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The Russian Economy: From Transformation to Development

Report for the XIX April Conference

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Introduction¹

In the second half of the 1980s in Russia (then the USSR) changes began, as a result of which much has changed in our country. The first line of the changes had as its most vivid side the democratization of the country which had ossified in the atmosphere of a totalitarian and then rather an authoritarian regime, which prepared the subsequent reforms. In 1992, economic reforms aimed at moving from a planned to a market economy began. They were followed by a very severe transformational decline, which lasted until 1998.

Then the recovery period began, which took a decade (1999-2008). The New Russia, already with a market economy, and which also got the opportunity to take advantage of the oil boom in a situation of political stability, managed to raise the economy and significantly improve the standard of living.

Major political events - the disintegration of the USSR, the Chechen war, the change of leadership since the early 2000s - left a mark on the fate of the New Russia. Since the beginning of the 21st century, the country has lived in a situation of political stability. This had its positive and negative sides, which were getting more and more clear with time.

After the crisis of 2008-2009, which became a manifestation of the global financial crisis in Russia, as well as the events of 2011-2012, the country entered a new stage of its development. The decay of the growth rates of the economy, a decline in the level of welfare raised the question of how Russia would develop further. Will this simply be a "new normality" that is characteristic of the country after serious institutional and structural changes, or does its development require new, additional changes to open the way for perspective development, modernization, and new achievements? We tried to answer these questions in previous works, and we intend to continue our efforts this time. Moreover, the relevance of the answers in recent years has dramatically increased.

So, the focus of our present work is an analysis of the processes taking place in Russia since the beginning of the period of changes, especially the events of the last two years, with the study of the possibilities for further development: what we can do and what we want to do.

The logic of the work is as follows. In order to reason about the prospects of the development of the economy, it is necessary to understand what the distinctive features of the current situation are and how and why the economy has come to it. This is the focus of Section 1, which gives a "bird's-eye view" on the development of the Russian economy from the beginning

¹ This report develops the ideas presented in report The Economy of Russia: Before a Long Transition, prepared for the XVII April Conference (see [Akindinova, Kuzminov, Yasin, 2016]). The authors are grateful to Y.I. Kuzminov for ideas that allowed this project to be realized.

of market reforms. We discuss the stages of economic transformation and its main results. It is shown that the transition period has come to its end. The economy received bonuses and incurred costs associated with the transition to the market. The attenuation of the process of transformation and the onset of a "new normality" create challenges that require a different agenda in place of the exhausted crisis one. The need for a transition to stable development leads to a gradual shift of the "center of gravity" of the decisions made in favor of fine-tuning. This forms the demand for improving the quality of institutions.

A more detailed analysis of the economic results of recent years is given in Section 2. The correlation between GDP dynamics and welfare and inequality indicators, the benefits and costs of stabilizing the macroeconomic environment (monetary and budgetary spheres), as well as the development of market mechanisms (competition and informality) are discussed. These results were significantly influenced by the economic structure that emerged during the transformation process. Its distinctive features are discussed in Section 3. Three market macro sectors are identified here: raw materials business, large non-raw materials business, and small and medium business. Enterprises from these macro sectors differ significantly in the nature of their relations with the government, access to rental incomes, mechanisms for adapting to changes in external conditions, and the level of profitability. We analyze the process of the transformation of a three-sector economic model into a more efficient one characterized by a departure from rent-seeking behavior and an increase in the role of market incentives, which is far from being completed yet.

The analysis performed serves as a basis for economic development scenarios, to the discussion of which we devoted Section 4. Two scenarios are considered - conservative and reformatory ones. The first one assumes the preservation of the current vector of economic policy, while the second one is based on consistent efforts to develop market principles, lower the risks of doing business, and reduce redistributive activities and opportunities for rent-seeking behavior. Due to the completion of the recovery, the potential of the conservative scenario seems insufficient to meet the challenges facing the country, which creates the demand for continuing reforms and makes the reform scenario preferable.

At the same time, the possibilities for implementing a scenario for economic development are related to political constraints, which are discussed in Section 5. The feasibility of a scenario is largely determined by what elite groups support it, as well as by the support of the population. The analysis of survey results shows that among experts the popularity of the reform scenario is growing, but the views of the population are not so unambiguous. The latter requires systematic educational activities among the population to explain the need for continuing reforms.

Otherwise, if the strength of arguments will turn out to be insufficient, there may appear a tempting to resort to the argument of force.

1. Completion of the transformation from plan to market²

1.1. Brief outline of economic transformation

It is natural to analyze the Russian economic dynamics of the last three decades in the context of a transition from plan to market, i.e. in the paradigm of transformation. This transformation, which began in late 1980s, outlined the long-term trends in the economy development, including the recent slowdown in economic growth observed during the last years, which is often called "new normality." These long-term trends were superimposed by three crises (which started in 1998, 2008 and 2014) caused by exogenous shocks (Figure 1.1). Although the analysis of these crises is traditionally given great attention, the character of the Russian economic dynamics of the last three decades was determined not by them, but by a transition process of a larger scale. It is economic transformation that is the main, leading process, on which the above-mentioned crises of a much smaller scale and duration, i.e. events of the second level, are superimposed.

On the eve of the transformation in the Russian economy, the plan principles dominated, according to which it had functioned for the six preceding decades. The completion of the transition leads to the predominance of market principles.

In the Russian transition process, we can distinguish three main stages - deterioration, improvement and attenuation³. The first of these is usually associated with a transformational decline⁴. At this stage, overall, the trends of decline in production (Figure 1.1) and welfare were dominant, which was accompanied by exceptionally high inflation rates (Figure 1.2). By the beginning of 1997, when there were signs of a resumption of economic recovery, the decline in GDP relative to the level of 1990 was 40%, and consumer prices rose 5.7 thousand times in relation to the end of 1990.

² This section is based on the results of the "Structural Changes in the Russian Economy and Structural Policy" study (see [NRU HSE, 2018, sect. 2]).

³ See [Arnold, 1990]. It should be noted that this mathematical work, published before the beginning of the transition process in the Russian economy, had described at a qualitative level exactly what happened subsequently.

⁴ See [Kornai, 1994; Polterovich, 1996; Campos, Coricelli, 2002; Bessonov, 2005].

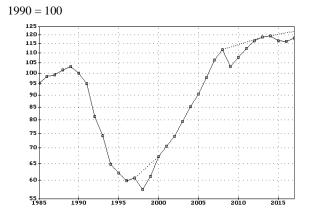


Figure 1.1. Gross domestic product in constant prices (the impact of the crises of 1998, 2008 and 2014 is highlighted).

Source: authors' calculations according to [Ponomarenko, 2002] (before 1989) and Rosstat.

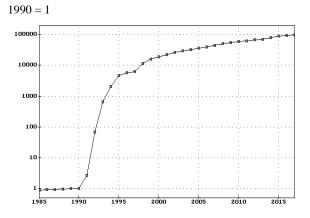


Figure 1.2. Consumer price index. *Source*: authors' calculations based on Rosstat data.

The stage of transformational decline was replaced by a recovery. Since the crisis of 1998 was superimposed on the initial period of recovery, the transition to recovery is traditionally dated as the fall of 1998, and not as early 1997. For similar reasons, the autumn 2008 is considered to be the end of this period, which allows us to speak about the inter-crisis decade. So, according to the traditional interpretation, the recovery took exactly 10 years. During this time, GDP increased exactly 2 times, and consumer prices increased 4.3 times. The high rate of the recovery was largely due to the great depth of the previous transformational decline. Its role was played by the fact that an event of a smaller scale was superimposed on the recovery phase. The economic recovery in the first two years of the inter-crisis decade significantly accelerated (Figure 1.1) due to the fact that the recovery from the 1998 crisis was taking place at this time. This short period can be considered as a secondary recovery, whereas the corresponding stage of the transitional process is naturally viewed as the primary recovery.

The end of the crisis that began in 2008 was not accompanied by a recovery in the rates of economic growth typical for the inter-crisis decade. In the transformation paradigm, this is naturally associated with the attenuation of the transition process, i.e. with the transition to its third phase. More precise identification of the boundaries of this period is hampered by the fact that it was superimposed by another event of a smaller scale - the crisis that began in 2014. However, in any case, an accurate estimate of the beginning of the attenuation of the transition process is impossible.

During the last years of the inter-crisis decade, the maintenance of the economic growth rates at a consistently high level was ensured by growing global oil prices. If the conditions of foreign trade had not demonstrated such an improvement, then we should have expected a gradual slowdown in economic growth rates as early as in the last years of the inter-crisis

decade. Thus, a favorable short-term trend due to the improving conditions of foreign trade was superimposed on the initial stage of the recovery slowdown.

The attenuation of the transition process in the 2010s is characterized by a gradual transition of economic growth rates to values typical for a stable (non-transitional) economy (in particular, for the Russian economy before the beginning of the transformation, see Figure 1.1) and the continued decline in inflation (Figure 1.2) also to levels characteristic of stable economies. GDP in 2014, i.e. in the last year when economic growth had been observed before the current crisis began, had grown by only 6.0% compared to 2008, and consumer prices had increased by 59% in the same period.

