

Article

About the personnel problem in modern Russia

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Abstract: According to official data, modern Russia has the lowest unemployment rate. However, there is still a huge contingent of hidden unemployment, many times higher than the official level. This situation is paradoxically combined with an acute and continuously growing shortage of qualified production personnel. Using a lot of factual material, the author reveals the causes of this phenomenon. The main one is the depopulation of the indigenous population, which is being replaced by people of other ethnic groups with the lowest qualification level. At the same time, due to the destruction (“optimization”) of the education system, the intellectual and qualification level of the indigenous population is continuously decreasing. The other is the various types and waves of growing emigration of “brains” and “golden hands.” As a result, for more than thirty years, the contingent of old engineering and technical personnel has exhausted itself, while new ones have not been trained in the required volume and quality. A huge personnel “hole” has formed. The author proposes to close this “hole” on the basis of a radical reorientation of the entire Russian education system, starting with kindergarten, school, etc. It is also necessary to reformat the public consciousness accordingly, especially the mass consciousness of young people.

Keywords: shortage of personnel; depopulation; emigration; “brain drain”; education system; technical illiteracy; degradation

1. Problem statement

In recent years, the shortage of personnel has gradually become the main problem of the Russian economy. The demand for qualified personnel in the productive sector has increased to the greatest extent. For example, in 2023 alone, the need for working specialties (primarily installers, turners, welders, builders, and others) increased almost 1.5 times [Institute of Economic Policy named after Gaidar (IEP) (2023)]. Designers and engineering workers are also in high demand. They have very thoroughly displaced IT specialists in the list of the most sought-after professions.

There are many versions regarding the causes of the situation. Their characteristic feature is a local approach to the consideration of the problem, the limited scale of its vision, and the “market” narrowness of the factual and analytical apparatus (Travkin, 2024). It seems advisable to consider the problem in a broader context. First of all, let’s pay attention to the specifics of Russian unemployment as an associated phenomenon of employment.

2. About unemployment in Russia

2.1. The official approach

Describing the state of the Russian economy, government representatives consistently point to the record low unemployment rate for all the years of “democracy” as the most convincing indicator of its success. Indeed, according to Rosstat, as of

November 2023, the number of unemployed in Russia amounted to 2.2 million people or 2.9% of the total working-age population, the rest of which (74.1 million) according to the classification of the same Rosstat, it was defined very vaguely as “engaged in economic activity.”

However, senior officials among the outstanding achievements of economic development necessarily include an even more convincing indicator, as it seems to them, the number of unemployed registered in employment centers, which as of November 2023 was 504 thousand people (0.6%). For example, Deputy Prime Minister of the Russian Federation T. Golikova often uses it in his speeches. She is not at all embarrassed that the vast majority (almost 80%) of the real unemployed are not registered in these centers. The ridiculously low amounts of benefits that people can receive in these centers (they are several times less than the subsistence minimum), combined with a lot of formalities and meaningless obligations, do not attract them there at all. As a result, a very convenient indicator for demonstrating economic “success” arises.

The manipulative possibilities of both indicators are quite obvious. Indeed, in the mass consciousness, the “unemployed” and the “employed” coexist as communicating vessels. According to this view, a reduction in the number of some automatically leads to an increase in the number of others. Juggling such insignificant values of the number of unemployed in the mass information space, representatives of government structures form a positive picture of complete well-being in the economy for the average person who is not inclined to reflection.

2.2. The structure and causes of unemployment in Russia

However, in reality, the picture looks somewhat different. Let’s take a closer look at the structure of Russian unemployment and its underlying causes.

It is quite obvious that the reduction in the number of unemployed was influenced and is influenced primarily by mass demographic processes: the depopulation of the indigenous population, which began immediately with the onset of “democracy,” the supermortality caused by events related to the so-called “coronavirus pandemic” of 2020–2022, the mobilization of September 2022 and the departure of hundreds of thousands of men for contract service. There is a sharply increased flow of emigration of highly qualified specialists and many others, but all these processes in no way characterize the activities of the authorities to improve the sphere of the economy.

In this regard, it should be noted that both indicators, unlike many other Rosstat data, are objective and reliable, since the first (the number of unemployed) is provided by conducting surveys on large (up to 77 thousand) representative samples in strict accordance with the methodology of the International Labor Organization (ILO), and the second represents the total value of information from employment centers. However, the use of these indicators as self-sufficient, out of context, and in isolation from other indicators characterizing the sphere of work, is completely incorrect.

The fact is that according to the ILO methodology, the unemployed include people who do not have a job or a profitable occupation, and who are looking for work and are ready to start right away. Those who were transferred to a shortened working week, sent on simple and unpaid leave, etc., do not fall into the category of

unemployed. According to Rosstat, at the end of 2022, there were 4.24 million such people. That is, these are those people who are officially registered at work, but do not perform their functions and do not have the opportunity to fully realize their workforce. In fact, these are the hidden unemployed, although formally they fully correspond to the category of “engaged in economic activity.” Their number is not recorded by any structure, but, undoubtedly, their share is very significant. The particularly rapid growth of this category of unemployed began in February 2022. Already in the middle of 2022, the Center for Strategic Research (CSR) determined that with the departure of foreign companies from the Russian market, at least 350 thousand jobs would be put at risk (Kommersant, 2022). But at the end of the same year, assessing the prospects for further exodus of foreign business from Russia, experts predicted that the number of unemployed should increase to 5 million people by the end of 2023 (Pavlova, 2022).

