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Global crisis and challenges for Russian economic development

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Abstract

Global crisis forms new economic policy agenda which raises new questions for economic theory and economic thinking. This paper deals with these new intellectual challenges. Among them: growth theory and the risks of secular stagnation, unconventional macroeconomic policy and the prospects of financial stability, inequality and growth, the new welfare state, the prospects of globalization vs. de-globalization, and the re-industrialization in advanced economies. Based on the analysis of global trends, the paper discusses the roots and features of current Russian economic problems, compares the 2008–2009 and 2014–2015 crises, and factorizes the last one on three main components. The analysis includes the effects of sanctions against Russia on the current economic situation and the structural problems that slow down economic growth. Special attention is paid to examples of medium-term and long-term steps that can provide sustainable development for the Russian economy.

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1. Introduction: Global crises — in general and in particular

Economic development in the advanced countries is being determined primarily by the causes and the character of the global crisis that erupted in 2008 and that continues to the present day. This crisis is of a particular type: it cannot be explained in terms of one or two parameters (for example, in terms of decline in production or growth in unemployment), and it is multi-dimensional and affects many spheres of socio-economic life. In most cases, it has had serious socio-political consequences. This is a systemic crisis and, in this respect, resembles the crises of the 1930s and the 1970s (Mau, 2009).

Comparisons are not straightforward. The lessons learned in overcoming the systemic crises of the past cannot automatically be applied in different circumstances. Even so, systemic crises have a number of qualitative features in common. This means they can be treated as

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a single category and compared, even if the anti-crisis policies that were effective in one case do not apply in another. We consider the distinguishing features of a systemic crisis to be the following.

First: A systemic crisis is both cyclical and structural. It involves fundamental institutional and technological changes, that is, a transformation of the technological base (which some economists term the "mode of technology"). These changes raise the economy to a qualitatively higher level of efficiency and labor productivity. A renewal of the technological base, during which the latest technical and scientific innovations are applied, is the main precondition for emerging from the crisis.¹

Second: A financial crisis is a significant component of any systemic crisis. The combination of financial crisis and economic crisis (decline in production and employment) renders the crisis even more difficult to overcome and creates the need for a variety of structural and institutional reforms to steer the economy back onto a trajectory of sustainable growth.

Third: The consequence of a systemic crisis is the formation of a new economic growth model: this involves the structural modernization of both the developed and developing economies and, in turn, the creation of new technological "drivers." At present, the emergence of new branches and sectors of the productive economy, and their geographical relocation throughout the world, is creating a new global economic reality that poses new challenges that require the adoption of new instruments of economic policy. This trend is captured well in an expression that began to be used in 2009: "the new normal" (El-Erian, 2010; Ulyukaev, 2010).

Fourth: Significant geo-political and geo-economic shifts take place, and new balances of power (involving both countries and regions) are achieved on a global scale. In the early stages of the present crisis, it was assumed that this would result in the consolidation of a bi-polar world centered around the United States and China, sometimes referred to as the "G2," the "Big Two" (Brzezinski, 2009), or "Chimerica" (Ferguson, 2008). However, we are gradually but ever more distinctly beginning to see the formation of a multi-polar world in which two or three key economic centers predominate but that resembles a return to the well-known nineteenth century "concert of nations" model, which is held in place by the need to balance interests. With adjustments to take present-day circumstances into account, we could speak of a balance of interests among regional power groupings.

Fifth: During the course of a systemic crisis, important changes take place in the regulation of socio-economic processes. During the 1930s, the transition to a phase of industrial development was brought to completion, as were the ideology and practice of the "big government." This meant an increase in taxation and of budget expenditure, state property, and planning, and in some cases, the determination of prices by the state. By contrast, the crisis of the 1970s resulted in large-scale liberalization and deregulation, in a reduction in taxation, and in privatization—in a word, in what was required for the transition to a post-industrial stage of technological development. At the beginning of the current crisis, it seemed that the world was again returning to a model of state domination of the economy (the term "Crass Keynesianism" has been employed). However, this tendency does not seem to have established itself. Certainly, there has been an increase in state regulation, but it seems to have been confined primarily to national and global financial markets. It is true that a significant anomaly currently exists in that while financial activity operates on a global scale, regulatory mechanisms have remained national. In the absence of a system of global governance, there is need for a mechanism to regulate global finance.

¹ Some economists have interpreted changes in the technological base as an example of "long cycles of conjuncture" (long waves of 50 to 60 years in duration) per N. D. Kondratiev (1925). This is an interesting and potentially useful hypothesis, but it has not been empirically proven, nor can it be in the absence of sufficient statistical data. Kondratiev himself considered "long cycles" to be only a hypothesis.

Sixth: A systemic crisis places the need for a new global financial architecture. Following the crisis of the 1930s, the world adopted a single reserve currency—the US dollar. After the 1970s, a dual system based on the dollar and the euro was adopted. How the currency system will evolve in the aftermath of the present crisis is not yet clear. If there is a consolidation of regional groupings in the global balance of power, this might be accompanied by a strengthening of the Chinese yuan or of regional reserve currencies. A proliferation of reserve currencies could contribute to the emergence of a multi-polar world and encourage increased accountability by the corresponding monetary authorities (to the extent that the reserve currencies would compete with each other).

Seventh: A new economic doctrine has been formulated, that is, a new orthodoxy in thinking. Examples from the twentieth century include Keynesianism and neo-liberalism.

All of the above have important implications for understanding how to overcome a systemic crisis and manage the processes involved. A systemic crisis poses a profound intellectual challenge: a fundamental examination of its causes and development is needed, as are the means for overcoming it. Just as generals are always preparing by looking at wars of the past, so politicians and economists tend to think in terms of crises of the past. This might be appropriate as long as the problem seems to be the business cycle. This is why the first response to a systemic crisis entails recourse to the methods of the past. In the 1930s, we had the case of the government of Herbert Hoover (and primarily of his Secretary of Treasury, Andrew Mellon), who decided not to interfere in the natural course of events, maintaining a strictly balanced budget and strengthening the monetary system based on the gold standard. As the experience of the preceding 100 years seemed to show, crises usually lasted only a year, and no special policy was needed to bring them to an end. Similarly, in the 1970s, the methods applied at the beginning of the crisis were those of conventional Keynesian regulation (budget stimulation during decelerating growth rates and even, during the administration of Richard Nixon, government price controls), but this resulted in a surge of inflation and the onset of stagflation.

In fact, systemic crises cannot be dealt with by applying the economic policies of preceding decades. Too many new problems arise, and it is unclear from the outset what mechanisms are driving the crisis, what is its scale, how long it will last, and how it can be overcome. In the twentieth century, it usually took around ten years to overcome a systemic crisis. Paul Volcker drew attention to this circumstance in July 1979, in the midst of the last systemic crisis, when he was appointed Chairman of the Federal Reserve System: "...we're face to face with economic difficulties really unique to our experience. And we've lost that euphoria..., that we knew all the answers to managing the economy" (Carter, 1980. Book 2. P. 1405).

A systemic crisis cannot be understood merely as a recession, as an increase in unemployment, or as a run on the banks. It comprises a number of phases and waves that affect specific sectors of the economy and, in particular, countries and regions. It lasts for approximately a decade, one that is usually "turbulent." Moreover, the statistical data do not accurately or even adequately describe the economic processes at work. While technological renewal transforms (to a significant degree) the actual dynamics of economic output, the statistical methods in use fail to adequately describe the emergence of new sectors in the economy.

Problems also arise with employment statistics. An increase in employment is one of the main indicators that an economy is emerging from a cyclical crisis. However, in the case of a systemic crisis, this increase is apparent only at the very end. Technological renewal makes new demands on structure of labor resources: in other words, significant structural changes take place in the labor market. This means that during the emergence from a systemic crisis, an employment recovery will be delayed, and there will be high unemployment even as the economy grows. The old statistical measures are incapable of reflecting the realities of the new economy, and some time is required before they are able to do so.

Finally, a systemic crisis cannot be overcome merely by macroeconomic policy or macroeconomic regulation, whatever the magnitude of budgetary, monetary, and credit problems might be. A responsible macroeconomic policy should not lose sight of the importance of structural and institutional change and of the need to modernize the socioeconomic system.

A systemic crisis may be described as a *period innovation* in that it involves the emergence (before, during, and after the crisis) of new economic and political institutions, the arrival of a new generation of political leaders, entrepreneurs and experts, and the construction of a new technological base—the replacement of the technology that was produced during the previous systemic crisis. Such a crisis is resolved only after the advances and transformations described above have been completed—in other words, once the problems that have arisen have been resolved. We are referring primarily to:

- economic growth rates, specifically the likelihood of a lengthy period of low growth rates (secular stagnation);
- new challenges in macroeconomic policy involving the widespread application of non-traditional methods (particularly in the sphere of money circulation);
- the problem of inequality in the context of the emergence of a new model of economic growth, which is bound up with the problems from the lengthy slow-down that precedes economic recovery;
- a revision of our understanding of the theory and institutions of the welfare state in order to take the demographic and political realities of the twenty-first century into account;
- the prospects for globalization or de-globalization;
- the prospects for re-industrialization and new technological challenges.

The problems we have identified require rethinking the theoretical foundations of present-day economic policy and of the practical measures currently being applied. During the years 1980–2000, the priorities were economic growth and macroeconomic stability, and the main obstacles to achieving these were considered inflation and excessive state intervention in managing the economy. This is the understanding of the goals and risks as summarized in the so-called "Washington Consensus," a set of guidelines aimed primarily at developing countries (Williamson, 1989). We do not deny the importance of macroeconomic stability, but economists and political leaders are now confronted with the task of finding additional tools with which to manage economic development.

