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Integration of immigrants and the role of policy in the OECD countries¹

*Katarzyna Woźniak*²

Abstract: With the increase in global spatial mobility the importance of migration policy (including integration policy) is increasing day by day, both in developed countries and new market economies. In the course of the research on migration policy various measures were constructed. Even though the particular measures relate to different areas of migration policy, they do not refer to the effectiveness of migration policy. The aim of this study is to assess the effectiveness of the integration of immigrants into the labour market in the countries that belong to the Organisation for Economic Co-Operation and Development (OECD) and to analyse the relationships between these effects and the integration policy adopted by the individual countries. The TOPSIS (*Technique for Order Preference by Similarity to an Ideal Solution*) method and the CRITIC (*Criteria Importance Through Intercriteria Correlation*) method were used in the research. The results indicate that the highest effectiveness of migration policy in terms of integration of immigrants into the labour market was reported in the following OECD countries: Iceland, Switzerland and New Zealand. The results also suggest that the higher the level of integration policy restrictiveness in a given country, the worse the effects in terms of integration of immigrants into the labour market that were noticed by this country.

Keywords: integration policy, international migration, migration, new market economies, the CRITIC method, the TOPSIS method.

JEL codes: F22, J15, K37, O15.

Introduction

With the development of global spatial mobility, migration policy has become an important issue for both developed countries and new market economies. The literature indicates that in many countries an increased pressure of migration flows has led to the adoption of a more restrictive migration policy and

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increased the border control. The effectiveness³ of the adopted reforms of migration policy is still insufficiently explored (Boeri, Brücker, Gournichas, & Cahuc, 2005, pp. 3–5; Rayp, Ruysen, & Standaert, 2017, p. 5; Vikhrov, 2017, p. 4). In the face of the substantial level of illegal immigration—the effectiveness of migration policy has been widely questioned in the literature. Furthermore, the literature also formulates arguments that a restrictive migration policy has a limited impact on migration flows and it can lead to an inflow of illegal immigrants (Czaika & de Haas, 2013, pp. 40–41).

The research on migration policy is particularly focused on descriptive characteristics. In the course of the research on the migration policy various measures were constructed. In particular, these measures are used to evaluate different migration policy fields, such as: asylum policy (Hatton, 2008; Thielemann, 2004); integration policy (Huddleston, Bilgili, Joki, & Vankova, 2015); multiculturalism policy (Tolley, 2016); visa policy (Vikhrov, 2017). Another study relates to immigration policy restrictiveness (Rayp et al., 2017), relative changes in this policy (de Haas, Natter, & Vezzoli, 2014) and changes in immigration policy, including the migration tracks (Bjerre, Helbling, Römer, & Zobel, 2016). Even though the particular measures relate to many different areas of migration policy they are still insufficient to assess the country's migration policy. The particular indexes do not refer to the effectiveness of migration policy and do not assess it. It is therefore reasonable to attempt to assess the effectiveness of migration policy in the OECD countries by constructing an index of the mi-

³ De Haas and Czaika (2013, pp. 493–497) elaborated a framework for analysing immigration policy effectiveness. This framework is based on the distinction between three policy gaps. This study is based on one of them is the efficacy gap (the extent to which implemented policies affect migration). Effectiveness is connected to producing a decisive, decided or desired effect. The term effectiveness sets up a relation to policy aims, and thus adds an evaluative dimension to the analysis of migration policy effects (de Haas & Czaika, 2013, p. 491). The authors (2013, p. 489) indicate that the only practical approach to define immigration policy is by stated objectives of policies on paper. In this study the Migrant Integration Policy Index (MIPEX) and the Migration Policy Index in terms of integration policy (MPII) were used to present integration policy in the OECD countries. These indexes are based on legal regulations and provisions on paper. De Haas and Czaika (2013, p. 489) also indicate that non-migration policies such as labour market, social welfare, education, macroeconomic might often play a role than typical migration policy. This means that economic and social indicators capturing the effects of these policies—should be taken into consideration in the empirical analyses relate to immigration policy effectiveness. According to the previous studies (e.g. Liebig, 2007; Irastorza & Bevelander, 2017; Fasani, Frattini, & Minale, 2018) the labour market integration of immigrants can be examined as labour market outcomes for immigrants (i.e. the employment rates of immigrants, the gaps in employment rates of immigrants and the native-born, the unemployment rates of immigrants, the labour force participation rates of immigrants). Three key indicators are considered in this paper with regard to the labour market effects of immigrants: foreign-born employment as a percentage of foreign-born population, foreign-born unemployment as a percentage of foreign-born labour force and foreign-born participation rate as a percentage of foreign-born labour force.

gration policy effectiveness in terms of immigrants' integration on the labour market. The significance of this issue is also related to the fact that the adopted rules within the migration policy have an impact on the distribution of costs and benefits of migration for countries (especially the developed countries which register an increasing number of migrants from the new market economies such as Poland or Mexico).

