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Lessons in stabilization and prospects for growth: Russia's economic policy in 2016

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Abstract

Economic growth is a primary challenge of the political agenda of leading countries, including Russia. This study discusses existing hypotheses that are related to "secular stagnation" and the "productivity paradox", which include the demand side of the problem (cyclical factors), special features of technological innovations (technological factors), anti-crisis policy that prevents "creative destruction" (political factors), and the irrelevance of the GDP measurement (statistical problems). Limits to growth contribute to a new global policy trend and the emerging of populism; this study discusses the prospects of the transformation from political populism to economic populism. Global challenges provide the basis for a more extensive analysis of Russian economic development and, particularly, the results of the 2015–2016 anti-crisis policy, which helped the Russian economy to adapt to new economic realities of the post-crisis world.

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1. Introduction

The world is searching for a new socioeconomic development paradigm, which is occasionally referred to as the "new reality." When considering prior structural crises (in the 1930s and 1970s), this search has lasted approximately a decade and has been characterized by volatile economic trends, political crises and social instability. Prior experience should by no means be bluntly applied to the future, and the duration of the "turbulent decade" can only be determined by

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future economic historians. However, it is evident that a primary issue on political and intellectual agendas is a new economic growth model and its potential rates and sources.

2. Discussing the prospects for economic growth

The prospects for economic growth present a significant challenge that will define the development of other vital structural processes during the 21st century, i.e., the trend towards globalization (or de-globalization), new industrialization (structural modernization), and the development of human capital.

We have witnessed the deceleration of economic growth rates since the beginning of the global crisis (i.e., roughly since 2008). Although this trend appeared to be temporary at first and was expected to dissipate in the foreseeable future, after approximately ten years, it became clear that the situation was far more complicated than expected. Economists predict an approaching of long secular stagnation and politicians have begun adapting to the new reality, which results in a sharp and explosive rise in populist sentiment. In fact, these were the two primary aspects of 2016: *low (and decelerating) economic growth rates and rising political populism*. Clearly, these two issues are related; economic hardships encourage politicians to adopt populist slogans, if not populist actions.

The ongoing economic deceleration had multiple causes and economists are focused on analyzing them. Modern growth is certain to be a highlight of future discussions regarding economics, political science, and political economy. One reason for this decelerating global development is lower growth rates in China and India, which they are, quite naturally, experiencing as they achieve economic maturity and a more stable condition similar to developed countries. The deceleration in global development could have been counterbalanced by emerging new opportunities for an accelerated technology transfer to other countries and regions of the world (e.g., to Africa), but this is more of a political and institutional matter than an economic issue thus far.

The deceleration may be partly attributable to cyclical factors, i.e., the low investment activity that is reflected in the excess of savings over investment that is characteristic of most developed countries. This period of decreased investment is seemingly associated with a high level of uncertainty, which is natural during technology upgrades and anticipated structural reforms.¹

However, the problem of economic growth does not only refer to decelerating global trends or the specifics of the modern business cycle. In the traditional economic development model that includes recessions and recoveries, the primary question following a crisis is concerned with the actual level at which the recession will stop and economic growth will commence. The events after 2008 clearly demonstrated that a downturn may be followed by stagnation or low growth rates; recovery is not automatic. This results in a need to change the substance of anti-crisis policies, which should no longer be limited to fighting recession, but propose measures to ensure acceptable growth rates (or accelerating potential

¹ Robert Shiller, Nobel Prize winner in economic sciences in 2013, attributes this deceleration to a "loss of economic confidence" (an expected business activity by companies and households' income and employment) and "economic policy uncertainty" (regulations, taxes, etc.) (Shiller, 2016).

growth). The need for a change in anti-crisis policies is the greatest challenge of the current global crisis and the essence of what is referred to as the "new eco-nomic reality."

Lengthy stagnation in a developed country is not a new problem and has been occurring in Japan for a quarter of a century. It has been demonstrated that a developed economy may stagnate over a long period of time while maintaining a high level of well-being and avoiding grave social problems. In the past, it appeared that this phenomenon was specific only for Japan. However, it is now evident that we are facing a new phenomenon that results in a need for research and adequate policy. The European Union has been in a similar situation for approximately five years. Russia is also faced with a risk of long-term stagnation, for which "reaching the bottom" (which was discussed vigorously in 2015 and 2016) does not imply returning to sustainable growth. This problem may be regarded as an intellectual challenge of sorts, similar to the Keynesian revolution. During Keynes' time, however, certain automatic anti-crisis regulators were activated (to mitigate the consequences of the crises); however, the present situation indicates that a dedicated policy should be developed to ensure growth.

Several cyclical, technological, political, and statistical hypotheses have emerged in an attempt to explain this phenomenon. Four possible explanations of the growth situation have been proposed. Despite their differences, absolute alternatives are not provided and the current situation is the result of a certain combination of these alternatives.

Cyclical factors. This perspective attributes deceleration to insufficient aggregate demand, which is reflected in a negative gap between investments and savings. The historically insufficient demand stagnates growth in the GDP and productivity, even near-zero interest rates will not stimulate economic growth (Summers, 2014).² Inequality appears to contribute to the problem, because the majority of the population has not experienced income growth and the excessive concentration of income in the hands of a few results in an increase in savings that is detrimental to demand, thereby creating additional incentives for deceleration.

Technological features. An alternate approach attributes the deceleration to limited supply, and most importantly, a limited supply of innovation (Cowen, 2011; Gordon, 2016; see also: Gordon, 2013). The potential deceleration of technical progress is meant, as well as a lesser impact on productivity by technical innovation, particularly when compared with the technical revolution at the turn of the 19th–20th century. This approach focuses on the exhaustion of modern economic growth as we have known it since the mid-18th century, which has become a significant mystery for economic science (particularly, economic history).

However, certain advocates of attributing the deceleration to technological factors maintain an optimistic interpretation of the problem; technological deceleration is a temporary phenomenon because of lags between the introduction of advanced technology and the spread of its effects to other industries and, accordingly, to growth in the GDP and productivity (Mokyr, 2014). This perspective relies on recent economic experience. For example, in 1987, Solow (1987,

² "The global savings glut and low inflation result in weak aggregate demand in high-income regions. This syndrome is consistent with zero or negative interest rates in Europe and Japan" (Nordhaus, 2016).

p. 36) noted that the "computer era is visible everywhere except for productivity statistics." Approximately 15 years later, this effect was reflected in statistics and did not require additional proof. However, prior to that, business models had to be significantly transformed beyond the comprehensive implementation of computer technology in industrial processes (Brynjolfsson and Hitt, 2000; Brynjolfsson and McAfee, 2011). Therefore, we presume that over time, the effects of innovations are reflected in economic growth statistics, particularly because new models of governance and business forms emerge.³

Political factors. The third explanation for the deceleration is related to specific features of political processes and their influence on the economy, which include the priority of short-term political goals over long-term structural objectives. To prevent grave social and political implications from the crisis (and considering the Great Depression of the 1930s), governments of developed countries have taken unprecedented steps to bail out existing companies and banks, thereby destroying the opportunity for Schumpeter's "creative destruction" (The Japanese government acted in a similar manner during the 1990s, which resulted in zombie banks and companies). A soft monetary policy (extremely low or negative interest rates) does not stimulate economic activity as much as it alleviates the debt burden on the state and corporations by improving the position of debtors relative to creditor interests (Wolf, 2016).⁴ Through these processes, this policy prevents a potential increase in bankruptcies.