2. Stimulating economic growth

In the decade before the crisis, the world experienced unprecedentedly high growth rates. It was considered that they were the result of the new methods of political and economic management, which could continue to be applied indefinitely. This was why monetary authorities (especially in the United States) were reluctant to restrict growth in lending, which would have helped avoid overheating the economy. High growth rates were achieved in both the developed and developing countries. Now growth has slowed down, and this has raised a number of questions.

Should we consider low growth rates to be an integral part of the "new normal" people began talking about as early as the onset of the crisis (Tables 1–2)? Does the "new normal" consist primarily of particular instruments of monetary policy (quantitative easing, low interest rates, etc.), or do we mean that as a result of these policies a sustainable period of low growth rates will be achieved? In other words, do current low growth rates reflect short-term problems (that are an integral part of the crisis that has not yet been overcome), or are they a characteristic feature of a future, post-crisis model of economic development?²

There is a related question concerning the growth prospects for emerging economies and, especially, for the countries that were expected to produce an economic miracle. The very

² Larry Summers doubted the feasibility of ensuring sustainable growth in the United States in the long term (Summers, 2013, 2014).

Table 1GDP growth rates, 1990–2013 (%).

	Share of global GDP, 2013	1990	1991	1992	1993	3 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
World		3.5	2.4	2.4	2.2	3.4	3.4	3.9	4.2	2.5	3.6	4.8	2.5	3.0	4.0	5.4	4.9	5.6	5.7	3.0	0.0	5.4	4.1	3.4	3.3
Advanced economies	43.62	3.3	1.5	2.3	1.5	3.4	2.9	3.0	3.6	2.7	3.6	4.1	1.4	1.7	2.1	3.2	2.8	3.1	2.8	0.1	-3.4	3.1	1.7	1.2	1.4
United States	16.45	1.9	-0.1	3.6	2.7	4.0	2.7	3.8	4.5	4.5	4.7	4.1	1.0	1.8	2.8	3.8	3.3	2.7	1.8	-0.3	-2.8	2.5	1.6	2.3	2.2
Japan	4.58	5.6	3.3	0.8	0.2	0.9	1.9	2.6	1.6	-2.0	-0.2	2.3	0.4	0.3	1.7	2.4	1.3	1.7	2.2	-1.0	-5.5	4.7	-0.5	1.5	1.5
Germany	3.45	5.7	5.0	1.5	-1.0	2.5	1.8	0.8	1.8	1.7	1.7	3.3	1.6	0.0	-0.4	0.7	0.9	3.9	3.4	0.8	-5.1	3.9	3.4	0.9	0.5
UK	2.28	1.8	-1.3	1.3	3.5	5.0	3.5	3.5	4.4	3.6	2.9	4.4	2.2	2.3	3.9	3.2	3.2	2.8	3.4	-0.8	-5.2	1.7	1.1	0.3	1.7
France	2.49	2.9	1.0	1.6	-0.6	2.3	2.1	1.4	2.3	3.6	3.4	3.9	2.0	1.1	0.8	2.8	1.6	2.4	2.4	0.2	-2.9	2.0	2.1	0.3	0.3
Italy	2.00	2.1	1.4	0.8	-0.9	2.2	2.9	1.1	1.9	1.4	1.5	3.7	1.9	0.5	0.0	1.7	0.9	2.2	1.7	-1.2	-5.5	1.7	0.4	-2.4	-1.9
Canada	1.49	0.2	-2.1	0.9	2.3	4.8	2.7	1.7	4.3	4.1	5.0	5.1	1.7	2.8	1.9	3.1	3.2	2.6	2.0	1.2	-2.7	3.4	2.5	1.7	2.0
Emerging economies	56.38	3.8	3.9	2.5	3.2	3.3	4.1	5.2	5.0	2.3	3.7	5.7	3.8	4.6	6.4	8.0	7.3	8.2	8.6	5.8	3.1	7.5	6.2	5.1	4.7
China	15.84	3.8	9.2	14.2	14.0	13.1	10.9	10.0	9.3	7.8	7.6	8.4	8.3	9.1	10.0	10.1	11.3	12.7	14.2	9.6	9.2	10.4	9.3	7.7	7.7
India	6.65	5.5	1.1	5.5	4.8	6.7	7.6	7.5	4.1	6.2	8.8	3.8	4.8	3.8	7.9	7.9	9.3	9.3	9.8	3.9	8.5	10.3	6.6	4.7	5.0
Russian Federation	3.43		-5.0	-14.5	-8.7	-12.7	-4.1	-3.6	1.4	-5.3	6.4	10.0	5.1	4.7	7.3	7.2	6.4	8.2	8.5	5.2	-7.8	4.5	4.3	3.4	1.3
Brazil	2.96	-4.2	1.0	-0.5	4.7	5.3	4.4	2.2	3.4	0.0	0.3	4.3	1.3	2.7	1.1	5.7	3.2	4.0	6.1	5.2	-0.3	7.5	2.7	1.0	2.5
Indonesia	2.34	7.2	7.0	6.5	8.0	7.5	8.2	7.8	4.7	-13.1	0.8	4.2	3.6	4.5	4.8	5.0	5.7	5.5	6.3	6.0	4.6	6.2	6.5	6.3	5.8
Mexico	2.02	5.2	4.2	3.6	2.6	4.7	-5.8	5.9	7.0	4.7	2.7	5.3	-0.6	0.1	1.4	4.3	3.0	5.0	3.1	1.4	-4.7	5.1	4.0	4.0	1.1
South Korea	1.67	9.3	9.7	5.8	6.3	8.8	8.9	7.2	5.8	«5.7	10.7	8.8	4.5	7.4	2.9	4.9	3.9	5.2	5.5	2.8	0.7	6.5	3.7	2.3	3.0
Saudi Arabia	1.52	8.3	9.1	4.6	0.0	0.7	0.2	3.4	2.6	2.8	-0.7	4.9	0.5	0.1	7.7	5.3	7.3	5.6	6.0	8.4	1.8	7.4	8.6	5.8	4.0
South Africa	0.65	-0.3	-1.0	-2.1	1.2	3.2	3.1	4.3	2.6	0.5	2.4	4.2	2.7	3.7	2.9	4.6	5.3	5.6	5.5	3.6	-1.5	3.1	3.6	2.5	1.9

Sources: Rosstat; IMF; OECD.

Table 2 GDP growth rates by period (average of period, %).

	Share of world GDP, 2013	1990- 1995	1996- 2000	2001 – 2007	2008– 2009	2010– 2013
World		2.9	3.8	4.4	1.5	4.1
Advanced economies	43.62	2.5	3.4	2.4	-1.6	1.8
United States	16.45	2.5	4.3	2.4	-1.5	2.2
Japan	4.58	2.1	0.8	1.4	-3.3	1.8
Germany	3.45	2.6	1.9	1.4	-2.2	2.2
UK	2.28	2.3	3.7	3.0	-3.0	1.2
France	2.49	1.6	2.9	1.9	-1.4	1.2
Italy	2.00	1.4	1.9	1.3	-3.3	-0.5
Canada	1.49	1.5	4.0	2.5	-0.8	2.4
Emerging economies	56.38	3.5	4.4	6.7	4.4	5.9
China	15.84	10.8	8.6	10.8	9.4	8.8
India	6.65	5.2	6.1	7.5	6.2	6.6
Russian Federation	3.43	-9.1	1.6	6.8	-1.5	3.4
Brazil	2.96	1.7	2.0	3.4	2.4	3.4
Indonesia	2.34	7.4	0.6	5.1	5.3	6.2
Mexico	2.02	2.3	5.1	2.3	-1.7	3.5
South Korea	1.67	8.1	5.2	4.9	1.8	3.8
Saudi Arabia	1.52	3.8	2.6	4.6	5.1	6.4
South Africa	0.65	0.7	2.8	4.3	1.0	2.8

Sources: Rosstat; IMF; OECD.

formation of the BRIC group rested upon this hypothesis. Many hopes were bound up with the expectation of dynamic growth in these countries.

Initially, the acceleration in the development of emerging markets gave rise to expectations of a gradual convergence of the developed and developing economies. It was envisaged that, given a responsible economic policy (a policy that would be "correct" in terms of international experience), less developed countries would achieve more rapid growth (Fig. 1).

At the beginning of the crisis, when it was still thought to be an "Anglo-Saxon" phenomenon, emerging markets even aspired to become safe havens where Western companies could take shelter from the economic storm. This gave rise to the hypothesis of "de-coupling," that is, of a situation in which the BRIC countries and a number of similar developing economies could preserve their stability by "detaching themselves" from the development path of the Western world (including Japan) that had led to the crisis.

A debate ensued over the extent to which emerging economies could repeat their successes of the previous 20 years in the foreseeable future. A hypothesis was put forward that the high growth rates of these countries during these years were anomalous and that a correction would follow that would bring them back to the levels of the 1970s and 1980s (Åslund, 2013).

We must not ignore the problem of the adequacy of measuring growth rates. Ever since the concept of GDP was devised, there have been concerns about how it could be accurately measured. Particular problems arise during periods of structural change, that is, during periods of systemic (structural) crises. Renewal of the economic system drastically affects the reliability of metrics for the size and trends in GDP. New sectors of the economy, especially those that have appeared during the crisis, are typically difficult to capture using the statistical methods that had been formulated to address pre-existing economic realities. At the present time, the information and biotechnology sectors plus new material production fall into this category.³ It takes time for statistics to adapt to the new realities, that is why a lowering of an economy's

³ "These measures were designed for a steel-and-wheat economy, not one in which information and data are the most dynamic sectors. They mis-measure the contribution of innovations to the economy" (Mokyr, 2014).