The significant decrease in economic growth rates in recent years, called "new normality," can be considered a natural consequence of the transition process attenuation. "New normality" is a return to the norm, the deviation from which the transformation dynamics was. The quantitative characteristics of "new normality" (economic growth rates, inflation rates, etc.) correspond to the situation before the beginning of the economic transformation, i.e. "old normality." They are typical of stable, non-transitional economies.

If the conditions of foreign trade again become as favorable as in the last years of the inter-crisis decade, we should not expect the resumption of economic growth at the same pace, since they were largely due to an intensive recovery after a deep transformation decline.

Over the period from 1990 (the last year before the onset of the intensive transformational recession) until 2014, Russia's GDP grew by only 19%, i.e. the average annual growth rate was only 0.7%. But then, the accuracy of these estimates is extremely low. Thus, the scale of the Russian economy has increased insignificantly over the past three decades. However, what is hidden behind this "facade", which has changed only slightly, has undergone colossal changes. In particular, the Russian economy has undergone large-scale institutional and structural changes.

1.2. Results of the transition period

The state of the Russian economy on the eve of the beginning of the process of its transformation was characterized by a number of serious disproportions. For example, the economy had a distinct raw material nature, which was manifested in a much higher material and energy intensity of products compared to developed market economies. The input of raw materials and power to produce a unit of an end product was often several times higher. The disproportions in the structure of production corresponded to distortions in relative prices, i.e. disproportions in the price structure. Prices for raw materials and energy resources were maintained at a relatively low level, while prices for final products were relatively high. At the

same time, the quality of the final products was not always in compliance with the international standards, which made it even less competitive.

The military industrial complex was hypertrophied, as was the investment complex. At the same time, the consumer goods production sector was significantly underdeveloped. Among the union republics, this was especially characteristic of the Russian Federation, in which the main enterprises of the military-industrial complex were concentrated. The service sector was also significantly underdeveloped.

The reasons for these disproportions are related to the specifics of a planned economy⁵. Producers very often did not have proper motivation to reduce costs and increase productivity. This was a consequence of the lack of competition between Soviet enterprises and also of autarky, when, due to the state monopoly on foreign trade, Russian manufacturers were not built into the system of world economic relations and did not face competition from foreign producers. The absence of market mechanisms and the autarky deprived Russian producers of effective feedback. Distortions of relative prices were to a certain extent due to the legacy of the pre-war period of industrialization, when the establishment of low prices for raw materials and energy and overly high prices for end products created incentives for the accelerated development of the processing industry.

These are, in the most general terms, the disproportions that developed in the Russian economy by the end of the period of its planned development. Elimination of these distortions was one of the goals of the market reforms. The structural changes during the transition period were accompanied by the correction of some disproportions and the growth of others.

The raw materials nature of the Russian economy intensified with the onset of reforms, which did not correspond with the expectations. This was manifested in the fact that in the first years of the transformation, the extractive industries underwent a much less deep decline in comparison with the processing industries and moved to the recovery faster. Per unit of extractive industries output, the Russian economy began to produce fewer products of processing industries than before the reforms.

At first glance, such a structural shift may seem paradoxical. However, it has a simple explanation. The liberalization of the foreign trade opened to producers of competitive, i.e. relatively cheap and high-quality (not spoiled by processing) raw materials, access to external markets, whereas producers of relatively expensive and not always competitive in terms of quality final products faced competition in the domestic market from foreign manufacturers. The prices of raw materials and energy sources were naturally growing at an accelerating rate, and

⁵ See also [Kornai, 1992].

the relative prices of many types of final products were declining⁶. As a result, during the initial period of the reforms, the producers of the respective types of products were placed in substantially different conditions.

There were also other reasons for this shift in the structure of production. Thus, the process of the production of high-tech products is characterized by greater complexity of production links, longer technological chains, and therefore it is more vulnerable to any forms of disorganization⁷ than the production of less technologically complex products.

At the same time, the occurred intensification of the raw material nature of the Russian economy can not be unequivocally interpreted as a negative structural shift. During the Soviet era, a large number of non-competitive products were produced. With the transition to market relations, a significant part of these products ceased to be in demand and gave way in the domestic market to cheaper and/or of higher quality imported products. The transition to the market did not allow continuing ineffective transformation of material and labor resources into final products of low quality. The economy got rid of the "body toxins". At the same time, a significant amount of resources was released, which were either directed to export, which allowed to import more efficiently produced final products, or to other sectors of the Russian economy. The abandoning of hypertrophied investing had similar consequences. Such reallocation of resources, leading to their more effective use, contributed to the improvement of well-being.

As an illustration of this process, let us point out the change in the situation in agriculture. In the Soviet period, a unit of livestock production in Russia compared with developed countries consumed several times more food. The result was a chronic shortage of feed, which forced to import large amounts of grain. The transition to the market and the liberalization of foreign trade led to the fact that instead of grain it became more profitable to import livestock products, the production of a unit of which abroad consumed significantly less feed. At the same time, significant amounts of previously inefficiently consumed grain were released in the country, which began to be exported, which allowed importing additional quantities of consumer and investment goods.

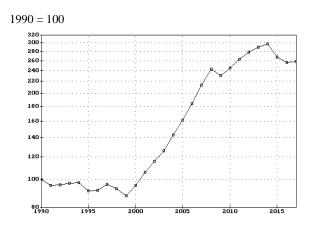
The discussed reallocation of resources contributed to a faster growth of welfare compared to production. It is known that the gross domestic product shows the dynamics of production, rather than welfare⁸. As such an indicator, one could use gross domestic income (GDI), but Russian statistics doesn't calculate it. Therefore, the outrunning growth in welfare can only be illustrated by indicators of a lower level of aggregation. Fig. 1.3 and 1.4 show the

⁶ For more details, see [Bessonov, 2005].

⁷ See [Blanchard, Kremer, 1997].

⁸ See, for example, [Stiglitz et al., 2010; Feldstein, 2017].

dynamics of two such indicators - the turnover of retail trade in constant prices and real disposable monetary income of the population. Both of these indicators demonstrate a much higher growth during the reforms compared with the production index (compare Figures 1.3 and 1.4 with Figure 1.1). This is particularly evident in the dynamics of retail trade turnover, which by the time of beginning of the last crisis had increased three (!) times compared with the pre-reform level⁹, while the GDP had grown by only 19%. Thus, the retail trade turnover during the reforms showed a 2.5 times higher growth than GDP. Other welfare indicators also show significant growth during the reforms.



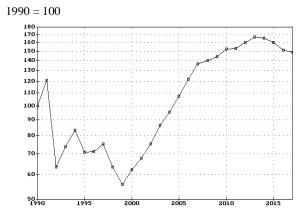


Figure 1.3. Retail trade turnover. *Source*: authors' calculations based on Rosstat data.

Figure 1.4. Real disposable monetary income. *Source*: authors' calculations based on Rosstat data.

It should be noted that the increase in welfare, the indicator of which is a sharp increase in retail trade turnover and real disposable monetary income, was taking place in the years when there was a significant increase in the value of exports and imports (Figure 1.5). All this illustrates that in the circumstances under consideration abandoning the production of uncompetitive products, reducing the resource intensity of products, decreasing losses, redirecting raw materials released as a result of this to export and importing cheaper and of higher quality products can not be considered a negative phenomenon.

⁹ There are grounds to believe that the retail trade turnover more adequately reflects the welfare dynamics in comparison with the real disposable monetary incomes. The reason is that in 1990-1991, i.e. on the eve of the liberalization of prices, the incomes of the population were not fully backed with goods and services. This imbalance led to a deficit in the consumer market and to an increase in forced savings of the population. Thus, the indicator of real disposable monetary incomes during these years gave an overestimation of the level of well-being compared to the subsequent years when, after the beginning of market reforms, the incomes of the population were backed with goods and services. Accordingly, a comparison of the level of real disposable monetary income after the liberalization of prices with their levels before liberalization gives an underestimation of the change in welfare. The retail trade turnover is not subject to similar distortions, because it is based on the accounting of actually made purchases. It can only slightly overestimate the level of prosperity of the first years after the liberalization of prices, when the population was getting rid of rapidly depreciating savings.

US\$ billion.

550
500
450
400
350
300
250

Figure 1.5. Export (1) and import (2) of goods. Source: Rosstat data.

1996 1998 2000 2002 2004 2006 2008 2010 2012

If the production process is viewed as the transformation of raw materials (including energy resources) into final product, then obtaining more of the final product per unit of raw materials can be interpreted as increasing production efficiency. If along with domestic production you take into account the flows of foreign trade (exports of raw materials and imports of final products), then it should be admitted that in exchange for the same volumes of raw materials, the Russian economy, after the start of reforms, on the whole began to receive a larger amount of final products, and in this sense the economy became more effective. The reflection of this was an impressive increase in the well-being. In other words, until domestic producers learned how to effectively transform raw materials into final products as their competitors from advanced countries, it had turned out to be economically more advantageous to export a significant part of raw materials and import final products. Of course, in the long run, such a strategy can hardly be considered as acceptable.

