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7th Migration Observatory Report:
"Immigrant Integration in Europe"

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March 2023

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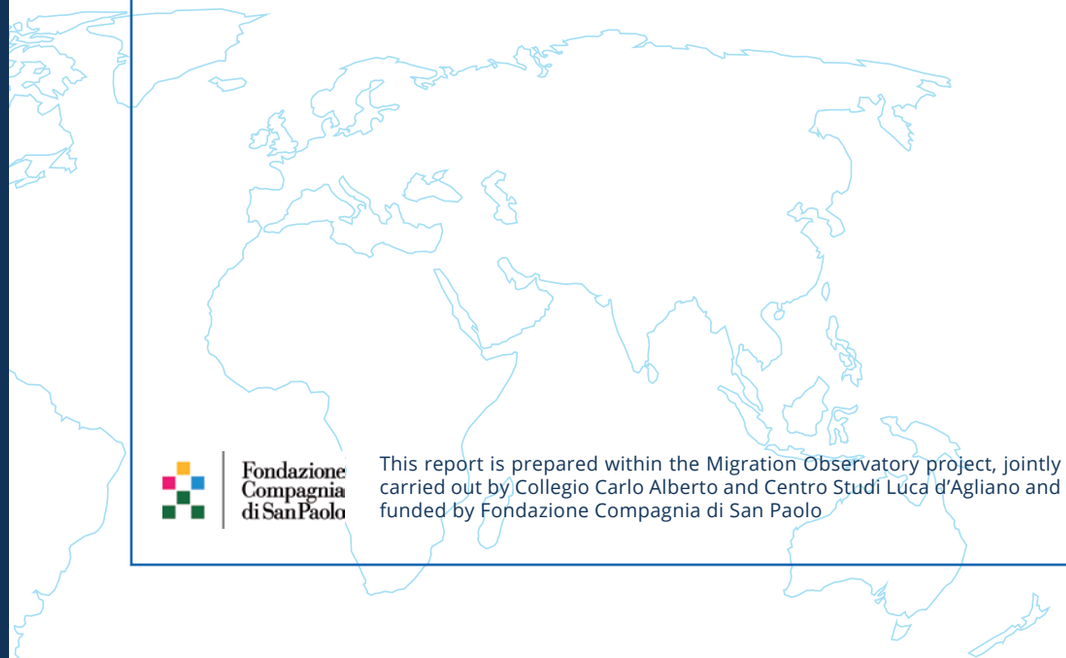

Fondazione Compagnia di San Paolo

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Executive Summary

This is the seventh edition of the Migration Observatory annual report on immigrant integration in Europe, which this year has a special focus on naturalization.

In the first part of this report, we use data from the latest edition of the European Labour Force Survey (2021) to provide a concise, easily accessible and up-to-date source of reference regarding the size, characteristics, and relative economic performance of immigrants in EU countries.

In the second part we focus on naturalization patterns of immigrants in Europe and on the labour market differentials between naturalized and non-naturalized immigrants. First, we describe the main patterns characterizing naturalizations in Europe over the last decade; then, we describe the characteristics of naturalized vis-a-vis non-naturalized long-term immigrants; finally, we analyse the so-called naturalization premium, i.e. the differentials in labour market outcomes between naturalized and non-naturalized long-term immigrants.

We show that naturalized immigrants enjoy a considerable naturalization premium. They have a higher employment probability, are employed in more prestigious and better paid occupations, and earn higher wages than non-citizens even when they are employed in similar occupations. The naturalization premium is highest for immigrant women and for those from outside the European Union.

The key findings are summarized below.

PART I - IMMIGRANT INTEGRATION IN EUROPE IN 2021

IMMIGRANT POPULATION - SIZE AND CHARACTERISTICS

BOTTOMLINE: More than 11% of all residents in the European Union is an immigrant. This ratio increases to 14% in EU14 countries, where most immigrants live. The number of foreign born residents in Europe has increased by about 10 million between 2015 and 2021. Less than one in six immigrants living in a European country in 2021 has emigrated within the previous five years. More than half of the immigrants are European. The share of tertiary educated natives and immigrants is strongly correlated across countries.

- In 2021, immigrants account for 11.3% of the total population in Europe. Most of them (45.4 million) live in a EU14 country, where the share of immigrants in the population is 13.6%.
- Immigrant concentration is highly heterogeneous across countries. The share of immigrants ranges from as low as 0.25% in Bulgaria and Romania to as high as 22% in Sweden, 32% in Switzerland and above 50% in Luxembourg.
- Less than one in six immigrants (15.7%) living in a European country in 2021 has emigrated within the previous five years, whereas in 2020 this share was 17%. Among the countries where immigrants account for at least 1% of their population, only in Cyprus, the Netherlands, Germany and Sweden is the share above 20%.
- Most immigrants (54.5%) were born in another European country: 32% are EU mobile citizens,

while an additional 22% were born in a European country outside of the EU. Among the other areas of origin, North Africa and the Middle East account for 19% of all immigrants, while 10% come from Latin America, 9% from Asia and the remaining 8% from either sub-Saharan Africa (7%) or from other countries in America and Oceania (1%).

- Among the foreign-born population, 52% are women. Only in Romania, Norway, Slovenia, Finland, Luxembourg, Germany and the Czech Republic more than 50% of immigrants are men.
- About one third of immigrants have tertiary education, one third at most upper secondary and the remaining third has at most completed lower secondary education. However, the educational levels of immigrants vary considerably across destination countries.
- Differences in immigrants' education across member states reflect the educational level of natives: countries with higher shares of university-educated natives also have higher fractions of immigrants with tertiary education and vice versa.
- Italy is the country with the least educated immigrants (13% have tertiary education) and the second lowest (after Romania) share of natives with tertiary education (21%). Conversely, Luxembourg and Ireland have among the highest shares of tertiary educated immigrants, respectively 58 and 60%.

EMPLOYMENT

BOTTOMLINE: Immigrants have a lower employment probability than natives, especially in central and northern Europe. The employment gap has decreased relative to 2020. Portugal, Spain, and Italy are among the countries with the smallest immigrant-native gap in the probability of being employed. Gaps cannot be explained by differences in age-gender-education profiles.

- On average across Europe, immigrants are 9.5 percentage points less likely to be employed than natives. This marks a slight recovery from 2020, the COVID year, when the differential was 10.1 percentage points.
- Employment gaps are larger in central and northern European countries like the Netherlands (-18.3 p.p.), Sweden (-17.3 p.p.), Belgium (-13.2 p.p.) or Germany (-12.7 p.p.) and smaller in Spain (-6.3 p.p.) and in Italy (-3.4 p.p.), where however natives' employment probability is among the lowest in Europe. In Luxembourg and Portugal immigrants are as likely as natives to be employed.
- Differences in employment probabilities cannot be explained by immigrants' age-gender-education profiles.
- EU immigrants' employment probability is 2 percentage points lower than natives', whereas immigrants from outside the EU display a disadvantage of 13 percentage points. Such differences do not depend on age-gender-education profiles: the same individuals would face less difficulties in finding a job if they were EU rather than non-EU citizens. Institutional factors like free mobility within the EU play a central role in explaining this difference.
- The probability of employment is higher for immigrants who have spent more time in the host country. The immigrant-native gap is almost ten percentage points lower (17.7 vs 8.2 p.p.) between immigrants with no more than 5 years of residence and those who have been in the country for 6 years or more.

OCCUPATIONAL STATUS

BOTTOMLINE: Immigrants are considerably more likely than natives to be employed in low-pay and low-status occupations, even after accounting for differences in personal characteristics such as education. Differences in individual characteristics between immigrants and natives can explain only a small part of the occupational disadvantage of migrants.

- Immigrants' occupational distribution is more polarized than that of natives. Immigrants are as likely as natives to work in high-status occupations. They are however much more concentrated than natives in the least qualified occupations and they are absent from the middle part of the occupational distribution (measured by the ISEI index).
- EU immigrants are employed in more prestigious and better paid occupations than non-EU immigrants.
- Immigrants' probability of working in an elementary occupation is three times as high as for natives (18% vs 6%). Likewise, natives are more concentrated than immigrants in the three highest paid occupational categories: managers, professionals and associate professionals (46% vs 35%).
- The concentration in elementary occupations is higher for non-EU than for EU immigrants. The share of non-EU immigrants in elementary occupations does not significantly change with years since migration: among employed non-EU immigrants who have been in the country for no more than five years, 20.1% work in an elementary job, a share that diminishes by just 0.5 p.p. among their co-nationals who have emigrated earlier.
- Differences in individual characteristics between immigrants and natives can explain only a small part of the occupational disadvantage of immigrants. In fact, they account for 20% of the differential probability of having an elementary occupation and for one third of the differential probability of working in one of the three highest paid occupational categories.
- In countries where the occupational distribution of immigrants is similar to that of natives, immigrants tend to perform better also in terms of employment probability. A higher immigrant likelihood of being at the bottom of the occupational distribution relative to natives is associated with a larger employment probability gap. This correlation suggests that misallocation across occupation and employment assimilation are associated, not alternative.

PART II: CITIZENSHIP ACQUISITION AND THE NATURALIZATION PREMIUM

NATURALIZATIONS PATTERNS IN EUROPE

BOTTOMLINE: Between 2011 and 2021 more than 8.5 million immigrants have acquired the citizenship of a European country, and almost 93% have naturalized in a EU14 country. More than 2% of non-citizens have been naturalized in Europe every year. The flow of naturalizations has increased over the past decade and peaked in 2021. The probability of naturalization is substantially higher for immigrants from non-EU countries.

- In 2021, more than 905 thousand persons acquired the citizenship of a European country, up from 783 thousand in 2020 and 761 thousand in 2019. The same figure was 648 thousand in 2011.
- Between 2011 and 2021, Spain has been the EU country with the highest number of naturalizations, slightly more than 1.4 million, followed by Italy (1.37 million), Germany (1.27 million) and France (1.2 million).
- Despite accounting for more than 30% of all immigrants in Europe, only 15% of the naturalized citizens between 2011 and 2021 were previously citizens of another EU country.
- Between 2011 and 2021, on average 2.3% of non-citizens in European countries have naturalized every year. Sweden is the country with the highest average annual naturalizations relative to its foreign population: over the past decade 7.6% of non-citizens have naturalized in every year. This is 1.5 times the rate of Portugal (5.1%), the second European country in terms of naturalizations relative to its immigrant population. The annual naturalization rates of Italy (2.6%), Spain (2.7%) and France (2.4%) are close to the European average, whereas the German rate (1.4%) is below.
- By 2021, European countries had naturalized more than 29% of their non-citizen residents in 2011.

CHARACTERISTICS OF NATURALIZED CITIZENS

BOTTOMLINE: Almost half of long-term immigrants have acquired citizenship of their country of residence. Immigrants in Central and Northern Europe have a higher probability of naturalization. Naturalizations are more frequent among women, non-EU and tertiary educated immigrants. The probability of naturalization increases with time spent in the host country. Naturalization policy matters: lower residency requirements increase likelihood of naturalization.

- In 2021, 41% of foreign-born residents in European countries were naturalized citizens. This share increases to 53% among long-term immigrants, who have been in their current country for ten or more years.

PART II: CITIZENSHIP ACQUISITION AND THE NATURALIZATION PREMIUM

- The share of naturalized long-term immigrants is highest in Croatia (98%), Portugal (92%), Lithuania (90%), Sweden (85%) and the Netherlands (81%), and lowest in Luxembourg (25%), Italy (35%), Latvia (36%), Norway (36%) and Estonia (38%).
- 55% of all long-term immigrant women, but only 51% of men, are naturalized citizens.
- 58% of long-term non-EU migrants, but only 43.5% of EU long-term migrants, are citizens of their country of residence.
- The likelihood of naturalization increases with educational levels: 43% for low-educated long-term migrants, 57% for those with at most upper secondary education and 61% among the tertiary educated.
- The share of foreign-born residents holding host country citizenship increases with years since migration: 9% among those who have been in the country for at most four years; 27% for immigrants who have been ten to fourteen years in the country; 39% for 15 to 19 years since migration, 70% after 25 years of residence.
- Across European countries, one additional year of residency requirement is associated with a four percentage points lower share of naturalized immigrants.

EMPLOYMENT

BOTTOMLINE: Naturalized long-term immigrants have a higher probability of employment than the non-naturalized. Naturalization is associated with a higher employment probability, especially for women and for non-EU immigrants. There are considerable differences between countries.

- The employment probability of naturalized long-term immigrants is 4.2 percentage points higher than for those who have not naturalized. Individual characteristics explain very little of this “employment naturalization premium”: comparing naturalized and non-naturalized immigrants with the same age, gender, education and years of residence reduces only slightly the differential to 3.2 percentage points.
- The employment naturalization premium is higher for women (6.4 p.p.) than for men (2.9 p.p.). When computed relative to migrants with similar characteristics, these differentials become larger for men (3.6 p.p.) and smaller for women (5.1 p.p.), which indicates that naturalized immigrant men have on average less favourable labour market characteristics than their non-naturalized fellow countrymen, whereas the opposite is true for women.
- Naturalized non-EU migrants’ employment probability is 8 p.p. higher than for the non- naturalized. Instead, there are no significant differences in employment probability between naturalized and non-naturalized EU migrants.
- There is considerable cross-country variation in employment probability differentials between naturalized and non-naturalized immigrants. Among countries with a more significant immigrant presence, the (unconditional) naturalization premium is as high as 11.3 p.p. in Germany, 7.7 p.p. in Spain and 5.6 p.p. in France, whereas it is negative in Italy (-4.1 p.p.), Belgium (-4.1 p.p.), Luxembourg (-5.9 p.p.), the Netherlands (-7.5 p.p.) and Norway

(-12.1 p.p.). The negative employment naturalization premium in these countries can be explained by differences in (observable and unobservable) characteristics of immigrants who decide to naturalize relative to those who do not.

OCCUPATIONAL STATUS

BOTTOMLINE: Naturalized immigrants are more likely to have a high pay and highly skilled job and less likely to have a low pay and low skilled job than the non-naturalized.

- The share of long-term naturalized immigrants who are employed in the three most highly paid broad occupation groups (managers, professionals or associate professionals) is 11 p.p. higher than among those who have not acquired citizenship. When compared to non-citizens with the same gender, age, education, origin and years of residence the differential shrinks to less than 3 percentage points.
- Naturalized immigrants are 8 p.p. less likely than the non-naturalized to be employed in a low-pay elementary occupation. Differences in individual characteristics explain less than half of this difference, which reduces to 4.4 p.p. relative to non-citizens with similar profiles.
- These patterns are common to all countries with a significant immigrant presence and to both women and men.