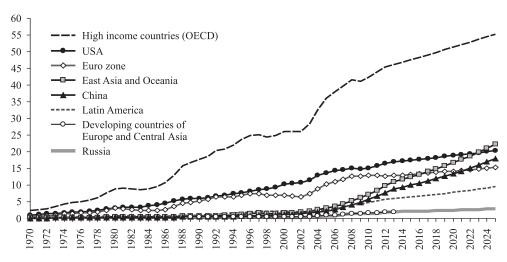


Fig. 1. Dynamics of convergence (USD).

Source: World Bank. World Development Indicators.

level of development during a systemic crisis can take place, especially at the stage when the crisis is coming to an end.

What light do the experiences of recent years shed upon these problems? The economic trends from 2008–2013 do not allow us to unambiguously conclude that the world has embarked upon a period of long-term low growth rates, and even less so that we have entered a period of long-term stagnation (secular stagnation). One can posit that such a model is emerging (Teulings and Baldwin, 2014), but at present it cannot be identified empirically: the period of low growth rates has not lasted long enough for any confident predictions to be made. Notwithstanding a slow-down in the world economy in 2012–2013, average growth rates during this period, while lower than during the 2000s, have nevertheless been in line with the average annual GDP growth rates throughout the world during the 1990s (Fig. 2). It is therefore premature to speak of long-term stagnation.

The growth rates of developed countries slowed down significantly during the pre-crisis period (by comparison with the 1990s) and during the post-crisis period. The contribution of the European economies to this slow-down was significant, whereas the average annual growth rates for non-European developed countries exceeded 2%.

Emerging economies currently constitute the most dynamic group, although their growth rates slowed down noticeably during 2012–2013. Their pre-eminence is due, as in the past, to the performance of Asian economies. The share of developing countries in global GDP is increasing, thanks to high growth rates in the developing countries of Asia. The group of dynamically growing developing countries has also been expanding, thanks in particular to the performance of Latin American economies.

The economic debate over long-term stagnation addresses several issues.⁴ The first is concerned with whether long-term stagnation affects potential or real GDP. The factors contributing to decreasing rates of *potential* GDP growth have been known since the 1980s, and they were at work during the entire period of rapid economic growth during the 1990s and 2000s. They include the following:

- slowing rates of population growth in developed countries (in a number of countries there
 has even been a reduction in population size);
- population aging and, in nearly all developed counties, reaching the natural limit in the portion of the population with higher education;

⁴ See, for example, Teulings and Baldwin, 2014.

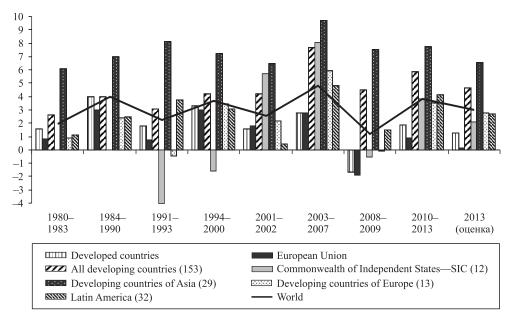


Fig. 2. Rates of economic growth (%).

Source: World Bank. World Development Indicators.

- the development of outsourcing and the transfer of industrial production from developed to developing countries;
- an increase in opportunity costs deriving from environmental issues.

The first two factors account for the reduced rates of growth in the labor supply, while the other factors account for slowing growth rates for total factor productivity.⁵

During the 1990s and 2000s, the influence of these factors was reduced by the following: growth in the services sector; stimulation of a consumption-based culture; an extension of the age at which people actively work; and a redistribution of value added in the production of new products between the developed and developing countries to the advantage of the former, even while physical production was located in the latter. Over and above all of this, in the measurement of *potential* GDP growth rates, more significance was attached to the *quality* of growth.

The factors that have contributed to the reduced rates of growth in *actual* GDP in recent years include the excessive burden of public and private debt on the economy, restrictions on immigration in the advanced countries, and completion of the effect of the technological cycle associated with the development of information and computer technology (IT).

A second issue in the debate over long-term stagnation addresses the question of whether this phenomenon affects all countries or only the developed ones. In listing the factors that contribute to slowing economic growth, we have referred in almost all cases to the group of developed countries. However, a slow-down in the developed countries inevitably has a ripple effect on the growth rates of developing countries. The principal mechanisms producing this effect are the outsourcing of production, the fact that the greatest volume of final demand exists in the developed countries, the need to transfer technology and capital from developed to developing economies, and the globalization of world financial markets, which, during global decline in economic activity, tends to redirect capital from developing countries into risk-free assets (that is, into assets in the developed countries).

The dynamic of the *real* GDP of the developed countries has a direct impact on the *real* GDP of developing countries.

⁵ On long-term problems of growth deceleration see Gordon, 2012, 2014.

The third issue concerns the convergence of living standards. As the work of Dani Rodrik has shown (Rodrik, 2011b), there was a steady, long-term trend toward a convergence in living standards in different countries until approximately the middle of the twentieth century. After this time, inter-country inequality did not decline and in some cases even increased. In fact, there has been a marked trend toward increasing differentiation between developing countries in this respect. On the one hand, a fairly large group composed of the largest developing economies (China, South Korea, Russia, Brazil, Chile, Mexico, Turkey, and others) has been steadily catching up with the developed countries. This is according to indicators for the absolute size of the economy and for per capita GDP, especially if one takes into account purchasing power parity, which reflects the difference in price levels between different countries. Judged by these criteria, the hypothesis regarding convergence, taking into account the relative GDP of particular countries, has been confirmed. However, the majority of developing countries, including those with relatively low incomes, have low rates of economic growth that are unstable over long time periods, which prevents them from catching up with the developed countries. In the case of these countries, the hypothesis of convergence has not been confirmed.

3. New trends in macroeconomic policy

The governments of the developed countries have resorted to macroeconomic measures for stimulating growth, including some that could be described as "non-conventional" or even "exotic." These include an exceptionally soft monetary policy in the form of quantitative easing, the transformation of central bank refinancing mechanisms from instruments for increasing liquidity to instruments for funding the operations of commercial banks, and interest rates that are either close to zero or negative. These measures are intended to free-up financial resources to revive investment activity. Given low levels of inflation and the risk of otherwise falling into a deflationary spiral, these measures have been judged politically acceptable, although the questions of whether they will be effective in the long term and whether they will entail the risk of financial destabilization remain open.

First, we need to understand how long the policy of quantitative easing can be applied and the extent to which ending this policy will result in reducing growth rates and possibly risking a recession. Second, the long-term consequences of such a monetary policy, which to a significant degree runs counter to the logic and experience of monetary restraint that prevailed in the developed countries from 1980 to 2000 (following the stagflation of the 1970s), are unknown. In the present circumstances, there is a risk of being caught in an unusual monetary policy trap: governments will respond to low rates of growth by reducing interest rates, but when, at the first sign of an upturn in economic activity, they increase interest rates, this will have the effect of once again driving growth rates downward toward zero. Applying the hypothesis of John Maynard Keynes, we can describe this scenario as a "liquidity trap." As things stand, however, the problem has not been sufficiently studied.

Running in parallel is the debate over the appropriateness and viability of a soft budgetary policy. The majority of developed countries have responded to high levels of debt and/or budget deficits by limiting or even reducing budget expenditure. However, fiscal conservatism incurs significant socio-economic risks, and the governments of a number of developed countries have refrained from introducing such measures.

What is also unclear is whether budgetary policy can be used to stimulate economic growth (this is the debate over the role of budgetary austerity). The governments of some developed countries have responded to a severe fiscal crisis by applying traditional anticyclical measures of increased budgetary expenditure. There is no consensus regarding the effectiveness of this policy.

Empirical evidence suggests that reducing budget imbalances can result in an improvement in economic performance. This is at least the experience of the United Kingdom and the United States, where measures have been taken to reduce budget deficits and where the result has been a reduction in unemployment and an increase in growth rates.

European experience also shows that countries that have implemented a policy of strict budgetary restraint have been the most successful, politically and economically (this includes the UK and Germany but also Greece and Portugal). By contrast, the economies of euro-zone countries that have not sought to balance their budgets (primarily France and Italy) are on the brink of recession.

At the same time, the majority of countries that sharply increased public expenditures nevertheless adopted measures to reduce their budget deficits and their sovereign debt. In monetary policy the key dilemma is how to move away from the unconventional forms of monetary policy that were adopted during the crisis with the objective of stabilizing the financial markets. It seems that the regulators in developed countries will proceed with extreme caution in implementing anti-crisis measures, reducing the volume of support proportionate to the recovery in economic activity and growth in the money multiplier.

In the debate over current macro-economic policy and growth stimulation, four topics stand out. First, the measures being implemented are anti-crisis measures, that is, they are primarily directed toward mitigating the crisis and do not contribute to solving the structural problems that gave rise to the crisis. This is abundantly clear from the fact that demand for credit is extremely low, even where there are negative interest rates. In other words, the low level of economic activity is being influenced by uncertainty (for reasons that are structural, technological, and, in some cases, socio-political).

Second, notwithstanding the current fashion for macro-economic experimentation, the classical techniques of macroeconomic management (pursuing a low level of inflation and a low budget deficit, the liberalization of trade, and deregulation) remain relevant as measures for the promotion of sustainable growth in the long term. The "Washington Consensus" should therefore not be abandoned but rather modified.

Third, the policy of quantitative easing is being most successfully applied in those countries (regions) where their currencies serve as reserve currencies—in other words, they are in demand throughout the world.

Fourth, these extraordinary measures cannot automatically be applied by other countries, least of all by developing countries. The scope for adopting soft budgetary and monetary policies is determined not only by the depth of the crisis but also by the specific economic circumstances of a particular country and by the amount of credibility the policy of that country enjoys.