Thus, Russian economy entering the structure of world economic ties allowed it to gain the benefits from participating in foreign trade, which it had previously been deprived of. The corresponding growth in welfare during the recovery phase was due to the process of transformation, i.e. it was a transformation bonus. Due to the fact that it can only be obtained once, there is no reason to expect further outpacing growth in welfare brought about by this transformation effect. Welfare has shifted to a different, higher level, but its further dynamics will be determined by other reasons. The positive influence of this effect ended in early 2010s with the end of a period of the rapid growth in exports and imports (compare Figure 1.5 with Figures 1.3 and 1.4).

Another transformational structural bonus is associated with reallocation of labor resources. By the beginning of economic reforms, the industry and agriculture had excessive employment. As the production of non-competitive products decreased and labor productivity increased, the excess labor resources were being pushed out of these industries. The recipient

was the service sector (including its informal segment), which contributed to its growth, i.e. elimination of one of the disproportions inherited from the period of planned development. We can consider as the magnitude of this bonus an increase in the production of services due to the influx of labor resources from other sectors.

In addition to the fact that the development of the service sector as a result of the reallocation of the workforce gave a transformational bonus, it largely saved the government from the burden of social support for the unemployed. Thus, the initially underdeveloped service sector played the role of a damper in the process of economic transformation, mitigating the social consequences of the decline in employment in the industry and agriculture.

The third transformation bonus was due to abandoning hidden subsidies to the countries of the Council for Mutual Economic Assistance (CMEA) and the former union republics, which in the Soviet era were supplied with energy resources and raw materials at low prices. The process of stopping hidden subsidies due to a number of reasons was stretched for many years, but to date it has basically been completed.

At the same time, the correction of some disproportions in the process of economic transformation was accompanied by the emergence of others. The production of many types of products and services that the Russian economy had traditionally been able to produce at high quality significantly decreased. For example, in the 1990's a large share of the domestic consumer market was occupied by imported goods. The dominance of imports in the aggregate domestic demand arose not only in high-tech industries, the lag in which developed long before the beginning of the transition period. Significant losses were suffered by well-developed manufactures with relatively simple technology that had traditions of high-quality production and even rated high on external markets outside the CMEA (machine-tool construction, the production of optical instruments and photographic equipment, bearings, and others).

In many cases, instead of expected improvement in the quality of the products produced and decrease of the costs associated with it, it was displaced from the domestic market. A disproportion formed that was the reverse of the one that took place on the eve of the beginning of the economic transformation process. The autarky was replaced with a situation when imported products accounted for a hypertrophied share in aggregate demand.

The reasons for the formation of this disproportion were both the inability of producers to adapt to the changing conditions of economic activities in a short period of time and unfair competition in the foreign trade (dumping products of not always high quality, "shuttle trade"). The disruption of economic ties with the former union republics and CMEA countries, the effects of disorganization, non-payments problem and other similar factors also contributed to

this disproportion. The most significant blow these processes inflicted on the domestic light industry.

As noted above, the stage of the transformational recession was characterized by the intensification of the raw material nature of the economy. However, later on structural changes took the opposite direction. Recovery in industry was accompanied by outstripping growth in processing industries as compared to oil and gas production and mining. In the economy as a whole, in this period, there was an outstripping growth in production in the non-raw materials sector. In agriculture, there was also a stable upswing, which didn't shown signs of an onset of attenuation yet. The latter can be attributed both to the potential of import substitution and to the prospects for further increase in the exports of products.

Thus, in the first phase of the transformation, the Russian economy adapted to market relations and entered the structure of world economic relations, receiving appropriate bonuses and incurring costs. After the completion of this adaptation stage, positive effects emerged due to the implementation of market relations. The effect of disorganization was replaced by the restoration of economic ties, i.e. reorganization, the process of import substitution began. Between the onset of market reforms and their visible positive results, a considerable amount of time passed. The transition to a new equilibrium, as a sign of the completion of which "new normality" can be viewed, took two decades.

The growth in processing industries was due to an increase in the volume of output of products in demand in the market in the conditions of strong competition with foreign producers' products, as an indicator of which the process of import substitution can be viewed. For this reason, it is not quite correct to compare the output of the end of the transition period with the production volumes of the beginning of the transformational recession, which were "inflated" due to the production of products that stopped being in demand due to the transition to market. Accordingly, insignificant changes in GDP in constant prices for the whole period of reforms conceal the fact that at the end of this period, products in demand of a generally higher quality and a broader range were manufactured with less resources.

1.3. Challenges of "new normality"

In view of the foregoing, the potential for recovery in the Russian economy appears largely exhausted, as is the potential for transformational bonuses associated with it. Therefore, the sources of economic growth and improvement of well-being for the foreseeable future should be associated with the effect of substantially different factors.

Over the past three decades, in discussions on the prospects for the Russian economy the anti-crisis agenda has dominated, which was natural. First, it was discussed how to stop the

transformational decline, then how to support the recovery, and all the time - how to reduce the rate of inflation. By now, in connection with overcoming the consequences of the challenges of the transition process and its attenuation, the anti-crisis agenda has been exhausted in the first approximation. Accordingly, the prospects for the Russian economy should be discussed based on other considerations.

The main leitmotif of the new agenda is ensuring acceptable rates of economic growth and welfare increase. The issues of combating inflation are gradually receding into the background. With these features, the new agenda resembles the one that became topical in the 1980s and brought about the policy of "acceleration". A significant difference from the situation on the eve of the beginning of the transformation process is that the Russian economy switched to market principles of economy, corrected the main structural imbalances and entered the system of world economic relations.

Thus, in connection with the completion of the transition period, it is natural to expect a change in the milestones of economic policy. Since economic policy in the main features is determined by the response to challenges, it seems appropriate to consider some of them.

One of the challenges stemming from the end of the "storm and onslaught" era is to increase the demand for the quality of institutions. Thanks to the potential for recovery and the rise in global oil prices, intensive economic growth in the zero years was possible with imperfect institutions. Now the potential of these factors is exhausted. The economy no longer has the "lifting power" that was ensuring economic growth in the inter-crisis decade. Consequently, factors that could previously be neglected are becoming more and more important. The framework and walls of the building of the market economy have been built. There are "finishing works", i.e. long meticulous work on fine-tuning institutions.

Another challenge for the next few years is the need to adapt the economy to low inflation. In particular, the adaptation of the banking sector is inevitable. In this sector, it is necessary to achieve a significant cost reduction, i.e. increase productivity. Expanding lending volumes as a result of lower interest rates will help compensate for the decrease in the banks' income due to the reduction of margins.

One more challenge for the financial sector is as follows. For a long time in the Russian economy (as well as in other transition economies) there was a tendency of intensive strengthening of the real exchange rate of ruble, which was initially significantly underestimated ¹⁰. During the crises, there were "rollbacks", but in general the trend can be traced very clearly. The presence of such a trend made it more profitable for Russian companies to borrow on the global financial market (in spite of exchange rate risks), because thanks to the

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¹⁰ See, for example, [Bessonov, 2005].

strengthening of the real exchange rate of ruble, the loan amount substantially depreciated. This put the domestic financial market in knowingly unequal conditions with external markets. In recent years, there has been, firstly, the exhaustion in the first approximation of the potential to strengthen the real exchange rate of the ruble, and, secondly, the reduction of inflation risks due to the lower inflation rates (the lower the inflation rate, the more stable they are). All this improves the competitive position of the Russian financial market and creates prerequisites for its significant development. Sanctions are also pushing to this. In view of what has been said, it is natural to expect significant progress in the development of the Russian banking sector in the foreseeable future.

A challenge is also the increase of the dependence of the Russian economy on the conjuncture of world markets (primarily raw materials) in connection with the entry into the structure of world economic ties. On the one hand, this entry led to the transfer of wealth to a much higher level, and, on the other, made its dynamics much more volatile. A consequence of this, in particular, is a profound decline in welfare during the last crisis (compare Figures 1.3 and 1.4 with Figure 1.1). When analyzing economic dynamics, it is necessary to take into account the short-term nature of the corresponding fluctuations and separate them from the influence of longer-term factors. Significant dependence on the external economic situation requires continued use of mechanisms to mitigate the effects of external shocks on welfare dynamics, such as the accumulation of reserves in periods of favorable business conditions. Due to Russia's unique abundance of natural resources, energy resources, raw materials and products of the initial processing will, in the foreseeable future, constitute a significant share in the value structure of exports, so this challenge has a long-term nature.

In general, gradual transition to ever more subtle, pinpoint, differentiated measures of economic policy seems inevitable. Of course, a number of important decisions at the macro level (related to pension reform, budgetary maneuver, etc.) should be adopted, but the "center of gravity" of the decisions made will gradually shift in the direction of fine-tuning. This, in particular, requires a higher quality of understanding of what is happening in the economy, which creates an increased demand for high-quality socio-economic statistics and analytics.

A large number of such measures are discussed in Structural Changes in the Russian Economy and Structural Policy report [NRU HSE (2018)]. Below we mention only some of them.

To some extent, the economic recovery in the foreseeable future can be supported by the import substitution process, i.e. we can expect a continuation of the correction of the disproportion (the excessive presence of imported goods in the domestic market) formed during the transition period. The restoration of the production of the corresponding types of products,

including through economic incentives and protection from unfair competition, would not only help preserve the domestic traditions of producing high quality products, but also solve the problems of overcoming significant differences in the levels of economic development of the regions. Supporting such productions will allow combining the development of high technologies with ensuring rational employment. This is topical in the context of minimizing the costs of low territorial mobility of the workforce (the presence of remote regions, monocities, etc.).