In a more severe interpretation, central banks have assumed functions that are similar to those performed by Soviet-type central planning agencies that were tasked with preventing crises and bankruptcies. The actions of these central banks "arrested falling asset prices, thereby saving enormous fortunes. However, this also prevented a great number of young businessmen and investors from taking risks on new ventures" (Sinn, 2016). This process hinders recovery from the crisis for years, if not for decades. Without creative destruction and the related political and social problems, we cannot escape the stagnation trap.

Political interests are beginning to dominate economic interests, i.e., ensuring current political and social stability and securing the results of the next elections has become more important than improving efficiency and productivity. An emphasis on narrowly interpreted political goals and group interests slows institutional and structural modernization and consequently, decelerates growth. The desire to prevent a surge in unemployment, which is understandable from a political perspective, may cause losses in efficiency and competitiveness. This process implies the domination of short-term interests over long-term interests, which is typical of numerous developed and developing countries in recent de-

³ Qureshi (2016) referred to advocates of approaches that estimate the impact of innovations on growth "techno-pessimists" and "techno-optimists": "In the debate between "pessimists" and "optimists" regarding the future of productivity, the issue may be less about who is right and more about how the challenges of the future which have been noted by the "pessimists" could be addressed to capture the opportunities envisaged by the "optimists." The future could be one of contingent optimism, if technological possibilities are supported by complementary policy and institutional change."

⁴ According to Reinhart (2016), this policy actually results in taxing creditors: "As in the past, during and after financial crises and wars, central banks increasingly resort to a form of 'taxation' that helps liquidate the huge public- and private-debt overhang and eases the burden of servicing that debt. Today, this means consistent negative real interest rates — equivalent to an opaque tax on bondholders and on savers more generally."

cades.⁵ Furthermore, most often, policies that result in rapid positive shifts in economic trends become inefficient and even harmful in the medium term.

The aforementioned implies that monetary policy measures can halt the crisis and prevent its continuation, but alone, cannot lead to sustainable growth. Sustainable growth requires structural and institutional reforms, particularly when the technological framework of the national economy is undergoing a qualitative upgrade.

Aspects of statistical measurements. Discussions regarding economic growth focus on the issue of adequately assessing growth. Certain researchers note that GDP statistics understate the actual level of production and well-being. The GDP indicator was implemented during the 1930s and 1940s and was later referred to as "one of the greatest inventions of the 20th century" (BEA, 2000; Masood, 2016). However, the fundamental technology shifts in recent years and the emergence of new governance models that reflect this new technological reality are creating an entirely new situation in the economy that eludes traditional statistics. The measurement of real GDP, which should include all goods and services that are produced (sold), does not consider a significant portion of the value (of the product, not necessarily tangible) that has been produced, but cannot be measured using existing methods. The issue here is the penetration of information and communication technology (ICT) into all areas of social life, which transforms the very concept of well-being and accordingly, the ability to measure it. Radical improvements in business and staff efficiency satisfy emerging needs and improve well-being by utilizing far lower amounts of labor and material resources.

This can be illustrated by a number of examples. First, there is an unprecedented increase in the number of free goods and services associated with information technology, let alone the rapid decreases in prices (at rates surpassing inflation rates) of new products that enter the market. Benefits are gained from social networks for the economy and consumers. People spend a significant amount of time communicating with IT systems and this improves their well-being (including business development). However, this is only reflected in the growth statistics, at best, as advertising income (DeLong, 2016). Second, certain advanced technologies (e.g., 3D printing) can make products substantially cheaper. Third, new products (goods) emerge and combine various functions at a much lower price than several devices performing the same functions (the iPhone is the most evident example). Fourth, certain goods and services have been converted into digital form, such as e-books, which are much less expensive and provide the same service as traditional books. Fifth, brand-new, IT-based business models are emerging, as embodied (and exemplified) by Uber (The Economist, 2016). Uber is reducing the demand for cars, while considerably increasing their utilization when compared to taxi services, let alone personal cars and subsequently reduces demand for the production of related goods and services. Therefore, these new business models improve well-being (and increase consumption) and the above

⁵ Examples of the dominance of short-term interests over long-term interests can be found in the practices of numerous developed and developing countries. Examples include the USSR between 1986 and 1990, when the government preferred to accelerate growth and caused a decade-long recession. Another example is China in recent years, growth rates are maintained by injecting budget funds into the economy. In our opinion, the dominance of short-term business interests (current capitalization) over long-term interests (increasing productivity) is one of the primary causes of the current global crisis (Mau, 2016a, p. 174).

technological, industrial, and management innovations may result in the decline of traditional GDP indicators.

Discussions regarding the problems of economic trends are far from over. These themes will remain at the forefront of economic discourse and political struggles for the foreseeable future and will attract theorists of political science and practitioners of economic policy.

Practical recommendations suggested during the past year clearly tended towards revising the correlations between monetary and fiscal stimulation. In 2016, a thesis that recommended scaling back monetary stimulus and enhancing fiscal stimulation gained increasing popularity.⁶ This theory is based on several issues:

- first, although the policy of extremely low or negative interest rates hindered the crisis, it was unable to ensure a recovery to normal growth;
- second, an understanding has spread that resuming growth does not require macroeconomic manipulation, but rather structural reforms that foremost require dedicated fiscal policy measures;
- third, the debt burden on government budgets has been slightly reduced and a number of developed countries gained more opportunities to borrow financial resources for large-scale projects, thereby using public demand to support growth in both the private and public sectors;
- fourth, the new US administration clearly established a priority for fiscal stimulation, which may be an attempt to repeat the success of Ronald Reagan, who combined fiscal stimulation with the rigorous monetary policy of Paul Volcker. Raising the FRS interest rates in December, 2016 was a step towards fiscal stimulation. The next step should be made by the new administration under Donald Trump.