INCOME

BOTTOMLINE: Naturalized immigrants are more likely to be in the top national income deciles and less likely to be at the bottom of the income distribution. The income advantage of naturalized immigrants has been slightly increasing over time. Naturalization is associated with a larger income premium for women than for men, and for non-EU than for EU migrants. Differences in types of jobs, rather than in individual characteristics, explain more than half of the income advantage of naturalized immigrants.

- About 14% of non-naturalized long-term immigrants are in the bottom decile of the income distribution of their country of residence. The corresponding share is 5 p.p. lower for those who have acquired the host country nationality. Likewise, about 11% of naturalized but only about 7.5% of non-naturalized immigrants' earnings fall in the top income decile.
- Less than 6% of the overall differential probability of being in the bottom income decile between naturalized and non-naturalized immigrants is explained by differences in individual characteristics between the groups. Instead, 56.5% of the gap is due to differences in the occupational distributions. The remaining 38% of the gap instead remains unexplained.
- Looking at the other end of the income distribution spectrum, immigrants with citizenship are 10.3 p.p. more likely to be at or above the eighth decile than those without citizenship. Dissimilarities in personal characteristics account for less than one fourth of the differential probability of being in one of the top three income deciles between naturalized and non-naturalized immigrants. Almost two thirds of the difference (63.8% of the total) is explained by differences in the types of jobs. Only 12.2% of the overall differential remains unexplained.
- The "naturalization income premium" is persistent and slightly growing over time. In 2010 naturalized immigrants were 2.5 p.p. less likely to be in the bottom decile and 6.7 p.p. more likely to be in one of the top three deciles than the non-citizens, a differential that has increased to respectively 4.9 p.p. and 10.3 p.p. by 2020.
- Naturalization for men is associated with a substantial increase in the probability of being in the top three income deciles (15 p.p. vs 6.4 p.p. for women). Conversely, for women naturalizations is associated with a sizable decrease in the probability of being in the bottom income decile (9 p.p. vs 2 p.p. for men).
- The link between naturalization and higher income is stronger for EU than non-EU long-term immigrants. The gap in the probability of being in the bottom income decile between citizens and non-citizen immigrants from outside the EU is twice as large as the corresponding gap for EU mobile citizens (6.6 p.p. vs 3.4 p.p.). Additionally, the increase in the probability of being in the top three income deciles for naturalized non-EU migrants is more than twice as large as for EU migrants: 14.2 vs 6.9 percentage points.

PART II: CITIZENSHIP ACQUISITION AND THE NATURALIZATION PREMIUM

INTRODUCTION

The Russian invasion of Ukraine in February 2022 has not only started a conflict that has been lasting for more than one year, but it also triggered massive outflows of Ukrainian refugees fleeing the country in search of safety. According to the UNHCR, more than 8 million Ukrainian refugees were recorded across Europe as of February 21, 2023, and 4.8 million of them registered for Temporary Protection or similar national protection schemes in Europe. The large number of Ukrainian refugees arriving in European countries has initially generated an enormous amount of attention and concerns, but after a few months most concerns seem to have vanished. Part of the reason why these inflows have been well absorbed by European countries is that, for the first time, the EU Council has activated the Temporary Protection Directive. Thanks to this policy choice, Ukrainian refugees have been able to choose the country where to resettle and have been immediately given protection and rights – including the right to labour market access – which made their integration smoother than it would have otherwise been. This fact highlights the importance that different policy decisions may have in determining integration patterns of immigrants.

In this 7th Annual Migration Observatory Report, we will focus on another area of migration policy, i.e. naturalization. Issues surrounding citizenship have been at the centre of the policy debate in many countries in recent years. For instance, Germany is now debating the introduction of a new citizenship law, which would allow dual citizenship and reduce the minimum residency requirement period as well as facilitate the acquisition of German citizenship for the German-born children of migrants. Likewise, the possibility of introducing some type of birthright citizenship has been debated for years in countries like Italy, and several unsuccessful attempts to reform the current citizenship law have failed, despite the activism of second generation migrants.

In 2021, more than 900 thousand persons acquired citizenship of a European country, an increase of about 120 thousand units with respect to the previous year. In general, in recent years the number of naturalizations has increased although at different pace in different countries. These cross-country differences reflect differences in the characteristics of the foreign populations, who are reflected in different propensity to naturalize, but also differences in legislations that make access to the host country citizenship easier or more difficult. We will analyse differences in naturalizations between countries of origin and destination, and investigate in detail the differentials in labour market outcomes between naturalized and non-naturalized immigrants.

Like in previous editions, this report is structured in two parts. First, in Part I, we provide an overview of the size and composition of immigrants across all EU27 countries as well as in Norway and in Switzerland, and we analyse their labour market integration benchmarking each outcome against those of natives. We will distinguish between migrants from different areas of origin (EU/non-EU), and different years of residence in the host country. In Part II we focus instead on citizenship, and contrast the labour market integration of naturalized migrants with the integration of immigrants who have not acquired the host country citizenship. Our results indicate that in general naturalized migrants have a higher employment probability, are employed in more prestigious occupations and have higher earnings than those who have not naturalized, hence they seem to enjoy a "naturalization premium". However, part of this premium might simply be due to differences in characteristics between immigrants who are citizens of their country of residence and those who are not. For this reason, we will also compute naturalization premia net of differences in age, gender, education and years of residence. We will show that such differences are not enough to explain away the naturalization premium. Hence, although it is still possible that naturalized and non-naturalized immigrants differ also in unobserved characteristics like motivation, desire to integrate, attachment to the host country, and therefore we cannot interpret the existence of the naturalization premium as evidence of a causal effect of naturalization, our results suggest that naturalization might be beneficial for immigrants' integration.

To facilitate readability, we have excluded from the main text all the technical details that were not strictly necessary, and have chosen to present all results in graphical form wherever possible. Our detailed Technical Appendices provide all technical details for the interested readers, and our extensive Tables Appendix displays all tables underlying the graphs, as well as a range of additional results not explicitly commented in the text. The analysis is based on microdata from the latest edition of the European Labour Force Survey, which is relative to year 2021. Throughout this report, we define immigrants as foreign born, unless otherwise specified.

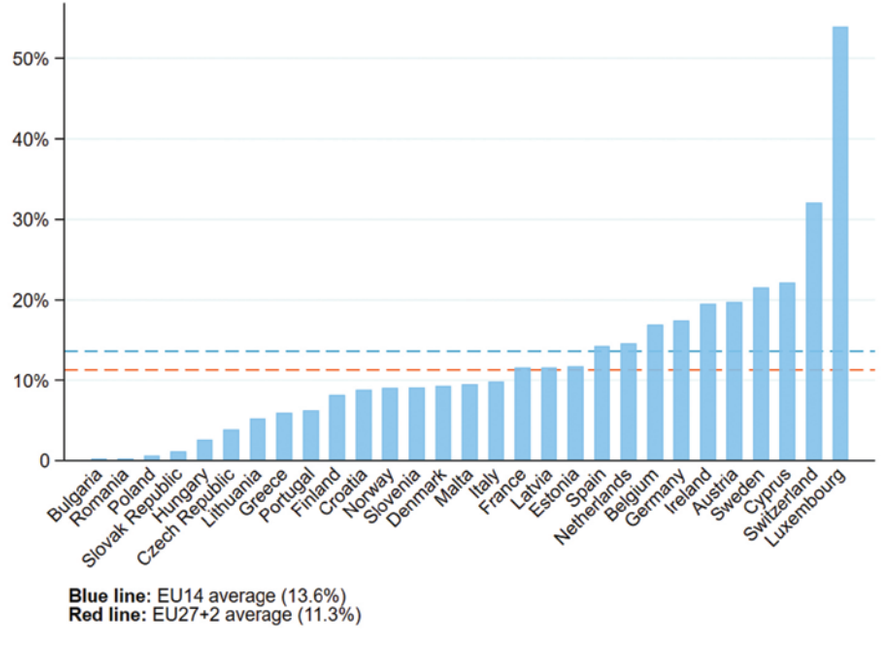
PART I: IMMIGRANT INTEGRATION IN EUROPE IN 2021

IMMIGRANT POPULATION - *SIZE*

In 2021 about 11.3% of residents in Europe were born in a country other than the one they live in. Most of them, 45.4 million, live in a EU14 country, where the share of immigrants in the population is around 13.6%.[1] There is a considerable degree of heterogeneity in the relative size of immigrant populations across countries, even within the EU14. The immigrant share is extremely low in most Eastern European countries: it is as low as 0.25% in Bulgaria and Romania, 0.61% in Poland, 1.1 and 2.6% in Slovakia and Hungary and almost 4% in the Czech Republic. Among Western European countries, the share of immigrants in the population ranges instead from about 6% in Greece and Portugal to about 10% in Italy, 12% in France, 17% in Germany and to as high as 22% in Sweden, 32% in Switzerland and 54% in Luxembourg (Figure 1).

Figure 1: Immigrants account for more than 11% of the European population

Share of immigrants in the total population (2021)



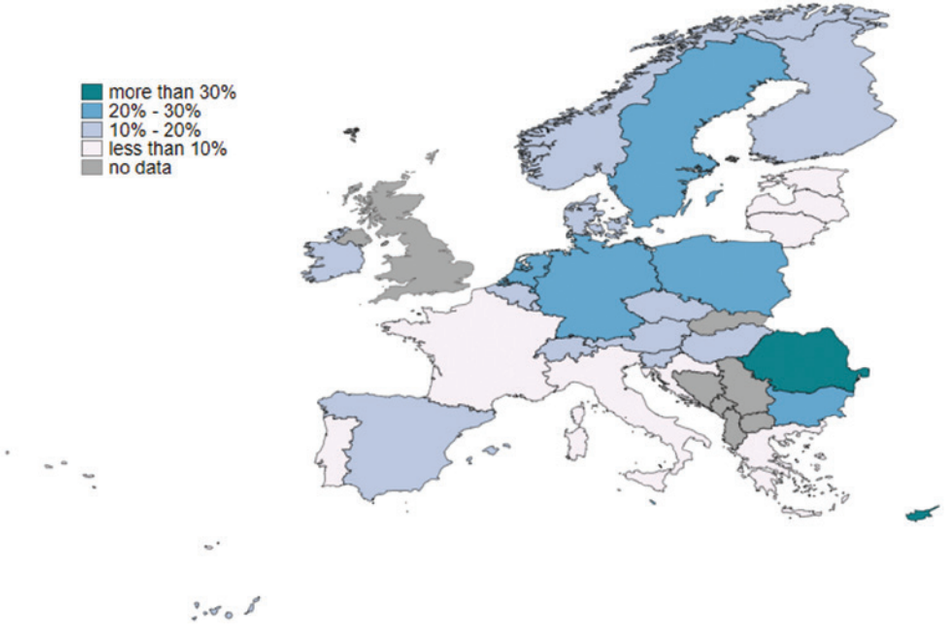
[1] *Throughout the report, we refer to "European" countries to indicate EU 27 countries as well as Norway and Switzerland. EU14 countries are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden. Note that the UK is not in our sample, since it formally left the EU on January 31, 2020.*

The foreign born population in Europe has been slowly but steadily increasing over the last years, with only a partial halt due to Covid: between 2015 and 2021 the number of immigrants in Europe has increased by about 10 million, which is equivalent to slightly more than 2% of the whole European population.

In fact, the data show that most immigrants have been in their current country of residence for quite a long time: on average, less than one in six immigrants living in a European country in 2021 has emigrated within the previous five years. With respect to 2020, the share of recent immigrants has decreased from 16.7 to 15.7 percentage points. The aggregate figure, however, still hides significant cross-country differences. Among the countries where immigrants account for at least 1% of their population, the Netherlands stands out with more than one fifth (22%) of immigrants arrived in the last five years: only Cyprus has a higher share of recent immigrants (33%). Also in Germany and Sweden at least one in five resident migrants has been there for at most five years, whereas in Austria, Spain and Switzerland the share of recently arrived immigrants is just below 20% (Figure 2).

Figure 2: Almost 85% of migrants have been in the host country for more than five years

Share of recent immigrants in foreign born population (2021)

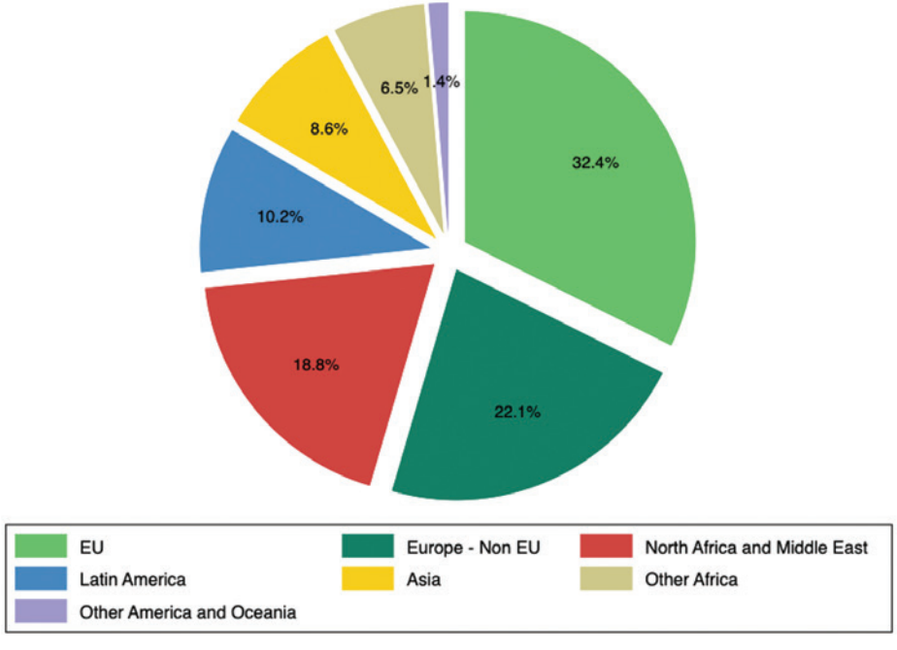


IMMIGRANT POPULATION – *CHARACTERISTICS*

A long standing, but often under-appreciated, feature of immigration in European countries, is that the majority of the foreign-born population (54.5%) originates from another European country. Not only do European mobile citizens make up 32% of the overall immigrant population in the European Union, Norway and Switzerland, but an additional 22% was born in a European country outside of the EU. Among the other areas of origin, North Africa and the Middle East account for 19% of all immigrants, while 10% come from Latin America, 9% from Asia and the remaining 8% from either sub-Saharan Africa (7%) or from other countries in America and Oceania (1%) (see Figure 3).

Figure 3: More than half of the immigrants in Europe are from another European country

Composition of immigrants by area of origin (2021)



As regards gender, like in previous years women account for 52% of all immigrants. Slovenia and Norway stand out instead for their male-dominated immigrant population: in both countries, at least 52% of immigrants are men.

