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THE EFFECT OF IMMIGRATION ON HUMAN CAPITAL EXPENDITURE IN EUROPE: AN INTERNATIONAL ANALYSIS

Immigration into Europe has been increasing rapidly in recent years, and consequently the European Union is intensifying efforts to create an effective and safe migration policy. In this context, European institutions play a crucial role in setting strategic instruments for migration policy, and the adaptation and integration process of immigrants is one of these instruments. For this purpose, EU countries are implementing various human capital outlays, e.g. on public education and healthcare. This study aimed to empirically analyse the impact of immigration on this expenditure. Panel data analysis was carried out with the data between 1995 and 2017 for 16 European countries. The results support the argument that immigration may have reduced the expenditure that immigrants benefit more from, such as education and social expenditure, while it does not reduce the expenditure that immigrants benefit less from such as healthcare

Keywords: immigration, human capital expenditure, panel data analysis

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1. INTRODUCTION

The number of immigrants internationally is increasing as a result of globalization. In addition to the effect of globalization, individuals also migrate due to wars, natural disasters, and for social, political, and economic reasons. Further drivers of immigration include low wage levels, poverty, unemployment, violence, an insecure environment, discrimination, weak government structures, and religious pressures. The additional desire to receive education and health services under better conditions, employment opportunities and diversity, safe living conditions, the opportunity to

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improve professional development, and better living conditions are among the other causes of migration.

To put it another way, a variety of factors have a role in migration decisions. For instance, migrants may be "pushed" out of their nations owing to economic or political instability. Moreover, people are "pulled" to places that pay well, have decent health care and strong educational institutions (Simpson, 2017). Bansak et al. (2015) identified two types of migration determinants: push and pull factors. Push factors are what motivate people to leave their home country, and pull factors are what attract them to enter a destination country, as detailed in Table 1.

Table 1

Determinants of immigration (push and pull Factors)

Push factors	Pull factors
Economic	***Economic***
High taxes	Demand for labor
High unemployment	High wages
Overpopulation	Generous welfare benefits
Poverty/low wages	Good healthcare and education systems
Non-economic	Strong economic growth
Discrimination	Technology
Poor health care	Low cost of living
War or oppression	***Non-economic***
Corruption	Family and friends/networks
Crime	Rights and freedoms
Compulsory military service	Property rights
Natural disaster	Law and order
Famine	Amenities

Source: Bansak,, Simpson, and Zavodny (2015), The Economics of Immigration. Oxford: Routledge.

Most immigrants mainly migrate to Western countries, and Europe is one of the most migratory regions in the world. Immigration continues to increase, particularly to European Union countries. In 2017, for example, 4.4 million people migrated to one of the EU's 28 member states (Eurostat, 2019). As seen from Figure 1, migration to Europe has recently increased; as a result, immigration has become a crucial issue for Europe. Moreover, since immigration is likely to dominate policy and political agendas, it is increasingly presented in both public and expert discourses as a challenge requiring coordinated European interventions involving both member states and European institutions (King and Lulle, 2016). Therefore, this study focused on the case of the European Union to investigate the link between immigration and human capital expenditure.

