet industry and agriculture. Especially hard-hit were “company towns” and remote settlements in the northern and eastern reaches of the country.
- Non-payment of wages to workers in both the private and public sectors. During this period it was not uncommon for factory workers, teachers, and doctors to go months without pay. In many circumstances, workers were paid in-kind.
- Runaway inflation that eroded wages, pensions, and savings. Especially hard-hit were the elderly and those in working in the state sector, including military personnel.
- Deep poverty, especially in small towns and rural areas. Abuse of and homelessness among youths became a widespread phenomenon. Russia’s cities,

including Moscow, suffered large influxes of émigrés and refugees from the Caucasus and former Soviet republics seeking housing and employment.

- The sudden rise of a wealthy and ostentatious class of “New Russians”, who often gained their status through insider buyouts, access to state resources, exploitation of legal loopholes, and the operation of criminal rackets. The contrast between the super-rich and displaced poor is a politically potent indicator in Russia, because broad social equality, despite a general low standard of living, was viewed as a positive accomplishment of the Soviet regime.
- The collapse of the social safety net and decay of basic public services, such as housing, utilities, transport, healthcare, and education. In many parts of the country, electricity blackouts and breakdowns in district heating systems have become commonplace.
- A decay of law and order. Crime rates and drug abuse soared and official corruption, organized crime, and black markets became commonplace. According to Transparency International, Russia ranked at the bottom of the charts and on par with conditions in many African countries. Again, basic public services and public safety were viewed as signature accomplishments of the Soviet regime.
- A sense of national impotence. This condition has been marked by Russia’s declining power status internationally and by the Russian military’s humiliating defeat in the first Chechen war. More recently, this malaise was epitomized by the sinking of the Russian Navy’s most advanced submarine, *Kursk*, in August 2000.

While these problems plague many nations today, the rapidity and intensity with which many of these problems appeared was jarring to most Russians. As a result, the reform process has never been viewed in a favorable light by average Russians.

2.2 The Yeltsin Legacy: Second Term, 1996–2000

Yeltsin's Reelection



Poor prospects for reelection in 1996

Pressure on Yeltsin to cancel or postpone the election

Yeltsin's desire to preserve democracy prevailed

Yeltsin's campaign was taken over and energized by a group of business tycoons

- Hasty truce in Chechnya
- Media dominance

Yeltsin narrowly wins reelection

Yeltsin's popularity plunged



Anti-government demonstrations and strikes



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THE YELTSIN LEGACY: SECOND TERM, 1996–1999

Yeltsin's Reelection


As the leader of this reform effort, Yeltsin's personal popularity rapidly plunged to very low levels. Going into the 1996 elections, the Communist Party, which benefited from having a grassroots organization throughout the country—a legacy inherited from the Soviet party—was leading in the polls. Large anti-government demonstrations were held in the capital and around the country. The country saw a number of large strikes by miners, teachers, and industrial workers demanding unpaid wages. Yeltsin was under tremendous pressure from representatives of the security forces as well as others within his own administration to postpone or cancel the election and avoid defeat.

To his credit, Yeltsin resisted the pressure to cancel the elections. Canceling the elections would have been contrary to Yeltsin's preeminent desire to create a break with the authoritarian rule of the past, and it would have destroyed what he hoped would be his most important legacy to Russia. Instead, on the advice of his close advisors dubbed the "Family"—a tight group of government officials, business leaders, and personal








family, including his daughter—Yeltsin allowed his floundering campaign to be taken over at the last moment and revitalized by a group of wealthy and influential businessmen. This new team provided a massive infusion of money and media and publicity support. They also arranged a hasty truce in Chechnya which granted the region *de facto* independence. These moves enabled Yeltsin to win reelection after two rounds of balloting.

2.2 The Yeltsin Legacy: Second Term, 1996–2000

**Russia's Predicament:
State Capture and Collapse**



Oligarchs obtained control of key industries and government posts

	Alekperov (Lukoil)		Khodorkovsky (Yukos)
	Berezovsky (Logovaz)		Gusinsky (Most)
	Chubais (UES)		Potanin (Interros)
	Fridman (Alfa)		Smolensky (SBS-Agro)

Absentee president

Rise of clans and baronies in regions

Communist-led efforts to impeach Yeltsin

Massive tax evasion

Default and devaluation

Violent conflicts among competing business groups

Chechen incursions into adjacent regions

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State Capture and Collapse

For their support of Yeltsin, the business leaders subsequently gained access to state assets at cheap prices. One mechanism was “loans for shares” deals where business leaders obtained title to major state assets in exchange for making short-term loans to cover the federal government’s massive budget deficit. Business leaders were also offered key government positions. For example, Vladimir Potanin, then head of Oneximbank (later the Interros conglomerate) was appointed deputy prime minister for a brief interval. Boris Berezovsky, founder of a large automobile and media empire, served as deputy head of the National Security Council and subsequently led the governing board of the state television channel ORT. Their alliance with Yeltsin led to the business leaders being dubbed “oligarchs”. This alliance epitomized the capture of state institutions and collapse of basic state functions in the late 1990s. Other features of Russia’s predicament included:

- The frequent absence of the president for long periods of time due to his health problems, depression, and drinking binges

- The rise of clans and baronies in the regions as governors consolidated their control over local legislatures and media and took control of or forged close alliances with local business interests
- A drawn-out effort in the parliament, which was dominated by the Communists, to impeach Yeltsin in 1999
- Massive tax evasion by both business and individuals that kept the federal government in chronic debt and prevented it from paying state wages and pensions on time
- The federal government's massive default on international loans and the devaluation of the ruble in August 1998
- Violent conflicts among competing business groups and criminal organizations as they fought to enlarge and protect their turf
- Incursions of Chechen insurgents into adjacent regions in the Caucasus as they attempted to enlarge their circle of power.



2.2 The Yeltsin Legacy: Second Term, 1996–2000

The Rise of Putin



2000 election precipitated a search for a successor

How Putin was identified and became trusted is not clear

Key qualifications

- **Loyal to Yeltsin “Family”**
- **Young and vigorous**
- **Symbolized law and order**
- **Not publicly associated with oligarchs**

Putin’s Resume

1952	Born, St. Petersburg
1975	Law degree, St. Petersburg
1975	KGB officer, St. Petersburg and East Germany
1991	Mayoral advisor, St. Petersburg
1997	Deputy Chief, presidential administration
1998	Chief, Federal Security Service
8/99	Prime Minister
12/99	Acting President
2000	President



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The Rise of Vladimir Putin

The approach of the 2000 presidential election precipitated a search for a successor to Yeltsin, who was barred by the constitution from running for a third term and whose popular support had completely disappeared. A scheme was conceived by his inner circle (the Family) for Yeltsin to resign and appoint an acting president who could use the remainder of the term to prepare for the election. The key actors in the closed-door search and bargaining process were Yeltsin, several oligarchs (most importantly Boris Berezovsky), and security officials on whom Yeltsin depended for protection and support.

After several experiments with various candidates, Vladimir Putin finally emerged as the “dark horse” winner. Putin was brought in from St. Petersburg in 1998 and was very quickly promoted through the ranks of the Yeltsin administration. How Putin was initially identified and became a trusted member of the Yeltsin team remains unclear.

However, Putin had several qualifications:

- He was viewed as loyal to and had an ability to protect the Family which feared reprisals should a hostile candidate assume the presidency

- He was young, dynamic, and a non-drinker—a marked contrast to Yeltsin—and was seen as capable of reinvigorating the Kremlin and larger federal government
- With his career KGB background, he symbolized law and order
- He was not publicly associated with any business leaders.

Several core values and policy priorities that can be discerned from Putin's resumé—namely political stability and market development.

- As a career KGB officer and leader, first in St. Petersburg, then in the German Democratic Republic (where he witnessed and was forced to manage the impact of the collapse of the Communist regime and Soviet power in 1989-1990), and finally in Moscow, Putin is inclined to advance the authority and prerogatives of “the state” (and executive authority, in particular) over partisan political, parochial, or individual interests. Accordingly, Putin can be seen as placing a premium on macropolitical stability and predictability.
- Having experienced the transition in East Germany, Putin was aware of the merits and benefits on the macroeconomic and macropolitical levels of private property, free enterprise, and liberal markets. As a deputy mayor in St. Petersburg in the early 1990s, he helped attract investment to the region. Thus, Putin can be seen as a supporter of free market and business development, especially when they support the capabilities and interests (such as political stability) of the state.

3.1 Putin's Presidency: First Term, 2000-2004

Putin's 2000 Electoral Platform



Stability

- Get economy moving
- Pacify Chechnya

Efficiency

- Streamline government
- Clean up corruption
- Establish “dictatorship of law”

Presidential leadership

- Create strong “vertical of power”
- Remove oligarchs from corridors of power




Putin wins first-round victory

Promises of political “stabilization” and consolidation” resonates with public opinion

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PUTIN'S PRESIDENCY: FIRST TERM, 2000–2004

Putin's 2000 Electoral Platform

Once in office as acting president at the beginning of 2000, Putin adopted a campaign platform that broadly advanced several key themes that were in line with his core values, including stability, efficiency, and leadership. In vague terms, Putin put forth his objectives to

- Speed up economic recovery and development
- Pacify Chechnya
- Streamline Russia's bloated government apparatus
- Clean-up corruption
- Restore law and order by imposing what he termed a “dictatorship of law”
- Re-impose Moscow's authority in the provinces—what Putin termed a “vertical of power”
- Create greater distance between the oligarchs and the Kremlin and government.

This platform not only was presented as an antidote to the maladies of the reform era, but Putin's calls for "stabilization" and "consolidation" also resonated with a fundamental political sentiment among the public.

Putin was elected president in March 2000 in a first-round victory with 52 percent of the vote. The Communist Party candidate Gennady Zyuganov garnered only 30 percent of the votes.

3.1 Putin's Presidency: First Term, 2000-2004



Putin's Performance

Pushes through key reforms

- Flat 13% income tax
- Regulatory simplification
- Land privatization
- Reform of civil and criminal codes

Consolidates power

- Creates pro-presidential "party of power"
- Curbs power of regional governors
- Tries to "normalize Chechnya"
- Appoints military and security officers to key posts
- Intimidates and sidelines oligarchs
- Curtails media independence





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Putin's First-Term Performance

With a strong electoral mandate, in his first two years in office Putin sought to speed economic development by pushing through several key reforms aimed at improving the business and investment climate:

- A flat personal income tax of 13 percent
- A reduction of regulations and permits required by businesses
- Legalization of the right of individuals to own land
- Reform of the civil and criminal codes.

These steps achieved a measure of success. By simplifying the tax code and reducing tax rates, income reporting and tax compliance increased significantly. Putin's regulatory and legal reforms reduced contradictions and absurdities—often resulting from the legacy of Soviet laws and practices—reducing the uncertain and grey areas in which businesses were forced to operate and thus opportunities for corruption.

Since coming to power, Putin also has consolidated power.

- He has decisively curtailed the influence of regional governors by amending laws to exclude them from membership in the upper house of parliament (Federation

Council). He created 7 super-regions with presidentially-appointed “governors general” with broad powers, including control of regional law enforcement and security agencies. He forced the repeal of many regional laws that conflicted with federal legislation and policy. And, he replaced some overly independent and self-assertive governors such as Nazdratenko (Maritime Territory) and Yakovlev (Leningrad).

- Putin appointed military and security officers to key positions throughout the presidential administration and government in order to monitor activities and counterbalance power of holdovers from the Yeltsin era. Putin also consolidated previously autonomous state security services.
- Putin also forced the most politically active and ambitious oligarchs to lower their political profile lower by pursuing legal cases against and seizing the property of two oligarchs in particular—Boris Berezovsky and Vladimir Gussinsky—who had been challenging the prerogatives of the president. Gussinsky and Berezovsky subsequently fled to Western Europe. He also warned others to pay taxes and stay out of politics if they want to retain their property. He reinforced these messages by authorizing the arrest of a close associate of the Number 1 oligarch, Mikhail Khodorkovsky, who had publicized his support of opposition political parties (Yabloko and Union of Right Forces). Putin also reopened a previously closed investigation of financial dealings of Oleg Deripaska, head of Basic Element, and a leading member of the Family.
- In the process, Putin has curtailed media independence, especially of the nationwide television channels.
- Finally, Putin created a pro-presidential “party of power” (United Russia) headed by the minister of internal affairs and minister of emergency situations to consolidate power in the parliament and prepare for forthcoming elections.

3.1 Putin's Presidency: First Term, 2000-2004



December 2003 Duma Elections

United Russia behind Communists in early polls

United Russia campaign goes into high gear in mid-2003

“Administrative” and financial resources of the Kremlin are used

- Populist tactics
- Weaken the opposition
- Media restrictions



United Russia & affiliates

- Speakership
- Control of all committees

Elections result in a decisive shift in power in the Duma

Other parties shown in the chart: Communists, Liberal-Democrats (Proto-Fascist), Motherland (Nationalist), Independents & undecided.

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December 2003 Duma Elections

As Putin's first term came to a close, elections to the lower house of parliament, the Duma, were held in December 2003. The financial and “administrative” resources of the Kremlin were brought into play to ensure that the new Duma would have a “pro-presidential” majority that could be counted on to support President Putin's initiatives during what was likely to be his second term. For example, the Putin administration launched a populist vote-getting campaign by, among other things, jailing one of Russia's richest oligarchs for alleged financial malfeasance during the process of privatization. Because the Kremlin has firm control over national television, such events received wide attention, while coverage of opposing candidates and parties was sharply curtailed.

In the event, the “pro-presidential” United Russia party won 38 percent of the vote. Together with blocs and parties aligned with it, United Russia gained control of about two-thirds of the 450 seats in the Duma and quickly moved to consolidate its power by claiming the speakership (given to ex-Minister of Internal Affairs Gryzlov) and the chairmanship of all committees. The Motherland Party, which received indirect support from the Kremlin as a way to siphon votes away from the Communists, emerged to

control about 8 percent of Duma seats. The strategy was effective: The presence of the Communist Party was cut in half from one-quarter to less than 12 percent of seats. The so-called liberal parties—Yabloko and Union of Right Forces (SPS)—failed to clear the five-percent of the popular vote needed to ensure them a place on parliamentary committees and they were reduced to representation by a handful of individual deputies.

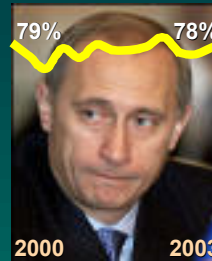
Although Putin has said he foresees no need to change the Constitution, he would almost certainly secure the necessary two-thirds majority needed to secure an amendment lifting the two-term limit on the presidency, making it possible for Putin to run again for president in 2008.

3.2 Putin's Presidency: Second Term, 2004-2008

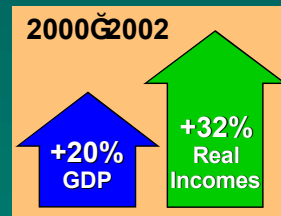
March 2004 Presidential Elections

Putin wins a landslide with 71% of vote

- Economic boom
- Popular support for a “strong hand”
- Desire among some elements of business community for a “Pinochet for Russia”
- Biased media coverage
- Absence of credible competitors



Putin's approval rating is high



March 2004 Presidential Elections

As expected, Putin won a landslide victory in the March 2004 presidential elections with 71 percent of the vote. Although the election was marred by a near-ban on TV appearances by other candidates and by many other irregularities, there is no doubt that Putin is in fact supported by a majority of Russian citizens. First, and most importantly, the Russian economy has been growing robustly and much of the population is experiencing an increase in their wealth. Second, there is widespread sentiment within the population that supports the idea of having a strong leader. Putin has worked to create this image for himself. Many business leaders also have endorsed the notion of a market dictatorship, pointing to the economic development model and experience of Chile and the “Asian Tigers” in the 1970s and 1980s.

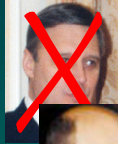
3.2 Putin's Presidency: Second Term, 2004-2008



Putin will be More Authoritarian

Goal: Efficient, stable government, and "managed democracy"

- Install more loyal Prime Minister
- Tighten parliamentary discipline
- Tighten bureaucratic discipline
- Further reduce power of regions
- Legitimize puppet government in Chechnya
- Identify a successor?



Constraints on authoritarian consolidation

- Resistance of governors and bureaucrats
- Tensions among "Putinites"
- Resistance of business leaders and capital flight
- Reaction by foreign investors and governments

Popular Russian joke:

We know that Putin likes the Korean model of economic and political development. We don't know which Korea—north or south.



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PUTIN'S PRESIDENCY: SECOND TERM, 2004–2008

Putin will be More Authoritarian

Putin's second term is likely to result in increased centralization and authoritarianism. Putin is likely to take several steps in an effort to consolidate his mandate gained in the parliamentary and presidential elections. Even before the election, Prime Minister Kasyanov was replaced by Nikolay Fradkov, a less independent bureaucrat with close ties to the security services. After the election, Putin also reorganized the cabinet, sharply reducing the number of ministers, and named the former deputy head of the presidential administration, Dmitry Kozak, to the post of cabinet secretary. These measures are intended to ensure greater coordination between the Kremlin, government, and parliament. The government shake-ups are likely to be followed by measures to promote greater discipline in with government ranks and to reduce corruption. Putin is likely to further reduce the power of the governors by merging regions, increasing the financial and decisionmaking autonomy of municipal governments, and expanding the powers of his appointed governors general. Putin will continue to try to surround the puppet government in Chechnya with an aura of

constitutional legitimacy and popular support. Finally, Putin will have to identify and prepare a suitable candidate as successor in the 2008 presidential election, should he decide to not run again.

There are several constraints on tendencies to a full-fledged dictatorship:

- Regional leaders, such as Shamiev of Tatarstan, who have well-established local power and economic bases are likely to demonstrate continued, albeit reduced resistance to Moscow's authority.
- Some members of the business elite may create resistance, albeit more passive and indirect, for example, by aligning with regional officials, if their property interests are seriously infringed.
- Laxity and incompetence in the government bureaucracy is likely to slow or blunt authoritarian initiatives.
- Putin's desired hyper-growth scenario could slow and distort economic development and reduce the financial resources of the state.
- A third term is not currently provided for in the constitution. Therefore, Putin's lame-duck status is likely to create tensions among "Putinites" in his administration, the government, and United Russia as they jockey for position to rise to the presidency in 2008.
- Two final constraints are a fear of gravely damaging the investment climate and precipitating a renewal of massive capital flight and a fear of undermining efforts to strengthen ties with the U.S. and European Union.

3.2 Putin's Presidency: Second Term, 2004-2008



Putin Will Continue Limited Reforms

Goal: Stable, prosperous powerful nation

- **Administrative reform**
 - Cut size of government
 - Reduce red tape
 - Combat corruption
- **Restructure electricity and rail monopolies**
- **Improve government services**
 - Education, healthcare, welfare
- **Reduce trade barriers**
- **Pensions reform**

Key strategic issues remain open for debate

- **WTO accession**
- **State intervention in markets**
 - Speed economic growth
 - Promote diversification
- **Reevaluation of business ownership arrangements**
- **Desired role of foreign investment in economy**

Oligarchs will maintain a low profile



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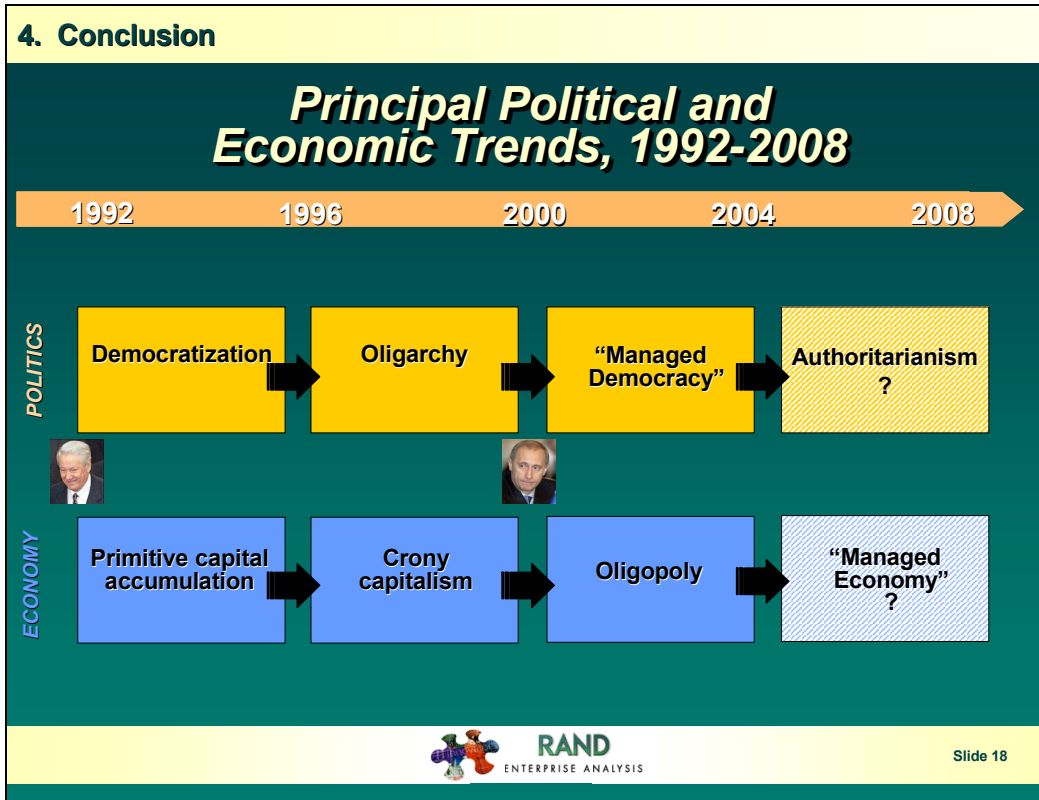
Putin Will Continue Limited Economic Reforms

In the lead-up to the elections, Putin repeatedly called for a doubling of GDP by 2010 as a means, among other things of reducing poverty. He has vowed to continue market-oriented reforms by reducing the bureaucracy and red tape, reforming the tax system, reducing barriers to trade and commerce, and combating corruption. He also has identified improving education, healthcare, and reforming pensions as ways of improving living standards.

