

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Kelsey J. O'Connor

# Working Paper Is immigration good for Europe? Long-run evidence using comprehensive well-being

GLO Discussion Paper, No. 1461

**Provided in Cooperation with:** Global Labor Organization (GLO)

*Suggested Citation:* Kelsey J. O'Connor (2024) : Is immigration good for Europe? Long-run evidence using comprehensive well-being, GLO Discussion Paper, No. 1461, Global Labor Organization (GLO), Essen

This Version is available at: https://hdl.handle.net/10419/300252

#### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



# WWW.ECONSTOR.EU

## Is immigration good for Europe? Long-run evidence using comprehensive well-being

By Kelsey J. O'Connor\*

Abstract: The immigrant (foreign-born) population increased by 32 million in total across 37 European countries from 1990 to 2019. Much of this movement was from east to west. Indeed, both the total and foreign-born populations declined in the former Eastern Bloc over this period. Such demographic shifts could be expected to affect both the immigrant destination and origin countries in diverse ways. However, we find no evidence of positive or negative impacts on aggregate subjective well-being, among both the destination and origin countries. Immigrants, in contrast, experienced increased well-being, converted to monetary terms, in excess of £25,000 per person. Previous research had reduced scopes, e.g., covering destination countries or impacts on income only. We offer more comprehensive evidence, in terms of country and period, and by assessing impacts on subjective well-being, which implicitly includes all of the factors perceived to be important to people, both economic and non-economic.

**Keywords:** immigration, emigration, migrants, life satisfaction, happiness **JEL codes:** I31, J15

\* Kelsey J. O'Connor, Economics Researcher, STATEC Research (Luxembourg National Institute of Statistics and Economic Studies); GLO Fellow, Global Labor Organization (GLO); Research Affiliate, IZA - Institute for Labor Economics; Senior Research Associate, School of Economics, University of Johannesburg. Phone: +352 247 84351. Email: Kelsey.OConnor@statec.etat.lu. ORCID: 0000-0002-1413-3619.

Acknowledgements: I would like to thank David Bartram and Richard Easterlin for helpful comments and gratefully acknowledge the financial support of STATEC. The author declares that he has no conflict of interest. Views and opinions expressed in this article are those of the author and do not reflect those of STATEC.

#### 1 Introduction

Liberalizing immigration policy is argued to have huge benefits, in the order of trillions of dollars (Clemens, 2011). Essentially, economic costs of immigration are negligible while the benefits, borne by the immigrants themselves, are substantial. This debate continues in earnest today, in part because there is still disagreement on whether immigration is good or bad especially for the destination countries (Dustmann et al., 2016). However, these articles are inherently incomplete as they focus solely on economic costs and benefits. We know that destinations and immigrants alike care about much more than wages or financial solvency alone – destinations are additionally worried about crime, for instance, and long-term migrants also look for quality-of-life more broadly, not just wages (Hendriks and Burger, 2021).

Although natives say they are concerned about immigration (O'Connor, 2020a, fig. 1), it is not clear whether it has an overall positive or negative impact on well-being. For example, an influx of foreign-born immigrants increases job competition, which reduces wages, thereby lowering well-being in the destination country. This logic, however, considers only the direct impact on wages. A reduction in wages also lowers the cost of production, which increases the returns to capital and can expand businesses, in turn increasing employment and thereby increasing wellbeing. Foreign-born peoples may also bring new skills and provide different products and services (e.g., specialized restaurants). Indeed, many countries worry about 'brain drain', that is when highly-skilled individuals in particular emigrate. This may explain why some countries in southern and eastern Europe are more worried about emigration out than immigration in (Dennison et al., 2019). The channels through which international migration affects individuals are not always obvious, and for this reason, concerns about immigration may not translate into impacts on well-being.

In this article we expand the scope of the economically-focused articles, presenting new evidence on the impacts of international migration on the well-being of destination and origin countries in Europe, and we discuss the well-being impacts on foreign born immigrants. Well-being is broadly defined, including both economic and non-economic concerns, and measured using life satisfaction, a popular measure of evaluative subjective well-being (Mahoney, 2023). Subjective well-being is important per se (Diener et al., 2018; Graham et al., 2018; Helliwell and Aknin, 2018; Kahneman et al., 2004) and for its predictive power (Kaiser et al., 2022; O'Connor, 2020b), including for voting behaviour (Ward, 2019).

