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About the Author

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Movchan has been a top executive for Russian and international financial institutions since 1993. He was an executive director of Troika Dialog for six years. From 2003 to 2009, Movchan headed Renaissance Investment Management Group, which he founded, and from 2006 to 2008, he was the CEO of Renaissance Credit Bank. He also founded the Third Rome investment company, and was its CEO and managing partner from 2009 until the end of 2013.

Summary

Russia faces bleak economic prospects for the next few years. It may be a case of managed decline in which the government appeases social and political demands by tapping the big reserves it accumulated during the boom years with oil and gas exports. But there is also a smaller possibility of a more serious economic breakdown or collapse. A proper analysis requires consideration of a number of key and often overlooked features of Russia's post-Soviet economy.

The Post-Soviet Economy

- By the late 1980s, the Soviet economy had become completely dysfunctional due to internal imbalances and rigid management required by the command economy and the socialist property system. Yet Russia also inherited a Soviet legacy that included well-developed infrastructure, a large number of ineffective but functioning industrial assets, and enormous mineral deposits.
- Since 1991, the economic system has undergone rapid changes, but democratic institutions have never emerged.
- More recently, high revenues from hydrocarbon exports together with massive subsidies for domestic energy consumers have hurt other sections of Russia's economy. Since oil prices have fallen, the country has been plunged into relative economic isolation.
- External factors—primarily Western economic sanctions—are secondary and insignificant and have little impact on the economy, although the Russian regime is actively exploiting them to justify current economic hardships.

Key Conclusions and Projections

- There is no reason to expect any serious surprises in the Russian economy in 2017, of either a positive or a negative kind. A baseline scenario does not anticipate economic catastrophe or radical social upheaval.
- The weakest link in Russia's economy over the next few years will be the banking system. But other vulnerable parts of the system could also experience catastrophic changes.
- The Russian government has chosen not to tackle economic challenges by reforming the economy. Instead, it has focused on maintaining the budget deficit at its current level in the short term, in part at the expense of long-term

development. The government's main strategy is to raise tax revenues and cut public spending.

- The government might significantly loosen its monetary policy and cut off capital flow abroad. In this case, foreign currency transactions will be restricted and price controls will be imposed. But this will certainly not happen before the 2018 presidential elections.
- Judging by the current state of public opinion, future changes are likely to include stricter political control, further nationalization of private property, further shutting down the economic space, and new processes that make economic transactions in the country less sophisticated and more inefficient.

Some Preliminary Caution: Can We Believe What We Are Seeing?

Any quantitative analysis of the state of Russia's economy is limited by the unreliability of measurement methodologies and the accuracy of available data. Pre-1991 economic indicators are hardly any use, as statistical methods employed in that era were completely different from modern ones. They measured an artificially valued currency and operated within a price-controlled economy.[1] Statistics did improve after 1991, but there are still serious question marks about their validity.

An additional analytical complication is the issue of how much Russia's large shadow economy contributes to its gross domestic product (GDP). The statistics are skewed first of all by the existence of off-the-book wage earnings and other unofficial revenues. The practice of artificial pricing by inflating the costs of government contracts also distorts data. For instance, price inflation for construction contracts has ranged from 20 to 50 percent,[2] while contracts for complex technological and consumer equipment have amounted to up to 200 percent of the real price.[3] This scheme was exposed by an investigation into the enormous bribes received by government officials for importing medical technology into Russia. There is also a widespread practice of lowering prices for imported goods so as to pay lower import tariffs. (For example, there was a gap of $10 million, or 0.5 percent of GDP, between Russia's calculations of imports from China and China's calculation of the scale of its exports to Russia.[4])

In the same fashion, businessmen declare lower prices for services so as to reduce the amount of value-added tax (VAT) they pay, and prices for export goods are artificially reduced so as to declare lower revenues and pay income taxes. Shadow business comprised 10 percent of the Russian economy in 2013–2014[5]—a significant drop from the 1990s, when, according to some estimates, unofficial businesses actually outnumbered officially registered ones. It is far from clear, however, how official statistics measure numbers for the shadow sector (private payments for services, outdoor markets, home businesses, illegal energy consumption, and so on). The governmental statistics agency, Rosstat, reportedly overhauled its calculation methodology in 2014 and significantly increased its estimate of the share of informal businesses in the GDP.[6] Thanks to this adjustment and the inclusion of the economy of Crimea in the calculations, Russian GDP actually grew in 2014, albeit by less than 1 percent.[7]

It is also hard to obtain accurate data on Russia's median household incomes, whether total numbers or industry- and region-specific ones. Russia has prohibitively high payroll taxes even for the lowest income levels, which is why many salary payments are disguised as other financial transactions or made off the books.[8] In 2014 more than 80 percent of retail transactions were done in cash, while 30 percent of the population did not own an ATM card.[9] The amount of cash rubles in circulation has grown more than forty-five times in the past fifteen years.[10]

The distribution of household income is skewed by the wide-scale practice of fictitious employment of citizens from economically depressed regions, where it's impossible to find real work for cash. Here, state officials formally hire unemployed people but do not give them work, and pay them minimal amounts (of around $10–20 per month) for participation in the scheme, thus allowing the officials to pocket most of their salaries. This scam is especially common in the municipal sector but also affects other state-controlled services and some federal organizations.

It is difficult to give accurate figures on Russia's budget spending when more than 30 percent of it is classified as secret.

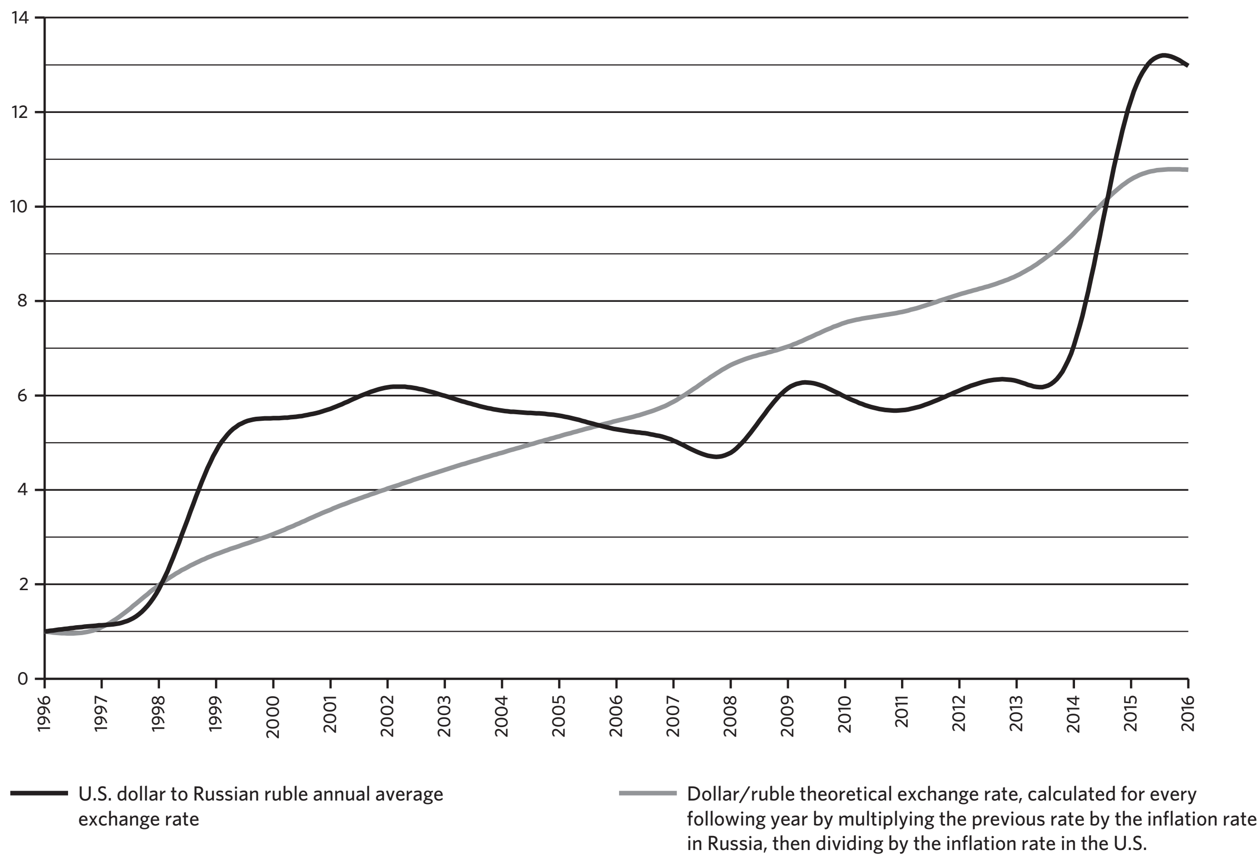
Secrecy is another factor. It is difficult to give accurate figures on Russia's budget spending when more than 30 percent of it is classified as secret.[11] It is generally believed that the classified items in the budget are used to finance the military-industrial complex and security agencies, but there is indirect evidence suggesting that these funds have many other uses as well. They may range from financing the "friends of Russia" abroad to closing gaps in the balances of state-controlled companies and allowing top officials to make personal purchases.

Even the exact size of Russian government reserves is hard to estimate. Even though the full amount is made public, many items are not transparent, and some of them, such as, for example, money transferred to Vneshekonombank, are likely to be bad debts with little probability of recovery.

The question of which units to choose for reporting poses another problem. From 2000 to 2015, the real U.S. dollar to Russian ruble exchange rate was fluctuating in a range between 140 and 60 percent of the inflation-adjusted exchange rate (see figure 1). If Russia's 2013 GDP were converted into dollars based on the inflation-adjusted exchange rate rather than the real rate, it would come to no more than $1.4 trillion instead of the official figure of $2.1 trillion.[12] An analytical study of the Russian economy suggests that this volatility in the ruble's rate is due to a dramatic overestimation of the Russian GDP in 2005–2013, rather than a steep decline in 2015–2016.

An even bigger problem arises when applying purchasing power parity (PPP) estimates to Russia's economic indicators. Prices in Russia are greatly distorted (for example, fuel prices are heavily subsidized and still are quite close to those in the United States, utilities' and state services' prices are very low, while some food items are more expensive than in Europe). Social stratification in Russia is so pronounced that consumer baskets look totally different for varying social groups and regions. The official PPP level, which exceeds 300 percent,[13] does not properly reflect either relative price levels in Russia or the cost of living—not to mention the very different components that constitute a GDP rating. As well

Figure 1: U.S. Dollar to Russian Ruble Exchange Rate, Compared to 1996 Levels



Note. The data are normalized to 1996 year levels: the average annual exchange rate of the ruble to the dollar was at 5.1 rubles per dollar (5100 rubles in 1996 year prices), the estimated rate of the ruble against the dollar was 5.3 rubles.

as other obvious reasons for this phenomenon, imports that come mostly from the European Union (EU) account for at least 50 percent of Russians' personal consumption, while the import share of industrial consumption is even higher.[14] In an analysis of the Russian economy, which can only be as accurate as the data it relies on, all these quantitative flaws must be taken into account.

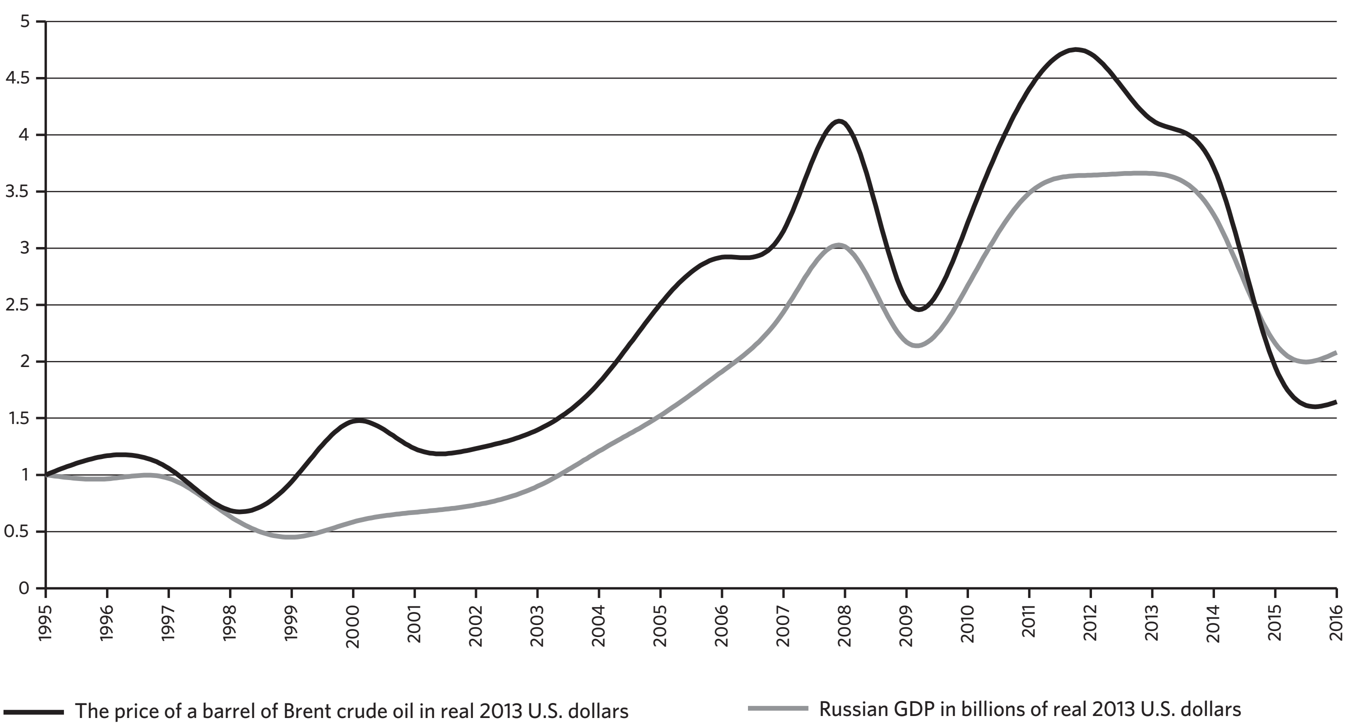
A Booming Gas Station—Russia's Economy After 2000

In the last fifteen to sixteen years, the Russian economy has undergone a classic resource cycle and Dutch disease caused by a big influx of oil and gas revenues.

Russia's political system, lacking strong checks and balances, exacerbated these economic distortions. By the time Russian President Vladimir Putin took power in 2000, the majority of key assets were owned either by the state or by a small group of private individuals,[15] who had obtained these assets from the state in return for political obedience and loyalty. After the constitutional crisis and violence of 1993, the president and the Kremlin administration had appropriated almost all power to themselves. Parliament played an advisory role at best, while parliamentary parties swore loyalty to the president in exchange for economic rewards. An independent judiciary had not emerged, and the country's laws remained archaic, contradictory, and ineffective. As a result, there was no real legal protection of property and investments and no remedies against ever-changing legislation and invasive state action.

The country went through an internal debt default and a 600-percent devaluation of its currency against the U.S. dollar caused by unreasonable budget spending and a dramatic decrease in budget revenues due to the fall of oil prices in the early 1990s, as well as low tax collection and dramatic capital outflows.[16] Amid this critical situation, the public demanded the continuation of reforms and was supported by the government, which saw no other way out of the economic crisis. But the spike in oil prices in the early 2000s allowed the government to take another tack. A rapid increase in budget revenues and skyrocketing profits in the oil and gas sector allowed the government to abandon the path of expanding the tax base through reforms. The public enjoyed better living conditions thanks to oil revenues—but both investors and ordinary people wrongly attributed the new prosperity to correct and efficient government policies.