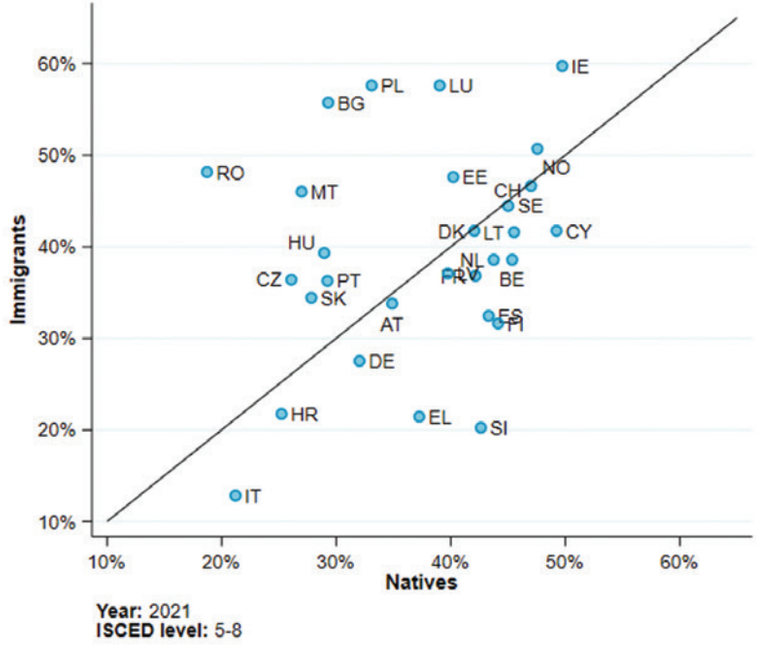
About one third of both immigrants and natives have received university education, on average, across all countries[2]. However, while the share of highly educated immigrants is very

[2] *Note that here and below we focus on the age range 25-64, in order to exclude individuals who may have not yet completed their education, and those who are not in working age.*

similar to that of natives (32% vs 34%, respectively), the proportion of immigrants that have at most completed lower secondary education is substantially higher than among natives: one in three immigrants vs less than one in five natives.

Figure 4: Countries with more educated natives attract more educated immigrants

Shares of immigrants and natives with tertiary education, by country (2021)



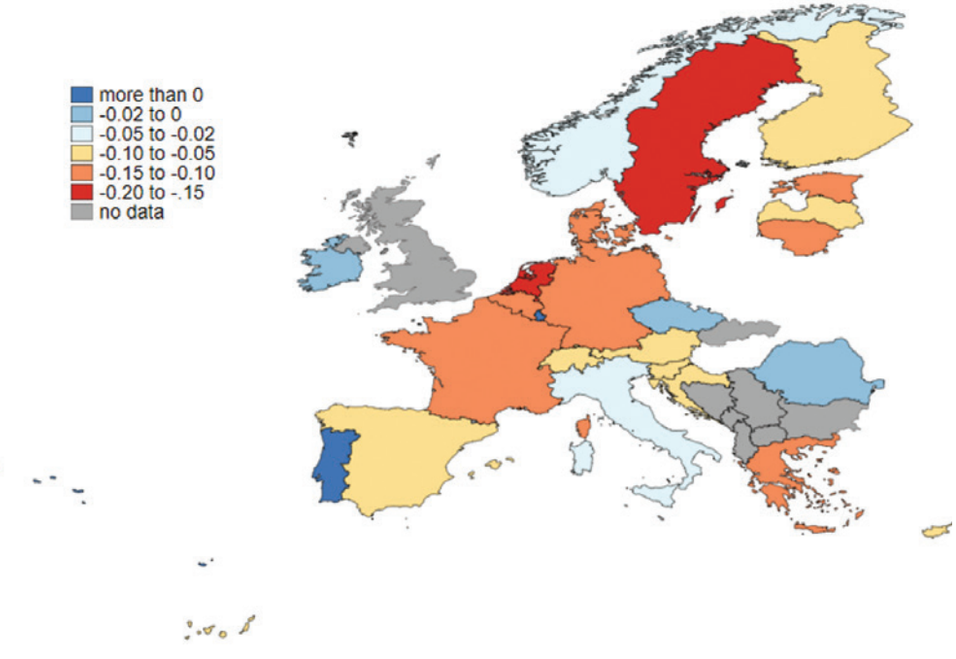
The higher educational polarisation of immigrants relative to natives is a common feature of most European countries, yet countries differ substantially in the educational level of their foreign-born population. For instance, Italy is the country with the least educated immigrants, displaying both the highest share of immigrants with no more than lower secondary education (48%) and the lowest share of immigrants with tertiary education (13%). Conversely, Luxembourg and Ireland have among the highest shares of tertiary educated immigrants, respectively 58 and 60%. Interestingly, as we highlight every year, these cross-country differences mirror closely the underlying cross-country differences in the education of the native-born: countries with a more educated native population also tend to attract more highly skilled immigrants (Figure 4). Again, Italy provides a perfect example, as it not only has the lowest share of university educated immigrants among all EU countries (13%), but it also has the second lowest share of natives with tertiary education (21%), after Romania (19%).

LABOUR MARKET OUTCOMES - *EMPLOYMENT*

Immigrants have on average worse labour market outcomes than natives. In terms of employment, they are 9.5 percentage points less likely than natives to have a job, an employment probability gap that has slightly decreased relative to 2020 (10.1 p.p.). These figures indicate a recovery of immigrant employment relative to the main Covid year, although the immigrant gap in employment probability is still larger than pre-pandemics. Since the employment probability of natives is on average 77% both across the whole EU and in the EU14 countries, this means that immigrants are 12% less likely to have a job than natives. Employment gaps are larger in central and northern European countries like the Netherlands (-18.3 p.p.), Sweden (-17.3 p.p.), Belgium (-13.2 p.p.) or Germany (-12.7 p.p.) and smaller in Spain (-6.3 p.p.) and in Italy (-3.4 p.p.). Note however that Italy has one of the lowest native employment rates (66%), therefore immigrants do not have a high probability of employment in absolute terms, but only relative to Italian natives. Portugal and Luxembourg stand out, among the countries with a substantial share of immigrants in their population, for having no statistically significant difference in employment probability between immigrants and natives (see Figure 5).

Figure 5: In most countries immigrants are less likely than natives to have a job

Immigrant-native differences in employment probability (2021)

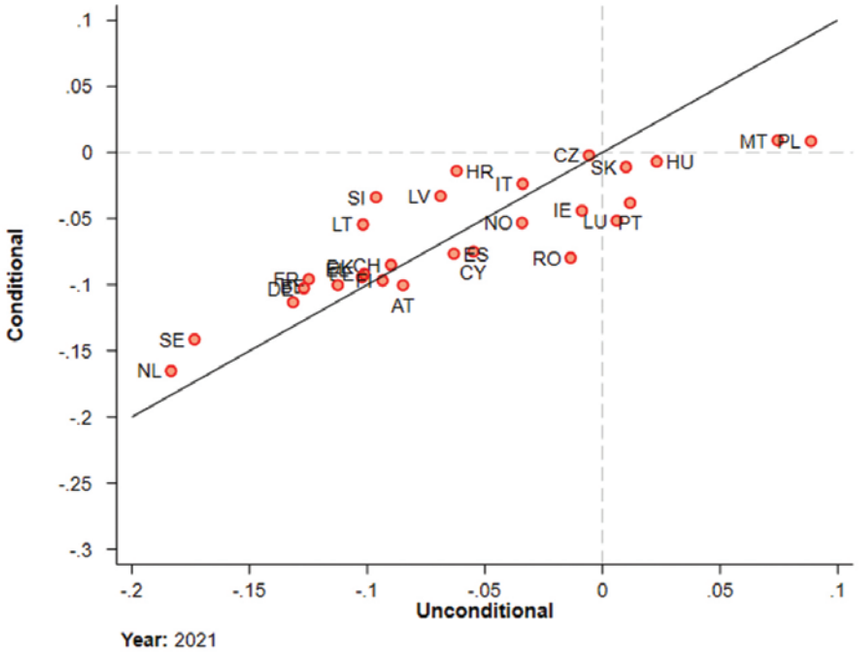


So far, we have focused on differences in labour market outcomes between the average immigrant and the average native, and we have shown that immigrants tend to have a lower employment probability. This gap might originate from immigrant-specific hurdles in labour market integration such as discrimination from employers, difficulties in formal recognition of foreign qualifications or low transferability of skills acquired at home, lack of fluency in the host country language. However, the gap might also originate from differences in characteristics such as age structure, gender mix and educational composition between the two populations. It is important to understand what the source of the employment disadvantage is, since the policy interventions required to close the gap are obviously different under the two scenarios. For this reason, we have also computed differences in employment probability between immigrants and natives with similar age-gender-education profiles: this comparison reduces only slightly the average immigrant employment gap across Europe, to 8.7 percentage points. This result indicates that the average immigrants' mix of labour market characteristics is only slightly less conducive to employment than natives'. More importantly, it also indicates that immigrant characteristics alone cannot explain their employment disadvantage, and therefore that other factors need to be addressed in order to close the gap.

However, there are also some countries where the raw difference in employment probability between immigrants and natives (*unconditional gap*) is significantly different from the employment probability gap once differences in gender, age and education are taken into account (*conditional gap*), as we show in Figure 6. The graph reports, for each country, *unconditional gaps* on the horizontal axis, and *conditional gaps* on the vertical axis. Countries below the 45 degrees line are those where the *conditional* disadvantage (advantage) of immigrants is larger (smaller) than their *unconditional* one, which indicates that immigrants have a gender-age-education profile that makes them more employable than natives. Conversely, countries above the 45 degrees line are those where immigrants have a less favourable profile than natives; therefore, conditioning out individual characteristics leads to a reduction in the employment probability differences (alternatively, an increase in the employment probability advantage).

Figure 6: Demographic characteristics do not explain the immigrant-native employment gap

Conditional and unconditional differences in employment probability (2021)



EU immigrants tend to have considerably better employment outcomes than non-EU immigrants, and, in some countries like Bulgaria, Hungary, Luxembourg, Malta, Portugal or Poland, they also outperform natives. The employment probability gap has decreased between 2020 and 2021 for both EU and non-EU immigrants: across all European countries, EU immigrants have a probability of employment that is 2 percentage points (or 2.6%) lower than natives, whereas their employment probability was 2.7 percentage points lower than natives the previous year; non-EU immigrants instead have a substantially larger gap, 12.9 p.p. (or 16.8%), which has however also decreased from 14.1 p.p. in 2020. The better employment performance of EU immigrants relative to their non-EU counterparts is only partly driven by a different composition of the two groups in terms of their age, gender or education. In fact, when EU and non-EU immigrants are compared to natives with the same individual characteristics, the differences in employment probability gaps between the two groups are still substantial. The gap for EU immigrants increases to 2.6 percentage points, whereas the non-EU gap decreases slightly to 11 percentage points. The different direction of changes between the *unconditional* and the *conditional* employment gap for EU and non-EU

immigrants indicates that while EU immigrants' age-gender-education profiles are associated on average to better employment prospects in European labour markets, the opposite is true for non-EU immigrants, who have on average slightly "worse" labour market characteristics than natives. Additionally, the persistence of large differences in the *conditional* employment gap between the two groups suggests that the better performance of EU immigrants may be due to the more favourable institutional setting they face. For instance, recognition of foreign qualifications and access to licensed occupations is easier for EU than non-EU citizens, which clearly facilitates the labour market integration of the former relative to the latter. Additionally, EU citizens can move freely across countries, and they are therefore able not only to settle in countries with higher labour demand, but also to move out of their country of current residence and move back to their country of origin or to another EU country at a lower cost, should labour demand decrease.

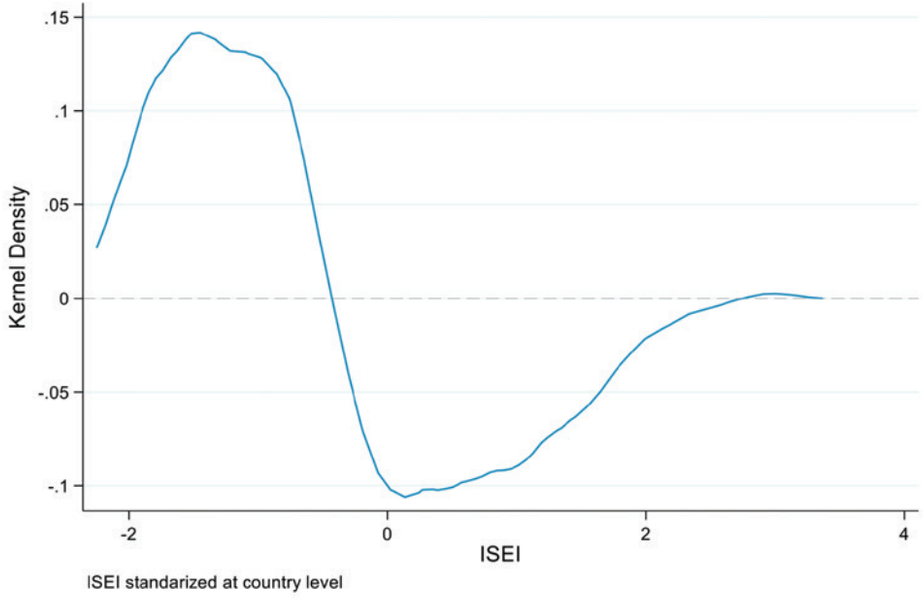
As expected, immigrants who have spent more time in the host country tend also to have a higher labour market integration. The average difference in employment probabilities between natives and immigrants who have been in the country for no more than five years (recent immigrants) is 17.7 percentage points, or 19.1 percentage points when we compare immigrants to natives with the same age-gender-education profile. For earlier immigrants, who have accumulated more than five years of residence in the host country, the gap instead decreases to just 8.2 percentage points and to 6.7 p.p. when differences in individual characteristics are taken into account. Even though these figures are based on a single cross-section of data, and therefore do not refer to the same migrants observed at two different points in time, but to different groups of migrants (with potentially distinct characteristics), they still suggest the existence of assimilation of foreign-born citizens in the host country labour market. This process may be due to immigrants acquiring country-specific skills, such as learning the host country's language. However, it may also be driven by selective outmigration, with less successful immigrants returning home (or migrating to a different country) after a few years spent in the host country. Note that this process is more clearly visible for non-EU immigrants. Their employment disadvantage decreases sizably with time spent in the destination country, from 24 percentage points among the recent ones, to 11 percentage points for those who have been longer in the host country. Recent EU migrants display a 2.7 lower employment probability than natives, and this employment disadvantage is only slightly smaller for earlier EU migrants (1.9 percentage points). It is important to note that when accounting for demographic characteristics, the employment probability differential with natives widens more for recent than for earlier EU migrants. This pattern is driven by the fact that recent EU migrants have age, gender and education characteristics that make them more employable than their co-natives who emigrated earlier.