All of these steps have been debated for years, and action on them now is not assured. Moreover, the trend towards more authoritarian government may hinder their attainment. While some have called for reducing the economic role of the state, others have called for greater state intervention in the economy, for example, through targeted state investment, protectionist tariffs, and direct subsidies and other benefits to selected firms and sectors. Such activities may ultimately undermine Russia's economic recovery. The rising influence of security service personnel is likely to be accompanied by increased meddling in and disruptions of corporate management and business operations, for instance, by increased investigations of tax accounting and mergers and acquisitions and by challenges to established ownership and property arrangements. This suggests

ongoing reevaluation of business ownership arrangements. While the government has stated its desire to join the WTO, many business leaders as well as government officials upon closer examination of the idea have expressed reservations. And, though officially welcoming foreign investment, many administration officials and business leaders demonstrate ambivalence and even outright opposition to large-scale direct foreign investment in many areas.

While economic growth in recent years has been robust, thanks in part to strong prices for oil, gas, and other raw materials, it is not clear that Putin has the will or the drive to sufficiently reform the Russian economy to ensure continued robust growth over the longer term.



CONCLUSION

Principal Political and Economic Trends, 1992–2008

Boris Yeltsin established the institutional framework and cultural baseline for the potential emergence of a “normal” and “civilized” political system to which he and many other “founding fathers of Russia” aspired. Imperfections in the reform process combined with Yeltsin’s personal infirmity during his second term led to significant economic and political volatility which undermined this framework and support for liberal reforms. Russia’s economy, and Putin politically as a result, have benefited from the rigors of the economic restructuring process put in place by Yeltsin, bolstered by a period of relatively high energy prices. Putin has utilized the relative stability of his first term as president to set the stage for a more centralized and authoritarian political system. In his second term, we expect that he will also seek to deepen and extend market reforms and further promote economic restructuring and development.

4. Conclusion

Key Judgments

Russia will remain united and is likely will be more assertive in parts of former USSR

Low-level conflict in Chechnya will continue and Russian homeland will be subject to terrorist attacks

Movement towards authoritarianism will continue but will not reach full-fledged dictatorship

Public will remain politically apathetic and passive

Efforts to improve the domestic business environment and diversify the economy will intensify but likely will include more state intervention

Political stability will last through Putin's second term but elections in 2007-2008 will prompt power struggles should Putin not seek to extend his presidency



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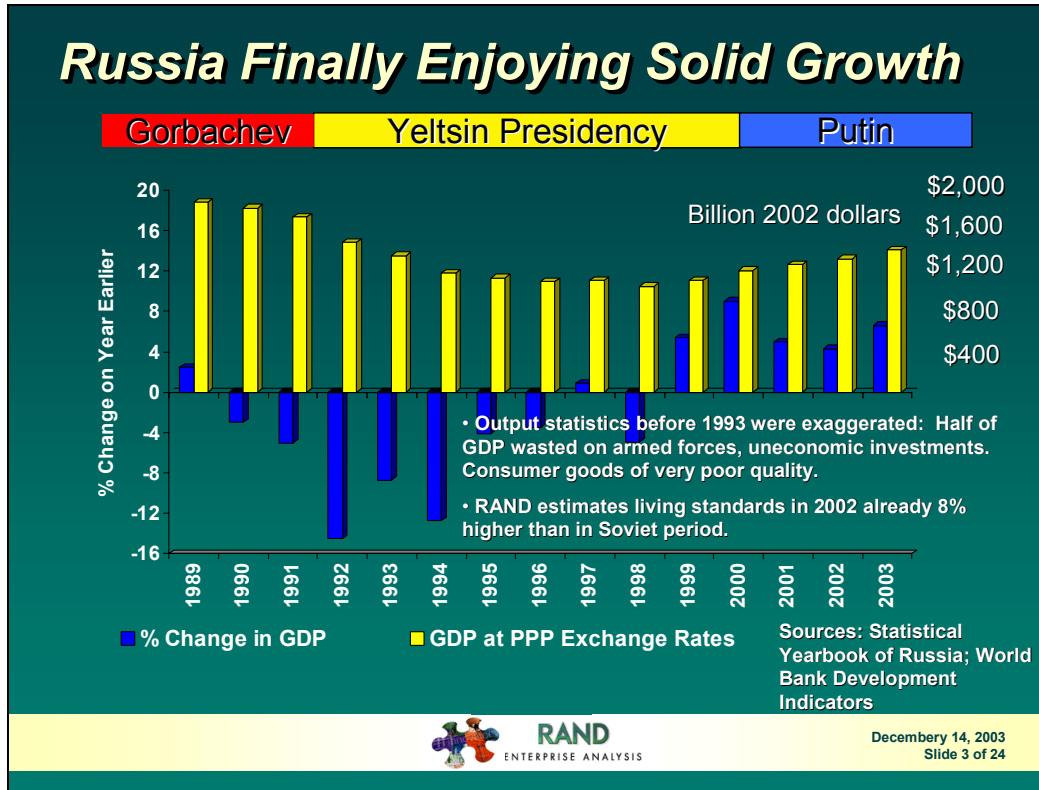
KEY JUDGEMENTS

We believe that, unlike the USSR, Russia will not break apart. Political stability is likely to last at least through Putin's second term (2004-2008). We do envision escalating political power struggles as 2008 elections draw near and candidates jockey for position and influence. We see a continuation, if not intensification under Putin of the trend towards a more authoritarian government. We feel a full-fledged dictatorship however, is neither generally desired nor feasible. The trend towards authoritarian government is in line with the stated preferences of a significant share of the population. Accordingly, we expect the Russian public will remain largely politically apathetic and passive. The general quiet which prevailed during the economic and social traumas experienced in the 1990s suggests that Russians will continue to focus on their personal affairs. We do not see a practicable solution on the horizon in Chechnya, despite Moscow's increasing reliance on political as well as military peacemaking stratagems. However, no domino effect will result from continuing conflict in Chechnya. As a substantial improvement in conditions in Chechnya is unlikely, the Russian homeland is likely to continue to suffer periodic terrorist attacks. We expect to see more state

intervention in the market, including reviewing established property claims; setting high-growth targets; and favoring specific industries.

2. HOW RICH IS RUSSIA? HOW MUCH RICHER WILL IT BE?

This briefing provides an analysis and assessment of the main lines of economic development in post-Soviet Russia.



CURRENT ECONOMIC PERFORMANCE

Russia Finally Enjoying Solid Growth

Russian GDP fell every year between 1990 and 1996, grew just 0.9 percent in 1997, and then fell 4.9 percent in 1998. Since the financial crisis of 1998, which was caused by overly large government budget deficits, which in turn precipitated the collapse of the ruble, the Russian economy has grown strongly. For the past four years, Russia has enjoyed some of the highest growth rates of any of the large medium-developed economies. Between 1998 and 2003, Russia's GDP rose by 37 percent, an average annual increase of 6.5 percent.

The initial figures on the economic decline in Russia were even steeper than those shown above until the World Bank and IMF helped Russia revise its statistics. Even according to the revised statistics, the fall in GDP was very large. From its peak in 1989, Russian GDP fell 44 percent to its low in 1998. Even in 2003, after five years of rapid growth, GDP was still one fourth less than in 1989.

The composition of Russia's GDP has changed significantly over the course of the transition. In 1989, the United States Central Intelligence Agency estimated that almost half of Russia's output was used for the military or investment, much of which was unproductive. Russian consumers suffered from queues, low quality goods, and had little or no access to Western consumer goods or foreign travel. RAND estimates that even on the basis of distorted Soviet statistics, per capita consumption in 2002 was already 8 percent higher than in 1989, even though GDP was 30 percent lower as output has been shifted from unproductive end uses to personal consumption.

Russia Has Left Soviet System Behind, U.S., EU Say Russia a “Market Economy”

Consumer, producer goods markets liberalized, except:

- Electricity, natural gas, public transport and railroad tariffs, rents, and upkeep of apartment buildings controlled
- Companies pay higher prices than households for electricity, gas, but much less than in Europe, Japan
- State controls exports of crude oil, diamonds, some metals

Factor markets also mostly free

- Wages set by market forces; New Labor Code gives employers more freedom to dismiss for performance, economic reasons
- 75% of all production assets privatized; companies can be bought and sold, but minority shareholders' rights frequently violated
- Households own most apartments, houses; foreign, domestic investors may purchase or lease commercial real estate



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Russia has Left Soviet System Behind; U.S., EU Say Russia is a Market Economy

In many aspects, Russia is now a full-fledged market economy. Russian consumers pay market prices for goods sold through shops. Enterprises have to compete for supplies of inputs on the basis of price, not their priority in a state plan. The allocation of factors of production (capital and labor) is now determined by market forces.

Government interference in markets for some goods and services still results in very distorted prices. Russian households pay very low prices for utilities. Fixed line telephone service, natural gas, and electric power charges are below cost-recovery levels. These have been and will continue to be raised in the coming years, as current infrastructure in electric power and housing cannot be maintained without more revenues for service providers.

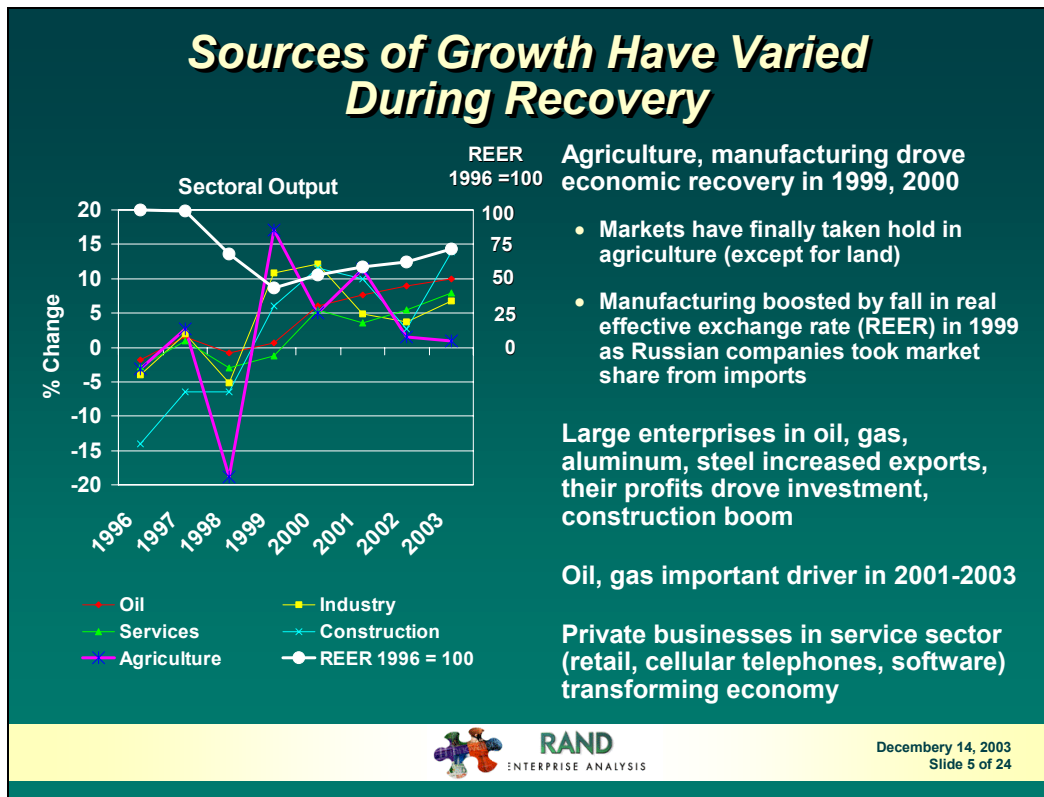
Prices of producer goods are generally set by markets. However, electric power and natural gas prices are set in conjunction with the government in an opaque process. Prices for these services are higher for enterprises than for consumers, but still

substantially lower than in developed market economies. The European Union (EU) argues that Russian government interference in setting these prices has led to implicit subsidies for energy-intensive industries. The EU has made increases in prices of natural gas and electricity a condition for Russian membership in the World Trade Organization (WTO). EU producers argue that Russian manufacturers of chemicals, refined oil products, and metals have an unfair advantage because of lower prices for energy.

Under Russia's new Labor Code workers have the right to organize and to severance pay, but employers have the right to dismiss employees for poor performance and for economic reasons, i.e., the need to cut costs.

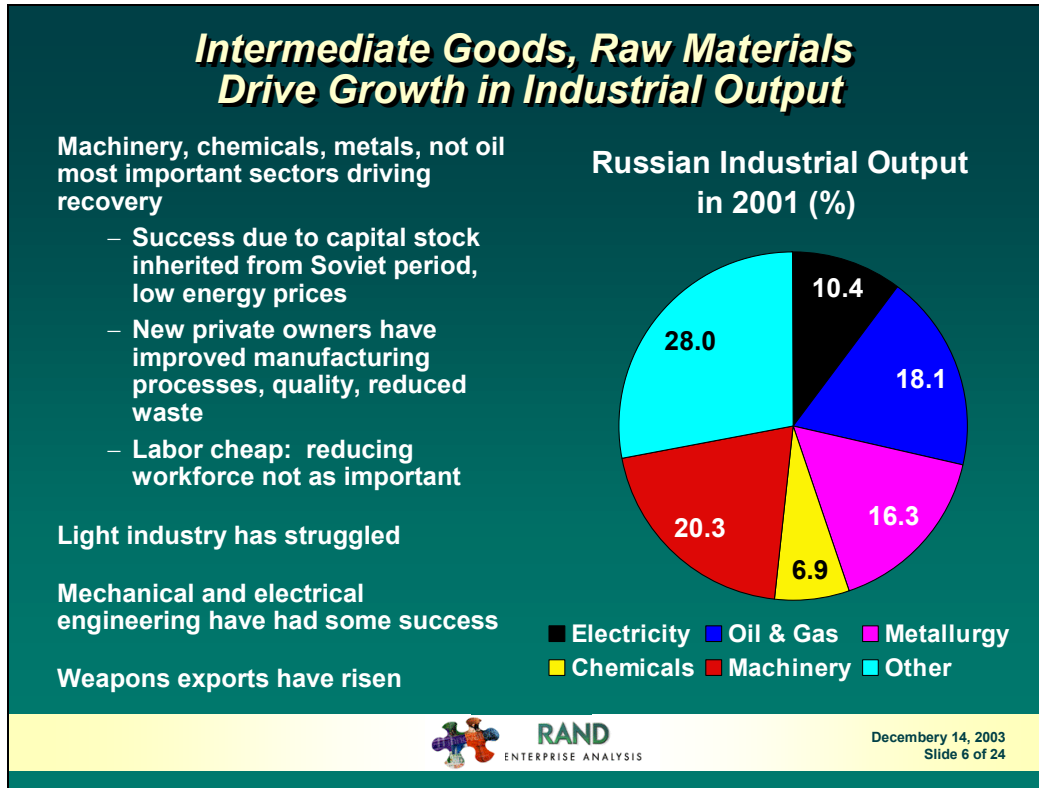
Russia is slowly creating a complete system of land titles. Land titles are important because they exactly define the area of a plot of land and who owns it. However, ownership of some commercial estate is not clear.

Russia is also moving to creating titles for agricultural land, but this policy is contentious. Many Russians believe agricultural land should belong to the state or village, not individuals. Others worry about rich Russians or foreigners buying up Russian farmland to recreate the large estates of the past.



Sources of Growth Have Varied During Recovery

The expansion of the last five years has been driven by different sectors at different times. Initially, the sharp depreciation of the ruble in 1998 and 1999 resulted in a surge in manufacturing output as Russian enterprises increased exports and took market share from imports. Since 1999, the rebound in industrial output has been led by the production of intermediate goods, especially metals and chemicals. As the ruble has hardened, some branches of manufacturing have faced tough competition from imports so industrial output growth slowed. Rising corporate profits contributed to a boom in commercial construction in 2000. As incomes also began to rise, services and residential construction soared. Domestic demand, especially in retailing and consumer services, is now a major driver of growth in GDP. Finally, the relatively high world market prices of oil over the last two years has stimulated a surge in oil output. Export commodities like oil, metals, and chemicals have been an important driver of industrial output in recent years. Energy (electric power, oil, gas, and coal) accounts for 30.1 percent of Russian industrial output.



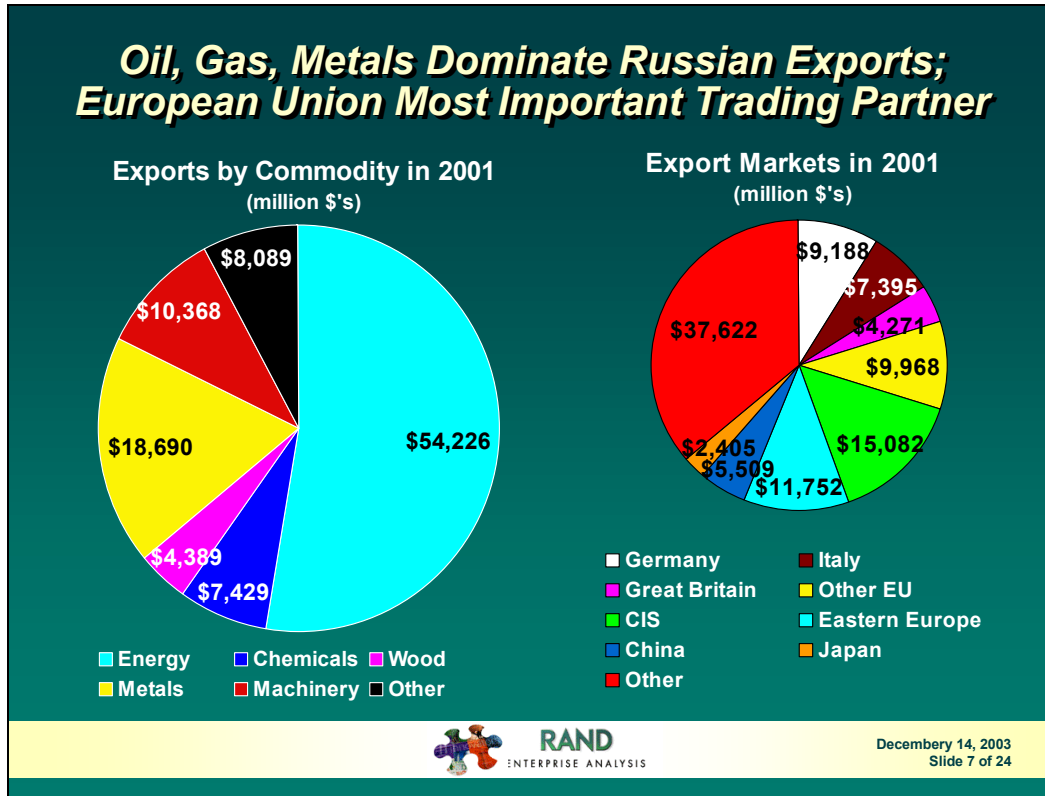
Intermediate Goods and Raw Materials Drive Growth in Industrial Output

Russian industry is heavily biased towards the production of metals, chemicals, energy, especially electric power and oil and gas, and machinery. Light industry comprises a tiny share of gross industrial output in Russia, 1.6 percent of the total. Consumer goods output is also limited.

The bias towards heavy industry has intensified since 1994. Over the past 8 years, the increase in industrial output has been led by the production of intermediate goods, especially metals and chemicals. Oil and gas production has only begun to recover in recent years.

Longer term, the key problem area for Russian industry is machinery and equipment. On the one hand, Russian manufacturers of investment goods, including pipes, oil drilling equipment, generators, and electric power equipment have enjoyed some growth in recent years. Sales of weapons have also risen. On the other hand, Russia faces some key competitive problems in the production of more sophisticated

machinery. Russia has major quality and technology problems in transport equipment, including airplanes, trucks, and cars.



fall of the ruble, Russian producers of food and appliances have regained market share; producers of clothing, shoes, and consumer electronics have not.