Figure 2: Russian GDP in U.S. Dollars and the Price of a Barrel of Oil, Compared to 1995 Levels

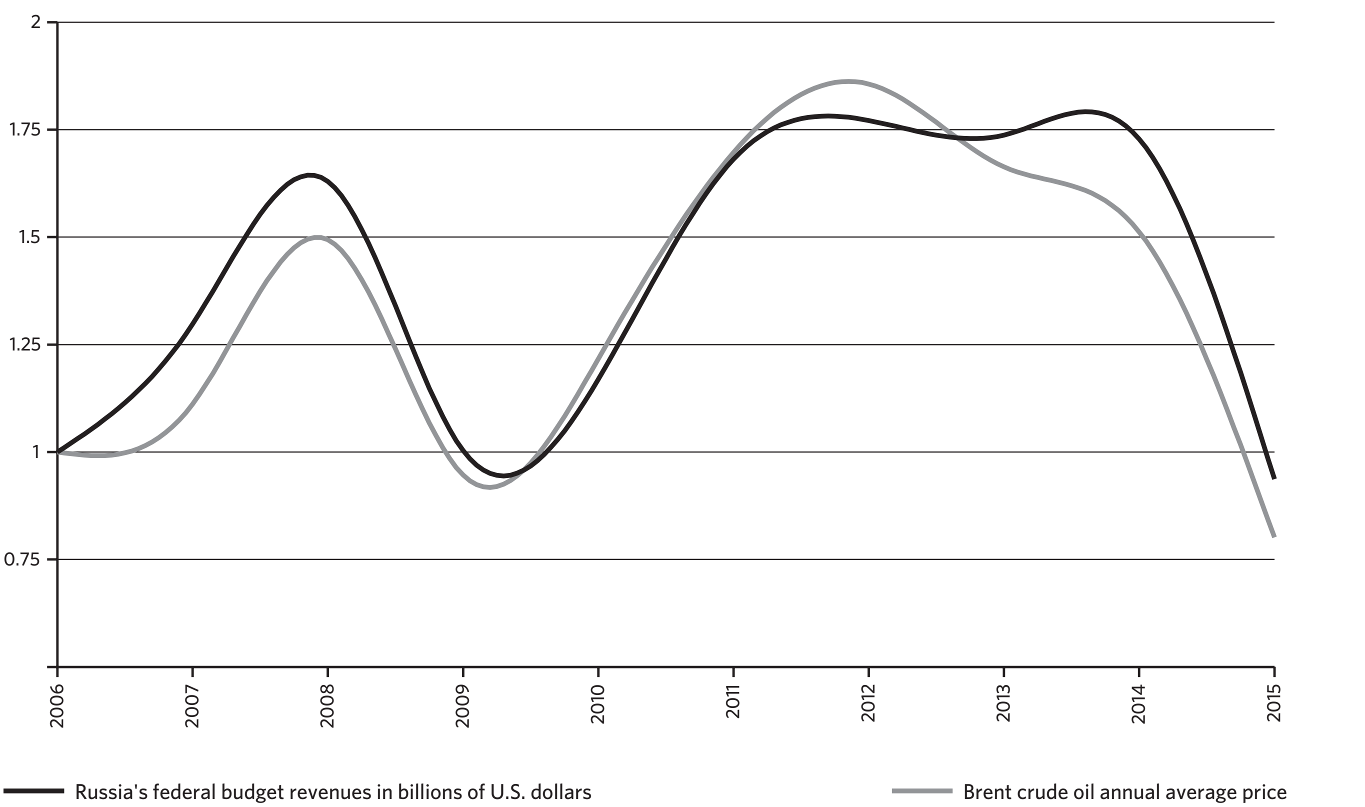


Note. The data are normalized to 1995 levels, in which Russia's GDP reached $609.718 billion and a barrel of Brent oil cost $26.36.

At the same time, the ruling regime aimed and succeeded at gaining back full control of the oil exploration and trading business (which had been lost during privatization in the mid-1990s), after it arrested the rebellious oligarch Mikhail Khodorkovsky in 2003, nationalized his Yukos oil company, and ensured all other oligarchs got the message and would obey. The regime gradually consolidated its indirect control over the hydrocarbon industry and banking, and, by extension, over the country's entire economic sphere. Simultaneously, the Kremlin effectively consolidated all major media under its full ideological control after it sent the two main media tycoons into exile. This had a negative impact on the development of any non-oil-related business, made economic and budgetary choices less efficient, and deterred investment.

By 2008, 65 to 70 percent of the Russian budget effectively either directly or indirectly consisted of hydrocarbon export revenues.[17] Changes in GDP, budget revenues, and state reserves have had a 90–95 percent correlation rate with oil prices (see figures 2, 3, 4.1, and 4.2). The massive influx of petrodollars into the Russian economy also led to a strong overvaluation of the ruble.

Figure 3: Russian Federal Budget Revenues and the Price of Brent Crude Oil, Compared to 2006 Levels



Note. The data are normalized to 2006 levels; the price of a barrel of Brent crude was then $65.40 per barrel. Russian federal budget revenues amounted to $233.05 billion.

Figure 4.1: Russia's International Reserves and the Price of a Barrel of Oil

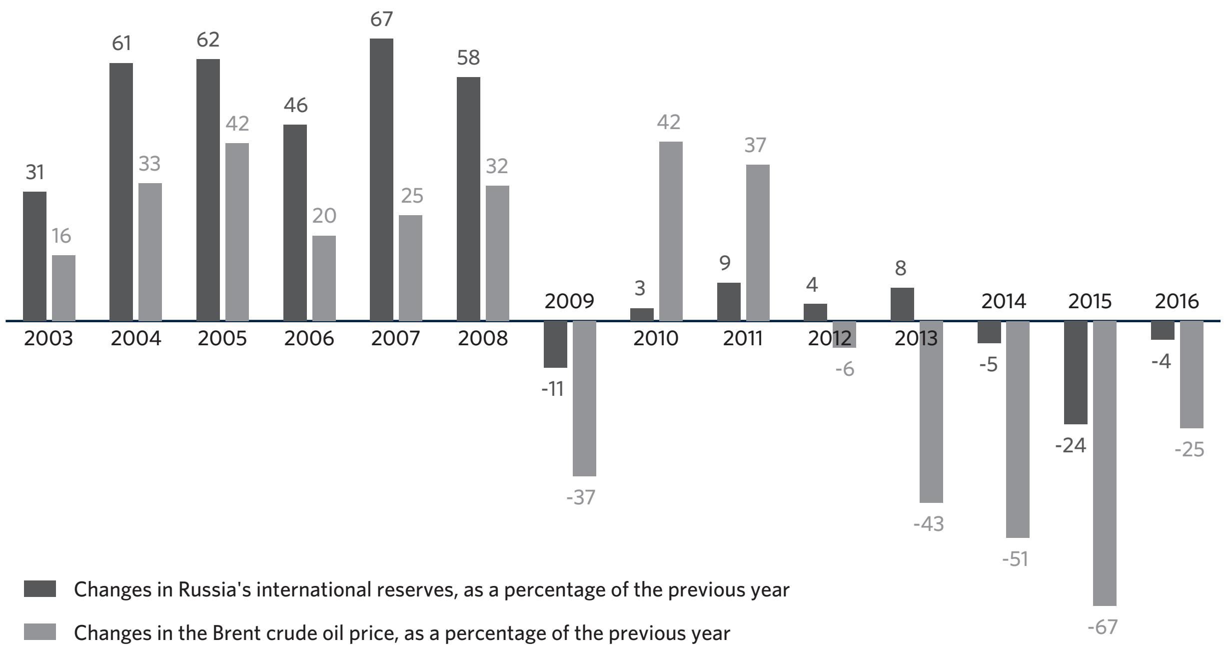
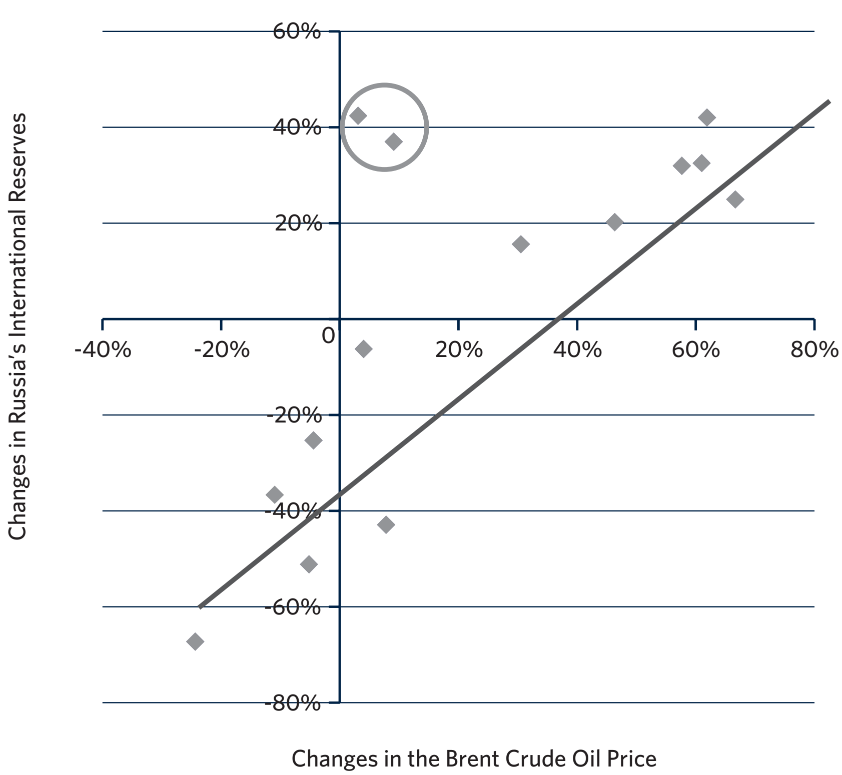


Figure 4.2: Scatterplot of Figure 4.1



In 2006–2007, its real exchange rate exceeded the inflation-adjusted rate by over 35 percent.[18]

Three negative factors most influenced Russia's economic development in this period:

- In its effort to control financial flows,[19] the regime unwittingly worsened the investment climate by changing legislation and unduly influencing Russia's government and legal institutions for its own benefit and in contradiction to the law. This resulted in a dramatic increase in the risk perceptions of domestic and international businessmen, much lower than possible investment inflows, a permanent outflow of capital and human resources, and a strong trend of businesses consolidating around the most profitable hydrocarbon industry and state-owned enterprises. In sixteen years, according to the data presented by the leading Russian business newspaper, *Vedomosti*, the private sector's share of GDP has fallen to 30 percent from almost 70 percent,[20] and foreign debt, which once reached more than 75 percent of GDP, dropped below 50 percent of GDP due to a lack of demand for investments. Higher levels of risk caused higher interest rates, sustained high inflation, and shortened investment horizons. More than $1 trillion worth of capital was taken out of the country by Russian rentiers, while the annual rate of foreign direct investment in Russia never exceeded $50 billion. Russia's best businesspeople and professionals followed in its wake. Russia is estimated to have lost up to 4.5 million people to emigration since 1991.[21] More than one-third of these emigres have gone through higher education. The number of emigres declined in 2009, but went up again in 2010 and in 2015 almost reached the levels of 1995.

- During the first few years of high oil prices, the government made the decision to transfer budget surpluses into reserves. This policy paid off during the 2008 and 2014–2016 economic crises, making it possible to offset budget shortfalls. Yet it also had the effect of raising the cost of attracting investments. As a result, investments became less popular and, in the case of capital-intensive or slow-growing sectors, almost impossible.

- By 2007–2009, a rapid rise in economic inequality—due to the inefficiency of non-natural-resource sectors in the economy, lack of investments, a bloated public sector, and the overvalued ruble—was impossible to ignore. Fearing it might lose public support, the regime took a number of populist measures, including unjustified salary increases in the public sector and extra social spending. These steps, along with already existing high corporate taxes and payroll deductions, as well as an unreasonable appreciation of the ruble, have sharply increased production costs, making Russian domestic production a money-losing venture.

Eventually, despite the overall income increases caused by hydrocarbon exports and accelerating consumption growth, almost all sectors of the Russian economy have degraded, and their level of competitiveness has even decreased. Hydrocarbon production accounts for up to 20 percent of Russian GDP. Trade, buoyed by the enormous influx of imports bought for petrodollars, accounts for up to 30 percent—twice the average in developed countries. The domestic energy market and infrastructure are responsible for another 15 percent of GDP, state projects comprise another 15 percent (a large number of which have been launched, most of them being inefficient and with no clear purpose), while the financial industry contributes 9 percent. No more than 10 percent of Russia's 2013 GDP came from the independent service sector and non-mineral-resource production. The share of small and medium-sized enterprises in GDP does not exceed 18 percent (compared with a conventional minimum for successful economies of over 40 percent). According to Rosstat, imports accounted for 85–90 percent of capital goods in 2014, and 50–70 percent of consumer goods.[22]

Russia's 2015 budget was swollen by ambitious but inefficient projects, excessive security and defense spending, and high levels of corruption.

The situation has been made worse by reckless social policy in which growth in personal incomes surpassed even oil-adjusted GDP growth. In 2013 alone, while GDP growth did not exceed 1.3 percent and while investments, capital construction, and exports were shrinking as oil prices reached a peak, inflation reached 6.5 percent but the increase of wages in real terms exceeded 11.9 percent, retail trade grew by 4 percent, imports added another 1.7 percent, and the cost of public services was up by 8 percent.[23] The public sector shouldered a tremendous burden by providing jobs for 30 percent of the workforce. Three attempts at pension reform failed basically because of the government's indecision and unwillingness to abandon socialist principles. As a result, by 2015, the Russian Pension Fund's deficit amounted to 15 percent of federal budget revenues (approximately 3 percent of GDP). In addition, the budget was swollen by ambitious but inefficient projects, excessive security and defense spending, and high levels of corruption.

A Ministry of Finance report suggests that foreign trade accounted for 38 percent of budget revenues in 2014.[24] Only up to 8 percent of this came from non-natural-resource exports, with hydrocarbon exports accounting directly for 35.4 percent of the federal budget.[25] When one takes into account natural resource-related taxes, fees, and payments (20 percent), as well as VAT paid on imported goods—which are primarily bought with petrodollars (17 percent) and custom duties and excises on imports (13 percent)—the overall contribution of oil and gas to the federal budget appears to be much higher and comprises at least 83.4 percent of the total. That is not even the end of it. Businesses involved in oil and gas production pay taxes on their revenues, and so do workers employed in this sector. Forty percent of individual income taxes are collected from federal and public-sector employees. So it's not surprising that oil prices and federal budget revenues correlate with over 98 percent accuracy.

Nowadays, as Russia faces a decline in oil prices, it has an undiversified and quasi-monopolized economy that lacks the capability and resources for growth.

The Most Pessimistic Forecasts Fail

When oil prices fell precipitately in 2014,[26] many European analysts and economists predicted a quick collapse of the Russian economy and were surprised to find that Russia successfully weathered the global oil shock. Two factors helped Russia to overcome the oil shock relatively smoothly.

First, the country had accumulated substantial gold and foreign currency reserves during the years of high oil prices, and these were three times higher than anticipated import levels in 2015. Businesses had also acquired sufficient fixed assets, while the public had amassed over $250 billion in bank savings and possibly as much in cash. People had stocked up on durable goods, and housing conditions had improved as per capita housing space more than doubled in the years of high growth. It is also important to note that inequality in Russia has increased over time, leaving the majority of citizens accustomed to a state of poverty. For these citizens, the current economic crisis was not a disaster simply because it had always been there.

Second, Russia is still enjoying the benefits of liberal economics. Cross-border capital flows are not restricted, there are no price controls on most goods and services, wages are set by market forces, and the ruble's exchange rate is determined in the free market, albeit with some intervention by the Central Bank.

In 2014–2015, the Russian economy contracted sharply but avoided cataclysmic shocks. The only dangerous moment came in early December 2014, when the Central Bank unwisely decided to double the refinancing rate,[27] causing panic in the markets. However, the government quickly corrected the situation by giving a firm promise (one of only a few it has actually delivered on) not to take drastic steps of this type anymore.[28]

By the fall of 2016, Russia's dollar-equivalent GDP was 40 percent below 2013 levels (a 15-percent decline in real ruble prices—see figures 5.1 and 5.2). There was an unprecedented drop in household real incomes of about 15 percent according to Rosstat data,[29] but given Russia's growing income inequality, especially in the last two years, the poorest segments of the population have lost more overall. However, even this precipitous fall brings Russians back to the relatively stable levels of 2007.