The standard principles and techniques of macroeconomic management remain relevant for emerging markets. If they apply a non-standard monetary policy, the risks for their economies will be much greater.

One important lesson to be learned from the experience of developed countries is that non-conventional monetary policies have not resulted in inflation. In emerging economies the picture is much more varied: background inflation is higher and their economies have not responded so flexibly to an increase in the money supply (Figs. 3–4). It would therefore be dangerous for developing countries to draw the conclusion that they can abandon the basic principles of the "Washington Consensus," that is, ignore the importance of macroeconomic stability and the creation of a favorable investment climate.

However, the matter cannot rest there. The crisis has shown that price stability and output stability do not necessarily guarantee financial stability: economic agents are becoming more inclined toward risk. It is now evident that the financial markets exert a greater influence on economic activity than was previously thought. Against this background, some of the guidelines and goals of economic policies that are intended to stimulate growth must also be changed.

The inflation target: It has been proposed that the inflation target for a stable economy should be increased from 2% to approximately 4%. This represents a substantial change in our understanding of the macroeconomic foundations of economic growth.

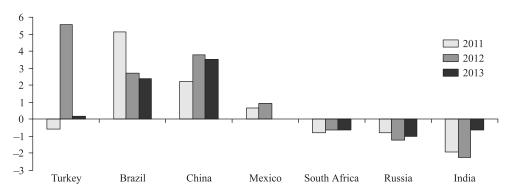


Fig. 3. Real policy interest rates (%).

Sources: IMF; Official sites of central banks.

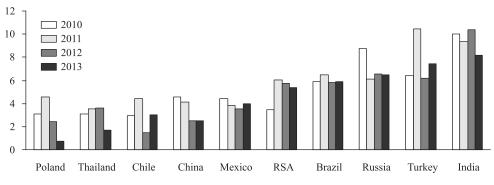


Fig. 4. Inflation (%).

Source: IMF.

Currency control: There is debate over the limits to liberalizing monetary policy, including the introduction of currency controls (particularly for capital account transactions), in special circumstances. During the last few decades, regulatory policies for cross-border financial flows have evolved in the direction of greater liberalization, and this trend was most notable in developing countries. However, the events of recent years have shown that liberalizing capital markets can incur significant risks at times, and this should not be ignored. The main problem manifests itself not in the scale but in the high volatility of cross-border capital movements.

Abolishing "off-shore" zones: Neither developed nor developing countries are willing to tolerate off-shore zones any longer. These zones have been attractive for two reasons: first, there is the fiscal advantage—an off-shore residence provides a means to minimize tax liability in national jurisdictions; second, there are opportunities to minimize business risks and to conceal the identity of the final beneficiary for reasons of private or entrepreneurial confidentiality.

The first problem is universal and is common in both developed and developing economies. It can be dealt with by tightening controls or by reducing taxation. The second problem mainly affects developing countries where political regimes are unstable or where the business environment is poor. In this case, repressive measures can be applied, but it is preferable to improve the quality of the business environment. Otherwise, any concerted measures taken by countries against off-shore zones will most likely result in the relocation of companies away from such zones to the jurisdiction of developed countries rather than return to their national jurisdictions. The decision would depend upon an evaluation of the risk-profit tradeoffs in each individual case.

Finally, in the debates over economic growth prospects, there are changes in the understanding of the problem of *inequality*. Whereas during recent decades this topic has been approached mainly from a global perspective—in terms of relations between developed and developing countries—inequality in the developed world is now in the center of attention (Piketty, 2014).

Two new sets of circumstances have drawn attention to this issue. First, the theoretical framework for our understanding has been provided by the "Kuznets Curve" hypothesis (Kuznets, 1966). The prevailing assumption had been that once a given level of economic development has been reached, further development will attenuate the problem of inequality. This hypothesis has not been entirely borne out by detailed economic studies. Even so, it would appear that in cases where the welfare of the population has increased proportionately with the growth of the economy, political upheaval has been avoided. This is in contrast with the consequences of inequality during the industrialization of the nineteenth to early twentieth centuries.

It has also been noted that the liberal economic model that has prevailed since the 1980s attaches priority to achieving economic growth on the assumption that this will automatically lead to improvements in the welfare of all, irrespective of whether overall economic growth and increased welfare lead to either an increase or a reduction in inequality. However, research over the last 10 years indicates that contemporary developed societies have become more polarized and that this polarization has become a structural factor inhibiting economic growth. Clearly, these questions will be at the center of political and economic debate in the near future. The Kuznets hypothesis must be re-examined to understand how relevant it is to the relationship between economic growth and levels of inequality in cases where developed countries depart from the traditional industrial society and undergo radical structural change.

4. Globalization and global imbalances

Globalization has been the most important development in recent decades. It has simultaneously been a contributing factor toward economic growth and a consequence of that growth. It has also been linked to both socio-economic successes and socio-economic failures. The unprecedented economic growth during the 1990s, the global crisis that erupted in 2008, and social stagnation that has been accompanied by growing inequality have all been attributed to globalization. It is not the purpose of this article to examine the socio-political and economic consequences of globalization. Rather, we shall ask how stable the trend toward globalization is, what impact the world crisis has had on this trend, and how long it will continue in the post-crisis period.

Two aspects of the globalization trend need to be taken into account: the conjunctural (the problem of imbalances or asset "bubbles") and the structural (technological). On the eve of and at the beginning of the recent global crisis, a number of economists took the view that global imbalances were the principal factors underlying the crisis. Attention was drawn, in particular, to the division of the world between countries that consumed and countries that saved. The term "Chimerica" was coined to contrast the consumer boom in the United States (arguably in the West as a whole) with the powerful propensity to save in China and other developing Asian countries.

One need to understand whether these imbalances can be overcome or whether, after some attenuation, they will once again increase for reasons that might include the application of anti-crisis measures (above all, the policy of quantitative easing), which themselves are capable of giving rise to new problems (inflation and "bubbles"). This leads to the related

⁶ For the debate over inequality, see *Journal of Economic Perspectives* (2013), vol. 27, no. 30 (in particular, Alvaredo et al., 2013; Mankiw, 2013; Corak, 2013; Bonica et al., 2013).

question of whether it will at all be possible to neutralize these imbalances and balance the world market by means of global regulation.⁷

A key question concerns the future of globalization relative to technological innovation. We know that where there is socio-economic progress, increased welfare leads to an increase in the cost of labor in the leading developing countries. These countries have become less competitive relative to developed countries, at least with regard to labor costs. This trend, combined with the latest technological development (reduction in the share of physical labor in the most modern products) will significantly contribute to a reduction of growth rates in world trade (Ulyukaev, 2014).

Now these countries will have to consider institutional improvements in the business environment if they are to remain competitive. The importance of exchanging goods between countries is diminishing, as is, correspondingly, the distinction between countries that consume and countries that save. Emerging markets must increasingly concentrate not so much on supporting exports (which is, of course, important, and support can even be increased) but on improving the quality of the business environment, irrespective of the markets particular businesses serve. Moreover, as the level of welfare in developing countries increases, the domestic markets in these countries will become not less but more important for their growth prospects than the markets of developed countries.

In this way, increased costs in the emergency economies (principally labor costs), on the one hand, and increased internal demand, on the other, can become contributing factors in slowing the rate of growth in world trade and even in promoting a certain reduction in world trade turnover.

There is nothing unusual about this. There were periods of de-globalization during the 1870s and 1880s and in the middle of the twentieth century. Periods of globalization seem to alternate with periods of de-globalization. In general, the experience of the past 200 years suggests that it would be a mistake to regard globalization as a linear process. Since the beginning of the twentieth century, there have been several phases of advance and retreat in the processes of globalization, and every time it has been assumed that the prevailing trend would last indefinitely.⁸

Analyzing contemporary economic trends does not enable us to reach any clear-cut conclusion regarding de-globalization (Fig. 5). However, we can draw attention to a number of important trends, some of which may be long-term. They are related to the dynamics of the market in goods and to the dynamics of the financial market.

The growth rates in world trade are slowing down. Certainly, in analyzing the acceleration of the 2000s and the slowing during the 2010s, we need to take into account the price factor

Regarding the regulatory challenges presented by globalization, Dani Rodrik wrote at the beginning of the global crisis: "Although economic globalization has enabled unprecedented levels of prosperity in advanced countries and has been a boon to hundreds of millions of poor workers in China and elsewhere in Asia, it rests on shaky pillars. Unlike national markets, which tend to be supported by domestic regulatory and political institutions, global markets are only "weakly embedded." There is no global anti-trust authority, no global lender of last resort, no global regulator, no global safety nets, and, of course, no global democracy. In other words, global markets suffer from weak governance, and therefore from weak popular legitimacy..." (Rodrik, 2008). These issues are treated in detail in Rodrik (2011a. Ch. 10). See also Ulyukaev (2014. Ch. 1).

⁸ Summing up the results of the pre-war economic crisis, John Maynard Keynes wrote in 1919: "What an extraordinary episode in the economic progress of man that age was which came to an end in August, 1914! ... The inhabitant of London could order by telephone, sipping his morning tea in bed, the various products of the whole earth, in such quantity as he might see fit, and reasonably expect their early delivery upon his doorstep; he could at the same moment and by the same means adventure his wealth in the natural resources and new enterprises of any quarter of the world, and share, without exertion or even trouble, in their prospective fruits and advantages; or he could decide to couple the security of his fortunes with the good faith of the townspeople of any substantial municipality in any continent that fancy or information might recommend. He could secure forthwith, if he wished it, cheap and comfortable means of transit to any country or climate without passport or other formality." But he went on to note: "But, most important of all, he regarded this state of affairs as normal, certain, and permanent, except in the direction of further improvement, and any deviation from it as aberrant, scandalous, and avoidable." (Keynes, 1919. Ch. 2).