This category of unemployed can be conditionally classified as “new.” However, there is a fairly large category of unemployed, the emergence of which is due to the ongoing “reforms” of the entire socio-economic sphere. In the economy, in particular, in the process of destruction (“reformation”) of the most important productive industries (machine tool construction, mechanical engineering, aircraft construction, production of electronic and electrical equipment, pharmaceuticals, and further on the list), new high-tech jobs equivalent to those destroyed were not created. As a result, people who lost the opportunity to work in accordance with their abilities and professional skills tried (and are still trying) to find other ways to earn money. Some of them have realized their intellectual potential and creative abilities outside their native country, contributing to the innovative development of other countries. Others have tried to integrate into the natural (retail) market element—mostly unsuccessfully. Someone decided to die out of desperation (according to WHO data for 2023, Russia is among the top ten countries with the highest suicide rate, neighboring the Central African Republic and South Korea in this ranking. At the same time, the suicide rate in men is 6.5 times higher than in women, so the Russian Federation occupies a strong 1st place in the number of suicides among men.). However, the vast majority of these people join the ranks of a relatively new and steadily growing social group of the population—the precariat, which can quite rightly be considered as one of the bright “achievements” of the “democratic” path of “development” of Russia (Toshchenko *et al.*, 2022).

The precariat (from Latin *precarium* “unstable, insecure” and “proletariat”—a social class alienated from the results of labor and exploited in the interests of the ruling class; in English transcription, precariat means fragile) is a fairly new class in modern capitalist society. Unlike the proletariat, the precariat is not only alienated from the results of its labor but also from the entire society. He is fully experiencing a special, sophisticated form of oppression. Citizens in this category do not have fully guaranteed employment. They are forced to take on any temporary, often casual job, which, as a rule, does not always correspond to their professional abilities. This puts them in front of the need to constantly master new, unusual skills and abilities, the inevitable consequence of which is deprofessionalization. As a result, their income is unstable, they have weak social security (there is practically none), they are deprived of many social guarantees, and their financial situation is extremely unstable. But all

of them correspond to the Rosstat formulation “engaged in economic activity.”

The most active, creative part of the precariat (for the most part, these are quite young age groups) invents various “innovative” schemes for legal money-making, thereby gaining the status of self-employed. Government agencies in every possible way promote this particular way of overcoming unemployment, however, without creating any incentive mechanisms for this (material, financial, technological advantages, any benefits, etc.). The main areas of activity of the self-employed are taxi services, apartment landlords, tutoring, construction, home craftsmen (plumbers, electricians, repairmen, etc.), child care, sick people, delivery of goods, etc. These types of work can only be qualified as “economic activity” very, very conditionally, after all, there is no socially useful product as a result of this “activity,” exclusively personal services. The vast majority of people are engaged in these types of work not by vocation or out of any high professional principles, but out of desperation, because of the inability to earn a living in any other way. Therefore, it is more legitimate to call self-employment a rather crude form of masking unemployment.

According to the Federal Tax Service, as of November 2023, 9 million self-employed people were registered and their number is constantly growing: more than 8.5 thousand people are registered as self-employed every day (The Federal Tax Service (FTS) of Russia, 2023). However, according to experts, the real number of this population group (including unregistered ones) is at least two to three times larger and reaches 30 million people.

As you can see, Russian unemployment is a very complex, multifactorial, and contradictory phenomenon. It is impossible to give an exhaustive picture of it with the help of the two indicators discussed above, many millions of really unemployed people remain outside their instrumental sensitivity, whose involvement in “economic activity” is highly questionable.

3. The phenomenon of staff shortage

Therefore, the fact that we have established that there is a huge and rather rapidly growing number of unemployed in the country is paradoxically combined with another process, which is extremely difficult to attribute to positive ones. The fact is that in recent years (about five years), the most important problems of the country include the problem of an acute shortage of workers (namely, workers, productive) personnel, especially qualified personnel. Moreover, according to estimates by both theorists and practitioners of the issue, the relevance of this problem is not only not decreasing, on the contrary, has a distinct tendency to worsen: in January 2024, 53% of heads of industrial enterprises indicated a shortage of personnel as the main problem (Kommersant, 2024). This means that the unemployed for the most part are not a resource for the labor market. The reasons for this paradox are discussed as follows.

3.1. The reasons for the shortage of personnel

3.1.1. Depopulation of the indigenous population

The first and most common factor is the catastrophic decline in the number of indigenous people. The process of depopulation (extinction) was launched immediately after the establishment of “democracy” in the country. This is clearly

seen in **Figure 1**.

