

III. ЭКОНОМИКА ПРОМЫШЛЕННОСТИ. ЭКОНОМИКА ТРУДА. ЭКОНОМИЧЕСКИЕ ПРОБЛЕМЫ ОТРАСЛЕ- ВЫХ КОМПЛЕКСОВ И РЕГИОНАЛИСТИКИ

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SOCIO-ECONOMIC LABOR MARKET STATISTICS AND THE COVID-19 PAN- DEMIC

The article is devoted to the state of the labor market in connection with the dire consequences of the pandemic, the self-isolation regime and limited quarantine. Trends and dynamics of employment processes, unemployment rate, demographic difficulties of the country, the impact of the situation in the labor market on certain aspects of digitalization of the national economy and the features of work in conditions of remote access to a stationary workplace are considered. The author also touched upon other special issues of both labor relations, and the doubtfulness of some statistical calculations of the recursive influence of political factors on the behavior of coronavirus infection and the consequences of the COVID-19 epidemic using indicators of morbidity, mortality and mortality of the disease.

Keywords: labor market, economically active population, employment, unemployment, pandemic, crisis, demographic consequences, political effects.

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СОЦИАЛЬНО-ЭКОНОМИЧЕСКАЯ СТАТИ- СТИКА РЫНКА ТРУДА И ПАНДЕМИЯ COVID-19

Статья посвящена состоянию рынка труда в связи с тяжёлыми последствиями пандемии, режима самоизоляции и ограниченного карантина. Рассмотрены тенденции и динамика процессов занятости, уровня безработицы, демографических трудностей страны, влияние ситуации на рынке труда на отдельные аспекты цифровизации национальной экономики и особенности работы в условиях удалённого доступа к стационарному рабочему месту. Авторы также затронули другие специальные вопросы, как трудовых отношений, так и сомнительность некоторых статистических выкладок рекурсивного влияния политических факторов на поведение коронавирусной инфекции и последствия эпидемии Covid-19 с помощью показателей заболеваемости, смертности и летальности недуга.

Ключевые слова: рынок труда, экономически активное население, занятость, безработица, пандемия, кризис, демографические последствия, политические эффекты.

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– Holmes, how did the pharaohs fight unemployment during economic crises?
- Elementary, Watson: they built pyramids.
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Introduction

The theme of the Second International *Roundtable* is "The World after the Pandemic". In such an interpretation of the name of the event, it is assumed that the boundaries of the pan-

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demic itself have already been groped, they are known for certain, and we just need to prepare to smooth out its consequences. Therefore, in the title of his post in the form of an article, the author carefully used the operator VS – versus (against). And this circumstance significantly narrows the range of areas of scientific search for a solution to gradually accumulating problems in the national economy and society. The author of the material will adhere to this truncated range of problems in the further presentation.

The independent problem of unemployment as one of the real consequences of the coronavirus pandemic (in Russia called Covid-19, and in the West SARS-CoV-2) on the global and domestic labor market is only now beginning to acquire tangible parameters of its own, separating it from the outline of a purely economic problems structural nature.

The current, protracted since 2009, a real economic crisis in its configuration, here it is appropriate to use a special geometric term, congruent with the English capital letter L, but with a continuing decline in the plateau. However, the individual merits of this crisis are now associated precisely with the coronavirus pandemic, and the synergy of such a composition – the alliance is already called the Black Swan phenomenon. This concept emerged from the book of the American mathematician, specialist in socio-economic statistics Nassim Nicholas Taleb "Under the Sign of Unpredictability", first published in 2007. The widely known work contains a holistic theory that considers difficult to predict and rarely occurring events that have extensive and significant consequences [1]. The famous phenomenon is assigned the English abbreviation TBS, i.e. *The Black Swan*.

In other words, analysts separate the new problems that have piled on Russian society from the technical recession that has been dragging on for more than 11 years and which the country has not yet been able to overcome. And here it is necessary to understand both the phobias, and the observed in the mood of the population, and in the state of the information field, on which *infodémia (infodésy)* is actively working. This fresh term hides a whole information complex: rumors, fakes, trolling, provocative flash mobs, sowing panic and panic, including those concerning the future state of the labor market, which are spreading somewhat more dynamically even than the viral infection itself. Although some statistical extracts can be considered encouraging, as shown in Fig. 1.

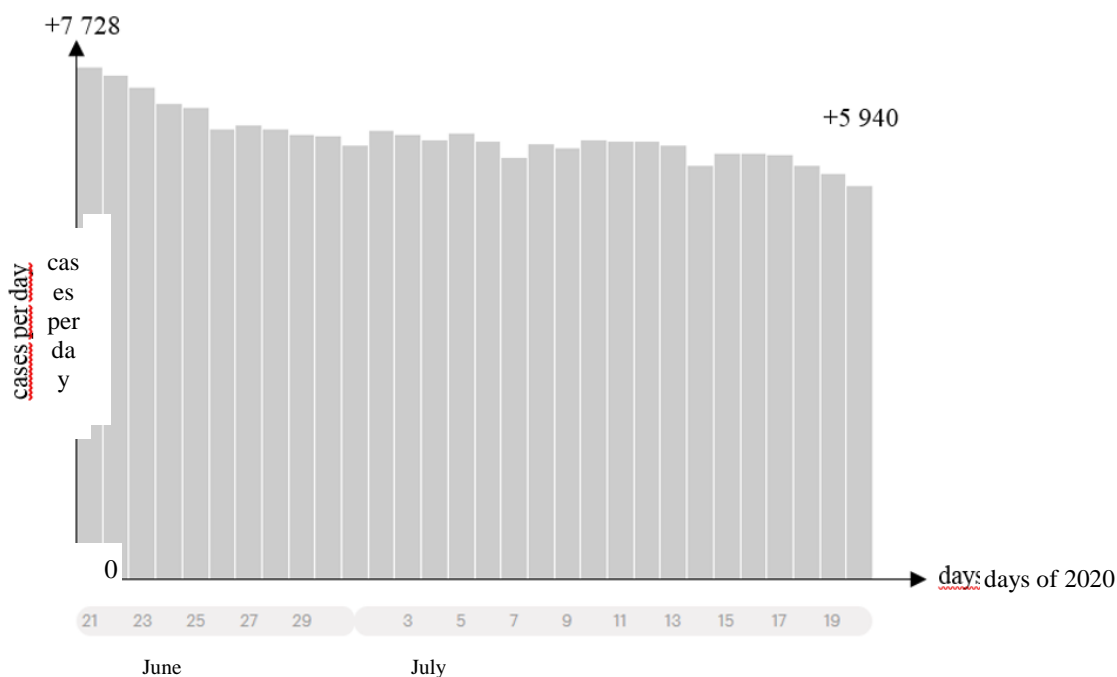


Fig. 1 – The rate of spread of coronavirus in Russia in June-July 2020
 Source: Federal and regional operational headquarters for the fight against the virus [12].