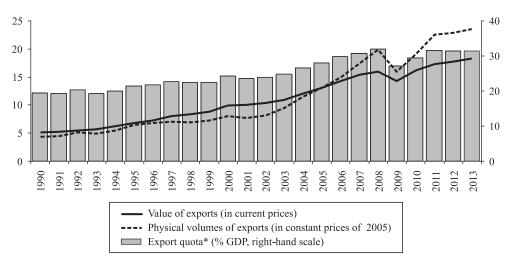


Fig. 5. World trade in goods and services in value and physical terms.

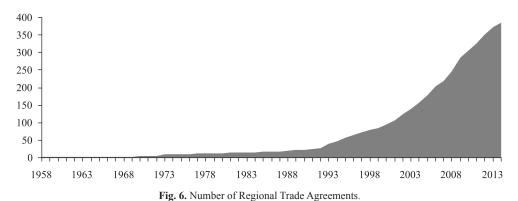
and the effect of double accounting. In other words, rapid changes in the prices for raw materials could artificially inflate the volume of international trade. Moreover, the slow-down that was observable in 2012–2013 was probably due to a weakness in demand and deterioration in the conditions for financing trade.

There was some contraction in the volume of direct cross-border investments, but there is no single explanation for this. The large-scale growth in these investments was one of the main features of world economic development toward the end of the 1990s and 2000s and a source of the accelerated economic growth that characterized the decade preceding the crisis. Now, despite the high volatility of such investment flows, they tend to oscillate around the level that has been attained: the average annual volume of global foreign direct investments (FDI) from 2005–2012 was approximately 1.5 trillion USD. The relationship between developed and developing countries as recipients in the aggregate volume of investments is changing: whereas the share of developing countries in all world FDIs was 20% in 2000, it was 50% in 2009 and 60% in 2012. In the post-crisis period, the level of investment in the developing countries of Asia and Latin America has recovered and even increased. The developed countries remain the principal provider of foreign investments, although their share has fallen from 90% at the beginning of the 2000s to 65% in 2012. Even so, they continue to dominate as before.

At the same time, the cross-border movement of capital between advanced countries has contracted. Whereas in 2007, financial flows between the G20 countries amounted to 18% of their aggregate GDP, this amount has now fallen below 4.5%, and for the entire world economy these flows have decreased by 60% (Lund et al., 2013; Atkins and Fray, 2014). Of course, some economists interpret this as a strengthening in the stability of the world economy and as an expression of the well-known dilemma of whether to choose between "stability that fends off the crisis" or "growth that brings it forward." The price of stability, if such there is, could be a long-term slow-down in economic development.

There has been a noticeable increase in the "demand" for protectionist policies and in the propagation of protectionist ideology, albeit not in the crude form of trade restrictions and high tariffs, which would be in violation of WTO requirements. Such measures, introduced during the crisis period, account for no more than 5% of world trade. Even so, qualitative barriers, referred to as "permissive" (e.g., phytosanitary and ecological), are increasingly being applied. There is a new trend toward the "regionalization of globalization," that is, an

^{*} Export value of goods and services (in current prices) as a proportion of GDP, applying exchange rates. *Sources:* World Bank. World Development Indicators; Export quota—estimates of T. Aliev.



Source: WTO Regional Trade Agreements Information System (http://rtais.wto.org/ UI/PublicAllRTAList.aspx).

increase in the number of free-trade agreements (Fig. 6). It is likely that the WTO system will be transformed by the formation of "interest groups": this would entail abandoning the unanimity principle as countries begin to form groups for particular purposes, including specific sector interests. This would signal a change in the foreign economic policy model of the advanced countries.

The real magnitude of the contemporary economy, and thus its external economic activity, is measured not so much by the volume of exports and imports as by the amount of value added within the system of global value chains (GVCs). It is vital when developing a foreign economic strategy that is appropriate for present-day conditions, to insert the economy into these chains, to increase the share of value added created by national companies and the competitiveness of national production, and to employ such methods as locating production in "low-cost" countries and importing low-cost components. This means that the goals and mechanisms of foreign economic trade, as a factor contributing to economic growth, will have to be redefined.

The regulation of foreign trade must change, as must attitudes toward imports. Strategies based on export-oriented growth and protection against imports are no longer compatible. In both spheres, the key issue becomes the international competitiveness of production. The very concept of protectionism must change. Rather than think in terms of protecting the national producer, located within a country's territory, we must think in terms of defending trans-national producers and supporting their interests throughout the global value chain. This means that border and internal barriers, the management of technology, the defense of intellectual property rights, competition, and access to the markets of countries that participate in the value chain will become important instruments for supporting national companies and enhancing their competitive advantage. The protection of the national economy will be understood as the protection of one's own participants in the global chains of value creation.

5. The trend toward re-industrialization

Another important recent trend, the re-industrialization of developed countries, could also become a factor that contributes to de-globalization. Over the last 50 years, the share of industry in GDP and employment in these countries has generally been falling, and this has also been the case in post-Communist Russia. Critics of contemporary capitalism have described this as de-industrialization, whereas other researchers have interpreted this trend as the formation of a post-industrial economy and society.

Several factors could be contributing to the re-industrialization, of which the increasing cost of labor in developing countries is not necessarily the most important. After all,

there are many poor and relatively stable countries to where production can be relocated to minimize costs. Re-industrialization (if this trend does indeed become established) is to be understood not as the reintroduction of traditional forms of production in the developed countries but as the formation of new branches of industry. The distinguishing feature is a relative reduction of labor in the cost structure and an increase in the weight of factors such as the proximity of the research base (given the increased proportion of R&D costs) and basic consumer demand). The increasing cost of labor in the emerging economies, has contributed to this process only to a limited degree (Egawa, 2013).

A significant transformation in the market for energy resources could become an important factor contributing to re-industrialization. There has been a noticeable reduction in the cost of energy, and this can be attributed both to recent technological innovations in the extraction of non-conventional forms of oil and gas and to a significant expansion of the means of transportation.

No less important is the proximity of the sales market. Nowadays when products are increasingly targeted at individual consumption, the proximity of the consumer has become an important factor in acquiring a competitive advantage. The proximity of developers of new products and technologies has also gained increasing importance, especially in the advanced countries. The analysis of new industries will also gain increasing importance as a means of identifying new technologies that will drive economic growth in the post-crisis period.

Trends toward re-industrialization cannot yet be statistically verified, but there are a number of examples (mainly in the United States) of a return to production by industrial enterprises that were closed down many years ago. One example is the revival of pipeline production for the shale oil and gas industries in the United States.

In these circumstances, industrial policy must acquire a new rationale. It should no longer be a question of "identifying winners" or of allocating budget resources to support particular sectors or enterprises but rather of creating an institutional framework that will be conducive to the emergence of new sectors of the economy.

6. Causes and components of the Russian crisis

By the end of 2014 and the beginning of 2015, the Russian economy showed distinct signs of a crisis following a greater than 50% drop in oil prices (from 110–115 USD/bbl in the first half of 2014 to 48–49 USD/bbl on certain days in December 2014 and January 2015). In December, the exchange rate of the Russian national currency fell by approximately 50%, and annualized inflation increased to 16%. For the first time since the beginning of the 2000s, the real income of the population is decreasing, and GDP growth rates are likely to be negative in 2015. All this was happening at the time the economic and financial sanctions the US and the EU introduced against Russia were ratcheted up, Russia's investment rating was downgraded by the world rating agencies, and there was a massive capital outflow from Russia.

The events that occurred around the end of 2014 and the beginning of 2015 were a most vivid manifestation of the more general problems directly impacting the possibility of securing sustainable growth in Russia's economy. These were long-simmering problems that created grounds for a major crisis given the coincidence of a number of factors. However, the 2014–2015 situation is far different in terms of its nature and mechanisms from previous crises suffered by the Russian economy.

The crisis faced by Russia in 1998 was primarily a standard debt crisis fueled by a lack of fiscal discipline and by continuing soft budget constraints in conjunction with a rather tight monetary policy. As is known from theory (Krugman, 1979), such a combination of factors leads to a first-generation currency crisis, which is exactly what happened in Russia in 1998. The drop in oil prices, which reached the bottom after a 75% drop in the nominal ruble rate (winter of 1998–1999), had a restricted effect on the development of the crisis. If oil prices had not dropped, the debt and the currency crises might have occurred somewhat later, but

they could not be avoided without balancing the budget and maintaining an equilibrium exchange rate. This was in fact demonstrated by similar crises in Brazil and Argentina, with the first appearing to be less and the second more severe than the situation in Russia at that time (see: Mau, 1998; Ulyukaev, 1999).

Such crisis characteristics in developing countries required well-known countermeasures. The 1980s and 1990s provided sufficient convincing experience in overcoming such a crisis. Given a sound macroeconomic policy and support from international financial organizations, it would take at most two years to emerge from the crisis, and this period was sufficient to regain foreign investor confidence in Russia.

However, the financial crisis in Russia in 1998 had an important defining feature: it coincided with the end of the transformation crisis, i.e., the transition from a planned system to a market-driven one. In conjunction with macroeconomic stabilization, it helped revive economic growth, which at first was a recovery growth (Mau, 2002). In other words, by the end of the 1990s, Russia was through with economic and political troubles (downturns), and in fact, the nature of the economic recession as such was quite simple and well-known from prior experience with macroeconomic destabilization in various countries (both developed and developing). Therefore, an important factor for the bailout was restoring political and macroeconomic stability, and the growth was fueled by the huge production and human capital resources resulting from a 40% drop in Russia's GDP from 1990 to 1998.