In this regard, it is appropriate to note that the development of exports and import substitution in order to eliminate the obvious distortions that arose at the stage of transformation are not alternatives. These processes can develop simultaneously. At the same time, import substitution to correct distortions has the advantage that effective demand already exists for the corresponding goods and services in the Russian economy. However, the development of exports requires the search for appropriate market niches.

We can expect the continuation of the rise of agriculture, the achievement of the full provision with domestic food products and the continued growth in the exports of products. The economic recovery in developing countries (primarily Asian ones) creates prerequisites for a significant increase in exports.

Speaking about the prospects of welfare change, it must be borne in mind that it is determined not only by the flows (say, by monetary incomes of the population), but also by reserves. The latter include the area of housing per person, the quality of housing, the availability of durable goods (including cars) in households, the state of social and transport infrastructure, human capital indicators, etc. The accomplished transition to market relations created the conditions for the continued growth of this kind of reserves and, in this sense, it continues to have a positive impact on the welfare dynamics even during periods of decline in output and flow indicators of well-being. After the completion of the recovery and the beginning of the next crisis in 2014, the reserves indicators, in contrast to the flow indicators, continue to show steady growth. As examples of the welfare increase mechanisms created as a result of the transition to market, we would like to point out the development of mortgage lending (which is still in its early stage of development and whose potential is far from being exhausted) and the provision of market educational and medical services that contribute to the accumulation of human capital.

In connection with the task of developing measures for socio-economic policy, it is necessary to pay attention to the limitations on the part of Russian statistics. This is due, inter alia, to the fact that technological progress leads to a decrease in the degree of representativeness of traditional macroeconomic indicators. Contemporary methods of quantitative description of economy at the macro level were formed decades ago. They coped well with the description of

economy at the stage of technological development on which it was at the time of their development. This is the economy of the industrial phase of development, oriented at the mass production of traditional goods and services, i.e. the economy of coal, steel, oil, gas, cars, traditional trade, etc.

The corresponding goods and services are produced now too, and they are still clearly visible through the prism of modern statistics. At the same time, over the past decades, there has been a significant development of technologies, primarily information technologies. A new economy appeared - the economy of high-tech goods and services. The opportunities that the new economy brought significantly influenced both production and consumption. At the same time, the new economy is difficult to measure with traditional methods¹¹.

The high-tech goods and services, which didn't exist before, provided by the new economy, improving welfare, lowering costs, reducing the burden on the environment and having other positive consequences, at the same time may not have a significant impact on traditional production indicators such as GDP, or may even contribute to their decline. One of the reasons is that the products of the new economy are characterized by intensive quality changes, which are far from being fully taken into account by conventional price indices. As a result, it may turn out that the output of the new economy is growing at a much higher rate, and relative prices show a much faster decline than traditional statistical indicators show.

The focus of Russian statistics is shifted towards the production of goods and services of the industrial phase of economic development. Therefore, regardless of what is happening in the Russian economy, an analysis of statistical indicators can lead to conclusions about its raw material nature, the "oil needle", the resource curse, and so on.

2. Economic results of recent years

2.1. Economic dynamics

In 2017, the Russian economy exited a two-year recession triggered by negative shocks of 2014. According to preliminary estimates by Rosstat, GDP grew by 1.5%, slightly offsetting more than half of the previous fall. This pace seems rather modest, to which there are several explanations.

Firstly, as already mentioned, by the beginning of the 2010s, in the Russian economy the period of recovery after the transformational recession of the 1990s had come to an end, after which the economy passed into the phase of attenuation of growth and the formation of "new normality" characterized by moderate long-term rates. Secondly, the policy of fiscal consolidation and inflation targeting, forming necessary conditions for macroeconomic stability,

¹¹ For more details, see [Bessonov et al., 2011].

in the short term was limiting the dynamics of domestic demand against the background of an increase in the average annual price of Urals oil in 2017 by 26% (from 42 to 53 dollars per barrel). Thirdly, the restricting influence on the economy was exerted by the restriction of cross-border flows of goods, capital and technology due to the action of sanctions and countersanctions. Fourthly, despite the on the whole developed market mechanisms in Russia, their effect, as before, was weakened by structural factors related to the monopolism and rent-seeking nature of the economy, as well as high risks of doing business.

The slowdown in GDP growth rates fixes Russia's position as a country with an "average income" that is close to the level of the countries of Central and Eastern Europe, which also passed the transit trajectory from planned to market economy (Fig. 2.1). Preserving these rates in the future does not allow us to count on nearing in the future to the indicators of developed countries located on the technological frontier and involves the risk of staying behind the actively growing developing countries sooner or later (Figure 2.2).

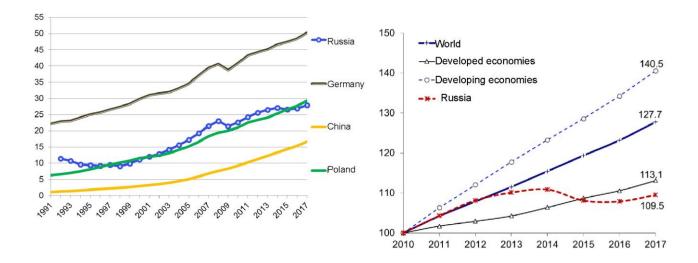


Figure 2.1. GDP at PPP per capita (in thousands of international dollars).

Source: IMF.

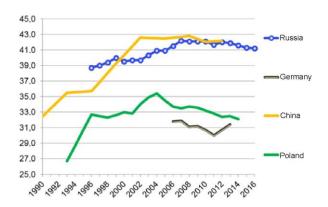
Figure 2.2. Dynamics of GDP (2010 = 100 %). *Source*: Rosstat, IMF.

Summing up the results of 2017, we should note very slow recovery of living standards, the scale of whose fall in 2014-2016 significantly exceeded the losses in the level of the real GDP (Fig. 2.4). At the same time, the dynamics of incomes of certain population groups contributed to maintaining a high degree of inequality - as in developing countries with lower levels of per capita GDP (Fig. 2.3). Given the predominance of the contribution of the region of residence compared to individual differences¹³ and the high contribution of the sectoral factor

¹² Measured in terms of GDP at PPP.

¹³ See [Ovcharova, Popova, Rudberg, 2016].

(despite the decrease in its significance compared to the mid-2000s)¹⁴, this inequality continues to be perceived by the people as unfair and demotivating, and therefore it has an on the whole negative impact on the economic growth.



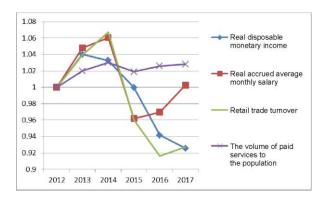


Figure 2.3. Index of household incomes concentration (Gini coefficient), 0 - 100.

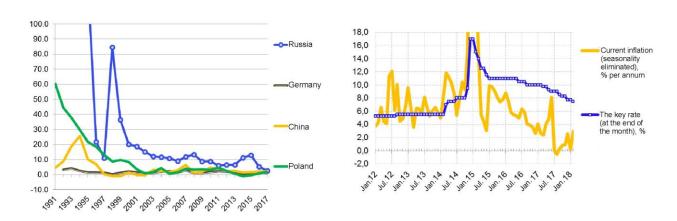
Sources: The World Bank; Rosstat; NRU HSE calculations.

Figure 2.4. The main indicators of the dynamics of the standard of living, 2012 = 1.

Source: Rosstat.

2.2. Macroeconomic environment

The obvious achievement of the economic policy of 2016-2017 was the reduction of inflation to 2.5%, that is below the target set by the Central Bank. Although the process of the gradual reduction of inflation has continued for more than two decades - since the mid-1990s, it was for the first time that it approached the levels typical for countries with a stable macroeconomic environment. Maintaining positive real interest rates at the same time strengthens market incentives for investment, but lowering inflation is not enough for a sustained revival of investing. The growth of investment in 2017 was extremely uneven in the sectoral context, and the peak values achieved in the second and fourth quarters were largely explained by the dynamics of individual infrastructural projects (the Crimean bridge, the completion of facilities for the 2018 FIFA World Cup).



¹⁴ See [Gimpelson, 2016].

From 2017, the impact of changes in oil prices on the dynamics of domestic demand and the ruble exchange rate has been limited by the effect of the temporary fiscal rule, which prescribes saving oil and gas revenues at a price above the base price (\$40 per barrel in 2016 prices). Despite the increase in oil prices in 2017 compared to 2016, federal budget expenditures during this period did not change in nominal terms, that is, in real terms they declined, which made a short-term negative contribution to the GDP growth. A more important consequence of the tight budgetary policy than a short-term limitation of growth rates (which will be overcome after the consolidation process is completed) was a structural restriction on the amount of productive expenditure of the budgetary system on infrastructure, fundamental science and human capital. The reduction in real terms of spending on education in 2017 compared to the maximum achieved in 2013 was 18%.