OCCUPATIONAL STATUS

Immigrants' labour market integration cannot be assessed only by looking at their employment probability. Indeed, the type of jobs that employed individuals perform is another crucial dimension to analyse. Jobs differ in terms of earnings potential, occupational hazard, prestige, and social status they confer to workers. We measure occupational status with the Socio-Economic Index of Occupational Status (ISEI), a continuous index that scores occupations in relation to their average education and income levels, thus capturing the attributes of occupations that convert education into income. Higher values of the index correspond to occupations with a higher socio-economic status[3]. We have standardised the measure so that it has mean zero and standard deviation one in each country: therefore, values above zero indicate occupations that are more prestigious, and more remunerative, than the national average, and vice versa for values below zero.

Figure 7: Immigrants' jobs are less prestigious and less remunerated than natives'

Immigrant-native difference in distribution along the occupational status scale (2021)



The blue line in Figure 7 reports the difference between immigrants and natives in their concentration at each point of the ISEI scale: if immigrants and natives within each country had the same distribution of occupational status, then the graph would show a straight line

[3] *See Ganzeboom, Ganzeboom, Harry B.G.; Treiman, Donald J. (2003). "Three Internationally Standardised Measures for Comparative Research on Occupational Status." in Jürgen H.P. Hoffmeyer-Zlotnik & Christof Wolf (Eds.), Advances in Cross-National Comparison. A European Working Book for Demographic and Socio-Economic Variables. New York: Kluwer Academic Press. Pp. 159-193.*

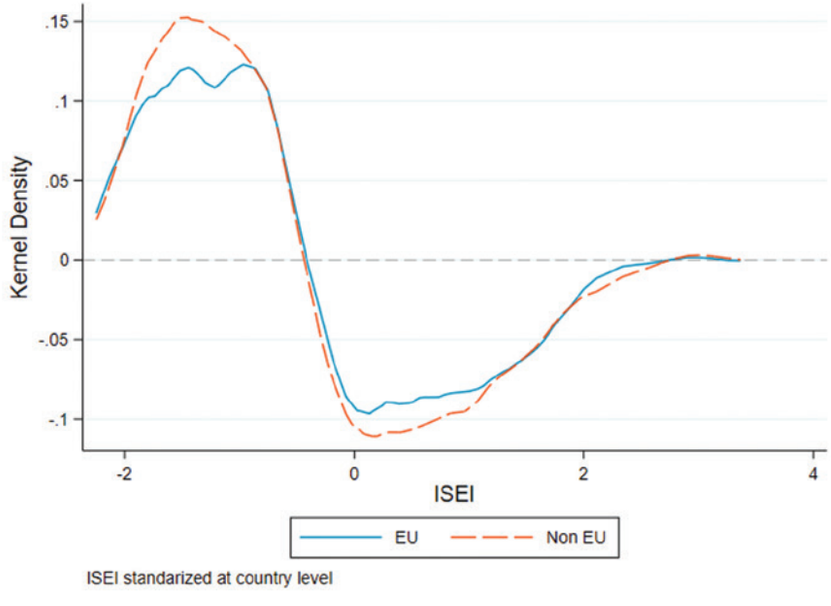
at 0. Conversely, the line is above 0 at those points of the occupational status scale where immigrants are relatively more concentrated than natives, and below zero where they are relatively less concentrated. The figure clearly shows that, on average across all EU countries, immigrants are considerably more likely than natives to be employed in low-pay and low-status occupations, while on the contrary they are less present than natives in occupations in the middle of the prestige scale.

Because of their higher polarisation in occupational distribution, and especially of their higher concentration at the bottom of the scale, immigrants have on average a lower occupational status than natives: across European countries, the mean ISEI score for immigrants is 30% of a standard deviation lower than that of natives, gap that increases to 37% in EU14 countries. Among the countries with a substantial share of immigrants in the population the occupational gap is highest in Italy, 72% of a standard deviation.

The patterns of occupational status distribution for EU and non-EU migrants are similar, although EU migrants are slightly more similar to natives, with a lower relative concentration in the bottom part of the distribution than non-EU migrants, and a higher concentration in the middle. The mean gap in occupational prestige of EU migrants relative to natives is slightly less than half that of non-EU migrants (17 and 37% of a standard deviation respectively). Immigrants' age-gender-education profiles can explain only about 25% of the differences in occupational prestige for EU citizens, and 33% of the gap for non-EU migrants.

Figure 8: EU immigrants' jobs are slightly more prestigious than non-EU immigrants'

Immigrant-native difference in distribution along the occupational status scale for EU and non-EU immigrants (2021)



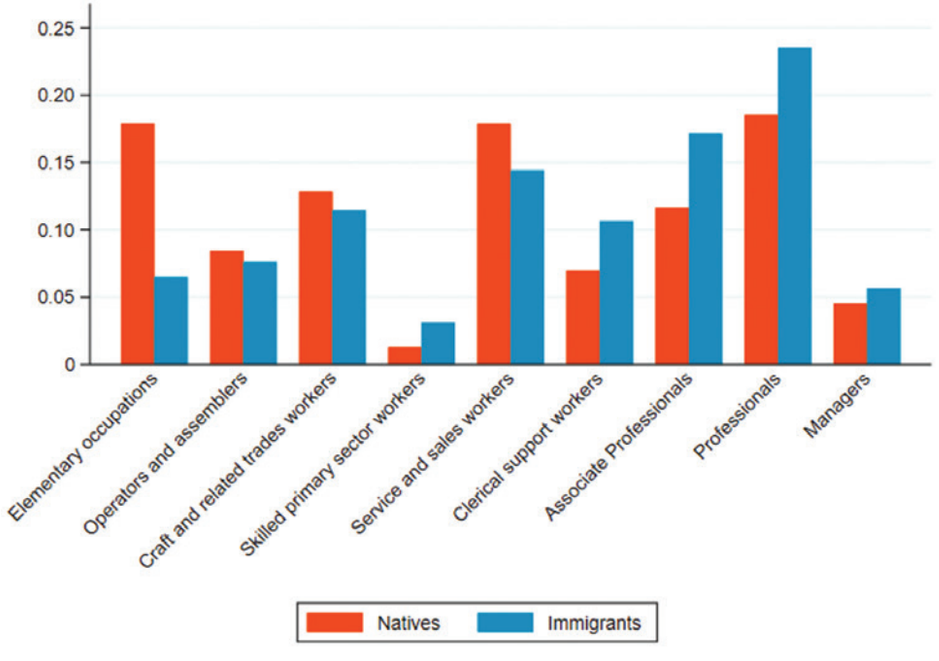
DISTRIBUTION ACROSS OCCUPATIONS

As the difference in the distribution of the ISEI suggests, immigrants tend to be disproportionately more concentrated than natives in low prestige and low pay jobs. In this section we investigate further what type of occupations immigrants are more likely to be employed in.

Figure 9 reports the distribution of immigrants (red bars) and natives (blue bars) across nine different occupational groups. Moving from the left to the right, jobs in each category are associated with a higher mean wage, and all jobs – with the exception of employment in armed forces – are classified in one of these nine categories.

Figure 9: Immigrants are more likely to be employed in elementary occupations

Immigrant and native distribution across one-digit ISCO occupations (2021)



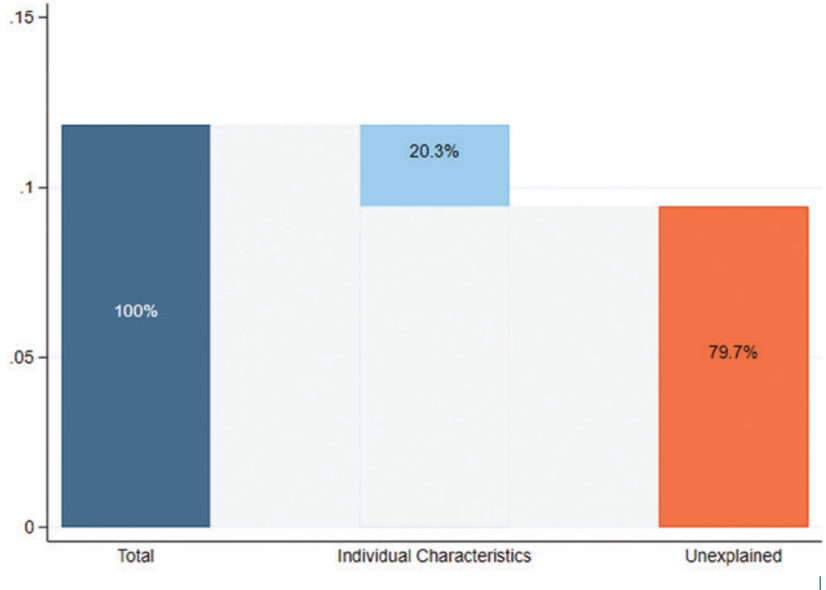
As expected, the two distributions are very different from each other. On the one hand, 46% of natives are employed in one of the three highest paid occupational categories: they work mainly as professionals (24%) and as technicians and associate professionals (17%), with only 6% employed in elementary occupations. On the other hand, only 35% of migrants work in one of the top three occupational categories and immigrants' probability of working in an elementary occupation is three times as high as for natives (18% vs 6%). The concentration in elementary occupations is especially high for non-EU immigrants: almost 20% of the

employed non-EU immigrants perform an elementary job, against less than 15% of EU migrants. Furthermore, and more concerning, the segregation in elementary occupations for non-EU migrants is not a transitory phenomenon, which vanishes with time spent in the host country, as immigrants learn the language, create new networks and familiarise with the new institutional setting. In fact, among employed non-EU immigrants who have been in the country for less than five years, 20.1% work in an elementary job, a share that diminishes by just 0.5 p.p. among their co-nationals who have emigrated earlier. By way of comparison, the share of EU migrants in elementary occupations decreases by 3.5 percentage points between recent and earlier migrants.

The situation among European countries is, however, very heterogeneous. Among the countries with a share of immigrants in the population above the 1%, Luxembourg, Ireland and Sweden stand out for having the highest proportions of immigrants in the 3 highest paid occupational categories, respectively 69, 51 and 51%. In addition, for Luxembourg and Ireland the share is not statistically different from natives. On the opposite side, immigrants in Italy, Greece and Spain are the least likely to work in high skilled and high pay occupations, with only, respectively 14, 16 and 22% of employed foreigners having a job in one of the three highest paid occupation categories. Likewise, they also display the highest difference in the probability of being in the least paid occupational category with respect to natives (respectively 19.9, 15.9 and 15.2 percentage points, or 2.5, 3.2 and 1.7 times more likely).

Figure 10: Individual characteristics explain only one fifth of immigrant occupational disadvantage

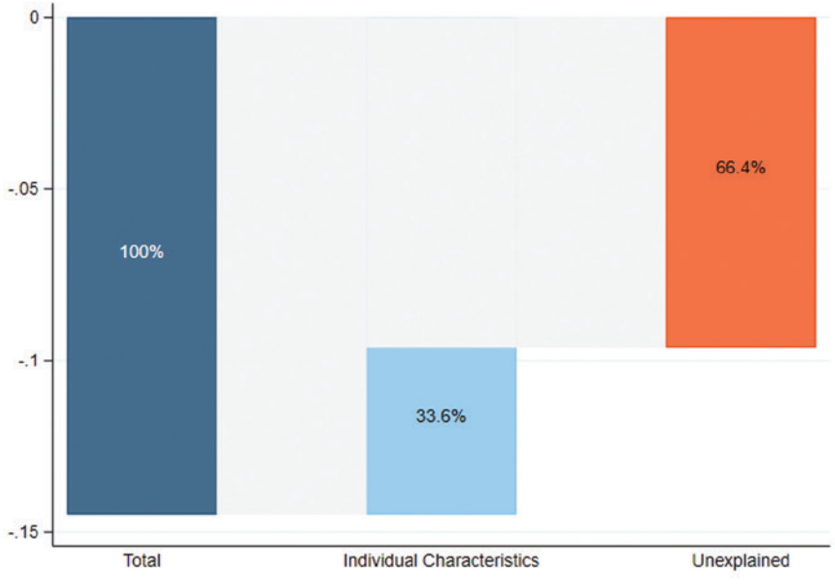
Immigrant-native difference in probability of working in an elementary occupation: overall and after accounting for individual characteristics



Importantly, Figures 10 and 11 show that the differences in individual characteristics between immigrants and natives are only able to explain a small part of the occupational disadvantage of immigrants, and especially their over-representation at the bottom of the occupational categories (Figure 10). The portion of the difference in the probability of having an elementary occupation explained by differences in age, gender and education profiles amounts to 2.5 percentage points or 20% of the total gap. Likewise, only one third of the overall lower immigrants' probability of working in one of the three highest paid occupational categories can be traced back to differences in age, gender and education profiles (Figure 11). The concentration of immigrants at the bottom of the occupational distribution also shows that immigrants' education is not being rewarded as much as natives'. In fact, immigrant skills tend to be misallocated between occupations, with formally highly educated immigrants taking up unskilled jobs, like for instance foreign graduates working as deliverymen or as cleaners or caretakers.

Figure 11: Individual characteristics explain only one third of lower immigrant concentration in the three highest paid occupational categories

Immigrant-native difference in the probability of working as managers, professionals or associate professionals

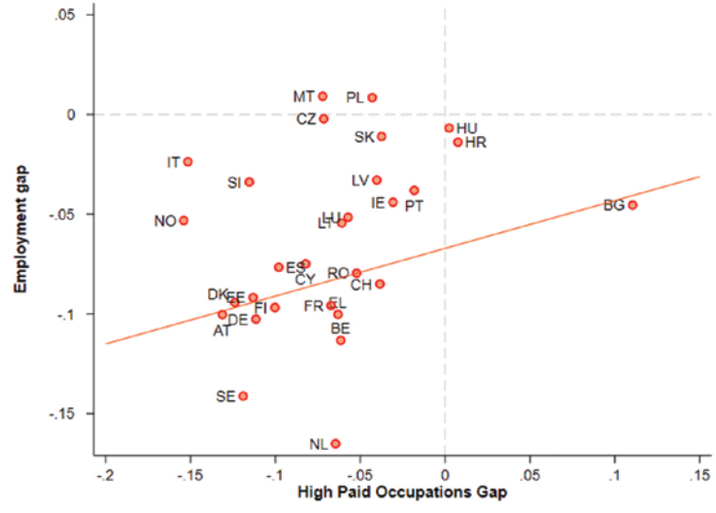


In countries where the occupational distribution of immigrants is similar to that of natives, immigrants tend to perform better also in terms of employment probability. This is shown in Figure 12 where, conditioning on age, gender and education profiles, in the top graph we display the (positive) correlation between the differentials in the probability of being at the top of the occupational distribution and the gap in employment probability. Coherently,

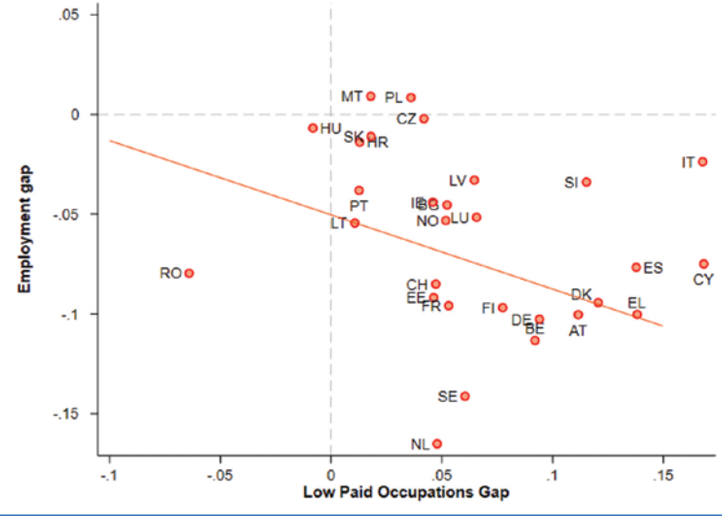
the bottom graph shows that a higher immigrant likelihood of being at the bottom of the occupational distribution is associated with a larger employment probability gap. These graphs therefore indicate that in general misallocation across occupation and employment assimilation are associated, and not alternative.