Although there are numerous studies that estimate the well-being impacts separately on destination communities and foreign-born (Hendriks and Burger, 2021), most focus on the experience of particular countries, which are unable to provide a European-wide view. The transnational view is important to understand immigration policy, as immigration policy, and its costs and benefits are transnational, especially in the case of the European Union (EU). Among EU natives in 2017, immigration was considered one of the top two issues facing the EU (O'Connor, 2020a, fig. 1).

This work expands upon earlier works that assess the well-being impacts to cover 37 eastern and western European countries over the nearly 40-year period from 1981 to 2019<sup>1</sup>. Two previous studies, look at the impact of immigration on destination communities (Betz and Simpson, 2013; O'Connor, 2020a) and find little to no effect of immigration on native populations' life satisfaction – the broader of the two samples covers the period 1990 to 2017 in the EU (O'Connor, 2020). Few if any studies cover the well-being effects of emigration on the origin populations as a whole,<sup>2</sup> while there is a broad literature that discusses the well-being of immigrants.<sup>3</sup>

## 2 Data and Methods

In a sample of 37 European countries (see Table A1 for the list of countries by region), we separately assess whether the foreign-born population share influenced life satisfaction in the destination country or whether the emigrant share affected life satisfaction in the origin country.

We perform the analysis on the full sample and separately by bloc, Eastern and Western, as the blocs experienced different migration patterns in terms of the numbers of people moving in as well as where they moved from (shown in Section 3.1). Also, as mentioned above, the Western Bloc countries were likely more worried about in-migration, while the Eastern Bloc countries may be more worried about out-migration. These differences lead us to hypothesize that immigration

<sup>&</sup>lt;sup>1</sup> Data availability varies across the set of countries. For example, for former Eastern bloc countries, the series tend to begin in the 1990s.

 $<sup>^{2}</sup>$  Ivlevs et al. (2019) is one of the few studies that assesses the subjective well-being impacts of emigration on a broad range of origin countries, however, they focus on immigrants' relatives, not the total populations of origin countries. They find positive impacts on evaluative subject well-being, which are enhanced by remittance receipts.

<sup>&</sup>lt;sup>3</sup> See for example (Helliwell et al., 2018; Hendriks, 2015; Nikolova and Graham, 2015; Simpson, 2013)

to the Western Bloc might have had a more negative impact on the destinations' life satisfaction than immigration to the Eastern Bloc.

## 2.1 Data

Life satisfaction data are from the European Values Study (EVS) and World Values Survey (WVS) (EVS 2015, 2020, Haerpfer et al 2020, and Ingelhardt et al 2019), based on responses to the question "All things considered, how satisfied are you with your life as a whole these days?" with responses ranging from 1 (Dissatisfied) to 10 (Satisfied). The surveys are irregularly fielded beginning in 1981 and ongoing today. Appendix Table A2 shows the survey years and number of countries per wave. On average, there are approximately nine years between waves. The data are based primarily on the EVS, but when the EVS was missing, we use WVS data if available. The EVS and WVS were designed to be integrated and are among the most used surveys in research pertaining to subjective well-being, among other fields.

The foreign-born share equals the total number of foreign-born residing<sup>4</sup> in a country divided by the total population and then multiplied by 100 to be in percentage terms. The emigrant share is equal to the total number of emigrants divided by an adjusted population value and multiplied by 100. The population is adjusted to reflect the total pool of potential emigrants and equal to the origin resident population plus the number of emigrants and less the number of foreign-born residents in the origin. Foreign born and emigrant figures are obtained primarily from United Nations bilateral immigrant stocks for each destination country, distinguished by country of origin (United Nations Population Division, 2019, 2017). The UN stocks are available every five years from 1990 to 2015, and again in 2017 and 2019. To match this data with the irregularly measured life satisfaction data, two additional datasets and linear interpolation was used. The resulting series covers the years 1960, 1970, and 1980 to 2019 for each of our 37 countries. We followed four steps to construct the data:

(1) We begin with the UN stocks (United Nations Population Division, 2019, 2017).

<sup>&</sup>lt;sup>4</sup> Foreign-born immigrants include anyone legally residing in a country that is not their place of birth. Foreign-born individuals include naturalized immigrants who have become citizens where they reside. Different countries have different rules, on dual citizenship for instance, which would limit consistent analysis. The Czech Republic is an exception. There the foreign-born include non-citizen residents – foreign born peoples that have become naturalized citizens are considered natives. Displaced peoples seeking asylum have a temporary legal status and are not included in foreign-born numbers until they have been granted the right to stay. Hungary, Bosnia and Herzegovina, and Croatia are exceptions. Their figures include refugees.

