THE LABOUR MARKET INSTITUTIONS'S INFLUENCE ON ECONOMIC DEVELOPMENT

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Abstract: Recent global events, such as the COVID-19 pandemic, have led to qualitative changes in many areas of public relations, including the labour market. Under these conditions, the role of some labour market institutions may change, which makes it relevant to identify trends in their changes. Based on modern research, the authors will try to trace the trends in the effect of the minimum wage institution`s influence on economic development. The following results can be emphasized: The increasing role of the minimum wage institution as a guarantee of a minimum income level in the context of growing economic inequality and a lack of skilled jobs.

Keywords: digital economy, macroeconomics, global events, COVID-19, labour market, minimum wage, minimum payroll rate, institutions.

1 Introduction

Public relations in the field of employment have always been in the focus of attention of economists in connection with their importance for macroeconomic indicators of economic systems. The labour market, like all other areas of socio-economic relations, is currently undergoing significant qualitative changes related to both demographic (aging of the population, increase in the period of working age), and technological trends (automation, robotisation of working places, reduction of number of workers with low and medium qualifications, the creation of new markets, great labour mobility). The labour market is also influenced by force majeure circumstances, such as, for example, the 2020 pandemic, which provoked an economic recession in many countries of the world, and contributed to a decrease in wages.

In this paper, we will consider the trends of transformation of the minimum wage institution in terms of its impact on the economic development of national economies.

The minimum wage is one of the institutions of the labour market, or the minimum allowable price for employee labour, which is introduced by the state in order to reduce poverty and reduce inequality in society - increasing nominal wages, but lowering the number of employees (because firms forced to pay more high wages will be able to hire fewer of low-skilled workers). In the situation of absence of a minimum wage established by the state, the level of equilibrium wages for low-skilled workers is established, as a rule, at the cost of living, which was proved by K. Marx. This allows workers only to restore their forces expended for the work, but depriving them of resources for the development of their human capital. Therefore, with the development of the theory of the welfare state, a minimum wage is introduced in many states. At the same time, different countries introduced the institute in different years, for example, the USA - in 1938, Germany - in 2014. In Russia, there is a federal institution of the minimum wage amount (MWA).

However, disputes about the impact of the minimum wage institution on employment and the economic situation as a whole are still on-going. An analysis of the scientific literature shows that raising the minimum wage can have different consequences in different countries, and even for individual regions and territories the effects are quite heterogeneous (Mayilyan, 2009). One of the first serious works on the effect of the minimum wage amount on macroeconomic indicators was published in 1946 by the economist J. Stigler after the minimum wage was introduced at the federal level in the USA in 1938 (Stigler, 1946). According to J. Stigler, workers with wages below the established level will be fired in most cases, which will lead to an increase in unemployment. This study was primarily theoretical in nature; the topic did not receive significant coverage in the scientific literature in those years.

The following significant work in this area can be noted in the 1970s. So, in 1976, J. Minser explored the relationship between the minimum wage and unemployment (Mincer, 1976). According to his results, an increase in the minimum wage reduces employment in all age groups, as the jobs are simply cut: the employer can hire fewer workers. Moreover, according to him, employment among adolescents suffers the most. These findings are consistent with earlier findings of the US Department of Labour (https://heinonline.org) in 1970, as well as findings in the works of F. Welsh 1978 (Welch, 1978). According to the calculations of F. Welsh, an increase in the cost of a hired employee by 1% reduces employment: among 18-19 year olds by 1.3%; 16-17 year olds by 2.4%; amount of 14-15 year olds are reduced by 4%. Minimum wage laws reduce employment, especially among those whose wages are lowest, including adolescents, older people, part-time workers, and women. F. Welsh proposed abolishing the minimum wage institution, considering the practice of its use is rather negative than positive.

However, in the future, especially in the 1990s, there appeared the studies that did not find a negative economic effect in the increase in the minimum wage (Dickens et al., 1999). So, P. Cahuc and Ph. Michel noted that legislation on minimum wage amount can have a positive effect on economic growth, stimulating more active accumulation of human capital (Cahuc & Michel, 1996). In fact, a decrease in demand for low-skilled labour with an increase in the minimum wage can create an incentive for workers to accumulate human capital (improve their skills), which is beneficial for the economic system as a whole. And the negative impact on employment among adolescents can be compensated by introducing sub-minimum wages for young people (Neumark & Wascher, 1992).

According to the results of the research by A. Oshchepkov, it was shown that based on the assessment of the Keitz index (the ratio between the minimum and average wages) and taking into account the time lag, an increase in the minimum wage by 10% firstly leads to an increase in unemployment by 0.5%, secondly, to an increase in shadow employment by 8% (Oshchepkov, 2011). It was shown that the effects of changes in the minimum wage are manifested with a lag of one quarter. Indeed, it is important to consider that raising the minimum wage may affect not only employment, but also to be a factor in the expansion of the shadow economy. O. Ashenfelterand R.S. Smith noted that in the 1970s the requirements for the minimum wage were observed in about 65% of cases (according to the results of their research in 1973 - 65%, and with an increase in the minimum wage in 1975, this figure decreased by about 10%) (Ashenfelter & Smith, 1979).

