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# MIGRATION DILEMMA OF THE YOUNGER GENERATION FROM THE PERSPECTIVE OF WAGE PURCHASING POWER

**Nataniel Wypych**[*], **Zuzanna Zawolska**[**]

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**Abstract**

**The purpose of the article.** The aim of the article is to determine whether there is a need to differentiate between countries in terms of the amount of aid they provide for the return of their citizens, and in which of the European countries a person can save the most and build up wealth in the fastest way.

**Methodology.** The study is based on historical data from 2016 to 2021 on average salaries, average cost of living, average price per square meter of housing in a country's capital and the average price of a VW Golf IV car in 37 European countries.

**Results of the research.** In the general view of the study presented below, the countries to which economic migration can bring the most benefits are Switzerland, Luxembourg, and Denmark. On the other hand, countries that may not meet economic needs include North Macedonia, Moldova, Montenegro, and Albania. One can save the fastest per square meter of housing in Belgium, Iceland, and Switzerland. The fastest way for people to save money for a car is available in Switzerland, Luxembourg, and Great Britain.

**Keywords:** migration, economic migration, savings, household savings, households.

**JEL Class:** J31, D12, D14, F22.

[*] Lic., Faculty of Economics, Finance and Management, University of Szczecin, e-mail: natanielwypych01@gmail.com https://orcid.org/0009-0004-3723-4975

[**] Lic., Faculty of Economics, Finance and Management, University of Szczecin, e-mail: zawolska.zuzanna@gmail.com https://orcid.org/0009-0008-5595-7332

## INTRODUCTION

One of the most important national economic events in 2022 was the entry into force of *the Polish Deal*, a government program designed to overcome the effects of the pandemic, reduce social inequalities, and create better living conditions in Poland for all citizens (*Podręcznik…*, 2022). The rapid legislative process, the lack of public consultations and the short *vacatio legis* meant that in the early days of *the Polish Deal*, public discussion was dominated by issues related to the amendment of the Tax Ordinance and the interpretation of payroll principles. In the meantime, *the Polish Deal* introduced several other solutions affecting many areas of social and economic life.

An example of another, less spectacular and media-oriented change is the "return relief", i.e., the proposal of tax benefits for those who decide to re-establish their tax residence in Poland. In this way, the legislator is attempting to curb the negative trend in economic migration[1] which has been observed since the accession of Poland to the structures of the European Union and its inclusion in the Schengen area. According to the estimates by the Central Statistical Office (GUS), almost 1.5 million people decided to leave Poland in the years 2004–2019 (*Sytuacja demograficzna…*, 2020), and their motives can be examined based on economic, socio-cultural, and political factors (Dębowska, 2007). There are also several non-wage factors of an economic nature, such as a need to gain experience abroad, professional success (careers in corporations), or to establish business relationships and contacts (Michałków, 2011). However, the decision to migrate is most often dictated by the desire to improve the material situation and social status (Wojnicz, 2016), which corresponds well with the assumptions of return relief.

The tax relief proposal presented in *the Polish Deal* seems reasonable as it highlights the main economic benefits for those who decide to migrate. On the other hand, it may be questioned whether the universality of the proposed solutions and the lack of differentiation of the scope of the relief according to the country from which the return to Poland takes place, do not constitute an internal limitation of the effectiveness of these regulations. Even if the primary reason for most decisions to migrate is the perspective of higher wages, the natural consequence of considerations before determining the direction of departure are the living conditions and costs in each place. Thus, the authors formulated the question: "Will the attractiveness of the return allowance depend on the relationship between the migrant's current standard of living and the perspective of moving to Poland?". Such a solution would require broadening of

[1] Migration is a significant indicator of social change, particularly in modern times. Industrialization leads to massive population movements from rural to urban areas within countries and across international borders (Richmond and Jensen, 1970).

the regulations related to the return relief and a differentiation of the scale of tax benefits depending on the economic gap between living conditions in Poland and in other countries[2].

The purpose of this study is to rank European countries according to average net wages or other gainful activities. Using publicly available economic data, 37 countries were ranked according to the average value of monthly savings and the average time needed to purchase major material goods. It was assumed that the size of the tax benefit offered by the redemption allowance should be greater in relation to countries where the generated savings make it possible to purchase certain long-term consumer goods more quickly than in Poland (Switzerland, Luxembourg, Denmark). Similarly, the benefits of the return allowance could be lower if the resident comes from a country with relatively lower average net wages (North Macedonia, Moldova, Albania). The proposed ranking has methodological limitations, but it can provide a starting point for discussions on future revisions of the return relief legislation.

## 1. LITERATURE REVIEW

The aim of this study is to rank European countries in terms of household wage power parity. First, it is important to note the methodology used by other authors in studies on similar topics.

In their work, Adamus and Strzelecki (1970), highlight various methods of measuring the standard of living of the population. These include GDP per capita, the Gini coefficient, the Human Development Index (HDI), the Network Readiness Index (NRI), the Democratization Index, the Economic Freedom Index, the Gross National Happiness Index (GNH), the Quality of Work Life Index (QWL), the World Happiness Index (HPI) and the Index of Sustainable Economic Well-being (ISEW). The authors' research shows that lower-order needs, such as living conditions, health care or the environment, are the most important of the factors affecting living standards.

Rytelewska and Kłopocka (2010) consider that the propensity to save and the directions of its allocation are determined by financial, fiscal, economic, legal, technological, demographic, psychological and cultural factors. However, the authors focused on the analysis of savings in relation to the demographic structure.