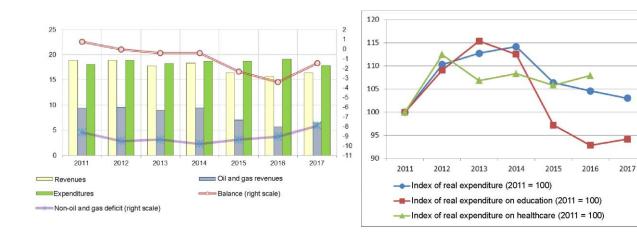


Figure 2.7. Revenues, expenses, balance, non-oil and non-gas deficit of the federal budget (in % to GDP).

Source: The Ministry of Finance of the Russian Federation,
Rosstat, the authors' calculations.

Figure 2.8. Dynamics of expenditures of the budgetary system in real terms, $2011 \, \Gamma = 100$. Source: The Ministry of Finance of the Russian Federation, Rosstat, the authors' calculations.

2.3. Market mechanisms

Although by the end of the transformation period, the formation of market mechanisms in Russia as a whole was completed, in 2017-2018 international ratings continued to record relatively low rates of economic freedom and competition in Russia. In the rating of economic freedom of Heritage Foundation, Russia took 107th place 15. In the competitiveness ranking of the World Economic Forum by "Intensity of Internal Competition" indicator, Russia was on the

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¹⁵ https://www.heritage.org/index/pdf/2018/book/index_2018.pdf

72nd place, and by "Efficiency of antimonopoly policy" indicator - on the 83rd place. ¹⁶. The connection between monopolization and the high level of nationalization of the economy is obvious.

According to the data provided in the report of the Center for Strategic Research¹⁷, the average revenue share of government-controlled companies in the revenue of the top 100 companies is 39.8%, and in some industries it exceeds 70%. Strengthening concentration and increasing governmental control can also be illustrated by the example of the processes taking place in the banking sector. Over 2016-2017, the share of banks with the government's participation, as well as its participation in the largest system-forming banks, increased. The rehabilitation procedures carried out at private banks to restore their sustainability gradually became a mechanism of nationalization in the banking sector¹⁸. A striking example of making government-owned is also the deal of February 2018 of the acquisition of a 29% stake in Magnit retail trade network by VTB Bank.¹⁹.

On the other extreme from companies controlled by the government, there is a large informal sector. According to Rosstat, the share of employed in the informal sector is at least 20%. The IMF's report²⁰ published in January 2018 estimates the share of the gray economy in Russia in 2016 at 33.7% of GDP (after ten years it remained practically unchanged), which corresponds to the average world level, but is significantly higher than indices typical for European countries²¹. As will be shown below, the informality in the Russian economy is an important mechanism that contributes to the preservation of market enterprises in unfavorable market conditions.

Inertial forecasts of experts in the field of macroeconomic forecasting show that if the institutional environment and the structure of the Russian economy will be preserved in the long term, GDP growth rates will be 1.5-2%²². At the same time, in the medium term, fluctuations around this level may be associated with the influence of the dynamics of oil prices, as well as changes in the budgetary and monetary policy.

¹⁶ http://www3.weforum.org/docs/GCR2017-

^{2018/05}FullReport/TheGlobalCompetitivenessReport2017%E2%80%932018.pdf

¹⁷ See [SDC, 2018].

¹⁸ Illustrative is the case of Promsvyazbank, which they intend to make, after the restructuring, a supporting bank for financing the State Defense Order.

¹⁹ https://www.vedomosti.ru/business/articles/2018/02/16/751222-galitskii-prodaet-aktsii-magnita-vtb

²⁰ See [Medina, Schneider, 2018].

²¹ Rosstat estimates the share of the gray economy in Russia at 15-16% of GDP, https://ria.ru/economy/20180227/1515368247.html

²² See, for example, the consensus forecast of the Development Center Institute of NRU HSE at https://dcenter.hse.ru/data/2018/02/26/1165186992/Cf-18-Q1.pdf

3. Structural Legacy of Transformation²³

In the report of 2016²⁴, the authors described the political and economic aspects of the transformation from a planned to a market economy that Russia experienced in the period since the early 1990s. It was shown that in the course of these changes, a peculiar three-sector model of the economy was formed in Russia, within the framework of which the redistributive and market relations are closely intertwined. It formed the so-called "bad equilibrium", when it is more profitable for all economic agents to preserve the existing models of behavior than to change them in favor of more effective ones in terms of the public good. On the one hand, the functioning of this model relies on the flows of rental income generated in the commodity sector of the economy and their redistribution to other sectors through budgetary and non-budgetary channels. On the other hand, in this economy, the role of market relations is rather big, which relations are most effectively developing in sectors that do not have access to oil and gas rent and budget investments.

As a result of the analysis, *three macro sectors* (not counting the budgetary one) *were identified*, with differing levels of profitability, differing relations with the government and access to rental incomes, as well as differing mechanisms for adapting to changing external conditions. These are Commodity businesses (CB), Large non-commodity businesses (LNCB) and Small and medium-sized enterprises (SMEs). Despite the fact that the boundaries of these sectors do not completely coincide with the boundaries of economic activities, each type of activity was conditionally assigned to one of the macro sectors based on the financial model prevailing in it.²⁵.

Characteristic features of CB is high profitability (about 20%) at low internal efficiency. The LNCB's lower profitability (9-11%) is offset by access to budgetary resources (subsidies, state investment). SMEs have even lower "official" profitability (5-6%), which is compensated by a high share of tax-free hidden wages.

The authors made an assumption that the trigger for the transformation of the three-sector economic model into a more efficient and market-oriented one would be gradual exhaustion of rent sources and the convergence of profitability indicators in different macro sectors, which would contribute to the attenuation of rent-seeking behavior and the development of incentives for productive activities. This will be manifested in the growth of private investment and labor

²³ This section is based on the results of the "Structural Changes in the Russian Economy and Structural Policy" study (see [NRU HSE, 2018, sect. 3]).

²⁴ See [Akindinova, Kuzminov, Yasin, 2016].

²⁵ See [Akindinova, Kuzminov, Yasin, 2016].

productivity in non-commodity macro sectors, reduction of the dependence of enterprises on state contracts and subsidies, as well as reduction of tax exemptions and "forced" charities²⁶.

During the period of the attenuation of economic growth, two events occurred that radically changed the conditions for the existence of macro-sectors. These were, on the one hand, the decline in oil prices from the levels of 100-115 dollars per barrel, typical for 2012 - first half of 2014, to 40-60 dollars per barrel in the second half of 2014 – 2017, and, on the other hand, the introduction of the strict fiscal rule, which limited the flow of oil and gas revenues to the economy. Within the scope of the report [NRU HSE, 2018], a series of studies was conducted on the response of macro sectors to changes in external conditions in order to determine to what extent their influence stimulates changes in the behavior and financial model of the functioning of macro sectors.

3.1. Commodity businesses

It turned out that, despite the negative impact of the fall in prices, in 2014-2016 the share of profit in the structure of added value of the Commodity businesses increased (Table 3.1). One of the explanations is the positive impact on the ruble volume of foreign exchange earnings of the growth of the dollar exchange rate, and the other is the reduction of the absolute and relative tax burden on the Commodity businesses. All this provided conditions for the growth of the investment rate in this macro-sector.

Against the backdrop of outstanding financial performance, total factor productivity in the Commodity businesses has been steadily declining since mid-2000s. (Figure 3.1.) The low share of labor compensation in the added value characteristic for it was combined with a noticeable demand for employees with a higher education and a high relative level of return from it. Given that in 2016 the average salary in the extractive sector was twice as high as the average for the economy, the absolute size of the salary premium also turns out to be very high. However, given the poor dynamics of total factor productivity, it can be assumed that the return on human capital (as well as the return on other resources) in the Commodity businesses was mainly rent-based.

²⁶ See [Akindinova, Kuzminov, Yasin, 2016].

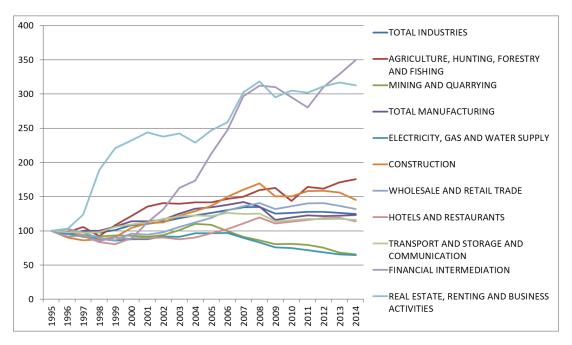


Figure 3.1. Dynamics of total factor productivity in the sectors of the economy, 1995 = 100. Source: Russia KLEMS.

During the period of the decline in oil prices in 2014-2016, this situation as a whole did not change. A radical change in the conditions of trade over these three years lead neither to a reduction in the concentration of resources in the Commodity businesses, nor to an increase in its internal efficiency. The monopoly position of key enterprises in this sector contributes to the retaining of their control over rent and high profitability, which in turn supports rent-seeking behavior in non-commodity sectors of the economy.

Table 3.1. Characteristics of the Commodity businesses and the Large non-commodity businesses, and their reaction to changing external conditions²⁷

Commodity businesses (in 2016 - 9.5% of GVA, 1.6% of employed),			arge non-commodity businesses 5.5% of the GVA, 36.0% of the employed)						
Mining and quarrying	Manufacturing	Production and distribution of electric power, gas and water	Construction	Transport and communications	Finance				

²⁷ Although, in addition to oil and gas production and mining, we should also include in the CB oil refining, wholesale trade in fuel and its transportation, the use of national accounts for the analysis of indicators does not allow ensuring such level of detailing. In our opinion, given the fact that the main profit of the Commodity Businesses in recent years is reflected in the extractive industry indicators, this is an allowable simplification.