(2) We used the OECD's International Migration Database (OECD, 2022), which solely has data for OECD destination countries, but is often available annually, to estimate annual growth rates in bilateral immigrant stocks. When available, we applied them to the UN data to fill holes between observations, e.g., between 2000 and 2005.

(3) The resulting series was linearly interpolated to fill remaining holes.

(4) We used the World Bank's Global Bilateral Migration Database (Ozden et al., 2011), available for every decade from 1960 to 2000, to extrapolate the series backwards from 1990 to 1960, by applying the growth rates from the World Bank's stocks to the UN stocks. In this way we obtain figures from 1980, 1970, and 1960. The period from 1980 to 1990 was linearly interpolated.

Annual remittances data are available from the World Bank (World Bank, 2021). Nominal inflows were deflated and transformed using an inverse hyperbolic sine function, which operates very similarly to the natural log transformation, but is identified at zeros. The deflator and total population were available from the World Development Indicators (World Bank, 2023)

#### 2.2 Estimation Method

The approach to estimate the relationships between life satisfaction and immigration is to use regressions of (1) national-average life satisfaction in the destination country on the foreign-born population share and the lag of life satisfaction, EU status, and time dummies; and (2) national life satisfaction in the origin country on the emigrant share, lagged life satisfaction, EU status, and time dummies. The OLS specifications are included in the table footnotes. Additional control variables are purposely omitted because they represent channels through which migration may affect life satisfaction (also known as 'bad controls' (Angrist and Pischke, 2009)). In this way, we capture the full effects of migration on life satisfaction.

It is important to control for the lagged value of life satisfaction to isolate the relationship coming from foreign-born to life satisfaction. Potential emigrants want to move away from dissatisfied places towards satisfied places (Grimes and Wesselbaum, 2019). This means that countries with lower life satisfaction experience greater emigration and countries with greater life satisfaction experience greater in-migration of foreign born. At the same time, countries with high life satisfaction tend to experience lower satisfaction growth. Together these facts mean that countries that attract more immigrants also experience lower life satisfaction growth independently of whether immigrants actually move there.

The instrumental variable analysis is conducted using the standard two-stage least squares approach, using twice lagged life satisfaction and twice and three times lagged foreign-born (or emigrant) share as excluded instruments. The table notes provide statistics regarding the relevance and validity of the instruments. The Kleibergen-Paap F-statistics are generally well above the common cutoff of ten for weak instruments, and the Hansen J p-values indicate that in each case we fail to reject that the excluded instruments are correctly excluded from the second stage.

In addition to the standard errors (clustered at the country level), we provide the p-values arising from the Wild Cluster Bootstrap method. Clustering is necessary to allow for serial correlation within countries over time, and bootstrapping is necessary when there are few clusters. Previous research has found that a small number of clusters can lead to rejecting the null hypothesis as much as twice as often as the critical value (Bertrand et al., 2004). For more details regarding Wild Cluster Bootstrapping, see (Cameron and Miller, 2015).

### **3** Results

#### 3.1 Migration from East to West

Before assessing the impacts of immigration, we first characterize the impressive movement of peoples into and around Europe. The foreign-born immigrant population increased by nearly 32 million from 1990 to 2019 in a sample of 37 European countries (see Table 1), which exceeds the total population growth of 23 million. The bulk of new foreign-born residents, about 20 million, moved to countries in Western Europe. Total population and net in-migration figures, accounting for those moving out, follow similar patterns. In former Eastern Bloc countries, total populations declined and more people moved out than in, especially in the countries of Central and Eastern Europe. There, the number of foreign born increased by 1.5 million, but 10.8 million moved out. See Appendix Table A1 for a list of countries by region.

Regions	Countries	Tot. Pop.	Foreign Born	Emigrants	Net Migration
		1000s	1000s	1000s	1000s
Western Europe	8	30495	20109	3922	16187
Northern Europe	4	4045	2699	313	2386
Southern Europe	4	12593	11174	-2	11175
Central and Eastern Europe	12	-8609	1553	10824	-9270
Former Soviet Union	9	-15701	-3959	-1058	-2900
All Countries	37	22823	31577	13999	17578

#### Table 1 Population changes, total and by nativity, from 1990 to 2019 by region

Source: Author calculations, (United Nations Population Division 2019)

To put this movement into perspective, Germany was criticized for agreeing to accept one million Syrian refugees in 2015. Two years later, then U.S. President Donald Trump called it a "catastrophic mistake" and Britain's leader of the Brexit Party, Nigel Farage, called it, "The worst decision a European leader has made in modern times," as reported by *The Guardian*. Admittedly, these quotes are from anti-migration people yet they were influential nonetheless. The one-million refugees are only part of a broader trend in Western Europe and Germany in particular. From 1990-2019, Germany gained seven million foreign born in total (United Nations Population Division 2019). For the Eastern Bloc, one million is even more significant. The total number of new foreign-born in Central and Eastern countries is only a little greater, at 1.5 million, while the Former Soviet Union countries had a four million person decline in foreign born over the period (United Nations Population Division 2019).