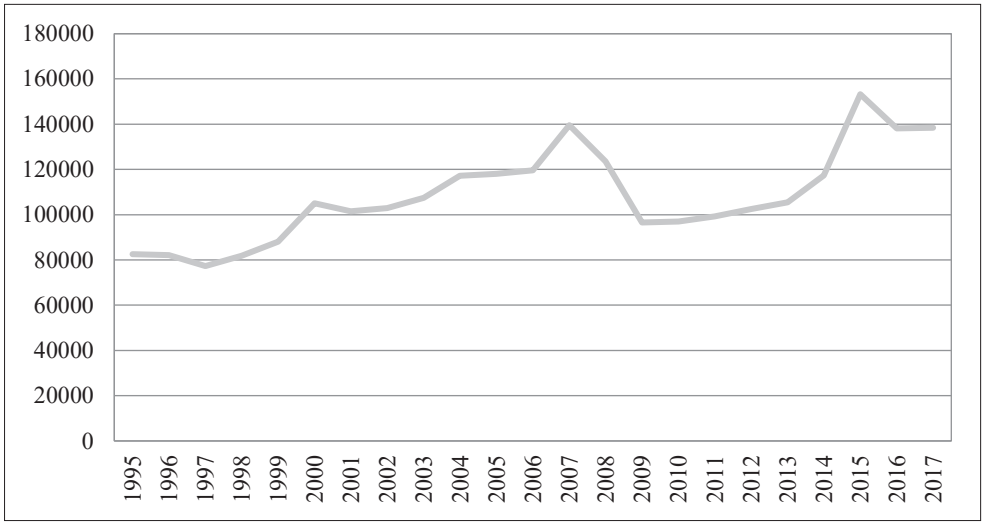

Fig. 1. Number of immigrants from outside Europe

Source: Eurostat (the number of immigrants in thousands).

Immigration causes many problems, including economic, social, and cultural. For example, as well as causing an increase in the population of the host country, it also brings changes in the public welfare budget. Furthermore, the increase in population diversity causes some difficulties in providing public services. In order to eliminate or reduce the problems introduced by immigration, immigrants should be adapted to and integrated into the country they migrated to. Human capital expenditure, such as education and health, is therefore of great importance in the adaptation and integration of immigrants. Figure 2 shows the average pattern of public health and education expenditure in the European Union during the period 1995-2018. As seen from the figure despite a recent decreasing trend in health expenditure, there was an increasing trend in education expenditure. In line with this trend, the immigrant population of Europe also increased during the same period (see Figure 1). In this context, whether the increasing number of immigrants increases the expenditure allocated to health and education services, and if this creates a burden on the public sector, the effect of the increasing number of immigrants on health and education expenditure, are topics that require investigation.

In addition to these questions, the impact of immigration on the host country's economy is also debated via three substantive questions. First, how do immigrants affect the host country's economy? Second, do immigrants have an impact on the employment opportunities of the local population? Third, what kind of immigration policy most benefits the host country (Borjas, 1994)? This study investigated the first question in terms of human capital expenditure.

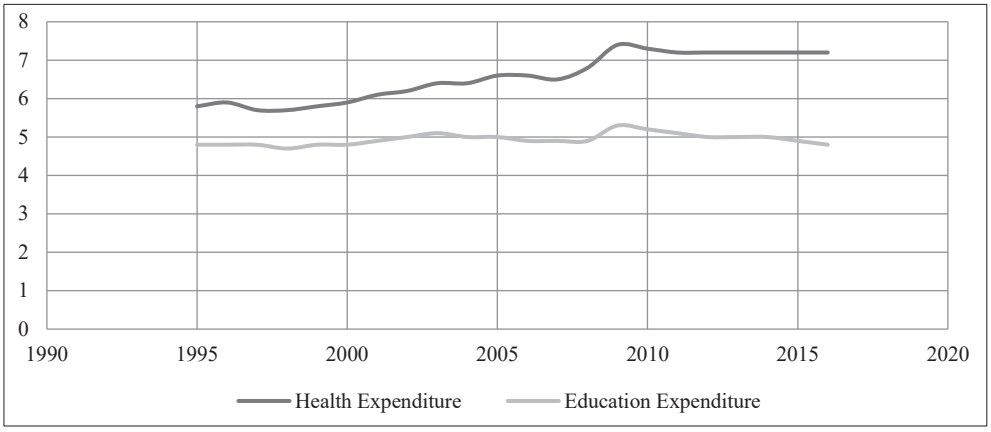

Fig. 2. Patterns of public education and health expenditure in Europe (1995–2018)

Source: Eurostat; values on the vertical axis indicate the percentage of GDP.

As stated above, the aim of this study was to investigate the effect of immigration on human capital expenditure in 16 EU member states over the period 1995-2017 using both static and dynamic panel data analysis. The results show that immigration has a negative impact on public education expenditure, while it has a positive impact on public health expenditure.

Some studies analysed the impact of immigration on human capital expenditure. However, almost all of these studies addressed the impact of immigration on human capital expenditure either at a single country/state level, while only few studies analysed this relation on international level. Therefore, there is a lack of sufficient evidence in the literature on how immigration affects human capital expenditure internationally. This study contributes to the literature by examining this relation on an international scale by expanding the scope.