Figure 12: Occupational distribution and employment gap are correlated

Differences in employment probability and in concentration in high paid occupations between immigrants and natives with similar age-gender-education profiles (2021)



Differences in employment probability and in concentration in elementary occupations between immigrants and natives with similar age-gender-education profiles (2021)



PART II: CITIZENSHIP ACQUISITION AND THE NATURALIZATION PREMIUM

The first part of this report has analysed the characteristics of immigrants across European countries and investigated their economic integration in terms of differentials in labour market outcomes with respect to natives. We have explored different dimension of heterogeneity and shown that the degree of economic integration of migrants differs across areas of origin, migration seniority and their interactions.

In this second part we focus instead on another cleavage within the immigrant population and explore differences in labour market outcomes between naturalized and non-naturalized immigrants. Out of the 50 million foreign born residents of a European country in 2021, more than 40% were nationals of their country of residence, a share that has been growing over time. For instance, according to Eurostat, in 2021, more than 900 thousand foreign citizens have acquired the nationality of a European country, up from the more than 780 thousand who naturalized during 2020. While naturalization allows immigrants full political rights and guarantees a higher stability of their residency in the host country, its direct economic effects are limited. In most cases naturalized immigrants were already living in the country with permanent visas, and the only labour market-related real change they face is that they gain full access to all public sector jobs, which in many countries are restricted to nationals only. Yet, the indirect effects of naturalization may matter too: acquiring a European passport facilitates visa-free international travels, may signal potential employers a higher stability of residence and a lower risk of interruption of the job relationship, as well as being interpreted as the coronation of a successful integration. Whether host country citizenship, among the foreign born, is systematically associated with differences in economic integration or not is therefore ultimately an empirical question that we address in this second part of the report.

What makes citizenship status different from the other dimensions of heterogeneity that we have investigated in the first part, is that naturalization is not a pre-determined characteristic of immigrants. In fact, whether to acquire citizenship of the host country or not is a deliberate individual decision, that immigrants may take provided that they satisfy the requirement(s) that the host country has set for eligibility to naturalization. Hence, it is important to always keep in mind that differential labour market outcomes between naturalized and non-naturalized immigrants can also be driven by differences in the underlying characteristics of the two populations. A crucial difference between the two groups is that naturalization is, in most cases, an option only for immigrants who have been resident "long enough" in the country they want to become citizens of. This minimum residency requirement – which varies across European countries – implies that, by construction, non-naturalized immigrants are more likely to have arrived more recently than those who have naturalized. Since in general

recent immigrants are less integrated in the host country than those who have been there longer and have, therefore, had more time to learn host country specific skills like language, they tend to display worse labour market outcomes. Thus, the comparison of naturalized and non-naturalized immigrants' outcomes would conflate together the effect of characteristics such as longer experience in the host country and the actual effect of citizenship. For this reason, in this second part of the report, we will only focus on the economic integration of "long-term" immigrants, i.e. immigrants who have been in their current country for at least ten years and who have therefore, in most countries, met the minimum residency requirements for naturalization. Additionally, we will compute "naturalization premia" – i.e. differences in outcomes such as employment probability, occupational quality and income between immigrants with and without citizenship of their country of residence – both between the "average" naturalized and non-naturalized long-term immigrants (unconditional differentials) and between naturalized and naturalized immigrants with the same age, gender, education, area of origin and years of residence profile (conditional differentials). This latter comparison reduces – although it does not fully eliminate – the concern that differences between naturalized and non-naturalized migrants may be driven by differences in their characteristics other than citizenship status. However, since we cannot rule out that the naturalized and the non-naturalized foreign-born residents of a country differ in unobservable dimensions such as motivation, labour market attachment, language fluency, we should still be careful in giving a causal interpretation to the estimated "naturalization premium".

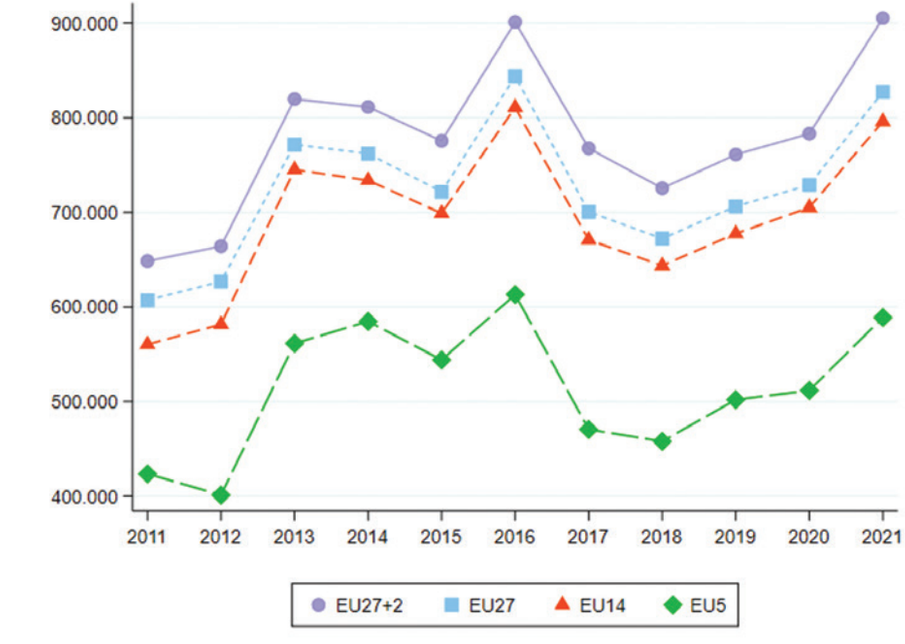
NATURALIZATIONS PATTERNS IN EUROPE – *SIZE AND CHARACTERISTICS*

Between 2011 and 2021 more than 8.5 million immigrants have acquired the citizenship of a European country, and most of them (close to 93%) have naturalized in a EU14 country.

The annual flow of new citizens has in general increased through the 2010s, as we show in Figure 13, which displays the annual number of naturalizations over the time period 2011-2021 across different aggregates of European countries. Overall, according to Eurostat data, there were about 905 thousand naturalizations across European countries in 2021, a 40% increase relative to the 648 thousand naturalizations in 2011. Besides 2021, a second major annual peak of naturalizations happened in 2016, when more than 900 thousand immigrants naturalized across the whole Europe. Two thirds of all the naturalizations occurred in Europe between 2011 and 2021 happened in the five EU countries with the highest GDP (EU5): Germany, France, Italy, Spain and the Netherlands.

Figure 13: Naturalizations in European countries have been increasing over time

Naturalizations over the time period 2011-2021

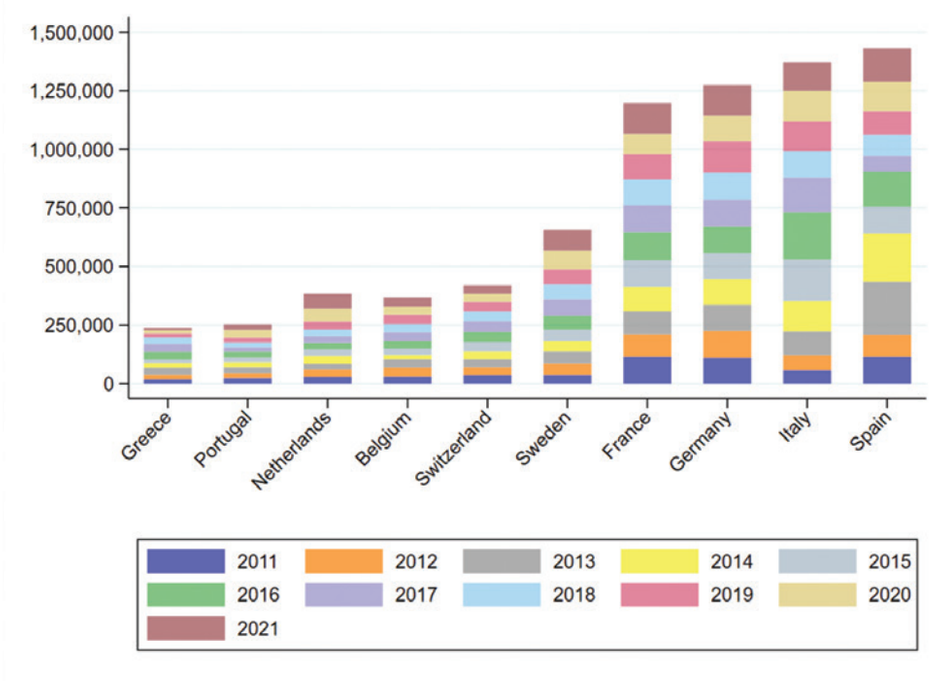


Among European countries, Spain stands out for having naturalized the highest number of immigrants over these ten years, slightly more than 1.4 million, followed by Italy (1.37 million), Germany (1.27 million) and France (1.2 million). Figure 14 provides some insight on the annual

breakdown of these naturalizations for the 10 European countries that naturalized the highest number of between 2011 and 2021. While Germany and France do not display much variation across years, Spain appears to be the main driver of the spike in naturalization that occurred during 2013 and 2014, with over double the naturalizations that took place in 2012. Similarly, even if to a lesser extent, Italy is the country that displays the sharpest increase in naturalizations over the period 2015 and 2016, respectively 37% and 55% higher than 2014. In both cases, however, the increase has been largely temporary.

Figure 14: Italy and Spain are the main drivers of the spikes in naturalizations of 2013-2016

Naturalizations by year for the ten European countries with most naturalizations in 2011 - 2021



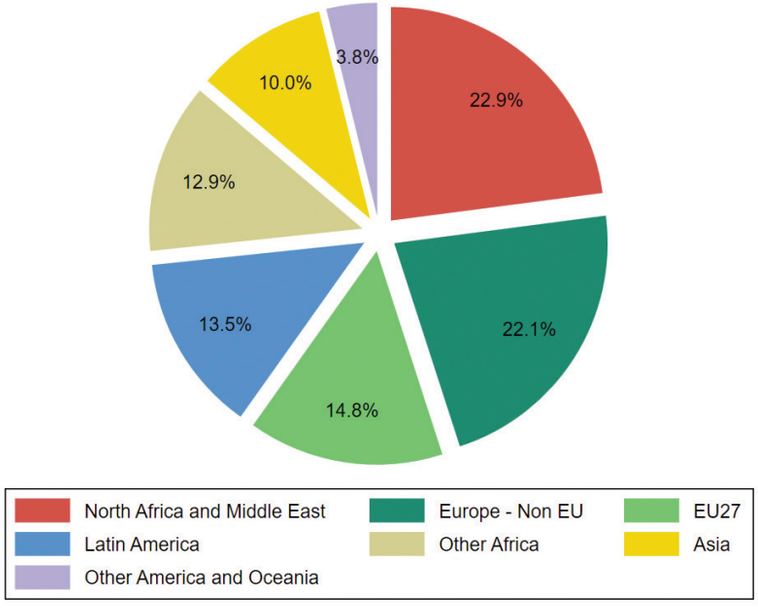
As we have shown in the first part of the report, European mobile citizens account for about one third of all immigrants in other EU countries. Yet, as Figure 15 shows, they account for only 15% of the naturalizations over the periods 2011-2021.[4] Conversely, immigrants from Africa and the Middle East, who make up overall 25% of all immigrants in the EU, account for about 36% of all naturalizations. In other words, EU immigrants' probability of acquiring

[4] *Figures 15 and 16 will only look at naturalized immigrants for whom we observe previous citizenship. In order to harmonise the geographical aggregates with those of the EU LFS, we consider as Middle East the following countries: Armenia, Azerbaijan, Bahrain, Georgia, Iran, Iraq, Israel, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, Tajikistan, Turkmenistan, United Arab Emirates, Uzbekistan and Yemen.*

the citizenship of their country of residence is less than one third than for African migrants. Likewise, Latin American immigrants account for almost 14% of all naturalizations, but only for 10% of all resident immigrants in Europe. These differences can be explained by several factors, like for instance differences in average length of stay in the current country of residence, but certainly a key role is played by the different returns that citizenship of a EU country may have for immigrants from countries outside of the European Union – relative to other migrants who are already EU nationals. We analyse later the economic returns to citizenship and how they differ across different migrant groups.

