

**ICEST 2021****II International Conference on Economic and Social Trends for Sustainability of Modern Society****THE PANDEMIC IMPACT ON THE INFORMAL EMPLOYMENT  
DYNAMICS IN THE RUSSIAN REGIONS**

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**Abstract**

The article presents the results of the informal employment dynamics study in Russian regions in the context of the 2020 COVID-19 pandemic. In the course of the work, the following methods were used: expert analysis, analysis of statistical data series, clustering and cartography. The following new results were obtained: 1) An assessment of the scale of informal employment in Russia was given: in general, by the end of 2020, informal employment covered 14.1 million people, or 20% of the total working population of the country, against 14.8 million people a year earlier, when it reached 20.6% of the total working population of the country. 2) It was revealed that during the pandemic, informal employment of the population in the majority of Russians decreased significantly, while its greatest contraction took place in the regions of the North Caucasus, where it is, according to the average data of 2017-2019. 3.4 times higher than in the regions of Central Russia and 2.2 times higher than the average for Russia. 3) Based on the cluster analysis of informal employment, it is shown that the vast majority of the country's population lives in regions with incomes below the average Russian level and high informal employment. 4) The necessity of developing measures for long-term and short-term support of workers employed in the field of informal employment has been substantiated in order to create fair and sustainable conditions for workers, enterprises, the economy and society as a whole.

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## 1. Introduction

Informal employment is, in many ways, an indicator of the economic well-being. The main criterion for informal employment, adopted in many studies, is the lack of registration of an employer as a legal entity, therefore, informal employees often include individual entrepreneurs and their employees, employees hired by individuals, self-employed, tutors, craftsmen, farmers, nannies, etc. In developed market economies, informal employment is not widespread due to its inefficiency, since only formal work guarantees a person social security, provides access to the services of the state health insurance system, income stability in the form of sickness benefits and industrial injuries, implements the possibility of accumulating funds in state and non-state pension funds, makes it available to obtain loans from commercial banks, etc. (Amin et al., 2019). On the contrary, in many developing countries, including Russia, shadow employment covers large segments of the population, acting as a socio-economic shock absorber of unstable market fluctuations. It provides casual earnings for people deprived of official work, informal employment allows to accumulate the necessary professional experience for young people (though with low wages) (Schwandt & Wachter, 2020); also shadow employment allows aspiring entrepreneurs to save on taxes, which creates the prerequisites for incubating new businesses (Cling et al., 2014). In a crisis, along with the instability of the economy, informal employment is also growing, creating a "trap" for sustainable development (Ulysea, 2018).

Since the beginning of 2020, the instability of economic development has become universal throughout the world. The explanation for it is the unprecedented spread of the COVID-19 coronavirus infection, which led to a pandemic within a few months. The COVID-19 pandemic has plunged the global economy into the deepest recession since World War II. Despite active measures to support the economy, global GDP fell by 4.5% in 2020, followed by a projected recovery of 4.2% in 2021. The pandemic has hit livelihoods severely. According to the estimates of the International Labour Organization (2020) the reduction in working hours in the second quarter of 2020 alone is equivalent to the loss of almost 500 million full-time jobs. According to the ILO the pandemic in 2021 could put 110 to 150 million people in poverty.

In a Bloomberg study on the situation in world markets in the context of the Covid-19 pandemic, it was revealed that many countries around the world faced a new problem during the pandemic. It has become a noticeably grown sector of the informal economy, which has reached almost a third of global GDP. Bloomberg experts note that the problem of the growth of the informal economy, closely related to shadow employment, leads to a distorted perception of the macroeconomic situation of countries and regions: with the large-scale development of the shadow economy in a number of industries, it is almost impossible to assess statistical indicators. Inaccurate statistics seriously complicate not only the fiscal tasks of the state, but also make it difficult to predict and form the parameters of long-term development strategies. Thus, the effectiveness of the economy regulation falls; all level budgets do not receive the planned funds, payments to social funds fall; fair competition of industries, regions and states decreases.