This study is structured as follows: Section 2 surveys the studies related to immigration and human capital expenditure. Section 3 presents and describes the data and outlines the empirical strategy, whilst Section 5 discusses the empirical results obtained from the study.

2. LITERATURE REVIEW

The effect of immigration on public expenditure differs in homogeneous and heterogeneous societies. For example, Speciale (2012) and Alesina et al. (1999) argued that immigration has a decreasing effect on public expenditure in heterogeneous communities, since these communities value public goods less than homogeneous ones; in any case, demand and preferences for public goods are also different in homogeneous and heterogeneous societies. For instance, Miguel and Gugerty (2005)

stated that preferences for public goods differ in ethnically diversified societies and that consensus on preferences for types of public goods is difficult in heterogeneous societies.

As a result, the integration of immigrants into the host country affects the country's government expenditure. In particular, human capital expenditure, expressed as health expenditure and education expenditure, is particularly important for immigrant integration. For this reason, many studies investigated the effects of immigration on education and health expenditure (Rowthorn, 2008; Speciale, 2012; Mavisakalyan, 2011). Based on the results obtained from these studies, it was demonstrated that immigration has a negative impact on education expenditure. According to Mavisakalyan (2011), the cause of this negative relationship is increased demand for publicly produced goods, which reduces the public resources for education expenditure.

However, studies analysing the impact of immigration on health expenditure show different results. For example, Mohanty et al. (2005) and Goldman et al. (2006) rejected the argument that immigrants pose a proportional financial burden on health expenditure, while Solé-Auró et al. (2012) and Braendle and Colombier (2016) conclude that immigrants place a proportional financial burden on health expenditure. According to Speciale (2012), the effect of the foreign population on health expenditure was found to be meaningless due to the age structure of immigrants, and accordingly, older individuals are the ones who benefit most from public health expenditure. However, the fact that immigrants are younger than the native population may be the reason that immigrants have no effect on the health expenditure.

Analysing the impact of immigration on health expenditure in the case of America, Mohanty et al. (2005) stated that health expenditure in America is lower for immigrants compared to those born in America. The study also rejected the argument that immigrants create a proportional financial burden on health spending. In another study focusing on America, Goldman et al. (2006) emphasized that foreign-born people benefit proportionally less from medical services and thus contribute less to health expenditure costs. In a similar study for Europe, Solé-Auró et al. (2012) arrived at different results, arguing that immigrants in Europe benefit more from health services than locals. The majority of migrants' healthcare services involve physical visits to the hospital and hospital stays. The study also stated that the benefits from health services differ between long-term and short-term immigrants – the latter benefit more from health services than the former. The study by Braendle and Colombier (2016) on the impact of migration on health expenditure in the Swiss cantons sample, found that the effect of immigration on health expenditure was positive and significant.

3. DATA AND METHODOLOGY

The data used in the study were obtained from World Bank Databases and Eurostat from 1995 to 2017, and collected for 16 European countries, namely: Denmark,

Germany, Ireland, Greece, Italy, Latvia, Lithuania, Luxemburg, the Netherlands, Poland, Portugal, Slovakia, Finland, Sweden, Switzerland, and Spain. The detailed information is given in equations (7) and (8), respectively.

3.1. Empirical methodology

This study carried out a cross-sectional dependency analysis using the Breusch-Pagan LM (1980) and Pesaran CD tests to determine the proper unit root test. The null hypothesis of the tests implies that there was no cross-sectional dependence, which was verified by comparing the test statistic values to critical values. The statistics values for the Breusch-Pagan LM test (1980) were calculated in equation (1).

$$\lambda_{LM} = \sum_{i=1}^{N-1} \sum_{j=i+1}^{N} \hat{p}_{ij}^2 \,, \tag{1}$$

$\hat{P}_{ij}$: stands for the number of correlations between the residues of i and j units, calculated using the formula in equation (2).

$$\hat{p}_{ij} = \frac{\sum_{t=1}^{T} \hat{\varepsilon}_{it} \hat{\varepsilon}_{jt}}{(\sum_{t=1}^{T} \hat{\varepsilon}_{it})^{1/2} (\sum_{t=1}^{T} \hat{\varepsilon}_{jt})^{1/2}} \,. \tag{2}$$

where ε is the estimate of using the ordinary least squares (OLS) method. The LM test statistic has a degree of freedom of d ($d = N(N - 1)/2$).