The foreign-born in Europe are from all around the world, indeed from more than 200 countries or regions. In 2019, approximately one in three foreign-born are from countries outside of Europe, as presented in Table 2. In the Western Bloc, nearly 50 percent or more are from outside of Europe, approximately 25 percent are from the Eastern Bloc (greater in Southern Europe), and the remaining less-than-25-percent are internal to the Western Bloc. In the Eastern Bloc, the foreign-born are largely from neighbouring countries. Nearly 50 percent in the Central and Eastern region are from countries in the same region (Table 2). The corresponding figure is even higher in the Former Soviet Union countries, at 74 percent. The Eastern Bloc countries also have much fewer foreign-born as a percentage of their total populations. The Central and Eastern countries have approximately one third of the foreign-born population share that Western Europe has.

		Percent of Foreign-Born by origin region					
Region	FB Pop. Share	West	North	South	Cent. & East	FSU	Non-Europe
Western Europe	17.41	18.51	0.65	9.51	19.27	4.47	47.60
Northern Europe	13.77	8.45	10.81	2.78	13.42	10.54	54.01
Southern Europe	10.83	14.30	0.52	2.36	23.48	9.15	50.20
Central and Eastern	5.48	8.88	0.40	10.70	48.47	15.77	15.77
Former Soviet Union	8.22	1.73	0.69	0.79	0.86	74.02	21.91
All Countries	10.20	9.76	1.66	6.27	24.09	26.21	32.00

**Table 2** Total Foreign-Born population share and disaggregated by origin region, 2019

Source: Author calculations, (United Nations Population Division 2019)

## 3.2 Impacts of foreign-born on destination country well-being?

The regression results, presented in Table 3, indicate that the foreign-born population share is not negatively related to the life satisfaction of destination-country residents. This result holds in the full set of 37 European countries and in the Eastern and Western subsamples. There are two sets of regression results for each set of countries. The first uses standard ordinary least squares estimation (OLS), while the second uses instrumental variables (IV), the results of which can be interpreted causally when correctly specified. In either case, the foreign-born population share is not statistically significantly related to the average life satisfaction of destination country residents.

As the relationships are statistically insignificant, the magnitudes are imprecise and unreliable. Nonetheless, certain readers may want to know whether they are large or small. Based on the estimates from column 1, a five-percentage-point increase in the foreign-born population share would be associated with a decrease in life satisfaction of approximately 0.1 life satisfaction points. This is calculated as five times the long-run relation, which in turn is calculated as the coefficient on foreign-born divided by one minus the coefficient on lagged life satisfaction, i.e., -0.006 / (1 - 0.671) = -0.018. We use five percentage points as a potential increase in the foreign-born share because five percentage points is approximately the standard deviation of the foreign-born population share; however, this shock is in fact large compared to the typical change in the foreign-born born share, from one period to the next, which is closer to one percentage point.

The results provide evidence that immigration is not (reliably) a bad thing for average destination-country well-being across Europe. This average result should be understood as high-level and relevant for the national debate, but does not preclude heterogeneous results. It is possible

that there are so-called winners and losers of immigration. For instance, residents with lower skills are more likely to have to compete on the job market with the foreign-born who tend to be underemployed. Younger natives also tend to experience greater benefits of immigration in well-being terms (Akay et al., 2014; Howley et al., 2018; Kuroki, 2018). However, if the average effect is well-being neutral, then adequate policy could redistribute the gains from immigration to offset the costs.