The work of Białowąs and Olejnik (2015) hypothesizes that the level of household savings is determined by economic factors, in particular GDP per

[2] A similar mechanism of geographical differentiation of benefits is applied in the case of subsistence allowances, travel and commuting expenses, accommodation and other expenses related to a business trip. Regulation of the Minister of Labor and Social Policy of 19 December 2002 on the amount of and conditions for determining the allowances to which an employee working in a state or local government unit of the budgetary sphere is entitled because of a business trip abroad (Journal of Laws, No. 236, item 1991, as amended).

capita. This implies that the wealth of the state has a strong influence on the creation of household savings. A corollary of the hypothesis thus accepted was the analysis of the relationship between the dynamics of GDP per capita and changes in the savings rate. The hypothesis was confirmed. Between 2004 and 2013, all countries experienced three periods of prosperity. At the same time, there were three phases in the development of the household saving rate. However, it should be noted that not all countries achieved the expected result. In Lithuania and Switzerland, the change in the saving rates was opposite to the theoretical expectations. In Italy and Slovenia, on the other hand, changes in GDP had no effect on household saving rates.

In the case of Liberda's (2016) study, the starting point was the life-cycle hypothesis and permanent income theory, which the author used for a cohort analysis of the savings profile. If savings represent the difference between a household's after-tax income and consumption expenditure, and that changes in the cost of living and net income are not proportional, the condition for generating savings is that income grows faster than the cost of living. The author focused on the age distribution of saving levels. According to the author, the distribution of the saving rate shows a large role of income growth of younger generations for saving and the cautious behavior of older generations, which reduces savings.

In the paper published by Frączek (2012), the savings rate is used, which expresses the share of savings in income that is available to households. The author notes that income is not the only factor influencing the level of savings. Factors such as the level of interest rates, the level of inflation, fiscal factors, the economic and political situation of the country and the demographic, social and cultural factors mentioned above should also be considered.

In Chmielewska's (2015) study, 27 countries of the European Union were included. The study shows that there has been an improvement in living standards in the countries that joined the European Union in 2004 and 2007, with little change in the richest countries. This is due to higher consumption expenditure in high-income countries.

Karmowska and Marciniak (2015) used indicators such as the poverty risk index, immigration, emigration, social benefits per capita, health expenditure per capita, GDP per capita, unemployment rate, percentage of households with internet access and consumer price index. From the results of the study, it can be concluded that the standard of living of the inhabitants of the European Union varies greatly. The standard of living in countries that joined the European Union earlier is much higher than in countries that have just joined. Karmowska (2015) conducted an independent study which also included variables such as annual population growth, employment in agriculture, employment in industry, health expenditure per capita, number of hospital beds per 1,000 people, food import, internet users per hundred people and number of car users per thousand people. The results of this study

suggest that the best living conditions are found in countries with the highest GDP per capita, low inflation, low unemployment, and high levels of wealth.

The study of Kozera and Kozera (2011) used several indicators divided into groups: food, safety, health care, housing, communication and transport, education and culture, and environment. These variables were reduced to comparable values. Twenty-six countries in the European Union were studied, and Slovenia, the United Kingdom, Austria, Denmark, and the Netherlands were found to be the benchmark countries. The countries with the lowest living standards are Romania and Bulgaria. These are countries that have recently joined the European Union. In another study by Kozera and Kozera (2014), the aim was to differentiate the housing conditions of the population in the countries of the European Union in 2011. Using similar indicators as in the previous study, it was found that countries with high living conditions were Malta, Ireland, Luxembourg, Spain, Finland, and Austria. Countries with the lowest living conditions were Greece, Bulgaria, Hungary, Romania, and Latvia.

The publications presented here represent only part of the research in purchasing power parity and the assessment of the propensity or ability of Polish households to save. The authors' results are not conclusive. They show that there are many methods of analyzing the level of household savings and the factors influencing them are very diverse. It is mainly influenced by the region in which the household is located and the wealth of that region.

The level of household wage power parity in European countries is positively correlated with GDP per capita, but the relationship may vary across different countries. Generally, more developed countries with higher GDP per capita are likely to exhibit greater wage power parity (Białowąs and Olejnik, 2015). Additionally, lower-order needs, such as living conditions, healthcare, and the environment, are significant factors influencing the standard of living (Adamus and Strzelecki, 1970). Age distribution plays a role in saving behavior, with younger generations more inclined to save due to income growth, while older generations tend to reduce their savings (Liberda, 2016). Factors beyond income, including interest rates and social factors, also contribute to household savings (Frączek, 2012). Overall, living standards and household savings vary significantly among European countries, influenced by regional location and wealth levels (Karmowska and Marciniak, 2015; Kozera and Kozera, 2011; Kozera and Kozera, 2014).

## 2. METHODOLOGY AND SAMPLE

For the purposes of the study, 37 countries in Europe were analyzed. The study included data on average monthly salary after tax, average cost of living, average price per square meter of housing in the capital and average price of a VW Golf IV

car. The data refer to values in the capital cities of the respective countries for the period 2016–2021. The authors considered European countries with available data for 2016–2021. Countries for which data were not available for selected categories have been excluded (Table 1).

In this article, savings are defined as the difference between the average net income and the average cost of living for a resident in the capital of the country under study. Due to the lack of available data on the average cost of living, these have been calculated. For this purpose, the authors used available historical data on the average cost of living in New York, the cost-of-living index[3] and the exchange rate calculated by the authors[4].

The purchasing power of households in the study is the length of time needed to save for specific luxury goods. The TSH index, which represents a number of months needed to save for a square meter of housing in the capital, was calculated by dividing the price per square meter of housing in the capital by the average monthly savings of a household in that city. The TSC index, on the other hand, is an index representing a number of months of savings needed to buy a Volkswagen Golf IV car. It is calculated by dividing the price of the car by the average monthly savings (Table 2).

Table 1. Data not available on Numbeo.com

| Year | Price per square meter in the capital | Price for Volkswagen Golf |
|---|---|---|
| 2016 | – | Montenegro, Luxembourg, Moldova |
| 2017 | Belgium, Montenegro | Belgium, Montenegro, Luxembourg |
| 2018 | – | Montenegro, Moldavia |
| 2019 | – | Belgium, Montenegro, Luxembourg, Moldova, Germany |
| 2020 | – | Austria, Belgium, Bosnia and Herzegovina, Montenegro, Iceland, Lithuania, Luxemburg, North Macedonia, Moldova, Norway, Slovakia, Switzerland, Italy |
| 2021 | Montenegro | Albania, Belgium, Montenegro, Finland, France, Germany, Iceland, Italy, Latvia, Lithuania, Luxembourg, North Macedonia, Moldova, Slovakia, Slovenia, Spain, Sweden, Switzerland. |

Source: own analysis based on Numbeo.com database.