The Covid-19 pandemic caused a noticeable decline in the Russian economy, led to increase in unemployment and poverty rates, decreased the well-being and life quality of Russian population. It was expected that the fall in official incomes of the population would be followed by an increase in informal

employment, but an analysis of statistical data shows that in Russia shadow employment during the pandemic, on the contrary, decreased by almost a million people.

In this regard, it is relevant to analyze the reasons for such a significant reduction in informal employment in Russia during the 2020 crisis year.

## 2. Problem Statement

At the end of 2020, Rosstat registered a decrease in the level of informally employed citizens of Russia by 4.6% or 678 thousand people (year over year). This happened against the backdrop of the suspension of the activities of many industries, the introduction of a countrywide self-isolation regime for the most working population and the rise in unemployment caused by these circumstances. A significant increase in unemployment (from 4.5% in September 2019 to 6.3% in October 2020) led to the fact that its level was the highest in the last eight years. The decline in employment and wages caused a decrease in the average disposable income of the population, which greatly influenced the spending structure and the dynamics of poverty. The share of Russia's population living below the poverty line increased from 12.3% at the end of 2019 to 13.2% in the second quarter of 2020, while the decrease in Russia's GDP over this period was 16%, while the G20 GDP decreased by 6.9%. (Rosstat (Federal State Statistic Service), 2020).

The problem of finding the reasons for the reduction in the number of informal workers in Russia during a pandemic is also actualized by the fact that in 2014-2016 the Russian Government took a number of measures to reduce informal employment; however, in 2017-2019 it grew annually. In addition, this decline occurred in spite of global trend in the growth of informal and shadow employment during the pandemic in developing countries.

Analysis of publications devoted to the study of how the COVID-19 has affected informal employment suggests that the international expert community has identified a number of acute problems: in the International Labour Organization report "COVID-19 crisis and the informal economy: Immediate responses and policy challenges" (2020) shows the scale of the informal economy, which, according to the ILO, employs over 2 billion workers, accounting for 62% of global employees. Informal employment in 2020 accounted for 90% of total employment in low-income countries, 67% in middle-income countries and 18% in high-income countries. Yeung and Yang (2020) note that the majority of young people in the world worked in the informal economy, with young people without education and relevant professional skills, women and migrants being the most vulnerable. The United Nations Policy Brief "The World of Work and COVID-19" (United Nations, 2020) notes that recent labor force data suggest that youth unemployment, especially among young women, is growing at a faster rate than among adults belonging to the main category of working age. Due to this exposure, there is a high risk of the "generation of isolation" formation. Webb et al. (2020), analyzing the results of broad studies and statistics, also argue that the pandemic has and will have significant short-term and long-term consequences for informal employment. Analyzing data from empirical studies conducted in Mexico, Flores and Arguez (2020) found a significant relationship between poverty and informal sector employment rates; they showed that people with a high risk of poverty are more likely to find work in informal employment that requires a low level of skills and competencies. These circumstances have affected the impact of the COVID-19 crisis on

emerging market economies, in particular Latin America, where more than 50% of employees were at risk of job loss even in the early stages of the crisis.

It should be noted that Russian scientists have also published studies on employment in COVID-19 conditions; however, even in the most recent scientific works of Odintsova (2020), Kubishin (2020), Karimov and Fatkullina (2021) the fact of the positive dynamics of the informal sector employment decline is not considered.

### **3. Research Questions**

Authors considered the following research questions:

- In which Russian regions was the largest reduction in informal employment during the COVID-19 crisis?
- How is informal employment related to the level of per capita income in the regions of Russia?
- What measures of households' state support affected the dynamics of employment in 2020?

### **4. Purpose of the Study**

The authors believe that the answers to research questions will serve as a basis for achieving the goal of the study, which is to assess the pandemic impact on the informal employment dynamics in typologically heterogeneous Russian regions, and may be useful for developing recommendations for reducing shadow employment in post COVID-19 period.