The aim of this study is to assess the effectiveness of the integration of immigrants into the labour market in the OECD countries and to analyse the relationships between these effects and the integration policy adopted by the individual countries. The TOPSIS method and the CRITIC method were used in the research. The TOPSIS method is to order objects with regard to a specific set of indicators (Hwang & Yoon, 1981). The weights of individual variables used to construct the index will be determined using the CRITIC (*Criteria Importance Through Intercriteria Correlation*) method (Diakoulaki, Mavrotas, & Papayannakis, 1995; Deng, Chung-Hsing, & Willis, 2000). The geographical scope of the research covers countries that belong to the Organisation for Economic Co-operation and Development (OECD). The empirical analyses cover the period between 2008 and 2016 which primarily results from the availability of statistical data.

The proposed index of the migration policy effectiveness in terms of immigrants' integration on the labour market is original for several reasons. First, no indicator has been constructed so far that would be concerned with and assess the effectiveness of migration policy in terms of integration of immigrants into the labour market. Many researchers (Boeri et al., 2005, pp. 3–5; Rayp et al., 2017, p. 5; Vikhrov, 2017, p. 4) indicate that the effectiveness of migration policy, as well as the effectiveness of the adopted reforms of migration policy is still poorly understood. Therefore, the weights of individual variables used to construct the index will be determined using the CRITIC method. Thus, it is assumed that the impact of individual variables on the value of synthetic index of migration policy effectiveness is not equal. Thus, the weights will be estimated empirically which will increase the objectivity and reliability of this study.

The obtained results indicate that the OECD countries were very diversified in terms of the effectiveness of the integration of immigrants into the labour market that is measured by the synthetic measure. In particular, the results suggest that the highest effectiveness of migration policy (in terms of integration of immigrants into the labour market) was reported in the following OECD countries: Iceland, Switzerland and New Zealand. In contrast, the lowest value of the synthetic measure (q_i) in terms of the integration of immigrants into the labour market were achieved by France, Turkey, Belgium, Greece and Spain. Additionally, the obtained results for formulation of the synthetic measure that relates to the integration of immigrants into the labour market in the OECD countries in this study are consistent with the results that were obtained based on the Migrant Integration Policy Index (MIPEX). The comparative analysis of

the obtained results in terms of the integration of immigrants into the labour market and the data on Migration Policy Index in terms of integration policies (MPI¹) also lead to similar conclusions. It may be concluded that the higher the level of integration policy restrictiveness in a given country, the worse the effects in terms of integration of immigrants into the labour market that were obtained by that country.

The conducted analysis allowed the indication of important relationships between the integration policy adopted by the OECD countries and the effects obtained by these countries in terms of the integration of immigrants into the labour market. The analysis might be also particularly important for new market economies which already are, or will be, soon facing the challenges of global migration movements. Additionally, the analysis may form a basis for further research, for example, on the determinants of an aggregated migration policy index. This analysis may be also helpful to identify the causes of differentiation of the given countries in terms of migration policy effectiveness.

The article is organized as follows. First, the concept and role of migration policy will be discussed. Second, the integration policy in the OECD countries will be presented. In the next step, the methodology will be presented. Finally, the ranking of the OECD countries in terms of the integration of immigrants on the labour market will be created. Then, the main relationships between these effects and integration policy adopted by the individual countries will be analysed.

1. The concept and role of migration policy

Migration is a process that can be managed while the migration policy is an integral part of the system of migration flows (Skeldon, 2010, pp. 22, 30). The migration policy includes legal regulations and provisions implemented and developed by the individual states that have an indirect and direct impact on the scale and structure of migration flows (Czaika & de Haas, 2013, p. 489). Migration policy includes immigration policy (together with integration policy) and other regulations implemented by the individual states that have an indirect and direct impact on the scale and structure of migration flows (along with return migration) (Duszczuk, 2014, pp. 39–40). The main areas of migration policy include: integration, immigration policy, emigration policy and border control (de Haas, Natter, & Vezzoli, 2015, p. 9). The essence of migration policy boils down to three fundamental aspects: capacity for analysis and long-term forecast of the effects of the introduced migration policy rules, political capacity for reaching a consensus related to long-term objectives of migration policy and tools that allow the achievement of these goals in relation to democracy and the rule of law (Castles, 2004, p. 856).

The main feature of migration policy is the selectivity of this policy. The migration policy of most countries is based on different migrant tracks that are characterised by different criteria required for entry. As a result, the qualitative nature of migration policy means that the measurement and classification of this policy in various countries and various time scopes is difficult to study. The selectivity of migration policy can be understood as various entry rules to a given country depending on the social, demographic and economic features of migrants (e.g. low-skilled and highly skilled migrants, nationality of migrants, profession of migrants etc.) (Rayp et al., 2017, pp. 5, 16–17).