The major question mark for future Russian exports will be the role of products from the mechanical and electrical engineering and transportation equipment sectors. These have held up better than expected in recent years, but technologies tend to be outdated. Unless these enterprises are taken over by foreign competitors with more recent technologies, it is hard to see how Russia will be able to continue to export these out-moded products.

For Good and Bad Reasons, Russia's BOP Remains Strong

Good: 1) Export growth has been strong

- High oil prices in 2002, 2003
- Metals, chemicals producers increasingly competitive

2) Russian manufacturers regaining market share in food, investment goods

Bad: Current account surpluses = capital account deficits

- Russians have invested abroad because of uncertainty at home
- Foreign firms cautious

Russian economy would be healthier if capital flowed in, not out

Russia's External Balances

Category	1998	2000	2002	2003
Trade	18	62	48	60
Current account	2	48	35	40
Official reserves	12	28	45	78


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For Good and Bad Reasons, Russia's Balance of Payments Remains Strong

Russia's large current account surplus reflects a capital account deficit. Over the past 13 years, Russians and Russian corporations have chosen to export their wealth abroad rather than invest at home. This state of affairs is changing. Initially, wealthy Russians were concerned that there would be a change in regime. A new regime might try to renationalize companies or expropriate wealth so they moved much of their wealth abroad. This worry has virtually disappeared. Now, almost no Russians believe that the country will return to its socialist past. In 1997 and 1998, Russians had little confidence in the government's ability to manage the budget and the exchange rate. Consequently, they exported capital in anticipation of a fall in the value of the ruble. After 1998, the super competitive exchange rate resulted in a surge in exports and a collapse in imports. But exporters were still reluctant to invest in Russia because the economy was so chaotic. Over the past four years, this state of affairs has begun to change. Investment has risen sharply, up 52 percent since 1998. Although relatively high oil prices have kept export revenues and the trade surplus high, capital is beginning to flow into Russia as well as out as Russian and more recently foreign investors have been investing in the economy.



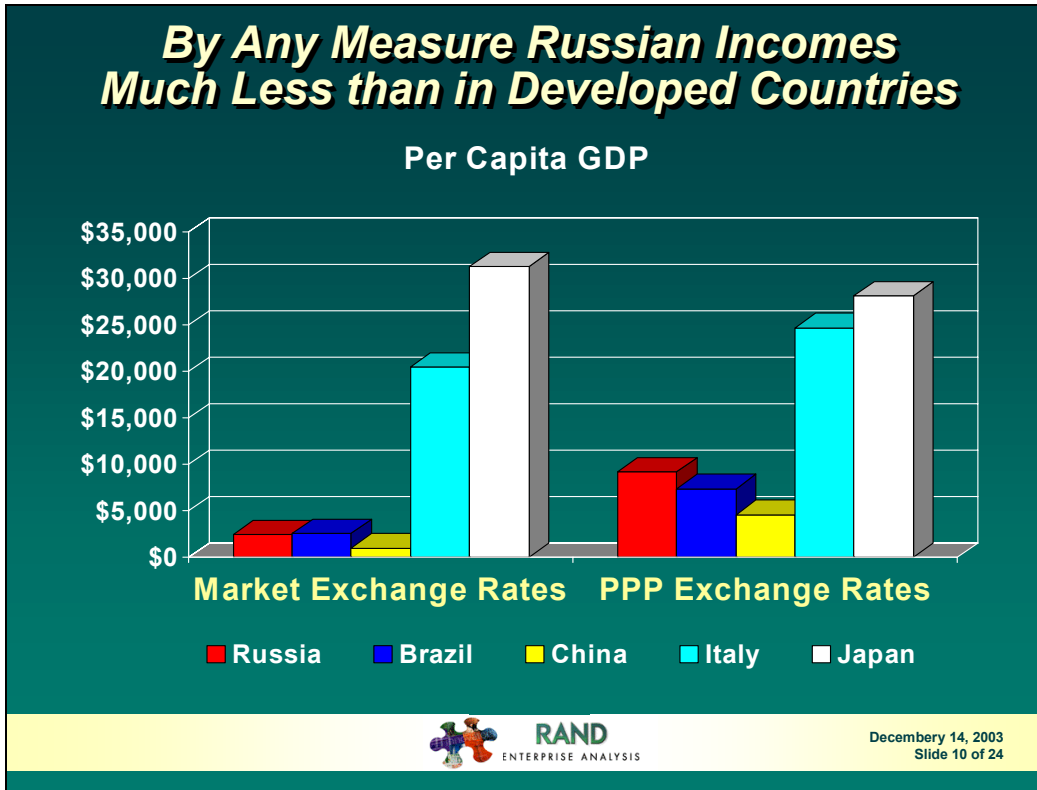
Russian Economy Not Threatened by Stronger Ruble

As can be seen from the graph, the value of the ruble against the dollar (corrected for differences in inflation) collapsed in 1998 and 1999. Although the fall in the value of the ruble made Russian manufacturers more competitive, it also made Russian consumers poorer. Average monthly wages fell from \$159 in 1997 to \$61 in 1999. Since then, they have recovered to \$141 per month in 2002 and are likely to hit \$175 in 2003. As can be seen from these dollar wage data, the fluctuations of the ruble have had an enormous impact on the ability of Russians to purchase imported consumer goods.

Some have worried about the impact on the Russian economy of a stronger ruble. A stronger ruble is contributing to the restructuring of the economy, but has had little impact on overall growth in output. While sectors that compete with imports like clothing and shoes have struggled, export sectors have enjoyed such strong increases in productivity that the appreciation of the exchange rate has not had a damaging impact on profitability. International commodity prices for oil, gas, steel, nitrogenous fertilizers, and wood and pulp are more important determinants of exporter profitability.

In light of continuing low dollar wages and improvements in labor productivity, a stronger ruble does not pose a major threat to Russia's economic health.

The firming ruble has boosted living standards as Russian consumers are now able to afford to purchase imported goods and take vacations abroad.



By Any Measure Russian Incomes Are Much Less than in Developed Market Economies

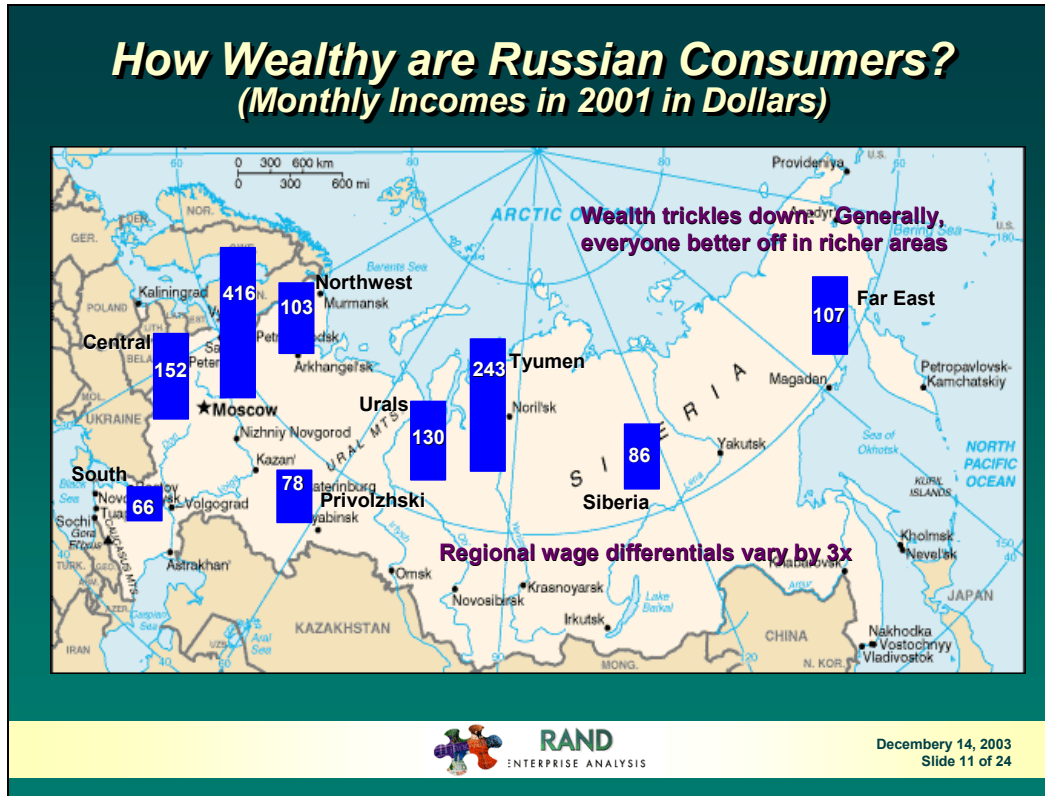
In 2002, Russia's total Gross Domestic Product (GDP) was \$347 billion at market exchange rates, the exchange rates set in international financial markets, while Brazil's GDP was \$452.4 billion and Italy's was \$1,187 billion. Japan's GDP was \$3,980 billion.

Another way of comparing the size of economies is to use purchasing power parity (PPP) exchange rates. Because of the problems that market exchange rates pose for comparing economic output across countries (volatility stemming from changes in macroeconomic policies, investor sentiment or changes in prices of key export commodities), economists frequently prefer to value economic output using purchasing power parity (PPP) exchange rates. Purchasing power parity exchange rates are determined by comparing the cost of purchasing a common basket of goods and services in one country with the cost of the same basket in another country. In poorer countries, costs of non-tradables, goods and services like housing, haircuts, and retailing, are much lower than in more developed societies because wages are cheaper. In contrast, market exchange rates are based on financial and trade flows, which involve goods traded at the

same price virtually everywhere. PPP exchange rates capture the greater purchasing power of personal incomes that stems from the lower local costs for non-tradable goods and services.

In 2002, Russia's GDP at PPP rates was much higher than at market rates, \$1,042 billion. Brazil's and Italy's PPP parity GDPs were \$1,324 billion and \$1,432 billion, respectively. Japan's was \$3,578 billion. At PPP rates, Russia's economy looks much larger, about the same size as Brazil's or Italy's economy and one-third the size of Japan's.

As economies become more developed and their financial sectors become larger and more stable, PPP and market exchange rates tend to converge. In the case of Russia, this implies that the ruble will continue to strengthen.



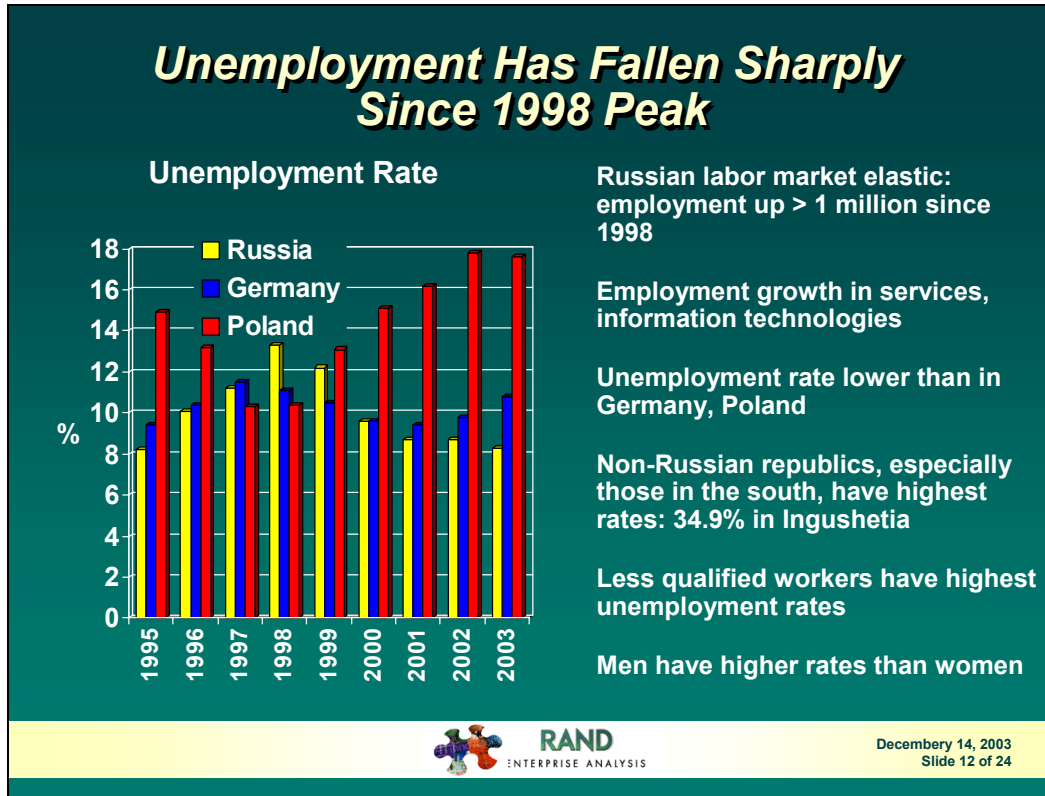
How Wealthy are Russian Consumers?

The map above provides data on monthly dollar wages in 2001 by Russia's major regions and for the two wealthiest areas: Moscow and oil-rich Tyumen oblast.

Russians speak of Russia as two countries: Moscow and the rest of the nation. The map shows the truth of this statement: Incomes in Moscow at \$416 per month in 2001 were four times the national average. Even though Moscow is a city of 8,539,000 people, it is still only 5.9 percent of Russia's total population. After Moscow, the resource-rich oblasts (provinces) have the highest incomes. Tyumen oblast is the center of the west Siberian oil industry. Personal income in Tyumen ran \$243 per month in 2001.

The poorest parts of Russia are in the south, especially in the non-Russian areas of Dagestan, Ingushetia, and Chechnya. Siberia proper is also poor, while incomes in the Far East are slightly above the national average.

Incomes vary widely within regions. For example, in the Urals region, per capita incomes are four times higher in Tyumen than in the impoverished Kurgan oblast.



Unemployment has Fallen Sharply Since 1998 Peak

Russian unemployment statistics are based on household surveys. Counter to conventional wisdom, unemployment rates are much lower than in a number of other transition economies. There is a substantial amount of labor mobility in Russia, in part because unemployment insurance is fairly modest: individuals without jobs need to find work so as to provide some source of income. Russia has a large informal economy involving construction, retailing, trucking, and household services. This sector is a major employer of people with less education. It also is a major employer of migrant workers.

The large formerly state-owned or state-owned enterprise sector has been slow to shed labor. Many large enterprises like AvtoVAZ, the largest Russian car manufacturer, are controlled by the management, which is reluctant to cut jobs. Now that a more vigorous market for corporate control is developing, some of these firms have been acquired by “oligarchs”, wealthy entrepreneurs that made their fortunes in other economic sectors. These new owners have been more intent on cutting labor. However, since labor is relatively cheap, even these owners often first focus on reducing inventories

and improving other business operations before resorting to layoffs, as these areas provide greater room for cost savings.

Agriculture remains a residual employer. People living outside of the large cities can virtually always obtain some sort of work on the large cooperative farms. Even with land reform, this state of affairs is unlikely to change soon. As in Central Europe, private agriculture in Russia is likely to continue to consist of large farms cultivated by corporations staffed with local inhabitants.

Conventional Wisdom Concerning Most Dangerous Risks to the Russian Economy

- 1) Continued high inflation
- 2) Banking crisis
- 3) Sharp drop in world market oil prices
- 4) Worsening business environment
- 5) Failure to liberalize trade, join WTO

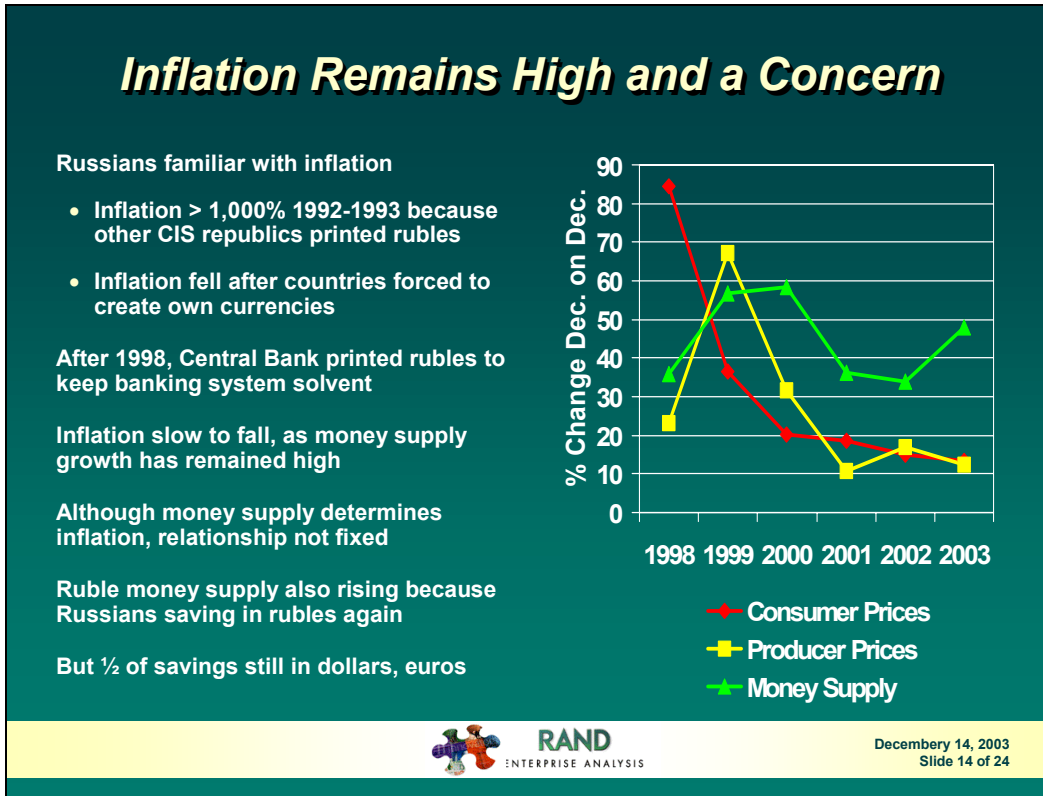


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KEY RISKS

Conventional Wisdom Concerning Most Dangerous Risks to the Russian Economy

- 1) Continued high inflation
- 2) Banking crisis
- 3) Sharp drop in world market oil prices
- 4) Worsening business environment
- 5) Failure to liberalize trade, join WTO



Inflation Remains High and a Concern

The transition in the former Soviet republics was marked by extraordinarily high rates of inflation. Inflation peaked in Russia at 2,522 percent in 1992. In the early years, inflation was driven by the chaotic monetary framework in which each independent republic was able to print rubles, which they did with abandon. Once each republic created its own currency, monetary policy tightened and inflation declined rapidly. Inflation hit a pre-1998 crisis low in 1997, when it fell to 11.0 percent.

Currency crises are invariably followed by periods of high inflation. After the collapse of the ruble in 1998, inflation surged to 84.4 percent. It then began to decline.

Inflation has remained stubbornly in the region of 13-18 percent over the past two years. The influx of dollars converted to rubles has resulted in very large increases in the money supply, which has kept inflation high. In addition, a number of producer prices like those for electricity, natural gas and railroad tariffs were kept artificially low during the immediate aftermath of the August 1998 ruble crisis. They are now being raised towards cost recovery levels, adding an additional stimulus to inflation.

RAND Projects Inflation, Depreciation Will Slow

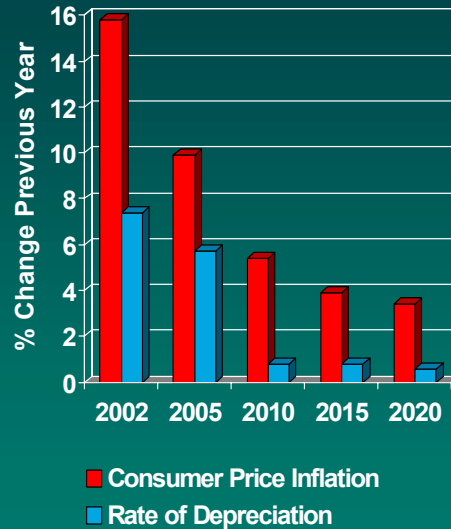
Needed price adjustments will keep inflation high through 2005

- Prices of utilities, housing, must move to cost recovery levels
- Higher energy prices will push up producer price index

But slower growth in money supply, will make ruble financially more attractive

- Russian savers slowly moving back to rubles
- Foreign portfolio investors will return

RAND forecasts 40 rubles = \$1 by 2020, compared to 30 in 2003, because of narrowing gap between PPP, market exchange rates



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RAND Projects Inflation, Depreciation Will Slow

The ruble remains relatively weak. At 3.8 times the market rate, the difference between the purchasing power parity exchange rate and the market exchange rate remains very wide. Middle-income economies with conservative monetary and fiscal policies and well-developed financial sectors usually have much smaller ratios, more on the order of two to one. As Russia's central bank, led by Chairman Sergey Mikhailovich Ignatiev since March 20, 2002, has much better leadership than in the past, it has adopted much more conservative monetary policies and is developing better financial instruments to control the money supply. Under Ignatiev's leadership, growth in the money supply is projected to slow, leading to a gradual decline in the rate of inflation. However, as of end 2003, policy was still focused on keeping the ruble from rising against the dollar by purchasing dollars. The inflow of rubles to purchase dollars has kept growth in the money supply at over 40 percent.