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Share of taxes ²⁸ in GVA (2011-2016)*	High/Fell from 46% to 27%	Average/Stable (14-17%)	Average/Grew from 13 to 18%	Average/Stable (10-11%)	Low/Fell from 11% to 8%	Low/Stable (7-9%)
Share of hidden wages in GVA ²⁹ (2011–2016)*	Almost zero (0.2- 0.3%)	Low (3-6%)	No (0%)	Average (9- 13%)	Low (6-7%)	Almost zero (0.6- 1%)
Response to the crisis of 2014-2015* (change from 2013 to 2016).	The growth of the share of profits 30 from 46.5 to 60% of GVA due to a decrease in the share of taxes. The growth of investment rate from 18% to 29% of GVA.	The growth of the share of profits from 41.2% to 45.5% of GVA due to a decrease in the share of wages. Reduction of the investment rate from 23.5% to 20%.	Remaining proportions between labor pay and profit. Reduction of the investment rate from 61% to 39%.	The growth of hidden wages, a decrease in the share of profits from 46% to 40%. Remaining low investment rate (9-10%).	The growth of the share of profits from 45% to 46.5% due to a decrease in the share of wages. Reduction of the rate of investment from 60 to 42%.	The growth of the share of profits from 51% to 55% due to a decrease in the share of wages. Remaining low investment rate of 6%.

^{*} calculations based on national accounts statistics (performed by A.G. Nazarova).

3.2. Large non-commodity businesses

Other trends are characteristic of the types of economic activities that we combined into LNCB macro sector (Table 3.1). Its structure is dominated by "old" or "traditional" enterprises, partly controlled by the government, and partly having access to budgetary resources through the mechanisms of state contracts, subsidies and public investments. The enterprises of this macro sector are large employers paying mainly "white" salaries. Three of the five industries that we included into this macro sector, from 2013 to 2016 received the opportunity to increase the share of profits through saving on the labor compensation fund (two thanks to the reduction in the

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²⁸ The amount of net taxes on production and net taxes on products related to the relevant activity.

²⁹ Hidden earnings, in accordance with Rosstat's methodology, include hidden wages of hired workers and mixed incomes that are not traceable by direct statistical methods.

The nominal amounts of hidden earnings (by types of economic activity) are obtained by calculation based on the additional calculation of GVA for hidden production (according to Rosstat data on the structure of the adjustment of the value added of industries for the shadow operations of legal entities, transactions of the informal sector of the economy and the production of households for their own end use), and the conventionally accepted hypothesis on the distribution of the total amount of hidden income of the economy (estimated by Rosstat through 2016 inclusive) similar to the industry structure of the additional calculation of the GVA for hidden production in the economy as a whole. For 2011-2015 — the calculations of hidden earnings by industries are performed using the data of "National Accounts of Russia in 2011-2016" statistical collection (Tables 2.5.35-2.5.39) published by Rosstat in August 2017 (http://www.gks.ru/bgd/regl/b17_15/Main.htm). For 2016 — shares that correct the GVA of industries for transactions not traceable by direct statistical methods are preserved at the level of the 2015 report due to a 2-year lag in the official publication of the indicator.

³⁰ Here and below, gross profit and gross mixed income.

number of jobs). However, unlike Commodity businesses, in none of them was this accompanied by an increase in the investment rate.

The cessation of growth or even decline in total factor productivity shows that the enterprises can not achieve an increase in internal efficiency, even if they reduce labor costs. In addition, the low investment attractiveness of this sector is at least partly connected with the negative trends in the dynamics of consumer demand, the dependence on which has grown over the past decade, that developed in 2014-2016. Despite the lack of direct access to oil and gas rents and the reduction of its redistribution through the budget in 2014-2016, the Large non-commodity businesses continues to receive it indirectly through the restriction of competition and budget support mechanisms. The incentives to increase the competitiveness of products and raise sales in the market as a result remain insufficient.

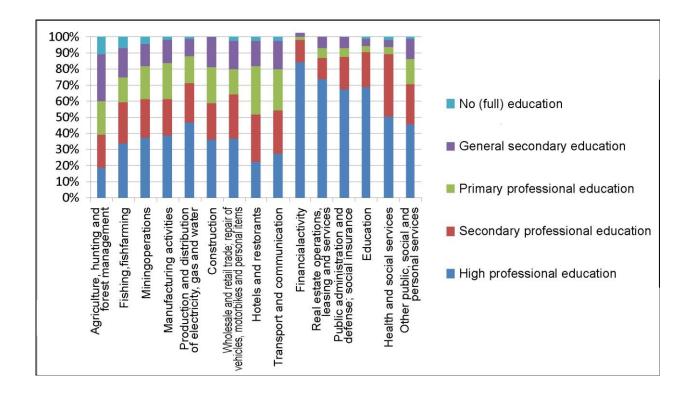


Figure 3.2. The assessment of the distribution of wages (in the GVA account taking into account hidden salaries and wages), by education levels and by economic activities in 2016, %

Source: calculations of the "Development Center" Institute of NRU HSE³¹.

3.3. Small and medium businesses

³¹ The calculations were performed by S.G. Misikhina. The structure of wages by types of economic activity and educational levels was obtained on the basis of the aggregation of the data of selective observation of incomes of the population and participation in social programs of Rosstat. The level of representativeness of the results - for the Russian Federation on the whole, urban and rural settlements with differing population, and by individual sociodemographic groups of the population. The database of the survey for 2012-2016 is on the website of Rosstat as "The Results of Federal Statistical Observations of Socio-Demographic Problems" (http://www.gks.ru/free_doc/new_site/inspection/itog_inspect1.htm).

Types of economic activity with the prevalence of SMEs are characterized by a generally higher level of competition and lack of access to government support (except for the large-scale subsidized agriculture). High risks and low profitability in this macro sector are compensated by mass tax evasion (Table 3.2). Among the changes that occurred between 2013 and 2016, first of all it is necessary to note the growth in the rate of investment in services to business and the population, as well as the remaining high rate of investment in hotels and restaurants, even against the background of the reduction of the share of profit in the structure of added value.

This sector also looks a little better from the point of view of the dynamics of total factor productivity. Its decline after 2008-2009 in this macro sector was less than the average for the economy. Despite the deterioration of the general conditions for the functioning of non-tradable sectors after the fall in oil prices, the share of the services sector in the structure of the economy continues to grow. In addition to the benefits already mentioned, this is due to the lower barriers to the penetration of new technologies than in traditional manufactures and a more competitive environment. At the same time, it is important that in the sphere of services to business and households belonging to the SME sector, there is a high demand for and high return from higher education (Figure 3.2). That way, the opportunity to receive a high salary (albeit not subject to taxation) allows keeping jobs in the country for people with higher education who otherwise might consider emigrating as one of the possible strategies.

Table 3.2. Characteristics of the SME macro sector and its response to changing external conditions

	Small and medium	business (in 2016 - 3	38.8% of the GVA, 38.8%	6 of the employed)
-	Agriculture**, hunting and forestry	Wholesale*** and retail trade, repair of vehicles, motorcycles, household articles and personal items	Hotels and restaurants	Real estate, renting and services
Share of taxes in GVA (2011-2016)*	Low (Subsidies)/Stable (-3% -6%)	Low/Stable (11%)	Low/Stable (8-9%)	Low/Stable (5-7%)
Share of hidden wages (2011-2016)*	High (36-47%)	Average (7-9%)	Average (8-13%)	High (35-40%)
Response to the crisis of 2014-2015* (change from 2013 to 2016)	The growth of the share of profits from 34% to 46% of GVA due to a decrease in hidden wages. Reduction of the investment rate from 24,5% to 18%.	The decrease in the share of profits from 54% to 51% against the background of an increase in the share of wages. Remaining low investment rate (4-4,5%).	The decrease in the share of profits from 45% to 38% against the background of an increase in the share of wages Remaining investment rate (14% -16%) despite a decline in profits.	The decrease in the share of profits from 36% to 32% against the background of an increase in the share of wages The growth of investment rate from 18% to 21% even without increasing profits.

It follows from the analysis performed that the transformation of the three-sector model, despite a strong change in external conditions, is taking place extremely slowly. To speed up this process, additional efforts from the government are required.