	(1)	(2)	(3)	(4)	(5)	(6)
Model	OLS	IV	OLS	IV	OLS	IV
Sample	Full	Full	East	East	West	West
Foreign-Born (% of pop.)	-0.006	-0.005	-0.008	-0.011	0.001	-0.006
	(0.007)	(0.008)	(0.007)	(0.012)	(0.004)	(0.006)
Lag Life Sat	0.671***	0.653***	0.690***	0.783***	0.732***	1.003***
	(0.045)	(0.042)	(0.057)	(0.146)	(0.074)	(0.153)
Period and EU Controls	yes	yes	yes	yes	yes	yes
Observations	109	72	52	31	57	41
# of Countries	37	35	21	19	16	16
Adj. R-Squared	0.717	0.688	0.718	0.453	0.637	0.513
Kleibergen-Paap F stat		38.712		24.141		25.516
Hansen J p-value		0.654		0.269		0.495
Boot p - FB	0.407	0.703	0.265	0.812	0.693	0.359

**Table 3** Regressions of destination-country life satisfaction on the foreign-born population share,two models across three samples, 1981-2019

Source: author calculations

We estimated the specification:  $LifeSat_{ct} = \alpha + \rho LifeSat_{ct-1} + \beta_1 FB_{ct} + \beta_2 EU_{ct} + period_t + \epsilon_{ct}$  using ordinary least squares (OLS) and instrumental variables (IV).  $LifeSat_{ct}$  is for country c at time t. Twice lagged life satisfaction and twice and three times lagged foreign-born share were used as excluded instruments. The IV diagnostics (F stat and Hansen J) suggest the excluded instruments are relevant and valid. Boot p –FB. is the p-value for Foreign-Born using the Wild Cluster bootstrap, used due to the limited number of clusters. Standard errors in parentheses (clustered by country); \* p<0.10 \*\* p<0.05 \*\*\* p<0.01

## 3.3 Impacts of emigration on origin country life satisfaction?

Emigration also does not have a negative effect on the life satisfaction of origin countries. Although some countries worry about emigration, if anything, the impact is positive. The average relation for Europe as a whole is statistically significant and positive, as presented in Column 1 of Table 4. However, this relation is reduced in magnitude and statistical significance when using the IV approach (col. 2). In the Eastern Bloc (cols. 3 and 4), where residents were more worried about emigration (Dennison et al., 2019, pg. 27), the relation is also positive though not always

statistically significant. While in the Western Bloc (cols. 5 and 6), the relation is statistically insignificant, negative, and smaller in magnitude.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Full	Full	East	East	West	West	Full	East	West
	OLS	IV	OLS	IV	OLS	IV	OLS	OLS	OLS
Emig. Share	0.017***	0.008	0.005	0.013**	-0.001	-0.003	0.013*	-0.008	-0.004
	(0.005)	(0.005)	(0.007)	(0.006)	(0.006)	(0.008)	(0.007)	(0.015)	(0.006)
IHS(remit pc in)							0.084**	0.169*	-0.005
							(0.041)	(0.087)	(0.029)
ln(Pop.)							-0.027	-0.016	-0.032
							(0.026)	(0.057)	(0.048)
Lag Life Sat	0.699***	0.666***	0.697***	0.846***	0.735***	0.963***	0.692***	0.668***	0.691***
	(0.042)	(0.048)	(0.054)	(0.140)	(0.073)	(0.123)	(0.041)	(0.065)	(0.147)
Period and EU Controls	yes								
Observations	109	72	52	31	57	41	109	52	57
# of Countries	37	35	21	19	16	16	37	21	16
Adj. R-Squared	0.732	0.693	0.717	0.422	0.637	0.527	0.748	0.746	0.626
Kleibergen-Paap F stat		48.212		14.639		18.921			
Hansen J p-value		0.224		0.957		0.629			
Boot p - Emig.	0.015	0.182	0.521	0.522	0.896	0.645	0.172	0.631	0.575
Boot p - Remit							0.039	0.150	0.890
Boot p - Pop.							0.313	0.794	0.608

**Table 4** Regressions of Origin Life Satisfaction on the emigrant share, two models, three samples,1981-2019

Source: author calculations

We estimated the specification:  $LifeSat_{ct} = \alpha + \rho LifeSat_{ct-1} + \beta_1 Emig_{ct} + \beta_2 EU_{ct} + period_t + \epsilon_{ct}$  using ordinary least squares (OLS) and instrumental variables (IV).  $LifeSat_{ct}$  is for country c at time t. Twice lagged life satisfaction and twice and three times lagged emigrant share were used as excluded instruments. The emigrant share is calculated as Emig Share = emigrants / (origin residents + emigrants - foreign residents). The IV diagnostics (F stat and Hansen J) suggest the excluded instruments are relevant and valid. Boot p values are the p-values for specified variables using the Wild Cluster bootstrap, used due to the limited number of clusters. Standard errors in parentheses (clustered by country); \* p<0.10 \*\* p<0.05 \*\*\* p<0.01

Remittances likely contributed to a positive relationship. When people emigrate, especially for economic opportunity, they often send money back to their family. For this reason, origin populations may benefit from a greater number of people leaving the country. Indeed, in additional regressions that include remittances, the average relation across countries decreases in magnitude (or becomes more negative) and significance (cols. 7-9). This suggests that emigration increases remittances and remittances life satisfaction in origin-countries; however, remittances are only statistically significant in the full sample (col. 7) and Eastern bloc (col. 8).