Russia's per capita GDP projection for 2016 is around $8,500, which puts the country at around 70 in the International Monetary Fund's world rankings, alongside Turkey, Mexico, and Suriname.[30] Arbitrary GDP at PPP figures raises Russia to around 50 in the world, next to Latvia, Kazakhstan, Chile, and Argentina. While these indicators are quite modest, they are far from disastrous. (Empirical evidence suggests that countries vulnerable to "color revolutions" and regime change have their nominal per capita GDP at a level of $6,000 or less. That was the per capita GDP level in Egypt, Colombia, Syria, Ukraine, Indonesia, Tunisia, and many other countries that experienced periods of instability.[31])

Figure 5.1: Russia's GDP in Trillions of Real 2013 Rubles

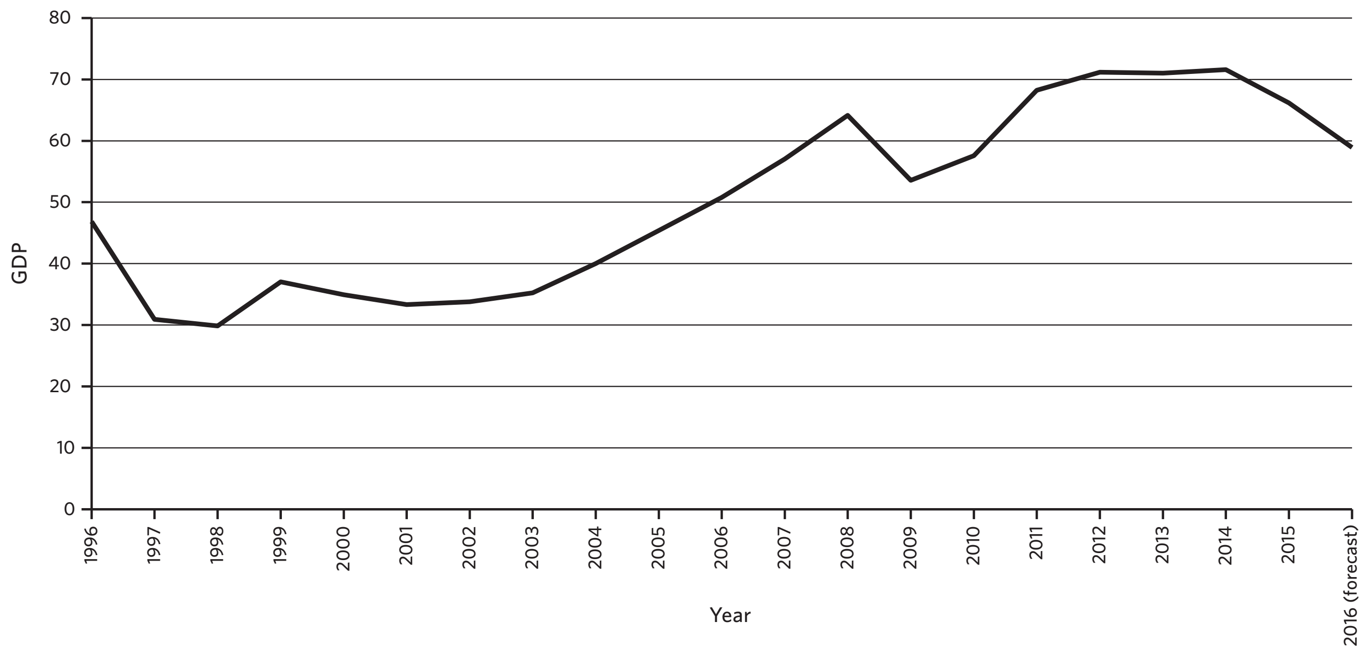
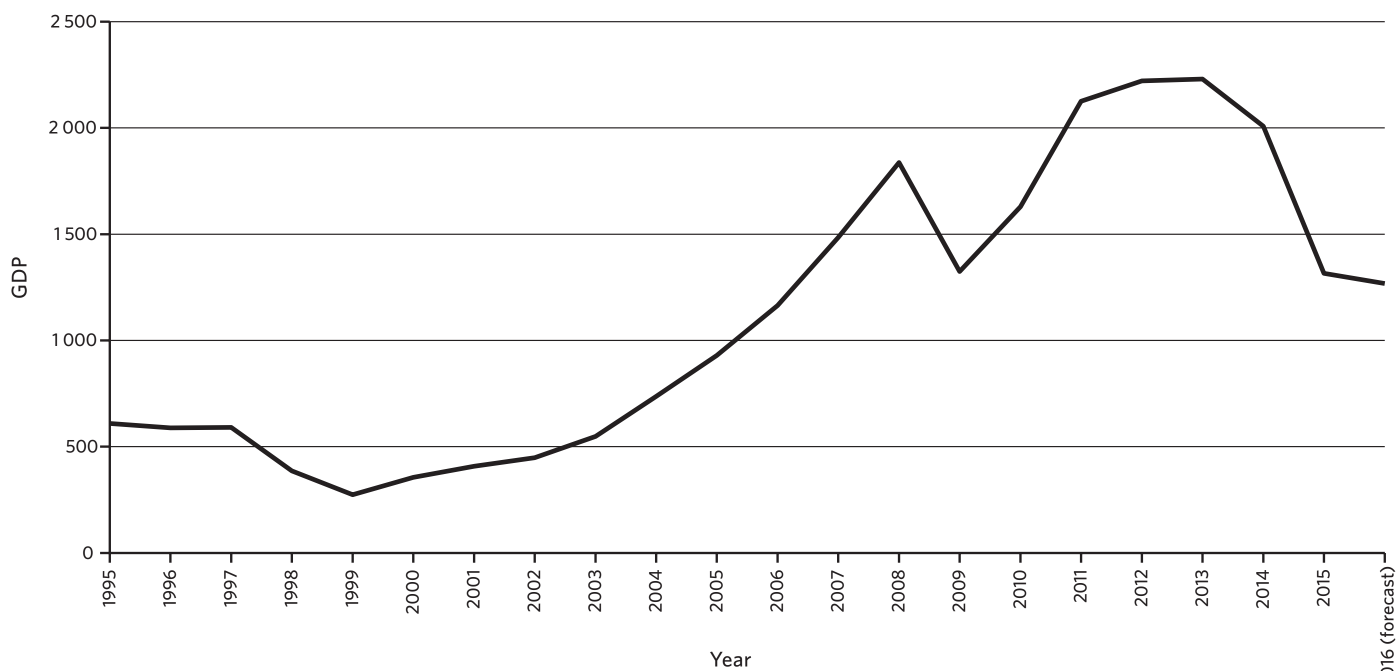


Figure 5.2: Russia's GDP in Billions of Real 2013 U.S. Dollars



In the case of Russia, a sharp decline in imports managed to stabilize the economy. A decline in imports caused by a catastrophic drop in demand by far exceeded declines in household incomes and export revenues, as the ruble underwent rapid devaluation and all players in the market lost faith in the prospect of an economic recovery. Consumers postponed their purchases of durable goods and switched in part to domestically produced ones, further diminishing imports. That ensured the maintenance of a surplus in the foreign trade balance and the balance of payments. This eventually stabilized the ruble exchange rate and, as oil prices stabilized at new levels, reduced inflation.

The devaluation of the ruble also eased economic shocks—while creating different problems. The devaluation played a positive role in sustaining exporters and the budget, but it has not promised GDP growth in Russia due to the country's uncompetitive production sectors. GDP growth in Russia almost entirely depends on domestic demand, as it is measured in rubles and therefore is not affected by the devaluation. Export growth requires investment and technology, which Russia currently lacks. And even in the few areas where Russia produces competitive goods, 100 percent of this production is to some extent tied to importing raw materials, parts, or equipment, where the ruble devaluation increases the ruble-denominated cost of products and services faster than international consumer demand can absorb.

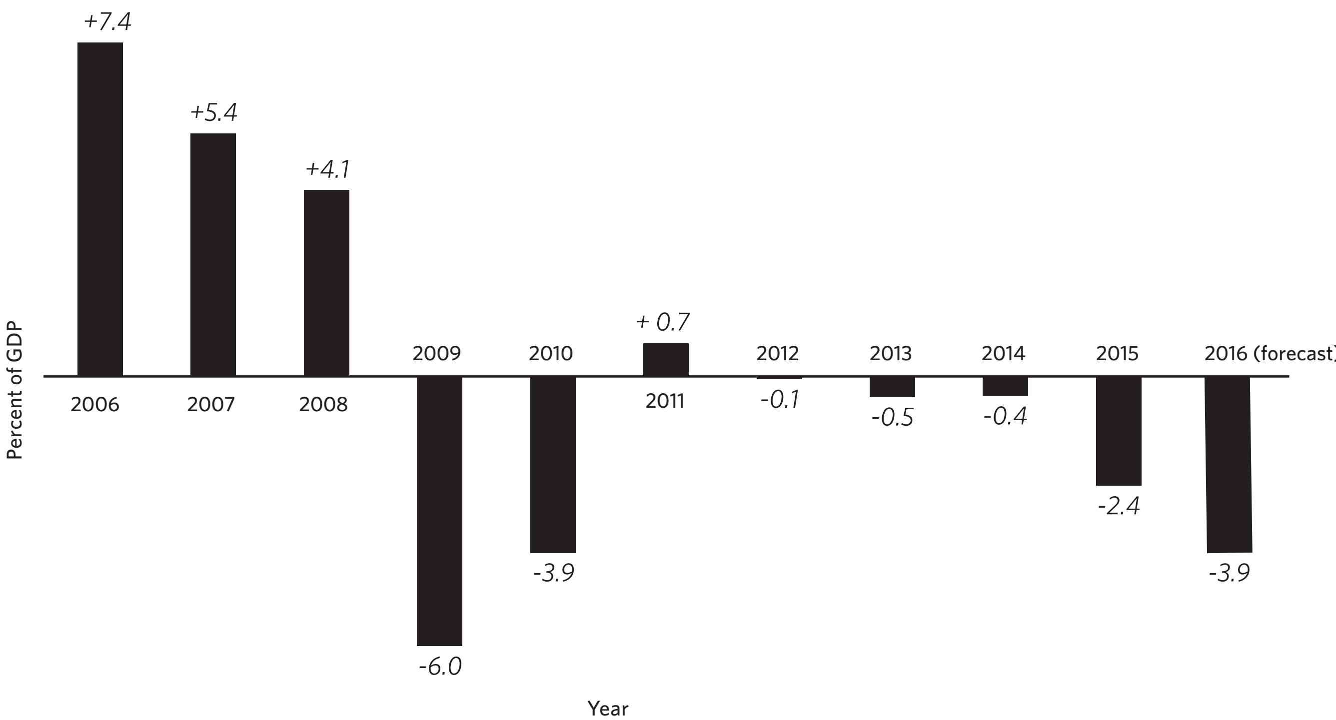
An Archaic Economy, a Declining Workforce

At first glance, all circumstances militate against the prospect of recovery for Russia's economy. Both the legacy of the past and the consequences of recent policies inhibit progress, while the macroeconomic situation only promises worse times ahead.

Russia has long suffered from insufficient fixed capital investment and, even at the modest output levels in 2016, is working at almost 85 percent of production capacity.[32] Yet a substantial part of Russia's production capacity (more than 40 percent by some estimates) is both technologically and functionally obsolete and cannot produce competitive and marketable products. For instance, Russia's machine stock has shrunk by almost one-half in the last ten years—a problem that is only in small part explained by old, inefficient machinery being replaced by new high-tech equipment.

The Russian economy badly needs to rapidly capitalize production and build new capacity, and the state simply lacks the money to accomplish this goal. Private investors consider it too risky to invest in Russia, with the result that only a tiny fraction of the necessary capital comes into Russia, and that mainly in areas such as retail trade, logistics, and the assembly of very simple goods with the lowest added value. The budget deficit will exceed 3 percent of GDP in 2016 and will most likely be as high as 5 percent in 2017 or 2018—state-run enterprises cannot afford the costs of modernization (see figure 6).[33]

Figure 6: Russia's Budget Deficit/Surplus



Russia seriously lags behind its competitors in terms of energy and logistics efficiency. For example, it consumes four times more energy per dollar of GDP than Japan does.[34] Cargo transportation, storage, and customs processing costs are significantly higher in Russia than in developing and even many developed countries, making Russian products less competitive.

Crucially, Russia also increasingly lacks labor resources, which are falling at the rate of 0.5 percent a year for natural demographic reasons (see figures 7.1, 7.2, and 8). Moreover, most of these workers are employed in spheres with zero or very low value added, such as the public sector, private security, retail, and the extremely inefficient banking sector. The remaining employees do not have skills the state needs. There is an urgent shortage of engineers, researchers, workers with technical skills, and professional managers.

Millions of migrants, many of them illegal, from other ex-Soviet states have filled gaps in the lower levels of the labor market for years. The Russian public utilities sector has relied heavily on these guest workers. Remittances paid by these workers were until recently the main source of revenue for Kyrgyzstan and the second-largest source for Tajikistan and contributed significantly to the Ukrainian, Uzbek, Moldovan, and Belarusian economies. But today the number of labor migrants in Russia has fallen rapidly thanks to the sharp decline of the ruble and of the population's purchasing power.[35] That means that both the utilities sector

Figure 7.1: Economically Active Population of the Russian Federation, Excluding Crimea