In the process of migration policy formation, especially political institutions and interest groups are involved. An important role in the process of migration policy formation is also played by international organisations and diplomatic relations. In contrast, on the national level the following interest groups are involved in the process of migration policy formation: unions, ethnic groups and anti-immigration groups (Cornelius & Rosenblum, 2005, pp. 106–108). The migration policy is also shaped by the activities of media and social movements, societies and non-profit organisations (Castles, 2004, pp. 866–867, 870).

2. Integration policy in the OECD countries

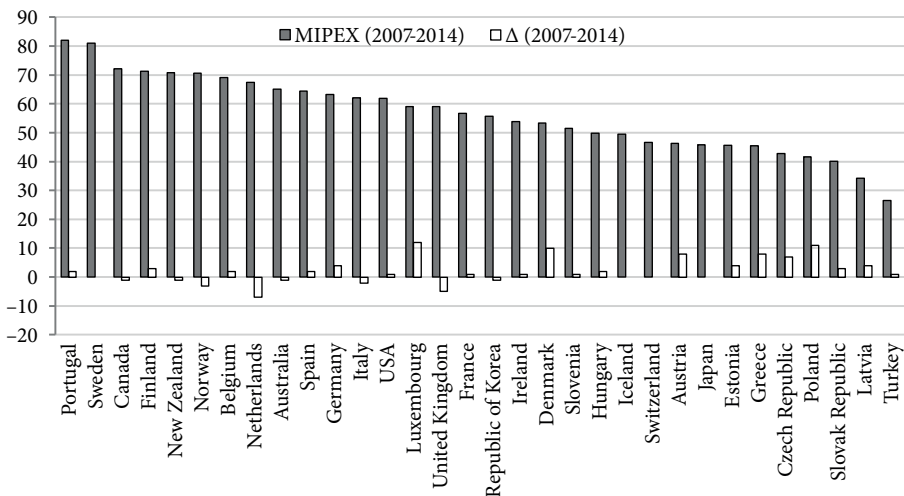
The Migrant Integration Policy Index (MIPEX) and the Migration Policy Index in terms of integration policy (MPI¹) were used to present integration policy in the OECD countries. The MIPEX⁴ was constructed within the project titled: “Integration policies: Who benefits? The development and use of indicators in integration debates” by the Migration Policy Group and the Barcelona Centre for International Affairs. The values of MIPEX are based on 167 policy indicators that measure eight areas of integration policy: labour market mobility, family reunion, education, political participation, access to nationality, permanent residence, anti-discrimination and health. For each area of the integration policy the authors developed the highest international standards that aimed to ensure equal obligations, rights and opportunities for all people (including migrants) (Huddleston et al., 2015; Migrant Integration Policy Index, 2015, Methodology, section 1–8).

The values of the MIPEX in the OECD countries in the years 2007–2014 are presented in Figure 1. In the years 2007–2014 the most favourable integration policy (if all areas of this policy excluding education and health are taken into consideration) were achieved by: Portugal, Sweden, Canada, Finland, New Zealand, Norway. In these countries the integration policy was the most

⁴ MIPEX has values from 0 to 100, where the 100 is the best result. The maximum is awarded when the highest standards for equal treatment are ensured (Huddleston et al., 2015; Migrant Integration Policy Index, 2015).

favourable for immigrants. The OECD countries that were characterised by a relatively higher value of the Migrant Integration Policy Index granted migrants an easy access to nationality, family reunion, permanent residence and political participation. In contrast, the lowest results in terms of the MIPEX were achieved by Latvia and Turkey. In the case of Latvia, the integration policy was the least favourable for immigrants in the following areas of this policy: political participation and access to nationality. In contrast, the integration policy in Turkey was the least favourable for immigrants in terms of political participation and labour market mobility.

Additionally, the changes of the values of Migrant Integration Policy Index in 2007–2014 in the analysed countries were also interesting (Figure 1). The changes of integration policy are taking place slowly. In most OECD countries the values of the Migrant Integration Policy Index increased in 2014 compared to 2007. The largest increase of the MIPEX was observed in Luxembourg (12 points) and in Poland (10 points). The increase of MIPEX was small for the majority of the analysed countries. In some OECD countries (i.e. Japan, Switzerland, Sweden), the value of MIPEX did not change in the analysed period. However, in these countries the value of MIPEX was below 50 points, which means a halfway favourable integration policy for immigrants. In contrast, the largest decrease was observed in the Netherlands (7 points) and in the United