As before, the magnitudes should not generally be interpreted as reliable. Nonetheless, for comparison, the emigration magnitudes are typically larger than the immigration magnitudes in Table 3, and the standard deviation of emigrant population share is closer to seven percent, a bit

larger than for immigration – suggesting that any costs to destination countries are outweighed by the benefits in origin countries

## 3.4 Impact of immigration on the foreign born

One remaining group is affected by immigration – the immigrants themselves, who represent a sizable number of people. As mentioned, the number of foreign-born grew by nearly 32 million over the period 1990-2019 (Table 1) to represent 10 percent of the total population in 2019 (Table 2).

The existing evidence indicates that the foreign-born around the world are likely to experience an increase in life satisfaction due to immigrating of approximately 0.5 points (on a 0-10 scale) on average (Hendriks et al., 2018). The increase is lasting too – the life satisfaction gains of foreignborn that have arrived within the last five years are indistinguishable from that of foreign-born who arrived earlier. The results do vary across regions however. In general, immigrants moving from less to more satisfied places generally experience increases in their life satisfaction, indeed reaching very similar life satisfaction levels to the destination country residents (Hendriks and Burger, 2021). Foreign-born peoples moving within Europe experience an increase in life satisfaction of approximately 0.4 points and foreign-born moving to Europe from other regions experience even larger gains. The exceptional group, who move from Western Europe to Central and Eastern Europe, do not experience a significant gain or loss (Hendriks et al., 2018 Table 3.1).

This evidence is based on the most comprehensive and methodologically-sound recent study of which we are aware (Hendriks et al., 2018). An intuitive explanation of their approach is to compare those who moved from a particular country with a group of people who have similar individual characteristics, are from the same country, and have not moved but expressed a desire to (referred to as potential immigrants). It is important to compare immigrants with potential immigrants because they differ from people without the desire to move in ways that are difficult to observe, e.g., personality.<sup>5</sup> Unfortunately, the ideal data for addressing this question does not exist. We would like to track people before and after moving across international boundaries, but this is almost never done. Even identifying those who want to move is only possible in certain data

<sup>&</sup>lt;sup>5</sup> For additional discussion, see (Bartram, 2013; Graham and Markowitz, 2011).

sets, such as the Gallup World Poll, which precludes a long-run analysis such as what we conduct in this paper.

## 4 Conclusion

Approximately 32 million new foreign-born in Europe likely experienced lasting life satisfaction gains on average of 0.4 points on a 0 to 10 scale. This gain comes at no reliable cost to the life satisfaction of the residents in either the destination or origin countries. Indeed, if anything, out migration increased life satisfaction of those left behind in the origin countries. 0.4 life satisfaction points is quite sizable, larger than the negative relation associated with being separated, divorced, or widowed, and a little smaller than being unemployed (Helliwell et al., 2021). While life satisfaction is intrinsically valuable (Mahoney, 2023), we can also estimate the monetary value using recent guidance from the United Kingdom Treasury.

One life satisfaction point for one year, referred to as a WELLBY, is valued at 13,000 British Pounds (MacLennan and Stead, 2021, p. 54). Thus, an estimate of the monetary value of emigration can be calculated as 0.4 life satisfaction points times £13,000, which equals £5,200 per person per year. Clemens (2011) estimated the average gain from emigration to be \$7,500 per person per year, not so different from the current estimates. These figures become quite large when considering 32 million people benefitted for a period of at least five years – the typical immigrant stays longer than five years and the life satisfaction benefits do not deteriorate. This figure (£5,200 \* 32 million people \* 5 years) is so large that similar papers tend to estimate the gains in terms of global GDP (Clemens, 2011).