Research goals and objectives

Any informational stuffing in an alarming environment is always perceived by the reader, viewer, listener, always wary, and sometimes painful. For example, reports in local media sources: the second wave of coronavirus hit St. Petersburg, the mortality rate was 14 %, i.e. out

of 100 cases, 14 people. surely die. And this is provided that, in Russia as a whole, this figure is 1.5 % as of July 18 (as the President asserts on 07.19.2020), and in Moscow – 2.0 %.

Or here's another: the press officially announced that for July 9 of this year, that is, 7 106 people died yesterday in St. Petersburg (albeit for all reasons), which is an absolute record for the last 10 years. Even more perplexing is this informational occasion from bloggers specializing in scientific approaches: in general, there are as many as six mutating coronaviruses detected – *SARC*, *MERC*, etc. To combat each of them, they say, it requires its own special adenovirus vector vaccine, and the emergence of a universal drug variant funds are not yet expected.

And, finally, the most controversial rumor of “vulnerable truth” is both hopeful and upsetting the consumer of up-to-date information. And the rumor is connected with the following scientific news: an effective vaccine against coronavirus is being developed by the Moscow Research Center for Epidemiology and Microbiology named after Honorary Academician N.F. Gamaleya. Moreover, the adenovirus vaccine, allegedly already developed under a closed program, is undergoing official trials, which provide for three phases of verification under the Protocol [13].

And if, according to the International Protocol, the first phase of testing tests the general safety of vaccination, the second determines the ability of the subject's body to produce antibodies, then the last, third phase, scheduled for December this year, provides for the analysis of the effectiveness of the drug on one thousand test volunteers, which will clearly not be enough for the reliability of clinical trials. Here the size of the randomized sample must exceed 30 thousand observations.

In the protocols of the Ministry of Health, the vaccine has not yet been approved, it has not been launched into civilian circulation, but clinical trials in the bowels of the Ministry of Defense (the Main Military Hospital named after Academician N.N. Burdenko), which have been in full swing over the past three months, are safely coming to an end in the second phase without any side effects and complications in the subjects. And on this wave of not official optimism, “a significant group of high and senior officials were vaccinated” [8] against ailment with a drug of this development. And in this group, back in April, according to RBC, the statement of the American Bloomberg agency and other media sources, individual heads of UC Rusal, Phosagro and other companies were noticed [9], [11].

However, according to other, extremely knowledgeable media, someone managed to pour a spoonful of herbal product into this alluring barrel of honey. Allegedly, the British special services discovered a hacker hacking of some attackers in order to steal the scientific development of a vaccine against coronavirus, from *Covid-19* disease at the University of Oxford, which, according to the official statement of the British Foreign Minister D. Rab, formed the basis for the manufacture and production of the very same domestic medicinal product [10].

How to take these alarm indicators to the characteristics of the current situation? How to separate the new true knowledge about what is happening from the interpretation of the achievements of “crafty statistics”? Naturally, sensible research is needed on the possibilities of timely confrontation of society with all risks and threats of this kind. First of all, infodemia has straddled and successfully exploited the current state of the labor market in 2020, initiating a number of issues that should be named.

How many unemployed are in the country today? How fast is their number growing? When will the full recovery and economic growth begin? Will the announced digitalization of business processes help this? Will there be enough resources and labor force reserves to overcome the crisis in an unfavorable demographic situation in the country? How many businesses will never rise to their feet? Are there reassuring but reliable socioeconomic projections of key indicators? Which statistical methodologies for measuring the situation should be trusted? Will the national currency be denominated and how soon? And even such a conspiracy question: can the covid's indicators affect the outcome of the election campaign in the State Duma of the Russian Federation in the fall of 2021 and the most mysterious campaign of 2024?

The questions formulated above, in one way or another, are still subject to disclosure in the form of solutions to completely independent scientific problems, but the author does not claim to comprehensively and thoroughly solve them in this article, which is of an application nature and intended for a collection of materials based on the results of an international conference (II *Round Table*) – “Scientific works of SZIU”. The desire to understand each of the listed issues, of course, is not caused by the idle interest of the layman, and it is not stimulated by the selfish motive of an omnivorous researcher who satisfies his scientific interests at public expense. After all, everything that happens in a fragile environment, in essence, concerns each of us.

Disposed and obtained results

It is necessary to give some figures about the summer state of the labor market. On 01.04 p. there were 3 million people. unemployed according to the Russian methodology for calculating statistical indicators. As of 01.06, according to the Minister of Labor and Social Protection of the Russian Federation A. Kotyakov, the total number of unemployed in Russia exceeded 4.5 million, i.e. over the past two months it has grown by 1.5 million people. At the same time, 2.09 million unemployed were officially registered at the beginning of June, as the minister said at a meeting of the Federation Council committee on social policy. From mid-April to the end of May, on average, about 220-250 thousand Russians were registered as unemployed per week.

But at a meeting with the President to support the economy and social sphere, the same profile minister informed that the number of officially registered unemployed in June increased by 16 % and reached 2,424 thousand. During June, employment centers registered about 150,000 new official unemployed persons every week. Thus, the growth in the number of officially registered unemployed slowed down from 30.0 % to 50.0 % growth [2]. The approximate dynamics of employment in these troubled months is shown in Table 1.

Table 1 – Employment statistics in Russia for 2020 ***

No. p/p	Finally corresponding months 2020 year	Work force, million people	Including, million people		Unemployment rate, %	Unemployed people registered with the employment service *, million people	Registered unemployment rate *, %
			employed	ineffective bot			
1	2	3	4	5	6	7	8
1	January	74,8	71,4	3,5	4,9	0,7	1,0
2	May	74,5	70,0	4,5	6,1	2,1	2,9
3	June	74,5	67,0	7,5**	10,1	2,5	3,4
4	December forecast ***	74,4	61,9	12,5	16,8	4,5	6,0

Sources of data: Rosstat, updated 03.07.2020;

* Rostrud data as of 04/07/2020;

** SuperJob data;

*** Compiled by the author as a puzzle "Face of Russian employment".

Commenting on the current situation, the head of the SuperJob Research Center (an authoritative service for finding high-paying jobs) A. Zakharov wrote: "The government reports that about 2.5 million unemployed were officially registered in mid-June. A recent *SuperJob* poll shows that 2/3 of people who have lost their jobs are not registered as unemployed at all. That is, to 2.5 million you can safely add 5.0 million job seekers who are in active search. Unemployment, unfortunately, will continue to rise, because not all businesses are getting on their feet. And the situation will continue to grow for some time" [5].

According to a competent and independent specialist, the situation on the labor market will begin to objectively change only from September 2020. A rapid recovery in demand for labor as a marketable commodity is not expected; the government does not expect such a restoration. And it will take about 5 years for market homeostasis to return to the level of demand for labor in 2019. Consequently, there are almost 3 times more unemployed in Russia than the official data of Rosstat indicate.

