Universal basic income. Theory and practice

1. Introduction

During the past few years, the world economy has accelerated technological progress, resulting in the widespread replacement of human labor with modern machinery and equipment. Researchers from the University of Oxford (Frey and Osborne) point out that about 47% of the jobs in the United States are exposed to high-risk computerization. Similarly, an Australian study published by the Committee of Economic Development of Australia (CEDA) indicates that around 40% of Australia’s jobs are at high risk of computerization or automatization over the next 10–15 years (Don, 2016).

However, Arntz et al. (2016) argue that the mentioned share should be close to 9%. It is certain that computerization and automatization will undoubtedly replace many of the jobs currently being done by people, who would need to find other occupations in order to provide for themselves and their families (Arntz et al., 2016).

The possible inflow of computerization and automatization on employment varies by the occupation and sector. Activities most exposed to computerization and automatization concern physical work; in particular, operating machinery and preparing fast food. Collecting and processing data are two classes of activities that more and more can be prepared better and faster thanks to machines. This could displace large amounts of work. However, despite being automated, some occupations may not decline at all; employees may rather perform new tasks (Manyika et al., 2017).

As a result, there are growing fears about the future of employment, social welfare, and the financial stability of social security systems. In addition, tax systems that rely on income from work may be subjected to severe pressure because the
machines replacing human labor do not pay taxes nor pay contributions to social security systems. Finally, technological changes can lead to increases in income inequality in society and the stronger polarization between the owners of capital and the labor force, especially for lower-skilled workers.

The Universal Declaration of Human Rights states that “everyone has the right to life, liberty, and security” and “the right to a standard of living that guarantees the health and well-being of him and his family.” In response to this statement, the concept of a “basic income” was introduced, which should be a universal income offered to all persons in all countries.

The purpose of the article is to analyze the theoretical and empirical aspects of a universal basic income, with a particular emphasis on the origins and consequences of introducing this instrument. In the text, a research method based on literature studies in macroeconomics and economic policy as well as statistical and descriptive methods based on data provided by the Organization for Economic Co-operation and Development and the World Bank are used.

2. Core of universal basic income

A universal basic income (UBI), also called “citizen income,” is a universal income granted to all members of the community without the need for work. First, the right to income and level of income are independent of the size and structure of the household. Second, a universal income is paid regardless of the income of citizens from other sources. Third, this income is granted without the need to do any work by the beneficiary of that income.

A universal basic income is a cash benefit paid by the government on a regular basis (on a monthly, quarterly, or annual basis). If a basic income reaches a level satisfactory to meet one’s basic needs, the basic income is said to be full; if it is lower, it is a partial income (Fumagalli, 2014).

The fundamental idea of introducing a basic income is that all citizens regardless of their individual income receive a uniform amount of money from the state each month to meet their basic needs. As a result, all other state-provided social benefits such as unemployment benefits or child benefits are withdrawn. Such a basic income would be largely financed by the abolition of costs, which in some cases has highly complex social benefits (including related administrative expenses).

In addition to the direct payment of money to beneficiaries of a universal basic income, this instrument may take the form of a negative income tax (NIT). A negative income tax occurs in conjunction with the existing income tax system of a progressive nature. A negative income tax leverages the mechanism by
which tax revenue from people with incomes above the minimum is collected to provide financial assistance to people with incomes below that level. Hence, the taxable income of individual households is deducted from the basic income of their members. If the difference is positive, then the tax should be paid; if the difference is negative, the state pays the household.