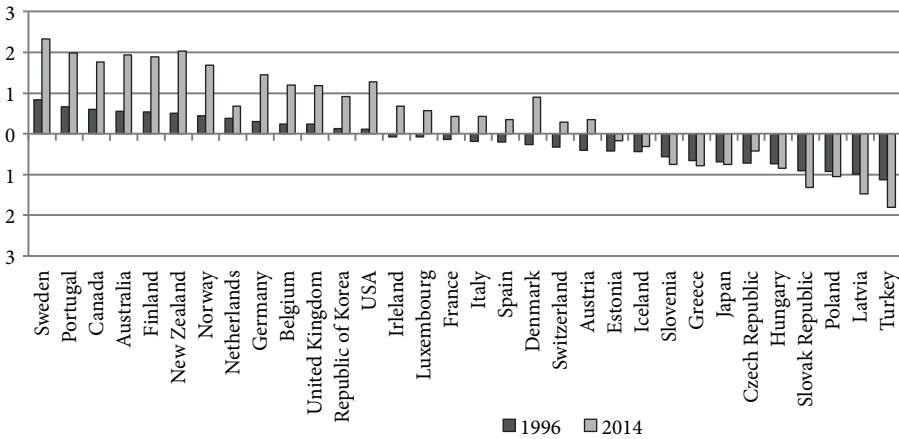
Notes: the figure shows the average values of the MIPEX in the years 2007–2014 in terms of all areas of integration policy excluding education and health and the following countries: Iceland (where only 2014 was taken into account), Australia, Japan, the Republic of Korea, New Zealand, Turkey and the USA where the years 2010–2014 were taken into account because of the lack of sufficient data. Δ is a difference of MIPEX between 2014 and 2007.

Figure 1. MIPEX in the OECD countries in the years 2007–2014

Source: Own work based on (Huddleston et al., 2015).

Kingdom (5 points). In other OECD countries the decrease of MIPEX was small. What is more in the OECD countries that were characterised by the least favourable integration policy for immigrants in 2007–2014 (i.e. Turkey, Latvia, the Slovak Republic) the increase of the value of the Migrant Integration Policy Index was also small. However, it may be concluded that the best results were especially achieved by the Western European countries and the OECD countries that have a long history of migration, whereas the Central and Eastern European countries and especially Turkey were characterised by less favourable integration policy in the main areas of this policy.

The Migration Policy Index in terms of integration policy (including immigrants’ rights) (MPI^I) was also constructed by Rayp and others (2017) within the project titled: *Economic and social consequences of immigration*. In order to construct these sub-indexes the public data sources related to the migration policy restrictiveness (de jure migration laws and regulations) were implemented (excluding those associated with asylum policy). The calculations were based on a Bayesian-state space model. The interpretation of the sub-indexes and the Migration Policy Index is as follows: the higher the level of sub-indexes or index, the lower the level of migration policy restrictiveness (Rayp et al., 2017, pp. 5–7, 11, 14). The values of the MPI^I in the OECD countries are presented in Figure 2. In most OECD countries the value of the Migration Policy Index in terms of integration policy increased in 2014 compared to 1996. Therefore, the integration policy has become more liberal in the years 1996–2014 in the analysed countries (especially in the West and South European countries as well



Notes: the higher the level of sub-indexes or index, the lower the level of migration policy restrictiveness.

Figure 2. The Migration Policy Index in terms of integration policy (MPI^I) in the OECD countries in the years 1996–2014
 Source: Own work based on (Rayp et al., 2017).

as in so-called “settlement countries”). In contrast, in the Central and Eastern European countries (excluding: the Czech Republic and Estonia), Japan, Turkey, Greece and Iceland the integration policy was more restrictive in 2014 compared to 1996 (Figure 2).

3. Methodology

In order to assess the effectiveness of integration of immigrants into the labour market the TOPSIS (*Technique for Order Preference by Similarity to an Ideal Solution*) method⁵ was used (Hwang & Yoon, 1981). The TOPSIS method was first developed by Hwang and Yoon (1981). This method was modified later by many other authors (especially by Hung & Chen, 2009)⁶. The TOPSIS method chooses the alternative nearest to the ideal solution as well as the alternative farthest from the negative ideal solution. The TOPSIS technique starts by establishing a decision matrix. The matrix represents the performance values of each criterion/attribute with each alternative. Then, the decision matrix is normalized using a desired normalizing scheme. As a result, all attributes have the same unit scale. In the next step, the values are multiplied by estimated weights of criteria. Then, the positive ideal and negative ideal solution are determined and the distance from these solutions is calculated. This approach was suggested by Diakoulaki and others (1995). In another approach suggested by Deng and others (2000), the distance from the positive ideal and negative ideal solution are multiplied by weights that were calculated for the analysed variables. Finally, the alternatives are ranked according to in descending order (Li et al., 2018).

The main advantages of the TOPSIS method are as follows: a rational and simple concept, good computational efficiency, possibility of a clear intuitive design, simple mathematical form of calculations and a clear interpretation of estimations. The main weakness of the TOPSIS method is that the obtained results depend on the positive and negative ideal solution (Deng et al., 2000).