The Breusch-Pagan LM test is effective when unit dimension (N) is less than time dimension (T). However, if N is greater than T, consistent results may not be obtained. Therefore, the Pesaran CD test was created as a substitute for the Breusch--Pagan LM test in order to produce consistent results when N is greater than T. The formula in equation (3) was used to calculate the Pesaran CD test statistic.

$$CD = \sqrt{\frac{2T}{N(N-1)}} \left(\sum_{i=1}^{N-1} \sum_{j=i+1}^{N} \hat{p}_{ij} \right). \tag{3}$$

The test statistic is distributed like for $\chi 2$ with d ($d = N(N - 1)/2$) degrees of freedom. The null hypothesis of the test states that there is no correlation between the units, when $N \to \infty$ and T are high enough, CD is $\to N(0, 1)$.

This study used the Multivariate Augmented Dickey-Fuller (MADF) test to determine the order of integration of the variables since it accounts for cross-section dependence. Another reason for using this test is that it gives consistent and unbiased results when T is larger than N. Since $T > N$ in this study, the MADF test was preferred, which is an extension of Dickey and Fuller (1979) proposed by Taylor and Sarno (1998) for unit root analyses since it takes into account the correlation between the units in a unit root analysis with inter-unit correlation in panel data. It was possible

to test for a unit root in a stochastic process using this method by constructing q_{it} time series by estimating the auxiliary regression in the following manner:

$$q_{it} = \mu_i + \sum_{j=1}^{k} \rho_{ij} q_{it-j} + u_{it}, \tag{4}$$

(Multivariate)

where k is the number of lags and signifies the estimated white noise residual. The condition of $\sum_{j=1}^{k} \rho_{ij} < 1$ is essential for stationary analysis. The following are the hypotheses for these test statistics:

$H_{0i} : \sum_{j=1}^{k} \rho_{ij} = 1$ denotes unit root process,

$H_{1i} : \sum_{j=1}^{k} \rho_{ij} < 1$, $i = 1, \ldots, N$, denotes stationary process.

By comparing the calculated test statistic value to critical values, it was determined whether the variables have a unit root. If the calculated test statistic value exceeds the critical values in this context, it can be stated that the variables do not have unit roots. As a result, the null hypothesis was rejected.

This study employed both static and dynamic panel data. The static approach used both the fixed effect (FE) and random effect (RE) estimates, while the dynamic panel data approach applied the GMM estimation technique. The FE technique is defined in this case as in equation (5).

$$Y_{it} = \alpha_i + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} \ldots + \beta_n X_{nit} + \mu_{it}, \tag{5}$$

where α_i is a constant and is a group-specific constant. This implies that the model is capable of including a variety of constants. The FE estimator is also known as the least square dummy variable (LSDV) estimator since it adds a dummy variable for each group to account for differing constants. While the FE model is an excellent starting point, panel data estimation has historically been used mostly for data sets with a very large N (Asteriou and Hall, 2015).

The RE model is an alternate technique for estimating the static panel model. The FE technique differs from the random effects method in that the latter treats the constants for each section as random parameters rather than fixed parameters. As a result, the variability of the constant for each part stems from:

$$\alpha_i = (\alpha + V_i).$$

Therefore, the RE model takes the equation (6) form:

$$Y_{it} = (\alpha + V_i) + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} \ldots + \beta_n X_{nit} + \mu_{it}. \tag{6}$$

In this context, two models were used to empirically test the relation between immigration and human capital expenditure. Following Speciale (2012), the first model tests the relation between public education expenditure and immigration in equation (7). Following Baltagi et al. (2017), the effect of immigration on public health expenditure was examined in equation (8).

$$\ln Edexp_{it} = \alpha_0 + \alpha_1 \ln IMG_{it} + \alpha_2 \ln GDPPC_{it} + \alpha_3 \ln pop14_{it} + \alpha_4 \ln pop65_{it} + \ldots \\ \alpha_5 \ln taxrev_{it} + \mu_i + \lambda_t + \varepsilon_{it}, \tag{7}$$

where *Edexp* denotes the total general public education expenditure (% GDP), *IMG* is the immigration total number, *GDPPC* stands for the GDP per capita which is measured by local currency and included in the model to account for differences in purchasing power among countries. As stated by Blankenau et al. (2007), GDP per capita is also used as an income variable. Another reason why it is critical to account for GDP per capita, is that it may be thought of as a proxy for the tax base (see Dottori and Shen, 2009).