[3] Cost of Living Index – an index representing the amount of a country's cost of living in relation to New York, where New York Cost of Living Index = 100.

[4] Data on the cost of living in New York were only presented in USD. To convert these values into EUR, a USD/EUR exchange rate was calculated using the price per square meter of housing in New York for the periods studied, which was available in both USD and EUR. The amount quoted in USD was divided by the amount quoted in EUR to obtain a rate that corresponded to the rate used by Numbeo.com. This allowed all the data examined to be consistent. The values calculated in this way were multiplied by the cost-of-living index, which made it possible to calculate the cost of living in each country for each year.

Table 2. Characteristics of the metrics used in the study

| Index | Description | Source |
|---|---|---|
| Index TSH | Time required to save per square meter in months $TSH = \frac{price\ per\ square\ metre\ of\ housing}{average\ monthly\ savings}$ | own analysis |
| Index TSC | Time required to save for a car in months $TSC = \frac{car\ price}{average.monthly\ savings}$ | own analysis |

Source: own analysis based on Numbeo.com database.

The calculations are based on classical measures and are presented in relative and absolute values.

To see the changes occurring in the period 2016–2021, an analysis of the change values over time was carried out. This made it possible to define the dynamics of change over the period under study. It also made it possible to determine how the purchasing power parity of household wages is likely to develop in the following years. It was possible to determine how long it takes to save for a car and a house and how this changes over the years.

Using purchasing power parity, the currencies of countries are converted in such a way as to obtain their actual purchasing power[5].

Household purchasing power parity is an indicator of the purchasing power of an individual in each country. This indicator is expressed as the number of months needed to save for a given good. It allows the standard of living in each country to be defined in economic terms.

There are many opinions about wages and the cost of living in many countries. Norway and Switzerland are considered to be high-paying but expensive places to live. Germany and the United Kingdom, on the other hand, are seen as countries where wages are high in the case of economic migration and where moderate living costs compared to wages can generate savings. Countries in Eastern and Southern Europe are considered to have little potential for high wages.

[5] Suppose a car costs $20,000 in the US and £10,000 in the UK on the same day. In terms of economic parity, this means that £1 has an economic parity of $2. As a result, you can buy a car in the UK for £10,000, or you can exchange your currency and buy the same car in the US for $20,000. However, it is important to remember that economic parity does not consider indirect costs, such as transport or transaction costs.

## 3. RESULTS

The average amount that can be saved by a resident in each country is shown in Table 3. The averages are shown in Figure 1. These values have been calculated from the difference between average monthly net earnings and aver-age monthly living costs. The countries with the highest average savings are Switzerland, Luxembourg, Denmark, Norway, the UK, the Netherlands, and Iceland. The countries with the lowest average savings are Albania, Moldova, North Macedonia, Serbia, and Belarus. Poland is in the middle of the table. The average citizen in Warsaw can expect to save an average of EUR 471.60 per month.

Table 3. Average monthly savings by country (in euro)

| Country | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|
| Albania | –87,37 | –126,37 | –98,97 | –75,78 | 21,97 | –48,43 |
| Austria | 1 177,04 | 1 163,01 | 1 189,36 | 1 174,96 | 1 556,97 | 1 360,89 |
| Belarus | –95,28 | 19,19 | 19,14 | 65,01 | –23,42 | 2,01 |
| Belgium | 1 183,33 | 1 323,42 | 1 172,21 | 2 364,13 | 1 605,30 | 1 569,45 |
| Bosnia and Herzegovina | 71,09 | 49,13 | –10,69 | 61,16 | 233,07 | 108,74 |
| Bulgaria | 153,05 | 188,18 | 171,9 | 257,65 | 227,62 | 324,32 |
| Croatia | 301,11 | 297,78 | 232,96 | 338,28 | 283,47 | 385,83 |
| Czech Republic | 488,39 | 554,63 | 477,38 | 625,35 | 586,03 | 800,66 |
| Denmark | 1 754,30 | 1 940,52 | 1 846,50 | 1 889,12 | 2 256,23 | 2 213,04 |
| Estonia | 373,39 | 452,89 | 406,63 | 598,14 | 576,76 | 644,58 |
| Finland | 1 619,98 | 1 672,69 | 1 434,48 | 1 557,85 | 1 729,55 | 1 714,66 |
| France | 1 517,35 | 1 491,07 | 1 368,83 | 1 373,52 | 1 502,70 | 1 732,03 |
| Germany | 1 163,24 | 1 409,69 | 1 306,28 | 1 598,61 | 1 631,00 | 2 156,41 |
| Greece | 137,98 | 102,66 | 31,66 | 152,33 | 111,98 | 131,07 |
| Hungary | 158,6 | 198,8 | 149,29 | 276,48 | 288,56 | 376,42 |
| Iceland | 1 116,47 | 1 940,36 | 1 813,63 | 1 823,48 | 1 433,02 | 2 840,68 |
| Ireland | 1 655,64 | 1 410,07 | 1 451,29 | 1 703,49 | 1 624,97 | 1 984,72 |
| Italy | 769,68 | 703,78 | 538,55 | 707,74 | 621,02 | 593,6 |
| Lithuania | 180,15 | 207,93 | 203,04 | 382,38 | 461,1 | 544,07 |
| Luxembourg | 2 185,31 | 2 535,58 | 2 106,78 | 2 629,06 | 2 992,22 | 2 824,57 |
| Moldova | –57,52 | –55,1 | –93,86 | –88,81 | –54,52 | 12,33 |
| Montenegro | 90,05 | 100,68 | –6,1 | 55,63 | 2,16 | 39,13 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Netherlands | 1 432,97 | 1 702,42 | 1 624,44 | 1 813,93 | 1 924,02 | 2 377,59 |
| Northern Macedonia | –23,6 | –10,36 | –65,84 | 15,33 | –22,42 | 18,06 |
| Norway | 1 973,77 | 1 877,59 | 1 801,86 | 1 903,13 | 1 852,66 | 2 081,07 |
| Poland | 451,57 | 494,85 | 400,33 | 532,65 | 412 | 539,99 |
| Portugal | 355,28 | 332,6 | 260,91 | 335,26 | 414,21 | 416,37 |
| Romania | 146,32 | 191,8 | 115,36 | 217,83 | 250,25 | 288,73 |
| Serbia | –6,66 | –1,39 | –81,9 | –13,37 | 22,84 | 51,2 |
| Slovakia | 415,53 | 448,61 | 395,94 | 544,52 | 550,79 | 654,08 |
| Slovenia | 530,86 | 487,96 | 382,44 | 552,72 | 546,97 | 629,02 |
| Spain | 840,03 | 1 019,51 | 761,11 | 990,34 | 890,37 | 1 049,84 |
| Sweden | 1 648,90 | 1 632,42 | 1 487,17 | 1 638,47 | 1 654,85 | 2 070,60 |
| Switzerland | 3 882,07 | 4 089,30 | 3 534,55 | 4 189,35 | 4 624,35 | 5 123,07 |
| Ukraine | –70,51 | 14,27 | 45,24 | 105,07 | 107,07 | 250,66 |
| United Kingdom | 1 724,90 | 1 737,91 | 1 878,34 | 1 792,38 | 2 175,41 | 2 691,55 |