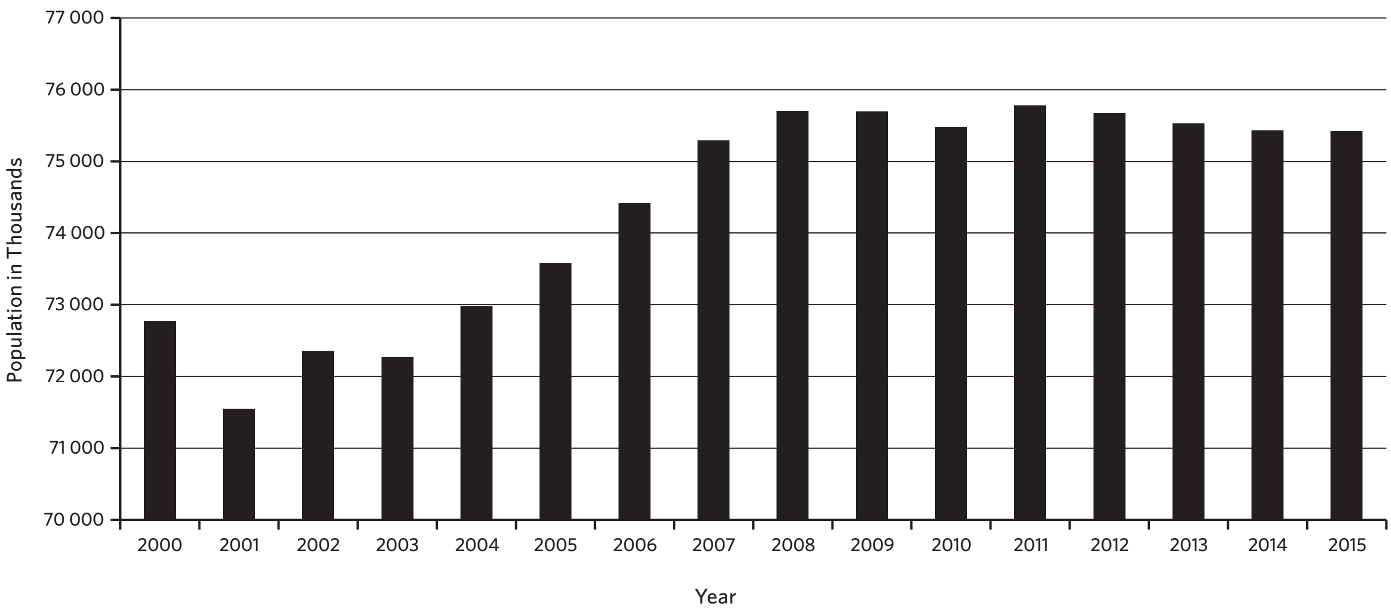


Figure 7.2: Number of Unemployed People

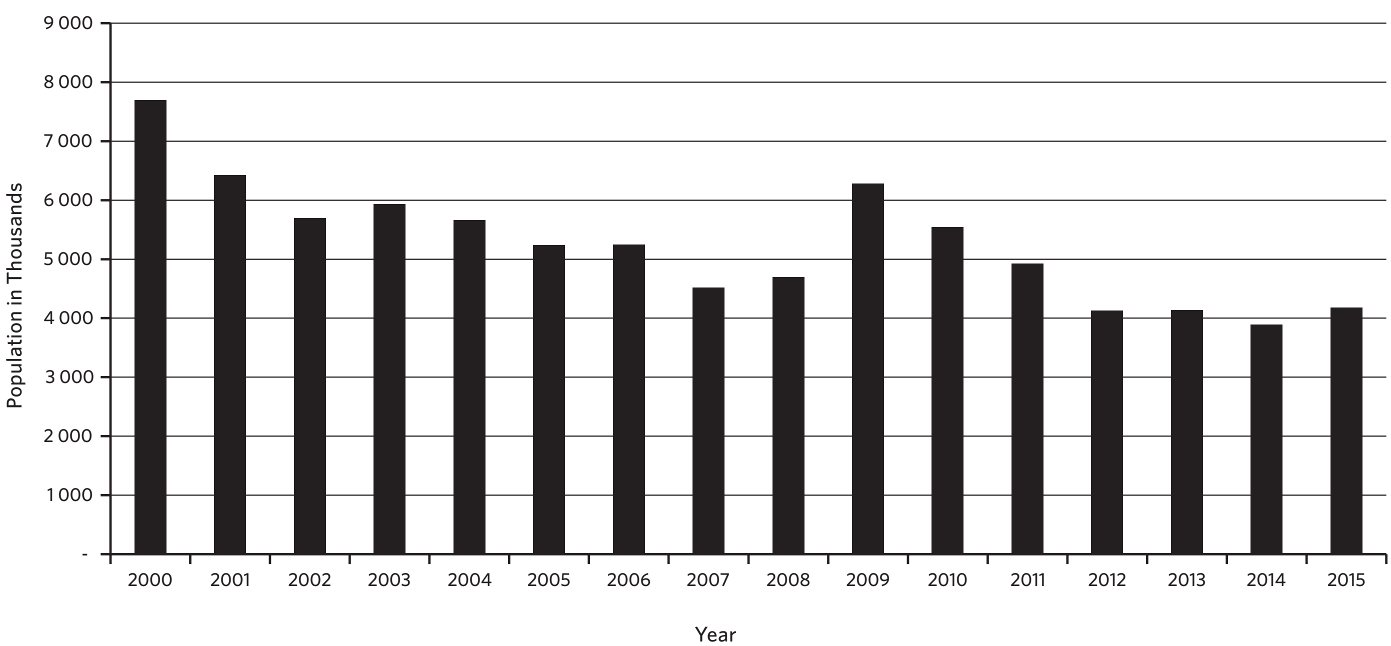
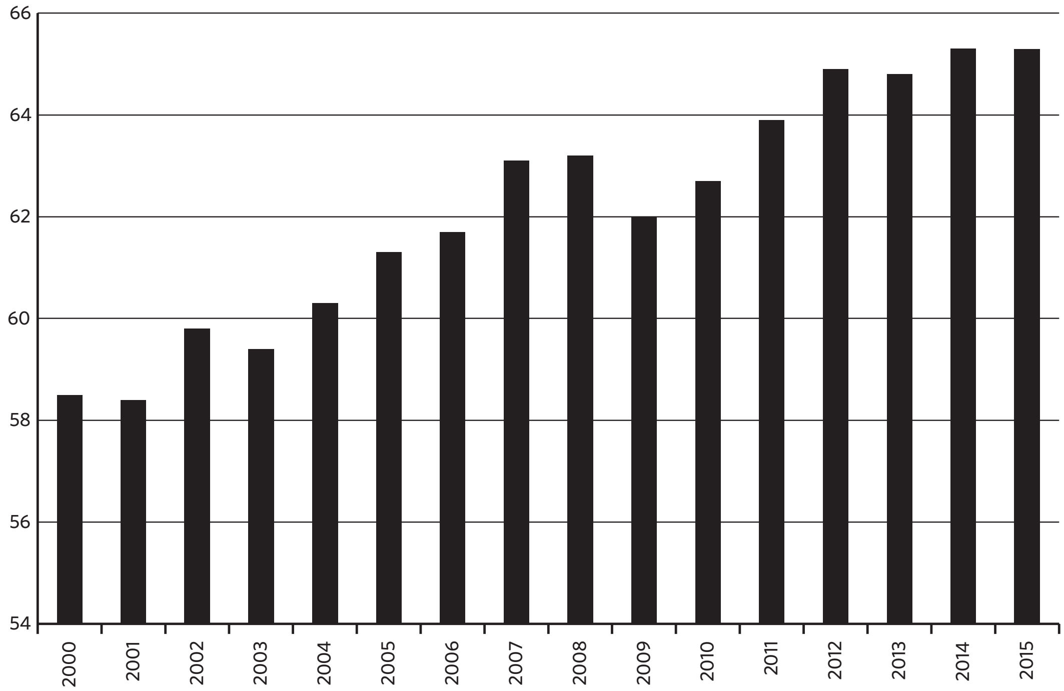


Figure 8: Employment, as a Percentage of the Total Population of the Russian Federation



and all the businesses that have employed a large number of unskilled laborers, including retail chains, are now experiencing labor shortages.

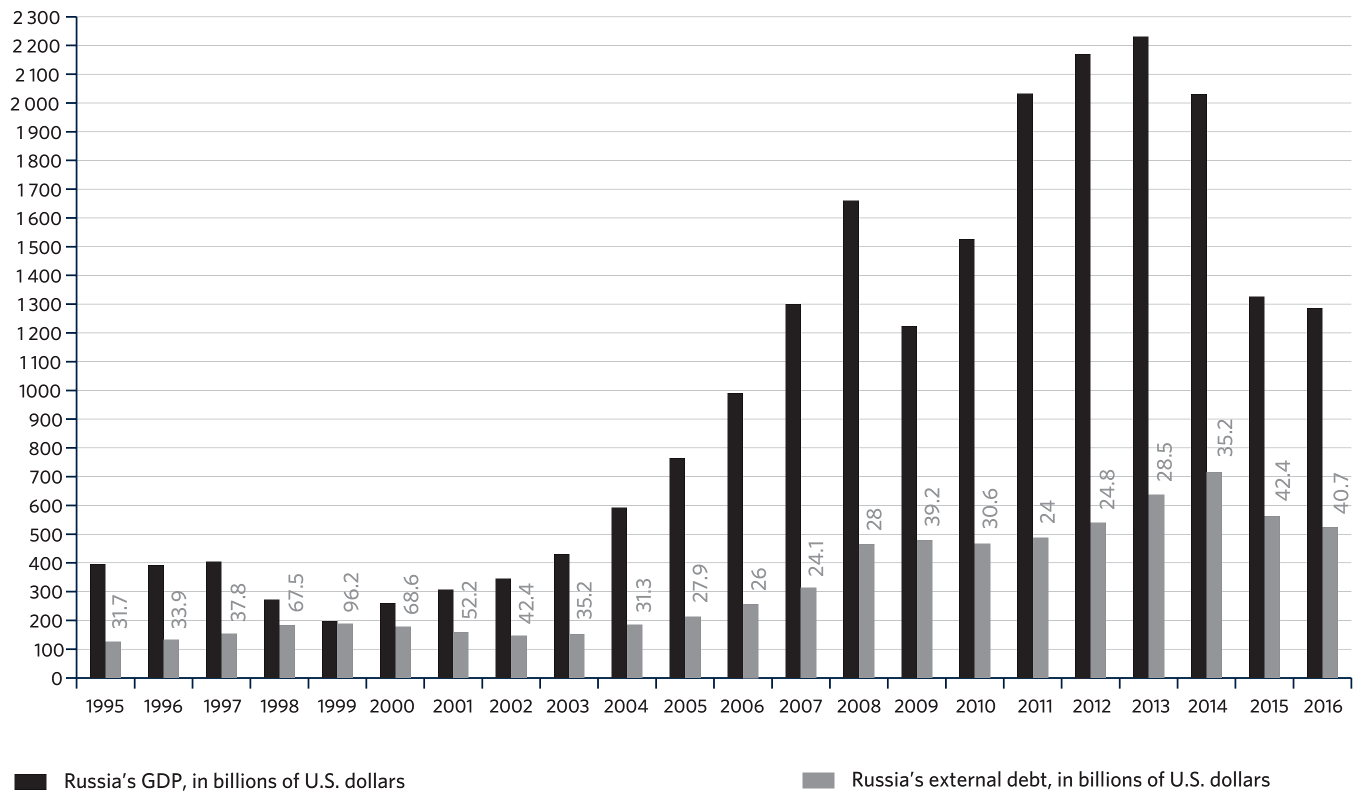
External Factors—Much Ado About Nothing

Since the Ukraine crisis blew up in 2014, Russia has been subject to economic sanctions from the United States and a few other countries, as well as the EU.[36] It has responded by launching counter-sanctions against the same countries. Although this is a major political topic, its significance for the Russian economy is almost certainly exaggerated—at least in the short term.

Russia still remains an active global economic actor. It is a member of the World Trade Organization and other international economic groups. It can keep its reserves in the most liquid instruments and currencies. There are no restrictions on Russia's currency and foreign trade transactions. Its sovereign debt yields are low. Russia and its companies do not suffer from hostile economic measures (protectionism, anti-dumping tariffs, free-trade restrictions, and so on) any more than before and certainly not more than other countries.

Western sanctions effectively prohibit a limited number of Russian commercial organizations from borrowing in international markets. They also prohibit Russian businesses from owning assets in several countries and block a small group of Russians from entering them. Finally, the sanctions forbid the transfer to Russia of a limited list of technologies, mainly connected with mining and the military.

Figure 9: Russia's GDP and Total External Debt



Restrictions on borrowing can only have a limited impact on a country that has been consistently reducing its external debt for several years now (see figure 9)—and besides, the list of entities affected by the ban is quite short. Russia's foreign debt burden is now already worth less than twice the country's gold and foreign currency reserves,[37] not to mention other privately held currency-denominated assets, and the country has no good reason to borrow more at the moment—the recession does not provide for economic agents increasing their balances. Obviously, if financial sanctions are expanded to include more issuers and borrowers (or the state itself), they will have a devastating effect on the Russian economy in three to five years' time, when the country's capital reserves are exhausted and it is forced to borrow large sums. But for now, sanctions are limited in scope.

Restrictions on technology transfers will have a negative impact on the Russian economy in the long run. The lack of new exploration and production technologies for the energy sector will adversely affect Russia's oil and gas production and its cost in five to seven years' time. But at the moment these restrictions have no effect. The same is true for military technology. Russia is actively increasing arms production and has raised its export levels to $14 billion a year,[38] making it the third-largest arms exporter in the world after the United States and China.

The self-imposed restrictions on food imports, known as counter-sanctions[39]—which Russia is applying to several countries, primarily in the EU (and briefly against Turkey)—are also not having a serious economic effect. The policy of "import substitution," or the attempt to compensate for imports by boosting domestic production, has failed because of a decline in consumption and a reluctance to invest in new capacity. On average, the price of Russian "import substitution" goods has gone up more than that of other everyday products. But there have not been any surpluses or shortages because of reduced demand, and a marked drop in the quality of domestic goods has resulted in a lower cost base.

Perhaps the greatest harm inflicted on the Russian economy comes from Russia's unpredictable, inconsistent, and hostile behavior toward international economic institutions.

Perhaps the greatest harm being inflicted on the Russian economy by the political row with the West comes from Russia's unpredictable, inconsistent, and hostile behavior toward international economic institutions. As a result of efficient lobbying efforts from domestic companies, there have been several attempts to make the country autonomous in spheres such as telecommunications, payment and transportation systems, IT, and navigation. Domestically produced alternatives are generally inferior and costly for the budget and end-use customers. This policy did not result in making a few businessmen close to the Kremlin much richer. Its end result is that Russia's national security is threatened not from abroad but from the home front.

A Surprising Lack of Public Protests

Despite an economic contraction, the Russian public is not registering its disapproval with public protests.

There are several reasons for this phenomenon. First, for the overwhelming majority of Russians, the current crisis follows a lengthy period of economic growth. Most Russians noticed the fact that their quality of life was better in 2016 than it was fifteen years ago, and not the current economic malaise. Household incomes would probably have to drop by another 30 to 40 percent (to 1999–2000 levels) to cause widespread discontent.

Secondly, the growth in prosperity between 2000 and 2012, much like the decline between 2014 and 2015, was very unevenly distributed. Only a small group of people experienced qualitative changes in their standard of living. For example, in 2015 only 24 percent of Russian citizens residing outside Moscow had foreign passports enabling them to travel internationally, and only 6 percent of Russians had traveled abroad at least once per year recently. The difference between the median and mean income in Russia is almost 50 percent,[40] meaning that half of Russians earn very modest wages.[41] Less than 30 percent of Russians have savings in banks, and only 9 percent have savings denominated in a foreign currency.[42] Russia's Gini coefficient was 8 in the late 1990s, but it is over 18 now. The growth in prosperity has been concentrated in Moscow and several other major cities. Per capita GDP in Moscow was about $30,000 in 2014 and fell to around $20,000 by the beginning of 2016[43]—but that figure is still high enough to prevent Muscovites from risking the problems with the law that could arise from public expression of their discontent.

The majority of Russian citizens in their turn do not recognize the economic crisis as a disaster as they did not feel much of the previous growth, so they have little reason to protest.

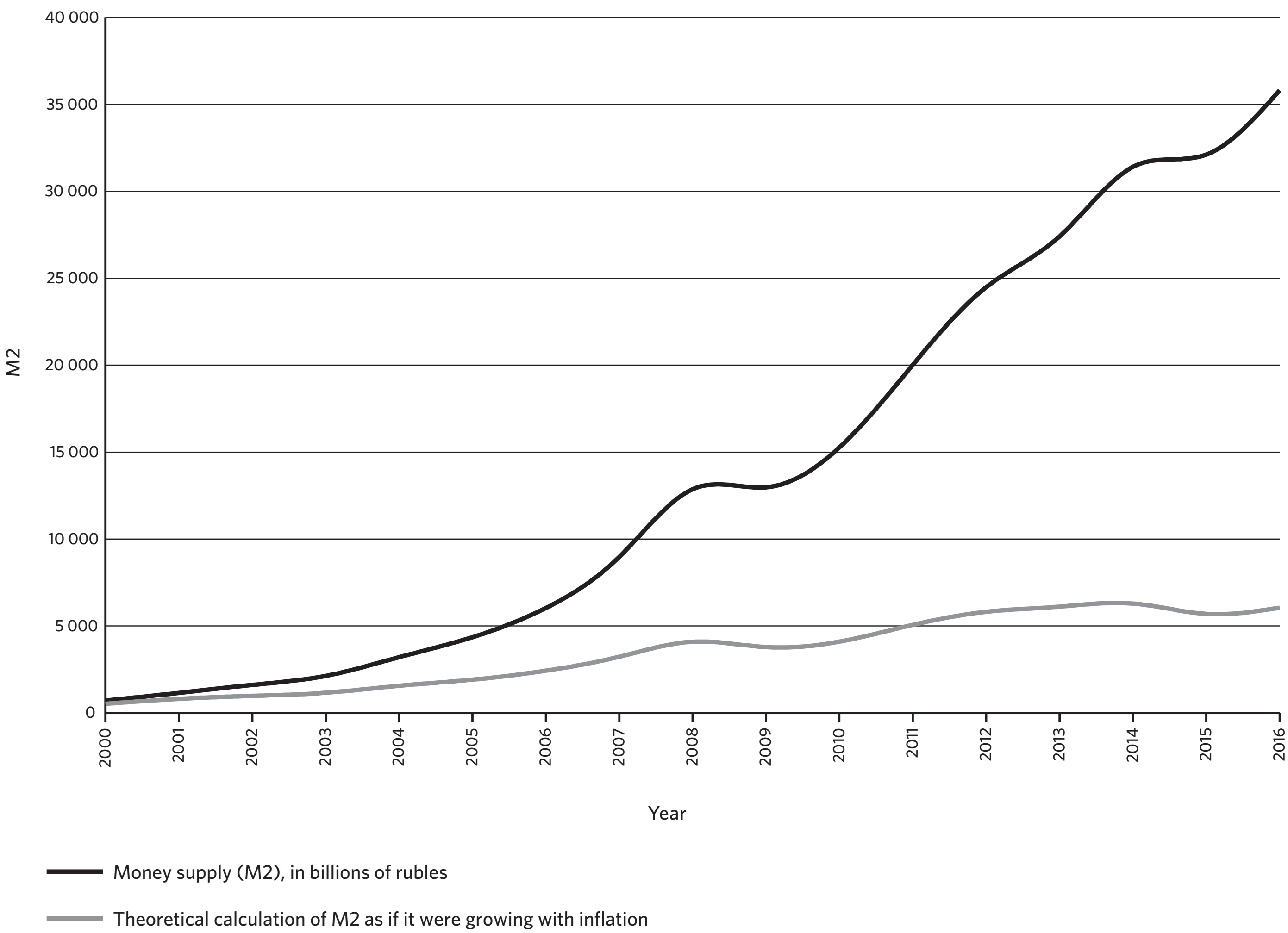
Thirdly, in Russia, unlike in Western democracies, there is no overt competition for power among elite groups. That means there is no strong, formal opposition in the public sphere that highlights problems, drawing the public's attention to the government's mistakes and inefficiencies. The state has an effective monopoly on information, meaning that Russian opposition groups within the elite cannot openly criticize the regime through independent media. Russian media downplay economic problems, substituting gloomy domestic news with manufactured information about problems outside Russia. They absolve the authorities of responsibility and blame hardships on external factors. The opposition is effectively cut off from access to capital and limited in its ability to coordinate protests.

In 2017, the Trend Continues

The year 2016 surprised even seasoned experts on the Russian economy. Sharp variations in the oil price from below $30 a barrel to $50 a barrel did not greatly alter the country's economic indicators,[44] except for the ruble exchange rate, which fluctuated in line with the price. Despite consistent declines in both oil and non-oil exports (which again demonstrates the importance of petrodollars for the Russian economy), the foreign trade balance remained on the plus side, and the year-end balance is expected to be over $80 billion.[45] The main reason for the positive balance is a continuing sharp decline in imports, which was caused by a sharp drop in budget subsidies, a lack of investment, and an 8-percent annual fall in household income calculated in real prices.