- 1. The key direction of the policy as regards the Commodity businesses is the *fight against monopolism and excessive concentration*, which, along with the availability of rental super profits, do not contribute to increasing the internal efficiency of this sector. It should be taken into account that the continued high profitability in this sector, even after a drastic drop in oil prices, remains a negative incentive for production activity in other sectors of the economy and thereby preserves the rent-seeking model. To reduce this influence, it is necessary to insist on the withdrawal to the budget of most of the profits of oil and gas companies with government's participation, and also to abandon the provision of unreasonable privileges to certain companies in this sector.
- 2. For the Large non-commodity businesses sector, the key policy is to *increase* competitiveness and raise sales of products in the domestic and foreign markets with gradual exiting the state support mode. At the same time, one should be cautious about the goals of economic policy formulated in terms of increasing labor productivity. As the past experience of Russia shows, the growth of labor productivity, if it is achieved by reducing the number of employed, may be accompanied by a decline in output and welfare and vice versa. At the micro level, the productivity improvement program can be a means of increasing competitiveness, but it should be borne in mind that the main objective of an enterprise is not to increase productivity and output, but to increase sales and profits.
- 3. As for the SME sector, it can be said that an intense *fight against gray wages* under current conditions is not an *effective mechanism for leveling out competitive conditions*. The spreading of gray employment and wages is mainly sectoral. For example, the lowest shares of gray wages in 2016 were observed in the Commodity and the Large non-commodity businesses sectors. These sectors as a whole can not be placed among the most dynamic ones in the economy because of the large share of monopolies, as well as enterprises with the government's share. Besides, they are the main recipients of government's subsidies. At the same time, a high share of gray pay for labor in recent years has been observed in the enlarged sector of real estate, renting and services, which

^{*} the calculations based on national accounts statistics were performed by A.G. Nazarova.

^{**} Agriculture includes both large holdings and small enterprises and personal supporting farms.

^{***}Trade can be only partially attributed to the sector of small and medium-sized enterprises, a large contribution is made by the wholesale trade in fuel, which should be attributed to the raw materials business, but the available national accounts statistics do not make possible separating its individual components.

includes ICT and other branches of the new economy. For many enterprises, in this macro sector, from the sphere of market services, moving to "the gray" is the only way to maintain economic activity in the conditions of sluggish demand and lack of access to government's resources. It is preferable to have a program for the gradual reduction of gray wages.

In addition, a performed analysis of the response of macro sectors to changes in external conditions showed that a reduction in the share of the wages fund and an increase in the share of profits in value added in a number of sectors did not lead to an increase in the share of investment (the exception is the raw materials business). Given the weak export opportunities of non-commodity business, the prolonged decline in consumer demand reduces the investment attractiveness of both industrial activities and services.

4. Scenarios of economic development

4.1. Limitations of development

Demographic changes connected with the population aging and the reduction of labor supply will have a key impact on the prospects for the development of the Russian economy in the coming decades. In 2001-2015, the number of employed in Russia grew by an average of 0.7% per year, until 2006 - thanks to the growth in the number of able-bodied population, and then (against the background of the beginning of its decline) thanks to the increase of the rate of the participation in the labor force of middle and old ages, which made a positive contribution of the demography to the economic growth. On the horizon until 2035, the working-age population will decline (the average version of the demographic forecast of the Institute of Demography of NRU HSE), despite the fact that the total population will grow until 2024. This means that by the 2030s, the Russian economy will lose all the benefits gained from the growth of the supply of labor force from early 2000s, and the direct contribution of demography to economic growth in the coming decades will be negative³².

Another limitation for Russia's economic development in the coming years will be the preservation of geopolitical tensions, sanctions and counter-sanctions that limit the cross-border movement of goods, capital and technology.

4.2. Conservative (inertial) scenario

On the whole, the conservative scenario envisages the preservation of the resource nature of the economy, the continuation of existing trends of the growth of government's control over economic activity, and the reduction of external ties and import substitution.

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³² See [Akindinova, Chekina, Yarkin, 2017].

In the conservative scenario, the government and the central bank will continue to pursue a policy of macroeconomic stabilization, that is, target inflation, and maintain the fiscal rule with a base price of \$40 per barrel in constant prices. Since such conditions require a very tight budget expenditure dynamics, including limiting transfers to regional budgets, in this scenario the creeping increase of the tax burden will continue. One of the manifestations of such an increase will be the growth of tax pressure on sole proprietors and the self-employed, including as a part of the fight against the gray sector.

At the same time, conservative public policy will mean further delaying of pension reform and significant reforms in education and healthcare. The situation of the Commodity businesses and Large non-commodity businesses will remain strong enough to ensure benefits for the oil and gas business and subsidies for large enterprises, in particular, as part of import substitution programs.

Growth in this scenario will rely primarily on capital increase in the Commodity businesses and the Large non-commodity businesses macro sectors.

Table 4.1. **Growth factors in the conservative (inertial) scenario**

]	Labor	C	apital	Total factor productivity	
Quantity of labor force	Quality (human capital)	Private	Governmental, incl. infrastructural	(residual without taking into account the contribution of the Human Capital)	
quickly shrinking, the workforce ages	stagnates or is gradually deteriorating due to low expenditure on education and healthcare	investments in the oil and gas sector and its servicing sectors	infrastructural megaprojects, defense complex, import substitution projects	low (almost near-zero) dynamics (continuation of the trend prevailing in the 2010s).	

The results of the conservative (inertial) scenario

Table 4.2.

Structure of the economy, level of Economic growth Welfare (standard of living) Relations with the outside world competition Real Institutional Exchange of household Driving Trade Inflow of **GDP** Productivity of labor Inequality knowledge and structure (macro capital income and branches (export/import) sectors) technology consumption the dynamics of remaining high share production exports is tied to limited, is high, of the commodity of oil and insignificant stagnation, oil and gas; possible in slow growth, lagging increasing, businesses and large gas and due to traditional export some points, extraction of the share in behind the income non-commodity restrictions on inertial dynamics - metals, and also world GDP dynamics of growth is businesses with a minerals and FDI and chemistry, through is decreasing possible in poor performance foreign investment related agricultural raw network dynamics, and exports some groups. sectors, borrowing materials, defense channels monopolism agriculture products

4.3. Reformatory scenario

The reformatory scenario assumes that the government will apply more consistent efforts to create the conditions for the transition to a new equilibrium oriented to market, rather than redistribution activity, and also ensuring not only an increase in production but also a rise in prosperity. This will be facilitated by measures aimed at reducing excessive non-tax burden on businesses and reducing the risks of doing business. At the same time, the reformatory scenario assumes a more active position of the government in restructuring the social sphere and refraining from oppressing consumer demand.

In the reformatory scenario, the government and the Central Bank also need to continue policies aimed at maintaining the sustainability of the macroeconomic environment (targeting inflation and the fiscal rule).

At the same time, a more flexible approach to fiscal policy is required to implement this set of reforms, including a moderate increase in the base price (for example, up to \$45 per barrel in constant prices), a change in the structure of budgetary expenditure towards investment in infrastructure and human capital (budgetary maneuver), stabilization of transfers to regional budgets, development of their revenue base and an increase of the financial autonomy of regions. The process of whitening wages should be carried out gradually and without enforcement, so as not to undermine the economy of the service sector. Pension reform (raising the age and at the same time the level of pensions), under the prevailing demographic conditions is inevitable, but it must be understood that it will only slow down the shrinking labor force process, but not break it³³. To fully utilize the human capital factor, a program is needed for improving the quality of educational and healthcare services, the resources for which will be provided by a budgetary maneuver, as well as the gradual introduction of a system of voluntary co-payments of the population for higher-quality social services.

Finally, as part of the reformatory scenario, the implementation of a structural policy aimed at increasing competition and raising the share in the economy of small and medium-sized businesses (SMEs) will be required. Its main directions are demonopolization and the development of competition in the raw materials sector and the sector of large enterprises, elimination of unjustified benefits and subsidies; redistribution of support measures in favor of successful enterprises that produce competitive products, provide high-quality employment and are oriented at market demand, in particular, at modern consumer standards (including the services of education, health care, and creative industries); reform of control and supervision, improving the conditions of small and medium business. Finally, as the reformatory scenario is implemented, there will be a growing need for policies that improve overall institutional

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³³ See [Akindinova, Chekina, Yarkin, 2017].

conditions: reforms of the law enforcement and judicial systems, as well as the development of local government and civil society.

In the reformatory scenario, it is expected to attract financial resources for investment in non-commodity market sectors, and the main sources of growth will be an increase in human capital and an increase in the efficiency of resource use in the economy (total factor productivity).³⁴.

Growth factors in the reformatory scenario

Table 4.3.

Lab	or		Capital	Total factor	
Quantity of labor force	Quality (human capital)	Private	Governmental, incl. infrastructural	productivity (residual without taking into account the contribution of the Human Capital)	
decreases more slowly than the number of population able to work, thanks to pension reform, a selective influx of migrants, and an increase in the duration of a healthy life	gradual coming nearer to developed countries in terms of the quality of education and the reduction of mortality at able- bodied age, as well as the preservation of the best personnel thanks to attractive jobs in a creative economy	investments of many enterprises in various traded and nontraded sectors of the economy	infrastructure (roads instead of megaprojects), social facilities, R&D	growth in efficiency through technology and competition	

This scenario involves connecting to the global trends of structural changes and technological development due to the unbundling and development of competition at all levels, the expansion of horizontal external relations (medium business, universities), high-rate development of sectors focused on consumer demand (services).

³⁴ See [Akindinova, Chekina, Yarkin, 2017].