Declining inflation rates will make the ruble more attractive as a financial asset. Strong economic growth coupled with a more attractive investment environment will

result in inflows of foreign investment, contributing to a stronger currency.

Improvements in labor productivity will make it possible for Russian firms that export and those that compete against imports to increase output despite rising ruble wage rates.

As a consequence of these developments, we project that the gap between the PPP and market exchange rates will narrow to 2.6 by 2020 on an inflation-adjusted basis. At that time, the ruble is projected to run 40.1 to the dollar compared to 30.4 in 2003.

Financial Crisis Likely in 5 Years, But May Not Halt Growth

- **State-owned savings bank, Sberbank now biggest threat to financial system**
 - Holds > 2/3 of retail ruble deposits
 - Provides > 40% of all ruble loans
 - Lends to uncreditworthy, but politically important employers
 - Central Bank of Russia oversight ineffective; Sberbank too big
- **Because of operational deficiencies at Sberbank, another banking crisis likely in next 5 years**
- **Banking crisis will not necessarily trigger a recession, but it will slow growth, probably by 2 percentage points**



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Financial Crisis Likely in 5 Years, but May Not Halt Growth

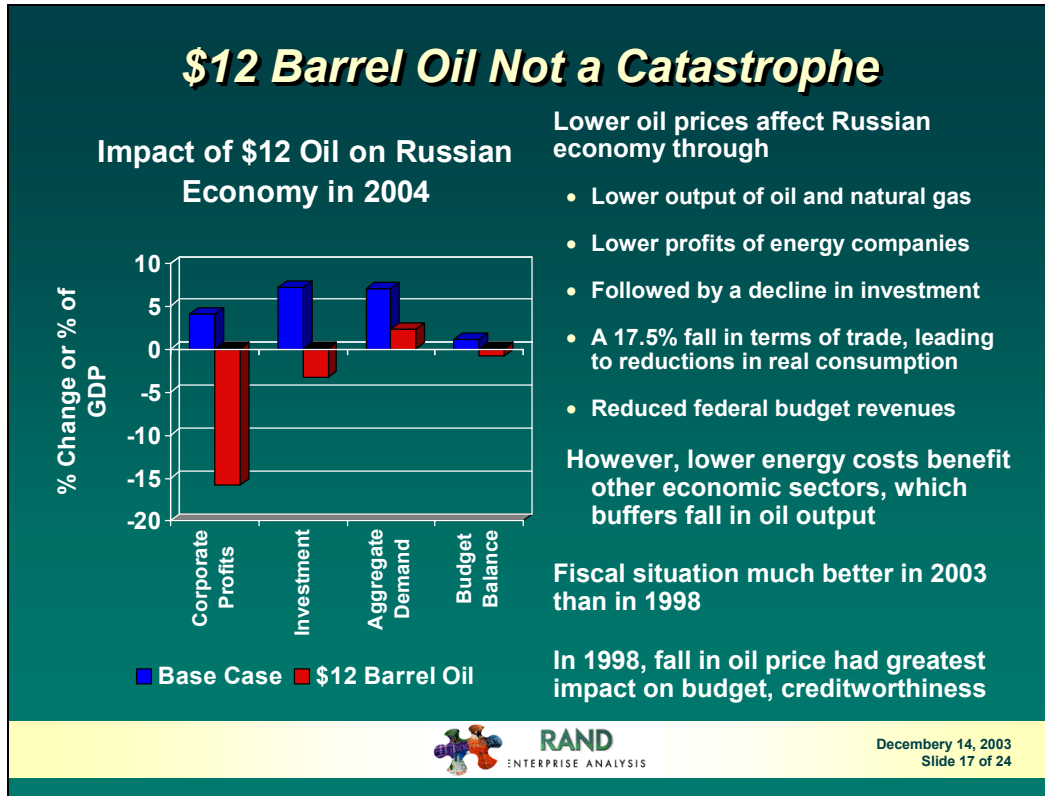
Russia's financial sector is very underdeveloped. Domestic credit, one measure of the size of the financial sector, is only a quarter of GDP. In other transition economies it runs two-thirds to three-fourths and in developed market economies, it runs from 1.4 (Japan) to 1.6 times GDP (United States, Germany).

The Russian banking system functions poorly. Sberbank, the large state-owned savings bank, is the only bank whose depositors have a government guarantee, although a new deposit insurance law, passed in 2003, is expanding the government guarantee to deposits in other banks. Historically, Sberbank lent to other banks or purchased government bonds. Now it is lending to large state-owned or formerly state-owned companies, many of which are poor credit risks. Because of its size and poor credit assessment skills, Sberbank poses the largest risk to the Russian financial system; other actors in the system do not pose risks of similar size. The commercial banks in Moscow are relatively small and sometimes poorly run. They often focus on serving the needs of companies in their corporate group, not on developing commercial banking business.

Some large regional banks are better run, but some are captives to local businesses or governments. Small banks are sometimes used by large companies to funnel money to specific projects or out of the country.

The greatest risk to continued economic growth in Russia is a banking crisis. Every transition economy has had 1 to 4 such crises. If or when the next financial crisis comes, it will not necessarily halt growth. Growth in Hungary and Slovakia continued after banking crises, although at much slower rates. However, Bulgaria, the Czech Republic, Russia, and Romania fell into recession. Thus, if Sberbank persists in unwise lending decisions, precipitating a banking crisis, Russian economic growth will slow sharply, probably for at least two years.

The only solution to these crises is to permit foreign banks that have experience in judging credit risk and no ties to local businessmen to operate freely in the domestic financial market. Because they have the skills to judge credit risk and the capital to buy up domestic banks, given free rein, these banks are likely to quickly take over the Russian market. Throughout Central and Eastern Europe, foreign banks now account for 2/3 of domestic banking assets. Unfortunately, Russia, like other transition economies, has been reluctant to permit foreign competition. Usually, it takes a financial crisis to let the foreign banks in.



\$12 Barrel Oil Would Not Be a Catastrophe

The energy sector is a major source of profit, excise, and wage tax revenue because of its importance as an employment and profit generator. It was responsible for 22 percent of total corporate profits in 2002. According to estimates by Moscow banks, a \$1 drop in the price of a barrel of oil on international markets translates into a \$1 billion decline in tax revenues from all sources. To put this in context, the budget surplus in 2002 was \$5 billion, so a \$5 dollar drop in the price of oil in that year would have eliminated the surplus. Total federal government revenues ran \$70.3 billion in 2002, 20.3 percent of GDP.

Up to this point in time, the contribution of royalty payments keyed to extraction has been modest. However, in July, 2003, Putin signed a series of new tax laws that will shift the tax burden more directly onto the energy sector. Oil and gas producers will pay about \$11 per ton and \$3.50 per thousand cubic meters of natural gas in royalty payments. In 2002, these taxes would have accounted for 12 percent of total federal

revenues. Federal revenues, in turn, accounted for 63 percent of general government revenues in 2002, with the regions and municipalities accounting for the rest.

Although energy-related tax revenues are an important source of government revenue, even a sharp drop in oil prices would be unlikely to derail economic recovery at this point in time. Other tax revenues are such a large share of the total, the budget surplus is large enough, and Russia's creditworthiness has improved to the point where the economy should be able to weather a very sharp fall in world market oil prices without a dramatic slowdown in growth. The government could counteract the effects of a decline in oil revenues by a combination of borrowing, drawing down a contingency fund that has been set up precisely to create a buffer for times when oil prices will be lower, and modest reductions in expenditures.

In addition to affecting tax revenues, a decline in the oil price would affect oil output, output of energy-intensive industries, corporate profits in the oil sector and through them, investment and Russia's terms of trade. RAND has conducted a simulation of the impact of a decline in the world market oil price from about \$26 a barrel to \$12 a barrel in 2004. The results of the simulation are shown in the graph above.

Business Environment Must Improve for Sustained Growth

- **Putin targeting corruption, reducing bureaucracy**
 - Business owners need fewer licenses, inspectors visit less frequently after Putin decree
 - But Putin has had no success in reducing bureaucracy, corruption remains major problem

- **To improve the business environment for both Russian and foreign investors, Russia must improve climate for trade**
 - Visa regimes for visitors and Russians traveling abroad will have to be eased so that businessmen can visit suppliers, customers
 - Tariffs need to be cut so that components can be imported
 - Bureaucratic customs procedures will have to be reduced so that orders can be delivered on time

If Russia is isolated from global markets, economy will stagnate



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Business Environment Must Improve for Sustained Growth

Improving the business environment so that Russia will be able to integrate into the global economy will be key to sustaining economic growth. Currently, relatively high tariffs on some components and bureaucratic customs procedures dampen trade in manufactured goods. Onerous visa regimes for individuals attempting to visit Russia and for Russians attempting to travel to North America and Europe pose a substantial barrier to enhanced economic interaction. Until these barriers are reduced, the integration of Russian manufacturing into global industry will be slow, retarding growth.

Failure to Join WTO by 2007 Would Slow Growth

Business support for WTO weak, divided

- Against: Aluminum, motor vehicles, agriculture, banks because of fear of competition
- For: Steel (Lower trade barriers)
- Neutral: Oil (Little effect)

Russians believe EU demands for higher energy prices, United States demands for open markets, unreasonable

Push to join World Trade Organization (WTO) top down process, membership seen as sign of Russia reemerging as economic power

- Maxim Medvedkov, chief negotiator sees membership by 2007
- Government believes Russia needs to become a member before end of Doha Round so that it can influence final negotiations

Russia making changes while protecting its interests

- WTO-compliant tax, customs legislation passed in 2003
- But new agricultural import quotas violate standstill agreement with EU, U.S.



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Failure to Join WTO by 2007 Would Slow Growth

Russia applied for membership in the General Agreement on Trade and Tariffs, the precursor of the World Trade Organization (WTO), in 1993 under Yeltsin. The first seven years of negotiations consisted of clarification of Russia's responsibilities and privileges under WTO. Successive Russian governments learned about WTO obligations, but were focused on Russia's many other economic problems. WTO membership had a low priority.

In 2000, Putin revived the application. Putin's major economic policy goals have been to restore Russia's international prestige and to improve the living standards of Russian people. He believes economic growth is the only way to achieve these goals; he recently set a target to double Russia's GDP by the end of the decade. Putin also believes that recognition from other nations depends on Russia playing a major role in international organizations, including WTO. However, Putin was not fully aware of the extent of the obligations involved in WTO membership and the preconditions the EU and the United States would put on Russia before membership. The EU has demanded reductions in tariffs on cars, trucks, and aircraft and increases in domestic electric power

and gas prices. The United States has demanded that Russia open banking and insurance markets and improve intellectual property rights protections.

As the scale of demands for economic policy changes has become clearer, Russian enthusiasm has waned. Banks, insurance companies, and producers of cars, trucks, and aircraft oppose membership, as do agricultural interests and nationalists. Exporters of metals and chemicals are not as supportive as one might expect as they see no decline in U.S. or EU protectionism and would lose from higher energy prices. Oil producers tend to be neutral.


Russia's chief negotiator has now set 2007 as the target date for accession, before the end of the Doha round. The Russian authorities have decided that they want to be members before the end of Doha so as to have some input into the next treaty on trade.

Russian government will revise legislation on anti-dumping, countervailing duties, and safeguard measures to bring Russian law into conformity with WTO stipulations in 2003. Russia is making changes in customs laws, financial service regulations, and even tariffs that will make accession to WTO simpler and easier. On the other hand, Russia imposed quotas on meat imports in January 2003 that its trading partners claim violated a "standstill" agreement on new barriers to trade adopted for the period of WTO negotiations.

	P	S
1) Continued high inflation	L	L
2) Financial crisis	H	M
3) Lower oil prices	H	L
4) Worsening business environment	L	H
5) Failure to join WTO	M	H

P : Probability
S : Seriousness

H: High M: Medium L: Low


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RAND's Evaluation of Risks

The table captures RAND's assessment of the likelihood and severity of the main economic risks facing Russia. The first column shows RAND's assessment of the likelihood that one of the five main economic risks is likely to ensue over the next several years. As can be seen, a financial crisis or sharply lower oil prices are very probable. We believe the likelihood that inflation will accelerate or that the business environment will worsen are low.

The second column shows the severity of the economic consequences for Russia if the event comes to pass. In our view, the biggest threats to Russia would be the failure to make more progress on lowering barriers to trade and removing impediments to private business activity. Russia under Putin has made progress in making business law more transparent and reducing the power of the bureaucracy to threaten the activities of legitimate businesses. Judges have been made more independent and some corrupt officials have been replaced. However, the business environment could easily deteriorate. If it worsens, Russian economic growth prospects would dim.



PROSPECTS

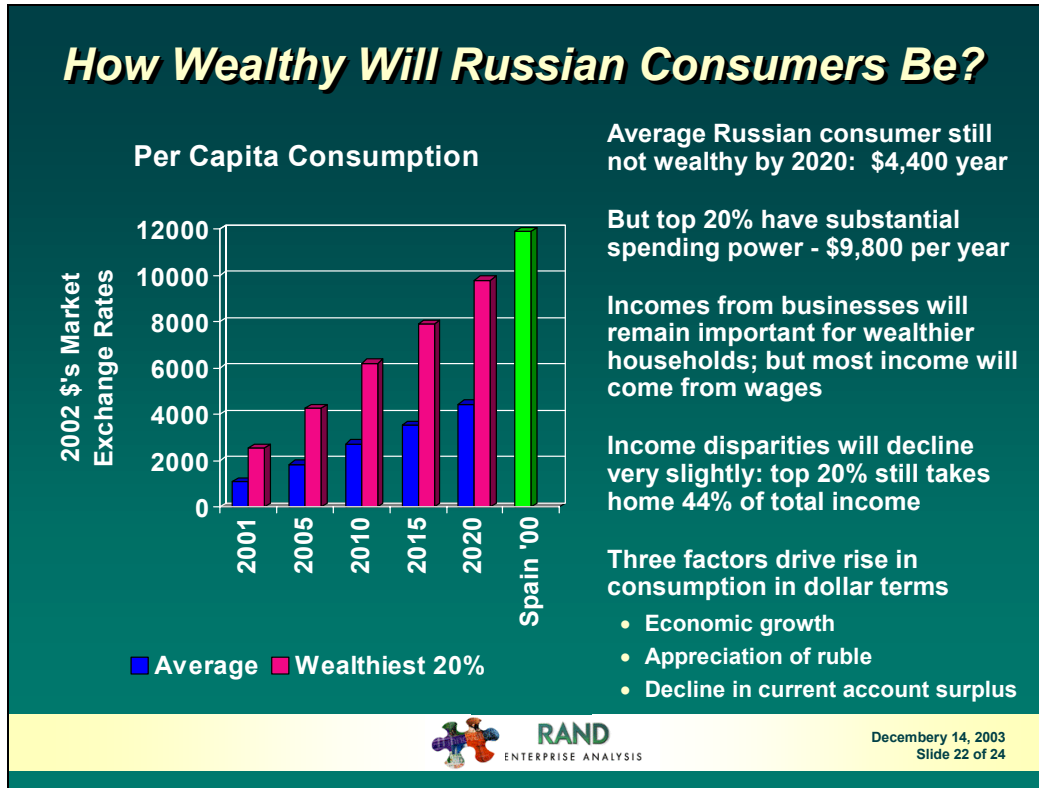
Russian Economy Projected to Grow 4 percent Annually After 2004

The economy is projected to grow at an average annual rate of 4.0 percent between 2005 and 2020. This is in the mid-range of economic performance in the transition economies after they resume growth. Lower income transition economies have generally enjoyed more rapid rates of growth than 4.0 percent. In recent years the Central European states have registered growth at around 4.0 percent, but some countries, like the Czech Republic, have grown at a much slower average annual rate.

Although respectable, the projected rate of growth is far below that posited by Putin in a recent speech. Putin set a goal of doubling the size of the Russian economy by 2010, which implies an average annual rate of economic growth of over 7 percent. No large transition economy has been able to sustain such a rapid rate of growth, although tiny economies like Albania, Bosnia, and Azerbaijan have grown rapidly, but from very low levels of output. The only large transition economy to grow close to 7 percent was

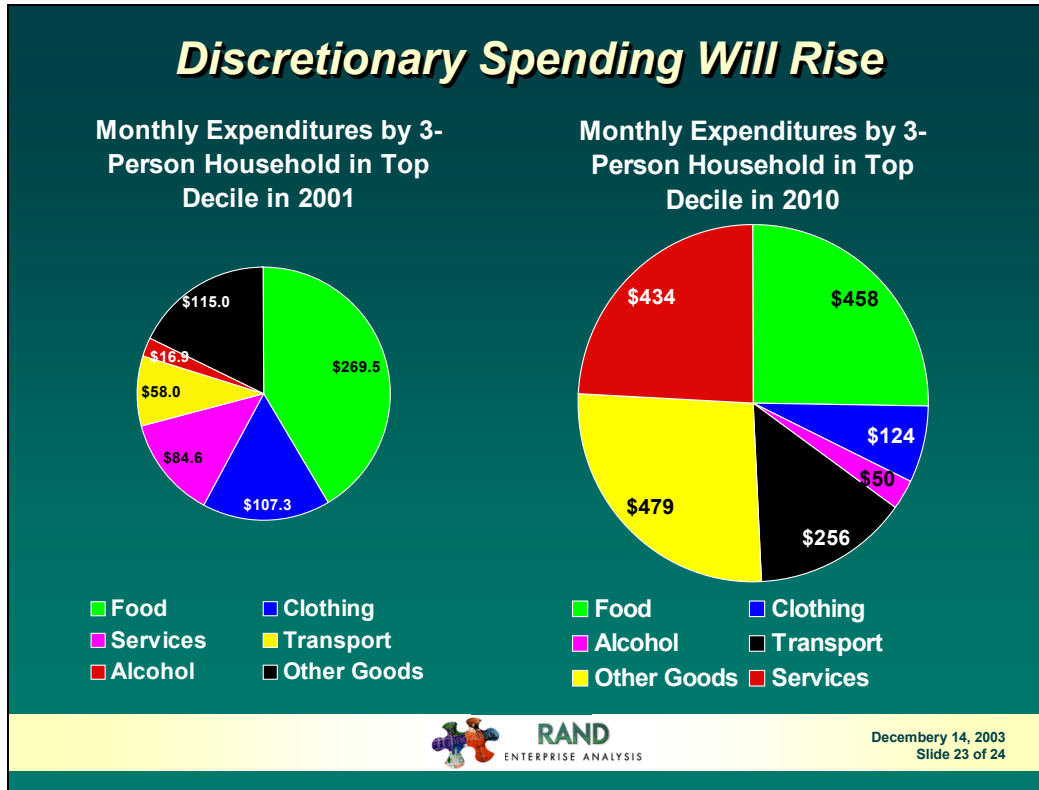
Poland, which enjoyed 5 years of growth averaging 6 percent in the mid- to late 1990s. However, the Polish economy has been growing very slowly for the past three years.

The poor condition or absence of critical infrastructure, corruption, continued barriers to trade, slow growth in the labor force, and lack of foreign investment make growth of 7 percent highly unlikely.



How Wealthy Will Russian Consumers Be?

At market exchange rates, per capita consumption is currently quite low, \$1,083 in 2001. Much of the increase in per capita consumption over the next two decades will be driven by exchange rate appreciation, as the ruble is projected to appreciate in real effective terms as it will no longer be quite so undervalued. Economic growth and inflows of foreign investment and a reduction in capital outflows will also provide a boost to consumption.



Discretionary Spending Will Rise

Household consumption levels in Russia, even among the top 10 percent of the population by income, are low. According to household budget survey data provided by the Russian statistical service, a three-person household in the top 10 percent of income earners spent only \$459 per month in 2001. (These data differ from the income data because they are collected differently. In RAND's view, they are biased downwards because Russian households underreport consumption.)

Expenditure patterns, even in the top income group, were heavily weighted towards food. On the other hand, expenditures on household energy and rents were very low.

Based on the forecasts of increases in personal incomes shown on the previous slide, we project a three person household would spend \$877 per month in 2010.

Much of this increase in income will be available for discretionary purchases. Energy prices are expected to remain relatively low and the declining population should moderate growth in housing prices.

We have used current Polish consumption patterns at the projected consumption levels for Russia to project future consumption patterns for upper income Russian households for 2010. The results are shown in the second graph above. Polish data provide expenditures on transportation. As can be seen, expenditures on transportation, which include the cost of owning and operating automobiles for upper income households in Poland are large. Similar households in Russia can be expected to eventually have similar expenditure patterns.