How convincing can such assessments by independent economists be at all? Let's consider this issue using some statistical evaluations as an example. The latest interesting and significant results based on the materials of sociological surveys of June 19, 2020 were obtained during the statistical observation carried out by the already mentioned *Superjob.ru* Research Center, which estimated the real number of unemployed in Russia.

The large-scale survey involved 3,000 unemployed economically active people from all federal districts of the country. At the same time, 467 settlements were covered by the survey during the sampling period from June 15 to June 19, 2020. The studied sample included unemployed respondents over 18 years old who belong to the economically active population of the country.

That is, in terms of its size, a random sample of 3,000 respondents (larger than the standard one) and in terms of its geography is a completely reliable and representative statisti-

cal sample. The anchor question asked to the respondents was: "Are you officially recognized as unemployed, i.e. are you registered at the employment center as unemployed?"

Among Russians without a job, as shown in Table 2, are registered in state employment centers as unemployed 35 %, and are not 65 %. Let us dwell on these numbers in more detail. What is behind them? If the official number of unemployed, as indicated above, is 2,424 million people (quite an optimistic estimate), then a simple proportion allows us to determine a countable value close to the real number of unemployed in the country in the amount of –

$$2,424 + 4,502 = 6,926 \text{ million people.}$$

Accordingly, attributed to the economically active population of the country from about 74.5 million people. the resulting counting characteristic gives the unemployment rate approaching 9.3 %. For the unemployment rate, this is an extremely high level, which does not bode well in the event of a further increase in social tension as the new consequences of the coronavirus pandemic manifest themselves.

And here, no sophisticated models of advanced macroeconomics, taking into account frictional, structural and other types of modern unemployment, of course, will lower this coefficient. Although it is clear that real assessments, taking into account the specifics of any sociological polls carried out, will always turn out to be incorrect in the conditions of our largely "garage" economy.

However, such a distribution of respondents is typical for the two capitals and for the regions as a whole, as shown in Table 2. Women are more likely than men to register with the Employment Centers: 38 % and 33 %, respectively. Russians with higher education are more often citizens with specialized secondary education: 45 % and 39 %. Most of the unemployed who have obtained an official status are among Russians aged 35-44 – about 46 %. The least number of unemployed people who have decided on their status is observed among young people under 24 years old – about 17 %.

So, if, according to the methodology of the International Labor Organization (ILO), there are 4.5-4.7 million unemployed in Russia, then according to *SuperJob* estimates as of mid-July: 7.5-8.0 million people. But in the forecasts for the end of 2020, these sources are close – something about 10 million, or 13.5 % in Russia. But in the USA and Sweden, the unemployment rate is already estimated at 13-15 % of the economically active population, i.e. such a level is observed specifically in those civilized countries that did not create special self-isolation and quarantine regimes at all, fearing serious losses in their national economies.

Nevertheless, the forecast of the balance of labor resources for 2020-2022, prepared by the Ministry of Labor of the Russian Federation, literally says the following: the number of unemployed will not exceed 3.4 million people by the end of 2020 and will remain at this level until 2022. According to the department, in conditions of economic growth and growing demand for workers, the negative dynamics of employment will be overcome. The number of employed, the Ministry of Labor believes, will stabilize by the end of 2020 and will begin to grow from 2021.

By the end of the forecast period, the number of employed will exceed the figure for 2018 by about 400 thousand people due to the influence of demographic factors. The growth in employment of the population "...will be ensured not only by the involvement of the population in economic activity, but also by a decrease in the unemployment rate (from 4.6 % in 2019 to 4.5 % in 2022)", the document says [3].

As a reassuring reasoning, the agency brings to the user the following relevant but well-known information. The Russian labor market has traditionally adapted to the crisis by not only increasing unemployment, but also by introducing part-time work, reducing wages, sending employees on unpaid leave when maintaining employment. Real wages, adjusted for inflation, at large and medium-sized enterprises in April, which was declared a non-working month by the president in connection with the fight against the *Covid-19* epidemic, fell for the first time since July 2016. Such argumentation from the department cannot be considered convincing in any way – it only raises other questions.

Table 2 - Results of a sociological survey conducted in 467 settlements of all districts of Russia for June 15-19, 2020, % (Study population: unemployed economically active population of the Russian Federation over 18 years old, random sample size: 3,000 respondents)

Option answer	Every-one	Respondent gender		Возраст респондента, лет			
		men	women	18 ÷ 24	25 ÷ 34	35 ÷ 44	45 and older
1	2	3	4	5	6	7	8
1. Yes, registered at the labor exchange as officially unemployed	35	33	38	17	35	46	41
2. No official unemployed status	65	67	62	83	65	54	59

Table continuation 2

The respondent's monthly income, rubles				The level of education		Cities and regions of Russia covered by the survey		
до 29 999	30 000 ÷ 49 999	50 000 ÷ 79 999	от 80 000	higher	secondary and specialized secondary	Moscow	St. Petersburg	regions of Russia
9	10	11	12	13	14	15	16	17
35	40	44	40	45	39	37	36	35
65	60	56	60	55	61	63	64	65

Data source: Service Portal *SuperJob* / https://www.superjob.ru/?utm_source=adm&tagtag_uid=8c8d92855b4ed43aa3ecb8ee60b2bf62 [5].

In the spectrum of opinions on assessing the current situation on the labor market, the following analytics is interesting. With a protracted pandemic, adaptation mechanisms will be exhausted, and "the coming crisis (!? – A. Ts.) may be the first when a truly large-scale layoff of workers begins", warn economists of the Center for Macroeconomic Analysis and Short-Term Forecasting. According to their calculations, in the baseline scenario, which assumes re-quarantine due to coronavirus in the coming autumn-winter, the unemployment rate in Russia may rise to 8.0-8.3 % in 2021 and 7.0-7.3 % in 2022-2023. At the same time, real wages will decrease by 4.5-4.8 % in 2020 and will reach 2.2-2.5 % growth rates only in 2023.

And finally, one more official judgment characterizing the true pluralism of opinions on a topical topic. The Ministry of Economic Development and Trade of the Russian Federation expects that the average annual unemployment rate in 2020 will be 5.7 % of the economically active population, after 4.6 % in 2019. In 2021, the specialists of this department predict a decrease in the unemployment rate to 5.4 %, in 2022 – to 4.9 %, in 2023 – to 4.7 % [3]. These and other statistical estimates of employment in the country are summarized in Table 2, and forecast calculations from various sources for the beginning of 2021 are placed in Table 3, which characterizes the peculiar diversity of Russian employment.