Source: own analysis based on Numbeo.com database.

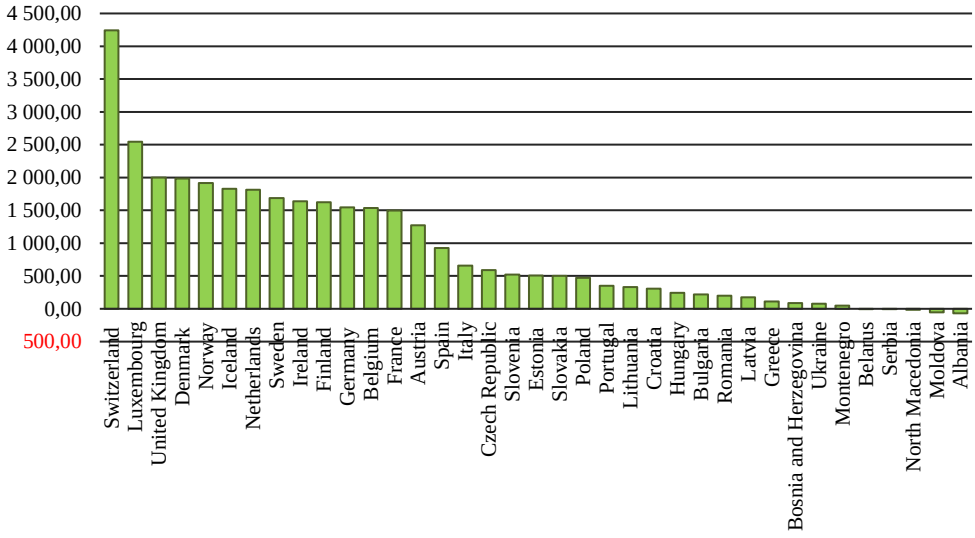


Figure 1. Average monthly savings by country (in euro) – average for 2016–2021

Source: own analysis based on Numbeo.com database.

The time (in months) needed to save for a new Volkswagen Golf car is shown in Table 4. The average values are shown in Figure 2. The shortest time needed to save for a car is in Switzerland, Luxembourg, Sweden, the United Kingdom, Germany, the Netherlands, France, and Ireland. A very long time to save for a car can be observed in Belarus, where the time needed to put aside the necessary amount of money is more than 125 years. The countries where it takes less time to save for a Volkswagen Golf are Ukraine (25.7 years) and Greece (18.54 years). Poland is again in the middle of the ranking, with an average of 3.13 years needed to save for such a car.

Table 4. Average time (in months) needed to save for VW Golf IV

| Country | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|
| Albania | –171,25 | –142,4 | –160,84 | –214,84 | 856,88 | no data |
| Austria | 17,42 | 17,2 | 16,89 | 20,85 | no data | 17,24 |
| Belarus | –140,08 | 722,66 | 626,45 | 260,33 | –524,4 | 8062,5 |
| Belgium | 18,59 | no data | 17,23 | no data | no data | no data |
| Bosnia and Herzegovina | 208,72 | 308,87 | –1676,91 | 291,28 | no data | 182,88 |
| Bulgaria | 115,92 | 95,09 | 107,11 | 75,91 | 89,61 | 63,07 |
| Croatia | 59,65 | 65,71 | 78,94 | 58,82 | 74,24 | 58,35 |
| Czech Republic | 30,31 | 28,72 | 36,37 | 27,78 | 31,72 | 25,43 |
| Denmark | 22,23 | 14,55 | 17,1 | 18,18 | 14,86 | 17,01 |
| Estonia | 45,53 | 39,72 | 41,72 | 30,43 | 34,16 | 31,03 |
| Finland | 16,01 | 13,74 | 16,73 | 15,28 | 15,03 | no data |
| France | 13,18 | 13,41 | 16,07 | 16,02 | 16,64 | no data |
| Germany | 15,71 | 12,82 | 15,04 | no data | 13,68 | no data |
| Greece | 130,45 | 175,33 | 568,57 | 124,73 | 183,06 | 152,59 |
| Hungary | 111,66 | 90,54 | 115,94 | 65,53 | 64,99 | 62,38 |
| Iceland | 20,6 | 15,34 | 15,35 | 14,22 | no data | no data |
| Ireland | 14,08 | 17,02 | 16,35 | 14,38 | 15,38 | 14,61 |
| Italy | 25,98 | 28,42 | 37,83 | 29,67 | no data | no data |
| Lithuania | 91,04 | 81,76 | 83,97 | 48,79 | no data | no data |
| Luxembourg | no data | no data | 10,21 | no data | no data | no data |
| Moldova | no data | –258,53 | no data | no data | no data | no data |
| Montenegro | no data | no data | no data | no data | no data | no data |
| Netherlands | 18,14 | 15,6 | 15,7 | 14,06 | 13,51 | no data |