In his paper from 2017, D. Newmark pointed out that instead of searching for a single effect on the minimum wage, one should focus on understanding how the effects of the minimum wage differ by groups of workers, labour markets, by time, and depending on the regulatory environment (Neumark, 2017). In addition, digitalization also plays a significant role in the processes under consideration (Seliverstova et al., 2018).

In addition, the minimum wage institution indirectly affects other areas of economic relations. So, A. Yamagishi calculated that in the market of low-quality rental housing, 10% increase in the minimum wage leads to an increase in rents by 2.5-4.5% (Yamagishi, 2020). This means that workers benefit from raising the minimum wage, but it also inadvertently benefits homeowners.

In Russia, there is little number of researches on the impact of the minimum wage amount on the labour market, and they are unsystematic in nature (Ivanovskaya, 2016). For many years, the Russian minimum wage amount was not able to provide a minimum set of established needs and struggled poorly with the problem of poverty. However, in recent years the situation has changed: since May 1, 2018, the minimum wage amount in Russia is equal to the cost of living. So the minimum wage amount institution was a significant tool for regulating the labour market until recently.

2 Methods

A dialectic approach to the knowledge of economic and social phenomena is used in the capacity of the methods; this allows them to be analysed from the point of view of their historical development and functioning in the context of a combination of objective and subjective factors. The dialectical approach determined the choice of specific research methods: discursive, formal-logical, and phenomenological.

3 Results

The greatest concern among critics of the minimum wage institution is the possible negative consequences of a change in the minimum wage in terms of employment.

If we compare the dynamics of the level of registered unemployment according to the methodology of the International Labour Organization (https://www.fedstat.ru) in relation to the minimum wage amount in Russia, then we notice a statistically significant directly proportional relationship (table 1). The correlation coefficient between the unemployment rate in Russia and the minimum wage amount for the period from the 1st quarter of 2014 to the 3rd quarter of 2019 is -0.7176.

Table 1: The unemployment rate and the minimum wage amount in Russia for the population aged 15-72, for the period of Q1 2014 - Q3 2019

	2014				2015			
	QI	Q II	Q III	Q IV	Q I	Q II	Q III	Q IV
Unemployment rate, in percent	5,5	5	4,9	5,2	5,7	5,6	5,3	5,7
The minimum wage, roubles	5554	5554	5554	5554	5965	5965	5965	5965
	2016				2017			
	Q I	Q II	Q III	Q IV	Q I	Q II	Q III	Q IV
Unemployment rate, in percent	5,9	5,7	5,3	5,4	5,6	5,2	5	5,1
The minimum wage, roubles	6204	6204	7500	7500	7500	7500	7800	7800
	2018				2019			
	Q I	Q II	Q III	Q IV	Q I	Q II	Q III	Q IV
Unemployment rate, in percent	5,1	4,8	4,6	4,8	4,8	4,6	4,4	4,6
The minimum wage, roubles	9489	11163	11163	11163	11280	11280	11280	11280

This trend is also characteristic of some other countries and regions in the world. For example, in Hungary the general trend is as follows: with an increase in the minimum wage, the unemployment rate decreases (Ivanovskaya, 2016). And in France, as in Estonia and Belgium, there was a slight increase in the minimum wage in parallel with a slight increase in the unemployment rate from 2011 to 2015 (Ivanovskaya, 2016).

The inverse-proportional relationship between the increase in the minimum wage amount and the unemployment rate can be associated with an increase in the share of highly skilled labour (table 2), which means that employees are encouraged to accumulate human capital and reduce the impact of the minimum wage as an institution of the labour market, since it mainly aimed at supporting low-skilled workers. Low wage level does not stimulate a person to active actions, intensive labour, and even more so, to self-improvement (Mustafin & Ignateva, 2016). Russia is a federal state that has a complex structure of subnational governments, the number of which reaches more than 80 subjects of the federation (Mustafin et al., 2019). It is important to note that an increase in the share of highly skilled labour is observed in all subjects of the Russian Federation for the period under review.

Table 2: The share of highly skilled workers in Russia, 2014-2018, in percent (https://www.fedstat.ru)

	2014	2015	2016	2017	2018
Russian Federation as a whole	31,9	32,5	32,2	32,5	32,3

Moreover, in general, the change in the proportion of highly skilled workers is insignificant. And in the coming decades, the trend towards an increase in the number of highly skilled workers around the world does not seem to be stable, since due to the predicted reductions in staff with medium qualifications, the proportion of unemployed and those engaged in simple labour may increase.