Additional control variables are included during robustness testing. The percentages of the population under 15 and over 65 years old account for the population's age structure. For example, the percentage of the population over the age of 65 allows for an adjustment of the political power of older voters, who may prioritize public health outlays above education spending (Ang, 2011). Taxrev is the tax revenue (as a percentage of GDP) that represents the sources of budgetary resources used to finance spending (Behera et al., 2018). All variables were included in the model in their logarithmic form. The second model can be expressed by the following equation:

$$\ln HE_{it} = \beta_0 + \beta_1 \ln IMG_{it} + \beta_2 \ln GDPPC_{it} + \beta_3 \ln pop14_{it} + \ldots \\ \beta_4 \ln pop65_{it} + \beta_5 \ln Lifex_{it} + \mu_i + \lambda_t + \varepsilon_{it}, \tag{8}$$

where *HE* denotes the total general government health expenditure, *IMG* stands for the total number of immigrants, *GDPPC* represents the GDP per capita, measured using local currency and included in the model to account for differences in purchasing power among countries; *GDPPC* is considered a determinant factor that increases health expenditure (Baltagi et al., 2017; Hartwig, 2008). *Pop14* and *pop65* represent the population under 15 and 65 and over (% of the total population), respectively. These age groups were included in the model since they both require healthcare service more than others and they represent the population age structure (Ang, 2011; Speciale, 2012). Lifex is the life expectancy at birth total (years) and is included in the model to capture health system efficiency and the quantum of medical equipment with the assumption that an improvement in the healthcare system and medical equipment reduces mortality (Pal, 2012; Baker and Wheeler, 1998). All the variables were included in the model in their logarithmic form.

The models given in equations (7) and (8) were estimated using the Static and System Generalized Method of Moments (GMM). Due to the dynamic nature of migration, its influence on education and health expenditure can be both static and dynamic. Therefore, the ordinary least squares (OLS) estimation of static models did not yield unbiased and consistent parameters. The GMM technique was utilised to resolve this issue as this approach produces unbiased and consistent parameters regardless of the presence of heteroscedasticity and autocorrelation issues in addition to the endogeneity problem. As a result, the GMM technique was preferred for estimating dynamic panel data models.

4. EMPIRICAL RESULTS

In order to determine the proper test for stationary analysis, the cross-section dependence test was employed and the results are shown in Table 2. According to the probability values of the tests, the cross-section independence of the null hypothesis was rejected. Therefore, the study used the Multivariate Augmented Dickey-Fuller Test (MADF) which takes into account the cross-section dependence issue.

Table 2

Cross-section dependence test results

Variables	Breusch-Pagan LM	Pesaran CD
LnIMG	981.8852 (0.0000)	16.19431 (0.0000)
LnEdexp	435.0987 (0.0000)	9.645613 (0.0000)
LnGDPPC	1925.685 (0.0000)	42.12798 (0.0000)
LnPOP14	1141.838 (0.0000)	3.974885 (0.0001)
LnPOP65	2141.290 (0.0000)	41.18833 (0.0000)
Lntaxrev	498.1936 (0.0000)	5.920397 (0.0000)
LnHE	2175.093 (0.0000)	45.83219 (0.0000)
LnLifex	2602.581 (0.0000)	50.98882 (0.0000)

Note: the probability values of the tests are reported in brackets.

Source: author's calculation.

Table 3 presents the MADF test results. Considering the MADF test statistics and 5% critical values, the variables used in the study were stationary in their level values since the MADF test statistics were greater than the given critical values.