| | | | | | | |
|---|---|---|---|---|---|---|
| Northern Macedonia | –717,66 | –1566,95 | –247,89 | 1129,75 | no data | no data |
| Norway | 14,83 | 17,24 | 17,99 | 18,76 | no data | 16,59 |
| Poland | 35,68 | 33,8 | 40,51 | 34,38 | 43,76 | 37,22 |
| Portugal | 70,37 | 75,16 | 88,15 | 76,62 | 62,77 | 60,04 |
| Romania | 110,7 | 84,09 | 138,54 | 77,19 | 69,91 | 63,39 |
| Serbia | –2434,93 | –11959,39 | –217,18 | –1360,91 | 816,83 | 414,07 |
| Slovakia | 39,11 | 36,22 | 40,41 | 29,84 | no data | no data |
| Slovenia | 36,94 | 36,89 | 47,07 | 36,18 | 38,39 | no data |
| Spain | 22,32 | 18,64 | 26,28 | 20,2 | 23,98 | no data |
| Sweden | 13,13 | 13,34 | 13,05 | 12,8 | 13,59 | no data |
| Switzerland | 6,57 | 5,41 | 5,89 | 5,97 | no data | no data |
| Ukraine | –320,66 | 1309,09 | 418,08 | 183,01 | 184,14 | 75,32 |
| United Kingdom | 13,38 | 13,1 | 11,49 | 12,91 | 12,09 | 10,08 |

Source: own analysis based on Numbeo.com database.

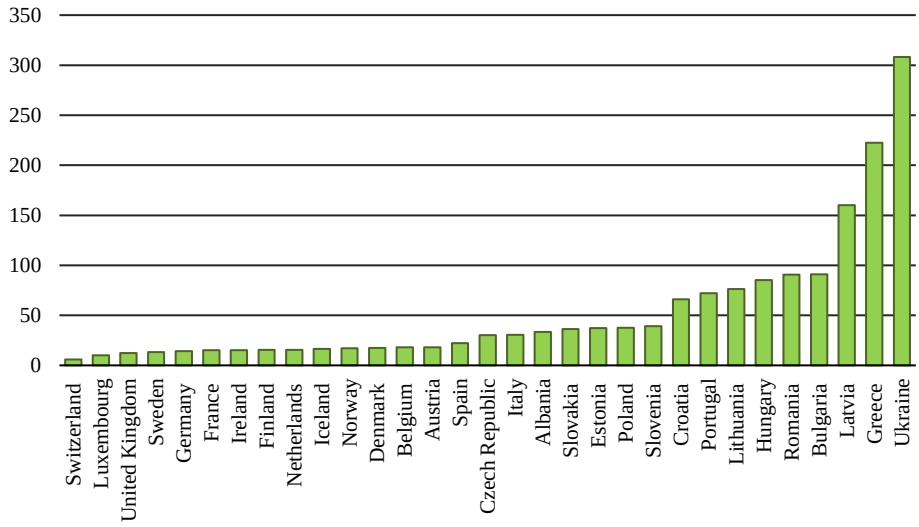


Figure 2. Average time (in months) needed to save for VW Golf IV – average for 2016–2021

Source: own analysis based on Numbeo.com database.

The average time needed to save for one square meter of dwelling in the capital of each country is shown in Table 5. The averages are shown in Figure 3. The result is strongly influenced by house prices, which vary considerably

between countries. The countries where capital city citizens can save the fastest for a house are Belgium, Iceland, Switzerland, Denmark, Ireland, Luxembourg, Germany, the Netherlands, and Norway. As in Table 4 on the average time needed to save for a car, Belarus is at the bottom of the table. The time needed to save per square meter is more than ten years. Countries where it takes more than a year are Ukraine (21 months) and Greece (16.3 months). Poland is again in the middle of the ranking, with an average of 5.6 months needed to save per square meter of living space in the capital.