In practice, the distribution of household incomes achieved with a universal basic income and a negative income tax is the same. Despite the obvious similarity of the above-mentioned mechanisms, a negative income tax may be less costly. This situation is due to the fact that, in the case of a universal basic income, there are two-way cash flows; one resulting from the payment of the basic income, and the other related to the payment of income tax. Moreover, in the case of a negative income tax, there is one household payment. On the other hand, a universal basic income is characterized by a certain advantage over a negative income tax, which results from the fact that each variant of a negative income tax needs to be supplemented by an installment system before the final tax settlement is reached at the end of the fiscal year. Additionally, despite the same distribution of income between households, the distribution of income within the household itself is more equal in the case of a universal basic income than in the case of a negative income tax. Finally, in the case of a universal basic income, beneficiaries receive a fixed income regardless of whether they earn additional income (e.g., from employment) or do not earn any income. Conversely, a negative income tax is dependent on the income earned by household members (Van Parijs, 2000).

Another type of basic income is wage supplements; that is, salary supplements designed to offer additional income so that no worker earns less than a certain level of income. In this case, the government guarantees to cover the difference between what the individual has earned and the minimum set by the state (Tanner, 2015).

Both the concept of income fundamentally as well as the ways in which it is distributed among citizens differ substantially depending on the economic doctrine that we deal with. Namely, according to the classic (liberal) approach, proponents of a basic income postulate the idea of a “negative income tax.” According to this doctrine, the functions of the state should be limited to the minimum necessary by setting a negative progressive tax. Citizens below the poverty line would then not pay income taxes, and the government would pay the necessary funds to meet each person’s threshold. In this case, public services (education, healthcare, etc.) would be paid; the exceptions would be national justice and defense.

In turn, according to the doctrine of the Social Democrats, it is necessary to ensure the continuity of income for the unemployed or those whose income from work is too low. In this case, the guaranteed income should only be for those who are without a suitable source of income. Such a redistribution of income
is independent of the activity undertaken and continues until the beneficiary of the benefit falls below the poverty line. So, this concept coincides with the idea of guaranteed pay.

Finally, according to the third doctrine presented by the radicals, the basic income should be universal, unconditional, and indefinite. Such a benefit would not be discriminatory and would represent a continuous benefit, independent of actual professional activity and providing a standard of living for every citizen of a given country or region.

3. Origins of universal basic income

The idea of a universal basic income dates back to 1796, when English radical Spence put forward the first coherent and elaborate proposal to grant equal treatment to all residents without any precondition. These amounts were to be granted to all citizens equally and paid quarterly. These funds were to come from a part of the income earned by the whole population from the land lease.

In the 19th century, the demand for introducing a basic income was adopted by radical and socialist movements. The supporters of this concept included Fourier and Charlier. Increasing popularity and recognition of the idea of a basic income was obtained in the first half of the 20th century. The main merit is attributed to the activities of Russell and Milner, who put forward the proposal of a universal income to help tackle poverty.

At the end of the 1960s and early 1970s, interest in the concept of a universal basic income appeared again. In the 1972 presidential election in the United States, Nobel laureate Tobin called on Democratic candidate McGovern to propose the idea of a universal basic income, while another Nobel Prize winner (Friedman) proposed that Republican candidate Nixon implement the concept of a negative tax income (Fumagalli, 2014).

As proposed by Tobin, a universal basic income can be expressed in arithmetic form, presented as follows:

\[ t = x + 25 \]  

where:

- \( t \) – the average tax rate in percentage of GDP necessary to finance the basic income;
- \( x \) – the basic income expressed as a percentage of GDP per capita.

The justification for this expression is that the basic income payments must be financed in the long run, and 25% is the approximate share of the expenditure...
required to finance non-social public expenditure (health, education, public administration, public debt, military spending, etc.) (Kay, 2017).

In 1986, when the Basic Income European Network (BIEN) was created, the aim was to popularize the idea of a basic income. In 2004, the organization changed its name to the Basic Income Earth Network, transforming itself from a European network into a global organization. In 1988, the first issue of the Basic Income Studies Journal, devoted entirely to a detailed analysis of the basic income concept, was published.

In recent decades, many countries and regions in the world have implemented the idea of a basic income in full form or in pilot form.