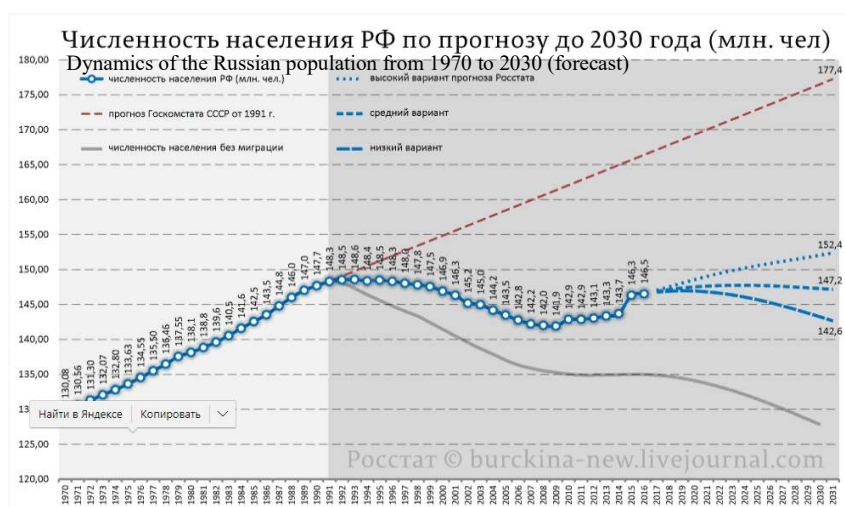


Figure 1. Dynamics of the Russian population from 1970 to 2030 (forecast).

Source: Rosstat.

In the left (light) its part shows the growth of the population of Russia (RSFSR) from 1970 to 1991. During this period, the population steadily increased by about 1 million people per year. The right (gray) part of the figure shows three graphs. The upper (straight line) is a forecast of the most likely population dynamics made by the USSR State Statistics Committee, which is an extrapolation of the previous twenty-year trend for the future, assuming that no extraordinary disturbing events will occur. According to this forecast, 173 million people should live in Russia in 2024.

But such an event happened—“democracy” came, the population began to decline rapidly, and, according to Rosstat, on 1 January 2024, 146.2 million people lived in Russia (this is with Crimea, which was not part of the RSFSR. Therefore, for the purity of the comparison, it is necessary to subtract 2.7 million people from the Rosstat data).

The average graph (with dots) gives an idea of the dynamics of the population of the Russian Federation since 1992. The lower graph (solid line) shows the change in the number of indigenous people, excluding legally imported immigrants who have received Russian citizenship. It shows that there are 132 million indigenous people left in 2024.

This means that the authorities, in order to overcome the demographic catastrophe, instead of creating conditions for the normal (natural) reproduction of their population, officially implement a policy of replacing the indigenous population under the guise of “compensation for demographic losses.” It is replaced mainly by representatives of radically different ethnic groups (Tajiks, Uzbeks, Kazakhs, Kyrgyz, etc.) with cultural and confessional traditions alien to the Russian people and civilizationally incompatible. But it is quite obvious that a dead (or unborn) Russian cannot be compensated in any way by a living Tajik, he can only replace him. 1–2 million of these immigrants are legally imported into the Russian Federation per year, and 2–3 times more enter the country illegally. These are mainly men aged 20–45, the vast majority of whom do not speak Russian and have the lowest professional level. Since 2024, due to the fact that the possibilities of importing immigrants from Central

Asia and the South Caucasus have decreased, it was decided to populate the rural lands of Russia devastated by the “reforms” with Africans even further removed from Russian traditions and culture (Samsonov, 2023). The share of this immigration component in the total population of the Russian Federation is constantly growing. But there is no reason to consider all these “substitute” people as a resource of skilled labor.

The indigenous population of the Russian Federation, on the contrary, is rapidly declining, and judging by the dynamics of the total fertility rate (currently it is officially 1.4, but in the central regions of the Russian Federation it is in the range of 1.2–1.3), no positive changes are expected in the foreseeable future. Along with the “natural” population decline, the country is losing people from, for example, events such as the fight against the so-called “pandemic,” as a result of which the supermortality amounted to about 1 million people.

3.1.2. Emigration of intellectual personnel

In addition to the “natural” decline in the population, the flow of citizens emigrating from the country for various reasons is growing. According to independent researchers, for the period from 2000 to 2020. About 5 million people left Russia. The flow of emigrants has been steadily growing since 2006, and in recent years the country has been losing about 300 thousand annually (Shirmanova and Kokourova, 2022).

It is easy to understand that the best people with high intellectual, professional, and creative potential are leaving. And this is indirectly confirmed by objective data. Among these five million, 55% are aged 30–40 years, 92% of them have higher education (31% in the Russian Federation as a whole), and 14% have an academic degree (1% in the Russian Federation). At places of permanent residence, a third of them work for themselves (company owner, entrepreneur, freelancer), half—in their existing specialty. In general, they are very successful in contributing to the comprehensive innovative development of those countries that have given them the opportunity to unleash their creative abilities. These are precisely the qualified personnel that modern Russia so badly needs.

This stream of emigrants can be classified as stationary. However, along with it, there are emigrant “waves” caused by various extraordinary socio-economic, political, etc. circumstances.