In 2016, economists were almost unanimous in formulating the structural priorities for developed countries. The first priority was the development of infrastructure (particularly in the US) and the education system (particularly in Europe). Other priorities include the development of green energy, healthcare, and everything related to human capital in a broad sense. High-priority structural measures include reducing taxes (fiscal measures) and deregulation.⁷

Concurrently, the priorities of structural and institutional reforms differ significantly between countries, particularly when comparing developed and leading developing ones. While the majority of developed countries are focusing on developing human capital, including easier access to the labor market for large social groups, China plans to enhance its physical infrastructure to boost domestic

⁶ Not everyone supports the idea of shifting the focus towards fiscal policy. Numerous economists strongly argued against reducing monetary stimulation, particularly in the Eurozone. Wolf (2016) recommended an active combination of different growth sources, without countermanding monetary stimulation with fiscal measures: "The best policies would be a combination of raising potential supply and sustaining aggregate demand. Important elements would be structural reforms and aggressive monetary and fiscal expansion. The US has been more successful in delivering a more balanced set of policies than the Eurozone."

⁷ "Trump has established infrastructure investment, tax reform, and deregulation as central components of his strategy to boost the US economy's actual and potential growth. As a result, markets seem convinced that the US will gradually exit its prolonged period of excessive reliance on unconventional monetary policy, replacing it with a mix of looser fiscal policy and pro-growth structural reforms—an approach much like that pursued by former US President Ronald Reagan. Germany, China, and Japan have good reasons to embrace such an approach. They are not getting enough out of monetary expansion at this point; the risk of collateral damage and unintended consequences is rising; and pro-growth structural reforms are overdue" (EI-Erian, 2016).

demand (considering the enormous domestic market) and technological exports to developing countries. Solving these types of problems is the focus of China's policy to build a Silk Road, presumably aimed at developing markets for Chinese products. This is the most important difference between the structural priorities of developed countries and China.

China currently (and in the near future) acts primarily as a producer of goods and has become the "world's factory" during the 21st century. Conversely, developed countries, even with the latest trends in re-industrialization, produce and consume mostly high-tech products and related services and the quality of human capital is critical for retaining leadership in the production and utilization of high technology.

These processes require the stimulation of demand (i.e., a partial return to the Keynesian model), which requires a serious revision subject to 21st-century realities. With respect to most developed countries, no definite conclusion can currently be drawn in favor of either "demand-side economics" or "supply-side economics." Demand factors should be adequate for technology-driven supply, which in turn should be maintained through adequate institutional measures (including deregulation or tax reduction). Only this balance between demand-side interests and supply-side interests will help overcome the deepening polarization between the beneficiaries of globalization and its victims (however conventional these terms may be).⁸

In terms of global processes, much will depend on whether the leading countries (the US, China, Germany, the UK, Japan, the EU) manage to coordinate their economic policies, considering their specific structural reforms. The inability to ensure this coordination will lead to increased protectionism and populism and, accordingly, to overall deceleration and simultaneous intensification of uneven development between certain countries.

The prior discussion directly implicates a second characteristic of the past year and, seemingly, the foreseeable future, i.e., populism⁹. This term generally refers to political activity that uses slogans that are popular in the general public but, as a rule, have no real (material or economic) grounds for practical implementation (see Acemoglu et al., 2013). The actual goals of populist politicians (primarily the struggle for power) are disguised as socially attractive ideas.

Populism is directly associated with the aforementioned conflict between short-term and long-term economic objectives. At best, populist measures yield the promised positive shifts for a short period of time, causing a decrease in longterm stability with a significant price to be paid for its recovery. In the political domain, populism often leads to the destruction of democratic institutions: populists retain power on the wave of short-term achievements, but afterwards, if the situation worsens, they abandon democratic procedures (directly or through manipulation) while promising prosperity after defeating internal and external enemies.

⁸ "Macroeconomic management must ensure that demand always grows as strongly as the supply potential created by technology and globalization. This is the fundamental Keynesian insight that was temporarily rejected in the heyday of monetarism during the early 1980s, successfully reinstated in the 1990s (at least in the US and Britain), but then forgotten again in the deficit panic after 2009" (Kaletsky, 2016).

⁹ In this article, we will use the following political definition of populism: "The presence of a charismatic mode of linkage between voters and politicians, and a democratic discourse that relies on the idea of a popular will and a struggle between 'the people' and 'the elite'" (Hawkins, 2003).

Populism became widely common during the 20th century and became either a source of degradation for many countries (Argentina) or a roadblock along the path of economic progress (see Mudde and Kaltwasser, 2011). Two varieties of populism clearly emerged during that time: political and economic (fiscal). The former could exist without the latter, but the latter was always associated with the former. Political populism is a tool in the struggle for power, but its economic implications are ambiguous. A party that rises on a wave of populist slogans and retains power can pursue any economic policy, whether populist or responsible. In certain cases throughout the 20th century, political populism was accompanied by economic populism, i.e., irresponsible fiscal and monetary policies, property manipulations, etc. This led to economic crises which took a long time to overcome. Most populist regimes in Latin America combined economic and political populism, from Juan Peron during the mid-20th century to Hugo Chavez and Nicolas Maduro in Venezuela during the early 21st century.¹⁰ However, there have been cases where politicians rose to power backed by populist slogans and reputation but managed to pursue a responsible and wellbalanced economic course (e.g., Lula da Silva in Brazil). Current discussions are primarily about political populism, which is associated with attempts to abandon what, until recently, belonged in the domain of "political correctness" or "rules of the game" and is accepted in the modern world (globalization, political equality, etc.). The influence of populist politicians is growing in Europe and America and in a number of developing countries.

The outcomes of 2016 highlight two specific features in the development of modern populism. First, both rightist and leftist populism is clearly increasing. Rightist populism is mostly related to developed countries in Europe and America, while leftist populism is apparent in poorer countries (including European countries such as Italy and Spain). However, the positions of rightist and leftist populism may coincide in certain provisions of an economic program (specifically with regards to globalization).¹¹ Second, macroeconomic (fiscal) populism is a rare phenomenon, which is restricted mostly to the situation in Venezuela. This is important when evaluating the prospects of macroeconomic stability in the world's leading countries.

A populist reaction in the form of anti-globalism may manifest itself in various countries in the near future. Anti-globalism has become an altogether indispensable component of modern populism. In particular, the rise of the US dollar, which appears logical in 2017, may lead to toughening protectionist measures in the US and result in retaliatory measures in certain countries. Various sanction

¹⁰ A classic analysis of 20th century economic populism is offered in a book that was edited by R. Dornbusch and S. Edwards, *The macroeconomics of populism in Latin America*. In this book, populism is defined as "an approach to economics that emphasizes growth and income distribution and deemphasizes the risks of inflation and deficit finance, external constraints and the reaction of economic agents to aggressive non-market policies" (Dornbusch and Edwards, 1991, p. 9; see also: Dornbusch and Edwards, 1990; Sachs, 1989).