In 1976, Alaska formed a standing fund in order to invest its revenue from the sale of crude oil in recognition that the mineral resources belonged to Alaskan residents. Since 1982, dividends have been paid on a per-capita basis to all inhabitants of the state. The only condition for receiving financial support was the requirement for residential status for at least one year, with the intention of remaining a resident of Alaska. Dividends were calculated on a yearly basis based on the fund’s five-year average investment performance. The largest dividend of $3269 was paid in 2008 and included a one-time $1,200 bonus to compensate residents for high fuel prices. In 2012, the dividend was $878 per person, or $3512 for a family of four. Currently, the dividend is $2,000 per capita per year and shows an upward trend every year.

The paid dividends played an important role in making Alaska one of the states with the lowest poverty in the United States (as well as one of the lowest income inequalities). Although the individual dividend was relatively small, the overall impact on the economy was significant, as in 2009, the purchasing power of Alaskan residents increased by $900 million. These results were comparable to the creation of a new branch in the economy or the creation of 10,000 new jobs. At the same time, there was no apparent impact of the paid dividend on the labor market.

Between 1968 and 1978, four guaranteed income experiments were conducted for citizens in selected areas of the United States (New Jersey, Seattle, Denver, North Carolina, Iowa, and Gary, Indiana). Although the tested system was in the form of a negative income tax and not a guaranteed basic income, the effects were similar due to the similarity of the two systems. The results of the experiment revealed that men receiving income reduced their working time by an average of 7% and women by 17%. This was mainly due to the decrease in the number of hours worked rather than the total absence of work. The monthly expenditures of the citizens increased moderately with increasing incomes, but the structure of these expenditures did not change significantly (Munnell, 1986).

In 2008, a non-governmental organization called ReCivitas launched a pilot project to pay a basic income in the small town of Quatinga Velho located near
Sao Paulo, Brazil. The project was financed by private donations and provided a monthly universal income for 27 people for $13.6 per capita. Over the next three years, the number of people receiving payments increased to 100. The monthly payment of a universal income was well below the poverty line, but even the villagers who received the basic income showed an improvement in their ability to meet their basic needs. Researchers have noted an improvement in the quality of nutrition among the residents, with 25% of the basic income being spent on food. There was also an improvement in their health and living conditions (Pasma, 2014).

In January 2013, an annual signature collection procedure was launched under the European Citizens’ Initiative for Basic Income. The aim of the initiative was to obligate the European Commission to encourage its member states to cooperate in undertaking research on a basic income as an instrument to repair their social security systems. However, it did not succeed, as they were only able to collect 285,000 signatures (well short of the required one million). Only six countries (Bulgaria, Slovenia, Croatia, Belgium, Estonia, and the Netherlands) managed to gather the minimum number of signatures required, and the previously set target was reached only in Bulgaria. Proponents of the basic income concept decided that the associated social movement should be institutionally formed and set up in 2014 with an organization called Universal Basic Income Europe.

In 2016, a national referendum was held in Switzerland that aimed to introduce a basic income. The results of the referendum showed that nearly 77% of the Swiss population opposed such a plan, while only 23% supported it. The basic income proposal was addressed for both adults and children. They were to receive a universal monthly income irrespective of their social and professional status. The monthly income paid by the state would amount to 2500 Swiss francs for adults and 625 Swiss francs for children. These figures reflected the high cost of living in Switzerland. Thus, Switzerland is the first country in the world to reject a proposal to introduce a universal basic income.

The most advanced experience with a basic income can be attributed to Finland, where nearly 2000 citizens were paid unemployment benefits of €560 per month in 2017 (the equivalent of a quarter of the average household income in Finland). In this case, the basic income did not eliminate additional benefits for citizens (e.g., housing benefits) and did not lead to changes in taxes for people receiving the basic income.