For example, in the first two weeks after the announcement of partial mobilization (21 September 2022), about 700 thousand people left Russia (Evseeva, 2022). As the intensive outflow of citizens from Russia continued, for the period of May 2023, the British Ministry of Defense estimated its total number at 1.3 million people (TIME, 2023).

There are also more extravagant estimates, according to which about 10 million people left the country in 2022 alone in connection with the SVO (special military operation) (Sakhnin, 2022).

We emphasize that 90% of this wave of emigration from Russia consists of young, strong, self-confident men from 20 to 40–45 years old, that is, the most active socio-demographic group in the labor market (Babichev, 2023). If we summarize the assessments of experts of the qualitative composition of those who left, then in general

they are mainly from big cities, on average younger, with better education, and better financial situation than those who stayed. Some parts of this migration flow have returned. But it is not known how many of these returned, for how long they returned: there is no reliable information.

There is every reason to assert that the resource potential, including professional and qualification potential, of those leaving Russia is higher than that of the corresponding remaining social groups. Indirectly, this is confirmed by the fact that many who left were able not only to find work in places of emigration but also to open their own business.

As can be seen, the authorities, following some perverse logic, have created “effective” technologies and appropriate conditions through which they systematically encourage the most qualified citizens (“brains” and “golden hands”) to leave the country and replace them with people capable of performing only primitive physical work.

4. Deindustrialization and its consequences

Undoubtedly, there are many talented, unique, highly professional specialists in the remaining indigenous population. However, there are a number of quite significant factors that together will lead to the fact that their number will steadily decrease, and some of them will also inevitably leave their homeland. The most important of them should include deindustrialization, which was carried out with phenomenal diligence in the country by the authorities immediately after the establishment of “democracy.”

In the era of “post-industrialism,” the so-called “information society” has come. In fact, both terms (in conjunction with the “knowledge economy”) are nothing more than science—like dummies, decorative deceptions designed to brainwash ordinary people who are not used to reflection, so that they are not very upset that they have been deprived of the fundamental basis of their lives—the productive sphere, industry. So that it does not immediately reach their consciousness that the basis of everything has been destroyed—the production of means of production, that the products and things necessary for their life are not printed on printers, but are now produced not in their homeland, but in factories and factories in modern workshops of the world—China and India, as well as in other countries.

Deindustrialization, in addition to its direct purpose (the transfer of a country from the status of a self-sufficient sovereign political entity to a state of a full-fledged raw material colony), has many side effects no less harmful. In particular, it radically changes the quality of people themselves. The people of industrial society are overwhelmingly versatile and professionally literate, intelligent, and skillful. They can easily cope with any household problems. In a country without industry, most people are inept, besotted with liberoid delirium, easily indoctrinated, and therefore inevitably dependent. Any household malfunction (electrics, plumbing, interior, etc.) is an insurmountable problem for them, which requires a specialist to eliminate. These people gradually atrophy their production skills—the ability to do useful things, not even super-complicated, but elementary, simple ones. In today’s Russia, even nails have already forgotten how to make, and toothpicks are brought from China. The country is no longer able to build a complete technological production cycle for any

complex product. The only thing that is still possible is the creation of assembly appendages of subsidiaries of international TNCs. But they are also leaving Russia. The process is proceeding quite rapidly according to the following scheme: deindustrialization → derationalization → degradation → debilitation.

4.1. Denationalization

A clear manifestation of denationalization is the abundance of previously not very popular and significant professions: lawyers, accountants (in general, financiers), economists, various kinds of “managers,” etc. The same number should include numerous populations of designers, marketers, developers, startups, psychologists, and various office workers, as well as representatives of the so-called “creative” professions—journalists, political scientists, image makers, bloggers, etc. other fighters of the conversational-boltological genre. Despite the significant differences in the subject of their activities, they are united by one important circumstance: the lack of a useful socially significant result “at the exit,” everything goes “to the whistle.” It is quite obvious that it is not possible to make that “breakthrough” to a new technological level, which has been included as a mandatory attribute in all election promises of government officials for two decades, with this personnel contingent.

The professions of engineers, the professions of workers, that is, those people who design and create real socially useful and necessary values, as well as the work of scientists, scientists, researchers who, in principle, can calculate and scientifically substantiate the optimal ways to implement this “breakthrough”, in a Russian deindustrialized society is not in price. Only in the last two years (2023–2024), when there was an urgent need to increase the volume of military production in connection with ITS, some high engineering positions and a small number of working specialties (in very remote areas from the center) entered the top ten relatively well-paid professions, taking 9th and 10th respectively places (Sokolova, 2023). Before that, none of these professions were included in the rating ranks at all, which meant (and still means) the extremely low level of remuneration for their owners. This is the specificity of economic priorities in modern Russia.

4.2. Degradation of education

In full compliance with the requirements of economic “development” in the new market conditions, the Russian education system has also been transformed. If in the USSR educational institutions trained not consumer clients, but specialists who are able to creatively participate in the production of a socially useful product, then the Russian education system currently represents an extremely effective conveyor belt for the production of qualified consumers and amazingly successfully solves the problems of degradation and debilitation of trainees. This is confirmed, in particular, by the results of the participation of Russian schoolchildren in international studies.