¹¹ The results of the referendum in the UK and the US elections in 2016 are of interest in terms of the correlation between rightist and leftist populism in developed countries. Bernie Sanders, a leftist critic of the establishment, lost the Democratic Party primaries to Hillary Clinton, who represented the traditional elites. However, the presidential elections were won by Donald Trump, who actively utilized rightist populist slogans and had much in common with Sanders in his anti-globalist agenda (Di Tella and Rotemberg, 2016, p. 10). Similarly, in the UK, rightist populism is associated with Brexit and confidently dominates the leftist populism of current Labour Party leadership (Jeremy Corbyn).

regimes are also a form of populist response to political and to a greater extent, economic problems. The list of examples is extensive.

The rise of populism seems to be based primarily on economic factors. Decelerating growth and protracted recessions are able to evoke a populist response to problems. (although this is not a strict rule, as confirmed by the 25-year stagnation in Japan). Sustainable growth is a natural though insufficient condition for overcoming populism. However, populism thrives under the favorable conditions of no clearly present growth prospects. Social policy measures may mitigate the risks of realizing populist slogans; they primarily include assistance for those who incur losses as a result of economic progress in adapting to new conditions, particularly by supporting education and other social spheres, which may be more important than providing monetary assistance.

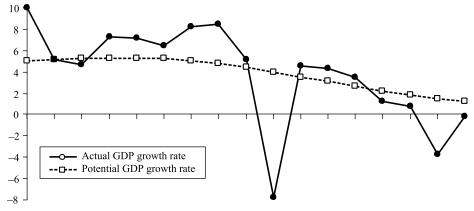
In this political dynamic, a new political polarization is more clearly taking shape and replacing the confrontation of rightist and leftist forces (to clarify, followers of free markets or socialism, liberalism or statism). Currently, it is far more important to note the confrontation between populism and traditional models of modernization. Both rightist and leftist forces that have a "traditional focus" may concentrate on both sides. It is unclear how stable or durable this new configuration is or whether it is of a temporary nature because of the specific circumstances of the current global crisis.

3. Economic crisis and adaptation to the new reality: 2015 and 2016 outcomes

Since 2008, Russia and other developed and leading developing countries have experienced a structural crisis which is gradually shaping a new economic, political, and social reality. Although these countries may have certain common characteristics, Russia has some unique economic and political circumstances that imply a need for substantially different socioeconomic policies than other countries.

From an institutional perspective, the structural crisis in Russia was associated with two sets of circumstances. First, considering the global problems, there was a need to construct a new economic growth model in lieu of the one that was formed after the crisis in the 1970s. Second, because of specific institutional problems in Russia, the recovery process was complete by the end of the 2000s: the economy reached the levels similar to the beginning of the transformational recession between the 1980s and the 1990s. These issues exhausted the opportunities of the extensive growth model based on utilizing idle production capacity and labor resources and incomes that rise faster than GDP growth and productivity. This process was reflected in lower structural growth rates (see Sinelnikov-Murylev et al., 2014; Drobyshevsky and Kazakova, 2016; Fig. 1). To clarify, the transition to the new growth model was dictated not only by the current situation but also by Russia's specific institutional dynamics.

From a macroeconomic perspective, Russia has been confronted with stagflation rather than deflation, i.e., it should achieve growth recovery by suppressing inflation, rather than by stimulating it. Accordingly, monetary and fiscal stimulation methods play a substantially limited role, notwithstanding the low national debt and significant accumulated reserves. 118



2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

Fig. 1. Actual and potential GDP growth rates in Russia (%).

Sources: Rosstat; baseline scenario for the Ministry of Economic Development forecast as of May 6, 2016.

The phenomenon of combined crises (structural, financial, and external shocks) also played a role. These crises required various and often drastically different anti-crisis measures that both stimulate (under structural crisis conditions) and consolidate (under external shocks). These crises initially resulted in highly complicated anti-crisis policies that were not always externally consistent and therefore, were susceptible to criticism.

From a political perspective, since 2014, Russia has engaged in confrontation with a number of leading countries and in addition to searching for a new economic model (and "new normality"), is working actively towards political re-positioning on the global stage. Financial and technological sanctions act as an additional factor in the structural crisis. Falling prices for basic Russian export products have formed a completely new environment for solving urgent economic problems and require stringent measures aimed at adapting the country to the new reality.

By the beginning of 2017, the economic recession had effectively ended and the material production sectors (industry and agriculture) and wholesale trade began to indicate positive trends in 2016. The anti-crisis policy period ended and the objective to ensure economic growth was brought to the forefront.

The anti-crisis policies of 2015 and 2016 deserve a separate analysis. These policies' measures and results are shaping the foundation for the country's further development and a new economic growth model. The lessons from this recent period are useful in terms of the opportunity to use this accumulated experience in the future, because periodic crises are a natural element of a market economy.

From the beginning, the government's anti-crisis policy fell under severe criticism from almost every possible direction. The government was criticized for a tight monetary policy aimed at decisively suppressing inflation, for insufficiently utilizing the US and EU experience with their powerful monetary and fiscal stimulation measures and because of a lack of measures to support various industries or their inefficiencies. These factors were augmented by criticism against the monetary authorities for maintaining high interest rates, insufficient business loans, and tough measures to purge the banking system. These criticisms were justified to a certain extent because there can be no popular economic policy under economic crisis conditions (furthermore, it is not always consistent).

However, one cannot ignore at least two important positive features of the 2014–2016 anti-crisis policies. First, the government and the Bank of Russia avoided populist measures and standard macroeconomic and institutional mistakes that are generally made by authorities under severe economic and political conditions, although they were affected by numerous influential political and economic players. Populist measures may ensure the short-term mitigation of the situation but lead to large long-term losses. Concurrently, a conflict between short-term results (in the form of economic growth) and medium-term goals (improved efficiency) poses the greatest danger for Russia's policy. A fetish for short-term growth rates could have led to populist measures with grave socioeconomic consequences in the not-too-distant future.¹² Second, it should be noted that the actual situation has been considerably better during the past two years than was expected in late 2014. Furthermore, despite a longer recession, it was better than in 2008 and 2009 in terms of most economic indicators, although the political and foreign economic environment was far more adverse (see Appendix A).

Below is a list of certain vital components and outcomes from the anti-crisis policies of 2015–2016, which, in our opinion, lay the foundation for future (post-crisis) economic growth.

The country retained macroeconomic stability, which is manifested primarily in the budget deficit, national debt, and in persistently decreasing inflation. In 2016, the government returned to three-year budgeting. Despite the symbolic nature of this step, it appears to be important for securing confidence in the economic policy. The consistent implementation of a course to reducing inflation to 4% by the end of 2017 is equally important in this respect. In the budget that was adopted, an attempt was made to loosen the traditional tie between its income basis and changes in oil prices. The government recognized the futility of this connection and budgeted for a flat oil price at USD 40 per barrel. This measure effectively introduced a new budget rule that is based on invariable expenses relative to oil price fluctuations.