Table 3 – Short-term forecasts of employment in Russia at the beginning of 2021

No. p/p	Sources of forecast data	Number of unemployed, million people	Unemployment rate, %
1	2	3	4
1	Rosstat according to the ILO methodology	9,8	13,2
2	Super Job Research Center	10,0	13,5
3	Ministry of Labor and Social Protection of Russia	3,4	4,6
4	Center for Macroeconomic Analysis and Short-Term Forecasting	not specified*	8,0 ÷ 8,3
5	Ministry of Economic Development of Russia	not specified	5,7
6	<i>BCG: Boston Consulting Group Management Consulting</i> 6.1 subject to the end of the pandemic 6.2 with repeated waves of coronavirus 6.3 severe quarantine and protracted crisis	not specified not specified not specified	6,0 ÷ 7,0 8,0 ÷ 10,0 12,0 ÷ 15,0

* Note: hereinafter, the forecast sources named in Table 3 are most likely faced with the problem of identifying the size of the economically active population of the country as of the assessment date.

According to Table 3, BCG experts estimated the potential increase in unemployment in Russia depending on the depth of the ongoing crisis:

If the epidemic ends quickly and the crisis is limited to one wave, unemployment will rise to 6-7 %, hitting the service sector and non-food trade as much as possible. In this case, the income of the population will decrease by 2-3 % compared to the previous year.

With repeated waves and protracted restrictive measures, unemployment can reach 8-10 % with the involvement of manufacturing industries, housing and industrial construction in the crisis. In this case, the income of the population will fall by 4-6 %.

A surge in unemployment to 12-15 % and a drop in incomes to 9-12 % are possible in the event of severe quarantine in all regions and a protracted crisis of the entire economy, including mining, metallurgy, banking, and insurance [16].

Will the pandemic accelerate digitalization processes through the labor market?

According to a joint survey of *Avito Works* and *Kelly Services*, 70 % of companies operating in Russia have suspended hiring during self-isolation. From April 13 to May 6, 2020, these organizations interviewed more than 66,000 employees from various fields of activity in eight federal districts of the Russian Federation. But this slice turned out to be the tip of the obvious iceberg. Restrictions on the full-fledged operation of enterprises led to the fact that 56 % of Russian companies temporarily suspended their activities, and their employees were left without work, but in different forms. It was this situation that the Russian business ombudsman B. Titov commented on in his own way at the end of April.

Fig. 2, which reflects the dynamics of vacancies for the analyzed period, and Fig. 3, which characterizes the change in the personnel policy of hiring employees by Russian enterprises, can serve as illustrations for the analysis of the state of the labor market in Russia during the coronavirus pandemic according to the results of a survey of representatives of mass professions.

According to the analytical company Gartner, in early June, a third of companies during the pandemic abandoned permanent employees in favor of freelancers (for example, freelancers or consultants hired temporarily for a specific project). Gartner surveyed over 400 HR executives, over 300 CFOs, and over 4,000 company employees. Due to the rapid introduction of remote forms of work in industries and remote employment, experts' forecasts for 2020 on the speed of digitalization have been significantly surpassed. This is noted by Joan Regan-Iles, executive director of human resources for the American company TTEC in the EMEA region (Europe, Russia, the Middle East and Africa).

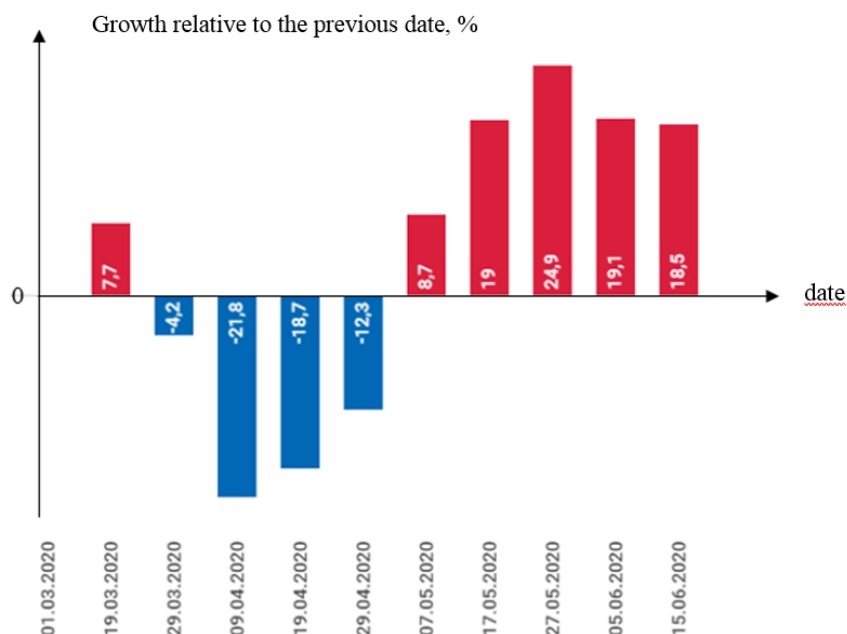


Fig. 2 – The dynamics of changes in the number of vacancies during the Covid-19 pandemic for the period 01.03-15.06.2020 based on the results of a survey of 66 thousand employees in various fields of activity in Russia

Source of information: "Avito Work" [17].

In large companies, digitalization processes went on before, the pandemic only accelerated them. Those technical, software tools and services that were previously available, but only to large companies, now, thanks to the joint efforts of government agencies and recruiting companies, for example *Avito Work*, *Kelly Services*, representatives of small businesses can also use. So, in May, services were launched that allow you to automatically download vacancies from CRM systems – client databases of employers. And also look for suitable resumes and upload them en masse to your information base.

Previously, employers did this exclusively in manual mode. In this case, digitalization has reduced the share of living routine and low-productivity labor, the computer has partly replaced a person. Digitalization allows you to create a semblance of local industry systems, which should be continuously improved as they develop innovative technologies, the emergence of new technical capabilities and adaptation to specific economic conditions. In this regard, digitalization forms a natural, non-stop and, most importantly, a necessary process. Is this digitalization process effective or not? There is no definite answer yet, taking into account all its advantages and all its disadvantages.