Migration policy should be liberalized. While numerous studies have come to the same conclusion, they have faced severe data limitations. The potential types of costs and benefits of immigration are too numerous to list and few are economic alone (e.g., crime, social cohesion, and diversity of good and services). The present study accounts for all of the costs and benefits of immigration that are important for people's perceived well-being (both economic and non-economic), over the nearly 40-year period from 1981 to 2017-19. The results are limited only in that they pertain to national averages. Future work should assess to what extent different groups gain or lose, and whether policy can be used to offset any losses.

#### References

- Akay, A., Constant, A., Giulietti, C., 2014. The impact of immigration on the well-being of natives. J Econ Behav Organ 103, 72–92. https://doi.org/10.1016/j.jebo.2014.03.024
- Angrist, J.D., Pischke, J.S., 2009. Mostly Harmless Econometrics : An Empiricist's Companion. Princeton University Press. https://doi.org/10.1017/CBO9781107415324.004
- Bartram, D., 2013. Happiness and "economic migration": A comparison of Eastern European migrants and stayers. Migr Stud 1, 156–175. https://doi.org/10.1093/migration/mnt006
- Bertrand, M., Duflo, E., Mullainathan, S., 2004. How Much Should We Trust Differences-in-Differences Estimates? Quarterly Journal of Economics 119, 249–275.
- Betz, W., Simpson, N.B., 2013. The effects of international migration on the well-being of native populations in Europe. IZA Journal of Migration 2, 1–21.
- Cameron, A.C., Miller, D.L., 2015. A Practitioner's Guide to Cluster-Robust Inference. Journal of Human Resources 50, 317–372. https://doi.org/10.3368/jhr.50.2.317
- Clemens, M.A., 2011. Economics and emigration: Trillion-dollar bills on the sidewalk?, in: Journal of Economic Perspectives. pp. 83–106. https://doi.org/10.1257/jep.25.3.83
- Diener, E., Oishi, S., Tay, L., 2018. Advances in subjective well-being research. Nat Hum Behav 2, 253–260. https://doi.org/10.1038/s41562-018-0307-6
- Dustmann, C., Schönberg, U., Stuhler, J., 2016. The Impact of Immigration: Why Do Studies Reach Such Different Results? Journal of Economic Perspectives 30, 31–56.
- EVS (2015): European Values Study Longitudinal Data File 1981-2008 (EVS 1981-2008). GESIS Data Archive, Cologne. ZA4804 Data file Version 3.0.0, doi:10.4232/1.12253
- EVS (2020): European Values Study 2017: Integrated Dataset (EVS 2017). GESIS Data Archive, Cologne. ZA7500 Data file Version 3.0.0, doi:10.4232/1.13511
- Graham, C., Laffan, K., Pinto, S., 2018. Well-being in metrics and policy. Science (1979) 362, 287–288. https://doi.org/10.1126/science.aau5234
- Graham, C., Markowitz, J., 2011. Aspirations and Happiness of Potential Latin American Immigrants. Journal of Social Research & Policy 2.
- Grimes, A., Wesselbaum, D., 2019. Moving Towards Happiness? International Migration 57, 20– 40. https://doi.org/10.1111/imig.12546
- Haerpfer, C., Inglehart, R., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano J., M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). 2020. World Values Survey: Round Seven – Country-Pooled Datafile. Madrid, Spain & Vienna, Austria: JD Systems Institute & WVSA Secretariat [Version: http://www.worldvaluessurvey.org/WVSDocumentationWV7.jsp].
- Helliwell, J.F., Aknin, L.B., 2018. Expanding the social science of happiness. Nat Hum Behav 2, 248–252. https://doi.org/10.1038/s41562-018-0308-5
- Helliwell, J.F., Layard, R., Sachs, J., De Neve, J.-E., Aknin, L.B., Wang, S. (Eds.), 2021. World Happiness Report 2021, World Happiness Report. Sustainable Development Solutions Network, New York.
- Helliwell, J.F., Layard, R., Sachs, J.D. (Eds.), 2018. World Happiness Report 2018. Sustainable Development Solutions Network, New York.
- Hendriks, M., 2015. The happiness of international migrants: A review of research findings. Migr Stud 3, 343–369. https://doi.org/10.1093/migration/mnu053
- Hendriks, M., Burger, M., Ray, J., Esipova, N., 2018. Do International Migrants Increase Their Happiness and That of Their Families by Migrating?, in: Helliwell, J.F., Layard, R., Sachs,

J.D. (Eds.), World Happiness Report 2018. Sustainable Development Solutions Network, New York, pp. 45–66.