Holding back expenses helps to control the federal budget deficit and the general government budget deficit, despite the substantial drop in income (even in nominal terms). The federal budget deficit was 2.4% of the GDP in 2015 and 3.5% at the end of 2016, compared with nearly 6% in 2009 or 3.5%, 4.0%, and 6.3% of the general government budget, respectively). For the ratio of the deficit to total federal budget expenses, almost 24% of expenses were covered through deficit financing sources in 2009, compared to 12.6% and 18.1% in 2015 and 2016, respectively. Concurrently, an increase in the total federal budget deficit in 2015 and 2016 coincided with a decreasing oil and gas deficit (from 10.0% to 9.4% of the GDP). Therefore, *the government succeeded in controlling the deficit for both the federal budget and the overall budget system*.

¹² During the "acceleration" policy of 1986–1989, increased growth rates were achieved through macroeconomic destabilization (sharp growth in the national debt and budget deficit) and resulted in a decade-long stagnation that was followed by another decade to return the economy to pre-crisis levels (see more in Mau, 2014, pp. 22–24).

Russia is a country with an exceptionally low national debt at 13% of GDP, and primarily in the national currency, 9%. The regional budget situation is more complicated; over the past few years, it has been very tense, because under crisis conditions, regional budgets were required to perform their social obligations. Although the debt held against regional budgets is low (below 3% of the GDP), the risk of an acute crisis remained quite real over the past few years. In 2016, the situation improved slightly in at least three respects. First, a significant portion of commercial debt was restructured into budget debt and on more favorable terms for the regions. Second, the majority of the regional debt is now denominated in the national currency. Third, the debt owed by the regions began to decrease, although insignificantly, by 0.1% of GDP in 2016 (see more in Deryugin, 2016).

The government budget's dependency on the oil and gas sector is decreasing. The share of oil and gas revenues of the total federal budget revenues is gradually decreasing, from 51% in 2014 and 43% in 2015, to 36% in 2016 (estimated). Undoubtedly, these decreases were conditioned not so much by the diversification of the Russian economy's structure as by falling global oil prices, which were not fully compensated for by the fall of the ruble against the dollar. As a result, the percentage of oil and gas revenues is falling against declining total federal budget revenues, even in nominal terms.

The Bank of Russia's transition to a policy of inflation targeting and a floating foreign exchange rate were criticized by numerous politicians, business professionals, and experts. Concurrently, the difficult decisions made in the autumn of 2014 had significant consequences for macroeconomic stability. By the end of 2016, inflation reached 5.4%, which was unprecedented for modern Russia. The government succeeded in retaining and even increasing international reserves to USD 377.7 billion (+2.5%) as of January 1, 2017.

In recent years, capital flight decreased substantially from USD 152.1 billion in 2014 to USD 57.5 billion in 2015 and then to USD 15.4 billion in 2016 (estimate by RF Central Bank). Outflows of private capital in 2015 and 2016 were to a greater extent related to the repayment of foreign debt by banks and corporations; these outflows cannot be characterized as "capital flight" to other jurisdictions. Accordingly, the country's total foreign debt was reduced. In 2015 and 2016, the foreign debt for state corporations decreased. For example, in 2015, the government's foreign debt according to the extended definition¹³ decreased by 12.1% to USD 268.1 billion and the foreign debt of public authorities decreased by 26.6% to USD 30.6 billion. The latter fact, however, is not a definitely positive phenomenon in terms of growth financing, because it resulted from financial sanctions. Naturally, after the acute crisis and devaluation in 2014, current conditions improved and stability increased; the current account remained positive and the outflow of capital stabilized quickly under a floating foreign exchange rate.¹⁴

¹³ The foreign debt of the public sector according to the extended definition includes the foreign debt owed by public authorities, the central bank, banks, and non-banking corporations in which public authorities and the central bank directly or indirectly own 50% or more of the capital or control the organizations in other manners.

¹⁴ The mechanism for adapting the Russian economy to the decreasing real exchange rate of the ruble was reviewed in Drobyshevsky and Polbin (2016).

Shaping the institutional framework for future economic growth, the Bank of Russia pursued consistent and stringent measures to *revitalize the banking sector* and remove lending institutions from the market that did not meet the regulator's supervisory requirements. 97 banking licenses were revoked in 2016, which is slightly more than in the previous years (93 licenses were revoked in 2015 and 86 in 2014). Lending institutions whose licenses were revoked in 2016 held RUB 1.2 trillion in total assets or 1.4% of the total assets of the banking sector at the beginning of 2016 (RUB 1.1 trillion or 1.4% in 2015 and RUB 0.4 trillion or 0.8% in 2014).

Closing these banking institutions resulted in positive shifts in banks' operations. Following a sharp reduction in profits in 2015, when the banking sector earned RUB 192 billion, profits began to recover and the banking sector earned RUB 930 billion in profits in 2016. However, the return on equity (11%) in annual terms in 2016, was significantly lower than from 2011 to 2013 (17%–19%).

Deposits by companies and households are boosting the stability of the banking system and simultaneously laying the foundation for economic growth. Bank deposits grew in 2015; this is an important indicator because own resources are the primary source of investments for companies. However, this trend changed in 2016 because of the ruble exchange rate appreciation against foreign currencies and a reduction in interest rates on deposits. In 2016, the total term deposits held by companies in the banking system decreased by RUB 1.5 trillion, to RUB 12.1 trillion as of January 1, 2017. These funds remain significant despite being reduced from a 35-day cycle as of January 1, 2016, to a 30-day cycle as of January 1, 2017 (prior to 2014, term deposits did not exceed a 20-day cycle).

Similarly, in 2015 and 2016, a certain amount of growth was observed that was followed by stabilization in *the savings held by households in banks*. The deposit growth rate was between 11% and 12% in 2016. Ruble deposits increased by 14% over 2016 and reached 18.4 trillion (as of January 1, 2017), while foreign exchange deposits barely changed: USD 94.0 billion at the beginning of the year and USD 94.8 billion as of January 1, 2017 (a 0.8% increase). The proportion of deposits held in foreign currencies decreased from 29.8% as of January 1, 2016 to 23.8% as of January 1, 2017. The floating foreign exchange rate apparently resulted in no mass transfer of ruble deposits into foreign exchange that occurred for the first time in the contemporary Russian history.

Mortgage loans. Following the mortgage boom in 2013 and 2014, when the housing loan debt grew by 31%–32% annually and the annual disbursement of new loans reached RUB 1.82 trillion, the amount of mortgage disbursements dropped sharply in 2015 (RUB 1.17 trillion); however, demand for mortgages increased by approximately 27% in 2016 to RUB 4.5 trillion. As a result, the total housing loan debt held by individuals reached RUB 4.4 trillion in 2016. Overdue debts related to those loans remain insignificant at 1.7% of the total debt. Concurrently, the NPL share is 1.2% for ruble housing loans and over 30% for foreign currency loans, but the share of total housing loans held in foreign currencies does not exceed 2% of the total housing loans.