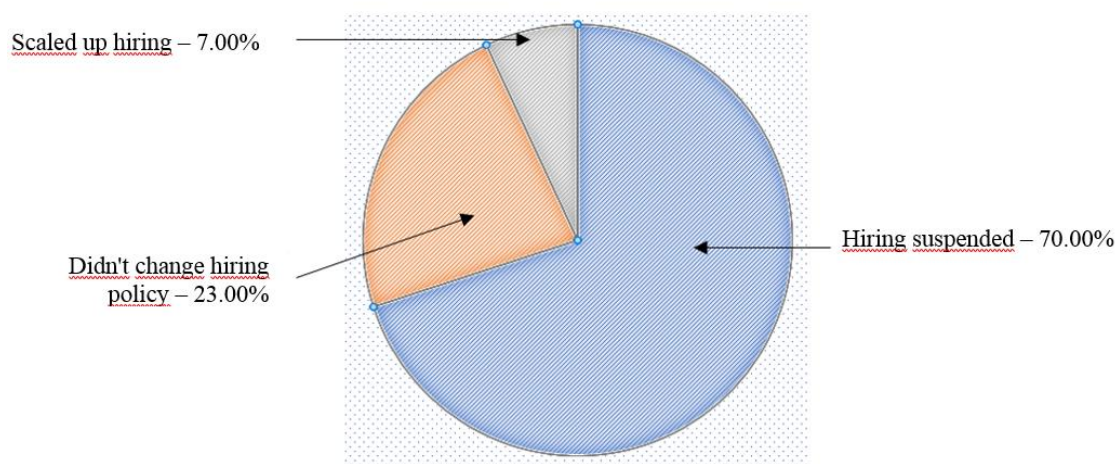


Fig. 3 – Changes in the personnel policy of hiring employees by Russian companies during the *Covid-19* pandemic for the period 13.04 – 06.05.2020
 Sources of information: *Avito Jobs* and *Kelly Services* [17].

Thus, the multinational corporation *Amazon* built the world's best logistics system and won a highly profitable market. Then another corporation, *Alibaba*, came along and did this and more even better. After all, economic agents have to compete with other market players that are better, i.e. more efficiently manage their resources, personnel, warehouses, transport. Here the concept (category) *efficiency* is appropriate for application, it is multidimensionally and professionally measured by methods. For digitalization as a process itself, it is preferable, according to the author, to use the concept of *fecundity*. Although this dispute is not of a semantic nature, and a special discussion should be devoted to it.

Workers, for their part, have become more multi-source of income, researchers at *Business Connection* found. Those who have switched to remote work now do not waste time on the road to the office and can use the freed-up time resource for professional diversified part-time work and advanced training. It is those employees for whom the companies have reduced their working hours and wages, are forced to look for additional income on the side.

Employees began to think more often about changing their profession. First of all, this applies to those who work in tourism, in the field of real estate, organizing events. These workers are trying to look for work in other industries and other businesses, and are in a hurry to take professional retraining courses. A variety of specialists send out their CVs to recruiters of companies en masse and by fan. But the blue collars, i.e. representatives of mass working professions, as a rule, do not draw up a resume, but they turn out to be much more in demand in the modern domestic labor market.

The pandemic, with its self-isolation and compulsory quarantine, disrupted the established traditional supply chains and the increase in the new value of economic benefits, there were problems with contractors, the movement of labor, not only in the service sector. The real sector of the economy is seriously suffering, and the losses of budgets of all levels are already being calculated.

It remains only to understand whether the expected revival of the national economy will be really supported by resources and labor reserves in the domestic labor market, taking into account the demographic situation in the country? The pandemic, self-isolation regime and forced quarantine have significantly changed Russian business. Companies are accustomed to working remotely and are ready to further improve their familiar operating schemes using free work zones, free work space and other forms of interaction between the employer and the staff.

Of the approximately 75 million working-age people in Russia, 60 million are employed in private business and state-owned enterprises. Analysts estimate that 15 million are office workers. And if before self-isolation, only 5 % of them worked in a remote format, then this and next year 20-30 % of office workers can switch to the "remote" mode – the so-called office "plankton", and this is a little / a lot – up to 5 million people.

Technologies for remote access to their stationary workplace were developed a long time ago, but not everyone wanted to use them. Consequently, a kind of revolution is expected in the field of employment. Many companies have learned how to manage remote employees, and now it will be much easier for them to hire personnel from other regions of the country, even abroad (near abroad), including freelancers.

According to sources of *Avito Rabota – Kelly Services*, in April 2020, 16.7 % of the country's population are already earning money, another 57.0 % are actively looking for options for an additional source of income. This format of cooperation will develop more actively than before. In May, the number of registrations of freelancers on the FL.ru freelance exchange grew 3.5 times, customers – 2.8 times compared to May last year, and the total number of orders – by 60 %. It seems that the emerging trend will continue for a long period, and not only because the staff loses their jobs.

In the book by American author Danyel H. Pink, "Free Agent Nation: The Future of Working for Yourself", it is rightly noted that real individual professionals want to personally administer their workload and control the level of its intensity [15]. For example, in 2009 the unemployment rate in the United States was one of the highest in the history of the country, as was the number of freelancers. But when, three years later, unemployment dropped by half, the number of freelancers did not decrease, their influx just slowed down, and today their number in the United States exceeds 33 million people. Many domestic companies are already attracting people to projects under contracts, this is a way to reduce costs – it is unprofitable to keep an employee on the staffing table to perform rare, related and non-core tasks.

Industrial production did not stop its work, but here its risks are revealed, there are threats. For example, 200 people take a shift in a workshop, a conveyor belt, and one of them turned out to be infected with a coronavirus. In this case, everyone must be quarantined. Where to find new employees? In fact, the human factor can interfere with the stable operation of an enterprise. In Russia relatively inexpensive labor; *à propos*, the teaching staff of the public higher school has the lowest wages in the world with the highest teaching load. Therefore, any projects and strategies related to the automation of business processes and robotization of production were introduced more recently, subject to the shortest return on investment and capital costs [18].

Now, in the face of increased risks of infection, the actual automation and robotization of production processes will become more in demand. Why, for example, does *Hyundai* enter the St. Petersburg Automobile Cluster with minimal losses due to the pandemic for assembled cars? Because even robots broken down on the South Korean conveyor, there are repair robots.

Specialists of the Ministry of Labor note that in the coming years, 2021 and beyond, the state policy of gradually increasing the retirement age and, accordingly, expanding the boundaries of the working age will provide support to the domestic labor market. According to the department, "the influx into employment of the population affected by the increase in the retirement age will not cause tension in the labor market due to the almost equal loss of the employed population of working age during this period" [14].

According to the ministry's forecast, due to the expansion of the working age boundaries, the proportion of working pensioners will decrease and the number of the economically active working-age population will increase. But these changes will manifest themselves most tangibly after 2022 (!? – A. Ts.). Moreover, by the end of 2022, the number of employees will allegedly increase in almost all sectors of the economy, except for agriculture and forestry, hunting, fishing and fish farming, wholesale and retail trade, repair of vehicles and motorcycles, financial and insurance activities, government and ensuring military security, social security (!? – A. Ts.).

However, according to the author of this article, from the point of view of the impact on the socio-economic development of the country in the period under study, the most important trends in the demographic dynamics in Russia are population decline, aging and population decline in economically active ages. According to all prospective estimates, according to various sources of information, with the exception of the high version of the Rosstat forecast, depopulation is expected in Russia in the next two decades (Fig. 4).