4. Results of introduction of universal basic income

The economics literature points to the measurable benefits of introducing a universal basic income. First of all, a universal basic income allows citizens the
freedom to spend the money any way they want. In other words, a basic income strengthens economic freedom at the individual level. This income provides residents the freedom to choose a particular type of work instead of forcing them to take low-productivity jobs to meet their daily needs. Second, a basic income is a kind of unemployment insurance and, thus, can contribute to reducing poverty. Third, a basic income leads to the fair distribution of wealth. Fourth, the increase in income improves the bargaining power of citizens, as they no longer must accept the offered working conditions. Fifth, a universal basic income is easy to implement. Due to its universal character, there is no need to identify the beneficiaries. It therefore excludes errors in the identification of planned beneficiaries, which is a common problem in targeted social programs. Sixth, due to the fact that each individual receives a basic income, it promotes efficiency and reduces losses in governmental transfers. Moreover, the direct transfer of a universal income to citizens can contribute to decreased corruption in a country. Additionally, the benefits may result from the reduction of costs and time as a result of substituting a basic income for many social programs. Finally, transfers of a basic income directly to the receiving bank accounts can raise the demand for financial services, which promotes the development of the financial market in the country.

On the other hand, opponents of the universal basic income idea point to the following disadvantages of this system. First of all, it poses a risk of a moral hazard. The result of this is a reduction in the motivation to work and the consequential drop in the labor supply in a country. In addition, it is about fiscal costs and the risk of declining purchasing power of the transfers received by the citizens. Namely, the opponents of the universal basic income concept will find that, after raising a universal income, taxes will rise in a country to finance the growing governmental spending. Moreover, an increase in the money supply of a country may cause an increase in inflation and a decrease in purchasing power in the country.

It is obvious that the impact of the basic income on the whole market cannot be unequivocally defined, since the income affects the individual areas of economic life; it is positive in some cases and negative in others (Sattelberger, 2016).

The impact on employers of introducing a universal basic income can be positive for those jobs that stimulate the competitiveness of the workers. Without working to ensure a specific level of living, individuals can develop and seek work that will offer them satisfaction and the ability to feel fulfilled. Rising competition will attract more qualified people to the labor market who are more willing to learn and develop and, thus, will result in strong human resource development. In addition, continued social protection and increased labor supply on the market will allow employers to lower their wages. However, there is a high risk for
employers to offer jobs to people with lower qualifications. In this case, the employer will have to pay a higher salary to fill vacancies. The increase in the wage fund will lead to higher prices, and the increase in prices will entail the need to increase the universal basic income.

Also, the impact on employees of introducing a universal basic income is positive. By receiving a universal income, they are able to pursue their own continuous development by engaging in programs that will help them get the desired positions by being able to invest a portion of their basic income to education without affecting the family budget.

The progressive income tax that is currently applied in most countries around the world seems to be the best available source of funding for social policies that seek to ensure an adequate standard of living for citizens by introducing a universal basic income. The introduction of a basic income must be accompanied by an organic or even complete elimination of other forms of social assistance such as unemployment benefits, pensions, and social allowances, leaving only funds available for people with disabilities. In addition, the introduction of a universal basic income may contribute to a reduction in state budget expenditures as a result of declining employment in the public sector. On the other hand, the elimination of unemployment insurance premiums and social security contributions may lead to a reduction in fiscal pressure on the economy (Cercelaru, 2016).

A universal basic income can be easy to apply, but the costs will be much higher than in the current social systems. However, a negative income tax can be cheaper, but it will potentially discourage work. On the other hand, a wage supplement system can encourage work, but it will not be common; hence, it is not able to completely replace the current social systems (Deutscher Bundestag, 2016).