Retail loans. The total debt for retail loans stopped decreasing at the end of 2016. The annual increase as of the end of December 2016 became positive (+0.7%); the debt decreased by 7.3% in 2015. An increase in housing loan debt

implies a corresponding reduction in consumer loan debt. The proportion of overdue debt reached its peak level in August 2016 (9.0% of all loans and 13.5% of consumer loans), after which it began to slowly decline (to 8.6% and 13.2%, respectively).

The accumulated debt of Russian households is insignificant when compared to developed market economies; it is slightly more than RUB 11 trillion (13% of GDP). However, considering the higher interest rates (the average annual cost of a performing bank loan was 16.4% in 2016) and short maturities (according to the repayment schedule, the average term on retail loans is 44 months; the actual term considering early repayments is 18 months), the servicing of bank loans in Russia accounted for 10% of disposable household income in 2016, as in the US, where retail loan debt is approximately 78% of the GDP. To clarify, the debt service burden for the average Russian is the same as that for the average American, but the relative amount of debt in Russia is six times lower. It should be noted that over the past two years, the debt burden relative to income decreased; it peaked at approximately 12% of disposable income in 2014 (Fig. 2).

Employment. An important factor in ensuring social and political stability was the low level of unemployment which, during the past two years, was 5%-6% of the working-age population. The working-age population continued to decline because workers from a sizable generation were retiring. Conversely, the specific aspects of the Russian labor market contributed to this trend; the reduction in economic activity (crisis) was accompanied not by decreased employment, but by a reduction in working hours and payments. Both factors are interrelated because the demographic situation is forcing employers to maintain official employment instead of relying on the open labor market (see Appendix A).

The greatest difficulties because of falling oil prices befell industries that benefited the most from the Dutch disease, primarily services (particularly commerce) and construction. Their adaptation and recovery began only in 2016, which was reflected in the demand for consumer and mortgage loans. In these areas, there is a gradual positive trend, which is natural given the deflating consumer bubble circumstances that are characteristic of booming rental income periods.

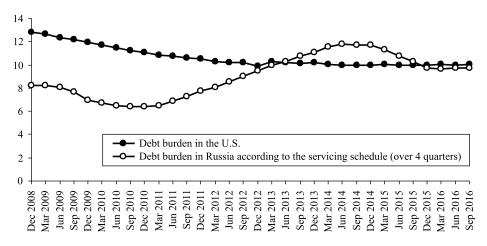
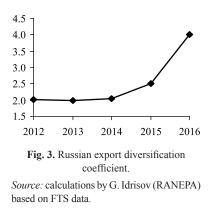


Fig. 2. Debt burden as a percentage of disposable household income in Russia and the US (%). *Sources:* Bank of Russia, Federal State Statistics Service; Federal Reserve; Gaidar Institute estimates.

Diversification of Russian exports. In 2015 and 2016, controversial and simultaneously important shifts occurred in the trends for Russian exports. The general trend is for declining exports at times when their structure is being diversified. This reduction is understandable given the decelerating global economy and growing geopolitical tension that results in declining demand for products and, respectively, declining prices. This process also explains the diversification of exports because the prices for fuel and energy products and metals fell significantly, even further than other product categories. As a result, beginning in 2014, the proportion of exports from fuel and energy products has decreased continuously (from

72% in 2014 to below 60% in 2016) and the share of other product categories has increased (agriculture, chemicals, light industry, textiles, machinery and equipment). The reduction in the total value of exports in non-energy industries progressed at lower rates; in some industries growth was observed (see Table). The volume of agricultural exports reached the volume of armament exports and even exceeded them. This resulted in the diversification of Russian exports; the export diversification coefficient doubled from 2014 to 2016 (Fig. 3).¹⁵



The export situation reflects a problem typical for modern crises, i.e., an inconsistency between short-term and long-term economic growth objectives. The reduction in exports is undoubtedly an unpleasant phenomenon that negatively impacts current growth and budget opportunities. However, the diversification of exports is laying the foundation for stable economic trends and a stable budget system in the medium term. Of course, this stability implies that the government and businesses can take advantage of the evolving circumstances and ensure the increasing competitiveness of non-commodity industries, without relying exclusively on the advantages of a low foreign exchange rate (see Kadochnikov et al., 2016).

4. Conclusions

The recession in Russia finally ended around the start of 2017. The initial adaptation of the domestic economy to the new economic and political reality occurred, which may be of a long-term nature. However, the end of the recession does not equate to the end of the global crisis or the resolution of structural problems in the Russian economy. The primary negative factors that affect the socioeconomic dynamics remain. The world economy continues to be turbulent and it will pose new and challenging objectives for the governments of leading countries, including Russia. Furthermore, these negative factors are

¹⁵ The degree of Russian export diversification was calculated based on the diversification index used by the World Bank (the Herfindahl-Hirschman index; see http://wits.worldbank.org/wits/wits/witshelp/Content/Utilities/e1.trade_indicators.htm).

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Changes in the breakdown of export and import products in Russia from 2014 through 2016 (% of total).

EAEU	Product category	Export			Import		
TN VED ¹⁾ code		2014	2015	2016	2014	2015	2016
	Total	100.0	100.0	100.0	100.0	100.0	100.0
01–24	Food products and agricultural raw materials (except for textiles)	3.8	4.7	6.0	13.9	14.5	13.7
25–27	Mineral products	70.5	63.8	59.2	2.5	2.7	1.8
27	Fuel and energy products	69.5	62.9	58.1	1.4	1.6	0.8
28-40	Chemical industry products, rubber	5.9	7.4	7.3	16.2	18.6	18.5
41–43	Raw hides, furs, and derivative products	0.1	0.1	0.1	0.4	0.5	0.4
44–69	Wood and paper products	2.3	2.9	3.4	2.1	2.0	1.9
50–67	Textiles, textile products and footwear	0.2	0.2	0.3	5.7	5.9	6.0
71	Precious stones, precious metals, and derivative products	2.4	2.3	3.1	0.4	0.3	0.2
72-83	Metals and derivative products	8.2	9.6	10.2	6.7	6.4	6.2
84–90	Machinery, equipment, and vehicles	5.3	7.4	8.5	47.6	44.8	47.4
68–70, 91–97	Other products	1.4	1.6	1.9	4.4	4.2	3.9

1) Commodity classification for foreign economic activity.

Sources: Russian FTS (official website, Customs Statistics for Foreign Trade section. http://www.customs.ru/ index.php?option=com_content&view=article&id=13858&Itemid=2095); calculations by the Russian Academy for Foreign Trade.

more complex than those that were solved during the previous stage of anticrisis policy and adaptation.

The complexity of the objectives does not imply that their solution must be more socially painful. Rather, it implies that the intellectual complexity of developing measures must ensure sustainable economic growth in the medium and long term and refers to the political complexity of consolidating forces (interest groups) to implement this program.