### **5. Research Methods**

In the course of the work, the following methods were used: the analytical method and the method of expert assessments, analysis of statistical data series, clustering and cartography.

As a basic assessment methodology, the updated Rosstat methodology was adopted. According to it those employed in the informal sector (as a criterion for determining the units of the informal sector, the criterion of the absence of state registration as a legal entity was adopted) "includes persons who were employed during the survey period, in at least one of the production units of the informal sector, regardless of their employment status and whether the job was primary or secondary for them."

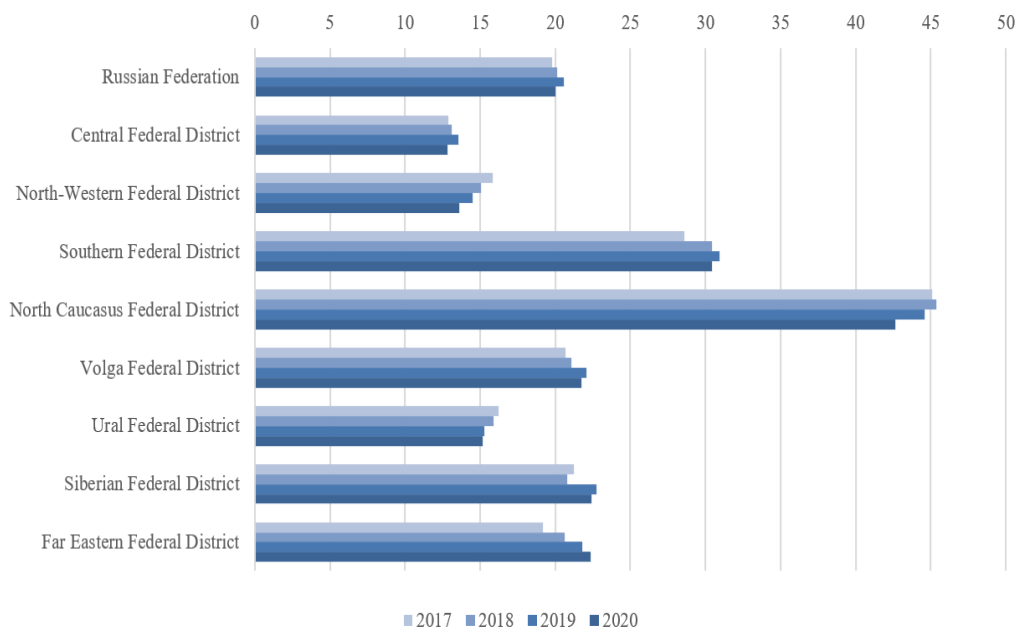
### **6. Findings**

The analysis of statistical data on employment in the informal sector of the economy in the context of the federal districts, graphically presented in Figure 1, allows us to draw a number of conclusions:

- 1) Average Russian level of informal employment for the period 2017-2020 was 20.1%, the most approximate indicators in the context of districts are noted in the Far Eastern Federal District (21%), the Volga Federal District (21.4%), and the Siberian Federal District (21.8%); in the Central Federal District, the Northwestern Federal District and the Ural Federal District this

indicator is 5-7% lower than the national average (13.1%, 14.7% and 15.6%, respectively), and in the Southern Federal District and the North Caucasus Federal District informal employment is 1.5-2 times higher than the national average (30.1% and 44.4%, respectively). Thus, shadow employment in the regions of the North Caucasus is 3.4 times higher than in Central Russia and 2.2 times higher than the average for Russia, which suggests the need for special attention when studying employment in this region.