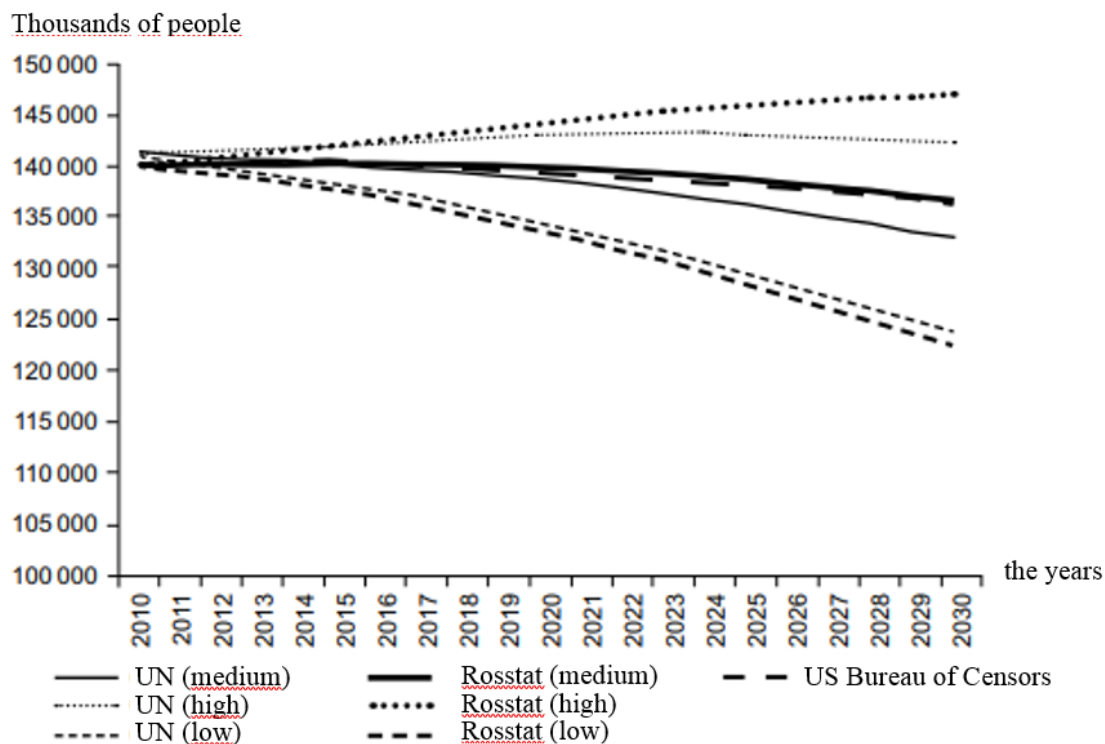


Fig. 4 – Change in the population of Russia in 2010–2030 according to estimates by Rosstat, the UN Population Division and the US Bureau of Qualifications

All medium projections predict population decline. But, as you can see, there is a noticeable difference in the estimates of the prospective population size by Rosstat, the UN Population Division and the Bureau of Qualifications. It should be emphasized that such significant discrepancies between forecasts made by national and international organizations for the EU countries, USA, Canada, Australia, is not observed. And the conclusion from these forecasts is surprisingly lapidary. The rates of economic movement, which are laid down by the government for the coming years, do not require any additional resources and reserves of labor, and an improvement in the demographic picture. And the depopulation of the people will come in handy.

According to Rosstat, the natural population growth in January–April 2020 compared to the same period in 2019 was recorded in 15 constituent entities of the Russian Federation (in January–April 2019 – in 16 constituent entities). There was a decrease in the number of births (in 74 constituent entities of the Russian Federation) and the number of deaths (in 72 constituent entities). In the country as a whole, in January–April 2020, the number of deaths exceeded the number of births by 1.4 times (in January–April 2019 – by 1.3 times), in 39 constituent entities of the Russian Federation this excess was 2.3 – 1.5 times. The situation recorded by the FSGS of the Russian Federation can be schematically shown in Fig. 5.

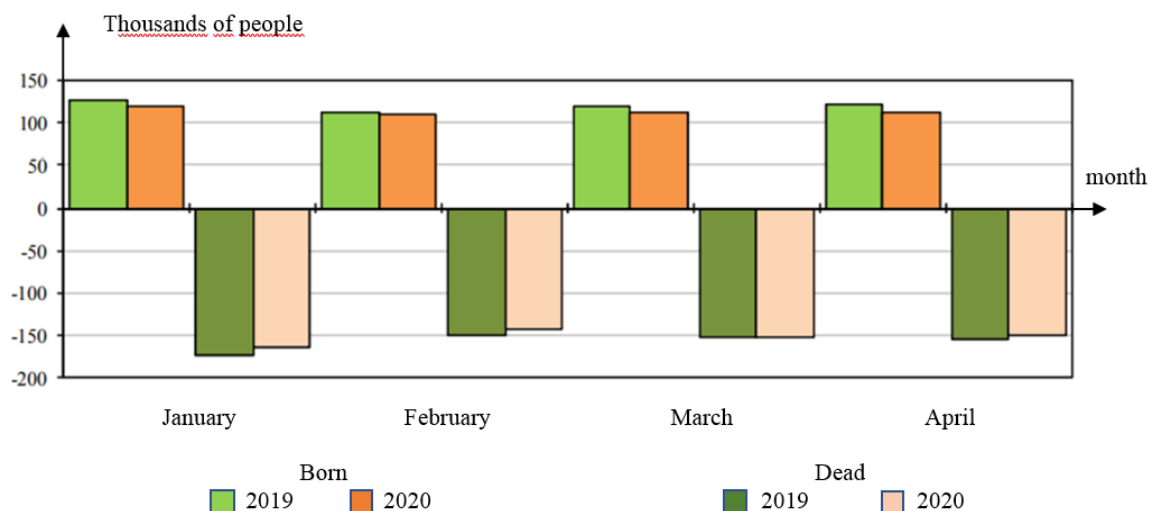


Fig. 5 – The number of births and deaths in Russia in January–April 2020, thousand people

Data source: Rosstat [6].

Instead of discussing a little entertaining conspiracy theories

Trying to find a causal relationship between epidemic rates, high politics and party affiliation looks strange at first glance. Or, as it is now customary to express it diplomatically – *conspiratorially*. But it is precisely this approach that has been adopted by the print media and news agencies of the *New York Times*, *Washington Post*, *Bloomberg*, *CNN* and other popular media outlets that support the Democratic Party in their versions of the current surge in the incidence in the United States. It is they who, in their numerous reports, constantly emphasize that an increase in the number of cases of coronavirus infection has been recorded precisely in the "republican" states – Texas, Florida, Arizona. However, there are publications of exactly the opposite content. As the saying goes, the effect of infodemic is exactly the opposite.

Recent publications in the *American Life Journal* by the well-known Russian analyst Andrei Nikolaevich Illarionov, a former economic adviser to the President of Russia, and now director of the Institute for International Analysis and a leading researcher at The Cato Institute in Washington, concerning research in the field of coronavirus and the *Covid-19* epidemic, highlighted unexpected statistical dependencies and patterns.