5. Universal basic income in light of empirical studies

In its published report, the Organization for Economic Co-operation and Development (OECD) stated that, for most high-income countries, a universal basic income can actually increase poverty. The proposed proposal is based on a scenario analysis in which all existing cash and tax benefits for people under 65 are replaced by a universal basic income in the 35 OECD member countries. The analysis conducted by this organization argues that governments in most member states implement social support programs for the poor, while a universal basic income will make it less precise. The OECD has conducted a detailed analysis of the impact of a universal basic income on four member states: Finland, France, Italy, and Great Britain. Three out of the four analyzed countries stated that their hypothetical universal income would actually increase poverty by at least 1%.
Jessen et al. (2015) conducted empirical research on the potential effects of introducing a universal basic income in Germany at €800 per month for adults and €380 per month for people under 18 years of age. These figures are close to the current level of existence guaranteed by unemployment benefits and social assistance in Germany. The study assumes that the mechanism would be financed from a 68.9% linear tax. Researchers have found that the introduced reform would increase the labor supply in Germany in the first decile of income distribution. This effect would be significant and would increase the supply of this group by 6.1%. On the other hand, the introduction of a universal basic income in Germany would reduce the supply of labor in most of the remaining income decisions. In general, the introduction of a universal basic income would reduce the total labor supply by 5.2%. Utilizing the utilitarian social welfare function, the authors of the study have confirmed that the overall social benefits to be achieved would be higher compared to the present situation. The result of the analysis has thus confirmed that the introduction of a universal basic income in Germany would be economically justified, increase motivation to work in poorer households, and bring social benefits as compared to the current system (Jessen et al., 2015).

On the other hand, a commission of the German parliament analyzed a basic income in 2013 and concluded that it would cause a significant decrease in the motivation to work among the citizens, with unpredictable results for the national economy. The system would need a total restructuring of the taxation, social insurance, and pension systems, which can be very expensive. They also argued the current system of social facilitate in Germany is more effective because it is more personalized. Finally, the German parliament concluded that there are no viable ways of financing a basic income in Germany (Davala et al., 2015).

The United Nations Educational, Scientific, and Cultural Organization (UNICEF) ended a few years ago with a pilot project in partnership with the SEWA in India to analyze the effectiveness of a universal basic income among thousands of people living in Madhya Pradesh. The results of the study confirmed the increase in local economic activity that led to the emergence of micro-businesses, creation of new jobs, and increasing purchases of technical equipment and livestock for the local community. In addition, people receiving the universal basic income made significant improvements in respect to child nutrition, school enrollment of children, health care, and accommodation. It should also be noted that the increase in benefits for women was higher than for men (increasing financial autonomy for women), greater in the case of people with disabilities (compared to healthy people), and greater among the poorest (compared to wealthy people) (Lehmann, 2003).

Relatively few economists claim that all citizens can benefit from the introduction of a basic income (Chéron 2002). According to Lehmann, the final effect
of introducing a basic income depends on the level of education in a country. He argues that more-qualified people are much less likely to benefit from a basic income than less-qualified people (Chéron, 2002).

Referring to experiments in the 1970s in Manitoba, Canada, Hum and Simpson acknowledged that employment reduction was relatively small after introducing a universal basic income (about 1% for men, 3% for men married women, and 5% for unmarried women). In addition, the researchers noted that the introduction of the universal basic income had a significant impact on the structure of the households (Hum and Simpson, 2001).

On the basis of empirical research on the concept of a universal basic income, two main conclusions can be drawn. First, a basic income is generally positive only when it is not too high or is slightly below the threshold of relative poverty. Second, a basic income should replace unemployment benefits.

The Family 500+ program introduced in Poland in 2016 could be described as a quasi-guaranteed income if paid for each child regardless of the income earned by the household. The Family 500+ program is 500 PLN per month paid by the state for each second child and all subsequent children regardless of household income. Low-income families also receive support for the first (or only) child if they meet the criterion of an average monthly net income of 800 PLN (or 1200 PLN in the case of raising a disabled child in the family). By the end of 2016, 3.8 million children were eligible for support, representing 55% of all children under the age of 18. The program has raised the standard of living for those families receiving benefits. The program has dramatically improved the material conditions of the families, resulting in a reduction in the number of people benefiting from social assistance and nutritional support. With the program, total poverty has decreased by 48% and extreme poverty by 98% (https://www.mpips.gov.pl, 2017).