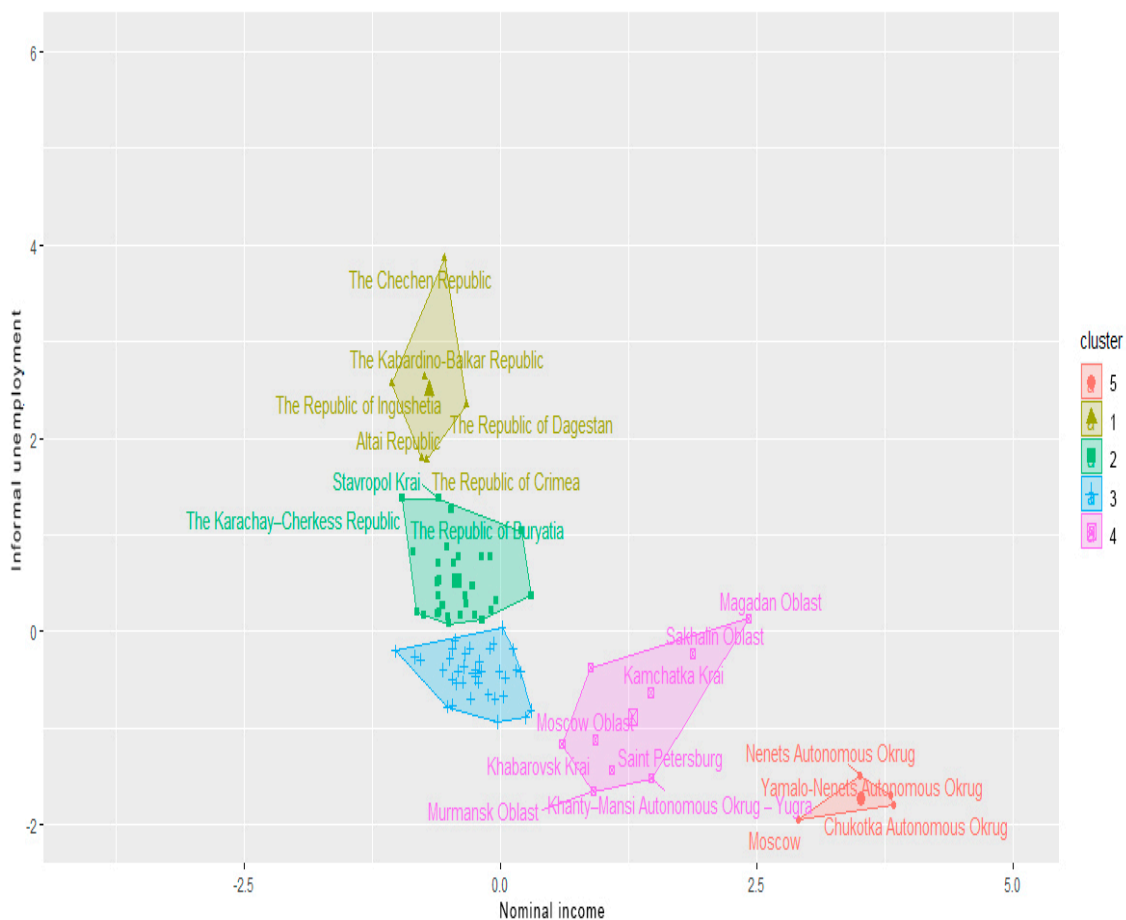
- 2) During the three years before the pandemic, there was a steady increase in informal employment both in Russia as a whole from 19.8% in 2017 to 20.6% in 2019, and in most federal districts, with the greatest growth in informal employment in the Southern Federal District (from 26.8% to 30.9%) and in the regions of the Far East (from 19.2% to 21.8%). Only in two macroregions of Russia informal employment has been steadily declining: in the Northwestern Federal District (it decreased from 15.8% in 2017 to 14.5% in 2019) and in the Ural Federal District - from 16.2% in 2017 to 15.3% in 2019
- 3) According to the results of 2020, the share of the population employed in the informal sector in comparison with the pre-crisis year decreased in all macro-regions of Russia, except for the Far East, where it shows a steady trend of growth throughout the observed period from 19.2% to 22.3%. The largest decline in informal employment occurred, against earlier forecasts and expectations, in the regions of the North Caucasus, where informal employment shrank by 2% over the year and by 2.8% over the three-year period (from 45.4% in 2018 to 42.6% in 2020), which is significantly more than in any other macro-region of the country. Thus, in the most problematic regions of the North Caucasus in terms of employment in Russia, during the deep economic crisis of 2020, due to the spread of the coronavirus infection COVID-19, there was the largest reduction in informal employment in the country.