In a concentrated form, the economic and political objective for the near future was formulated by President Putin at the end of 2016 in his address to the Federal Assembly. Putin outlined that his primary goal is to ensure the development of the Russian economy at a rate that exceeds the world average. This is quite a precise definition that allows a departure from measuring against absolute desirable growth rates because the Russian economy is deeply integrated into the world economy and its rate of growth cannot be independent from global growth. Russia's current level of socioeconomic development allows for focus on this rate for the foreseeable future. The task of developing this type of program was commissioned in December by the Russian government and primarily, for the Ministry of Economic Development. The outline of this program is well known.¹⁶ However, it should be completed with a system of specific measures that go far beyond the economic domain. It is control understood today, that achieving Russia's strategic development objectives is only possible if

¹⁶ Measures of structural modernization have been discussed in detail in the economic literature, including by the author of this article (see, e.g.: Mau and Kuzminov, 2013; Mau, 2016b, pp. 29–32; Idrisov and Sinelnikov-Murylev, 2014).

the economy, governmental administration, social policy, and law enforcement activity are comprehensively modernized.

The government specified priority projects around which it began to build a policy to stimulate growth. These projects include healthcare, education, mortgage and rental housing, international cooperation and exports, labor productivity, small businesses and support for entrepreneurial initiatives, reforming control and supervision activity, free and high-quality roads, single-industry towns, and the environment. To implement these projects, a special Presidential Council on Strategic Development and Priority Projects was established. If detailed further, these sections should become the industry-specific and institutional basis for an economic growth strategy. However, in developing measures for each of these domains, it is important to overcome the traditional approaches that were used during the pre-crisis period and analyze from the vantage point of the new reality which recently took shape.

Another specific feature of the past year was that several groups of economists began work on the long-term socioeconomic development program (strategy). Respective tasks were assigned to the Presidential Council for Strategic Development and Priority Projects, the Center for Strategic Development, headed by the Deputy Chairman of the Russian Presidential Economic Council, Alexey Kudrin and to a group of businessmen and economists headed by Business Ombudsman, Boris Titov, united under the aegis of the Stolypin Club. They all must present their proposals in 2017, which, among other things, will become a component of the upcoming presidential campaign. These programs can be benchmarked against each other. We are expecting a difficult period, which will require flexibility from the authorities, and consistency in their course. Flexibility will be needed to meet new challenges, while consistency will be needed to solve the fundamental (if not secular) tasks of comprehensively (not only economic) modernizing Russia.

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References

- Acemoglu, D., Egorov, G., & Sonin, K. (2013). A political theory of populism. *Quarterly Journal of Economics*, 128 (2), 771–805.
- BEA (2000). GDP: One of the great innovations of the 20th century. In Survey of Current Business (pp. 6–9). Bureau of Economic Analysis, January.
- Brynjolfsson, E., & Hitt, L. M. (2000). Beyond computation: Information technology, organizational transformation and business performance. *Journal of Economic Perspectives*, 14 (4), 23–48.
- Brynjolfsson, E., & McAfee, A. (2011). *Race against the machine: How the digital revolution is accelerating innovation, driving productivity, and irreversibly transforming employment and the economy*. Lexington, MA: Digital Frontier Press.
- Cowen, T. (2011). The Great Stagnation: How America ate all the low-hanging fruit of modern history, got sick, and will (eventually) feel better. New York: Dutton.
- DeLong, J. B. (2016). The economic trend is our friend. Project Syndicate, August 31.

- Deryugin, A. (2016). Regional budgets: At the limit of possibilities. *Ekonomicheskoe Razvitie Rossii*, 12, 70–75 (In Russian).
- Di Tella, R., & Rotemberg, J. J. (2016). Populism and the return of the "Paranoid style": Some evidence and a simple model of demand for incompetence as insurance against elite betrayal (Working Paper 17-056). Cambridge, MA: Harvard Business School.
- Dornbusch R., Edwards S. (1990). Macroeconomic populism. Journal of Development Economics, 32 (2), 247–277.
- Dornbusch, R., & Edwards, S. (Eds.) (1991). The macroeconomics of populism in Latin America. Chicago and London: University of Chicago Press.
- Drobyshevsky, S., & Kazakova, M. (2016). Decomposition of GDP growth rates in 2016–2019. *Ekonomicheskoe Razvitie Rossii*, 6, 3–7 (In Russian).
- Drobyshevsky, S., & Polbin, A. (2016). On the role of floating ruble in stabilizing business activity under foreign trade shocks. *Problemy Teorii i Praktiti Upravleniya*, 6, 66–71 (In Russian).
- El-Erian, M. (2016). The international barriers to Trump's economic plan. *Project Syndicate*, December 16.
- Hawkins, K. (2003). Populism in Venezuela: The rise of Chavismo. *Third World Quarterly, 24* (6), 1137–1160.
- Gordon, R. J. (2013). Is U.S. economic growth over? Faltering innovation confronts the six headwinds. *Voprosy Ekonomiki*, 4, 49–67 (In Russian).
- Gordon, R. J. (2016). *The rise and fall of American growth. The US standard of living since the Civil War.* Princeton, NJ: Princeton University Press.
- Idrisov, G., & Sinelnikov-Murylev, S. (2014). Forming sources of long-run growth: How to understand them? *Voprosy Ekonomiki*, 3, 4–20 (In Russian).
- Kadochnikov, P., Knobel, A., & Sinelnikov-Murylev, S. (2016). Openness of the Russian economy as a source of economic growth. *Voprosy Ekonomiki*, 12, 26–42 (In Russian).
- Kaletsky, A. (2016). The crisis of market fundamentalism. *Project Syndicate*, December 23.
- Masood, E. (2016). *The great invention. The story of GDP and the making and unmaking of the modern world.* New York: Pegasus Books.
- Mau, V. (2014). Waiting for a new model of growth: Russia's social and economic development in 2013. Voprosy Ekonomiki, 2, 4–32 (In Russian).
- Mau, V. A. (2016a). Crises and lessons. Russian economy in a turbulent epoch. Moscow: Gaidar Institute Publ. (In Russian).
- Mau, V. (2016b). Anti-crisis measures or structural reforms: Russia's economic policy in 2015. Voprosy Ekonomiki, 2, 5–33 (In Russian).
- Mau, V. A., Kuzminov Ya. I. (Eds.) (2013). Strategy-2020: *A new growth model—new social policy*. Moscow: Delo (In Russian).
- Mokyr, J. (2014). Secular stagnation? Not in your life. In C. Teulings, R. Baldwin (Eds.), Secular stagnation: Facts, causes, and cures (pp. 83–89). London: CEPR Press.
- Mudde, C., & Kaltwasser, C. R. (2011). Voices of the peoples: Populism in Europe and Latin America compared. *Kellog Institute Working Paper*, No. 378.
- Nordhaus, W. D. (2016). Why growth will fall. The New York Review of Books, August 18.
- Qureshi, Z. (2016). The productivity outlook: Pessimists versus optimists. Washington, DC: Brookings Institution.
- Reinhart, C. (2016). What's new about today's low interest rates? Project Syndicate, July 28.
- Sachs, J. D. (1989). Social conflict and populist policies in Latin America. NBER Working Paper, No. 2897.
- Sinn, H.-W. (2016). Secular stagnation or self-inflicted malaise? Project Syndicate, September 27.
- Shiller, R. J. (2016). The global economy hesitation blues. Project Syndicate, July 21.
- Sinelnikov-Murylev, S., Drobyshevsky, S., & Kazakova, M. (2014). Decomposition of Russian GDP growth rates in 1999–2014. *Ekonomicheskaya Politika*, 5, 7–37 (In Russian).
- Solow, R. (1987). We'd better watch out. New York Times Book Review, July 12.
- Summers, L. (2014). Reflections on the "New secular stagnation hypothesis." In C. Teulings, R. Baldwin (Eds.), *Secular stagnation: Facts, causes, and cures* (pp. 27–38). London: CEPR Press.
- The Economist (2016). Uber: From zero to seventy (billion). The Economist, September 3.
- Wolf, M. (2016). Negative rates are not the fault of central banks. Financial Times, April 12.