In 2016, the economy continued a slow, gradual contraction, but without any major upheavals. The Industrial Production Index will probably be around 96 percent of its 2015 level,[46] despite the facts that hydrocarbon production has already grown by more than 3 percent and that the oil price promises to be higher than a year before. Pessimistic expectations led to a sharp decrease in demand for funds—banks' balances with the Central Bank rose by 100 percent (in 2015, they grew only 19 percent). While inflation promises to be limited to 6 percent, the broad monetary aggregate (M2) grew by 11 percent (most probably the investments made by the Central Bank in insolvent banks are to be blamed for the difference).[47] The M2 continues to grow faster than inflation for the eighth year in a row (see figure 10).

Figure 10: Money Supply (M2) in the Russian Federation



Not much is likely to change for the Russian economy in 2017. The commodities market promises to be more stable. Conservative forecasts predict oil price fluctuations between $40 and $60 a barrel, which will ensure sufficient stability for the budget. One of the major risks in the coming year will be the return of pent-up demand to consumer and industrial markets. In 2014 and 2015, a combination of negative expectations and declining personal incomes made consumers substantially reduce their purchases of durable goods. That still applies to some product categories: for instance, car sales have dropped another 10 percent since August 2015. But generally, imports in 2016 declined just 10 percent relative to 2015, while total exports have fallen 22 percent.[48] That could be an alarming sign—consumers are coming back to the market, using their savings to replace amortized goods. If exports decline faster than imports for a long period of time, and especially if imports begin to grow, Russia will face the problem of rising inflation and a falling ruble, even if oil prices remain stable.

We can expect a gradual and gentle decline in all of Russia's economic indicators in 2017. Inflation will probably be higher than the government projection of 4 percent, but it is not likely to exceed 6–7 percent due to the depressed state of the economy. The strength of its reserves and relatively high oil prices will allow the Russian government to maintain a strict monetary policy. As before, the dollar exchange rate will track oil prices and inflation. But GDP will continue to stagnate or even fall because of the absence of growth drivers and declining entrepreneurial activity. Modest budget subsidies cannot really replace private-sector investments, which are likely to decline 10–20 percent more. Long-term investment, including capital construction, is headed for a steeper decline. According to some estimates, capital and especially housing construction may decrease in 2017 by as much as 50 percent, compared to 2014.

We can expect a gradual and gentle decline in all of Russia's economic indicators in 2017.

As in 2016, Russia's budget deficit will be manageable. The government believes that it will not exceed 3 percent of GDP thanks to "additional budget revenues," mostly from privatization. However, the way that the Bashneft and Rosneft privatization deals have been handled makes one skeptical about these predictions. Most likely, the deficit will be around 4 percent of GDP ($50 billion), and this will be covered by reserves. However, the government has discussed its plans to start active domestic borrowing, so we will see how the market assesses debt risks and costs in 2017.

A higher tax burden in 2017, still applied mostly indirectly by decreasing the number of exceptions, widening the tax base, introducing minor duties, and increasing estate taxes, will hasten a further decline in business activity and push more small and medium-sized businesses into the shadow sector. According to official government data, the number of small businesses has decreased by 70,000 (or about 25 percent) since the start of 2016. Of course, some businesses were reclassified as medium-sized or micro-businesses, but a large number of them simply shut down. As it is much easier to avoid taxation in trade than in manufacturing, trading companies will be the fastest to disappear into the mists of the unofficial economy, and the quantity of low-quality "grey" imports will rise.

Production will fall across the board, although there may be some islands of growth in export-oriented sectors due to lower costs and in domestic consumption due to the loss of affordable imports and declining purchasing power. The quality of products will continue to fall in a wide range of industries as the amount of counterfeit ingredients and products increases.

Russia's Mysterious Banking System

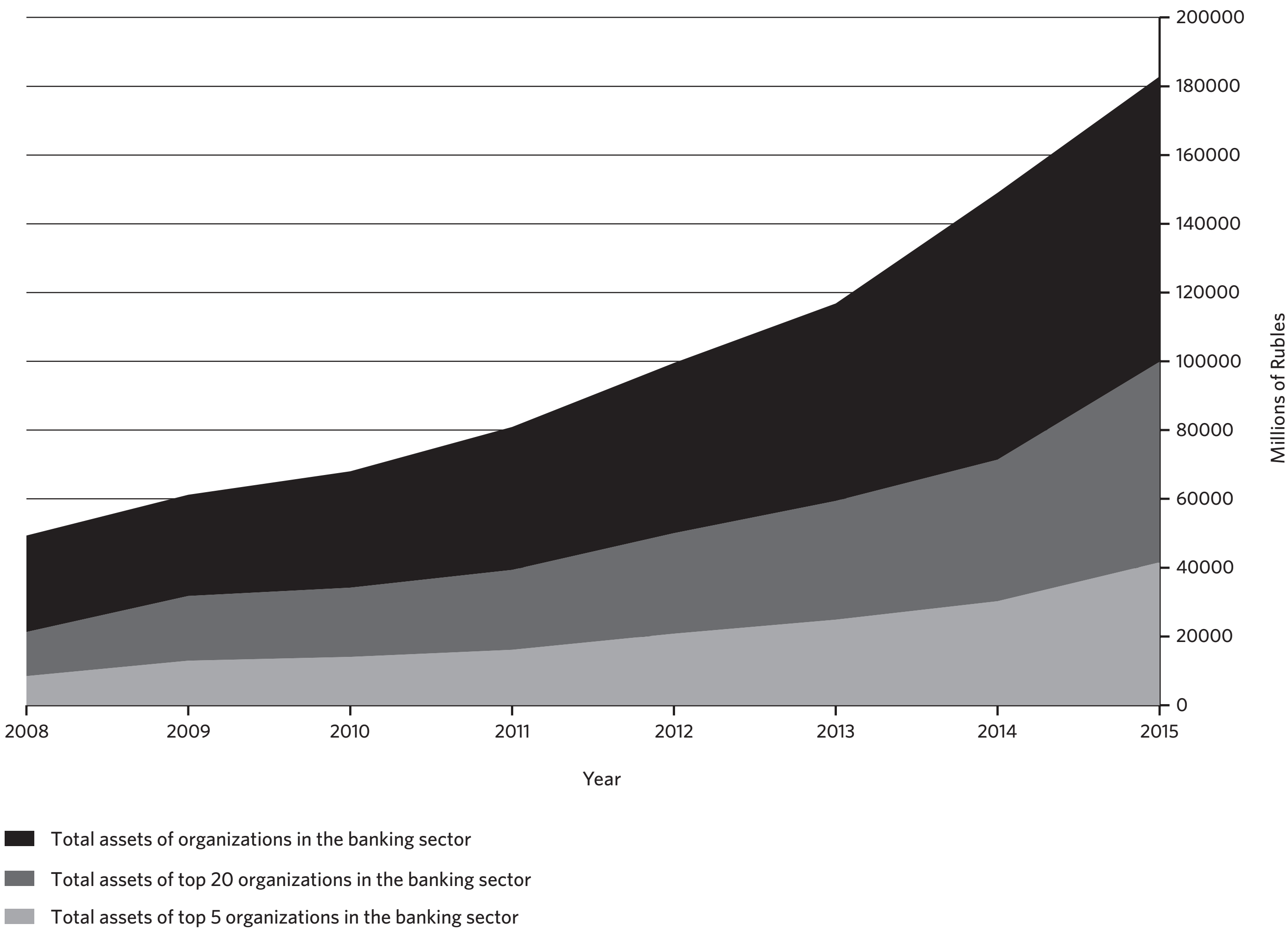
The real level of capital held by the Russian banking system is unknown because for many years the Supervision Department of the Central Bank did everything it could to allow commercial and state-owned banks to conceal the true state of their finances. These banks artificially inflated their capital by supplementing it with overvalued assets, through special circular schemes such as lending to shareholders who subsequently invested their borrowed funds into the bank's capital, or by inaccurate credit and investment risk assessments. Recent personnel changes at the Supervision Department suggest that it is no longer possible to continue this previous window-dressing policy without pushing the banking system to the brink of collapse.[49]

The Russian banking system is far less efficient than its Western counterparts. The scale is much smaller, while credit risks are much higher and still rising. Nonperforming loans in consumer finance were already up 33 percent in 2015,[50] and data on commercial credit cannot be trusted because banks embellish it in every possible way so as to demonstrate that they have capital. As a consequence, banks avoid attempts to partially recover nonperforming commercial loans by declaring them bad and selling collateral assets, which currently cost less on the market than the principal loan amounts with accrued interest—so as not to show any decreases in capital (see figure 11). Essentially, the collateral assets are abandoned as neither their owners nor the banks can manage them.

The number of banks in Russia has been decreasing by around 10 percent a year.[51] Today, there are fewer than 700 functioning banks in the whole country (see figure 12). At the same time, asset concentration is very high: the top five banks manage around 56 percent of all assets in the banking system; the top fifty control 88 percent.[52] In fact, a total of slightly more than fifty banks would be sufficient to serve the needs of the economy. In theory, closing the rest of the banks would not make a big difference. It might even have a positive effect by flushing out the system and sterilizing the funds of unfortunate depositors who pursued higher interest rates by keeping their savings in untrustworthy banks.

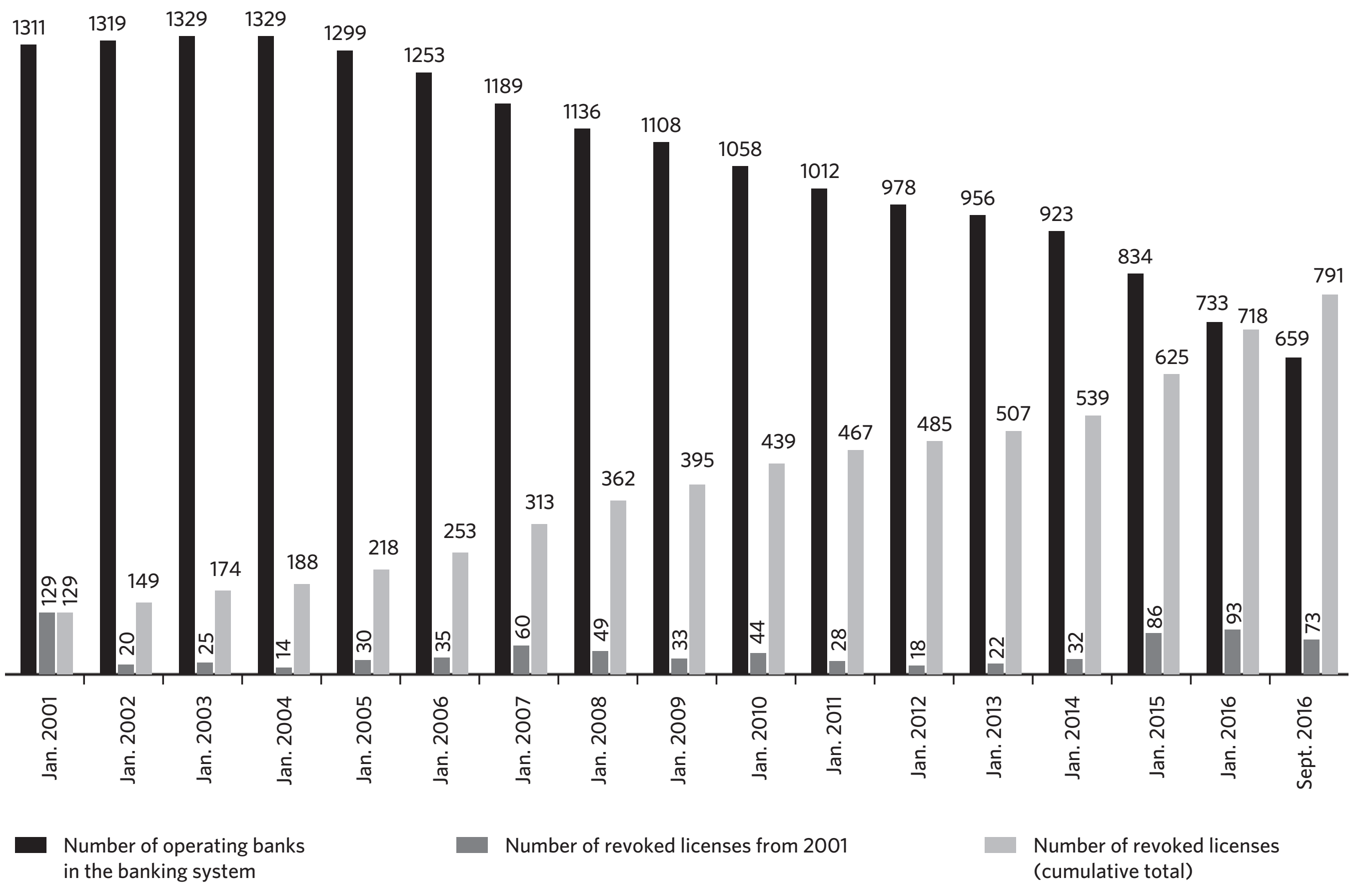
The aggregate official capital of the Russian banking system is less than 9 trillion rubles.[53] Theoretically, it can even handle full recapitalization now. In reality, banks will probably need 1–1.5 trillion rubles for additional capitalization in 2017. Of course, the state will be unable to reimburse the 41 trillion rubles in credits that it issued, especially in light of a big rise in the number of delinquencies and defaults (see figure 13). However, in the unlikely event of a major banking crisis, the state can still find a way to make use of the 44 trillion rubles in corporate and individual bank deposits by using a series of effective stabilization mechanisms at its disposal. For example, it could forcibly convert currency deposits into rubles at low exchange rates. It could also freeze deposits and transfer some of them into the banks' capital and some of them into long-term government bonds. These are extreme steps, and we will not see them in 2017. They may occur in the future, several years after the presidential election, when the banking system exhausts its reserves.

Figure 11: Assets in the Banking Sector



The sudden collapse of one or two of Russia's largest banks could pose a much greater risk to the economy. This would trigger a chain reaction, with a liquidity crisis, banks unable to make payments, a mass flight of depositors, and the paralysis of the banking system. It is the job of the Central Bank to predict and prevent a crisis of this sort. Should such a crisis erupt, the Central Bank will have to react immediately by injecting liquidity into the system. However, the past performance of the Central Bank showed its limited ability to respond to such a crisis successfully.

Figure 12: Number of Banks in Russia



Russia's Budget—Resilient, But for How Long?

The Russian economy is contracting and gradually losing its global competitive edge, even in sectors in which it can still create competitive products. Lately it has developed a serious monetary imbalance. While the country has run budget deficits for the past three years, banks' excess reserves add up to trillions of rubles (see figure 14), yields of sovereign and corporate debt warrant an AA rating rather than the junk rating that Russia is currently assigned, and deposit rates are comparable if not equal to European ones. And yet the problems of the state budget, which previously derived almost all its revenues from natural resources and was over-inflated during the years of high oil prices, seem neither catastrophic nor insoluble.