Two models in equations (7) and (8) were estimated by FE, RE, and System GMM. Table 4 presents the results from the FE, RE, and GMM estimation of Equation (7). As seen from the table, the coefficient of lnIMG is negative and statistically significant at the 1% level according to FE and RE. However, the Pesaran CD and Modified Wald tests show cross-section dependence and heteroscedasticity

Table 3

Multivariate Dickey–Fuller Test Results

Variables	MADF Test Statistics	% 5 Critical Values	Lags
LnIMG	163.421	34.737	1
LnEdexp	361.295	34.737	1
LnGDPPC	128.549	34.737	1
LnPOP14	5614.777	34.737	1
LnPOP65	2.81e+05	34.737	1
Lntaxrev	382.494	34.737	1
LnHE	214.875	34.737	1
LnLifex	89.769	34.737	1

Source: authors' calculation.

Table 4

The Effect of Immigration on Public Education Expenditure

Variables	1.	2.	3.	4.	5.
	FE	RE	PCSE	System-GMM (One-step)	System-GMM (Two-step)
LnIMG	–0.311223*** (0.0086267)	–0.034659*** (0.008151)	–0.1136482*** (0.0068973)	–0.0961116*** (0.036648)	–0.1115074*** (0.167299)
LnGDPPC	–0.0086186 (0.0420681)	0.0544404** (0.0272009)	0.1188738*** (0.0051075)	0.112622*** (0.0263724)	0.1321616*** (0.0167064)
LnPOP14	–0.1176599** (0.0566933)	–0.0264688 (0.0272616)	0.0264679*** (0.0071407)	0.0276174 (0.0334558)	0.0353734** (0.0156106)
LnPOP65	–0.0305781 (0.0577284)	–0.0334625 (0.0507734)	0.02689651*** (0.0384488)	0.4029183*** (0.0980707)	0.3754099*** (0.0597952)***
LnTAXREV	–0.0538076 (0.0547509)	–0.0217179 (0.0491587)	–0.0458907*** (0.0165161)	–0.0050682*** (0.0612454)	–0.030903 (0.0407757)
Constant	1.724688*** (0.4809411)	0.8542708*** (0.2438755)	0.2860649**** (0.0528247)		
Adjusted R^2	0.86	0.04			
F	3.95 (0.0017)	21.71 (0.006)	1452.85 (0.0000)	6304.50 (0.000)	108015.33 (0.000)
X^2	502.87 (0.0000)				
Pesaran CD AR (2) Hansen Test	7.644838(0.0000)	9.131591(0.0000)		(0.11) (1.000)	(0.120) (1.000)

Note: *, ** and *** shows 10%, 5% and 1% significant levels, respectively.

Source: author's calculation.

problems in FE and RE estimation. Therefore, to obtain more consistent results, FE and RE were re-estimated according to the Panel Corrected Standard Error method

(PCSE), which takes into account heteroscedasticity and cross-section dependence. The results are presented in column (3), where the coefficient of lnIMG was still negative and statistically significant at the 1% level. According to the dynamic analysis shown in columns (4) and (5), the coefficient of lnIMG was negative and statistically significant at 1% level. In conclusion, static and dynamic analysis shows almost the same results, i.e. a 1% increase in the total population of immigrants decreases public education expenditure by about 0.11%. This result is consistent with the studies of Alesina et al. (1999), Coen-Pirani (2011), and Speciale (2012).

Table 5

The effect of immigration on public health expenditure

Variables	1.	2.	3.	4.
	FE	RE	PCSE	System-GMM (Two-Step)
lnIMG	–0.0069218 (0.011542)	–0.005665 (0.0114208)	0.0080988*** (0.0023357)	0.0581119** (0.0242987)
lnGDPPC	–0.0059648 (0.0639566)	0.0249691 (0.045738)	–0.0824612*** (0.0028563)	–0.0316137 (0.0349965)
lnPOP14	–0.0607956 (0.0876457)	–0.0221809 (0.0476666)	0.1014396*** (0.0028194)	0.0683195* (0.0407152)
lnPOP65	0.0029562 (0.1218824)	0.0549455 (0.1100197)	0.1914811*** (0.0125385)	0.2709322** (0.1250049)
lnLIFEX	3.618345*** (0.5545923)	3.3751*** (0.5030264)	1.758496*** (0.0988915)	–0.5470237*** (0.1639397)
Lntaxrev	–0.3716351*** (0.07324)	–0.2925434*** (0.0698541)	0.8286803*** (0.0076025)	0.6719892*** (0.1545666)
Constant	–5.260598*** (0.8301458)	–5.295363*** (0.801257)	–4.19064*** (0.1739919)	
Adjusted R^2	0.48	0.48		
F	54.57(0.0000)	296.82(0.0000)	35218.55(0.0000)	2490.12(0.000)
Pesaran CD	6.641732(0.0000)	8.095375(0.0000)		
X^2	5259.16(0.0000)			
AR(2)				0.919
Hansen Test				(1.000)