Key Points

1. Russian economy projected to grow steadily

- Economy has grown strongly since 1999; projected to grow 4.0% per year through 2020
- Per capita consumption expenditures in dollars low, but projected to rise from \$1,083 in 2001 to \$4,438 in 2020

2. Economic growth will be broadly-based

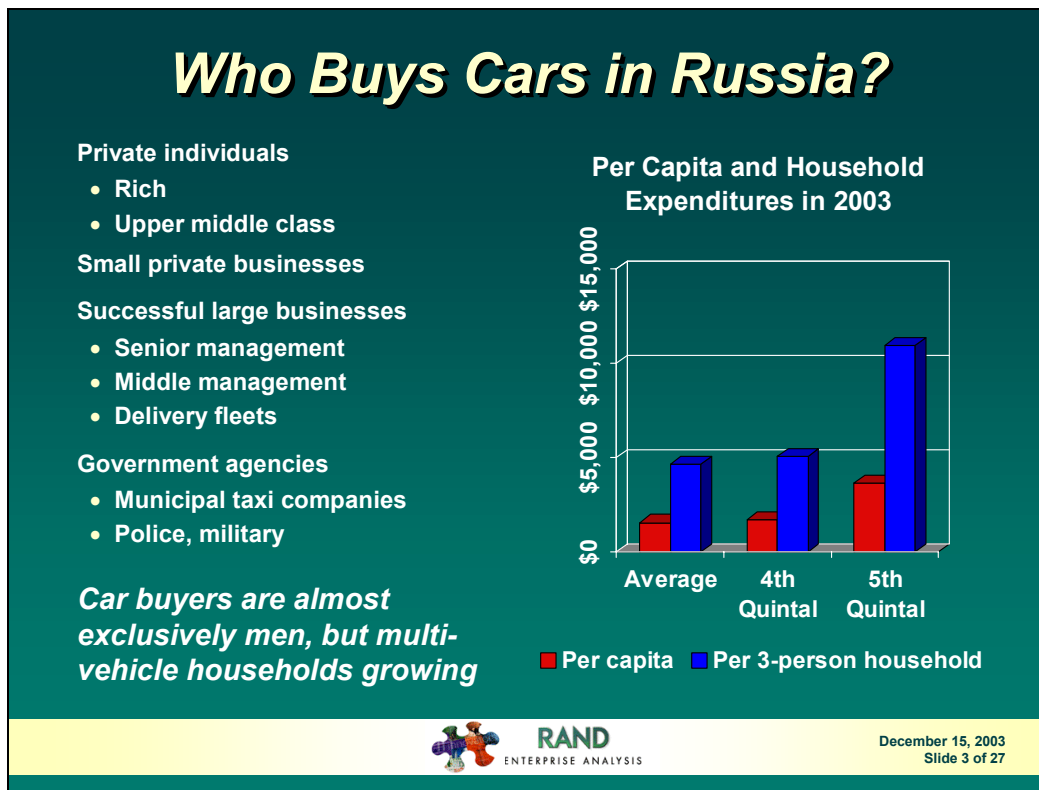
- Underdeveloped service sector will expand
- Productivity in manufacturing to grow very rapidly

3. Greatest risks to growth:

- Repeated banking crises
- Domestic business environment fails to improve
- Failure to integrate into global economy

3. OUTLOOK FOR THE RUSSIAN CAR MARKET TO 2020

The presentation examines several aspects of Russia's automotive sector. First we examine Russia's car markets today. This examination includes a look at Russian purchasers of cars and markets for both new and used vehicles. Second, we examine automobile manufacturing by traditional Russian manufacturers and by foreign manufacturers who have recently moved into the market. We discuss both current activities as well as future trends. Third, we examine government policy—namely tariff policy and support to manufacturing. Finally, we examine the prospects for sales of new cars in Russia, including quantitative forecasts by segment.



WHO BUYS CARS IN RUSSIA?

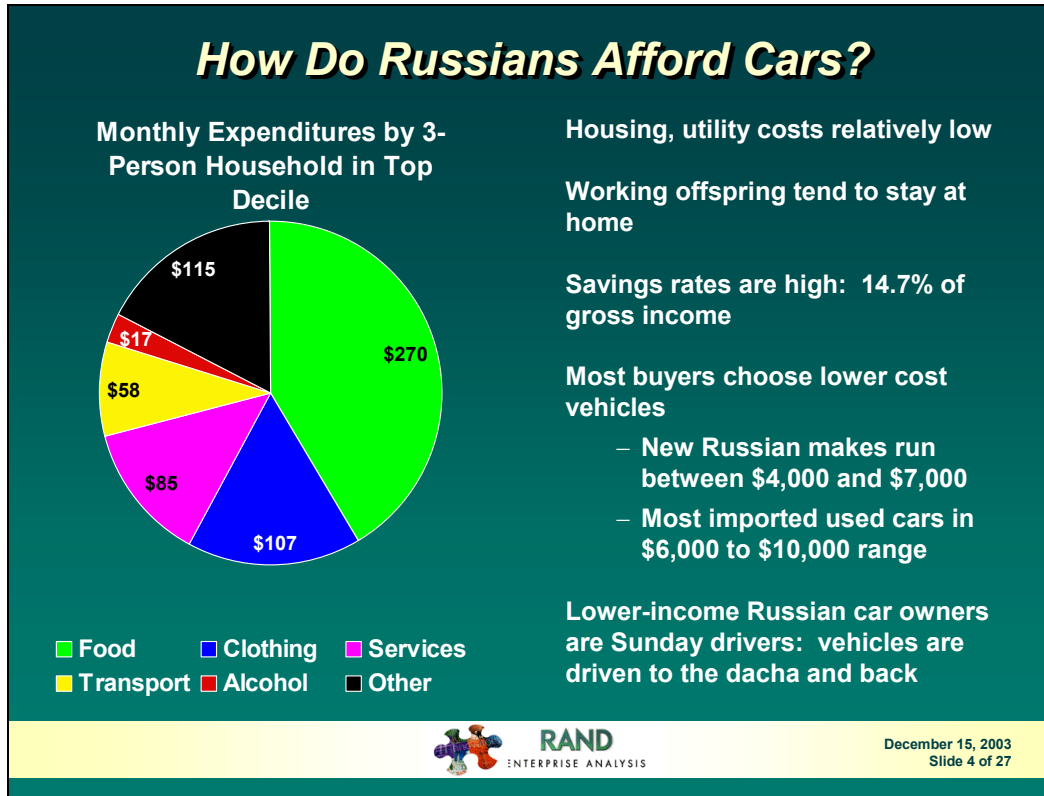
Most individual Russian buyers tend to be located in the top 20 percent (highest quintile) of the population in terms of income, with most of the remainder falling in the top 40 percent (second quintile).

Russian ownership levels of 154 per thousand people are 60 percent of ownership levels in the wealthier Central European states of Poland and Hungary, reflecting the lower Russian incomes. However, roughly one in four households in Russia still owns a car, one in two in Moscow. In fact, most middle-income, two-earner urban families have a car. Not surprisingly, pensioners and rural residents have low rates of car ownership.

Fleet sales to companies are an important, if fluctuating, segment of the market for imported Western vehicles. Large private companies often provide vehicles to upper and middle management as part of their compensation. However, Mercedes and BMW dealerships report most sales are made to individuals, not to companies.

Russian government agencies primarily purchase Russian-made cars.

In married and cohabiting couples, the man almost always buys the car. Sometimes the woman does not even test drive it, but receives it as a surprise gift. Due to the high rates of divorce in Russia and female labor force participation, and because women often are the head-of-household, female car buyers are likely to become much more prevalent as incomes and car sales rise.



Earnings and Spending Patterns

In dollar terms, average wages in Russia are low, running just \$139 a month in 2002. Given the country's sustained economic growth and the strength of the ruble, wages are projected to reach \$175 a month in 2003. In comparison, dollar wages in Hungary ran \$550 per month in 2003; Czech and Polish wages are comparable.

However, wages only account for 45 percent of gross Russian incomes. Households raise their living standards through income from private business activities, growing their own food in gardens, and through investment income.

State price controls result in greater disposable income for Russian households than one might expect. Household energy (electricity and gas) and rents are very cheap. Expenditures on household energy ran 1.3 percent of total expenditures in 2002. Expenditures on rents and communal services ran 5.2 percent of the total. In developed market economies, these expenditures often run 25 percent or more of total income.

Russians are also high savers: in 2002, the savings rate was 14.7 percent. Because of the underdeveloped state of consumer finance markets, households have to save for major purchases such as cars.

Because of their low incomes, most Russians purchase low-cost vehicles (i.e. less than \$6,000). Lower-income Russian car owners are Sunday drivers: Vehicles are driven to the dacha and back.



The Car Market is Growing and Shifting

Russia has experienced an explosion in car ownership over the past ten years: the number of registered cars has almost doubled—from 11.8 million to an estimated 22.7 million cars in 2003. New registrations exceeded 1.5 million units in the mid-1990s and again in 2002.

Figures on total new registrations in Russia are estimates. The most accurate sales numbers are those for imports of new foreign vehicles sold through official dealer networks. These broke the 100,000 unit mark in 2002 for the first time.

Figures on domestic sales by Russian manufacturers are also fairly accurate, although some of these vehicles find their way to neighboring countries through wholesale channels.² AvtoVAZ dominates the market for Russian-produced cars.

The availability of used vehicles from Western Europe and Japan has provided a vast source of lower-cost cars for the Russian market. However, sales of imported used foreign vehicles are the most difficult numbers to track. Historically, most of these

² These sales are often not captured in Russian export statistics and are therefore counted as domestic sales.

vehicles were smuggled into the country and therefore were not counted in statistics on foreign trade. Under the Putin administration, customs officials have clamped down on smuggling, so the counts are more accurate than in the past. Nonetheless, many vehicles still seem to evade the statistical authorities. Smuggled vehicles eventually show up in the figures for total registrations. These totals are used to impute imports of used vehicles by estimating these imports from changes in total registrations and using assumptions for scrappage rates.

Statistics on total registrations also have problems. Every car has to be registered with the authorities, so these numbers should be fairly accurate. However, total registration figures seem too high based on the share of foreign vehicles in the car park and sales of Russian vehicles. For Russia to report such a rapid increase in registrations, either more domestic vehicles should have been sold or the share of foreign vehicles in total registrations should be higher. According to Russian analysts, the problem is scrappage: scrapped vehicles are not subtracted from total registrations on a timely basis. Some junked cars are probably included in the total registration figures

The rapid rise in registrations in the early 1990s also reflected imports of used Russian vehicles. After the break-up of the USSR, a large cohort of ethnic Russians emigrated to Russia from the Baltics, Ukraine, and the Central Asian republics, especially Kazakhstan. Many brought their Soviet-made cars home, increasing registration numbers. In addition, many Central Europeans sold their Soviet cars to Russians as the Central Europeans chose to purchase used European vehicles instead.

Russian Car Park Old, Scrappage Rates to Rise

Average age of park > 10 years

But less than ¼ of park driven extensively (> 20,000 km/year)

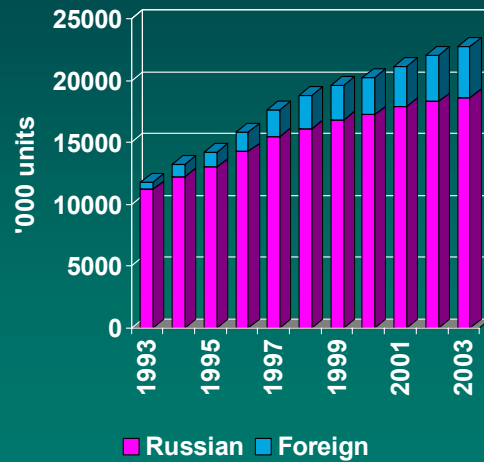
Rest of park receives occasional use only

Apparent scrappage rates very low, just 2 – 3%

Some vehicles may have been scrapped, but remain on register

Scrappage rates will rise towards 5%

Russian Car Park



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Russian Car Park Old, Scrappage Rates to Rise

Russia's car park has almost doubled in size over the past decade: it numbered 22.8 million cars in 2003. The number of foreign makes registered increased by seven times and accounted for 18 percent of all registrations or 4.1 million cars in 2003.

Nevertheless, Russia's car park is very old: the average vehicle age is over 10 years.

However, less than 17 percent of the car park is driven extensively (i.e. greater than 20,000 km/year). The rest of the park receives only occasional use, for example, when city residents drive to their country homes (dachas) on the weekends.

Despite the advanced age of the car park, apparent scrappage rates are very low, just 2-3 percent. Scrappage rates are expected to rise towards 5 percent in the near future.

What Do Russian Car Buyers Want?

Gasoline engines

- Gasoline relatively cheap: \$0.40 per liter for good quality 95 octane versus \$0.30 for diesel of uneven quality
- Cold winters (-40 degrees) make diesel engines unattractive: many Russians do not have garages

Reliability and Simplicity

- *Myth:* Russians do not care about reliability, quality
- *Fact:* Russians prefer reliable vehicles; prefer to purchase vehicles at full-service dealers (*Avtosalons*) where warranties will be honored

Safety Equipment

- Safety becoming more of a consideration for older, richer buyers
- Traffic fatalities per million population: Russia = 188; U.S. = 154
- Fatalities per million passenger vehicles: Russia = 1,568; U.S. = 210

Low prices

- For most Russians price key determinant of vehicle choice
- > 1/3 of cars purchased at used car markets (*Avtorinok*)
- Repair costs major concern, many prefer to do it themselves



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What Do Russian Car Buyers Want?

For most Russian, price is the key determinant of vehicle choice. As a result, more than one-third of car purchases are made at used car markets (*avtorinok*). Because of their relatively low incomes, Russian drivers are far more sensitive to differences in operating costs than West European drivers. Costs of repairs and parts weigh heavily in buyer decisions. Many car buyers, especially those in remote cities and rural areas where affordable and quality service is not available, prefer to do it themselves.

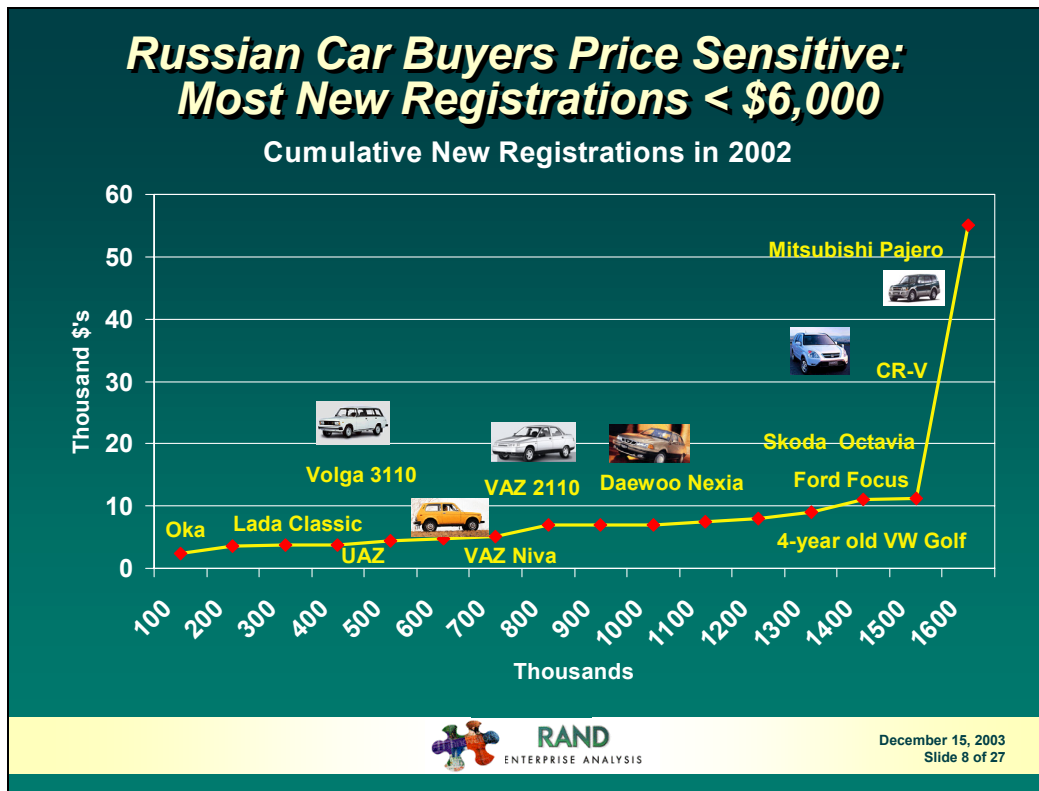
There is a major debate between car dealers who sell new Russian cars and sellers of used foreign cars concerning Russian demand for reliability. Dealers of Russian cars say that most customers (especially those in rural or remote areas) prefer Russian models because they do not care about reliability so long as parts are cheap and they can fix the vehicle themselves. Used car dealers of foreign makes say Russians are fed up with cars that constantly break. Therefore, demand for reliability is very high. Sales figures support the latter argument.

Safety is also becoming more of a consideration for older and richer buyers. Traffic fatalities per million population are high in Russia: 188 versus 154 in the United

States. Fatalities per million passenger vehicles are much higher in Russia: 1,568 versus 210 in the U.S.

The lower cost of diesel fuel compared to gasoline has not translated into demand for diesel cars. Several factors are involved.

- First, the severe Russian winters make diesel unpopular. All drivers have to park outside at least sometime. Difficulties in starting diesel engines in the cold have been a major factor in making diesels unpopular. In contrast, diesel engines are popular in the somewhat warmer Ukraine.
- Second, the price differential between gasoline and diesel is not very large in Russia. Gasoline is relatively cheap: \$.40 per liter for good quality 95 octane versus \$.30 for diesel. For many drivers, it is not large enough to overcome the higher cost of the diesel engine.
- Finally, competition from foreign oil companies and the proliferation of used foreign cars has transformed the Russian gasoline market. Demand for higher quality gasoline has provided an incentive to filling stations to provide higher quality gasoline. Competition from foreign companies has made it imperative. In contrast, most diesel fuel is purchased by Russian truck and tractor drivers. Russian diesel engines are of poor quality, but also consume poor quality fuel so the demand for higher quality diesel fuel has not yet stimulated an adequate supply response, making purchases of diesel-powered cars even less attractive.



RUSSIA'S CAR MARKET: THE PRESENT

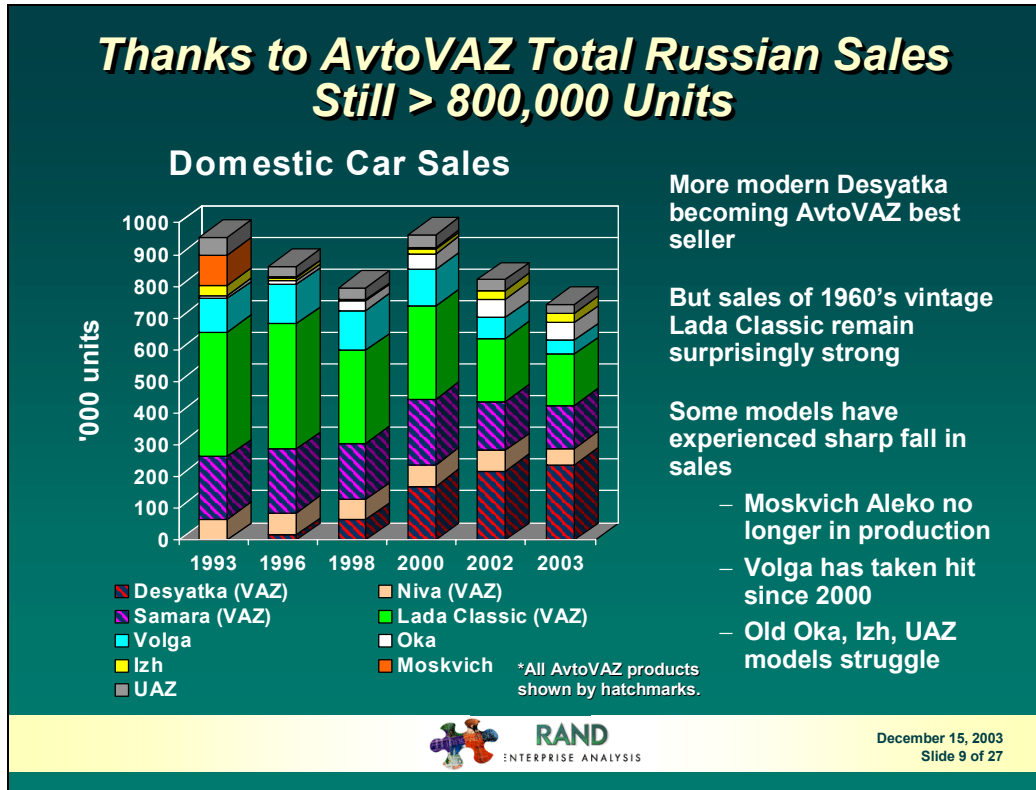
Russian Car Segments

It is more useful to segment the Russian car market on the basis of price than on the basis of size. Accordingly, the market can be divided into three distinct segments.