Whether they serve as a good example of scientific scrupulousness or trolling disguised as a serious science, and at the same time as some kind of intellectual investment in the upcoming US election campaign, the author of the article does not undertake to judge. But the United States ranks first in the world for all covid's indicators. Hence, the research information base appears to be extremely rich, and the available National Bureau of the United States statistics for a scrupulous study – quite reliable.

So, A.N. Illarionov found that the incidence of coronavirus and mortality from this disease in the United States "...reflects differences in attitudes towards health, life (his article is cited), and the treatment of their fellow citizens by individuals who adhere to different behavioral practices. And these differences, obviously, are largely predetermined by different mental, cultural, ideological approaches shared by different political parties. Moreover, both by the administrations of the respective states and by citizens who elect such leaderships of their states" [4].

According to this researcher, in those US states where Democrats are in power, i.e. representatives of the Democratic Party, the incidence in comparison with the Republican states, where, respectively, Republicans are in power, is higher by 1 million inhabitants by 28 %. What is reflected in the Table 4. Visually, the chronology of interdependence can be studied in Fig. 6. The mortality rate per 1 million inhabitants is 2.1 times higher, which is recorded in Table 5, and visually statistical relationships can be estimated from Fig. 7. And finally, the apotheosis of exceptional statistical capabilities, according to A.N. Illarionov, when analyzing the mechanism of causality: mortality in democratic states is higher than in republican states, by 65 % (see graphs in Fig. 8).

Table 4 – Covid-19 cases by 2020 periods by US administrative units*

No. p/p	Indicator name	Time periods		
		27.02+06.06	06.06+29.06	27.02+29.06
1	2	3	4	5
1	In total, thousands of cases, including:	1 911	659	2 570
	1.1 in the states led by the Democratic Party	1 286	266	1 552
	1.2 in states led by the Republican Party	623	393	1 018
2	Total, %, including:	100,00	100,00	100,00
	2.1 in states led by the Democratic Party	67,29	40,36	60,39
	2.2 in states led by the Republican Party	32,71	59,64	39,61

* Calculated by source [4].

In other words, the risk of contracting covid for a resident of a Republican state is 28 % lower than for a resident of a democratic state, and the likelihood of dying from it is more than two times lower. If a person nevertheless turned out to be infected, then his probability of surviving in a republican state is 65 % higher than in a democratic state. Such is the socio-economic statistics with conclusions of a purely party coloring.

Further, a prominent economist points out: If the democratic states of the United States carried out all the measures that have been carried out in the republican states in the past 4 months – from regulation by governors to hospital treatment protocols, from drugs used to physical distance and citizens' use of personal protective equipment, then the death rate of democratic states would be at the level of republican states. And therefore, the death toll from coronavirus in the democratic states and in the United States as a whole would be less than the actual number by 33,895 people.

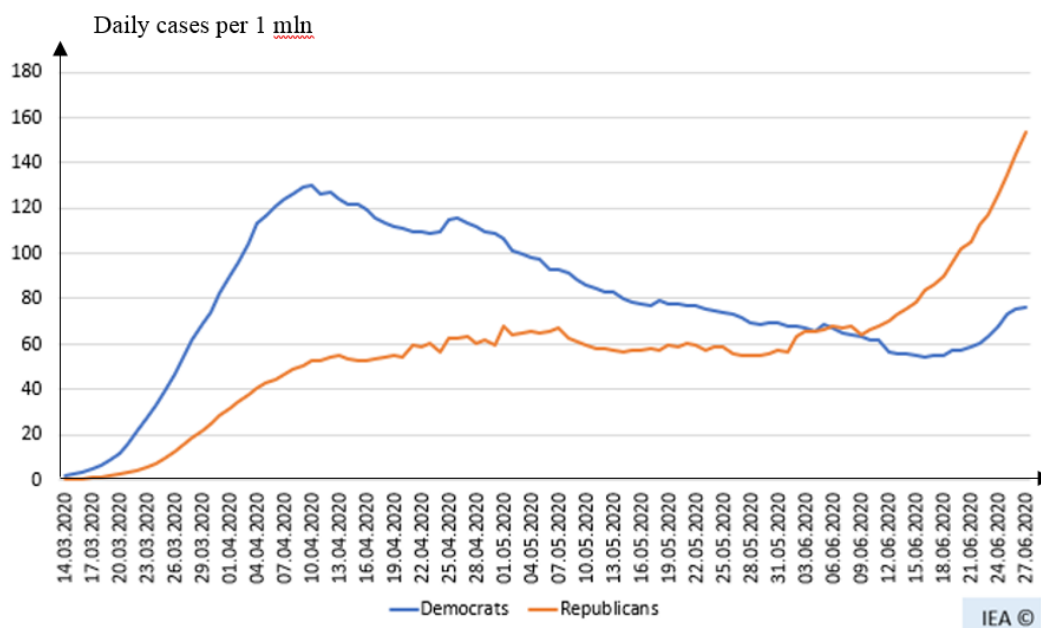


Fig. 6 – Dynamics of Covid-19 disease by periods of 2020 in the form of a smoothed characteristics built on a seven-term (days) moving average for administrative units of the United States

Data source: IEA / <https://aillario-nov.livejournal.com/category/>.

The conclusion suggests itself, and it is not complicated. If a voter votes for the Democratic Party, then, most likely, he is doomed to die from Covid-19; if for the Republican Party, then, again, most likely not. Such unpretentious extracts from the analytical portfolio of A.N. Illarionov, of course, go far beyond the general assessment of SARS-CoV-2, coronavirus, and American politics. And the absolutely independent author for the first time objectively approached the solution to the main secret of a Healthy Lifestyle (HLS) without drugs – how an individual's health (somatic, bodily health) and his political preferences are related.

Table 5 – The number of deaths from Covid-19 by periods of 2020 by US administrative divisions*

No. p/p	Indicator name	Time periods		
		27.02+06.06	06.06+29.06	27.02+29.06
1	2	3	4	5
1	In total, thousands of cases, including:	105 644	13 951	119 595
	1.1 in the states led by the Democratic Party	77 813	7 838	95 651
	1.2 in states led by the Republican Party	27 831	6 113	33 944
2	Total, %%, including:	100,00	100,00	100,00
	2.1 in states led by the Democratic Party	73,66	56,18	71,62
	2.2 in states led by the Republican Party	26,34	43,82	28,38

* Calculated from the source [4].

This is the real scientific fundamentality that allows you to get any, the most interesting results. Our President lost a lot when he parted with his economic adviser of such an enviable caliber. Naturally, it is possible to extend the research results of the former adviser to the Russian realities of the existing political landscape.