Note: *, ** and *** shows 10%, 5% and 1% significant levels, respectively.

Source: author's calculation.

Table 5 presents results from the FE, RE, and System GMM estimation of equation (8). As seen from the table, the coefficient of lnIMG was negative and not statistically

significant according to FE and RE. On the other hand, Pesaran CD and Modified Wald tests showed cross-section dependence and heteroscedasticity problems in FE and RE estimation. To obtain more consistent results, FE and RE were re-estimated according to the PCSE, which takes into account heteroscedasticity and cross-section dependence. The results are presented in column (3). When the heteroscedasticity and cross-section dependence was taken into account, the coefficient of IMG became positive and statistically significant at the 1% level. These results were more valid than FE and RE since there were no autocorrelations or cross-section dependence. The dynamic estimation result is shown in column (4). The coefficient of lnIMG was positive and statistically significant at the 5% level. Both the static and dynamic estimations showed that an increase in the level of immigration results in an increase in public health expenditure. This result supports the conviction that an increase in immigrants imposes a burden on public health expenditure, as stated by Braendle and Colombier (2016).

CONCLUSIONS

The population of immigrants in Europe has been increasing recently for a variety of reasons, which leads to problems such as economic, social, and cultural. The adaptation and integration of immigrants into the country they migrate to is important in terms of solving these problems. In this context, human capital expenditure, e.g. education and healthcare, is essential for the adaptation and integration of immigrants. Moreover, determining the impact of immigration on these outlays is also important in terms of determining and implementing effective economic policies for immigration policies.

This study investigated the relationship between immigration and public human capital expenditure in Europe by panel data analysis over the 1995-2017 period. The author considered government human capital expenditure to include public education and healthcare. This study confirmed that immigration has a negative and statistically significant impact on public education expenditure. This negative relation was determined according to both static and dynamic panel data analyses, consistent with Alesina et al. (1999), Coen-Pirani (2011), and Speciale (2012). One cause for this outcome is ethnic conflict and ethnic diversity. Alesina et al. (1999) noted, for example, that when ethnic groupings are polarized and politicians have ethnic constituencies, the percentage of expenditure is low. Another argument given by Coen-Pirani (2011), is that when the numbers of immigrants increase, the marginal tax rate on public education expenditure also increases, resulting in a drop in public spending.

As for public health expenditure, both the dynamic and static results show that immigration has a positive and statistically significant impact. This result supports the conviction that an increase in immigrants imposes a burden on public health expenditure, however this study shows that this burden is minimal, and is consistent

with the study by Braendle and Colombier (2016), who stated that immigrants' demand for public health care may be consistently greater due to differing preferences, a different socioeconomic background, and the fact that immigrants have worked in riskier and physically demanding jobs. As a result, this study shows that as the immigration increases, public education expenditure decreases while public health expenditure increases. This finding supports the argument that immigration may have reduced the expenditure which immigrants benefit more from, such as education and social expenditure, while it does not reduce the expenditure on healthcare that they benefit less from.

In conclusion, immigrants need to benefit more from human capital expenditure, as their adaptation and integration into European values and principles are important. In this respect, human capital expenditure for immigrants should be more comprehensive and required by immigrants. Therefore, bureaucratic obstacles should be removed or loosened in order to better adapt immigrants to the system of the country to which they have migrated. Furthermore, this is critical for the success of immigration policies because immigrants who do not receive adequate education and health care will not reach their full potential, and this in turn may cost the economy more than they contribute.

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