Figure 15: Less than 15% of naturalized citizens were originally from another EU country

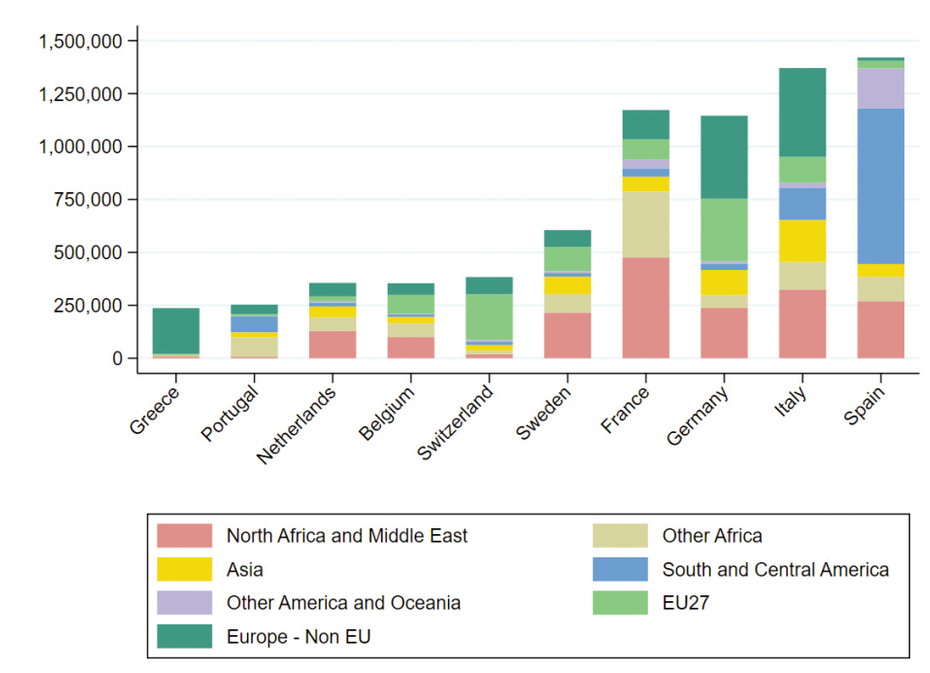
Naturalizations in Europe between 2011 and 2021, by origin



However, focusing once again on the 10 European countries with the highest number of naturalizations, there is a significant degree of heterogeneity with regard to naturalized immigrants' origins, which partly reflects differences in countries of origin mix across destination countries (Figure 16). In particular, over 50% of the migrants becoming Spanish nationals are from South and Central America (52%), while about two thirds of new citizens in France (67%) and in Germany (60%) were born in Africa or Middle East and in Europe, respectively. The country of birth mix of new Italian citizens is instead more balanced with 40% from another European country and an additional 24% from North Africa and the Middle East.

Figure 16: Significant cross-country heterogeneity with regard to origin of new citizens

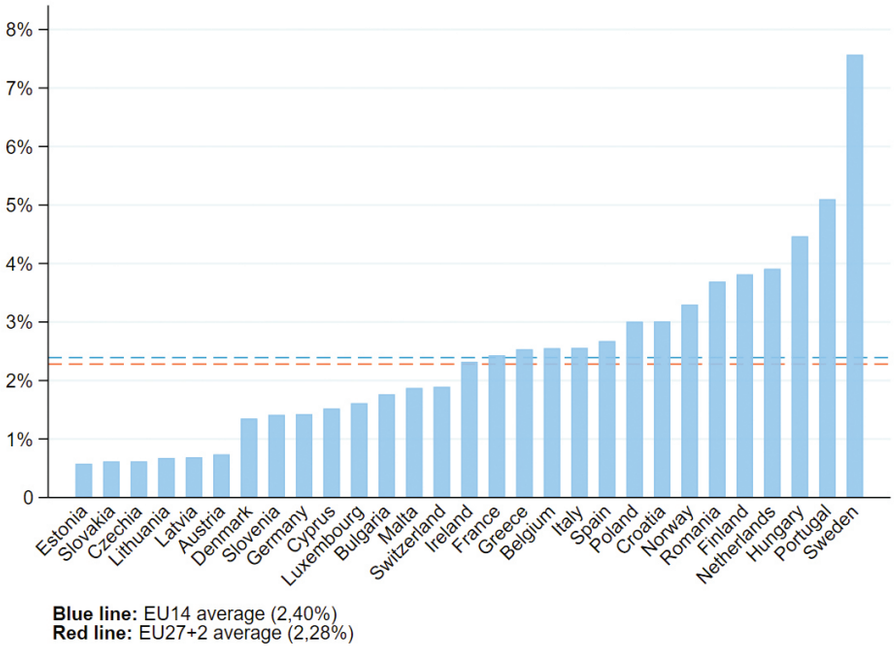
Naturalizations by origin for the ten European countries with most naturalizations in 2011 - 2021.



Over the past decade, about 2.3% of all foreign citizens in EU countries have acquired the nationality of their current country of residence in every year (Figure 17). Sweden stands out as the country with most naturalizations per year (relative to the size of its foreign-born population): more than 7.6% of immigrants in Sweden naturalized every year, which amounts to more than three times the European average and 1.5 times the rate of Portugal (5.1%), the second European country in terms of naturalizations relative to its immigrant population. At the other end of the spectrum, countries like Estonia (0.58%), Czech Republic (0.62%), Croatia (0.62%), Lithuania (0.68%), Latvia (0.69%) and Austria (0.74%) have naturalized on average less than 1% of their foreign population in every year. Despite the high number of citizenship acquisitions we have previously noted, the annual naturalization rates of Italy (2.6%), Spain (2.7%) and France (2.4%) are pretty much aligned with the European average, which indicates that their high number of naturalizations reflects the large size of their immigrant populations, rather than a high propensity to naturalization of its foreign residents, while Germany is remarkably below the EU average at only 1.4%.

Figure 17: More than 2% of immigrants naturalize in Europe every year

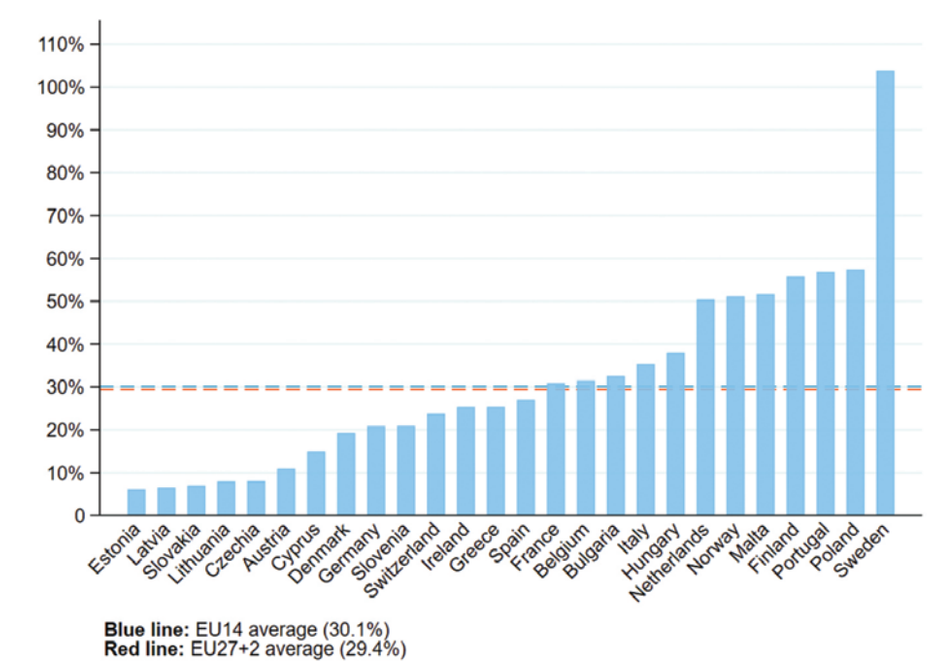
Average share of non-citizens that were naturalized each year between 2011 and 2021



These annual naturalization rates, cumulated over the eleven years considered, imply that a significant share of the foreign population has acquired citizenship of their host country over the past decade. We show this in Figure 18, which displays the ratio of the total number of individuals who acquired the nationality of their current country of residence between 2011 and 2021 to the initial stock of foreign nationals in each country in 2011. Overall, across Europe the number of naturalized immigrants amounts to more than one fourth (29.4%) of the foreign national residents in 2011. As expected, given the figures on annual flows of naturalizations, Sweden stands out as having naturalized over a decade a number of immigrants, which is equivalent to about the size of its 2011 stock, almost twice as much as Finland (56%) and Portugal (57%).

Figure 18: Over the past decade, Europe has naturalized more than 25% of its foreign born residents

Naturalizations over the period 2011-2021 as a share of resident non-citizens in 2011



NATURALIZATION AND POLICY HETEROGENEITY

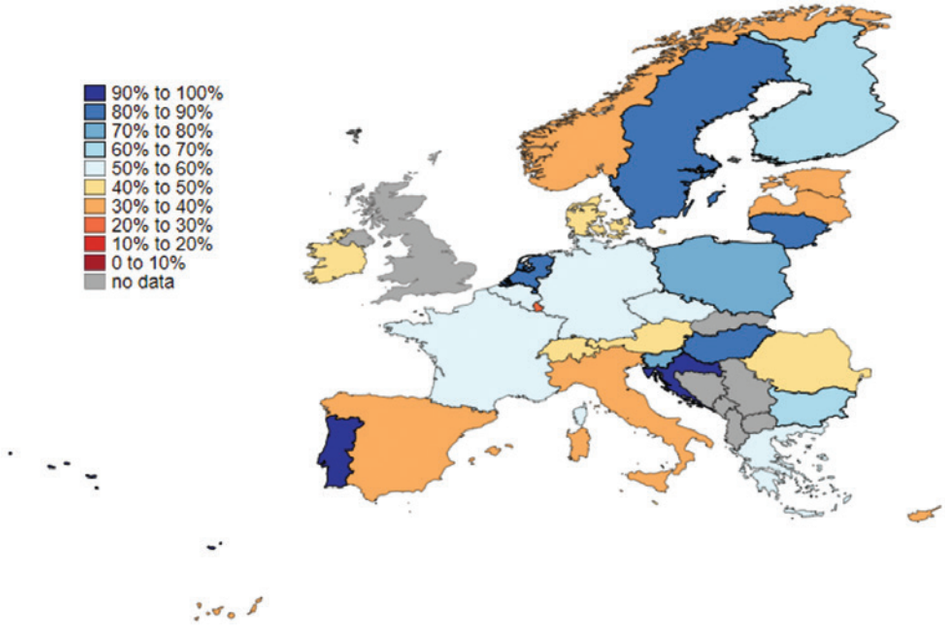
Across Europe, in 2021 there were slightly less than 21 million individuals born abroad but holding the citizenship of their country of residence. Throughout, we will refer to these individuals as "naturalized immigrants".[5] Naturalized immigrants account for about 41% of the whole foreign born population in Europe. However, this share does not mean that only about 40% of migrants in Europe have decided to apply – and have been successful – for the nationality of their country of residence. In fact, all countries impose some type of minimum residency requirement before immigrants can apply for naturalization, and hence a significant proportion of the 50.5 million immigrants in Europe is not eligible for naturalization (we discuss these requirements later). For this reason, in this section we focus on "long-term" migrants only, which we define as foreign born individuals who have spent at least ten years in their current country of residence, a period of time that – in most European countries – guarantees potential eligibility for the host country citizenship.

[5] *Note that the term "naturalized immigrants" is convenient but might be slightly misleading because the host country citizenship may have been acquired through any mode, not only through naturalization, and because some individuals whom we identify as "immigrants" because they were born abroad might have acquired their current nationality at birth.*

In Figure 19 we report the 2021 share of long-term migrants who are citizens of their country of residence. Across all Europe, 53% of all migrants who have been in their current country for ten or more years have also acquired the host country nationality. Yet, there are significant cross-country differences. In general, the share of naturalized long-term immigrants appears to be higher in Northern Europe, with Sweden having as much as 85% of its long-term foreign-born residents who have Swedish citizenship, a share that falls to 62% in Finland. Overall, among the countries with a share of immigrants in the population above 5%, the highest shares of naturalized long-term residents are recorded in Croatia (98%), Portugal (92%), Lithuania (90%), Sweden (85%) and the Netherlands (81%). The lowest rates are instead in Luxembourg (25%), Italy (35%), Latvia (36%), Norway (36%) and Estonia (38%).

Figure 19: Immigrants in Central and Northern Europe have a higher probability to be citizens of their country of residence

Share of foreign born long-term residents (10 years or more) with host country citizenship (2021)

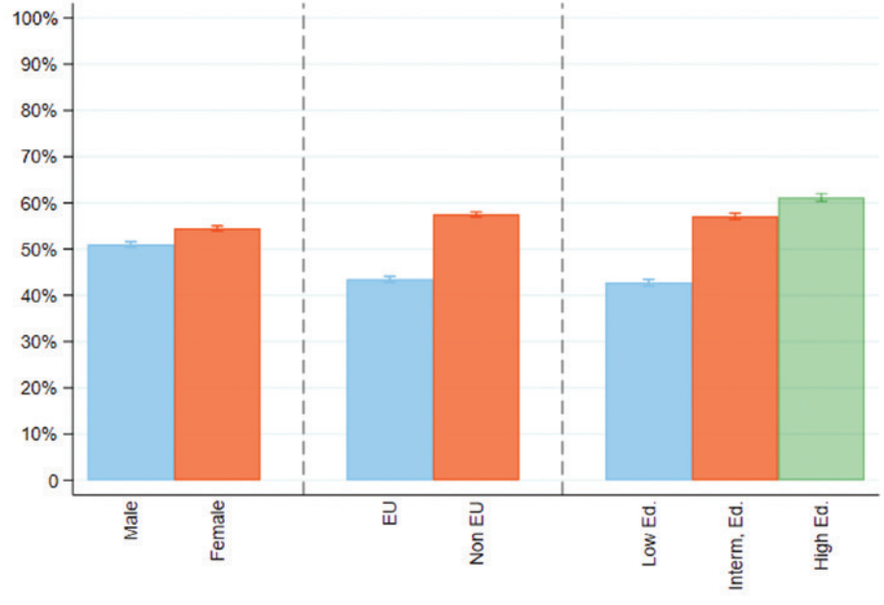


Immigrant women are slightly more likely than immigrant men to be citizens of their host country: 54.5% of all long-term immigrant women, but only 51% of men, are naturalized citizens (Figure 20).

The differences in propensity to naturalization are even larger between immigrants from different countries of origin and with different educational levels. In fact, 57.5% of long-term non-EU migrants, but only 43.5% of EU long-term migrants are citizens of their country of residence. Likewise, there is a clear educational gradient in the likelihood of naturalization, which increases markedly with educational levels starting from 43% of low-educated long-term migrants, to 57% among those with intermediate education and up to 61% among the tertiary educated.

