Potential influence of Universal Basic Income on labor input in Russia

Sergey Aleksandrovich Zolotov

+79101403017;szolotov96@gmail.com

Lobachevskiy State University of Nizhniy Novgorod, Russia

Russian Center for Promotion of International Initiatives.

In our research we will analyze the following aspects of the posed problem:

- premises for the implementation of Universal Basic Income (UBI) in Russia;

- changes of labor input in the result of UBI.

UBI is the universal form of population social guarantee. In modern Russia there is still a great number of social privileges and guarantees: for students, pensioners, invalids, labor veterans and so on. These guarantees and privileges, as a rule, are not high. Thus, there are definite institutional premises for UBI introduction in Russia.

The idea of UBI introduction begins to spread in Russian society. In the Internet the group "Universal Basic Income: it is not to the right or to the left, it is forward" is created, which has 1500 subscribers. The group informs about the principles and advantages of UBI using the results of foreign investigations and experiments with UBI introduction.

Russian scientific community, so far, treats the research in the field of UBI with some care. It is connected with the novelty of the idea, the difficulty of its realization. That is why in economic literature it is possible to find hundreds of articles on the problem of financial budgeting but not more than 20 about UBI problem. The number of such publications will grow for sure.

In the reports about UBI in Russian media a negative tone is set beginning with the title and finishing with the content. Despite the fact the idea of UBI is becoming attractive. Thus, according to the results of the poll conducted by the company "Head Hunter" in 2017, 62% of respondents were for the implementation of UBI into the Russian practice.

All these show that in Russia, as well as in other countries, there are perspectives for UBI realization. That is why the question how labor input will change in the result of UBI introduction acquires practical importance.

The main hypothesis of our research is that the implementation of UBI, though it will lead to a certain reduction in labor supply, will not have the catastrophic consequences for Russian economy. To verify this hypothesis we shall use a number of premises.

We used the data from Russian national service of statistics http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/wages/labour_force/ and from the government report about family and children in our research https://rosmintrud.ru/docs/mintrud/protection/474

The values of the indicators are known only for 2016 at the moment in Russia. We need to know for the research such indicators as average wage, working hours elasticity with the respect to non-labor income, the participation elasticity to the non-labor income, share of workers with different number of children or without children, for our future estimations. We have also made an assumption, that basic income is the same for adults and children.

Average wage is 36476 rubles per month. The working hours elasticity with the respect to the non-labor income - 0,2; the participation elasticity to the non-labor income: - 0,6 (Klepikova E. 2016). UBI may have a meaning of 10000 rubles per month (this level is close to the minimal wage in Russia). Share of workers (family and non-familial) without children is equal to 42.9%; share of family workers with one child is equal to 38.4%; share of family workers with two children – 15.2%; share of family workers with three and more children – 3.5%.

To calculate the changes of working hours supply we'll use the following formula

$$\Delta L(\%) = e_h \times \sum_{i=1}^{n} \alpha_i \times \Delta I_i (\%) \qquad (1)$$

Where,

ΔL (%) – change of working hours (in %);

e_h – elasticity of working hours by non-labor income;

α_i – share of group i workers in general number of workers;

ΔI_i (%) – change of non-labor income (in %) for the workers belonging to group i, where

$i =1$– workers without children;

$i = 2$– family workers with one child;

$i = 3$– family workers with two children;

$i = 4$ – family workers with three or more children.

ΔI_i (%) – change of non-labor income (in %) is calculated according to the formula

$$\Delta I_i (\%) = \frac{\Delta I_i}{[(I_A + (I_A + \Delta I_i)] : 2} \times 100\% \qquad (2)$$

Where,

I_A – average wage per month in Russia (in rubles);

ΔI_i – change of non-labor income (in rubles) for the workers of group i, calculated by the

formula: $\qquad \Delta I_i = UBI + \frac{N_i}{2} \times UBI \qquad (3)$

Where:

UBI – Universal Basic Income (rb)

N_i – number of children per one worker belonging to group i.

Calculations results by formulas 1-3 are given in table 1.

Table 1. Changes in working hours supply in % in Russia as a result of UBI equal to 10000 rubles implementation.

	Workers of the group			
	1	2	3	4
UBI	10000 rb			
ΔI	10000	15000	20000	25000
ΔI (%)	24.1	34.1	43.0	51.0
α	0.429	0.385	0.152	0.036
ΔL (%)	-6.4			

As we can see, ΔI depends from the number of children in the family. It becomes more for the half with each extra child in the family. The change of the non-labor income increases from the non-children families to families with children. The effect of this growth is neutralized by reduction in the proportion of each population group. The total change in working hours supply in % in Russia as a result of UBI equal to 10000 rubles implementation will be only - 6.4 %.

So, we can conclude, that the reduction of working hours supply due to the implementation of UBI on the level close to the minimal wage will be inessential.

Not all the researches are of the opinion that non-labor income increase influences the wish to stop work. We shall take into consideration this effect as well, using the formula (4), analogues to (1):

$$\Delta E(\%) = e_E \times \sum_{i=1}^{n} \alpha_i \times I_i(\%) \qquad (4)$$

Where:

$\Delta E(\%)$ – percentage change of employment;

e_E – participation elasticity by non-labor income.

As the calculations show, when UBI is equal to 10000 rubles the employment will reduce on 19.1%. We have also made a supposition that employment reduction, expressed in percents, is equal to a relative reduction of general number of labor input. It is close to the reality because the majority of employers in Russia have the negative attitude to the part-time working day.

After that refinement we could go to the cumulative results. Than it is necessary to correct the decrease of labor input on the part of employed: when UBI is equal to 10000 rb the decrease of hours supply will be 5.2% (6.4%×0.81). Correspondingly, the reduction of working hours will be 24.3% (5.2% + 19.1%).

We should mention the important outcome, maximal reduction of working hours will not overcome 24.3%.

According to our mind, phased implementation of UBI is necessary: the 1st year to pay 1000 rubles per month, the 2nd year – 2000 rubles per month and so on. Then the economy will adapt to UBI implementation without any shock on the labor market. This will be the factor of mass technological unemployment prevention.

Working time reduction will give an opportunity to consistently introduce the principle of life long education, will increase the flexibility of the working force. Employees will get an opportunity for constant qualification growth, their income will increase. This will allow to improve the quality of the working force. In its turn, the employers are interested in educated, and consequently, high-performing workers. So, UBI implementation, in the end, will improve the well-being of all members of society.