1. New Russian Cars: During the Soviet period, factories were assigned different types of vehicles to produce and did not compete among each other, therefore each Russian car manufacturer populates its own segment. The tiny A class Oka, designed by VAZ and assembled by KamAZ and SeAZ, costs just \$2,000. There are no competitors in its class. No other Russian car is as big as the Volga produced by GAZ. The Volga 3110, priced at \$5,000, has been classified by some analysts as a D segment vehicle, the same segment as the VW Passat or Opel Vectra. AvtoVAZ provides the only C segment products. There is some competition in Jeep-like vehicles where the AvtoVAZ Niva and UAZ

products both provide 4-wheel drive. Regardless of their size, most new Russian car sales are in the very low price category -- \$4,000-7,000.

2. Used Imports. Russian-made vehicles face price competition from used imports, which typically range in price from \$7,000 to \$10,000. Except for the Desyatka model, AvtoVAZ cannot price its products at more than \$6,000 because at that point more reliable foreign used imports are widely available.
3. New Imports: New imports compete against used or privately imported vehicles. In the mid- to late 1990s, many new vehicles were imported privately and sold through “gray market” dealers. However, with customs becoming more rigorous and the proliferation of official dealers and the beginning of financing, higher cost vehicles are increasingly being purchased through official dealerships.



Thanks to AvtoVAZ, Total Sales of Russian Cars Are Still Above 800,000 Units

Sales of new Russian cars have declined over the past decade. Despite the difficult market, in 2002 total Russian sales were still above 800,000 units, with the vast majority of them VAZ products.

Low price has been a key factor in keeping most models alive. Russian cars are technologically out-moded. The up-dated GAZ Volga still uses 1970s or early 1980s technologies. The Oka uses 1970s technologies and the Izh and UAZ models are based on vehicle designs from 40 years ago.

AvtoVAZ has partially bucked this trend. AvtoVAZ was the only manufacturer to introduce a truly new model in the 1990s, the Desyatka. It has also taken the lead in introducing fuel-injected engines. As a consequence, the share of AvtoVAZ vehicles with more modern technologies has grown very substantially, a trend that is much different for the other remaining manufacturers.

The extent to which AvtoVAZ dominates Russian car production is difficult to exaggerate. In 2002, AvtoVAZ itself produced over 70 percent of all cars manufactured

in Russia. In addition to its own production, two models designed by AvtoVAZ, the Oka and the Lada Classic, are assembled by other producers. The total output of AvtoVAZ and AvtoVAZ-designed vehicles accounted for 86 percent of Russia's car output in that year.

UAZ, which manufactures vehicles of its own design, produces a Jeep-like product. UAZ was acquired by a major steel group, Severstal in 2001 and folded into Severstal's auto group, which also includes ZMZ, an engine manufacturer that supplies both GAZ and UAZ. Severstal changed UAZ's management in 2002 and is emphasizing commercial vehicles and sales to the military. UAZ has a very limited dealer network.

Izhmash is a diversified manufacturer (including weapons) that produces a small, outmoded van. It has begun to assemble the Lada Classic.

SeAZ and KamAZ, the truck manufacturer, assemble the Oka, a tiny \$2,000 vehicle designed by AvtoVAZ. AvtoVAZ makes most of the components that go into the vehicle.

One Russian carmaker has perished: AZLK. The company had to stop production because sales of its product, the Moskvich, could not generate enough revenue to keep wages competitive in the booming Moscow labor market.



Used Car Market

Country of origin
of used imports
2002



- Imported by private individuals at lower tariff rates
- Impending tariff increases stimulated 50% surge in used imports to 505,000 in 2002
- Market glut hurt Russian new auto sales
- Cash-only deals
- Russian registrars beginning to be linked to Interpol databases on stolen vehicles

1.5 million
stolen
vehicles
in Russia



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Used Car Market

A unique feature of the Russian and other East European automobile markets is the role of imports of used vehicles. A 7 to 8 year-old foreign car typically is viewed as being of higher quality, having fewer defects, and being more reliable than a new Russian vehicle. The contrast with Russian cars can be striking. Repair bills often begin almost immediately upon purchasing a new Russian vehicle. According to dealers in Russian cars, most new Russian cars arrive at the showroom with parts missing or broken.

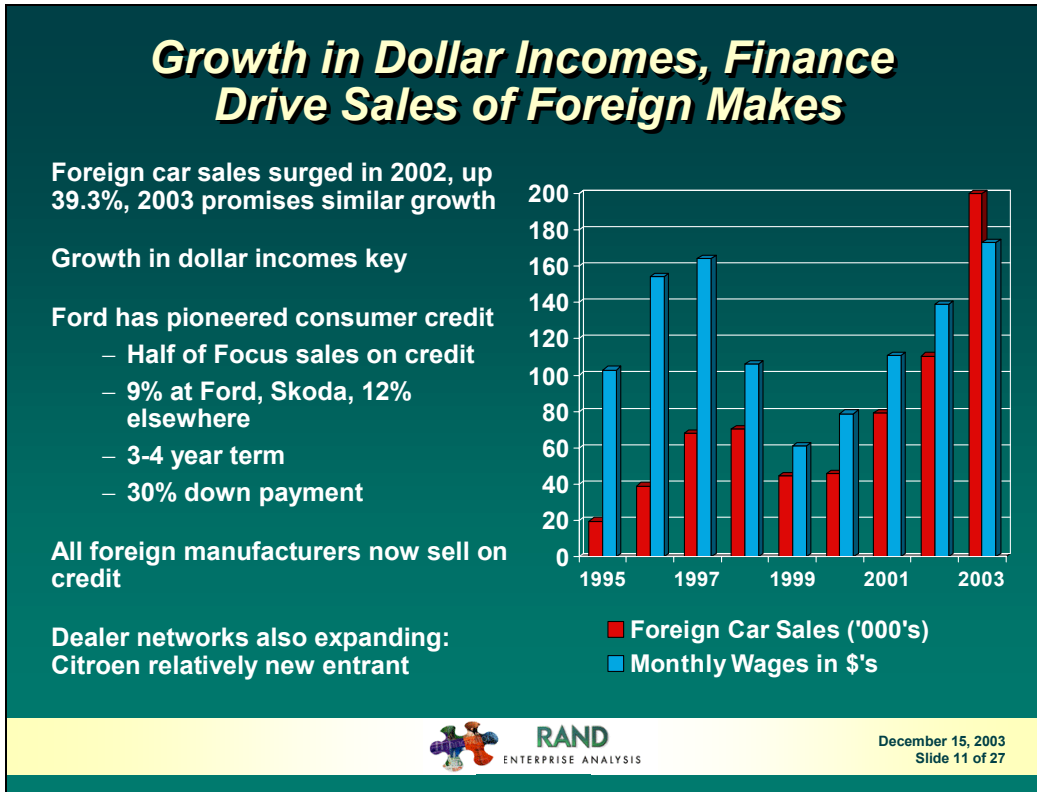
Because of smuggling it is difficult to get an exact account of used vehicle imports. To give a sense of the scale, the number of foreign cars registered in Russia rose from virtually zero in the late 1980s to 594,000 in 1993 and then doubled to 1,192,000 in 1995. As of 2002, 3,758,000 foreign cars were registered in Russia.

Virtually all of these vehicles were imported used from Western Europe or Japan. Total official new foreign car sales over this period were just 478,400, of which over one fourth were sold in 2002 alone.

The used import market is geographically segmented. In the Far East and eastern Siberia, all used imports are from Japan. West of the Urals, all used imports come from Europe. Western Siberia is a mixed market.

Used car markets are very organized. The largest is the Lyubertsy car market, located on the outskirts of Moscow. Typically over 2,000 cars are on offer every weekend during the spring and summer months. Buyers and sellers come from all over central Russia to deal. Importers are organized, family-run businesses. They usually work with a contact, often a Russian émigré, in Germany or Holland, the two largest European supply sources. Business owners go themselves or hire drivers (almost invariably young men) to pick up the vehicles and drive them to Russia. Used Japanese vehicles are imported through Vladivostok.

Used car markets have excellent security as all transactions are in cash. Titles are exchanged at the market. The Lyubertsy market has an Interpol site where potential buyers may check to see if the vehicle had been stolen.



Growth in Dollar Incomes and Consumer Finance Drive Sales of Foreign Makes

In Central and Eastern Europe, during the course of the transition to a market economy, sales of new cars through dealerships gradually replaced sales of imported used vehicles. For example, in 1991, used car imports in Hungary ran 109,805 while sales of new cars were just 41,375, i.e., imports of used cars accounted for 73 percent of new registrations in that year. By 1996, new car sales had supplanted imports of used cars: in that year used car imports accounted for just 5 percent of new registrations on the Hungarian market.

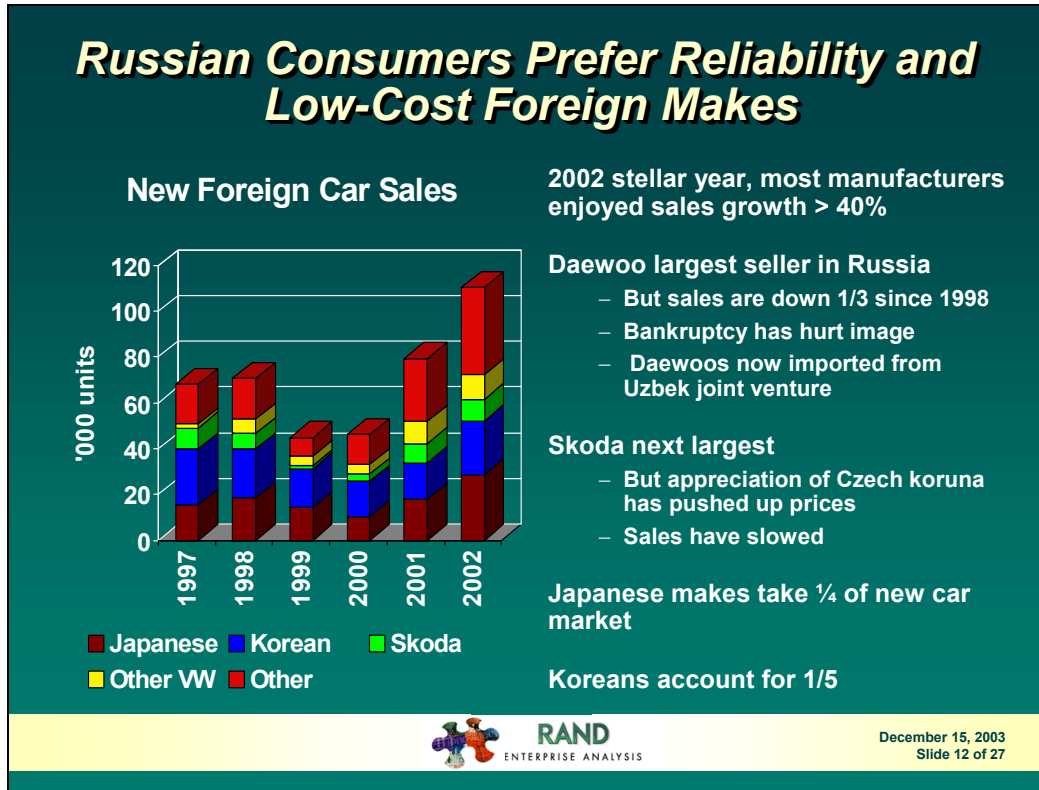
The change was driven by five factors:

- 1) Growth in dollar incomes;
- 2) The development of consumer financing;
- 3) The expansion of the dealer network;
- 4) Manufacturers' warranties
- 5) Tariffs and other barriers to trade.

The first two phenomena are the most important as they made new cars affordable to a larger segment of the auto-buying public. The last two explain why buyers prefer to buy new rather than used cars. Tariffs and bans on older cars also played a role. The Central and East European governments passed bans or increased tariffs on older or all used cars. However, a variety of ways were found to circumvent these bans ranging from smuggling to importing damaged cars as scrap and refurbishing them for the domestic market.

Russia is currently undergoing these same shifts in the market. The shift from used to new vehicles began in 1996 and 1997 as Russian dollar incomes rose. The trend was interrupted by the crash of the ruble in 1998. The collapse of private banks, the resurgence in inflation, and the drop in dollar incomes resulted in two very difficult years for dealers in new foreign cars. However, with the stabilization of the ruble and strong economic growth, dollar incomes have risen. As a consequence, so have sales of foreign cars. More recently, foreign automakers have introduced consumer credit at attractive rates, contributing to the surge in new foreign car sales in 2002 and 2003. Foreign manufacturers are also expanding their dealer and service networks.

These factors contributed to a 39 percent surge in sales of foreign makes in 2002 and a 100 percent increase in 2003. Sales should rise rapidly in the next two years as financing becomes more widely available.



Russian Consumers Prefer Reliability and Low-Cost Foreign Makes

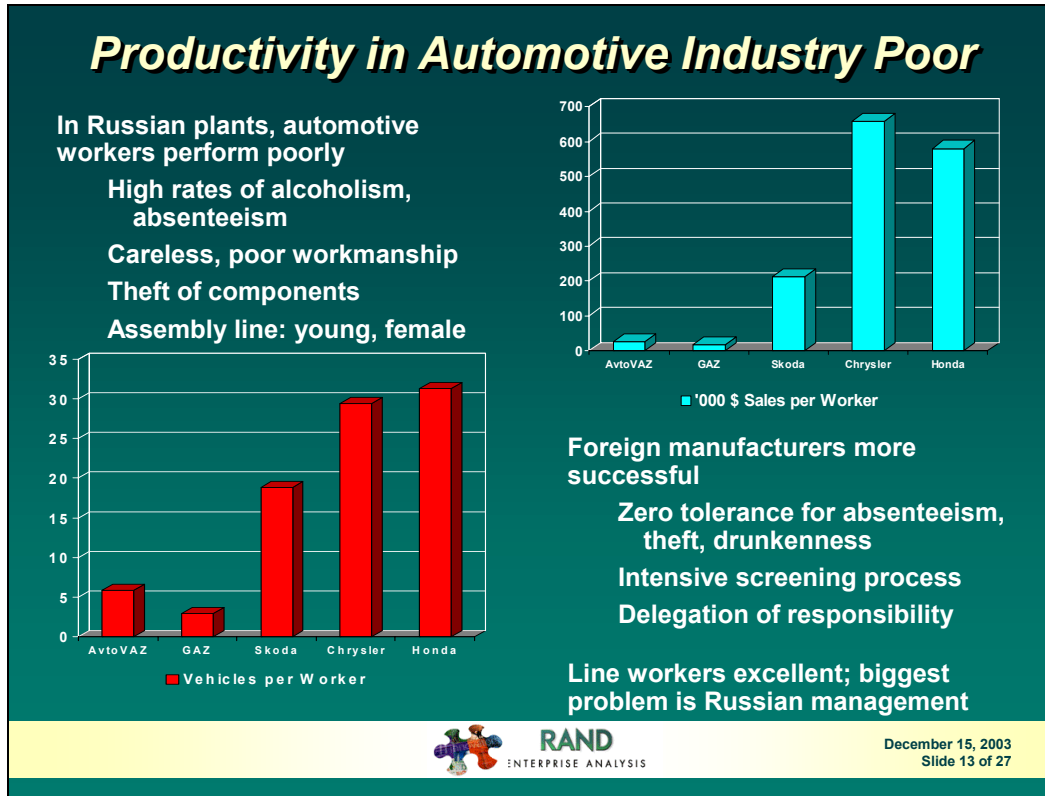
Most foreign car companies enjoyed stellar sales growth of more than 40 percent in Russia in 2002. Sales grew more strongly in 2003. Despite the rapid growth of the past few years, the Russian market for new imported foreign vehicles remains very small, smaller than the market in Hungary, a country with just 10 million people compared to Russia's 143 million.

In emerging markets like Russia, numbers of foreign cars sold are not analogous to sales figures in more developed markets. Lower-priced models dominate the new car market in emerging markets. For example, when car sales in Poland hit their peak of 625,000 units in 1999, 94,000 cars or 15 percent of the total, consisted of models priced under \$6,000 (the FIAT P126 and the Daewoo Matiz). Through the 1990s, most of the cars sold in the Central European car markets were priced under \$10,000.

The same is true for Russia today. Daewoo and Skoda have been market leaders because of their price. As can be seen from the graph, Skoda plus the Korean makes accounted for 40 percent of the Russian market through 2001. Recent declines in market

share for Skoda have been due to increases in prices caused by the appreciating Czech koruna. Daewoo is suffering from quality problems and the consequences of the collapse of the parent company.

The biggest increase in sales and market share in recent years has been registered by European manufacturers, especially Renault and PSA. In-country production is also becoming important in Russia, as it proved to be in Central and Eastern Europe. Ford posted a 160 percent increase in sales in the first half of 2003 because of its ability to undercut competitors through products assembled at its new local manufacturing facility.



AUTOMOBILE MANUFACTURING: RUSSIAN AND FOREIGN MANUFACTURERS NOW AND IN THE FUTURE

Productivity of Russian Auto Makers is Low, but Foreign Manufacturers have been More Successful

Assembly line workers in Russian firms have a reputation for low productivity and poor performance. As can be seen from the graphs, productivity levels in Russian companies are far less than in firms abroad—both in terms of vehicles produced per worker and sales per worker.³

Historically, absenteeism rates tended to be high. The high rate of alcoholism in Russia has contributed to missed work. Workers frequently came to work drunk and in some instances drank on the job. Workers supplemented their incomes by stealing parts

³ Because of problems with comparability with national statistical data, we have chosen to compare productivity data for Russia's two largest companies with two Western companies or subsidiaries (Honda and Chrysler) and with Skoda, where statistical data permit a comparison. These three foreign manufacturers were chosen because of their geographic locations and because they are strictly light-duty vehicle manufacturers.

for sale on the aftermarket. Rewards were given for meeting production targets, not for quality control, so defect rates were very high. Staffing levels have also been very high. GAZ, for example, had three workers for every station on its assembly lines: an operator, a quality-control examiner, and a “defector” responsible for fixing defective parts or repairing machinery.

Conditions have begun to change. The new management at GAZ has tightened worker discipline. It has also shed labor, in great part through voluntary measures. For example, the number of workers at each assembly station has been reduced from 3 to 2. Management splits the savings in wages from reducing staffing levels among the remaining workers.

Car company managements have not moved more aggressively to reduce assembly line staffing because the labor cost of these workers are such a small share of total costs (3 percent). In April 2003, assembly line workers averaged \$170 per month, a shade above the national average wage of \$164 that month, but lower than the average wage in industry.⁴ As a consequence, assembly line workers tend to be young (less than 30 years old) and often female, who traditionally earn less than men in Russia. Roughly 60 percent of the assembly line workforce at GAZ are women.

Defect rates are very high, running on average several defects per delivered vehicle. GAZ, with the assistance of an outside consultant, implemented a new quality control program in 2002 that has resulted in very sharp drops in defect rates. For example, in 2002, 500 defects per million was acceptable for some parts. This level was cut by half in 2003. The resulting improvement has resulted in lower warranty costs.