Nine-year-old Russian children who have not yet lost their natural intellectual abilities in the process of initial “learning” show excellent results in international studies of the quality of education. They occupy the first place along with Singapore and other leading countries in the field of education. However, fifteen-year-old Russian schoolchildren in terms of functional literacy in reading, mathematics and

natural sciences have shown the lowest results in Europe over the past 20 years: they occupy places in the fourth to fifth tens. Only 2% of Russian students have the ability to understand complex texts, objectively analyze the information presented, and formulate hypotheses and conclusions (Vetrova, 2016).

The current aggressively destructive system of Russian school education, functioning according to the scheme of a business project, in every possible way, displaces from the school environment those teachers and educators who are trying to preserve the principles and methods of classical education and upbringing intact. This largely explains the fact that, according to the Ministry of Education, 193.5 thousand teachers left schools in 2023 alone (Ministry of Education of the Russian Federation, 2024). This is despite the fact that there are chronically not enough teachers in many disciplines. This means that no improvement in the quality of graduates of Russian schools can be expected in the foreseeable future.

By accepting such “material” from school at the “entrance,” the Russian higher education system is forced to solve a rather exotic task: to provide higher education to those who, in fact, do not have secondary education. Strangely enough, the task is successfully solved in the conditions of the “market” model. The fact is that Russian universities under this model have been turned into educational supermarkets: applicants pay money, and the university sells them, according to the tax, educational services—a certain set of “competencies.” The educational process is imitated so thoroughly and so similar to the real one that graduates—bachelors and masters—continue to live for a long time in the world of the illusion that they have received some kind of (higher) education.

Of course, there are a certain number of specialized schools and a dozen and a half or two universities where students receive a fairly high-quality education. But the share of graduates of these institutions in the total mass of graduates does not exceed 4–5%. Since this process has been going on for more than 30 years, many experts talk about the massive degradation of the Russian population: “We must admit that we live in a world of functionally illiterate people. And if forty years ago scientists were looking for a way to combat functional illiteracy, now they are looking for ways to interact with it. The diagnosis has become so universal” (Sokologorskaya, 2016; Polyushkova, 2020). According to Rosstat, the majority of the Russian population is functionally illiterate, and less than 20% of people have full-fledged conceptual thinking (Yasyukova, 2016).

4.3. Degradation of science

Russian science is also “developing” in the same way “harmoniously” and in full accordance with the economy and the education system. According to Rosstat, during the years of “democracy” the number of researchers in the country has decreased by more than 3 times. At the beginning of 2024, their number was 320 thousand people (in 1991 there were 990 thousand), of which 93 thousand people with an academic degree. In terms of the number of patents, Russia lags behind the United States by almost 16 times, and China by 38 times. According to the indicator of internal research and development costs per researcher, Russia ranks 47th. The sphere of Russian science is unattractive even for scientists, due to the insufficient

development of appropriate infrastructure and low wages (Izotova, 2020). At the same time, there is no reason to expect any positive developments in this area either in the near or in the distant future. This follows from the data in **Table 1**.

Table 1. Graduate school graduation in the reporting year

	Total (person)	Including the defense of the dissertation	
		Total	%
2010	33763	9611	28.5
2015	25826	4651	18.0
2020	13957	1245	8.7

Source: Federal State Statistics Service, 2023.

As can be seen, the graduation rate of graduate students is decreasing at an accelerated pace, and the number of those who complete their studies in graduate school with a thesis defense is decreasing even faster. The fact is that in the process of deindustrialization, the consciousness of young people has been radically reformatted. As a result, two generations have grown up and formed in modern Russia, for whom science as a concept and as a kind of professional activity is generally absent from the alignment of their life interests (Gorshkov, 2020). Among the priorities of modern Russian youth are cosmetologists, designers, marketers, etc. “creative” professions. Lawyers, economists, and managers, who until recently were a priority, although they came off the pedestal of her life plans, are still considered promising by a significant part of young people. The professions of “scientist,” “researcher,” and “engineer” are beyond the professional guidelines of Russian high school students. All life goals and meanings, motives of interests, and actions of modern Russian youth are built around the universal equivalent—“money.” The vast majority of them firmly believe in the idea of enrichment at any cost. Through the optics of this “market” model of life, a person who spends enormous intellectual efforts to acquire a degree in order to then live on a miserable salary is perceived as nothing but a madman (there are also more adaptive terms: “sucker,” “loser,” “outsider,” etc.).

These are, in brief, the reasons that led to a radical decline in the intellectual and professional level of the indigenous population of modern Russia. This level is still quite sufficient to ensure the functioning of a raw material colony with a backward technological structure, the production of first-stage products (at best), an exorbitant level of social and regional inequality, and a degrading culture. But it is completely unacceptable for a country claiming to be a self-sufficient political entity.