In 2008 and 2009, the crisis in Russia developed in economic terms according to a more sophisticated model with both internal and external components. On the one hand, it was a global economic crisis that was especially apparent in developed countries. In the autumn of 2008, Russia suffered the effect of 'being infected' by the crisis in the global financial system and the ensuing slump in global demand for the basic commodities of Russian export, primarily raw commodities and their primary processing products (part of the investment demand).

On the other hand, by the middle of 2008, signs appeared of a crisis in the growth model that had been used in the 2000s and that was based on demand expansion (determined in the case in question by rapid growth in the rental income from the fuel and energy sectors). The fall in oil prices from 145 to 37 USD/bbl during 2008–2009 was critical for the economy, which was obviously 'overheated,' as demonstrated in unequally high wages, a decline in unemployment below the natural rate, an overvalued exchange rate for the national currency, and a huge foreign debt. However, considerable gold, foreign currency, and budget reserves significantly mitigated the acute phase of the crisis and helped prop up the economy until oil prices returned to a reasonable level (at the end of 2009).

In 2014 and 2015, Russia faced three crisis components simultaneously: structural, cyclical (internal market), and external.

First, this is a crisis in structural growth rates, which conventionally implies potential growth rates at the existing level of technologies and entrepreneurship (the total factor productivity, TFP), with a full effective (considering the existing spare capacity, the technical and moral aging of fixed assets) capital load and a natural (not accelerating inflation) rate of unemployment maintained in the economy. According to estimates by the Gaidar Institute for Economic Policy, the structural rates of Russian GDP growth fell from approximately 4.0–5.0% annually during the 2000s to 1.0–1.5% in 2014, and are expected to continue decreasing in 2015 (see below). In other words, in the last 10–15 years, Russia's economy has been losing 3–4 p.p. of GDP growth per year (Sinelnikov-Murylev et al., 2014).

Second, this is also an internal cyclical business crisis. The characteristic features of this type of crisis are the following: a decrease in the growth rates of investments; a slowdown in the growth of bank loans to the non-financial sector; an increase in the proportion of 'bad' debts for banks; an expansion of consumer demand by the population, as fueled by consumer lending; a decline in the share of profits in the economy; and a reduction in the number of small and medium-sized businesses. The Gaidar Institute has already been recording negative cyclical rates in Russia's GDP growth since 2011 (up to 1.0–1.5 p.p. a year).

Third, the current crisis is connected with changes in external economic conditions (a trend reversal in oil prices). The tenuous point of fact that the crisis of 2008–2009 was apparently overcome without serious consequences was, in fact, due to the continuance of the previous Russian economic growth model, under which high growth rates are possible only with constantly growing oil prices. Their actual stabilization in 2010 until the first half of 2014 at approximately 100 USD/bbl had already noticeably reduced the contribution of the oil industry to the nation's GDP. Falling oil prices drove down the foreign trade component of GDP growth to practically zero in 2014 and will apparently make a negative contribution in 2015.

It is true, however, that unlike 2009, the demand for exports and world prices for other Russian commodities, apart from oil, are practically unchanged, which compensates to some extent for the negative impact of falling oil prices. However, this should rather be regarded as an absence of any *additional* negative impact on the economy and even on individual sectors.

Furthermore, there has been an external shock due to the sanctions imposed on Russia, primarily in the finance sector. The latter have greatly destabilized capital dynamics and, therefore, the economic dynamics. The outflow of capital is simultaneously due to both external shocks—the fall in oil prices and the cutoff of Russia's economy from accessing external financial markets.

7. Channels of influence from the sanctions on the Russian economy

We can single out several channels of influence from the sanctions on Russia's GDP growth that are already having a negative effect, which will persist for two to three years. Among them is the increased economic and political uncertainty, an increase in the cost of borrowed funds, and restrictions on technology transfer as well as imports.

The most important channel of influence was a *sharp increase in uncertainty* in the economy and in politics, which affects decision-making by economic agents both within the country and with respect to Russia abroad. There are two mechanisms of the influence of uncertainty: through consumption and through investments. Let us analyze these two in more detail.

Consumption. The increase in economic and political uncertainty creates uncertainty about future income. As a result, according to the permanent income hypothesis, economic agents lower consumption in the present by augmenting savings to be able to level out potential income and consumption fluctuations in the future (Friedman, 1956; Bernanke, 1984). In the context of Russia's specific situation (low confidence in the national currency, economic policy, and banking system, along with high inflation and exchange risks), such savings are made mainly in the form of foreign cash. This decreases the demand for real cash balances in rubles (due to the components of the transactional demand and the demand for a store of value) and increases the demand for real cash balances in foreign currency (due to the demand for a store of value and for precaution).

This leads to a slowdown in the aggregate consumption, dollarization, and inflation acceleration. These processes could already be distinctly observed in the 1st and 4th quarters of 2014, when, in addition to the increased capital outflow from the country, we observed reductions in the volumes of bank deposits and people started converting their savings from bank accounts to currency in cash and safe-deposit boxes (see Table 3).

Investments. The increased uncertainty about future income and output volumes raises the current cost of holding of capital and reduces its desired future volume. The investments needed to achieve this volume fall as a result, and businesses are only willing to implement those projects for which the guaranteed return exceeds the current increased cost of capital (interest). In this case, we speak precisely about increasing the risk premium within the interest rate, subjectively perceived by economic agents, as an indicator of the relative return on (cost of) capital between the present and the future. Decreasing the nominal interest rate on the financial market cannot change the investment behavior of businesses. They would

Table 3		
Outflow of capital and	dollarization of Russia's	economy in 2014.

	Q1	Q4
Net outflow of capital from the private sector, USD billions	-47.8	-69.8
Trends in ruble bank accounts held by the population, RUB billions	-798.8	-287.9
Trends in foreign cash, USD billions	10.4	17.4

Source: Central Bank of the Russian Federation.

choose to save money on accounts or in the form of liquid assets rather than make new investments in fixed capital.

Similarly, as is proven by statistics, the increase in the key rate of the RF Central Bank and nominal rates at the end of 2014 had practically no effect on the lending volumes in the non-financial sector: the higher risks had been anticipated in advance. For a short period, the demand for ruble loans even increased due to replacing foreign currency loans (Fig. 7). However, as devaluation expectations grow weaker and inflation slackens, which is supposed to decrease the investment risks in real projects, the level of nominal rates will again become important on the lending market.

Let us recall that the diametrically opposed monetary policy pursued by several central banks in developed countries after the crisis of 2008 (FRS, ECB, Bank of Japan) brought about similar results in terms of encouraging investment lending. Despite the extremely low or even negative interest rates, economic agents were unwilling to take out loans due to the high uncertainty about the general prospects for economic growth in many European countries and due to the specifics of structural priorities for post-crisis development.

An important channel of influence from the sanctions on the Russian economy is the *increased cost of borrowed funding*, especially long-term funding. Because most of the long-term funds were borrowed in previous years on the external market, Russian borrowers suffered not only from the direct increase in rates but also from the increased foreign exchange risk for loans in foreign currency. First, this channel reduces investment opportunities for businesses willing to make investments at the present moment, despite the mechanism of reducing the desired capital volume described above; second, it limits opportunities for refinancing current business debts, which restricts their operations because they must divert current financial flows to repay existing debts.

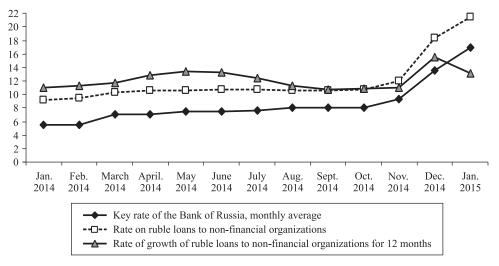


Fig. 7. Interest rates and rates of growth in ruble loans to non-financial organizations (%).

Source: Central Bank of the Russian Federation.

The third channel of influence from the sanctions is the *decline in the total factor productivity* because there is no access to technology transfer from abroad and because of the reduction in foreign direct investments and the deterioration of competition with foreign producers (the latter on account of restrictions on foreign trade transactions on either side and the impact of price advantages due to the drop in the ruble exchange rate). At the same time, amidst the decline in the working-age population and incomplete replacement of fixed assets, the total factor productivity appears to be the only tool that can increase the structural annual economic growth rates from the present 1.0–1.5% range to at least 3.0–3.5%.

Regarding other potential channels of influence from the sanctions, one should mention the effects from *import restrictions* within Russia. In a number of Russia's economic sectors, the production of individual goods crucially depends on imported components that cannot be replaced, at least in the near term, for technical or technological reasons. This effect will persist regardless of whether this restriction is due to discrete decisions with respect to certain product categories or is the result of increased prices for imported goods due to devaluation. In particular, research shows that output trends will be materially affected by a decline in the real ruble exchange rate for sectors such as pharmaceuticals, automobiles, textiles, apparel production, plastics and plastic products, equipment, electrical equipment and machinery, and furniture (see: Evdokimova et al., 2013).

At the moment (the beginning of 2015), it is difficult to evaluate the degree of influence by this channel because no statistics are available. However, the existing rise in prices for most goods produced in Russia is often due to the increased prices for components or raw materials because of the ruble depreciation.

Finally, another channel of influence from the sanctions on Russia's GDP dynamics, though not yet strongly demonstrated, can be *restrictions on Russian exports* of certain types of goods, particularly energy resources and raw materials. Because the production of such goods significantly exceeds their potential consumption volume on the domestic market, and because of the numerous technical restrictions regarding the export geography, reductions in the physical volume of exports for such goods will rapidly have an adverse effect on the output and financial standing of businesses in these sectors.