Foreign manufacturers have been more successful with Russian labor. Both Ford and GM/Opel use interviews, questionnaires and tests to recruit and assess candidate employees. GM/Opel reportedly avoided hiring employees from AvtoVAZ because of the poor work habits ingrained there. Once hired, a significant effort is placed on training -- for specific tasks as well as general skills such as problem-solving, communications, and teamwork. These efforts appear to have paid off. Western car companies have reported a very favorable experience with Russian assembly line labor.⁵

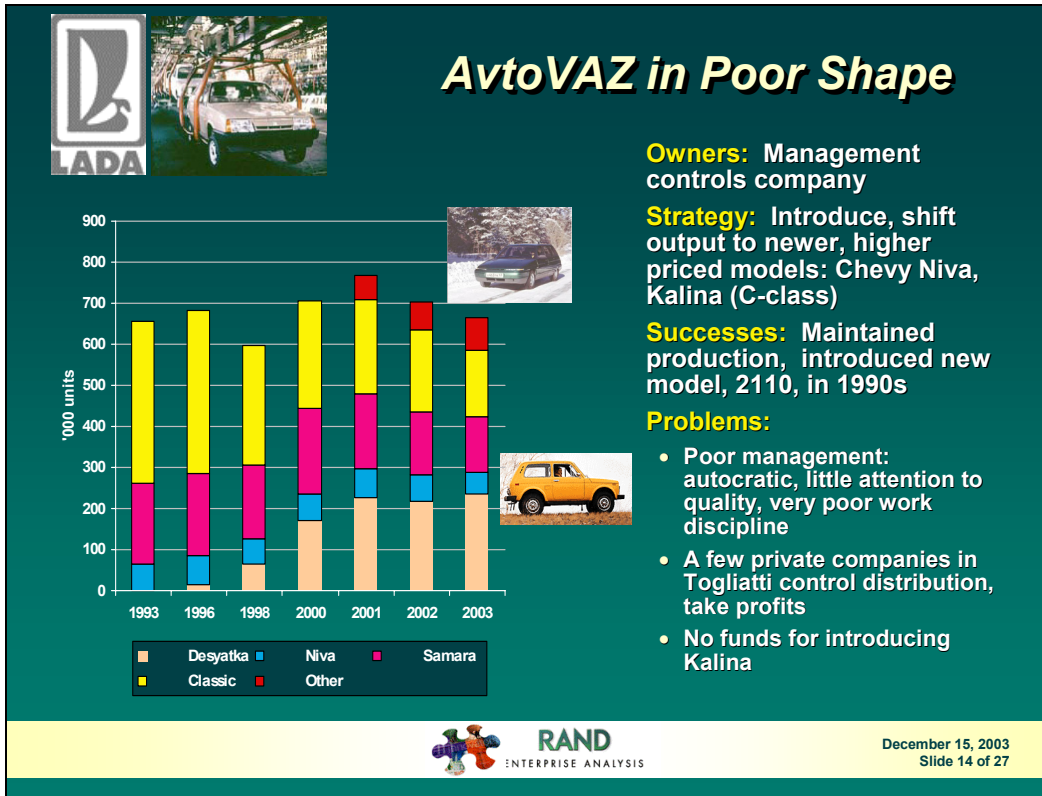
⁴ AvtoVAZ pays a quarter to a third more than GAZ for similar work.

⁵ In general, foreign car companies have had excellent experiences with assembly line workers in Central and Eastern Europe. For example, Ford's Belarusian SKD operation had the lowest defect rate for the Focus throughout Europe. Revoz, Renault's operation in Slovenia, has consistently had lower defect rates for assembling the Clio than Renault's plants in Spain and France. In contrast, foreign manufacturers have reported difficulties with East Europeans as

Although neither pays a significant premium over local wage rates, working for a foreign company is perceived by many Russian workers as very attractive because of the skills one can learn, the opportunities for career advancement and what is viewed as more civilized labor- management relations.⁶

managers as they are seen as too dictatorial, do not do well in teams, and try to prevent bad news from reaching their superiors.

⁶ Traditional Russian managers have a reputation for being very autocratic and yelling at or threatening employees.



AvtoVAZ is in Poor Shape

AvtoVAZ is by far the most integrated and largest Russian car manufacturer. It has its own design center, testing facilities, and complete production facilities. In contrast to international car companies, AvtoVAZ has only one main manufacturing site - - located in Togliatti. Its main assembly hall has four production lines and a capacity of close to 800,000 units per year. AvtoVAZ's development center has also been used for series production of 40,000 units or less.

AvtoVAZ has a reputation for a lack of transparency, poor management, poor worker discipline, corruption, and criminality: During the 1990s, a shop foreman was assassinated on the factory floor in a gangland killing. The company has several principal shareholding groups, including its employees, but the company is controlled by the management.


AvtoVAZ used to be almost completely integrated, with all major parts and components produced in-house. Since 1991, some components production has been divested or spun off into subsidiaries -- many in which the firm and its management still

have ownership and controlling interests.⁷ Some of these suppliers are now trying to break entirely free of AvtoVAZ control -- which they see as stifling -- so they can develop new product lines and customer relationships.

AvtoVAZ does not have a proper distribution network for its products. Four local “dealers” (wholesalers) located in Togliatti, buy and resell as much as one-fourth of the company’s total output. Although AvtoVAZ management is trying to set up a proper dealer network, some managers reportedly benefit financially from steering cars to particular “dealers.” The ability of the company to distribute cars east of the Ural Mountains is particularly weak.

AvtoVAZ is barely profitable and has little in the way of financial assets for new product development. As a consequence, the Kalina, its newest C-class model, has stayed on the drawing board. In RAND’s view, AvtoVAZ does not and will not have the funds to put the Kalina into full-scale production in the near future.

⁷ It is not clear whether managers just appropriated the production assets or whether AvtoVAZ actually received payment.



RusPromAvto

New Industry Owners

- Oleg Deripaska's BasEI, aluminum group, bought GAZ, created RusPromAvto in 2000, kept GAZ brand
- Aleksei Mordashov's Severstal, successful Russian steel manufacturer, acquired UAZ, ZMZ same time

Why?

- Shift from metals production to metal goods
- Apply superior management skills
- Earn political goodwill for investing in car manufacturers

Strategy


- Short-term: Cut costs, improve quality
- Long-term: Link up with foreign manufacturer

Successes

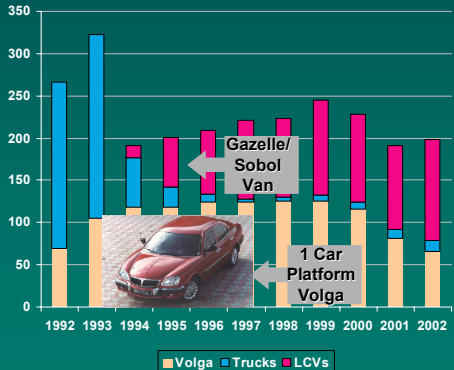
- GAZ quality control much better
- GAZ, UAZ profitable

Problems

- No experience in automotive manufacturing
- Outmoded technologies, low volumes




GAZ Output



1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002

■ Volga ■ Trucks ■ LCVs



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RusPromAvto and Other Manufacturers

In a Russian industry noted for its stagnation and poor management, GAZ stood out as an innovator in the 1990s. GAZ introduced Russia's first semi-modern light commercial vehicle (LCV) in 1994, the GAZ GAZelle. It later introduced a smaller LCV, the Sobol. Modeled after the Ford Transit, these models dominate the Russian van and minibus market. In contrast to the automobile sector, where Russian manufacturers have been hit hard by competition from used imports, the GAZelle has more than held its own. Quality levels are high enough and it is priced so competitively that it dominates the mid-sized van market.

GAZ had signed a joint venture agreement with FIAT, in which the European Bank for Reconstruction and Development (EBRD) also held a stake. Unfortunately, the agreement had just begun to be implemented in 1998, when the ruble fell. In light of Russia's economic problems at the time and FIAT's more recent financial problems, the agreement collapsed.

In the mid-1990s, GAZ had borrowed in dollars to finance a paint shop for the GAZelle. When the ruble collapsed in 1998, the company fell into financial disarray as it labored to honor its debt commitments. A controlling interest was acquired by Basic Element (BasEl), the large, light metals conglomerate, in 2000.

BasEl installed new management; these new managers have taken a much more sophisticated approach to running the company than the management of AvtoVAZ. They have taken a more aggressive approach to cutting labor and supplier costs and to improving product quality and worker training and discipline.

GAZ's sole car model, the Volga, is obsolete. Losses on Volga production, have been offset by earnings from LCVs. While sales of the Volga have fallen dramatically in recent years, GAZ faces pressure from the federal government to continue production of the vehicle for use by taxi services and government agencies. GAZ needs to stop production of the vehicle. However, it has scant financial resources to develop a replacement product and the company management argues that revenues from LCV production alone are not enough to sustain the company over the long term. GAZ also still produces a medium truck, which is primarily purchased by the military and large cooperative farms.


Foreign OEM Investments in Russia

Other potential projects in Russia:


- VW
- Toyota

Other existing projects in CIS:


- UzDaewoo (Uzbekistan)
- Skoda (Ukraine)



Ford
Focus
SKD, 2002
20% domestic in 2003 (glass, mats)
50% domestic by 2005
25,000 output by 2005




Renault
Symbol
SKD, 2003
City of Moscow JV
60,000 units by 2007



GM
Chevy Niva
CKD, 2002
JV with AvtoVAZ
98% local parts
Russian design,
GM quality control





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Foreign Investment in Automobile Manufacturing

Over the past few years, Russia has finally experienced some significant investments by foreign original equipment manufacturers (OEM).

Three assembly operations are now functioning: Ford, the GM/AvtoVAZ Niva project, and Renault. Ford and GM/AvtoVAZ, in particular, are rapidly ramping up production. Renault seems firmly committed as well, although production is not as far along as the other two projects.

Information on proposed projects by Toyota and VW come from press reports and are speculative. VW, in particular, has discussed investing or has been discussed as a foreign investor for over a decade. Official VW policy has been to enter emerging Eurasian markets through its Skoda subsidiary. Skoda and its local partner are now assembling vehicles in Ukraine. However, VW/Skoda has not announced firm plans to assemble in Russia as of this time.

In addition to investments by major manufacturers, there are a number of smaller ventures in Russia that assemble vehicles from imported components. These ventures

have no equity ties with the manufacturer. One of the largest of these operations is Avtotor, located in Kaliningrad. It assembles the BMW 3- and 5-series and Kia models from kits. TagAZ in the Don region assembled Daewoos and Citroens; now it assembles Hyundai Accents.

Despite the bankruptcy of Daewoo, UzDaewoo continues to assemble cars in Uzbekistan, but without the participation of its Korean joint venture partner. It buys components from Daewoo factories in Korea and from local operations.

Russia Dramatically Increased Import Tariffs on Older Vehicles in 2002

Gasoline	< 1,000 cc	1,000-1,499 cc	1,500-1,799 cc	1,800-2,999 cc	> 3,000 cc
New (0-2 years old)	25% or 1 euro per cc	25% or 1.2 euro per cc	25% or 1.25 euro per cc	25% or 1.8 euro per cc	25% or 2.35 euro per cc
3-7 years old	25% or .45 euro per cc	25% or .5 euro per cc	25% or .45 euro per cc	25% or .55 euro per cc	25% or 1 euro per cc
> 7 years old	1.4 euro per cc	1.5 euro per cc	1.6 euro per cc	2.2 euro per cc	3.2 euro per cc
	Diesel	< 1,500 cc	1,500-2,500 cc	> 2,500 cc	
	New (0-2 years old)	25% or 1.2 euro per cc	25% or 1.8 euro per cc	25% or 2.35 euro per cc	
	3-7 years old	25% or .4 euro per cc	25% or .55 euro per cc	25% or 1 euro per cc	
	> 7 years old	1.5 euro per cc	2.2 euro per cc	3.2 euro per cc	



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RUSSIAN AUTOMOTIVE REGULATIONS AND BARRIERS TO TRADE

Russia Increased Import Tariffs on Older Vehicles in 2002

Russian manufacturers have quite rightly focused on used imports as the primary threat to their sales. The stiffest competition facing new Russian cars comes from used imports from Europe and Japan. Dealers in foreign cars have also complained about the failure of importers of used vehicles to pay tariffs.

In order to protect the Russian car industry, in October 2002, the Russian Government introduced new, higher import duties for used cars older than 7 years. The new tariffs are based on engine capacity, not the value of the vehicle.⁸ The new import duties have resulted in a very sharp drop in imports of vehicles more than 7 years old. At

⁸ In the past, importers would falsify receipts and bribe customs officials in order to reduce the dutiable value of their imported vehicles.

Moscow's Lyubertsy auto market, for example, cars over 7 years of age have largely disappeared.

Domestic car manufacturers are now pushing for higher duties on imported cars between 3 and 7 years old. The Commission on International Trade Protective Measures has suggested that the Russian Government unify import customs duties for cars between 3-7 years old imported by individuals with duties paid by legal entities. The recommendation would result in the same treatment for corporate and private importers.

This new tariff measure is expected to make the assembly of foreign cars in Russia more economically attractive.

Gov't Support for Domestic Industry Tepid

In July 2002, government adopted the *Concept of Automotive Industry Development up to 2010*

1. Basic Wish: Modernization

2. Actual Policy

1. Use regulation to push technological development in industry: Russia adopting EU emission standards, but may delay implementation again
2. Protect Domestic Brands
 1. Tariffs raised on old imported used vehicles
 2. Government has clamped down on corruption in customs service
3. Provide financial support
 1. Federal tax forgiveness
 2. Local tax forgiveness; local governments provide modest financing
 3. Small federal grants for automotive R&D

3. RAND's View: Document not worthy of much attention

1. Captures industry view
2. But Finance Ministry more important, unwilling to provide subsidies



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Government Support for Industry Tepid

In July 2002, the Russian government issued a report, *The Government Concept of Automotive Industry Development up to 2010*. In RAND's view, this report is more of an old Soviet-style government document than an operational policy document. It is long on generalities and short on specifics.

Although less so under Putin, the Russian government is still fond of issuing policy pronouncements but never implementing them. In contrast to the U.S. or Japanese governments, which upon adopting a policy, create bureaucracies, regulations, and enforcement procedures to implement them, the Russian government still too frequently makes policy statements, but then fails to take the measures necessary to implement them. It often lacks the administrative capability to enforce policies. For example, the Russian government has failed to take measures to implement policy statements on seeking membership in the World Trade Organization (WTO), military reform, enforcement of customs regulations, promulgation and enforcement of environmental regulations, etc. In the case of the automotive industry document, statements on the

desirability of improving the technological level of Russian automotive manufacturing are merely wishes. They have no operational meaning.

Some of the policy recommendations, most notably raising tariffs on used imports, have been adopted. These policy changes were consistent with the desires of the Ministry of Industry and President Putin's office, two much more powerful institutions than the Ministry of Industry, the author of the document. The Finance Ministry wished to raise tax revenue and Putin had long wanted to crack down on corruption in the customs agency. Their support for the policy change was not just a response to the automotive industry requests for protection.

In general, Russian regulations are becoming more similar to those in Europe. Automotive liability insurance has been required since July 2003. Russia is a member of the United Nations Economic Commission for Europe (UNECE). Although Russia is already a member of UNECE, it imposes five additional regulations on vehicle construction. There is no sign that these will be dropped. Russia is adapting its environmental regulations and regulatory conformity assessment procedures to be more in line with the European Union's. However, Russia has frequently delayed the implementation of tougher regulations on emissions in response to lobbying from domestic engine manufacturers.

Government Provides Few Incentives for Foreign Investment

1. OEMs

- 1. Foreign assembly operations may import components duty-free**
 - 1. Local content must > 50% by 5th year, must rise each year**
 - 2. During first five years, limits on output**
- 2. Local governments may provide property tax concessions**
- 3. Additional support unlikely**
 - 1. Russian industry antagonistic**
 - 2. Finance Ministry opposes financial concessions**
- 4. OEMs want to count component exports as local content**

2. Foreign component manufacturers

- 1. Subcomponents, materials subject to 25% import tariffs**
- 2. Free Economic Zones (FEZ) available, but unattractive**
- 3. Foreign component manufacturers lobbying for use of bonded warehouses**



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Government Provides Few Incentives for Foreign Investment

Popular and government support is stronger for encouraging foreign manufacturers than for subsidizing Russian manufacturers. Many knowledgeable Russians believe the current manufacturers face such a gap in technologies with their foreign counterparts that only foreign investment will make it possible to bridge the gap. Consequently, the Russian government has provided tax holidays and zero tariffs on imported components to foreign manufacturers so as to encourage them to invest in Russia.

This said, there is little support for increasing incentives for foreign manufacturers. The Ministry of Finance does not want to lose the tax revenue and Russians, in general, are suspicious of the efficacy of government subsidies and concessions to foreign investors.

The major incentive for foreign OEMs in the future is likely to remain relatively high tariffs. Under the standstill agreement signed by Russia with the European Union (EU) and the United States during negotiations for WTO membership, Russia has agreed not to raise tariffs. On the other hand, there is strong support on the part of Russian and

foreign manufacturers in Russia to keep tariffs on finished vehicles at current levels. We believe that it is unlikely that tariffs will be cut sharply, even after Russia enters the WTO.

The most likely immediate change in tariff policy concerns components. Foreign OEMs have lobbied very hard for zero tariffs on components. Now that they have achieved this goal, at least as long as local content requirements are met, the Russian manufacturers no longer have an incentive to lobby against reductions in tariffs on components. In fact, in many instances, imported components or materials are needed to upgrade Russian vehicles. Moreover, GAZ and AvtoVAZ would both like to have the option of playing off domestic providers against importers.

Russians are aware that the automotive component industry has enjoyed explosive growth in Central and Eastern Europe. That growth entailed substantial imports of subcomponents for the manufacture of larger components or complete modules. In contrast, the domestic component industry is politically weak. Consequently, tariffs on components may be reduced in the coming few years.

The EU and Russia: A New Relationship?

1. Past EU Trade Policies towards Russia

1. Because Russia not member of WTO, EU has been able to impose anti-dumping measures on Russian metals, chemicals
2. Russia only recently recognized as market economy; still subject to many safeguard measures

2. Potential Future EU Trade Policies towards Russia

1. EU has been focused on enlargement: 10 new members to join in 2004
2. EU beginning to turn attention to Russia
3. EU policy goals for economic relations with Russia:
 1. "Common European economic space"
 2. Free trade area, including free trade in cars, components: ***Non-EU exporters would still face high tariffs***
 3. Common regulatory framework

But no membership for Russia: EU considers Russia, too big, too poor, too chaotic for membership



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The EU and Russia: A New Relationship?

Over the course of the transition, the EU has adopted much more accommodating trade policies towards Central European nations than towards countries further east, including Russia. The Central European states and other applicant countries signed Europe Agreements. These agreements assured the signatories that they would be considered for membership in the EU. In addition, they were given asymmetric tariff reductions.⁹

In contrast, the CIS countries, including Russia, were offered Partnership and Cooperation Agreements, which did not provide duty-free access or elimination of quotas. The EU has also taken a much harder line in terms of other restrictions, including anti-dumping measures. Major Russian exports like aluminum, steel, and fertilizers are subject to monitoring mechanisms.

⁹ The EU abolished tariffs and quotas more quickly than the Central Europeans who were permitted to maintain tariffs for a longer period of time.

EU policy is in the process of becoming more accommodating. As of May 2004, the first round of enlargement will have taken place. EU policymakers will no longer be quite so absorbed with enlargement, especially as the next group of countries to join will be smaller (probably only Bulgaria and Romania in 2007, followed by Croatia in 2010). Turkey is unlikely to be invited to join during this decade. Russia has also become a more attractive and more important economic partner. Economic growth and a more efficient Russian government have shifted EU policy interest towards Russia. In addition, day-to-day policy issues with Russia are likely to become more salient as the enlarged EU will have a long, new border with Russia. Kaliningrad, the isolated Russian outpost on the Baltic Sea, also presents a number of policy problems.

The EU has already articulated a number of policy goals vis-à-vis Russia. It has set a goal of a “common European economic space” that would involve a free trade agreement with Russia and similar regulatory systems. A free trade agreement would not be signed until Russia joins the WTO, but after Russia joins the WTO, presumably in 2007, one could be signed shortly thereafter. Although tariff reductions would likely proceed in stages, the EU has moved quickly to cut tariffs on exports from the Balkans. It could very well do so for Russia as well.

Forecast Methodology

- **New Registrations**
 - Econometric analysis shows for every \$1,000 increase in per capita income at PPP exchange rates, car ownership levels rise by 19 per 1000 people
 - New Registrations = Projected change in total registrations + scrappage
- **Composition of sales (Russian, used imports, new foreign)**
 - Forecasts of average incomes, income distribution determine composition of new registrations by price segment
 - Assumptions on policies determine availability of used imports
- **Forecast of segmentation of new foreign car sales**
 - Supply – planned production models by Ford, Renault, etc.
 - Evolution of segmentation in Central Europe
 - Current Russian patterns: SUVs are more popular in Russia than Europe because of snow



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RUSSIA'S CAR MARKET: THE FUTURE

Forecast Methodology

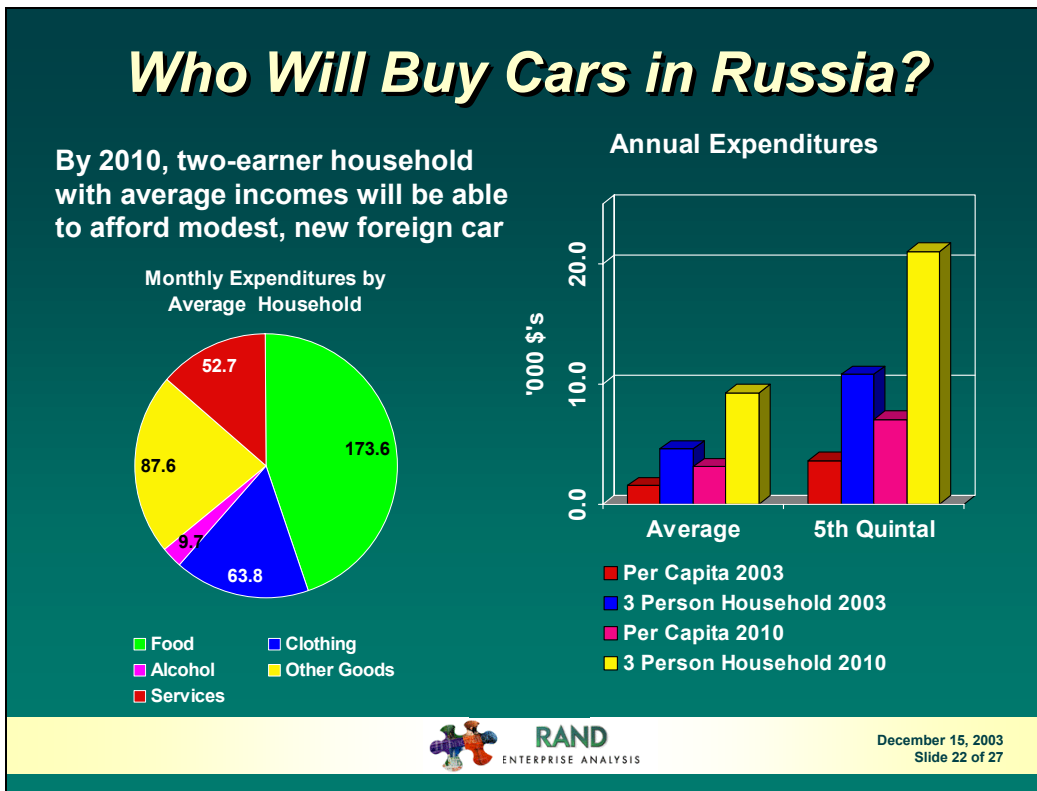
We forecast future car sales in Russia using standard forecast industry techniques.