The research method covered seven steps. The first step was to collect a set of variables that allowed the measure of the integration of immigrants on the labour market. The choice of indicators was based on the specific substan-

⁵ TOPSIS is a well-known method of linear ordering and is widely used for various selection and ranking solutions in the empirical analysis. For example, the TOPSIS method was used to examine: the extent to which the presence of Foreign Direct Investment is reflected in productivity of business environment in the Czech regions (Kotikova & Vavrek, 2019); the quality of internet health information (Afful-Dadzie, Nabareseh, & Komínková Oplatková, 2014) and to rank new comers to work based on their organizational commitment propensity (Safari, Cabrita, Hesán, Maleki, & Mirzaeirabore, 2018).

⁶ Hung and Chen (2009) proposed a fuzzy TOPSIS decision making model using entropy weight for measuring the degree of non-satisfiability and the degree of satisfiability, respectively, of each alternative that evaluated across a set of criteria.

tive reasons and the availability of statistical data. In addition, the selection of each indicator to measure the realisation of the particular aims was based on five general principles as suggested by De Lombaerde, Dorucci, Genna and Mongelli (2008). The general principles included relevance, accuracy and credibility, data availability, timeliness and comparability (De Lombaerde et al., 2008, pp. 162–164). It needs to be stressed that the difficulties in the selection of statistical data were also related to different methodologies adopted by the particular sources of statistical data, especially with the lack of comparable statistics for all the analysed countries.

Based on the analysis of the literature and international databases, the following variables were included: foreign-born employment as a percentage of foreign-born population (Migr_em variable), foreign-born unemployment as a percentage of foreign-born labour force (Migr_un variable) and foreign-born participation rate as a percentage of foreign-born labour force (Migr_part variable).⁷ The short description of the variables is presented in Table 1. The literature attributes a special importance to the integration of immigrants on the labour market (Bergh, 2013). This, in turn is closely connected to the source of success in other areas related to the integration of immigrants in the host country. One of them is education. The economic performance of immigrants may vary according to the level of their education and skills. The level of integration of immigrants into the labour market may be also differed for first and second-generation immigrants. The existing studies indicate that the second-generation immigrants (descendants) participation in the Scandinavian higher education systems was increased during a period of Europeanization reforms (Kagan, 2019).

It needs to be stressed that including other areas of integration policy, such as: naturalisation or anti-discrimination was not possible because of the insufficient availability of the statistical data. Additionally, the assessment of the effectiveness of immigrant integration based on the data related to naturalisation may lead to false conclusions because some OECD countries identify naturalisation as a “reward” for the high level of integration with the host society (e.g. Germany, Hungary, Iceland), while other OECD countries identify it as an initial condition, i.e. the first step of the integration (International Migration Institute, 2018). In the second step, descriptive statistics were used to describe

⁷ In some analysis, the Pearson correlation coefficient and the inverse correlation matrix are used to eliminate variables that are overly correlated with each other. However, based on the analysis of the literature and international databases three variables were chosen in order to assess the effectiveness of integration of immigrants into the labour market, which primarily results from the availability of statistical data. Consequently, in this study, all variables (see Table 1) were included in the empirical analysis. The literature indicate that the these variables can be used to examine labour market integration of immigrants (see footnote on p. 4). It needs to be stressed that, the results (both in the case of empirical analysis for two variables and three variables) were similar and led to similar conclusions. These results are available upon request.

the basic features of the data in the study. The results of the descriptive statistics are presented in Table 2. The highest differences between countries were related to the foreign-born unemployment rate (the coefficient of variation amounted to 50.7%).

Table 1. The variables measuring the effectiveness of the integration of immigrants into the labour market

Variable name	Short description	Character of variable	Weight	Source
Migr_em	foreign-born employment (% of foreign-born population)	stimulant	0.32	(OECD Statistics, 2016a, Foreign-born employment)
Migr_un	foreign-born unemployment (% of foreign-born labour force)	destimulant	0.48	(OECD Statistics, 2016c, Foreign-born unemployment)
Migr_part	foreign-born participation rate (% of foreign-born labour force)	stimulant	0.20	(OECD Statistics, 2016b, Foreign-born participation rates)

Source: Own work.

Table 2. The descriptive statistics of the variables measuring the effectiveness of the integration of immigrants into the labour market

Variable name	Min.	Q ₁	Q ₂	M	Q ₃	Max.	SD	CV (%)	Number of observations	Number of countries
Migr_em	43.5	59.4	65.5	64.2	69.4	86.6	7.7	12.0	270	30
Migr_un	4.1	7.3	9.8	11.5	14.6	38.0	6.1	52.7	270	30
Migr_part	45.8	70.4	73.7	72.6	76.3	90.3	7.2	10.9	270	30

Notes: The table shows the values of the selected descriptive statistics for all variables in the years 2008–2016. The individual missing values of the variables were replaced by averages computed for a particular country for all periods where this information was available.

Source: Own calculations.