8. Medium-term economic growth restraints

The above channels of influence from the sanctions on Russia's economy are not a separate crisis component. They influence the economy, in the first instance, by having a medium-term effect on structural growth rates. However, if the sanctions are called off or considerably relaxed, or if oil prices increase to a level comfortable for Russia (approximately 80–100 USD/bbl), the recovery of Russia's economy may appear to be protracted.

Russia is conventionally regarded as a raw-material-producing nation whose welfare rests primarily on hydrocarbon production and export. Russia's oil and gas reserves are among the largest in the world. In fact, Russia dominates the crude oil and gas market in Europe and is extensively expanding hydrocarbon exports to China and Southeast Asia. In 2014, Russia set a record for oil production (528 million tons). Oil and gas account for $^2/_3$ of exports, and revenues from the extractive sector account for over 50% of the federal budget income. However, it can already be stated that the oil and gas sector is no longer the key driver of Russia's economic growth.

The aggregate contribution of the oil and gas sector to Russia's GDP reached its peak in 2005, at approximately 25% of the GDP. Since that time, it has gradually reduced to 21% of the GDP (beginning of 2014) (see: Dmitriev and Drobyshevsky, 2015). Indeed, since 2005, the oil production output has remained practically unchanged, at approximately 500 million tons per year. In other words, the real output in this sector has not grown for nearly 10 years, whereas the GDP has grown, apparently due to development in other industries and the service sector. There are no grounds to expect any growth in the physical

output of the extraction sector in the years to come. According to our estimates, by 2020, the share of the oil and gas sector will not be above 18.0–18.5% of the GDP, or 25% less than in 2005. Moreover, oil and gas are not the only raw commodities Russia exports. After hydrocarbons, metals (ferrous and non-ferrous) are the next most common, accounting for approximately 20% of total exports.

Another conventional factor promoting economic growth is domestic consumer demand. However, here there are serious problems.

First, despite relatively weak development in Russia's financial sector, the population has a huge debt burden (Fig. 8). Although loans to the population make up only 17% of the GDP, due to short average loan terms, a small proportion of long-term mortgage loans, and high nominal interest rates, Russians spend approximately 13% of their disposable income on servicing loans. This is more than in the US, for example, where the population's loan debts total approximately 70% of the GDP but where debt servicing costs are near 10% of income. In other words, even after the country overcomes the acute phase of the current crisis, further expansion of consumer demand by means of lending is not economically viable and bears serious risks.

Second, further expansion of consumer demand at the expense of the population's regular income (wages) is also unlikely. After the decline in the ruble exchange rate during the second half of 2014, labor costs significantly decreased in Russia, becoming competitive even versus countries in Southeast Asia. Nevertheless, demographic issues will soon raise wages again, and the income of hired employees will increase. At the same time, it is evident that economic advancement is impossible if labor costs continue growing, and thus, it will be necessary to restructure sectors and to release and shift the labor force. This makes employees more restrained about their future income and more inclined to save (in whatever form).

Third, the inconsistent policy toward developing the pension system drives people to consider providing for themselves on their own after retiring, which also encourages saving. Of course, under present conditions, with rate volatility and inflation growing, any long-term savings in money terms are out of the question, but a decline in inflation and an increase in inflation predictability will significantly heighten the incentive to save.

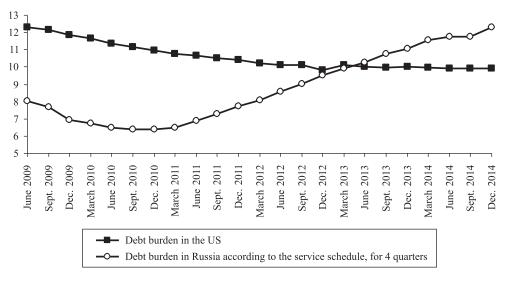


Fig. 8. Debt burden on disposable income in Russia and the US (%).

Sources: Rosstat, RF Central Bank, calculations of IEP, US FRS.

⁹ For more details, see Vedev et al., 2014.

Thus, in the near-future, the population will be net savers repaying their debts rather than actively consuming. This potentially serious shift in the typical conduct of a Russian citizen compared with the 2000s still needs to be analyzed and understood by decision-makers.

From the perspective of state stimulation of demand, there are also restrictions in the medium-term, although in the short-run, public spending can be expected to be augmented by the means of the anti-crisis package.

In the 2000s Russia pursued a responsible fiscal policy. After the crisis of 1998 the country paid off external debts, ensured a federal budget surplus, and formed sovereign funds amid a favorable external environment. In 2009–2010, thanks to the previously accumulated resources in the Reserve Fund, the country funded the budget deficit and the anti-crisis package while keeping government debt at a minimum (approximately 10% of the GDP). In 2012, it adopted a new budgetary rule ensuring a deficit-free budget at the current level of oil prices. However, within just the past three years (the budget planning horizon in Russia), all that was achieved has begun to face serious challenges.

First, the revenue base of the budget has been reduced. As noted above, taxes on the oil and gas sector bring in more than 50% of the federal budget income, and the share of the oil and gas sector in GDP is shrinking. Revenues in the oil and gas sector are increasingly coming from new green fields, which enjoy considerable tax privileges. Even if oil prices had not gone down, tax revenues from the oil and gas sector would still be expected to decrease by 1.0–1.5 p.p. of the GDP by 2016. Under an unfavorable business climate, tax revenues from the oil and gas sectors (for example, the tax on profits) are also low. Therefore, against the 2014 data, the federal budget deficit would grow from 0.5–1.0% to 1.5–2.0% of the GDP solely from decreased tax revenues. Reducing average oil prices to 60–80 USD/bbl in 2016–2017 will add another 1.5–2.0% of the GDP to the federal budget deficit. However, there is an additional factor—increasing business profits by reducing their relative costs against the backdrop of a deep devaluation of the national currency.

Second, there is no certainty about pension reform, a key factor for ensuring budgetary, social, and political stability. Among the important measures that are being discussed but have not yet been introduced are increasing the pension age (at present, 60 and 55 years old for men and women, respectively—the lowest rate in Europe), developing the funded component, and reducing the employee categories entitled to early retirement. This uncertainty affects the employment market and does not help strengthen confidence in the pursued policy (the previously introduced funded component has, in fact, been frozen), which, in turn, increases the risks to the financial stability of the pension system and of the state budget. The pension system deficit will grow because the ratio of the working population to pensioners is not changing for the better and must be financed out of additional transfers from the federal budget.

Third, the structure of federal budget expenditures is deteriorating. ¹⁰ For example, Russia still spends little on enhancing the quality of human capital and life (education, health care, infrastructure, environment) and allocates the same or even more money for the military-industrial complex, army, police, and transfers to the Pension Fund. ¹¹

The enumerated arguments prove that even if the cyclical crisis is overcome, oil prices recover, and the sanctions are canceled (relaxed), with the existing growth model, Russia is unlikely in the near-term to return to growth rates of 3.0–3.5% per year. There are discus-

¹⁰ For more details see Idrisov and Sinelnikov-Murylev, 2013.

¹¹ The problem of optimizing budgetary expenditures from the point of view of social and transportation infrastructure priorities is not new for Russian economic policy. For example, in his speech at the State Council on December 31, 1880, Finance Minister A. A. Abaza outlined the budgetary policy as follows: 'First and foremost we should cut down on military expenditures... Then, we also need to save funds in other departments, except for those we should spare no expense on, because spending on them actually raises the national welfare.' According to Abaza, no expense should be spared on colleges and schools or on developing the court system and railroads. 'With strict saving on state expenditures... we should encourage in every possible way the diligence and thrift of private persons—the main sources of the national wealth' (Peretz, 1927. P. 18).

sions in Russian academic literature about the necessity to change Russia's economic growth model (see, for example, Kudrin and Gurvich, 2014; Idrisov and Sinelnikov-Murylev, 2014; Ulyukaev, 2014; Mau and Kuzminov, 2013). It is obvious that in the foreseeable future it is impossible to increase structural growth rates (not necessarily sensitive to short-term downturns or changes in external market conditions) without implementing an effective anti-crisis policy. Still, to ensure that the current crisis does not turn into a protracted economic stagnation, in addition to taking short-term stabilization measures, it is necessary to consider a variety of measures aimed at increasing structural economic growth rates, i.e., at reducing production costs and improving total factor productivity, which would depend only on internal economic policy and not on external markets or the geopolitical situation.

9. Conclusion: Priority measures for social and economic stabilization and development

9.1. Changing budgetary policy principles

- 1. Reformulating the principles regarding the immunity of federal budget items, assuring equal immunity of productive expenditures and human capital expenditures, along with public and legal commitments. Revising the indexing principles for budgetary expenditures considering the dynamics of budget income. Adopting a target-oriented approach to budgeting, excluding formal budget cutting.
- 2. Holding budgetary maneuver that allows for re-allocating financial resources in favour of priority expenditure items—for developing human capital, innovations, and enhancing the quality of the entrepreneurial and investment climate within the country.

9.2. Reducing costs

- 1. Adopting a moratorium on tax burden increases: postponing the effective dates of all new decisions on increases to some time after 2018. The same also applies to the quasi-tax burden.
- 2. Formulating entrepreneurship requirements, most burden-some and least effective in terms of pursuing goals of public concern, deciding on their cancellation or revision.
- 3. Increasing the efficiency of infrastructural monopolies: reducing unwanted costs, switching to a long-term tariff-making model, implementing new approaches to organizing the heat power market (alternative boiler plants) and the electric power market (retiring ineffective generation).