Figure 20: Naturalizations are more frequent among women, non-EU and tertiary educated immigrants

Share of citizens among long-term migrants by sex, origin and education (2021)



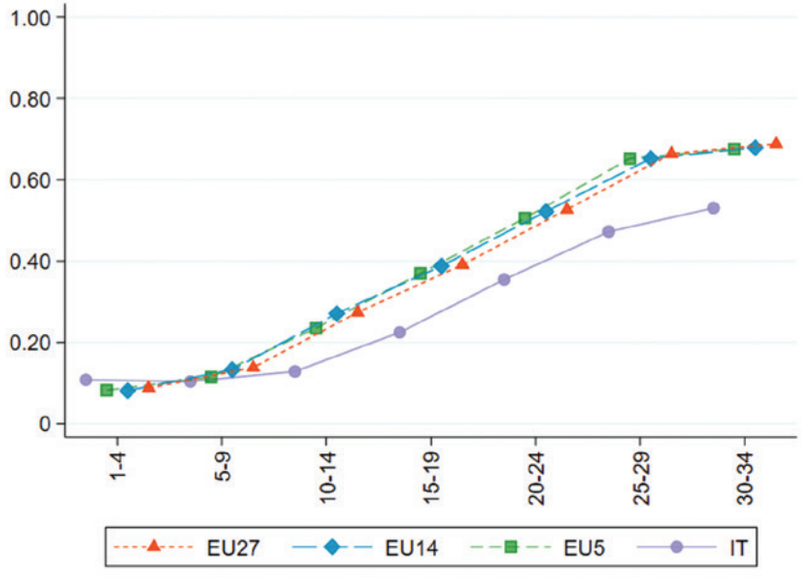
The heterogeneity by origin and education in the likelihood of naturalization reflects both differences in economic returns from citizenship and in the facility to obtain it. On the one hand, the economic benefits of citizenship might be higher for migrants with higher education who are more likely to be employed in occupations where host country nationality might help or be necessary. For instance, EU citizenship facilitates international travels and gives access to a wider range of job opportunities, including public sector employment, which in some countries is only available to nationals. On the other hand, highly educated migrants might also be more likely to meet the additional requirements beyond minimum residency (e.g. minimum earnings threshold, language fluency, etc) that many countries impose for eligibility for citizenship.

Looking at countries with a share of immigrants in the population above the 5%, Malta, Norway, Belgium, Ireland, Lithuania and the Netherlands stand out for a higher share of citizens among long-term low-educated immigrants than among those with higher education, with a difference between the two shares of respectively 20, 12, 5, 4, 4 and 2 percentage points.

The share of naturalized citizens increases in all countries among immigrants with longer periods of residency (Figure 21). Across all the EU 27, the share of foreign-born holding the host country citizenship is around 9% among those who have been in the country for at most four years and slightly higher, 14%, for immigrants who have resided in the country for five to nine years. It is only after ten years since migration, however, that the share of naturalized migrants grows significantly: 27% for immigrants who have been ten to fourteen years in the country, 39% for 15 to 19 years since migration, and 53 for those who have migrated 20 to 24 years earlier. After 25 years of residence, the share of naturalized migrants stabilises somewhat at around 70%, although in some countries such as Sweden or Portugal it is well above 90%. In fact, there is a significant degree of cross- country heterogeneity in shares of naturalized immigrants, even within immigrants with similar migration seniority. Countries like Luxembourg, Austria and Italy exhibit shares of naturalized immigrants that are consistently well below the European average, whereas the share of foreign-born population with host country nationality is always at least 30% higher (and in some cases more than 300% higher) in countries like the Netherlands, Portugal and Sweden.

Figure 21: Probability of naturalization increase with time spent in the host country

Share of naturalized immigrants by years of residence (2021)

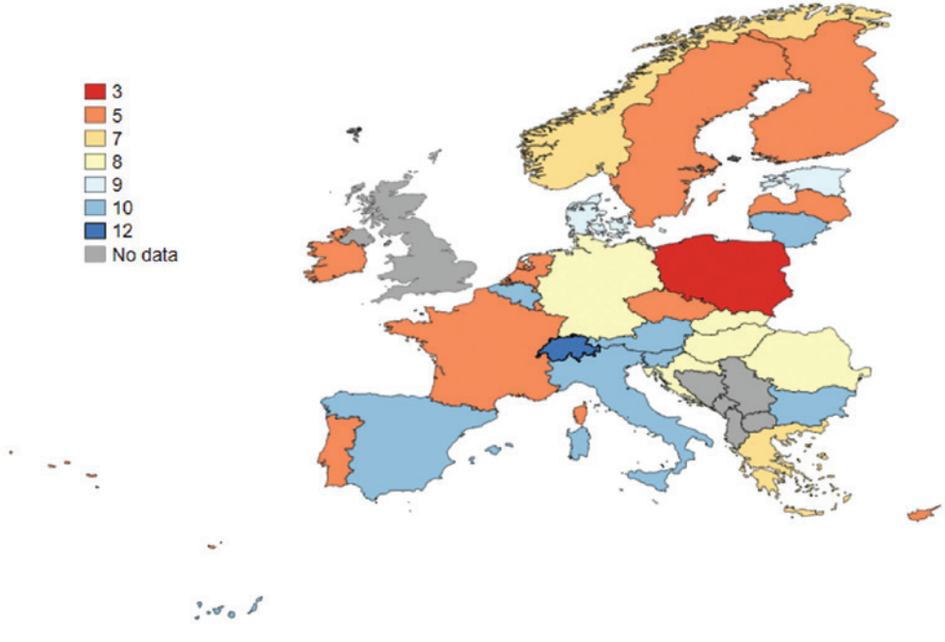


POLICY HETEROGENEITY

Every country decides what requirements to impose on foreigners who want to apply for citizenship. Such requirements aim at rationing citizenship acquisition and, typically, at making sure that only migrants who display a sufficient degree of integration or attachment to the country, or who have exhibited "good" behaviour may acquire the host country nationality. Among the most frequent requirements that countries impose are the absence of criminal records, demonstrated fluency in the official country language, sufficient knowledge of the country's history and culture, minimum earnings threshold, renunciation of other nationalities. However, one requirement that is, in different forms, imposed by all European countries is a minimum number of years of residency. On average, European countries require a minimum of 7 years of residence before immigrants can apply for naturalization, but there is a considerable amount of heterogeneity (Figure 21). Among all European countries, Switzerland stands out for being the only one with a requirement of 12 years[6], the highest in Europe. Austria, Belgium, Bulgaria, Italy, Lithuania, Slovenia and Spain, each requiring 10 years of residence are also among those imposing the most demanding requirements. The country with the shortest residency requirement is instead Poland (3 years), followed by 12 countries requiring at least 5 years.

Figure 22: There is considerable heterogeneity in residency requirements for naturalization

Residence Requirements in the European Countries (2020)

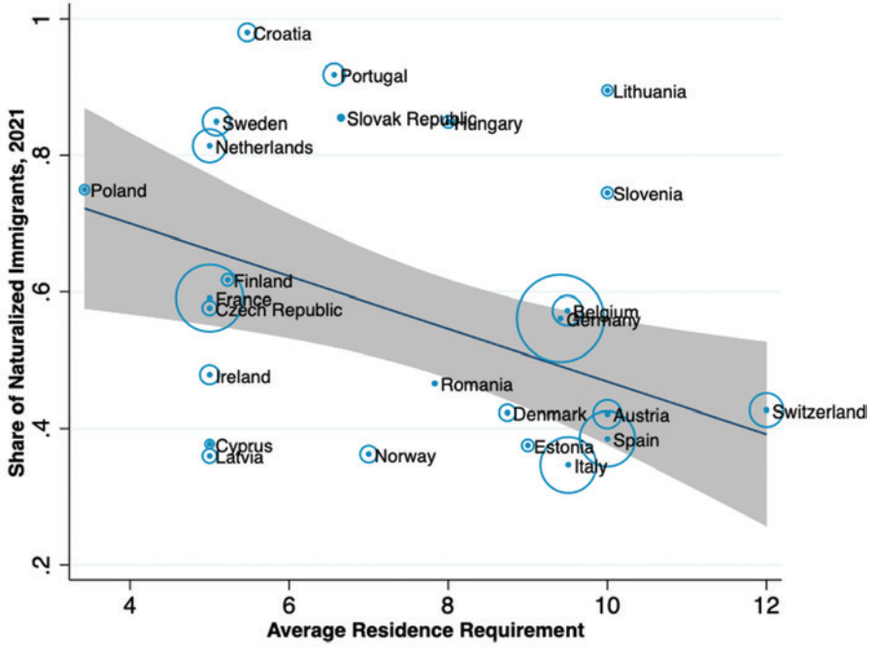


[6] *Recently reduced at 10.*

Intuitively, one might think that the cross-country heterogeneity in strictness of requirements for naturalization might contribute to explaining the cross-European differences in naturalization rates. This is what we show in Figure 23, where for each European country we plot the share of long-term foreign born residents with host country citizenship against the mean number of years of residency requirements faced by immigrants currently living in that country (i.e. we account for the fact that the residency requirements may have changed over time, and thus immigrants entered in the same country in different years may have been subject to different rules). The figure confirms the existence of a negative correlation between the share of naturalized immigrants and the strictness of residency requirements in each country: the slope of the line we have interpolated through the scatterplot implies that one additional year of residency requirement is associated with a four percentage points lower share of naturalized immigrants.

Figure 23: Negative correlation between length of residence requirement and share of naturalized immigrants

Share of naturalized long-term immigrants (2021) and average residence requirements (2010-2021). The size of each circle is proportional to the number of long-term immigrants.



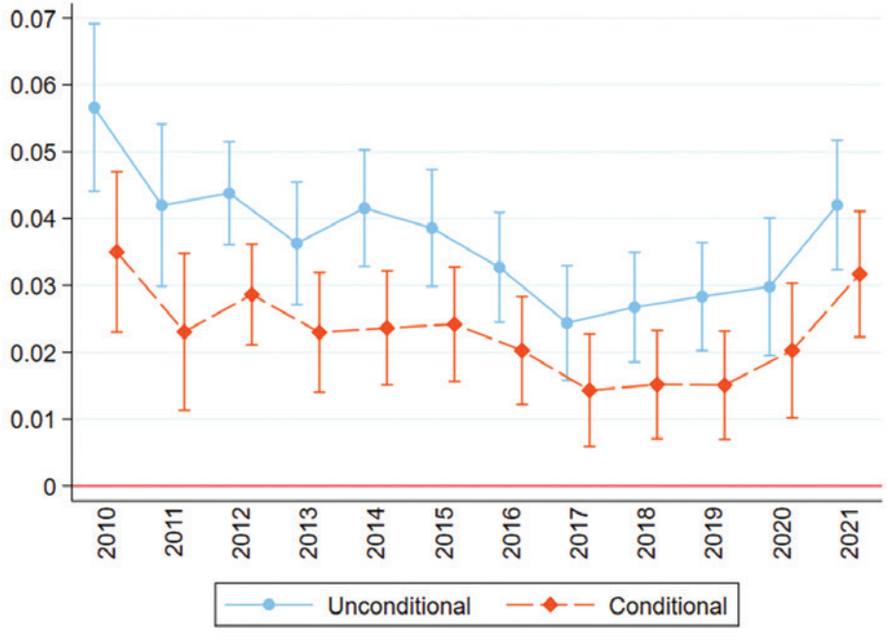
LABOUR MARKET OUTCOMES - *EMPLOYMENT*

Does naturalization matter? In this section we explore whether, and how, the labour market outcomes of naturalized immigrants differ from those of other migrants who have not acquired the host country nationality. As discussed above, in most European countries immigrants cannot apply for citizenship before having been in the country for at least five years - and in many countries the minimum residency requirement is as high as ten years. Since we know, from the first part of the report, that a longer residence in the host country is associated with better labour market integration, in what follows we will always contrast the outcomes of naturalized and non-naturalized immigrants who have been in the host country for at least ten years.

Throughout Europe, naturalized long-term immigrants display significantly higher probability of employment than those who have not naturalized: in 2021 their employment advantage was as high as 4.2 percentage points. The "employment premium" for naturalized immigrants has always been positive over the years 2010-2021, but it has fluctuated significantly over time, decreasing from 5.7 p.p. in 2010 until 2.4 p.p. in 2017, and then steadily increasing again until 2021. Of course, a potentially large part of the "naturalization premium" might simply be due to differences in individual characteristics of citizens and non-citizens, rather than to the effect of naturalization in itself. However, even when naturalized immigrants' employment probability is compared to the employment probability of their non-naturalized counterparts with similar age, gender, education profiles, and with the same length of residence in the host country, the naturalization premium is still significant: 3.2 p.p. in 2021, more than 75% of the size of the unconditional premium. It must therefore be the case that either naturalization does actually have a positive effect on employment probability, or that immigrants with unobserved characteristics that make them "more employable" are more likely to acquire the host country nationality.

Figure 24: Naturalization is associated with higher employment probability for immigrants across Europe

Conditional and unconditional differences in employment probability between naturalized and non-naturalized long-term immigrants

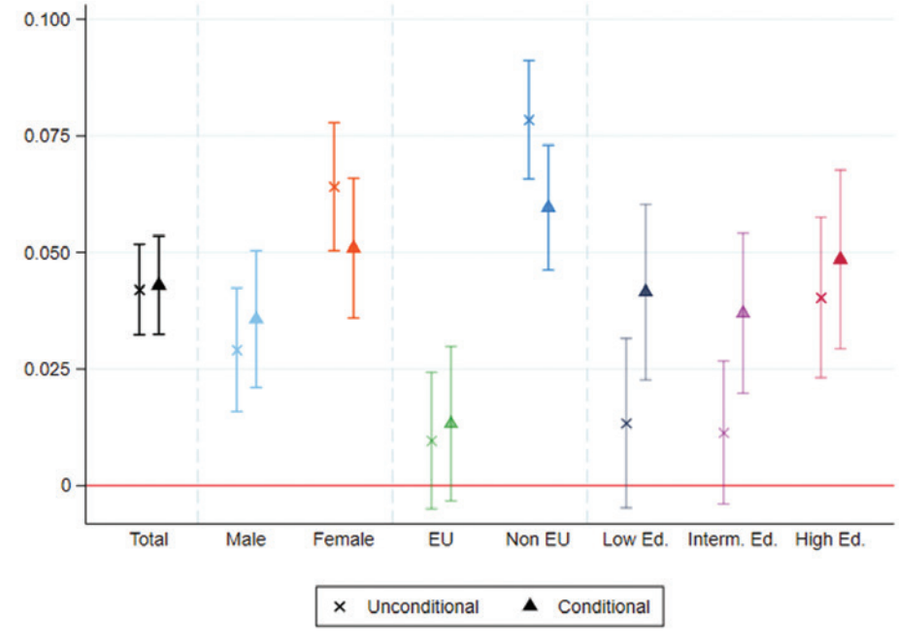


The naturalization premium is not equally large for all immigrants, as we show in Figure 25. The first important dimension of heterogeneity is by gender: the employment probability of naturalized immigrant men is 2.9 percentage points higher than the employment probability of non-citizen immigrant men, whereas the corresponding premium for naturalized women is 6.4 percentage points. This difference is even more remarkable when considering that immigrant women's employment probability is in general lower than immigrant men's, hence, relative to the baseline probability the naturalization premium of immigrant women is even larger. It is also instructive to compare the unconditional naturalization premium to the conditional one for men and women, since it highlights a different pattern of selection into citizenship between male and female immigrants. Among men, the conditional naturalization premium is slightly larger than the unconditional one (3.6 vs 2.9 p.p.), which indicates that naturalized immigrant men have on average less favourable labour market characteristics than their non-naturalized fellow countrymen. Conversely, the unconditional naturalization premium is larger than the conditional one for immigrant women (6.4 vs 5.1 p.p.), indicating that among women the probability of acquiring the citizenship of the host country is higher

for those who have better employment prospects based on their age, education, origin and years of residence profiles.