Figure 13: Changes in Consumer Credit Delinquencies, in Millions of Rubles

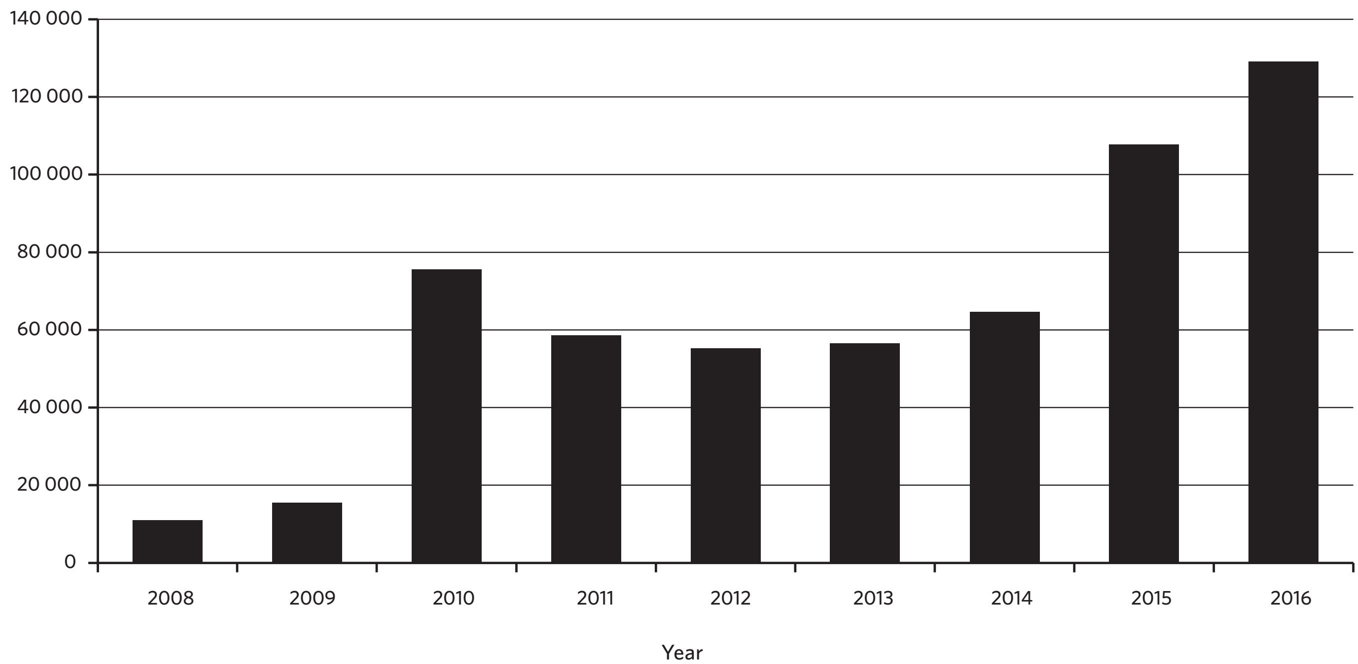
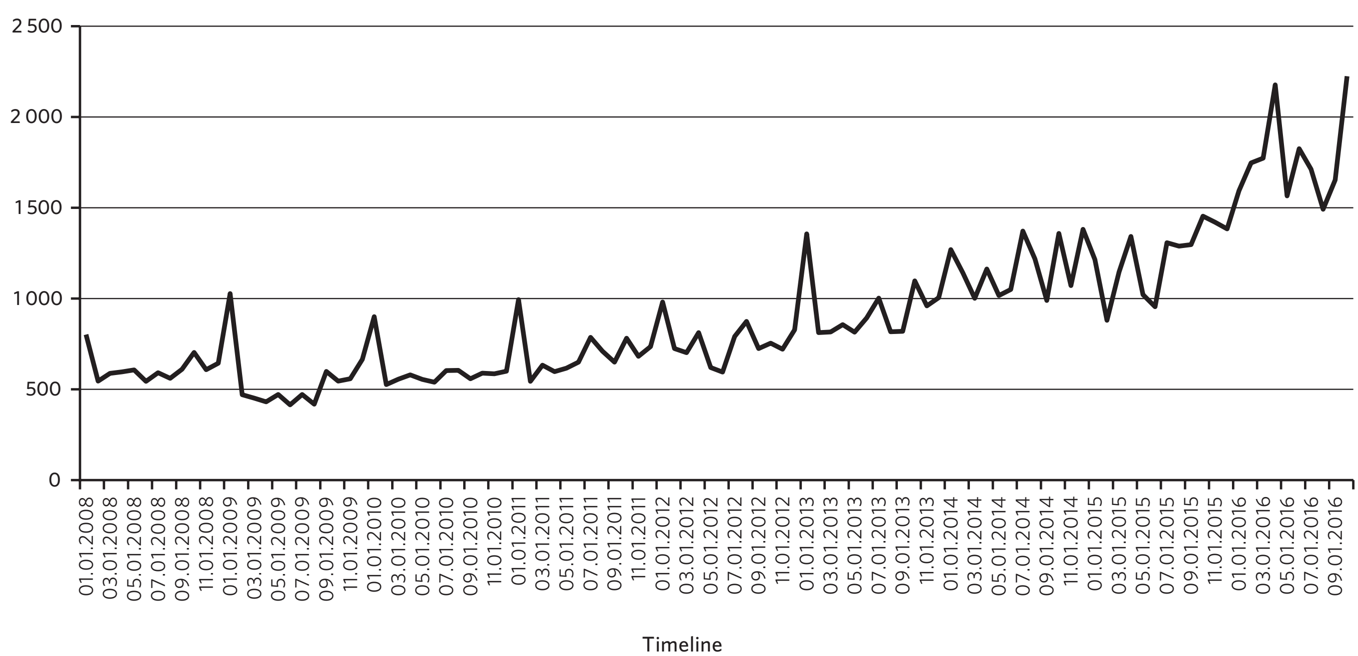


Figure 14: Commercial Bank Balances With the Central Bank of Russia, in Billions of Rubles



In 2015, Russia's GDP per capita was at the same level as in 2006 in real terms,[54] while average salaries were close to their level in 2007 (see figures 15.1 and 15.2).[55] GDP for 2016 is expected to be at the 2005 level (real prices), and salaries will be equivalent to their level of 2006. Federal budget revenues will be in a similar situation. Since 2000, revenues, if measured in barrels of Brent crude, have amounted to slightly over 4 billion barrels a year, and 2016 was no exception. The projected revenues will be 13 trillion rubles ($210 billion dollars or 4 billion barrels of oil at a price of slightly over $50 a barrel), which in real terms roughly corresponds to the 2003–2004 revenue levels, when oil prices were at a similar level.

Special-interest groups will try to offset their losses from shrinking state budget allocations by tightening their grip on state and non-state businesses.

In that period more than a decade ago, Russia had no significant economic or budget problems, which tells us that the country still has room to retreat and the public's patience will endure. At the peak of the financial crisis in 1999, when the Russian economy was teetering on the brink of collapse, per capita GDP was 21 percent lower than it was in 2016, and average salaries were 40 percent lower. Budget revenues were also much lower back then.

On the other hand, we should note that budget expenditures are almost twice as high now as they were in 1999–2000 if measured in real prices.[56] And while the contraction of household incomes merely leads them to decrease their consumption, thus helping balance the country's current account and exchange rate, cuts in budget spending threaten the incomes of powerful lobbying groups and will be fiercely resisted. These groups have grown accustomed to earning incomes from wasteful government spending in corrupt schemes. Their fight against cuts is already in evidence, as consolidated budget spending has fallen less than 20 percent relative to peak levels—a much smaller decline than the drop in consumption. Over the next few years, this trend will likely lead to a higher budget deficit and a rising tax burden, which will hurt the economy in turn.

These special-interest groups will try to offset their losses from shrinking state budget allocations by tightening their grip on state and non-state businesses. We can expect to see a greater frequency in cases of bribe-taking, the monopolization of sectors and industries where monopolistic prices can subsequently be set, the further inflation of prices for state purchases and the taking of control over purchasing channels, and a demand for higher rents in a number of sectors, beginning with the oil and gas industry and construction. We already see evidence of this trend in the increasing consolidation of hydrocarbon industries under the umbrella of the Rosneft oil company (with the minister of economy who argued against it now under home arrest[57]). We see a new series of state purchases made with the apparently paranoid aim of developing new IT systems, including sovereign firewalls and systems that control Internet access and web traffic, and in new government megaprojects. After all this, the regime's efforts to retain the support of these special-interest groups will further slow economic growth.

Figure 15.1: Average Monthly Salary in Russia, in Rubles

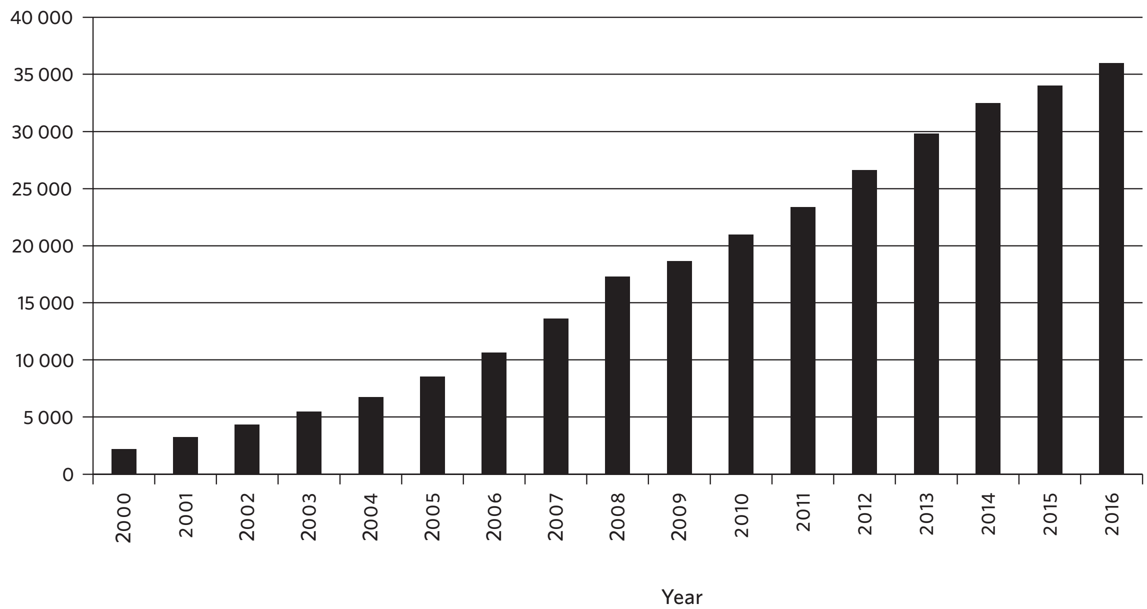
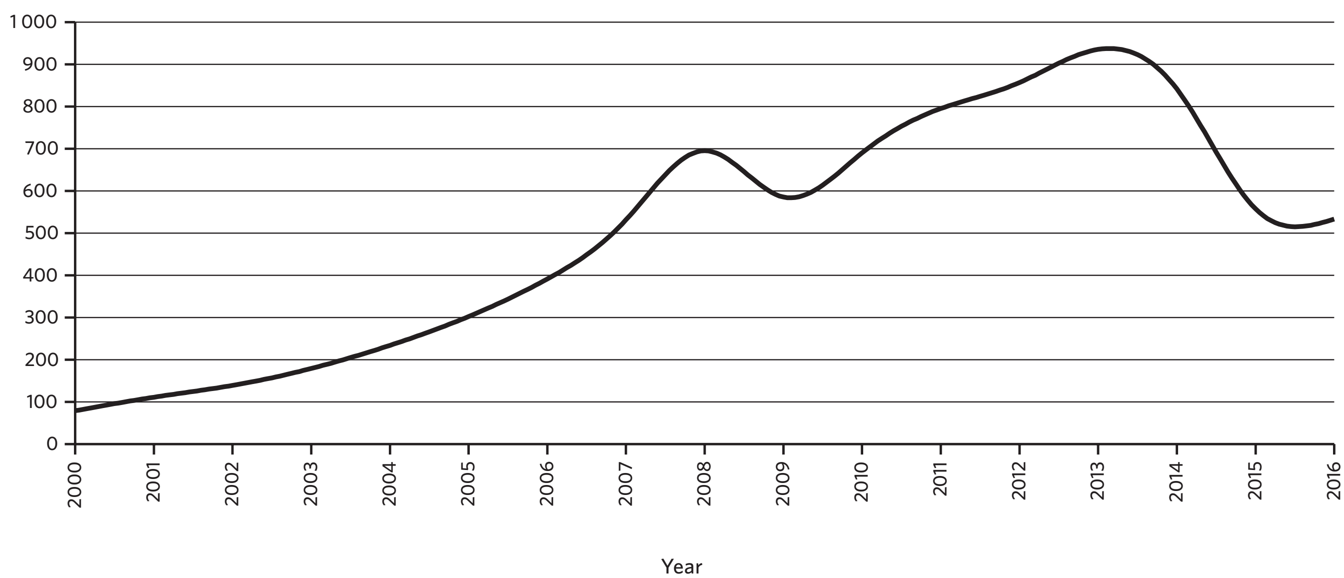


Figure 15.2: Average Monthly Salary in Russia, in U.S. Dollars



As a result, over the next few years we can expect a decline in investment, more business joining the shadow sector, and, after a while, smaller budget revenues caused by the contraction of hydrocarbon production and the stabilization of prices. This downward spiral will eventually lead the country to economic collapse. But this collapse will not happen any time soon. The economy is undergoing a slow contraction, and a decline in oil production forced by underinvestment will not start for another three to four years.

In the near term, the budget deficit can be covered by additional taxes on the oil and gas industry, as well as by using remaining government reserves, state borrowing of various forms, and cutting budget spending in a number of areas in defiance of lobbyists, including the hitherto untouchable defense and security sectors.

The state will be able to maintain an initial budget deficit of approximately 3 trillion rubles ($50 billion, 4 percent of GDP per year) for three to four years. Domestic debt increases at the rate of 1.5–2 trillion rubles per year will not burden the budget with excessive interest charges for at least five to six years. The rest of the deficit can be covered by the Reserve Fund ($38 billion as of mid-2016[58]) and the liquid part of the National Wealth Fund ($45 billion in total as of mid-2016).[59] These funds will last for less than three years, and from about 2020 the government will have to replenish them through a combination of budget cuts, tax hikes, and currency emission by the Central Bank (which will need a change in the law to allow it to directly lend to the government).

It is hard to forecast how long the current budget construction will endure. If oil prices start rising again, every $10 price increase will add $20–$40 billion to the budget. In other words, oil prices of $65–$70 a barrel will virtually eliminate the budget deficit for the time being. Likewise, an oil price of $30–$35 a barrel would seriously exacerbate the deficit problem and could trigger a serious budget crisis as early as 2019–2020.

In any event, Russia will have to completely review its current model of budget spending sooner or later. This can basically be done in two ways. The government could somewhat reduce social welfare spending, drastically reduce defense spending, and attempt to return to its former status of being a client on the global stage by opening its markets again, asking for loans, and asking for International Monetary Fund assistance. Alternatively, it could opt to drastically reduce social spending, maintain the current level of defense and security spending, and drift toward complete economic and political isolation. At the moment, the Kremlin looks much more likely to adopt the second option, which will allow it to keep political control for some time. However, the government's draft budget in 2016 for the next three years did not make any attempt to lower social spending.[60] That is a good sign, showing that the Kremlin is afraid of a public reaction and maybe will force major budget consumers in the defense, industrial, and bureaucratic lobbies to agree on a reasonable reduction in their shares of the pie.

Can Hydrocarbon Exports Be Exploited?

Unfortunately, Russia's reliance on oil and gas exports seems unlikely to change. Throughout the 2013–2016 oil crisis, Russia's GDP retained a surprisingly stable structure, with most of its components essentially keeping the same share as before.[61] Besides hydrocarbons and their derivatives, Russian exports have mainly consisted of three large products: metals, agricultural products, and military technology and equipment.

Russia will have to completely review its current model of budget spending sooner or later.

Just like hydrocarbon exports, Russian metal exports are affected by the overall decline in commodity prices. In 2015, some metals even cost more on domestic markets than on global ones.[62] A fifteen-year-long trend—when exports of ferrous metals stayed at about \$20 billion a year, and exports of nonferrous metals grew, reaching a peak of \$40 billion a year in 2011–2012[63]—was reversed in the first six months of 2016, when Russia's total metal exports amounted to less than \$20 billion, including nonferrous metal exports of less than \$4.4 billion. Russia is already one of the world leaders in metal exports, so we cannot expect significant growth in its market share. The slow growth in the market cycle suggests that metal prices will not increase significantly in the foreseeable future. Even when they do increase, Russia is unlikely to substantially raise its export sales relative to the level in previous years of about \$60 billion a year. This is because of tough market competition and numerous trade barriers and restrictions—over twenty countries are now restricting exports of Russian products.

Agricultural exports have increased lately and may grow much more if there is substantial investment and continued government support for agricultural producers.[64] But these exports generate very little tax revenue and do not serve as a foundation for investing in other productive sectors. Agricultural production has very low value added, and agriculture accounts for less than 3 percent of Russia's GDP. In fact, the share of agro-industry in GDP has been continuously declining around the world for the past thirty years. Moreover, increases in agro-exports are likely to put additional strain on the budget, as the government will be forced to raise agricultural subsidies, as well as to sponsor low-interest loans and infrastructure construction in this sector.

Russian arms exports are predominantly financed through loans, most of which will never be repaid (for instance, arms shipments to Venezuela comprised 25 percent of Russia's total arms exports in 2015, but that country is unlikely to ever pay for them[65]). Besides, Russian arms exports are not diversified enough: India, Vietnam, Venezuela, and China purchase over 70 percent of all Russian exports. Moreover, restrictions on exports of dual-use technologies to Russia will make Russian weapons inferior to those of their closest competitors—the United States, the European Union, Israel, and probably China. Russia is already losing some ground on the arms market. It will probably lose the Indian market (primarily in military aircraft sales). China, which is still buying Russian missile defense systems, is increasingly relying on its own aviation technology now. In ten to fifteen years, when developed countries focus on the sixth generation of arms technology (the fifth generation will then be on sale for developing countries), Russia will have nothing left to offer in this market.