RAND first forecasts changes in the size of total registrations. The primary indicator of fleet size is the number of vehicles per 1,000 population, which is driven by per capita incomes at purchasing power parity (PPP). We used a sample of 52 countries to estimate the effect of a change in per capita incomes at PPP exchange rates on motorization rates. The t- statistic on the parameter was 14. Using these estimated parameters, we projected the vehicle park in 2020. We used a lagged adjustment model to project forecasts of changes in fleet size. These changes coupled with scrappage rates were used to derive forecasts of new registrations. Scrappage rates were assumed to rise to four percent at the end of the forecast period from an estimated 3.1 percent in 2003.

Projections of average income and income distribution generated by the economic model were used to segment new registrations by price. The share of households able to

afford vehicles that cost more than \$10,000 determined the size of the new foreign car market. Assumptions about the Russian government's policy towards used imports were then used to divide the lower priced segment between Russian and used imports. In addition, out-moded, very low cost Russian models were assumed to be driven out of the market entirely because of lack of demand and rising costs of energy, materials and labor.

Segmentation of foreign car sales were driven by three factors. First, supply availability on the part of Western manufacturers in Russia has a major effect on segmentation. The 25 percent savings on tariffs gives locally assembled models a tremendous cost advantage, skewing purchases to locally available products. This trend has been very apparent in Central Europe. Second, as Russian incomes rise, demand for foreign vehicles becomes more "normal" as a larger share of the population can afford new foreign cars. As a consequence, segmentation patterns in Central European states with per capita incomes similar to projected Russian incomes are used to model future segmentation patterns. Third, according to current segmentation patterns, Russian consumers have a stronger preference for SUVs and C class vehicles than Central Europeans. These preferences were factored into the forecasts.



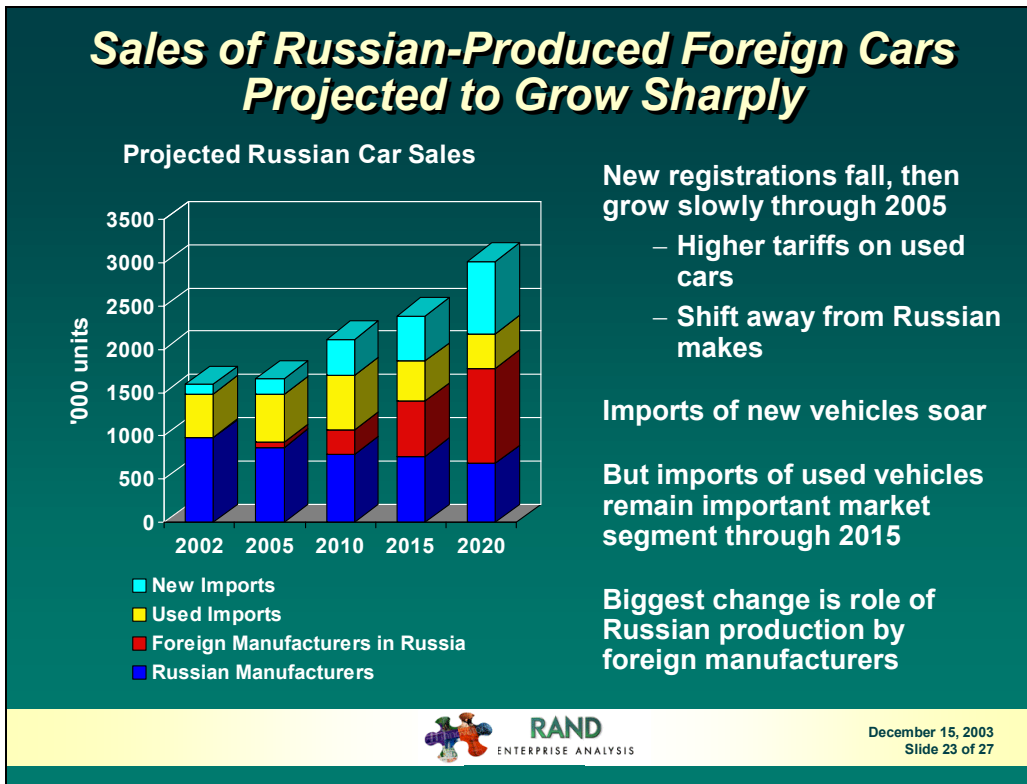
Who Will Buy Cars in Russia?

Two trends in personal incomes will serve to make the Russian car market more similar to those in other transition economies in Eastern and Central Europe. First, GDP growth will boost per capita incomes, making cars more affordable. Second, and just as important, the projected continued strengthening of the ruble -- due in part to its current undervaluation -- will greatly increase dollar incomes.

In the chart above, average per capita dollar incomes are projected to double between 2003 and 2010. Of this increase, 35 percent is due to growth in real incomes and 65 percent is attributable to the real effective appreciation of the ruble against the dollar. This is a similar pattern to what has been experienced in Central and Eastern Europe.

As incomes of average Russians rise, consumption patterns will mimic the current consumption patterns of higher income Russians. Consequently, average Russians are projected to be able to spend a greater share of their income on consumer durables than in the past, including on lower-priced automobiles.

Higher income Russians are projected to have family or household incomes close to those of lower income West Europeans today. However, in comparison with lower income West Europeans, we project that these higher income Russians will still spend a much smaller share of their incomes on housing and communal services, giving them *more* disposable income to spend on consumer durables, including automobiles.



Sales of Russian Produced Foreign Cars Projected to Grow Sharply

The ability of Russian consumers to pay more for vehicles and a more favorable investment climate for foreign manufacturers will result in major changes in the automotive industry in Russia.

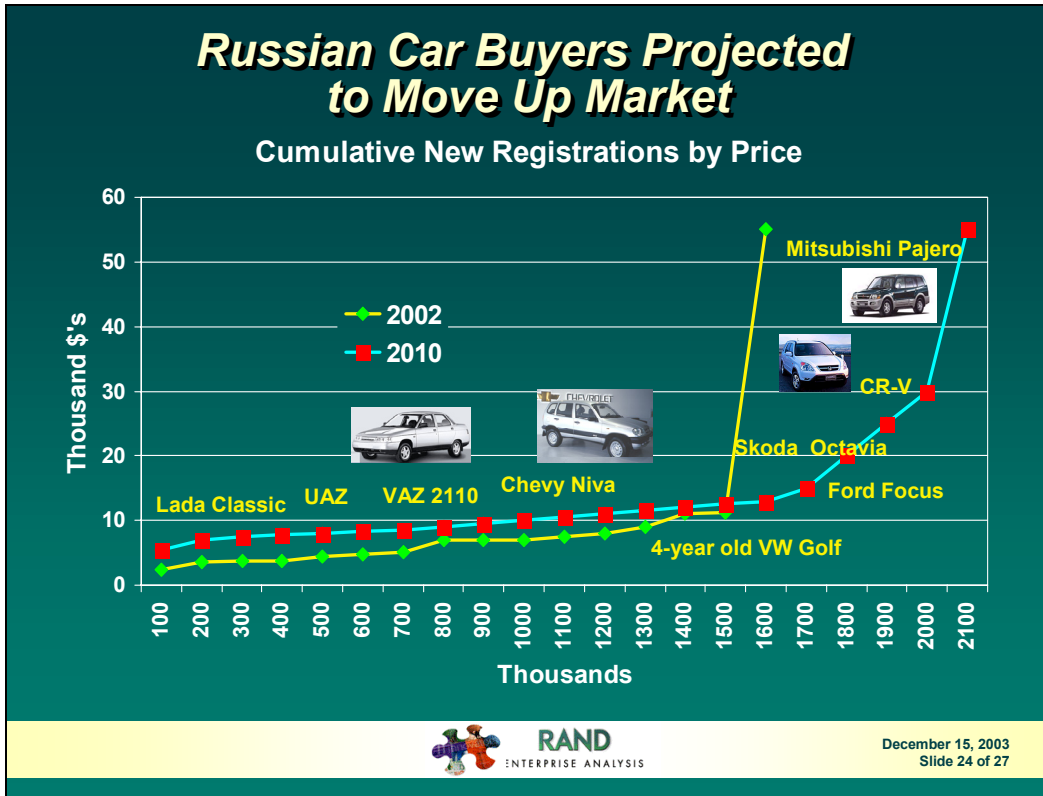
The Russian government has made it plain in negotiations for accession to the WTO that it wishes to preserve a domestic automobile industry. However, policy statements also indicate that the Russian government expects the current domestic industry to solve its own competitive problems or be shut down. Already major automotive manufacturing operations have been dramatically downsized (Izhmash, ZiL, KamAZ) or closed (AZLK).

The Russian government has chosen to support a domestic industry by providing tariff protection to both domestic and foreign manufacturers. RAND expects tariffs on cars (and airplanes) to remain relatively high after WTO accession, resulting in a substantial build up of assembly operations of foreign manufacturers in Russia, most notably, Ford, Renault, and General Motors (GM), probably Skoda and possibly Toyota.

These manufacturers will assemble low-cost, smaller vehicles for sale in Russia and for export, most probably to other former Soviet republics.

Despite relatively high tariffs, foreign manufacturers will find it more economical to import higher priced vehicles than to manufacture in Russia. As incomes rise, these vehicles will become more affordable and imports will rise. However, imports of lower-priced vehicles, especially Korean makes, will fall due to competition from vehicles manufactured by foreigners in Russia.

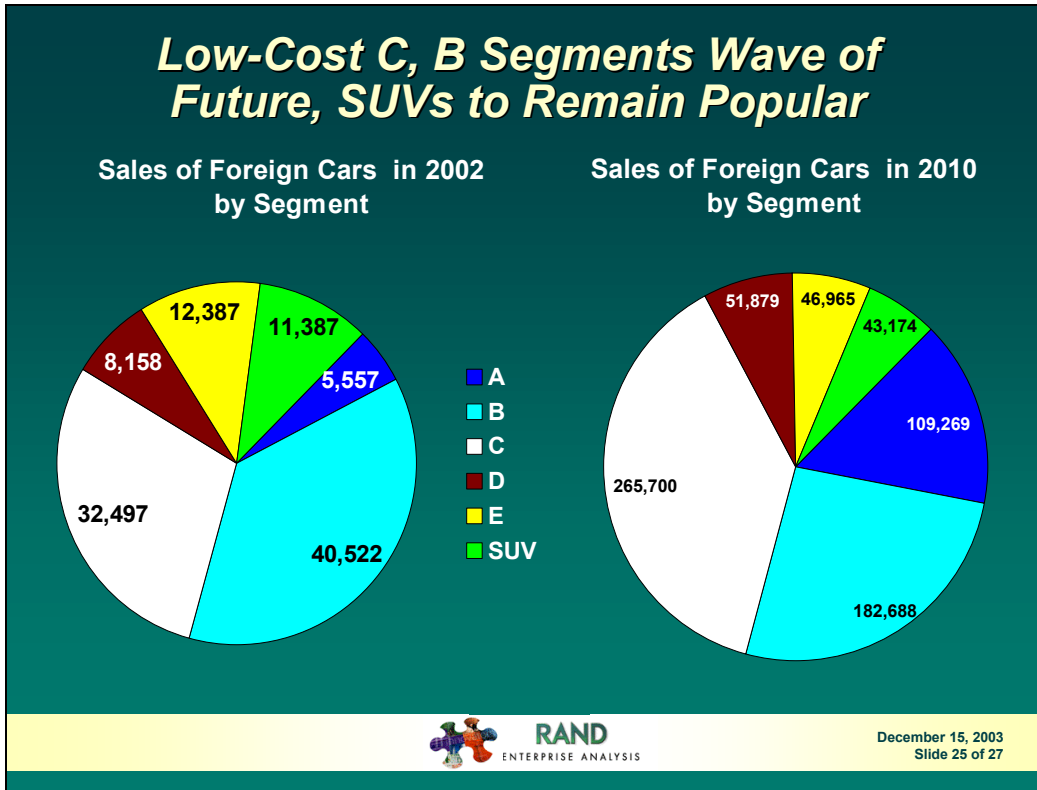
Both used imports (even under a stricter tariff regime) and foreign manufacturers are projected to take market share away from traditional Russian manufacturers.



Russian Car Buyers Are Projected to Move Up Market

Higher average incomes are projected to have two major effects on the automobile market. First, new registrations of vehicles in Russia are projected to rise 38 percent between 2002 and 2010. Second, the average price paid per vehicle will more than double as sales of traditional Russian vehicles fall and while sales of new foreign automobiles rise 6 times.

These changes are reflected in the composition of sales by price. In 2002, RAND estimates that at most 15 percent of new registrations, new and used imports, were sold for more than \$10,000. By 2010, RAND projects that over half of the vehicles sold in Russia will cost more than \$10,000.



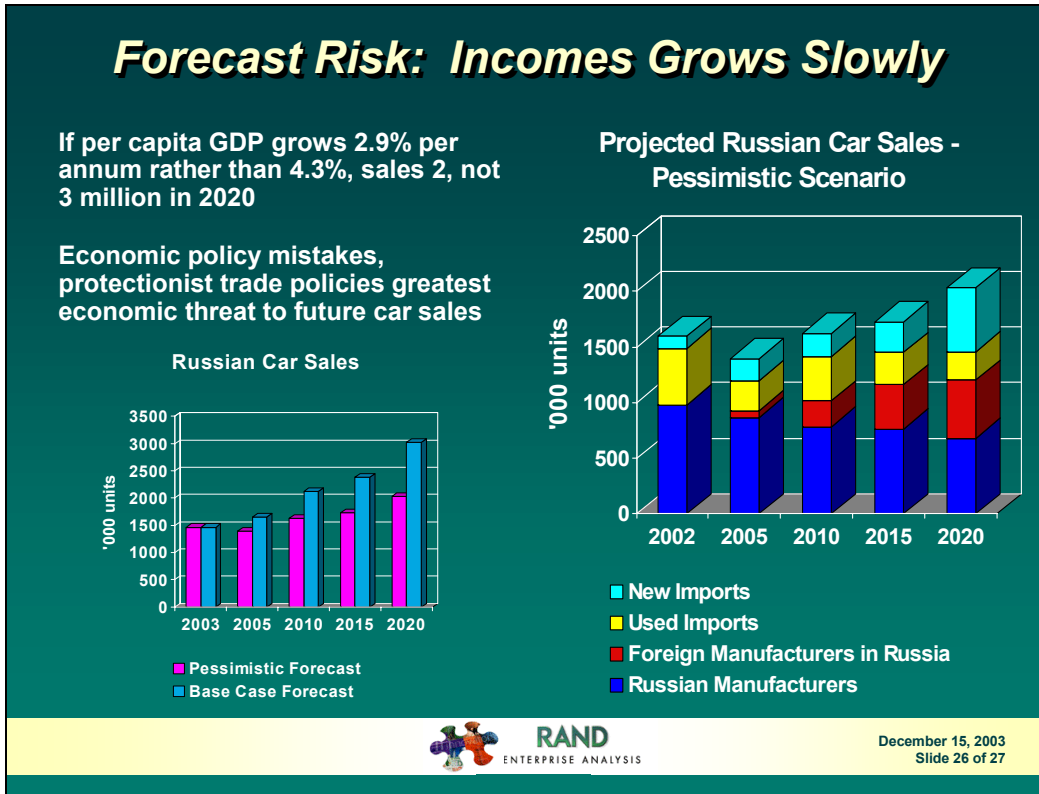
The Low-Cost C and B Segments are the Wave of Future, While SUV's will Remain Popular

Because of the very different price categories for the three major market groups in Russia (Russian vehicles, used imports, and foreign vehicles), it makes little sense to discuss market shares by vehicle size except within these three groups. We have provided a rough estimate of market segments for new foreign vehicles sold in Russia in 2002. As can be seen, the estimated market shares for luxury vehicles (E segment) and SUVs are relatively high.

Our projections for market shares for 2010 are driven by our expectations for growth in production by foreign manufacturers in Russia. The Renault project, in particular, involves the production of a very low-cost, smaller vehicle. Skoda production is also expected to be skewed towards a B segment vehicle, while Ford is projected to concentrate on assembling a C class vehicle.

As a consequence, market segmentation is projected to become more “traditional” with a decline in the market share of luxury vehicles and SUVs and an increase in A and D segment vehicles towards percentages more common in other emerging markets.

However, because of continued production of lower-cost traditional Russian vehicles, the foreign car segment will still be more skewed towards the higher priced segments than is the case in other emerging markets.



Forecast Risk: Incomes Grow Slowly

Forecasts of sales of cars in emerging markets are prone to a great deal of forecast risk.

The key driver of our forecasts are increases in the purchasing power of Russian consumers because of economic growth and the ensuing growth in personal incomes and the strengthening of the ruble. Both developments are highly uncertain.

The greatest risk for growth in incomes is on the down side. A surprising number of transition economies have experienced a second recession after the first transition recession, including Russia. Many have experienced growth slowdowns, often because of balance of payments problems that are caused by fiscal problems.

If the Russian government begins to relax its fiscal policy, either because of increased expenditures or because of declines in tax revenues stemming from a fall in prices of energy exports, income growth could easily be in the range projected in the pessimistic scenario above. In this case, total registrations would be a quarter less than in the base case.

Under this scenario, the composition of sales would differ greatly from that in the base case. Average vehicle prices would be much lower, skewing sales towards used imports and traditional Russian vehicles and away from new imported foreign vehicles. Under this scenario, production of foreign vehicles in Russia would be one-fifth less than in the base case, while imports of new vehicles would be half. Instead of a new import market of 419,000 vehicles in 2010, the Russian new import market would be just 209,000 vehicles.

Key Points

1. Market

1. Currently, only a small part of population can afford cars
2. If the economy continues to enjoy solid growth, Russian market will double to 3 million units/year by 2020

2. Domestic Brands

1. Currently only one large manufacturer, AvtoVAZ, which has many problems;
2. Smaller manufacturers have been acquired by aluminum and steel giants, restructuring in process
3. By 2020 AvtoVAZ likely to be only remaining Russian manufacturer

3. Foreign Brands

1. Investment in assembly operations has just begun
2. By 2020, foreign car production will exceed AvtoVAZ's

4. Government: Lacks resources to support domestic brands; provides incentives to foreign operations: duty-free imported parts

5. EU and Russia may have signed Free Trade Agreement by 2010



December 15, 2003
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Summary of Key Points

Currently, only a relatively small segment of Russia's population can afford to purchase new cars, especially foreign models. However, by 2020, should economic growth continue, we expect that the Russian market will double to 3 million units per year.

The future of Russian automobile makers is unfavorable. AvtoVAZ, Russia's largest, has many problems. Nonetheless, AvtoVAZ is likely to be the only remaining independent Russian manufacturer. However, in order for AvtoVAZ to survive, it will have to develop a strategic relationship with a foreign partner. Second-tier companies such as GAZ and UAZ, which have been acquired by aluminum and steel giants and are being restructured, are likely to be sold to foreign buyers or closed.

Responding to the evolution in Russia's automobile market, foreign firms have recently begun to make investment in assembly operations. By 2020, we expect that foreign firms will be responsible for almost two-thirds of the 1.8 million cars projected to

be manufactured in Russia. The market share of new foreign cars, including domestically produced and imports, is projected to run 64 percent of new registrations.

Russia's government currently lacks the resources and the political desire to provide significant support to Russian manufacturers. The government does provide some incentives, mainly tariff reductions on imported parts to foreign operations. By 2010, Russian and the European Union are likely to have signed a free trade agreement, liberalizing trade in automobiles and components, accelerating cooperation between Russian manufacturers and their foreign counterparts.