In order to ensure comparability of all indicators the zero unitisation was conducted. The following variables were identified as stimulant variables: Migr_em variable and Migr_un variable (the higher the number of employed and professionally active immigrants—the higher the effectiveness of migration policy), whereas the third variable i.e. Migr_un was identified as a destimulant variable (the lower the number of unemployed immigrants—the lower the effectiveness of migration policy) (Table 1). In order to ensure comparability of all indicators and to conduct zero unitisation, the following formulas were used:

- for the stimulant variable:

$$z_{ij} = \frac{x_{ik} - \min_i \{x_{ik}\}}{\max_i \{x_{ik}\} - \min_i \{x_{ik}\}}, \quad (i = 1, 2, \dots, n; j = 1, 2, \dots, K), \quad (1)$$

- for the destimulant variable:

$$z_{ij} = \frac{\max_i \{x_{ik}\} - x_{ik}}{\max_i \{x_{ik}\} - \min_i \{x_{ik}\}}, \quad (i = 1, 2, \dots, n; j = 1, 2, \dots, K), \quad (2)$$

where: $\min_i \{x_{ik}\}$ is the minimum value of k th characteristic; $\max_i \{x_{ik}\}$ is the maximum value of k th characteristic; i is object (a given country that belong to the OECD).

In the next step, based on the Criteria Importance Through Intercriteria Correlation (CRITIC) method (Diakoulaki et al., 1995; Deng et al., 2000) the weights of the employed variables were estimated. The estimation of weights in the CRITIC method is based on the analysis of correlation between the analysed variables and standard deviations. The relatively large weights are assigned to variables which are characterised by a high level of variation and low correlation with other variables. The estimated weights amounted to: 0.32 for Migr_em, 0.48 for Migr_un variable and 0.20 for Migr_part variable (Table 1). In order to estimate the weights of employed variables the following formula was used:

$$w_j = \frac{c_j}{\sum_{k=1}^K c_k}, \quad j = 1, 2, \dots, K; \quad c_j = s_{j(z)} \sum_{k=1}^K (1 - r_{jk}), \quad j = 1, 2, \dots, K, \quad (3)$$

where: c_j is the quantity of information contained in j th characteristic; $s_{j(z)}$ is the standard deviation that was calculated based on the normalised values of j th characteristic; r_{jk} is the coefficient of correlation between j th and k th characteristic. The sum of the weights amounted to 1.

In the next step, the Euclidean distance from the positive ideal (z_k^+) and negative ideal solution (z_k^-) was calculated for each indicator. The following formulas were used:

$$d_i^+ = \sqrt{\sum_{k=1}^K (z_{ik} - z_k^+)^2} \quad (4)$$

$$d_i^- = \sqrt{\sum_{k=1}^K (z_{ik} - z_k^-)^2}, \quad (5)$$

where: z_{ik} the observation of the k th variable for the i th object; d_i^+ is the Euclidean distance from the positive ideal solution; z_k^+ is the positive ideal solution; d_i^- is the Euclidean distance from the negative ideal solution; z_k^- is the negative ideal solution.

Next, the distance from the positive ideal and negative ideal solution were multiplied by weights that were calculated for the analysed variables as suggested by Deng and others (2000). Then, the value of the synthetic measures was determined:

$$q_i = \frac{d_i^-}{d_i^+ + d_i^-}, (i = 1, 2, \dots, n), \quad (6)$$

where: $q_i \in [0,1]^8$.

Finally, based on the arithmetic average and standard deviation of the synthetic measures, the analysed countries were grouped in terms of the effectiveness of the integration of immigrants into the labour market:

- countries that are characterised by the highest value of the synthetic measure: $q_i \geq \bar{q} + s_q$,
- countries that are characterised by a medium higher value of the synthetic measure: $\bar{q} + s_q > q_i \geq \bar{q}$,
- countries that are characterised by a medium lower value of the synthetic measure: $\bar{q} > q_i \geq \bar{q} - s_q$,
- countries that are characterised by the lowest value of the synthetic measure: $q_i < \bar{q} - s_q$,

where: \bar{q} is the arithmetic average for the synthetic measure; s_q is the standard deviation for the synthetic measure.

4. Empirical results

In Table 3 the ranking of the OECD countries in terms of the integration of immigrants into the labour market was presented. The second and third columns include the Euclidean distance. The values of synthetic measure in terms of the integration of immigrants into the labour market were included in the fourth column. The relative value of synthetic measure (q_i) means a relatively high effectiveness of migration policy in terms of the integration of immigrants into the labour market. In terms of the integration of immigrants into the labour market, the countries were very diversified. The best results were achieved by Iceland, Switzerland, New Zealand and Canada. In contrast, the lowest results were noted for Turkey, Greece and Spain. Furthermore, the average value of the

⁸ The value “1” of the synthetic measure means the best result (the highest effectiveness of the integration policy).