Table 4.4. **Results of the reformatory scenario**

Economic	c growth	Welfare (stand	ndard of living) Structure of the economy, level of competition			Relations with the outside world			
GDP	Productivity of labor	Real household income and consumption	Inequality	Institutional structure (macro sectors)	Driving branches	Trade (export/import)	Inflow of capital	Exchange of knowledge and technology	
acceleration of growth, the share in world GDP stabilizes	acceleration of growth	income growth, the dynamics of domestic consumption is balanced with the dynamics of investment and exports	inequality is declining, the incomes of professionals, sole proprietors and small business people are increasing, pensions are growing in real terms, salaries of government employees are at a competitive level	the share of the small and medium-sized enterprises sector is growing, competition is increasing	complex individualized products, creative industries, services for the population (including education, healthcare), rental of housing, transport, consumer goods, financial services	expansion of the range of exports, growth in the share of exports of services, high imports	limited FDI inflows	exchange of knowledge and technology "a the grassroots level"	

5. To the current situation

So, at the moment we have identified two scenarios for economic development that roughly characterize the choices: conservative (inertial) or reformatory. This is the simplest option. However, it does mean the main choice. Then it can also be changed, or regulatory methods that belong to different scenarios can be applied. Nevertheless, there are the main lines on which the methods of work, selected personnel and the results achieved depend. In any case, if a reform scenario is chosen, the success of its implementation will be connected with the extent to which the participants in the processes are imbued with responsibility and trust in the chosen path.

The importance of the choice of a scenario is largely determined by what elite groups support it, being sure that they can preserve or gain influence over the authorities. The point is that the conservative scenario allows maintaining power with high reliability, whereas the reformatory scenario assumes a greater stream of institutional and structural changes that generate risks for retaining power and associated privileges. And for a large part of ordinary citizens there are uncertainties too, the resolution of which is not obvious.

The peculiarity of the current situation, in our opinion, consists in the fact that the need for reforms is becoming more evident, while the time and methods of conducting them generate multiple doubts, naturally, first of all, among the powers that be.

It should be noted here that the macroeconomic stabilization policy pursued by the economic block of the government and the Central Bank should not be viewed as a specific feature of the conservative scenario, as is sometimes done now. On the contrary, it is also a necessary feature of the reformatory scenario too, since it reduces the risks of the problems that arise in the course of reforms. The current state of affairs in this area says, more likely, that after 2014 the moderately rigid macroeconomic policy ensuring acceptable rates of inflation became a necessity for any scenario, as if a common basis for subsequent decisions. The same picture with demographics.

In our work of ³⁵ 2016 and in the report of ³⁶ E.G. Yasin for the XVIII April conference in 2017, four scenarios were considered, which were selected, in particular, because they reflected the events that took place in 2011-2012 and 2014, which were shock versions of two other scenarios - inertial (conservative) and gradual democratic development (close to the reformatory one). Now we decided to combine the data of the expert surveys of 2016 and 2018 into two main scenarios considered above.

³⁵ See [Akindinova, Kuzminov, Yasin, 2016].

³⁶ See [Yasin, 2017].

The report of 2016 provided the data of an expert survey on four scenarios: inertial, mobilization, and "decisive leap" - radical actions for democratization and gradual democratic development. At the same time, in pairs these scenarios reflected actions in one direction. This time, as shown above, we take two scenarios - conservative (inertial) and reformatory, with a certain transformation in mind, which probably took place in the last two years.

The results of the survey in 2018 are shown in Table 5.1 with expansion for three years (2018-2020).

Table 5.1. **Results of a survey of experts in 2018 with expansion for the future 2018-2020**

	Probability of choice (%)				The consequences of the policy in the economy (%)						
	2016	2018	2019	2020		2016	2018	2019	2020		
Inertial (conservative)					growth	9.6	30.5	25.9	20.5		
	73.6	67.67	60.54	54.0	stagnation	44.2	55.9	61.8	50.8		
(conservative)					recession	46.2	14.1	20.4	28.8		
					growth	50.1	48.7	56.6	57.9		
Reformatory	26.4	32.33	39.46	44.46	stagnation	29.8	47.2	46.6	32.3		
					recession	20.1	13.1	14.5	18.2		

Table 5.1 shows information on the opinions of the first 16 experts. They show a decrease in the probability of continuing the conservative scenario and an increase in the probability of the reformatory one. For comparison, the results of the survey of 2016 are also provided. The consequences expected by experts show a high probability of stagnation, whereas the reformatory scenario is rather characterized by expectations of recovery, although the likelihood of stagnation is also estimated as quite high, especially for 2018.

The opinions of experts are collected for the third time. At the same time, colleagues advised us that, in addition to the opinion of experts who claim to be more or less objective in assessing the situation, we should also reflect the mass opinions of the population. This time we cite Levada Center polls conducted at the end of 2017 based on the sample they adopted and a simplified questionnaire, in a form convenient for ordinary citizens.

The results of the Levada Center study are given in three tables. Judgments about the ways of the development of Russia are given in Table 5.2. This is an attempt to compare the opinions of experts and ordinary citizens. Table 5.3 shows data of polls about which of the known political systems seems to be the best. Preferences are given to the Soviet system. Table 5.4 indicates the opinions of which system ideally people would like to see in Russia in the future. Here the best option is the developed countries of the West. From these data we see

contradictory character of the judgments and the difficulty to rely in public policy on the opinions expressed by Russian citizens.

In August 2017, there was another poll conducted by Levada Center and Moscow Carnegie Center. Its results seemed to be very different from ours. The opinions, to which one had to adhere, were very different from ours:

- we need decisive full-scale changes 42%
- we need only minor changes 41%
- we need no changes, let everything remain as it is 11%
- cannot say 7%

It would seem that the answers in these polls are very much in line with the division of our scenarios into conservative and reformatory ones. We have more or less clearly defined what is happening in what scenario, and what, on the contrary, is not happening.

In this study, the distinction was made on the basis of another principle: who belongs to a certain group of supporters. The most ardent supporters of the first seemingly conservative group are of an age of 55+, have secondary special education and consumer status "barely enough for food," the inhabitants of cities below 100 thousand inhabitants. They want changes, but they do not know what to do. It is clear that these are not reformers, but also not conservatives, in our understanding³⁷. Only a smaller part of the supporters of liberal changes are ideological "liberals and democrats".

Supporters of minor changes are also heterogeneous: adherents of a conservative order, with a higher education, with a high consumer status. Their life is a success. These people also have something to fix, but much can be lost. In short, our groups and those we cited are very different. The difference between conservatives and reformers refers rather to elites, and different groups of elites will seek support from different groups of population.

The opinions of the experts rather turn in the direction of the reformatory scenario.

³⁷ See [Volkov, Kolesnikov, 2017].

Table 5.2.

Which of the following judgments about the ways of the development of Russia in the next 5-10 years is closest to your opinion? (%)

which of the following,		8	iits ab			,								Jest	10 0100		J	- I	0227 (, , ,			
	ТОТ	AL	GEN	DER		A	GE			EDUC	ATION			CONS	UMPTI(ON STA	TUS			LC	CALI	ГΥ	
	number	percentage	male	female	18-24 years old	25-39 years old	40-54 years old	55+ years old	below average	average	special secondary	higher	We do not have enough money even for food	We have enough money for food	We have enough money even for food and clothes	We can buy some expensive things	We can buy a car	We can afford anything	Moscow	more than 500 thousand	from 100 to 500 thousand	cities up to 100 thousand	village
Number of respondents	3,217	100	1,452	1,765	305	978	814	1,119	645	529	1,094	952	146	561	1,701	700	89	13	277	753	638	738	813
Nothing will change, everything will remain as it is now	727	22.6	25	21	21	24	23	21	24	23	22	22	30	25	21	21	25	48	21	23	23	19	25
The economic situation of the country and of the people will deteriorate, a struggle for power will begin at the top between powerful groups	432	13.4	14	13	11	12	14	15	12	12	15	13	11	15	14	12	13	15	12	11	14	15	14
Necessary changes in the economy and public policy will begin, which will lead to a noticeable improvement in the state of the country	688	21.4	19	23	24	22	20	21	18	25	21	22	16	16	22	26	23	15	20	24	22	20	20
There will be no profound changes, but there will be a gradual movement towards improvement in the economy and wellbeing of people	974	30.3	31	30	29	29	32	31	32	26	31	31	31	26	30	33	32	22	33	32	31	32	26
I don't know, cannot say	396	12.3	11	13	15	13	11	11	14	14	11	12	12	18	13	8	0	0	14	10	9	14	15

Table 5.3. Which political system seems to be the best for you: Soviet (the one that we had before the 1990s), the current system or democracy modeled on Western countries?

Political system _	1996	2000	2005	2010	20)15	2017
Folitical system _	II	XII	XI	II	III	VII	I
Soviet one, which we had before the 1990's.	39	45	42	34	34	30	32
Democracy on the model of Western countries	28	29	20	20	11	15	18
The current system	8	13	23	28	29	32	26
Number of respondents	1,600	1,600	1,600	1,600	800	1,600	1,600

What would you like Russia to be ideally in the future?

Table 5.4.

	what would you like Russia to be ideally in the ideale:												
	1998 April	2006 April	2007 April	2013	2014	2015	2017						
	1	1	1	March	March	November	January						
Such as now	2	9	10	8	15	14	16						
Such as the													
developed countries of the	43	43	50	39	40	36	34						
West													
Such as it was in Soviet times	36	32	25	25	27	23	28						
Such as it was before 1917.	5	5	4	7	3	3	3						
Don't know	9	6	6	14	10	14	10						

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