Table 5. Average time (in months) needed to save for house in capital city

| Country | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|
| Albania | 15,54 | 11,44 | 15,61 | 22,19 | 76,95 | 38,85 |
| Austria | 5,58 | 5,88 | 5,4 | 5,8 | 5,67 | 4,82 |
| Belarus | 14,51 | 70,72 | 67,83 | 23,39 | 73,86 | 838,26 |
| Belgium | 2,76 | 0 | 2,59 | 1,42 | 2,32 | 2,54 |
| Bosnia and Herzegovina | 19,31 | 29,06 | 141,48 | 27,95 | 6,92 | 15,32 |
| Bulgaria | 7,59 | 6,93 | 8,01 | 6,03 | 7,2 | 5,6 |
| Croatia | 7,28 | 7,52 | 10,25 | 8,02 | 10,06 | 8,06 |
| Czech Republic | 6,8 | 7,16 | 9,28 | 8 | 8,58 | 7,45 |
| Denmark | 2,88 | 3,05 | 3,37 | 3,3 | 2,87 | 3,37 |
| Estonia | 6,53 | 5,14 | 5,97 | 4,45 | 4,85 | 4,56 |
| Finland | 3,89 | 4,13 | 5,24 | 4,79 | 4,66 | 5,26 |
| France | 6,26 | 6,58 | 7,64 | 8,38 | 8,12 | 7,23 |
| Germany | 3,65 | 3,35 | 4,04 | 3,87 | 3,67 | 3,19 |
| Greece | 9,71 | 14,16 | 45,9 | 12,92 | 15,75 | 15,41 |
| Hungary | 10,73 | 11,71 | 17,51 | 10,53 | 10,36 | 8,37 |
| Iceland | 2,78 | 2,55 | 2,54 | 2,42 | 2,65 | 2,04 |
| Ireland | 2,87 | 3,71 | 4,24 | 3,29 | 3,47 | 3,38 |
| Latvia | 11,54 | 13,16 | 13,84 | 34,99 | 7,65 | 6,91 |
| Lithuania | 13,92 | 12,39 | 12,56 | 7,23 | 6,02 | 6,19 |
| Luxembourg | 3,61 | 3,08 | 4,02 | 3,75 | 4,18 | 4,4 |
| Moldova | 12,78 | 14,49 | 9,34 | 9,98 | 17,75 | 82,36 |
| Montenegro | 19,32 | 0 | 219,73 | 24,61 | 746,87 | 0 |
| Netherlands | 3,78 | 3,56 | 4,25 | 4,32 | 3,91 | 3,48 |
| Northern Macedonia | 50,82 | 116,02 | 17,98 | 79,86 | 54,03 | 73,9 |
| Norway | 3,71 | 4,54 | 4,3 | 4,45 | 4,29 | 4,3 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Poland | 5,4 | 5,1 | 6,73 | 5,86 | 8,4 | 7,34 |
| Portugal | 9,32 | 9,71 | 15,99 | 12,95 | 10,68 | 11,69 |
| Romania | 9,44 | 7,88 | 13,98 | 8,23 | 7,38 | 6,93 |
| Serbia | 298,26 | 1 498,08 | 27,56 | 185,43 | 113,3 | 55,28 |
| Slovakia | 5,95 | 5,91 | 7,03 | 5,84 | 6,95 | 7,03 |
| Slovenia | 5,54 | 6,5 | 8,64 | 6,58 | 6,65 | 6,42 |
| Spain | 4,85 | 3,98 | 6,14 | 5,46 | 5,62 | 4,39 |
| Sweden | 5,85 | 5,94 | 6,02 | 5,38 | 5,57 | 5,08 |
| Switzerland | 3,42 | 3,21 | 3,35 | 2,71 | 2,58 | 2,77 |
| Ukraine | 20,56 | 98,1 | 30,95 | 14,83 | 16,94 | 7,69 |

Source: own analysis based on Numbeo.com database.

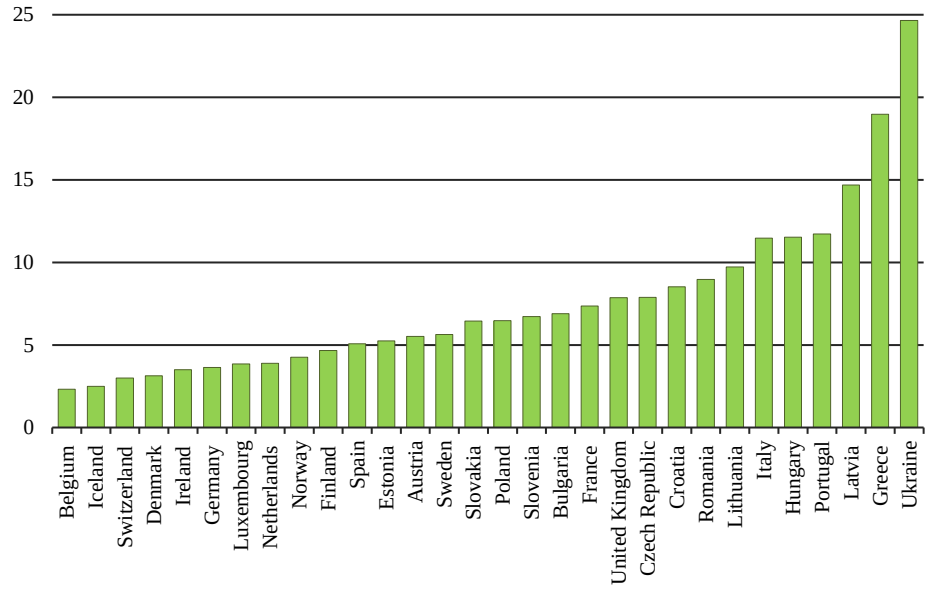


Figure 3. Average time (in months) needed to save for house in capital city – average for 2016–2021

Source: own analysis based on Numbeo.com database.

The ranking of countries in terms of the highest purchasing power parity of average salaries and the positions of the countries in each of the categories studied are shown in Table 6. The overall position is the average of the positions of each country in the categories studied. It allows not only to determine the position in

the ranking but also to measure the difference between countries. Figure 4 shows the averages of all categories for 2016 and 2021. It shows the dynamics of the changes in the ranking positions over the above-mentioned years.

Table 6. Ranking of countries in terms of highest purchasing power parity of average wages by category

| Country | Overall position | Savings position | TSC position | TSH position |
|---|---|---|---|---|
| Switzerland | 2 | 1 | 1 | 3 |
| Luxembourg | 3 | 2 | 2 | 6 |
| Denmark | 5 | 4 | 8 | 4 |
| Iceland | 6 | 8 | 8 | 2 |
| Ireland | 7 | 9 | 7 | 5 |
| Germany | 7 | 11 | 5 | 6 |
| Netherlands | 7 | 7 | 6 | 8 |
| Norway | 8 | 5 | 9 | 9 |
| Sweden | 8 | 9 | 3 | 13 |
| Finland | 9 | 10 | 7 | 11 |
| United Kingdom | 9 | 5 | 3 | 20 |
| Belgium | 11 | 11 | 20 | 1 |
| Austria | 12 | 13 | 10 | 13 |
| France | 12 | 11 | 6 | 20 |
| Spain | 13 | 15 | 12 | 11 |
| Estonia | 16 | 19 | 16 | 12 |
| Poland | 17 | 20 | 15 | 17 |
| Czech Republic | 17 | 17 | 13 | 21 |
| Slovakia | 18 | 20 | 17 | 17 |
| Slovenia | 18 | 19 | 17 | 17 |
| Italy | 20 | 17 | 15 | 27 |
| Bulgaria | 22 | 27 | 22 | 18 |
| Lithuania | 22 | 23 | 22 | 22 |
| Croatia | 22 | 24 | 18 | 23 |
| Romania | 23 | 27 | 21 | 22 |
| Portugal | 23 | 23 | 19 | 26 |
| Hungary | 24 | 25 | 20 | 26 |
| Latvia | 26 | 28 | 25 | 25 |