**Figure 1.** Employed in the informal sector aged 15 years and older by federal districts of Russia in 2017-2020, as % of the total employed population

We conducted a cluster analysis of statistical data on informal employment in the regions of Russia and the average per capita income of the population (Rosstat, 2020), which allowed us to group regions into 5 typologically homogeneous clusters, as shown in Figures 2. The five regional clusters formed according to the criteria "level of average per capita income – informal employment" indicate a significant impact of average per capita income on the level of informal employment.

It is easy to see that the cluster of regions "low average per capita income – high informal employment" includes six regions; the cluster of regions with slightly higher average per capita income and significantly lower informal employment includes about 30 regions, while all the regions of the North Caucasus actually form the lower reference zone. Another 30 regions of Russia form a normalized cluster with the analyzed indicators close to the national average. The fourth most diluted cluster is formed by only 9 regions of Russia, the level of per capita income in which is higher than the average Russian level. Finally, the fifth cluster includes the 4 regions with the highest incomes and the lowest level of informal employment. The economy of the regions of the fourth and fifth clusters is based on the extraction of natural resources, they are sparsely populated and remote from the urbanized territories of Russia, with the exception of Moscow and St. Petersburg. Thus, the vast majority of the country's population lives in regions with incomes below the national average and high informal employment.



**Figure 2.** Clustering of Russian regions according to the "average per capita income –level of informal employment» criterion, 2020 data

Work outside the corporate segment is especially common in the poor regions of Southern Russia and the regions of the North Caucasus with the lowest incomes and the highest unemployment. That is why the COVID-19 crisis so quickly led to a jump in the level of poverty of the Russian population: in the context of the shutdown of many enterprises and the introduction of a self-isolation regime and in the absence of alternative sources of income, the loss of labor earnings caused an increase in relative poverty among informal workers and their families. They became interested in coming out of the shadows and registering as unemployed citizens when the Russian Government introduced a whole package of anti-crisis measures, a significant part of which was aimed at supporting people who lost their jobs due to the crisis. In particular, a simplified procedure for registering as unemployed was introduced, the amount of unemployment benefits was increased (from March 2020, the maximum amount of unemployment benefits was increased from 8000 to 12130 rubles) and the number of persons entitled to these benefits was expanded. In addition to measures of direct support to the population, indirect support measures were introduced, consisting in obtaining a system of preferences for enterprises that retained staff, including the introduction of a simplified tax regime and simplification of procedures for paying taxes and duties, expanding access to credit resources, and so on.

## 7. Conclusion

The Russian government needs to provide measures to support informally employed workers in order to create fair and sustainable conditions for workers, enterprises, the economy and society as a whole, not only in 2021, but also in the future, because, as noted by authoritative experts, the pandemic has and will have significant short and long term implications for informal employment.

Of course, the effectiveness of employment support measures is determined by the capabilities of the budgetary system of the Russian Federation, it also depends on the flexibility of institutional levers and the speed of the state's response to emerging employment problems, as well as the feasibility of decisions made in specific circumstances. The experience of anti-crisis regulation of the economy and social sphere in 2020 showed that the effectiveness of support measures is ensured not only by diversity, but also by their availability to potential recipients, transparency and speed of aid distribution, as well as flexible adjustment of these mechanisms, taking into account feedback from representatives of all economic entities.

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