5. The reasons for the shortage of personnel

From the above, it clearly follows that the personnel crisis that modern Russia is experiencing is not an accidental phenomenon: it was laid down and implemented by the entire logic of “democratic” “development.” It only escalated in 2022 in connection with the military actions in Ukraine and the complex system of restrictive sanctions that followed them. It was then that it became clear that the high-tech industry and the corresponding education system are an absolutely necessary condition for the full functioning of the country as a political entity. At the same time, it turned

out that the engineering and technical personnel resource that “democratic” Russia inherited from the USSR and which ensured the tolerable functioning of those few (mainly raw materials) industries that survived deindustrialization was inefficiently squandered and exhausted itself. Those few engineering, technical, and scientific personnel who are trained by the Russian education system are neither able in quantity nor in quality to solve the whole set of problems that have arisen.

The conclusion is as follows.

Both the low unemployment rate and the problem of a shortage of qualified personnel have, oddly enough, common causes:

- Rapid extinction of the indigenous population (depopulation);
- Significant losses of human resources due to emergencies (COVID-19; outflow of hundreds of thousands of men to their homes; refugee flow due to partial mobilization in September 2022; general deterioration of the economic situation, etc.);
- Increasing emigration of the able-bodied population.

It was the simultaneous overlap of these flows that led to the formation of a rather rapidly expanding personnel “hole.” In order to rectify the situation, it is obviously necessary to “redirect” these flows. However, it is also obvious that in order to do this, it is necessary to change the model of the country’s way of life, the entire system of basic values and guidelines, according to which people build their life “trajectories.” This is how it looks in relation to the first stream.

6. About the causes of depopulation

In the “market” world, where money is the measure and evaluation criterion of everything, there is and cannot be stability, there are no prospects and confidence in the possibility of a better future. Sharing the values of this world, a person, no matter how much money he possesses, is forced to join a mad race for an even larger amount, and face the same madmen as him with the remnants of his mind poisoned by greed and hatred of competitors. In this world, it is easier to make money through deception, speculation, and theft than to get it through honest productive labor. This is exactly the kind of world that has been forming in modern Russia for the fourth decade. However, for the vast majority of the population, it remains alien, as it is incompatible with traditional values and moral attitudes. Most people cannot “fit into” this world, they do not see any life goals or prospects in it. According to the conditions and criteria of this world, the birth of one child puts a young family in the category of poor, giving birth to a second child, this family is guaranteed to fall into poverty. Therefore, the birth of a child looks in a certain sense like a kind of protest against the rules and conditions of this world.

Russian government officials tirelessly develop various programs to stimulate the birth rate. Great propaganda hopes in this regard are pinned on the so-called “maternity capital” (MC). It is considered as the main financial incentive. Numerous reports and analytical documents for the general public consistently indicate the effectiveness of this particular measure.

Figure 2 shows the relationship between the size of maternity capital and the total fertility rate (TFR). A solid line (with dots) shows the annual change in the

amount of maternity capital (thousand rubles). The rectangles of the histogram located below give an idea of the value of the total fertility rate also by year. At the beginning (since 2007), an increase in the value of the MC and a slight increase in the TFR from 1.6 to 1.78 were visible. Then, from 2012 to 2016, it is clear that the size of the MC continues to grow, and the value of the TFR remains at one (rather high) level—1.9, forming a kind of “plateau.” This gave rise to court demographers and not-very-demanding media workers organizing a propaganda campaign about the amazing effectiveness of maternity capital. It was presented as a great success in overcoming the demographic problem.

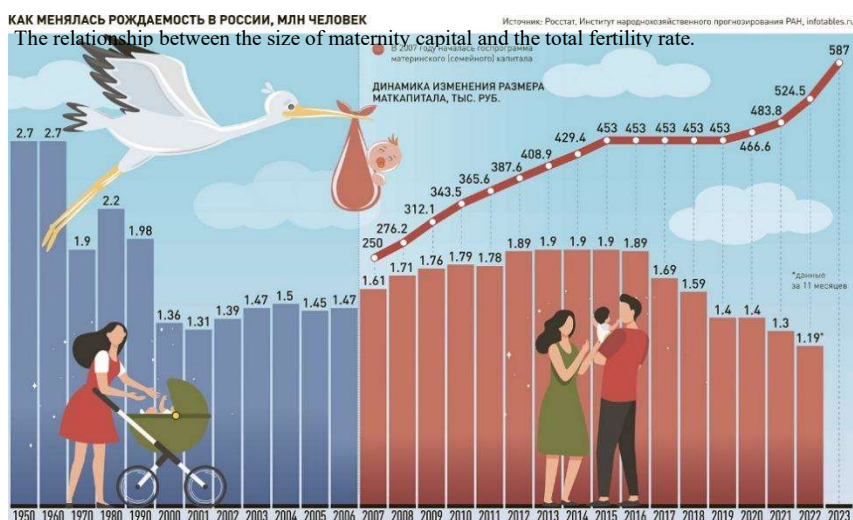


Figure 2. The relationship between the size of maternity capital and the total fertility rate.

Source: Rosstat. Institute of National Economic Forecasting.