The impact of the increase in the minimum wage amount on the shadow sector in the Russian economy is rather difficult to assess due to the values of divergence for the shadow economy estimates between the Federal State Statistics Service (12.7–13.8%) and the IMF. According to L. Medina and F. Schneider (IMF estimates), the average value of the shadow economy share in the Russia's GDP for the period 1991-2015 amounted to 38.42% (Medina & Schneider, 2018).

According to IMF estimates, the share of Russia's shadow economy in recent years, up to 2018 (the last period for which data is currently available), increased slightly. This occurs

against the background of an increase in the minimum wage amount, which confirms the results of previous studies that have revealed a directly proportional relationship between the dynamics of the minimum wage and the share of the shadow sector.

It turns out that the digitalization of the Russian economy still does not sufficiently affect the shadow sector, although there are undoubtedly significant successes in this direction (for example, in terms of automating the activities of the Federal Tax Service). All this means the need to develop digital technology centres by creating economic clusters (Seliverstova et al., 2018).

In our opinion, the role of the minimum wage institution is also affected by digitalization processes. Thus, the development of the digital economy makes transactions between different economic entities more transparent, which makes it difficult for most of them to increase shadow volumes of activity, and also reduces incentives for this because of high detection risks and subsequent sanctions (costs). The digital economy reduces the ability of economic entities to adapt to increasing the minimum wage amount by falling into the shadows: this means that it often forces employers to increase in the expenditures connected with wage pool for low-skilled workers and also for some highly-skilled workers (due to the effect of personnel transfer).

Thus, in our opinion, even an increase in the expenditures connected with wage pool upon an increasing in the minimum wage amount may not cause a reduction in the number of employees (and an increase in unemployment) under conditions when:

1. There is an insignificant proportion of low-skilled workers in the total number of employees (the wages of the majority of employees does not directly depend on the minimum wage, and the indirect effect of the transfer of personnel is manifested with a significant time lag);
2. Economy digitalization takes place, namely a high level of automation of jobs (if a company uses a limited number of personnel through automation of jobs, which means that reductions have already been made and the resource for job cuts is small).

In addition, in the context of the COVID-19 pandemic, most countries have adopted measures to support economic development in the form of direct payments to the population to stimulate demand. This is a justifiable measure due to the fact that according to the results of the first studies, low-income households were most affected. So, Cajner T. et al. note that in the United States, workers in the lower quintile of the wage distribution experienced a 35 percent decrease in employment, while workers in the upper quintile experienced only a 9 percent decrease (Cajner et al., 2020).

In European countries, the situation is similar: the total number of working men declines, and more so for the self-employed and those with a lower level of education. According to H.-M. von Gaudecker et. al., such a criterion as the level of education arises because workers with higher education work much more hours at home (Von Gaudecker et al., 2020). The strength of this effect is weakened by the government, which defines some workers as necessary for the functioning of the economy.

The size of these direct payments to households is not tied to the minimum wage, which also indicates a decrease in the role of the minimum wage institution in modern economic development.

4 Summary

In general, under the current conditions with the development of the digital economy in many countries of the world, the effect of the minimum wage institution on employment may decrease due to an increase in the share of highly skilled labour, the creation of incentives for increasing human capital, and the further introduction of digital technologies, which will lead to the crowding out of low-skilled labour force from the labour market and the dominance of direct measures to support households, the value of which will depend on the fiscal capacity of governments.

At the same time, it is important to continue the fight against the shadow economy through the further introduction of digital technologies in order to reduce the possible negative effect of raising the minimum wage and the growth in the informal economy (part of the shadow economy, which includes legal activities for which business entities use tax evasion in whole or in part) (Kundakchyan & Grigoryeva, 2016). Although here we are witnessing a decrease in the influence of the minimum wage institution on the size of the shadow economy due to the increasing role of factors such as digitalization, various digital control tools (including those from the tax authorities), stagnation of international trade, etc.

5 Conclusion

According to the results of the correlation analysis, it was revealed that in most developed and developing countries, an increase in the minimum wage was accompanied over a long period (2014-2020) by a reduction in officially registered unemployment and had a positive economic effect on employment.

Moreover, in general, the situation in the labour market is becoming more and more uncertain and this is a general trend. According to Lefteris Kretsos, the current socio-economic forces have made work more insecure, unpredictable, and risky (Kretsos, 2010).
Given the development of digital technologies, and the increasing role of the technological factor in economic development issues, it also seems relevant in the future to study the trends in the effect of raising the minimum wage on various indicators of economic growth and development, especially since economic development becoming an increasingly non-linear and complex process, as shown by Grigoryeva N. and Grigoryeva O. (Grigoryeva & Grigoryeva, 2015).

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