9.3. New business support rules

- 1. Formulating rules for securing state support of businesses (loans via state banks) against guaranteed development of competitive production in world prices (formula: increasing efficiency in return for public funding). In practical terms, it implies using world prices for electric power, oil, oil products, etc., in all financial feasibility studies, business plans, and investment projects requesting budgetary or quasi-budgetary funding. A positive value added must be created in world prices without persisting in backwardness.
- 2. Developing tools for state support of large- and mid-scale investment projects having a deep multiplicative effect for the economy and contributing to solving infrastructural and social problems. Enhancing the quality of project preparation mechanisms for their selection when using National Welfare Fund resources and other project funding mechanisms.
- 3. Using state procurement resources and procurement for companies in which the state has a stake (24 trillion rubles or 30% of the GDP) for stimulating domestic production, advancing it to a stage of technological upgrade and competition with world producers.

9.4. Improving the business environment

- 1. Reformulating approaches to control and supervision activities and slashing the number and intensity of inspections with respect to most legal entities or facilities that pose no serious public risks.
- 2. Introducing a three-year 'supervisory break' for businesses that have not breached established business requirements for three years.
- 3. Introducing inventory control for the regulatory environment and business practices, adopting only electronic submission of reporting forms (which may include canceling hard-copy reports for small businesses).
- 4. Canceling mandatory accounting and reporting procedures for small businesses (returning to the simplified system—income and expenditure ledgers).

9.5. Support of non-resource exports

- 1. Ensuring access by Russian exporters and customers to export funding for their products on competitive conditions with comparable parameters to the export loans issued by leading export credit agencies.
- 2. Introducing the concept of a 'package guarantee'—a general guarantee much lower than potentially payable customs charges (up to zero), if the importer is any manufacturing business or if the importer has been operating on the market for several years and has proved its loyalty, solvency and accuracy in observing customs and tax rules.
- 3. Introducing a project-based approach that allows building a single product promotion chain—from determining the export market and buyer, obtaining a loan and insurance to promote the project by sales representation directly in the country of stay.

9.6. New rules for cooperating with foreign investors

- 1. Shortlisting sectors in which foreign investment activity is restricted or prohibited, assuming that a foreign investor may participate in any sector if it does not directly involve national security. In practical terms, this can be implemented on a gradual basis—within 3–7 years, so as to avoid rapid asset redistribution at the current stage of depreciation of national assets.
- 2. Ensuring the most attractive investment environment for investors from developed countries. Concluding preferential trade agreements with APEC members and the European Union in the medium-term.

9.7. Revision of social policy

- 1. Increasing the pension age starting in 2018, and partially leveling the pension age for men and women.
- 2. Making support for socially vulnerable population groups most affected by the weakened ruble (consumers of imported drugs, services that require using foreign equipment) more targeted.
- 3. Abolishing quotas for the issue of work permits to foreign workers and replacing them with patents to be issued according to significantly simplified procedures (considering the actual drop in the income of migrant workers due to the ruble devaluation, we will need everyone willing to come to our country to work).

It is important to formulate *future social guidelines* to underlie the medium- and long-term national development strategy. For these purposes, the national programme "Enhancing the

Public Quality of Life" should be adopted. The programme should seek to attain the following social targets:

- increasing the life expectancy at birth by three years compared with 2014;
- increasing Russia's OECD Better Life Index by 10% compared with 2014 (in 2014, Turkey and Brazil had similar positions);
- upgrading Russia's Most Efficient Health Care—Bloomberg rating from 51st place in 2014, to 20th place (in 2014, Portugal, Germany and Greece had similar positions);
- upgrading Russia's Human Development Index (HDI) from 57th place in 2013, to 30th place (in 2013, Spain had a similar position).

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References

Alvaredo, F., Atkinson, A. B., Piketty, T., & Saez, E. (2013). The top 1 percent in international and historical perspective. *Journal of Economic Perspectives*, 27 (3), 3–20.

Åslund, A. (2013). Why growth in emerging economies is likely to fall. Working Paper No. 13-10. Washington, DC: Peterson Institute for International Economics.

Atkins, R., & Fray, K. (2014). Rapid fall in capital flows poses growth risk. Financial Times. January 6.

Bernanke, B. S. (1984). Permanent income, liquidity, and expenditure on automobiles: Evidence from panel data. *Quarterly Journal of Economics*, 99, (3), 587–614.

Bonica, A., McCarty, N., Poole, K. T., & Rosenthal, H. (2013). Why hasn't democracy slowed rising inequality? *Journal of Economic Perspectives*, 27 (3), 103–123.

Brzezinski, Z. (2009). The group of two that could change the world. Financial Times. January 14.

Carter, J. (1980). Public Papers of the Presidents of the United States 1979. Washington, DC: GPO.

Corak, M. (2013). Income inequality, equality of opportunity, and intergenerational mobility. *Journal of Economic Perspectives*, 27 (3), 79–102.

Dmitriev, M., & Drobyshevsky, S. (2015). Russian economy as the hostage of high oil prices. In Sung Jin Kang, & Yung Chul Park (Eds.), *The international monetary system, energy and sustainable development*. London: Routledge.

Egawa, A. (2013). Will income inequality cause a middle-income trap in Asia? Bruegel Working Papers, 2013/06.

El-Erian Mahamed, A. (2010). Navigating the new normal in industrial countries. The Per Jacobsson Lecture. Washington, DC: Per Jacobsson Foundation.

Evdokimova, T. V., Zubarev, A. V., & Trunin, P. V. (2013). *The influence of real ruble exchange rate on economic activity in Russia* (Working Paper No. 165P). Moscow: Gaidar Institute Publ (In Russian).

Ferguson, N. (2008). The ascent of money: A financial history of the world. N. Y.: Penguin Press.

Friedman, M. (1956). A theory of the consumption function. Princeton, NJ: Princeton University Press.

Gordon, R. J. (2012). Is U.S. economic growth over? Faltering innovation confronts the six headwinds. NBER Working Paper, 18315.

Gordon, R. J. (2014). The Demise of U.S. economic growth: Restatement, rebuttal, and reflections. NBER Working Paper, 19895.

Idrisov, G., & Sinelnikov-Murylev, S. (2013). Budget policy and economic growth. *Voprosy Ekonomiki*, 8, 35–59 (In Russian).

Idrisov, G., & Sinelnikov-Murylev, S. (2014). Forming sources of long-run growth: How to understand them? *Voprosy Ekonomiki*, *3*, 4–20 (In Russian).

Keynes, J. M. (1919). The economic consequences of the peace. N. Y.: Harcourt, Brace, and Howe.

Kondratiev, N. D. (1925). Large cycles of conjuncture. Voprosy Konyunktury, 1 (1), 28-79.

Krugman, P. (1979). A model of balance of payments crises. *Journal of Money, Credit, and Banking, 11* (3), 311–325.
Kudrin, A., & Gurvich, E. (2014). A new growth model for the Russian economy. *Voprosy Ekonomiki, 12*, 4–36 (In Russian).

Kuznets, S. (1966). Modern economic growth: rate, structure, and spread. New Haven & London: Yale University Press.

Lund, S., Daruvala, T., Dobbs, R., Härle, P., Kwek, J. H., & Falcon, R. (2013). Financial globalization: Retreat or Reset. Global capital market 2013. McKinsey Global Institute. Mankiw, N. G. (2013). Defending the one percent. Journal of Economic Perspectives, 27 (3), 21-34.

Mau, V. (1998). Political nature and lessons of the financial crisis. Voprosy Ekonomiki, 11, 4-19 (In Russian).

Mau, V. (2002). Economic and political results of 2001 and prospects of sustainable economic growth. Voprosy Ekonomiki, 1, 4–22 (In Russian).

Mau, V. (2009). Global crisis: Past experience and future challenges. Ekonomicheskaya Politika, 4, 47-61.

Mau, V. A., & Kuzminov Ya. I. (Eds.) (2013). Strategy-2020: A new growth model—new social policy. Moscow: Delo (In Russian).

Mokyr, J. (2014). What today's economic gloomsayers are missing. The Wall Street Journal, August 8.

Peretts, E. A. (1927). E. A. Peretts diary (1880–1883). Moscow & Leningrad: Gosizdat (In Russian).

Piketty, T. (2014). Capital in the Twenty-First Century. Cambridge, MA: Harvard University Press.

Rodrik, D. (2008). Globalization: We urgently need Keynes. *Vedomosti*, July 28. (In Russian).

Rodrik, D. (2011a). The globalization paradox. N.Y. & London: W.W. Norton & Company.

Rodrik, D. (2011b). Unconditional convergence. NBER Working Paper, 17546.

Sinelnikov-Murylev, S., Drobyshevsky, S., & Kazakova, M. (2014). Decomposition of Russia's GDP growth rates in 1999–2014. *Ekonomicheskaya Politika*, 5, 7–37 (In Russian).

Summers, L. (2013). Why stagnation might prove to be the new normal. Financial Times, December 15.

Summers, L. (2014). Washington must not settle for secular stagnation. Financial Times, January 5.

Teulings, C., & Baldwin, R. (Eds.) (2014). Secular stagnation: Facts, causes and cures. London: CEPR Press.

Ulyukaev, A. V. (1999). Waiting for the crisis: Implementation and contradictions of economic reforms in Russia. Moscow: Strelets (In Russian).

Ulyukaev, A. V. (2010). Russia and new macroeconomic reality. In E. Yasin (Ed.), *X International academic conference on problems of development of economy and society* (Book 1, pp. 111–120). Moscow: HSE Publ. (In Russian)

Ulyukaev, A. V. (2014). *Painful transformation of the global economy*. Moscow: Gaidar Institute Publ. (In Russian). Vedev, A., Drobyshevsky, S., Sinelnikov-Murylev, S., & Khromov, M. (2014). Actual issues of banking system development in Russia. *Ekonomicheskaya Politika*, *2*, 7–24 (In Russian).

Williamson, J. (1989). What Washington means by policy reform. In J. Williamson (Ed.), *Latin American readjust-ment: How much has happened*. Washington, DC: Institute for International Economics.