Goraus and Inchauste (2016) estimated that the poverty and inequality in Poland will fall as a result of the introduction of the Family 500+ program. Indirect taxes were also expected to increase, but the net effect on disposable income was estimated to be positive, relative to the situation in 2014 (Goraus and Inchauste, 2016).

The cost of the program is about 25.7 million PLN per year (1.5% of the GDP). To compare the efficiency of the new program relative to the other existing programs mentioned in Figure 1, researchers calculated the change in poverty and extreme poverty per zloty (PLN) spent for each program. They found that the changes in poverty and inequality were lower for the Family 500+ program as compared to social subsidies, social assistance, nursing allowances, and housing benefits, because these were more targeted; however, it was more efficient than the spending on the nursing and family benefits (Fig. 2) (Goraus and Inchauste, 2016).
Figure 1. Progressivity and marginal contribution of Family 500+ program

Source: Goraus and Inchauste, 2016.

Figure 2. Efficiency of social spending

Source: Goraus and Inchauste, 2016.
When the authors took into account the likely increase in the value-added tax (VAT) and excise tax, the net cost of the program was expected to be 22.2 million PLN per year (1.3% of the GDP). To compare the efficiency of the new program relative to other existing programs, Goraus and Inchauste (2016) calculated the changes in poverty and extreme poverty per zloty spent for each program. They found that the changes in poverty and inequality were lower for the Family 500+ program as compared to social support, social assistance, nursing allowances, and housing benefits (as these were more targeted), but it was more efficient than the spending on the nursing and family benefits (Goraus and Inchauste, 2016).

Supporters of a universal basic income would like to introduce a full universal system in Poland, amounting to approximately 1000 PLN per month. However, opponents argue that the reasons for introducing such a benefit are weak, because we have seen a marked increase in private employment accompanied by drops in inequality and the risk of poverty in Poland over the past 15 years. They also claim that the introduction of an unconditional basic income would entail a tax increase of about one-third in Poland. Such an increase in taxation would lead to a breakdown in economic development and a decline in professional activity. They believe that social policy can be carried out from the bottom up, without the coercion of state and tax redistribution (Goraus and Inchauste, 2016).

6. Conclusions

Supporters of the introduction of a universal basic income argue that it will help reduce the potential for abuse in the system. The universal transfer of a basic income is a very simple and transparent transfer system that drastically reduces the possibility of abuse as compared to other systems commonly used today. In addition, the introduction of a basic income reduces the stigmatization of the applicants. At the same time, supporters say that it creates a more egalitarian society and opens up possibilities for individual self-realization. Moreover, basic income supporters argue that technological development in the world of work is causing manual labor to be constantly replaced by technical solutions. This means that a small group of people with high wages will face a growing number of unemployed. A universal basic income will then ensure the necessary social balance.

On the other hand, opponents of a universal basic income claim that the belief in an equal distribution of a basic income is only wishful thinking and that it can never become a reality. In addition, a universal income raises the risk of abuse (moral hazard) because the basic income would significantly reduce the willingness to take up employment and, thus, lead to a decrease in employment.
This would reduce the driving forces of the market economy. In addition, the introduction of a basic income would result in the loss of other social benefits and, thus, the need for self-financing social needs.

A universal basic income is, in fact, a radical change from the current social system and is equitable, liberal, and treats all citizens equally. People with higher incomes pay higher taxes than people with lower incomes in absolute and relative terms. The minimum living guarantee is guaranteed to everyone, and people without incomes receive net transfers. Although the concept of a universal guaranteed income is neither perfect nor cheap to implement, it seems reasonable to at least consider a radical change in the current social assistance system. At times, it turns out that the risk of radical change is less than the risk of continuation of an existing system, as the current social system can exacerbate social and political pressure as a result of increasing polarization in society (Benedyk, 2018).

References