In fact, the “surge” in the birth rate in 2012–2016 is the result of a truly unprecedented set of measures to stimulate the birth rate, which was implemented in the early 1980s by the Soviet government. The task was to dampen the second post-war demographic “pit,” which was supposed to happen in the mid-1980s (the first “pit” was in the mid-1960s). The task was successfully solved: instead of a “pit” on the population graph, a kind of “hump” turned out, and the total fertility rate exceeded 2.2 due to an increase in second and third births. A large generation of girls born in the mid-1980s, thanks to this set of measures, became the “culprit” of the origin of this “plateau.” It was they who, having reached the age of 25–28 (this is the average age of the birth of the first child in modern Russia), gave birth to their firstborn.

Thus, maternity capital has nothing to do with the slight increase in the birth rate in 2012–2016. This is confirmed by the further development (since 2017) of the processes under consideration (**Figure 2**): maternity capital continues to grow quite intensively, and the total fertility rate (approximately as intensively) decreases. Of course, there is no hard negative correlation between these processes. It just means that MK does not have the slightest effect on fertility at all. Judging by the results, it can be concluded that all other measures to stimulate fertility developed by the Russian government work about the same “effectively.” Apparently, their main purpose is to imitate the “violent activity” allegedly aimed at overcoming the demographic catastrophe, and “cover-up” with it the real task being solved—the replacement of the

indigenous population by peoples of completely different ethnic groups. As you can see, redirecting the first of the above-mentioned flows, while remaining within the framework of the existing socio-political system, is an occupation from the field of fiction.

7. Possible ways to overcome the personnel shortage

If we analyze the causes of the second and third flows, we can make sure that they, for the most part, are the result of certain actions of the authorities. Therefore, there is no reason to expect radical (and such radical changes are needed) in the direction of the actions of the Russian government. At the same time, as noted, the urgency of the problem of shortage of qualified personnel will only worsen. Already now (by the end of 2023), according to N. Akhapkin, there are 4.8 million workers missing in Russia (Akhapkin, 2023). In this situation, you have to act in the “fried rooster” regime. There are a few options.

- 1) The traditional import of specialists from abroad. But we are no longer talking about the usual migrant workers but about highly qualified specialists. The limitations of this way of solving the problem are quite obvious. First of all, it is connected with the need to increase the wage rates not only for foreigners, but also for domestic specialists. Such experience is already available in Russian airlines, which faced a shortage of pilots and technical personnel after the “optimization” (reduction) of flight schools in the 2010s. In addition, the area of effective use of this area is limited mainly to operational industries where technological processes have already been debugged and their maintenance is required. In industries where the design, development and implementation of new high-tech technological solutions, the development and implementation of the latest technologies are necessary (namely, in this area, the most acute personnel “hunger” is felt), the possibilities of this method are very modest. Firstly, because here, in addition to certain qualifications, a specialist must also have high creative potential (not “creativity”), and the ability to make original engineering decisions. There are few such specialists, and luring some of them to Russia for a long time (there is no point in a short one) is not an easy task. Secondly, it is quite risky for reasons of state security, especially in the military-industrial complex sectors. As you can see, this method is really not promising.
- 2) Training of specialists with the necessary qualifications on the basis of the national education system. However, with all the evidence of this direction, it is not worth expecting an acceptable solution to the personnel problem on this basis in the near foreseeable future.

The fact is that the current Russian education system as a whole does not provide students with fundamental theoretical knowledge, does not motivate young people to work productively, and does not develop independent thinking skills: This is how the educational process is structured, and the content of educational programs is set up. None of this is necessary for a “qualified consumer.” In addition, it is 80% focused on training people who, in principle, are not able to function in the productive sphere. These are all the same lawyers, financiers, economists, managers, journalists, marketers, designers, crisis managers, targetologists, and other “creative” workers.

And no advanced training courses, no retraining programs, are ever, under any circumstances, capable of “reforging” any, for example, lawyer (anyone from the list can be substituted here) into a more or less ordinary engineer. The remaining 20% includes doctors, agronomists, geologists, programmers, and many other professions not directly related to the productive sphere. This means, firstly, that it is unrealistic to reorient some part of the huge number of available socio-humanitarian specialists to work in the productive sphere and thus reduce the severity of the shortage of personnel; and, secondly, the modern Russian education system trains extremely few specialists in engineering and technical profile, completely insufficient to solve the problems before the country of tasks.

Seeing no other opportunities, the heads of many (40%) enterprises are still trying to overcome the situation by “reaching out” to applicants close in profile to the necessary qualifications with the help of a mentoring institute, organizing educational structures, or simply luring the right specialists from competitors, offering them higher wages (Institute of Economic Policy named after Gaidar (IEP), 2023). In the most desperate situations, some employers are ready to employ convicts (Travkin, 2024). It is clear that it is impossible to radically solve the problem of scarcity in such ways.

8. Conclusion

For all its apparent triviality, the general conclusion is as follows.