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Indicator	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Macroeconomic indicators (growth in physical volume										
as a % of the previous year)										
GDP	8.5	5.2	-7.8	4.5	4.3	3.5	1.3	0.7	-2.8	-0.2
Industry	6.8	0.6	-10.7	7.3	5.0	3.4	0.4	1.7	-0.8	1.3
Agriculture	3.3	10.8	1.4	-11.3	23.0	-4.8	5.8	3.5	2.6	4.8
Construction	18.2	12.8	-13.2	5.0	5.1	2.5	0.1	-2.3	-4.8	4.3
Wholesale trade	9.5	5.4	2.0	3.0	4.4	3.6	0.7	-3.6	-10.0	1.3
Retail trade	16.1	13.7	-5.1	6.5	7.1	6.3	3.9	2.7	-10.0	-5.2
Retail consumption by household	14.3	10.6	-5.1	5.5	6.8	7.4	4.4	2.0	-9.8	4.5
Investments in fixed capital	23.8	9.5	-13.5	6.3	10.8	6.8	0.8	-1.5	-10.1	-0.9
Share of wages in GDP (methodology change in 2011)	46.7	47.4	52.6	49.6	43.9	44.2	46.7	47.2	45.1	46.7
Share of profits and mixed income within GDP (methodology change in 2011)	34.1	32.6	30.8	32.6	41.5	41.1	39.1	38.9	43.8	42.4
Public finance and international reserves										
Surplus (+)/deficit (-) of the consolidated budget (% of GDP)	6.0	4.9	-6.3	-3.4	1.4	0.4	-1.2	-1.1	-3.4	-3.7
Surplus (+)/deficit (-) of the federal budget (% of GDP)	5.4	4.1	-6.0	-3.9	0.8	-0.1	-0.5	-0.5	-2.4	-3.4
Oil and gas deficit of the federal budget (% of GDP)	-3.3	-6.5	-13.7	-12.2	-9.3	-10.5	-10.4	-10.9	-9.4	-9.1
Russian domestic national debt (at year end, RUB billion)	1248.8	1499.8	2094.7	2940.4	4190.6	4977.9	5722.2	7241.2	7307.6	8003.0
Foreign national debt (Ministry of Finance data, USD billion)	44.9	40.6	37.6	40.0	35.8	50.8	55.8	54.4	50.0	51.2
Consolidated national debt (% of GDP)	7.2	6.5	8.3	9.0	9.0	9.7	10.6	13.0	13.2	12.9
Reserve Fund (2007-Stabilization Fund; at year end, USD billion)	156.81	137.09	60.52	25.44	25.21	62.08	87.38	87.91	49.95	16.03
National Welfare Fund (at year end, USD billion)		87.97	91.56	88.44	86.79	88.59	88.63	78.0	71.72	71.87
International reserves at the Bank of Russia (at year end)	478.8	427.1	439.0	479.4	498.6	537.6	509.6	385.5	368.4	377.70
Prices and interest rates										
Consumer price index, December over December	11.9	13.3	8.8	8.8	6.1	6.6	6.5	11.4	12.9	5.4
Producer price index, December over December	25.1	-7.0	13.9	16.7	12.0	5.1	3.7	5.9	10.7	7.4
	6.0	6.9	8.3	5.3	5.3	5.3	5.5	7.9	12.6	10.6
repurchase transactions for 1 day), annual average, % p.a.)								C	(continued on next page)	n next pag

Table A1 (continued)										
Indicator	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Average interest rate on RUB loans to businesses (annual average % n a)	10.0	12.2	15.3	10.8	8.5	9.1	9.5	11.1	15.7	12.6
Average interest rate on individual deposits (except for demand deposits, % p.a.)	7.2	7.6	10.4	6.8	5.4	6.5	6.5	6.7	9.7	7.3
Labor market										
Overall unemployment rate (ILO methodology, annual average, %)	6.0	6.2	8.3	7.3	6.5	5.5	5.5	5.2	5.6	5.5
Average wages (RUB thousand/month)	13.6	17.3	18.6	21.0	23.4	26.6	29.8	32.5	34.0	36.7
Wages in real terms	17.2	11.5	-3.5	5.2	2.8	8.4	4.8	1.2	0.6-	0.6
Real disposable household income	12.1	2.4	3.0	5.9	0.5	4.6	4.0	-0.7	-3.2	-5.9
Population with cash income below the subsistence level, in millions	18.8	19.0	18.4	17.7	17.9	15.4	15.5	16.1	19.1	20.3
Banking system										
Number of active lending institutions at year end	1136	1108	1058	1012	978	956	923	834	733	623
Number of banking licenses revoked during the year	49	33	43	27	18	22	32	86	93	97
Assets	46.1	32.7	3.7	14.8	21.4	20.4	14.2	18.6	-1.5	2.1
Debt owed by domestic corporations (excluding banks) through bank loans	52.4	28.6	0.0	9.6	22.8	15.5	11.6	12.7	5.0	-0.1
Debt owed by domestic individuals through bank loans	58.3	31.2	-11.7	14.4	35.5	39.1	27.7	11.6	-7.3	0.7
Share of overdue loans to domestic corporations, excluding banks	0.9	2.2	6.0	5.5	4.8	4.6	4.1	4.1	6.0	6.1
Share of overdue loans to individuals	3.1	3.6	6.9	7.1	5.3	4.1	4.5	6.0	8.4	8.3
Profit, RUB billion	508	409	205	573	848	1012	994	589	192	930

Sources: Rosstat; Ministry of Finance; Bank of Russia.