Table 3. The ranking of the OECD countries in terms of the integration of immigrants on the labour market

Country	d_i^+	d_i^-	q_i	Ranking list
Iceland	0.087	0.942	0.916	1
Switzerland	0.107	0.900	0.894	2
New Zealand	0.211	0.848	0.801	3
Luxembourg	0.230	0.818	0.781	4
Canada	0.231	0.795	0.775	5
Australia	0.245	0.842	0.775	5
Norway	0.233	0.799	0.774	7
the Czech Republic	0.249	0.796	0.762	8
the United States	0.261	0.799	0.754	9
the United Kingdom	0.271	0.782	0.743	10
Hungary	0.286	0.773	0.730	11
Germany	0.312	0.726	0.700	12
Estonia	0.311	0.693	0.690	13
Austria	0.333	0.713	0.682	14
Portugal	0.359	0.658	0.647	15
Denmark	0.376	0.644	0.631	16
the Netherlands	0.388	0.663	0.631	16
Slovenia	0.388	0.656	0.628	18
the Slovak Republic	0.398	0.649	0.620	19
Ireland	0.431	0.583	0.575	20
Sweden	0.441	0.565	0.562	21
Finland	0.447	0.558	0.555	22
Italy	0.459	0.569	0.554	23
Mexico	0.631	0.687	0.521	24
Poland	0.545	0.593	0.521	24
France	0.549	0.482	0.468	26
Turkey	0.744	0.508	0.406	27
Belgium	0.640	0.416	0.394	28
Greece	0.713	0.361	0.336	29
Spain	0.815	0.368	0.311	30

Source: Own calculations.

synthetic measure (q_i) for all OECD countries amounted to 0.638. Most of the analysed countries achieved a higher score than the OECD average: Iceland, Switzerland, New Zealand, Luxembourg, Canada, Australia, Norway, the Czech Republic, the USA, the United Kingdom, Hungary, Germany, Estonia, Austria and Portugal (Table 3).

Based on the arithmetic average and standard deviation of the synthetic measures the analysed countries were grouped in terms of the effectiveness of the integration of immigrants into the labour market (Table 4). The first group of countries that are characterised by the highest value of the synthetic measure included the following countries: Iceland, Switzerland and New Zealand. This group of countries are characterised by the highest foreign-born participation rate. The average value of the variable for Iceland, Switzerland and New Zealand amounted to 81.7%. In contrast, the average value of the foreign-born unemployment rate in this group of countries amounted to 7.5% and was a little higher than the lowest foreign-born unemployment rate in the analysed period (including all the analysed countries). Additionally, this group of countries is characterised by the highest values of the foreign-born employment rate in the analysed period (including all the analysed countries).

The medium higher value of the synthetic measure (q_i) was achieved by: Luxembourg, Canada, Australia, Norway, the Czech Republic, the USA, the United Kingdom, Hungary, Germany, Estonia, Austria and Portugal. It needs to be stressed that this group of countries included especially countries that have a long history of migration (Australia, the USA, Canada) and some European countries. The average value of the foreign-born unemployment rate in this group of countries amounted to 8.9%. In contrast, the average value of the foreign-born participation rate amounted to 75.1% and the foreign-born employment rate amounted to 68.5%. The lowest foreign-born unemployment rate was noted for Australia (5.7%). Nonetheless, this group of countries is characterised by lower values of the foreign-born participation rate than the first group of countries (Table 4).

The medium lower value of the synthetic measure (q_i) was achieved by Denmark, the Netherlands, Slovenia, the Slovak Republic, Ireland, Sweden, Finland, Italy, Poland and Mexico. The average value of the foreign-born unemployment rate in this group of countries amounted to 11.9% (Table 4). In contrast, the average value of the foreign-born participation rate amounted to 69.3%, whereas the average value of the foreign-born employment rate amounted to 61.0%. What is interesting is that this group of countries included Mexico. In particular, it is a result of the value of the foreign-born unemployment rate in Mexico which was the lowest in all the analysed countries (excluding Australia). However, the second analysed variable, i.e. the foreign-born participation rate amounted to 55.7% and was one of the lowest in the analysed period. Similarly, the foreign-born employment rate amounted to 52.8% and was one of the lowest in the analysed period. Only in Turkey was the foreign-born participation

rate lower than in Mexico and amounted to 53.4% and the foreign-born employment rate was lower than in Mexico and amounted to 46.9%.