For example, such a voter, previously educated about the laws of healthy lifestyle, votes for the "Yabloko" party, and he immediately detects not antibodies, but a 100 % probability of picking up a harmful virus of any given mutation for which a vaccine has not yet been developed in China. He votes for the Communist Party – the chances of getting sick are somewhat reduced, by about 10 %; for the Liberal Democratic Party – another 10-12 %, etc. And if for ... In general, as they say, "do not go to a fortuneteller!" A table of recommended criteria and significance factors can be promptly prepared under a grant or within the framework of departmental research work. Costly election campaigns will be a thing of the past. Large savings in budget funds can come out in the event of a very tangible shortage in the future.

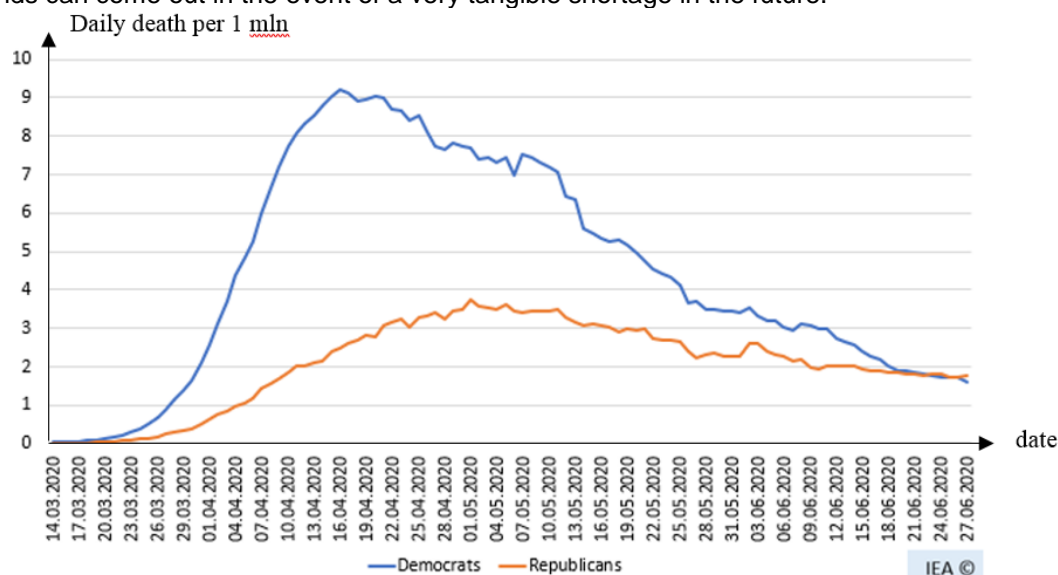


Fig. 7 – The influence of party affiliation of US state governors on the state losses from the pandemic (7 days moving average)

Data source: IEA /<https://aillario-nov.livejournal.com/category>.

Instead of recommended conclusions and non-binding recommendations

In the roundtable hearings, the conversation should go not only about the spread of diseases, about the second wave of the pandemic (in China, Australia and New Zealand), about the third wave modeled by mathematicians, about the new cadence of mutating viruses, and there are already six of them – SARC, MERC, about phases vaccine trials, etc. People are afraid not only for their health, and this is natural. But they are afraid that they will be fired, their salaries will be cut, they will become socially unclaimed, and their level and quality of life will decrease. And the point, of course, is not that multiple border closures have led to economic disruption.

If a really private, independent and not affiliated business gets the opportunity to work normally, they will undoubtedly try to create on Russian territory everything that turns out well

and innovatively, including an effective antiviral vaccine. Of course, if this product is produced cheaper and better than somewhere abroad the country, and this will be enough and quite civilized make money. These are the written laws of a hard, severe and violent market.

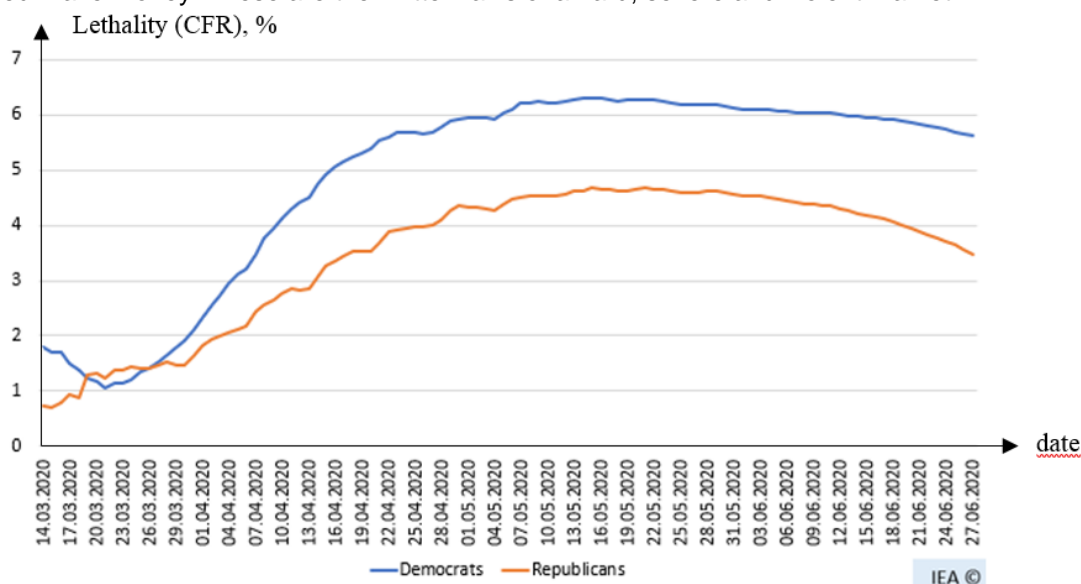


Fig. 8 – Mortality of the outcomes of Covid-19 in the US states led by Democrat and Republican Governors, estimated by a 7-term (days) sliding average, %
 Data source: IEA/[https:// aillarionov.livejournal.com/category/](https://aillarionov.livejournal.com/category/).

In any case, one important conclusion on the current crisis situation, aggravated by a pandemic, can still be tentatively indicated here. The point, of course, is not that the closure of borders at one time led to the interruption of global added value chains in which our economy is involved. For example, those comparatively more reliable Russian ventilators (artificial lung ventilation), the production of which was established by the Ministry of Industry of the Russian Federation in recent weeks, was developed by a small private company – this is a response, an effect, an instant response to the dynamically changing situation in the country.

And these ventilators are produced at a private Russian plant, which, by the way, is not part of the structure of S. Chemezov's Rostec State Corporation. In other words, the acuteness of this or that problem (as an unconfirmed working hypothesis of true knowledge) is not in globalization or de-globalization, turbulence, but in the very structure of the domestic market and the national economy as a whole. Once again, since 2014, the emergency situation of the "Black Swan" gives us after the sanctions and embargo regime a wonderful new opportunity to implement a case study called "import substitution" [7].

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