| | | | | |
|---|---|---|---|---|
| Greece | 27 | 29 | 24 | 28 |
| Bosnia and Herzegovina | 29 | 31 | 27 | 29 |
| Ukraine | 29 | 31 | 25 | 30 |
| Belarus | 31 | 34 | 27 | 33 |
| Serbia | 32 | 33 | 29 | 35 |
| Montenegro | 33 | 32 | 33 | 33 |
| Albania | 33 | 36 | 30 | 34 |
| Moldova | 34 | 36 | 33 | 34 |
| Northern Macedonia | 34 | 34 | 33 | 35 |

Source: own analysis based on Numbeo.com database.

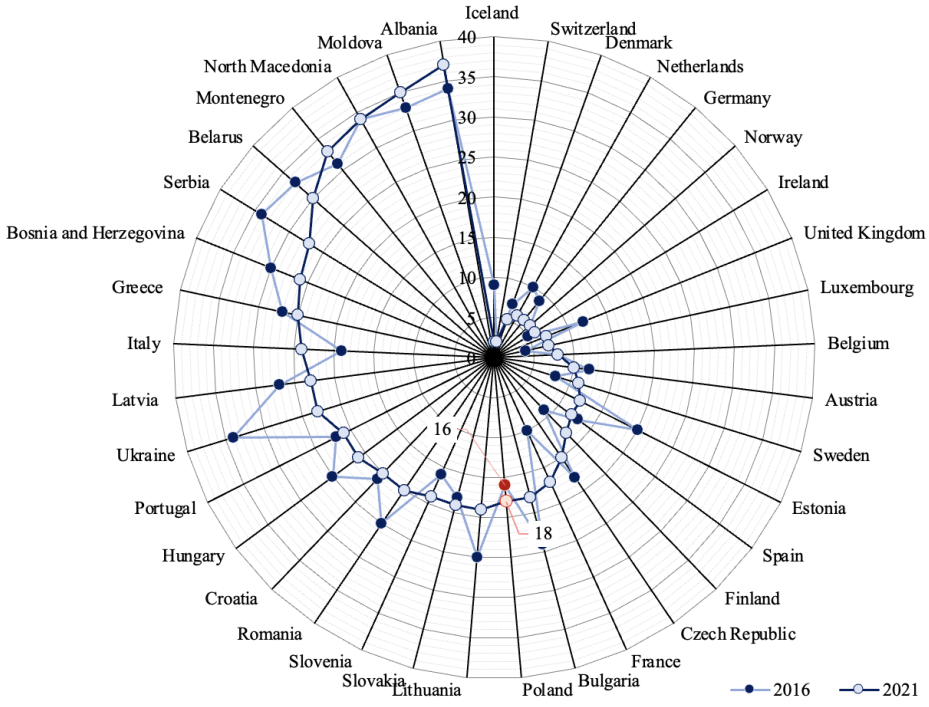


Figure 4. Averaged ranking places in 2016 and 2021

Source: own analysis based on Numbeo.com database.

After calculating the average value from the time needed to save per square meter, the time needed to save for a car and examining the propensity to save, Switzerland, Luxembourg, Denmark, and Iceland are at the top of the ranking. The lowest rankings are found in North Macedonia, Moldova, Albania, Montenegro, and Serbia. In each of these countries, the average household savings is negative, meaning that the average cost of living exceeds the average monthly salary after tax. The countries at the bottom of the list with positive average household savings are Belarus, Ukraine, Bosnia and Herzegovina, Greece, and Latvia. These countries are willing to generate savings, but it takes a long time to save for a house or a car. Poland is in the middle of the ranking, together with the Czech Republic at 17th place.

The dynamics of change over the period 2016–2021 are shown in Table 7. They allow us to analyze how each measure might develop in the future. They are not comparable between countries but are a tool for determining whether the purchasing power parity of average wages is tending upwards or downwards.

Table 7. Dynamics of change over the period 2016–2021

| Country | Savings | TSC | TSH |
|---|---|---|---|
| Albania | 44,57 | 600,37* | –149,98 |
| Austria | 15,62 | –1,02 | –13,56 |
| Belgium | 32,63 | – | –7,85 |
| Belarus | 102,10 | –5855,82 | 5876,29 |
| Bosnia and Herzegovina | 52,97 | –12,38 | –20,65 |
| Bulgaria | 111,91 | –45,60 | –26,23 |
| Croatia | 28,14 | –2,18 | 10,79 |
| Montenegro | –56,55 | – | 3765,14* |
| Czech Republic | 63,94 | –16,10 | 9,59 |
| Denmark | 26,15 | –23,47 | 17,02 |
| Estonia | 72,63 | –31,85 | –30,20 |
| Finland | 5,84 | –6,09* | 34,95 |
| France | 14,15 | 26,22* | 15,46 |
| Greece | –5,01 | 16,97 | 58,72 |
| Spain | 24,98 | 7,43* | –9,57 |
| Netherlands | 65,92 | –25,52* | –7,83 |
| Ireland | 19,88 | 3,76 | 18,05 |
| Iceland | 154,43 | –30,95** | –26,36 |
| Lithuania | 202,02 | –46,41** | –55,54 |

| | | | |
|---|---|---|---|
| Luxembourg | 29,25 | – | 21,93 |
| Northern Macedonia | 176,54 | 257,42** | 245,41 |
| Moldova | 121,44 | – | 744,46 |
| Germany | 85,38 | –12,90* | –12,68 |
| Norway | 5,44 | 11,86 | 16,01 |
| Poland | 19,58 | 4,30 | 36,08 |
| Portugal | 17,20 | –14,67 | 25,40 |
| Romania | 97,33 | –42,74 | –26,57 |
| Serbia | 868,41 | –117,01 | 118,54 |
| Slovakia | 57,41 | –23,69** | 18,25 |
| Slovenia | 18,49 | 3,92* | 15,89 |
| Switzerland | 31,97 | –9,17** | –18,93 |
| Sweden | 25,57 | 3,47* | –13,10 |
| Ukraine | 455,51 | –123,49 | 137,42 |
| Hungary | 137,34 | –44,13 | –22,02 |
| United Kingdom | 56,04 | –24,67 | –53,84 |
| Italy | –22,88 | 14,19** | –3,73 |

* Period 2016–2020
** Period 2016–2019

Source: own analysis based on Numbeo.com database.