The problem of shortage of personnel in the production sector did not arise today. It was laid down immediately after the onset of “democracy.” Over the past three decades, the old staff has left, but the new ones have not been prepared in the right quantity and quality. In addition, effective mechanisms have been created to stimulate the growing flow of emigration from the country of “brains” and “golden hands.” As a result, a huge personnel “hole” has been formed, which cannot be closed with palliative half measures. Comprehensive work is needed across the country. The main direction is a radical reorientation of the entire Russian education system, starting from kindergarten, school, etc. It is also necessary to reformat the public consciousness, especially the mass consciousness of young people. This process is certainly lengthy, associated with many objective obstacles and (much worse) subjective counteractions. However, the most important thing is that it requires the adoption of a principled non-trivial political decision at the highest level. Only under this condition can we hope for ultimate strategic success.

Will this decision be made?

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References

- Akhapkin, N. (2023). Available online: <https://www.rbc.ru/society/24/12/2023/65875bb99a7947bca518dbe2?from=copy>. (accessed on 24 December 2023).
- Babichev, S. A. (2023). How many left Russia in 2022! Migration statistics. Available online: <https://cont.ws/@VitimBabi4ev/2501593> / (accessed on 9 March 2023).
- Evseeva, E. (2022). After the start of mobilization, about 700 thousand people left Russia // *Forbs*, (accessed on 4 October 2022).
- Federal State Statistics Service. (2023). Available online: <https://rosstat.gov.ru/statistics/science> (accessed on 4 October 2023).
- Gorshkov, M. K. (2020). Russian Society in a sociological dimension. *Herald of the Russian Academy of Sciences*, 90(2), 149–

157. <https://doi.org/10.1134/s1019331620020021>
- Institute of Economic Policy named after Gaidar (IEP). (2023). Personnel hunger and wage growth: how the labor market has changed and what awaits it. Available online: <https://www.rbc.ru/economics/05/01/2024/6589738d9a794798dc106898> (accessed on 8 March 2023).
- Izotova, G. S. (2020). The level of funding for Russian science is insufficient to ensure a technological breakthrough Available online: <https://ach.gov.ru/checks/9658> (accessed on 7 February 2020).
- Kommersant. (2024). Available online: <https://lenta.ru/news/2024/02/02/max/> (accessed on 2 February 2024).
- Merchant. (2022). Available online: <https://www.kommersant.ru/doc/539670> (accessed on 6 October 2022).
- Ministry of Education of the Russian Federation. (2024). Available online: <https://dzen.ru/a/Zct-rup0yg8-5dEt/> (accessed on 26 August 2023).
- Pavlova, V. (2022). How many unemployed will Western fugitive companies leave behind. Available online: <https://newizv.ru/news/2022-03-16/skolko-bezrobotnyh-ostavyat-posle-sebya-zapadnye-kompanii-begletsy-351980> (accessed on 16 March 2022).
- Polyushkova, A. (2020). Is functional illiteracy a scourge of the XXI century? Available online: <https://russiancouncil.ru/analytics-and-comments/analytics/funktsionalnaya-negramotnost-bich-xxi-veka/> (accessed on 28 May 2020).
- Sakhnin, A. (2022). Leakage of men: how mobilization will change demographics and the labor market. Available online: <https://moskvichmag.ru/lyudi/utechka-muzhchin-kak-mobilizatsiya-izmenit-demografiyu-i-rynok-truda/> (accessed on 18 October 2022).
- Samsonov, A. (2023). From demographic to migration catastrophe. They propose to populate Russia with Africans. Available online: <https://topwar.ru/222065-ot-demograficheskoy-k-migracionnoj-katastrofe-rossiju-predlagaju-naselit-afrikancami.html?ysclid=lskslrhnoa741792152> (accessed on 24 July 2023).
- Shirmanova, I., Kokourova, A. (2022). Available online: <https://tochno.st/materials/za-poslednie-20-let-iz-rossii-uekhali-do-5-mln-chelovek-chto-issledovaniya-govoryat-o-novoy-volne-emigratsii> (accessed on 3 April 2022).
- Sokologorskaya, D. (2016). New Sharikovs: a generation of functionally illiterate. Available online: <https://chips-journal.ru/reviews/novye-sarikovy-pokolenie-funkcional-no-bezgramotnyh?ysclid=ltn81upf4q313488498>. (accessed on 3 March 2016).
- Sokolova, V. (2023). The highest paid professions in Russia. Available online: <https://dzen.ru/a/ZOVGD6ad0lbYEpnp> (23 August 2023).
- The Federal Tax Service (FTS) of Russia. (2023). Available online: https://sfr.gov.ru/press_center/z_news~2023/11/28/257546 (accessed on 29 November 2023).
- Toshchenko, J. T. (2022). From precarious employment to precarization of life. *The Whole World*.
- Travkin P. (2024). Features of recruitment in 2024. Available online: <https://www.audit-it.ru/articles/personnel/a111/1095591.html> (accessed on 6 February 2024).
- Vetrova, E. (2016). New illiterates: education has nothing to do with it. Available online: <https://www.liveinternet.ru/users/marina94/post397623394/> (accessed on 26 August 2016).
- Yasyukova, L. (2016). Less than 20% of people have full-fledged conceptual thinking Available online: <https://marss2.livejournal.com/2075279.html> (accessed on 24 May 2016).