The last group of countries were the OECD countries that are characterised by the lowest value of the synthetic measure: France, Turkey, Belgium, Greece and Spain. The average value of the foreign-born unemployment rate in this group of countries amounted to 19.7% (Table 4). In contrast, the average value of the foreign-born participation rate amounted to 67.8%, whereas the average value of the foreign-born employment rate amounted to 53.9%. What is

Table 4. The groups of the OECD countries that are characterised by similar values of the synthetic measure in terms of integration of immigrants into the labour market

The value of the synthetic measure (q_i)	Short description*	Countries	Migr_un [%]	Migr_part [%]	Migr_em [%]
$q_i \geq 0.793$	countries that are characterised by the highest value of the synthetic measure (3)	Iceland, Switzerland, New Zealand	7.5	81.7	75.5
$0.793 > q_i \geq 0.638$	countries that are characterised by a medium higher value of the synthetic measure (12)	Luxembourg, Canada, Australia, Norway, the Czech Republic, the USA, the United Kingdom, Hungary, Germany, Estonia, Austria, Portugal	8.9	75.1	68.5
$0.638 > q_i \geq 0.483$	countries that are characterised by a medium lower value of the synthetic measure (10)	Denmark, the Netherlands, Slovenia, the Slovak Republic, Ireland, Sweden, Finland, Italy, Mexico, Poland	11.9	69.3	61.0
$q_i < 0.483$	countries that are characterised by the lowest value of the synthetic measure (5)	France, Turkey, Belgium, Greece, Spain	19.7	67.8	53.9

Notes: * The number of countries in a given group are presented in parentheses.

Source: Own work.

more, the high foreign-born unemployment rate in this group of countries is especially a result of the high value of this indicator for Spain (over 29%) and Greece (over 25%). Furthermore, Turkey is characterised by the lowest value of the foreign-born participation rate and the foreign-born employment rate among all the analysed countries. In contrast, in the case of Belgium and France, the lowest values of the synthetic measure are especially a result of the highest foreign-born unemployment rate and the lowest foreign-born employment rate that were noted in Belgium and one of the lowest foreign-born participation rate and foreign-born employment rate that were noted in France.

The obtained results in terms of the effectiveness of the integration of immigrants into the labour market are also crucial from the economic point of view. That is because the effects in terms of integration of immigrants into the labour market have a potentially large effect on economic and social development in the individual countries. These effects are especially related to the costs and benefits for individual countries. In the case of countries that are characterised by lower value of the synthetic measure, the costs of the social security health care systems and others can be much higher. The integration of immigrants into the labour market is key to ensure positive impact of immigration on the economy. Additionally, the integration of immigrants into the labour market leads to them realising their economic potential. In particular, immigrants can contribute to solving skills' shortages in the host societies. Consequently, the high level of the integration of immigrants into the labour market have a positive economic impact in the host countries. As a result, the host countries should be interested in a high level of integration of immigrants into the labour market. The key aspect in the shaping of the effectiveness in terms of the integration of immigrants into the labour market is the adopted integration policy. The obtained results indicate that the countries that are characterised by the most favourable integration policy (especially in the area of the mobility on the labour market) will be also characterised by a high effectiveness of the migration policy in terms of integration of immigrants into the labour market that is measured by the synthetic measure.

Conclusions

The obtained results indicate that the OECD countries were very diversified in terms of the effectiveness of the integration of the immigrants into the labour market that is measured by the synthetic measure. In particular, the results suggest that the highest effectiveness of migration policy (in terms of integration of immigrants into the labour market) was reported in the following OECD countries: Iceland, Switzerland and New Zealand. Good results were also achieved by: Luxembourg, Canada, Australia, Norway, the Czech Republic, the USA, the United Kingdom, Hungary, Germany, Estonia, Austria and Portugal.

In contrast, the lowest value of the synthetic measure (q_i) in terms of integration of immigrants into the labour market were achieved by France, Turkey, Belgium, Greece and Spain.

It can be expected that the countries that are characterised by the most favourable integration policy (especially in the area of the mobility on the labour market) will be also characterised by a high effectiveness of the migration policy in terms of integration of immigrants into the labour market that is measured by the synthetic measure. In particular, the obtained results for formulation of the synthetic measure that relates to integration of immigrants into the labour market in the OECD countries in this study are consistent with the results that were obtained based on the Migrant Integration Policy Index. The data on the Migrant Integration Policy Index indicate that Turkey was characterised by the most unfavourable integration policy (Figure 1). For this country one of the lowest values of the synthetic measure in terms of the integration of immigrants into the labour market was also observed (Table 3). The comparative analysis of the obtained results in terms of integration of immigrants into the labour market and the data on Migration Policy Index in terms of integration policies (MPI¹) also lead to similar conclusions. The data on Migration Policy Index in terms of integration policies indicate that Turkey was characterised (both in 1996 and 2014) by a policy showing the highest level of integration policy restrictiveness (Figure 2). It may be concluded that the higher the level of integration policy restrictiveness in a given country, the worse the effects in terms of the non-integration of immigrants into the labour market that were obtained by this country.

The conducted analysis has shown the importance of relationships between the integration policy adopted by the OECD countries and the effects obtained by these countries in terms of the integration of immigrants into the labour market. The analysis might be also particularly important for new market economies which already are, or will be, soon facing the challenges of global migration movements. Additionally, the analysis may form a basis for further research, for example, on the determinants of an aggregated migration policy index. This analysis may be also helpful to identify the causes of differentiation between the given countries in terms of migration policy effectiveness.

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