Countries where the tendency to generate savings increased significantly over the analyzed period are Serbia (868.41%), Ukraine (455.51%)[6] and Lithuania (202.02%). Countries where the tendency to generate savings has increased by more than one hundred per cent are North Macedonia, Iceland, Hungary, Moldova, Bulgaria, and Belarus. The opposite situation can be observed in countries with a negative dynamic's indicator. These countries are Greece (–5.01%), Italy (–22.88%) and Montenegro (–56.55%). Poland recorded an increase in average savings of 19.58%.

Countries where the time needed to save for a car has decreased significantly include Ukraine, Lithuania, Bulgaria, Romania, and Hungary. In Belarus, the time taken to save the equivalent amount has increased significantly. There are no significant changes in the other countries studied. In Albania, North Macedonia and Serbia, households were not willing to save and therefore did not have the

[6] With the war in Ukraine breaking out in early 2022, it is important to bear in mind that performance in future years may deviate from historical results.

potential to buy a car in the future. Recently, however, they have shown such a potential. In Poland, the time needed to save for a car increased by 4.3%.

In Belarus and Montenegro, the time taken to save for a house increased the most among the countries studied, by 5876.29% and 3765.14% respectively. The most favorable changes occurred in Ukraine. In the first year of the studied period, households in Ukraine showed no tendency to accumulate savings that would cover the cost of buying a house. Between the second and the last year of the survey, the time needed to save to buy a dwelling was reduced by 92.16%. Countries where households were not willing to save but showed an ability to save for housing in the last year were Northern Macedonia, Moldova, and Serbia. In Poland, the time needed to save for a house increased by 36.08%.

## CONCLUSIONS

One of the main reasons for economic migration is dissatisfaction with current living conditions (Winchie and Carment, 1989). The possibility of choosing a higher standard of living, better health care, the chance to send their children to better schools and better social conditions are increasingly leading people to consider economic migration. Several factors are considered when planning a future in emigration. Everyone views the purpose of migration individually, considering their own priorities (Guzzetta, 2004). However, regardless of the intention to migrate, the level of income and the cost of living have an impact on the standard of living of anyone who decides to live abroad. The main objective of the study is to establish a classification of European countries according to net income and standard of living, to propose a differentiation of the return relief introduced by the Polish authorities, and to correct and confirm a big number of opinions about living abroad.

It shows how Poland compares with other European countries. It may help to find out in which countries people can save more money and buy the goods they are interested in more quickly. It may also make it possible to determine in which countries the conditions for doing so are worse.

The above study analyzed most European countries in terms of average salaries and cost of living. This data was used to determine which country would offer the greatest savings. Residents of Switzerland, Luxembourg, Norway, the UK and Sweden were able to save the most. The countries where the cost of living exceeded average salaries were Albania, Moldova, North Macedonia, and Belarus. The above analysis also shows the time it takes to save for a Volkswagen Golf in months and the time it takes to save per square meter of housing in the capital in months. The shortest time to save for a car is in Switzerland. The longest

time to save for a car is in Bosnia and Herzegovina. The shortest average time to save per square meter of dwelling is in Belgium and the longest is in Belarus.

Based on the above results, it is important to note for which countries the rules for determining the return allowance should be changed. The return allowance from countries such as Switzerland, Luxembourg and the United Kingdom should be relatively higher, as the standard of living in these countries is higher. Current residents of countries such as Moldova, North Macedonia and Albania who wish to change their country of residence should receive a return allowance that is comparatively lower than for residents of countries such as Luxembourg or Switzerland. The scope of the study does not allow for giving a precise indication of how much this allowance should change, which could be the subject of further future studies.

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**AUTHORS' DECLARATION**

The authors report no conflict of interest.

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**DYLEMAT MIGRACJI MŁODEGO POKOLENIA Z PERSPEKTYWY SIŁY NABYWCZEJ WYNAGRODZEŃ**

**Streszczenie**

**Cel artykułu.** Celem artykułu jest określenie czy ulga na powrót powinna być zróżnicowana pod względem wielkości dla różnych państw oraz w którym z państw Europy człowiek jest w stanie najwięcej zaoszczędzić oraz najszybciej zbudować swój majątek.

**Metodyka.** Badanie zostało przeprowadzone na podstawie danych historycznych z lat 2016–2021 dotyczących średnich wynagrodzeń, średnich kosztów życia, średniej cyny za metr kwadratowy mieszkania w stolicy danego państwa oraz średniej ceny samochodu osobowego VW Golf IV w 37 państwach europejskich.

**Wyniki.** W ogólnym spojrzeniu na powyższe badanie państwami do których migracja ekonomiczna może przynieść najwięcej korzyści są Szwajcaria, Luksemburg oraz Dania. Z drugiej strony, do państw które mogą nie zaspokoić potrzeb ekonomicznych są Macedonia Północna, Mołdawia, Czarnogóra oraz Albania. Na metr kwadratowy mieszkania można zaoszczędzić najszybciej w Belgii, Islandii oraz Szwajcarii. Na samochód najszybciej można zaoszczędzić w Szwajcarii, Luksemburgu oraz Wielkiej Brytanii.

**Słowa kluczowe:** migracja, migracja ekonomiczna, oszczędności, oszczędności gospodarstw domowych, gospodarstwa domowe.

**JEL Class:** J31, D12, D14, F22.

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