- Hendriks, M., Burger, M.J., 2021. Happiness and Migration, in: Handbook of Labor, Human Resources and Population Economics. Springer International Publishing, pp. 1–23. https://doi.org/10.1007/978-3-319-57365-6\_178-1
- Howley, P., Moro, M., Waqas, M., Delaney, L., Heron, T., 2018. Immigration and self-reported well-being in the UK (No. 18/12), University of York: Health, Econometrics and Data Group.
- Inglehart, R., C. Haerpfer, A. Moreno, C. Welzel, K. Kizilova, J. Diez-Medrano, M. Lagos, P. Norris, E. Ponarin & B. Puranen et al. (eds.). 2018. World Values Survey
- Ivlevs, A., Nikolova, M., Graham, C., 2019. Emigration, remittances, and the subjective wellbeing of those staying behind. J Popul Econ 32, 113–151. https://doi.org/10.1007/s00148-018-0718-8
- Kahneman, D., Krueger, A.B., Schkade, D., Schwarz, N., Stone, A.A., 2004. Toward National Well-Being Accounts. American Economic Review 94, 429–434.
- Kaiser, C., Oswald, A.J., by Richard Easterlin, E., 2022. The scientific value of numerical measures of human feelings. https://doi.org/10.1073/pnas
- Kuroki, M., 2018. Racial diversity, immigrants and the well-being of residents: evidence from US counties. J Popul Econ 107–133. https://doi.org/10.1007/s00148-017-0657-9
- MacLennan, S., Stead, I., 2021. Wellbeing Guidance for Appraisal: Supplementary Green Book Guidance, His Majesty's Treasury: Social Impact Task Force.
- Mahoney, J., 2023. Subjective Well-Being Measurement: Current Practice and New Frontiers, OECD PAPERS ON WELL-BEING AND INEQUALITIES No. 17. Paris. https://doi.org/10.1787/4e180f51-en
- Nikolova, M., Graham, C., 2015. In transit: The well-being of migrants from transition and posttransition countries. J Econ Behav Organ 112, 164–186. https://doi.org/10.1016/j.jebo.2015.02.003
- O'Connor, K.J., 2020a. The effect of immigration on natives' well-being in the European Union. J Econ Behav Organ 180. https://doi.org/10.1016/j.jebo.2020.10.006
- O'Connor, K.J., 2020b. Life satisfaction and noncognitive skills: effects on the likelihood of unemployment. Kyklos 73, 568–604. https://doi.org/10.1111/kykl.12226
- OECD, 2022. International Migration Database: Stock of Foreign-Born population by country of birth. OECD Statistics.
- Ozden, C., Parsons, C.R., Schiff, M., Walmsley, T. 1., 2011. Global Bilateral Migration Database.
- Simpson, N.B., 2013. Happiness and migration, in: Constant, A.F., Zimmermann, K.F. (Eds.), International Handbook on the Economics of Migration. Edward Elgar Publishing Limited, Cheltenham, pp. 393–407.
- United Nations Population Division, 2019. International migrant stock: The 2019 revision.
- United Nations Population Division, 2017. International migrant stock: The 2017 revision.
- Ward, G., 2019. Happiness and Voting: Evidence from Four Decades of Elections in Europe. Am J Pol Sci 64, 504–518. https://doi.org/10.7910/DVN/QWLGGN
- World Bank, 2023. World Development Indicators.
- World Bank, 2021. Annual Remittances Data (updates as of May 2021). Migration and Remittances Data.

# Appendix

Western Bloc			Eastern Bloc	
Northern Europe	Western Europe	Southern Europe	Central & Eastern	Former Soviet Union
Norway	United Kingdom	Spain	Poland	Russia
Sweden	Ireland	Portugal	Czech Republic	Estonia
Finland	France	Italy	Slovak Republic	Latvia
Denmark	Netherlands	Greece	Hungary	Lithuania
	Belgium		Romania	Belarus
	Germany		Bulgaria	Ukraine
	Austria		Slovenia	Moldova
	Switzerland		Croatia	Armenia
			Bosnia and Herz.	Georgia
			Albania	
			North Macedonia	
			Serbia	

Table A2: Total observations by time period and subsample	
---	--

		Eastern Bloc	Western Bloc	Total
Wave (E/WVS)	Years	obs.	obs.	obs.
1	1981 - 1982	1	12	13
2	1989 - 1993	12	15	27
3	1996 - 2002	21	16	37
4	2008 - 2009	21	16	37
5	2017 - 2020	18	14	32
Total		73	73	146