Essentially, Russia needs to develop new export industries, but that ambition requires a financially efficient production capacity on its own territory and a reasonably high quality of product. Unfortunately, Russia is incapable of delivering on either of these goals.

A complicating factor is that, despite a serious decrease relative to 2008–2010 levels, average salaries in Russia are still much higher than in its competitors when it comes to labor-intensive production (see figure 16).[66] Russia's transportation infrastructure is quite expensive, export operations are virtually monopolized, and the costs of entering international markets are much higher than they are for its international competitors. The total tax burden on businesses is about 10 percent higher in Russia than in average European countries.

An inefficient pension system, which is unlikely to last even beyond one generation's lifetime, and an inefficient and corrupt healthcare system basically double the cost of pension and social taxes for taxpayers, as they have to save money for their old age and medical care after paying over 30 percent of their incomes to the state in pension and social security contributions (see figure 17).

Russian products cannot compete with those of most foreign producers. The country has no tradition of such competition; the government restricts producers' freedom; labor resources are distributed very unevenly, a problem that is exacerbated by people's low mobility (130 Russian cities employ more than half of their inhabitants in one enterprise only[67]). All these factors make for a situation in which unviable, expensive, low-quality enterprises are allowed to operate for decades with the help of government subsidies. Sanctions and protective tariffs discourage competition, allowing domestic producers to fail to improve the quality of their products. Seventy percent of the country's GDP is produced by state-owned or quasi-state-owned companies that easily monopolize the market, and thereby drastically reduce spending on marketing and quality control. Foreign trade is overly regulated (a complaint heard from all exporters). The cost of customs processing is very high (inspecting a container in the port of St. Petersburg—offloading, transporting to inspection site, and reloading—is four times higher than the cost of a similar procedure in Tallinn).

The government constantly talks of simplifying foreign commerce, providing low-interest loans to exporters, and encouraging competition, but nothing is being done. The same is true of promises to reform other sectors of the economy. Instead, the Russian government continues to rely solely on natural resource production and exports, as long as time and political stability are still on its side.

Figure 16: Average Monthly Salaries in Russia and Selected Countries

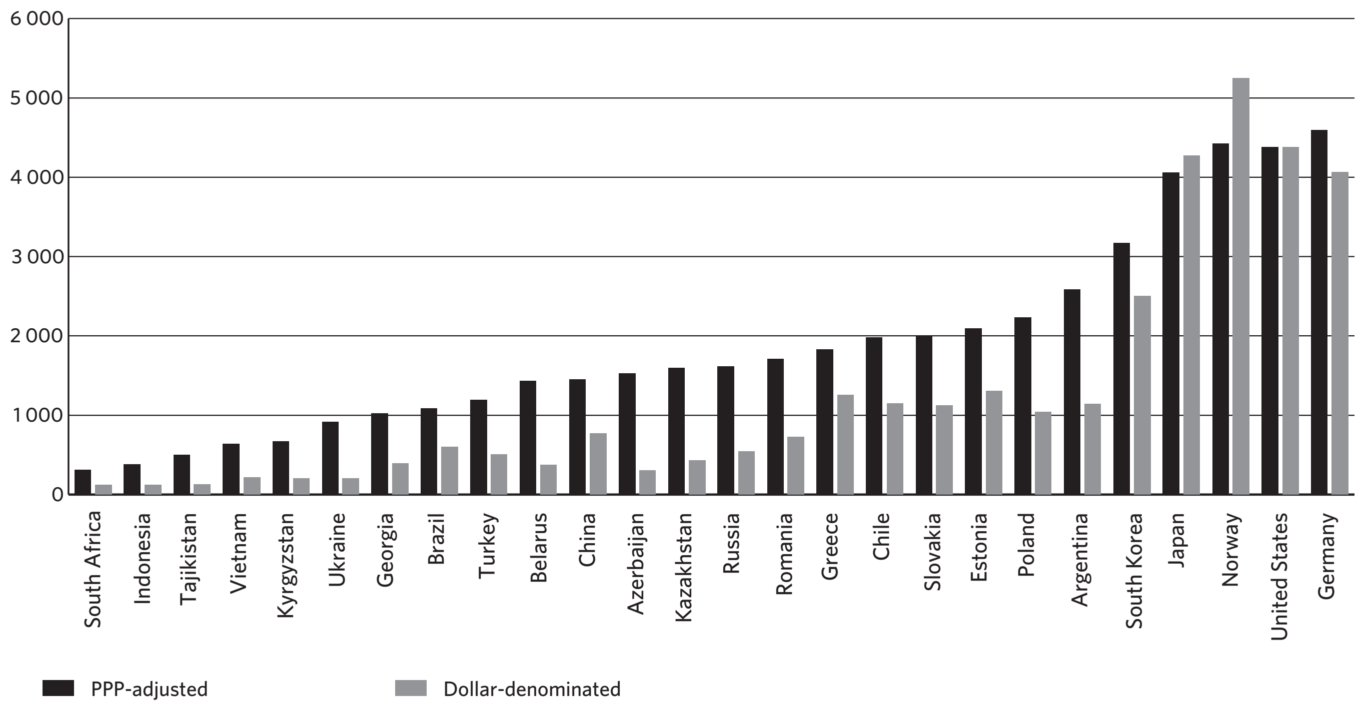
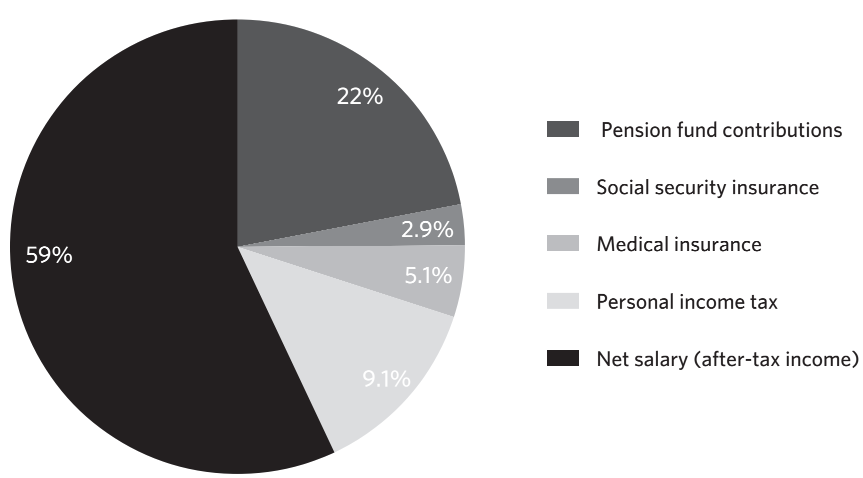


Figure 17: Tax Burden on Low-Wage Employees in the Russian Federation



The Government's Plan—A Slow Road to a Dead End

In the near future, the government will focus on ways to improve its administrative capacity so as to fill up state coffers and satisfy the demands of special-interest groups. But no steps, which could be called reforms, will be able to immediately balance the budget. On the contrary, any reforms are likely to lead to spending increases in the next three to five years, which will temporarily throw the economy off balance and exacerbate the economic crisis.

The problem is that Russia's current regime, whose main goal is self-preservation and maintaining social stability, simply cannot afford the experiment of reforms. Recent election results, which apparently rewarded the regime for providing stability, give it no mandate to make any attempts at reforms. In fact, less than 29 percent of respondents in a Levada Center poll said that they trust the statements made by high-ranking officials.[68] The number correlates with recent parliamentary election results. Thirty to forty percent of voters took part in the election, with up to 52 percent of them casting their vote for the United Russia ruling party (it is impossible to cite a more accurate number due to massive fraud at the polls).[69] More than 50 percent of voters boycotted the elections altogether,[70] which means only 10 to 20 percent of Russian citizens voted for the current regime. Russians are increasingly expressing leftist sentiments, with calls for curbs on foreign trade and the free market, printing money on a massive scale, nationalization of private property, and government investment in infrastructure.

The anticipated government response will be aimed at boosting budget revenues without reforming Russia's economic and social systems. Six steps can be expected, with the first three occurring in the near future and the second three much further in the future.

- **Raising taxes and fees.** In the current economic conditions, the government cannot increase the tax burden dramatically. Therefore, tax increases will mostly affect public-sector enterprises, their payrolls, and their property. This will enable the government to maintain current subsidies and even increase them, and then return most of its payments to the budget through higher taxes (see figure 18). Other ways of increasing tax revenues may include collecting greater utility payments, requisitioning revenues from special payments to centralized funds, imposing taxes on bank deposits and exchange rate gains, or introducing a currency exchange tax. Finally, higher taxes and fees may be imposed in fields where this will not result in a reduction of the taxable base, for example in the field of property taxes, tolls and parking fees, excise taxes on common imported and domestic products, and new or higher fees for public services such as education. These new fees may serve as a direct source of income for the most important budget consumers—for example they could be collected by intermediaries between the budget and taxpayers, who will receive a commission of up to 100 percent of the payments.

Figure 18.1: Payroll Taxes in Russia, in Billions of Rubles

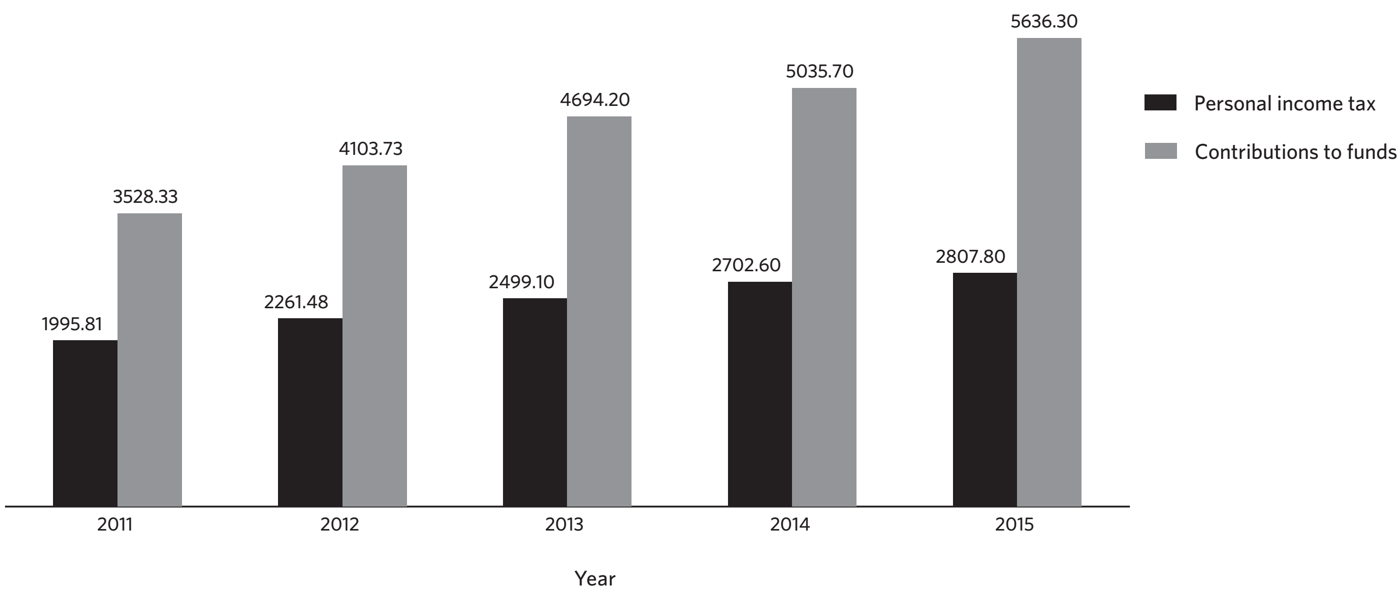
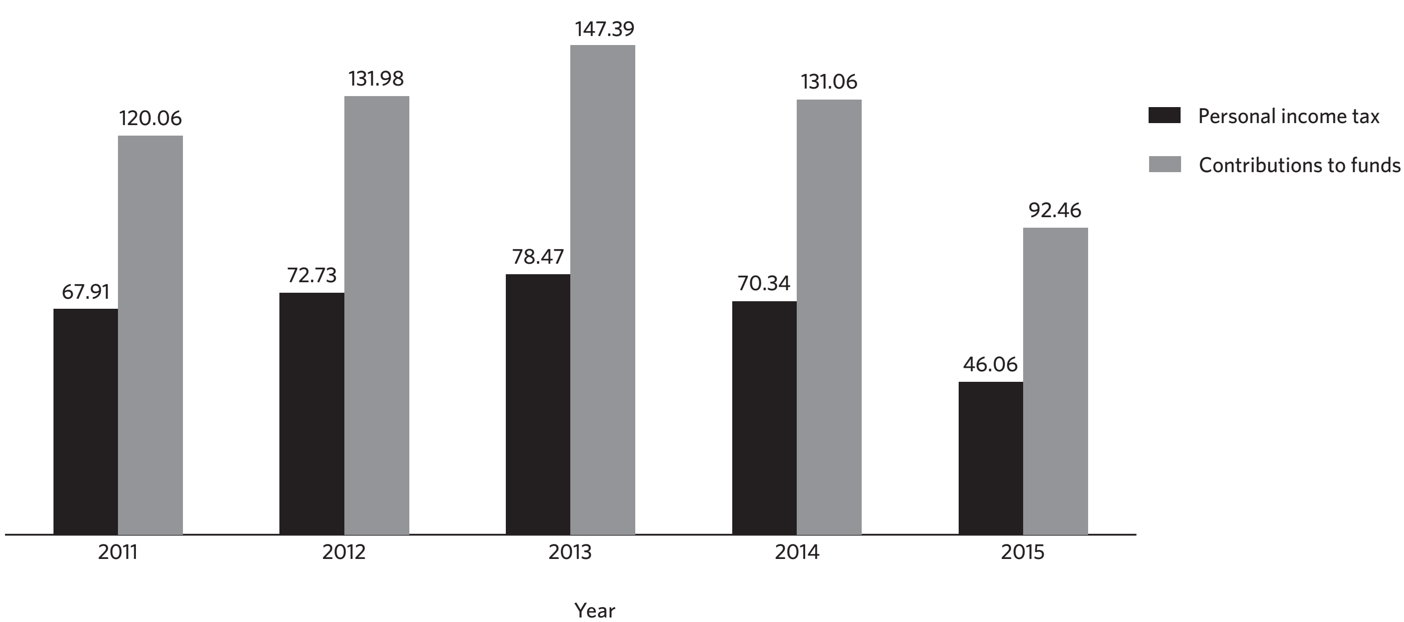


Figure 18.2: Payroll Taxes in Russia, in Billions of U.S. Dollars



- **Expanding the tax base**. The number of exemptions will decrease, existing exemptions will not be extended, and the courts will favor tax collectors in arbitrary cases.
- **Special categories**. The legislature may introduce discriminatory regulations against the small, wealthy social class whose protests will not threaten the system's stability. In particular, progressive tax rates may be imposed on real estate assets, automobiles, and works of art, but legal loopholes will allow the ruling elites to avoid paying them. Passport applications may cost more, and overseas spending may be limited and taxed. This can be easily done by prohibiting the transfer of cash out of the country and charging banks for their clients' foreign debit and credit card transactions. Much higher tax rates could also be imposed on the wealthiest 3 to 5 percent of the population and the special activities that they enjoy.
- **Cutting the public sector.** The retirement age will be raised, while education and healthcare costs will be cut. Government procurement prices will also be lowered. Cuts will affect medical procedures and the quality and quantity of medicine provided for hospitals. Nonessential programs and services, such as music schools and extracurricular educational programs, may lose most or all of their funding. Regional elites, who are now generously financed by the federal government in exchange for their loyalty, will be asked to curb their appetites, with any resistance facing a potential use of force. If the outcome is only greater costs or bloodshed, the regime can always use the new crisis to divert the public's attention from economic problems.
- **Requisitioning.** The government might simply choose to seize money from bank deposits (private citizens alone currently keep more than $250 billion in banks). This can be done by forcing banks into bankruptcy and then nationalizing their assets, making banks convert foreign currency deposits into rubles at a favorable exchange rate, or compelling banks to turn ruble deposits into long-term government obligations or bank bonds. The government could also seize foreign capital, prohibiting Russian citizens from owning property abroad, and forcing existing assets to be repatriated and converted into rubles. Businesses might be seized as well, partially to increase budget revenues and partially to benefit large or small elite groups that have lost money from direct budget transfers. One day, Russia could even revive the practice of court-ordered property confiscation, whereby the government would "legally" seize property from owners who fall out of favor or lose power, and sell it at favorable prices to more loyal individuals.
- **Imposing new economic conditions.** The government may attempt to save money on some of the many public services that it currently provides for free or at a heavily reduced price. It could, for example, condition free postsecondary education on participation in a civil or military service system in which

graduates are paid meager wages. Given declining levels of immigration and the resulting shortage of low-skill workers, we can expect the introduction of three to four years of state-sponsored national service for both men and women as an alternative to military service.

The recently announced string of privatizations (the details of which have not yet been worked out) will do little to improve the situation and replenish the budget. The market value of assets in Russia is currently so low and the number of potential buyers is so limited that privatization will at best serve to expropriate minimal sums from out-of-favor oligarchs, redistribute cash from one state-owned company to another (for example, from Surgutneftegaz to Rosneft), or sterilize assets in bank accounts and non-state pension funds. The latest much-advertised privatization deal in which a state-owned share in the Rosneft oil company was supposed to have been sold in parallel to the sale of recently renationalized Bashneft,[71] clearly demonstrated that Russian privatization will neither reduce the state's share in the economy nor raise additional revenue for the government. In the end, the state-owned company Rosneft bought Bashneft, but no one was interested in buying the state's share in Rosneft. That share most probably will be turned into treasury stock, either with the help of financing from Vneshekonombank—which in turn is effectively bankrupt and only stays afloat through extensive usage of the government reserves—or through the issue of domestic bonds by Rosneft, with the Central Bank buying out the whole issue.

All else being equal, contributions to the state budget will decline over the next five or six years, while pressure from Russia's left-oriented citizens will increase.

Some of the measures cited above are one-off solutions. Others will actually reduce long-term budget revenue streams. All else being equal, contributions to the state budget will decline over the next five or six years in real terms, while pressure from Russia's growing left-oriented citizens will increase. After all, Russian society expects the government to subsidize its lifestyle and will therefore demand inflation adjustments to public-sector salaries, welfare, and pension payments, as well as more social infrastructure spending and support for imports.

Elite groups affiliated with the leftist so-called "systemic opposition" in the Russian parliament, receiving around 40 percent of the vote in the latest Duma elections, will be unhappy with cutoffs in official subsidies and unofficial business opportunities and will demand populist economic measures (in other words, measures that actually commercially benefit party leaders and their supporters). They will threaten to stop backing the government and to chart an independent political course if not appeased. In response to this, the ruling regime will need to compromise by taking steps such as increasing price controls and regulations on businesses, printing more money, taking protectionist measures, de facto nationalization of entire sectors, confiscating savings and property, and further restricting cross-border transactions.

The dwindling opportunities available to the imports of consumer and industrial goods due to the shrinking exports will facilitate the development of substitutional production, but because of the risks of doing business in Russia this production will be concentrated on state-owned enterprises and lead to massive government assistance for quasi-state-owned import-substitution producers. But without access to modern technology, international R&D schools, full-scale international production cooperation, and low-interest financing, these businesses will be inefficient, production costs will run high, and quality standards will return to the levels of the later years of the Soviet Union. At that time, even low-quality domestic products were hard to come by, and some product categories (for example, automobiles, electronics, real estate, and quality clothing) were prohibitively expensive. Russia could be forced into a protracted period of Peronism, potentially lasting ten years or more, with disastrous consequences lasting for decades.

Even if the current, moderately conservative authoritarian regime manages to preserve economic stability as it gradually exhausts the economic resources that guaranteed popular support and avoids a catastrophe similar to that of the 1990s, its successor is most likely to be a more extreme, leftist-conservative paramilitary or military regime whose popular support is based on discontent with current conditions and on a continuing fear of the outside world, which the current regime successfully inculcates in the public. Thanks to a successful official propaganda campaign, many Russians have romantic and primitive notions of twentieth-century Soviet history, believing, for instance, in the myth of successful industrialization under Stalin, prosperity and order in the 1960s and 1970s in the era of Leonid Brezhnev, and the internationally recognized might of the Soviet Union. The advent of a regime of this type will of course delay the country's progress even further.

Infrastructure Investment Will Be Ineffective

While government investment does often lead to economic growth, this is by no means a given all the time and in all places.

Any new investments that effectively offer new opportunities on the market should be weighed against existing or potential demand; otherwise, they are doomed to fail. Traditionally, investment in infrastructure is used to boost the economy when demand for infrastructure is much greater than the supply. This can be seen in certain African countries that lack infrastructure even for most basic development of commerce and manufacturing. Foreign businesses were ready to invest in the economy under these conditions, and the local population was ready to participate in a new kind of economy. This was the model of Iran in the 1970s, where massive investments in industrial infrastructure led to protests from craftsmen and small landowners, which eventually resulted in the 1979 revolution. In countries with relatively good infrastructure, such as Russia, the effect of investments on infrastructure is generally much lower. Expensive infrastructure projects for which there is no great demand have a habit of sucking funds from budgets and costing more jobs than they create, thereby triggering social discontent.

The economic depression of present-day Russia has nothing to do with insufficient spending on infrastructure. High transportation, communication, and logistical costs are not connected with the infrastructure itself and should be attributed to an outdated legal framework, a lack of competition, the burden of corruption, and the inefficient scale. Moreover, these costs do not affect the final price of a product so much as risk factors, such as the lack of protection for investors and entrepreneurs, political uncertainty, and the high-handedness of officials. In addition, Russia lacks the capital and labor resources to fuel infrastructure growth. History shows that in Russia, large-scale government infrastructure projects generally face a number of additional challenges.

- **Planning.** The government almost always invests in projects that are lucrative for powerful lobbyists rather than in those that best serve the public good.
- **Financing.** Infrastructure projects are overpriced and over budget. Moreover, a large portion of the money earmarked for investment inevitably flows offshore, further undercutting the ruble exchange rate.
- **Implementation.** The implementation can be expected to be slow and to violate quality control standards. As a result, some of the infrastructure built is inefficient, if not useless.
- **Utilization.** Sites are often underequipped and unstaffed. There is little demand for their use. The government is unlikely to make the necessary investment in maintenance, meaning that projects that don't get off the ground will often be doomed to stay idle.
- **Effect on overall demand.** Large-scale infrastructure projects are likely to have a net negative effect on overall demand. Funds for investment are raised through monetary emissions or taken from more productive budget lines, which will lead to inflation and a decrease in demand, further reducing the utility of the projects.
- **Effect on business climate.** The diversion of resources into state infrastructure can increase costs for independent businesses. Due to the shortage of human capital, government investment is a drain on materials and labor, which raises prices and wages. Using funds for direct and indirect imports temporarily increases imports, which may negatively affect the ruble exchange rate and social welfare sector.
- **Effect on domestic policy.** Monetary-emission-driven investment offers elites a brief opportunity to make money and, yet again, postpone reforms. Russia's development will begin to lag even further behind its competitors.
- **Effect on foreign policy.** Russia's foreign policy will become more aggressive in order to compensate for these economic problems and their negative effect

on the government's approval ratings. This in turn impairs Russia's ability to attract investment and further isolates Russia from the global economy.

Eventually, even if all of these challenges were addressed and there were significant demand for infrastructure in Russia, it would still take a colossal amount of government investment to invigorate an economy with Russia's per capita GDP and level of infrastructure. Conservative estimates suggest that Russia would have to invest 15 percent of its GDP in infrastructure annually for many years to have a significant effect on the economy. This is impracticable. By way of comparison, Mexico spends 5 percent of its GDP on infrastructure, India spends 10 percent, Indonesia spends less than 7 percent, and China spends between 6 and 11 percent.[72]

Economic Black Swans

Although most indicators promise a soft landing for the Russian economy and several calm years ahead, we cannot rule out some extreme scenarios or black swan events, which could potentially cause great disruption to the Russian economy.

According to the baseline scenario, the Russian economy will contract gradually for at least three to four years, after which a process of socialization will set in as the government implements price and currency controls, monopolizes foreign trade, embarks on the large-scale nationalization of private industries, and increasingly regulates salaries and consumption. If this happens, the economy will continue to contract without collapsing for a few more years or even more than a decade. However, a number of serious events could disrupt this process and lead to economic breakdown, a shift to a subsistence economy, a rapid dollarization and the loss of control over the ruble, a devastating decline in budget revenues, big shortages of goods, and destitution for a large percentage of Russia's population.

This economic shock could in turn trigger new disasters: a sharp increase in crime rates, greater autonomy for most donor and dependent regions (the former will no longer want to share their wealth, while the latter will look for ways to survive without federal government subsidies), active and perhaps even successful attempts by some regions to secede from the Russian Federation, local armed conflicts (primarily in the North Caucasus), and perhaps attempted coups d'état. These events will be followed by a long period of political instability and possibly even the breakup of the country, as happened with the USSR but with even greater bloodshed.

No one event could trigger this catastrophic chain of events in the next few years. But a combination of two to three factors could indeed set them off.

- **A major banking crisis that is not efficiently neutralized by government subsidies and capital injections.** If a large-scale banking crisis or a collapse of two or more major banks is not resolved by an injection of liquidity into the system before a transaction crisis hits the economy, there could be a run on the banks, an immediate spike in inflation and the exchange rate as a result of an attempt to convert banks' liabilities into hard currency denominated in cash and fixed assets, and a massive devaluation of the ruble. The result could be reminiscent of Germany in the mid-1920s,[73] when inflation and unpaid debts stifled business growth, triggering an acute economic crisis.

- Economic havoc could also be caused by **disruptions at a large number of infrastructure facilities** due to amortization or interruptions in energy supplies. This scenario looks more plausible if authorities move forward with reductions in overall budget allocations and suspend investment in modern technology. Accidents at key infrastructure sites could also significantly impact the country's economy, even if they do not result in casualties or damage to other sites. Utility systems (water, gas, and residential electricity supply) are especially vulnerable because of underfinancing.

- **A sharp decline in hydrocarbon production**, combined with continued low global energy prices, also poses a threat. Oil production in Russia is inefficient from the extraction coefficient point of view.[74] Russia's oil extraction coefficient is about 30 percent lower than that of the United States and, in contrast to the United States, is slowly decreasing. The upper limit of production will continue to decline in the coming decades and is expected to fall by half by 2035. We still do not fully know what the long-term negative effects of Russia's current accelerated oil extraction practices will be, but there is scientific evidence that these practices reduce the oil extraction coefficient. It is even possible that outputs will start falling significantly in three to four years, and Russia's lack of advanced exploration technology (partly due to sanctions) will keep them low. Venezuela is a good example here. The country has lost two-thirds of its possible output and is already buying oil from overseas. The unlikely but possible scenario of an EU embargo against Russian oil and gas exports could have a similar effect.

- **Crises in major industries** could also be destabilizing. As purchasing power in Russia falls over the next few years, the demand for goods and services—particularly durable ones—will fall significantly. As a result, an entire range of industries will be under threat, from the personal care sector to the construction industry. Most businesses in the personal care sector (hair and beauty salons, sports clubs, and cafes, which officially employ more than 3 million people) use imported ingredients and supplies, which drastically increases production costs while the demand for these services is falling. The cost of construction recently fell about 20 percent, but market prices decreased even more sharply. Overall, the prices and the costs of construction now are closer to their levels of 2002–2003, when 49 million square meters were built annually (in 2014, the figure was 139 million square meters), and no more than 5 million people were employed in the industry (as opposed to more than 5.7 million today).[75] Unless the government gives large-scale subsidies to the construction industry via subsidized mortgage rates, low interest loans, tax rebates, and/or co-investments, we can assume that it will contract sharply, causing 1 million people to lose their jobs. Banking, shipping, tourism, hotels and restaurants, and import retail are also vulnerable. Crucially, once one sector collapses, it could lead to a domino effect, leaving 5 to 10 million people unemployed. Neither the government nor the private sector has anything to offer these laid-off people if this contraction takes place.

- **Internal elite conflicts** are unlikely but still possible. They are unlikely because the interests of various groups are well defined and all the key players understand that keeping the peace is in everyone's best interests. Still, in other countries, elites have historically fought for power when their rent falls below 10 to 12 percent of GDP, and per capita GDP dips below $6,000. Economic rent is only slightly higher in Russia right now (about 16 to 17 percent) and is gradually declining, while per capita GDP is forecast to be $8,000 in 2017–2018.[76] Even if elite infighting does not erupt into all-out war, it might still have a significant destabilizing effect on the economy. Stable and well-organized elites could face the same situation if a key person who balances differing interests becomes dysfunctional or is eliminated. Only one person now plays this role in Russia, and while the chances of him suddenly becoming dysfunctional are low, the possibility exists.

- Finally, Russia lacks strong governmental institutions, political competition, and a system of critical decision analysis. Propaganda seriously distorts public opinion and distracts it with false agendas. In this context, **there is a very high risk of very costly, irreversible, and irrational decisions** being made that will drastically change the situation. It is hard to predict what kind of decision this would be. The government could decide to impose crippling tax burdens on businesses, which would result in a catastrophic decline in business activity. It could escalate or initiate new military or hybrid operations that undermine the economy or draw a new round of much tougher sanctions (for instance, an oil embargo and/or an embargo on selling parts for foreign planes, automobiles, and equipment to Russia). It could introduce new harsh price, currency, and capital controls.

Conclusion: Achieving Effective Reforms

The Russian economy currently suffers from two fundamental problems: excessive regulation and high risks that disincentivize doing business.

According to a primitive but still accurate economic model, growth occurs in places where potential earnings for businesses are greater than investment risks.

As a result, economic growth requires either high potential earnings for businesses or substantially diminished risks of doing business. The promise of high return was an incentive for many very poor countries that underwent a fast growth spurt from a very low start because of high untapped demand. This was the situation in which Russia found itself in the early 2000s as the influx of petrodollars generated high revenues, and there was an illusion of looming economic liberalization. High earnings and apparently lower levels of risk invited capital into the country, and entrepreneurs got access to new investments. Any market with minimal government assistance and reasonable regulations was able to identify venues for growth, and Russia experienced growth across a broad spectrum of industries, even in the high-tech and entertainment sectors.

Present-day Russia with declining demand, a shrinking workforce, and a lack of resources does not have sectors where excessive profits can be made—with the exception of criminal activities, corruption schemes, and state-related and/or state-subsidized businesses (which are often a combination of the former two). Russia is tightly insulated from international cooperation and has a fairly small population (2 percent of the world's) for such an insulated market, which is not big enough to compete in prices and quality on the global market. Russia is a country of quasi-monopolist conglomerates that provide essential services like energy and transportation to businesses at inflated prices. Russia is greatly dependent on imports, meaning that its companies buy supplies at high prices and are taxed at high rates.

That means that the only way to increase the country's economic potential under these circumstances is to reduce risks. Developed countries, like those of Northern Europe, the United States, and Canada, also offer few opportunities for earning excessive profits, if at all—primarily because of tough competition, high taxes, and slow consumption growth. Nevertheless, as a result of extremely low risks of doing business, the average rate of per capita GDP growth in these countries exceeds \$500–\$1,000 a year (which would be 7–14 percent a year for Russia).[77]

Certain basic risks have to be addressed for Russia to get back on the path to prosperity. The first risk relates to property rights, which are little respected in today's Russia (even the mayor of Moscow condescendingly refers to certificates of ownership as "fraudulent papers").[78] There is also a high risk factor and uncertainty in the application of local legislation, both in disputes between businesses and the state and in disagreements between businesses themselves.

The formation of a comprehensive program of reforms is far beyond the goals and limits of this paper, but we can repeat some key general recommendations about how risks can be minimized in Russia in the pursuit of economic growth. Russia needs a comprehensive change of legislation directed at protecting investors' and entrepreneurs' rights; guarantees of the primacy of international law and courts; presumption of innocence of businessmen in cases where the government plays a plaintiff role; a prohibition on bringing criminal charges in cases of suspected economic crimes against individuals without prior conviction by a civil court or an arbitrage and a direct referral to a criminal court; the introduction of jury trials in most types of courts and cases; a business protection program in case owners or top managers face criminal charges; an independent, publicly elected judiciary on all levels; a system that protects good-faith buyers and absolves titleholders of any responsibility even if the state issued a title with some irregularities; a one-off 100 percent property amnesty; and other protections for the business community. All these changes would lower the risks for investors and entrepreneurs and transform the country's current feudal and corrupt legal system into one based on the rule of law.

Finally, a very important way of reducing risk is to strengthen the body of legislation that protects investors and entrepreneurs from adverse legislative changes and government acts, both those that conform to government legislation and illegal acts. This legislative ambiguity has caused business losses or missed opportunities, in cases when businesses were started or managed with a reasonable belief that things would be otherwise. This has an international dimension: it is important that the Russian government in no way impedes class-action lawsuits and other cases in international courts.

A strong new commitment to the rule of law, both domestically and internationally, is fundamental if Russia genuinely wants to halt economic decline and achieve prosperity in the future.

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