Figure 25: Naturalization is associated with higher employment for women and for non-EU immigrants

Conditional and unconditional differences in employment probability between naturalized and non-naturalized long-term immigrants - by sex, origin and education (2021)



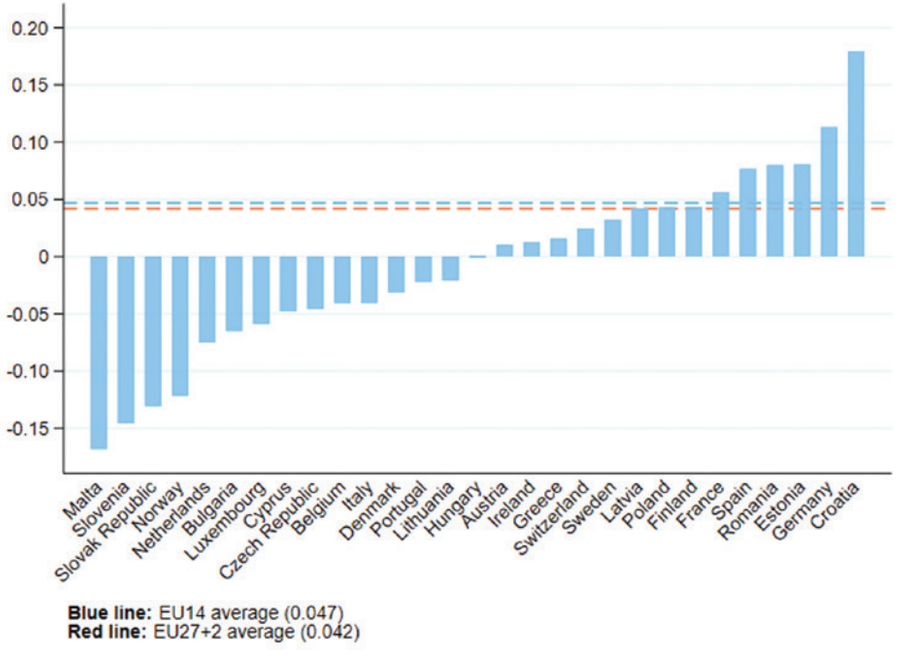
A second remarkable dimension of heterogeneity is the country of origin. As we have shown above, non-EU immigrants are significantly more likely to naturalize than those from EU countries. Figure 25 suggests that such a differential propensity to citizenship acquisition might be related to differences in the size of the employment naturalization premium. In fact, while the employment probability of naturalized EU immigrants is not significantly different from the non-naturalized, citizenship is associated with an almost 8 p.p. higher employment probability among non-EU immigrants. About one fourth of the premium can be traced down to differences in age, gender, education, origin and years of residence between naturalized and non-naturalized non-EU migrants (the conditional difference is 6 p.p.).

Finally, the heterogeneity by educational qualifications displays an interesting pattern. The unconditional naturalization premium is not statistically significant for migrants with low and intermediate levels of education, but in both cases when comparing naturalized and non-naturalized immigrants with similar characteristics, the conditional gap is estimated to be of about 4 percentage points. Such a change suggests that low and intermediately educated naturalized immigrants are more likely than their non-naturalized counterparts to possess individual characteristics that make them less attractive in the labour market. Although to a lesser extent, this result also applies to highly educated immigrants, as the conditional gap in employment probability is almost 1 percentage point higher than the unconditional gap (4.8 vs 4 p.p.).

While on average across Europe naturalized immigrants display a significantly higher employment probability than the non-naturalized, there are significant differences between destination countries, as we show in Figure 26.

Figure 26: In some countries, naturalization is associated with lower employment probability

Unconditional differences in employment probability between naturalized and non-naturalized long-term immigrants by country (2021)



Among countries with a more significant immigrant presence, the (unconditional) naturalization premium is as high as 11.3 p.p. in Germany, 7.7 p.p. in Spain and 5.6 p.p. in France, whereas it is negative in Italy (-4.1 p.p.), Belgium (-4.1 p.p.), Luxembourg (-5.9 p.p.), the Netherlands (-7.5 p.p.) and Norway (-12 p.p.). However, in Luxembourg and Norway, the negative premium is entirely explained by the less favourable age-gender-education-origin profiles of the naturalized immigrants relative to those who have not naturalized, and in Belgium the conditional premium is even positive (7.5 p.p.). Conversely, in the Netherlands and in Italy, differences in characteristics between naturalized and non-naturalized immigrants affect only marginally the estimated gap. We will analyse in more detail the case of Italy below.

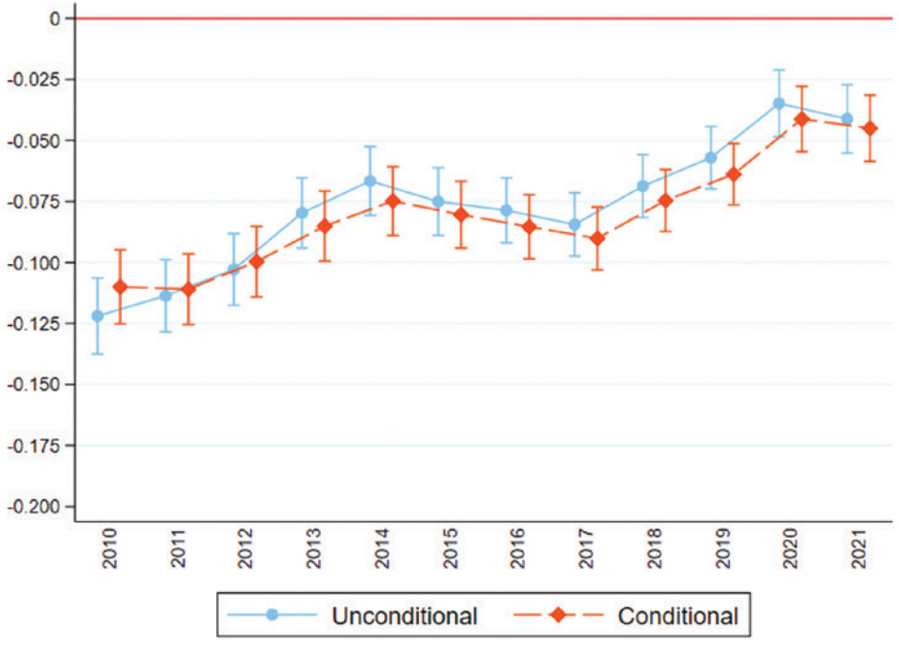
ITALY

Italy is not the only country where naturalized immigrants display negative employment probability gaps relative to their non-naturalized counterparts, but it is certainly the largest, and the one that is hosting the largest foreign-born population. For this reason, we will specifically investigate the status of naturalized citizens in Italy.

As surprising as it may seem, the negative naturalization premium in employment probability for immigrants in Italy is a persistent feature of the foreign-born population in the country (Figure 27). In fact, the differential in employment probability between naturalized and non-naturalized immigrants has been always negative between 2010 and 2021, although its size has shrunk over time, from about 12 percentage points in 2010 up to about 4 percentage points in 2020-2021. Remarkably, in all years the unconditional and conditional gaps have always been very close to each other, indicating that the overall age-gender-education-origin-years of residence profiles of naturalized and non-naturalized immigrants are very similar. Hence, the worse employment prospects of naturalized immigrants cannot be explained by negative selection into citizenship in terms of observable individual characteristics. Still, it is possible that among observationally similar immigrants in Italy those with less employment potential are more likely to naturalize.

Figure 27: In Italy, naturalized immigrants tend to have a lower probability of employment, but they are catching up

Conditional and unconditional differences in employment probability between naturalized and non-naturalized long-term immigrants in Italy



There are significant, and persistent, differences in the employment naturalization premia of male and female immigrants in Italy, as we show in Figure 28. While the differential in employment probability between citizens and non-citizens is negative for both immigrant men and women, the size of the gap is significantly larger for women, even when they are compared to other immigrant women with similar characteristics. Among men, the gap is never much larger than 4 percentage points, and in recent years it is very small and not statistically significant. On the contrary, the female gap is large and persistent, although it has decreased over time from about 16 p.p. in 2010-2011 to less than 7 p.p. in 2020-2021.

Figure 28: Gap between employment probability of naturalized and non-naturalized immigrants in Italy is driven by women and due to lower labour force participation

Conditional differences in employment and unemployment probabilities between naturalized and non-naturalized long-term immigrants in Italy, distinguishing between men and women

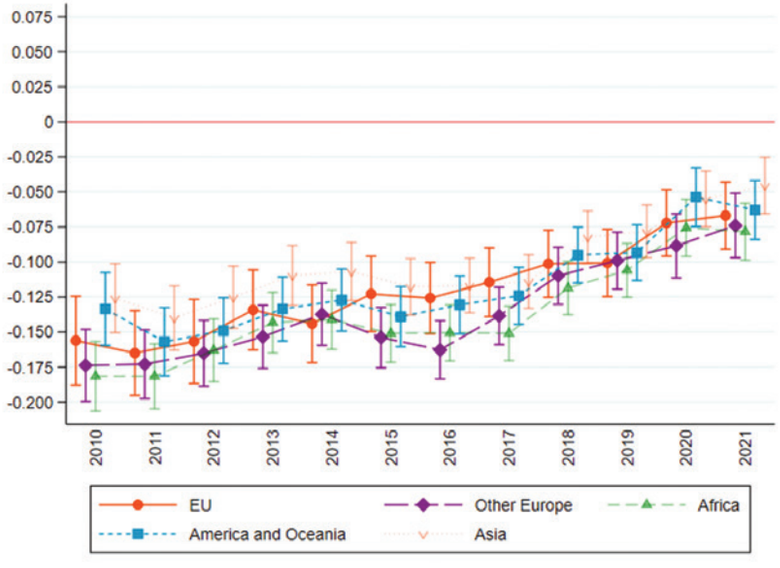
Remarkably, the gap in employment probability of naturalized women does not originate from a higher unemployment rate among those who are part of the labour force: for most of the recent years there are no statistically significant differences in the unemployment rate of naturalized and non-naturalized women (and men). Rather, differences in employment rate appear to be driven by underlying differentials in labour market participation between naturalized and non-naturalized women – but such differences are not due to differences in elements such as cultural norms in countries of origin, since differences in origin areas are accounted for.

In fact, as we show in Figure 29, immigrant women and men from all areas exhibit a very similar evolution over time of naturalization premia in employment.

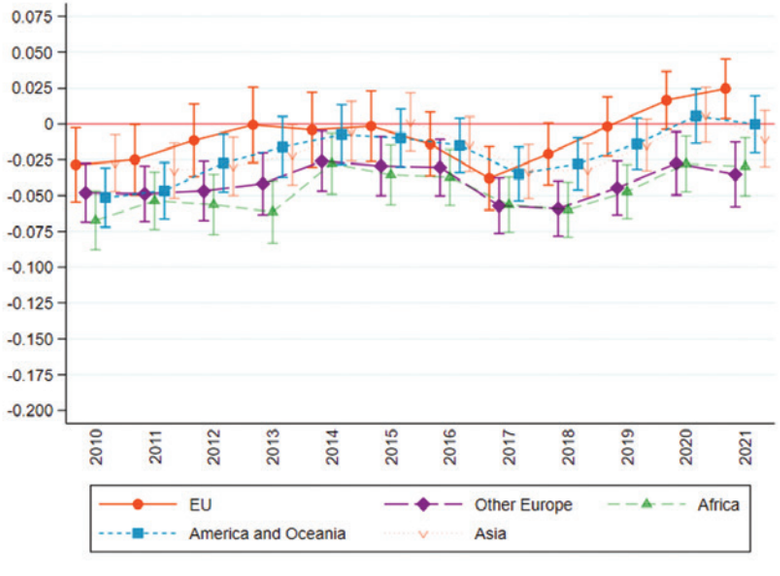
Figure 29: Naturalized women's gap in employment probability is common to all areas of origin

Conditional differences in employment probability between naturalized and non-naturalized long-term immigrants in Italy, by sex

WOMEN



MEN

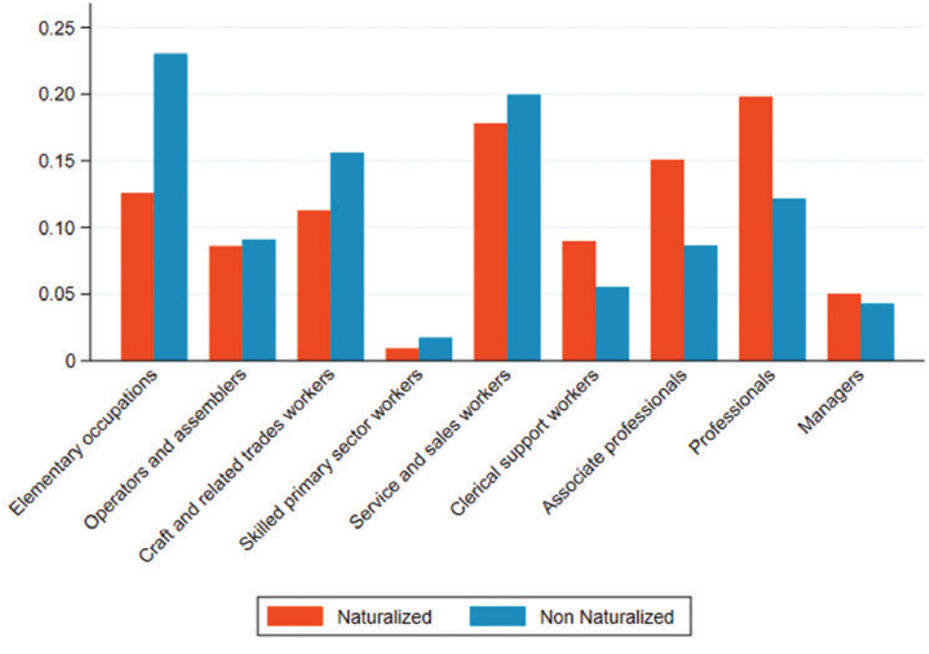


OCCUPATIONAL DISTRIBUTION

Not only do naturalized immigrants display a higher employment probability than the non-naturalized, but they are also disproportionately more likely to be employed in high-pay occupations like professionals, associate professionals and managers (Figure 30). Across Europe, the share of long-term naturalized immigrants who are employed in one of these three occupational categories is 40%, whereas it is only 30% among those who have not acquired citizenship. Similarly, naturalized immigrants are almost half as likely as the non-naturalized to be employed in a low-pay elementary occupation (13% vs 23%). Remarkably these patterns are common to almost all countries with a significant immigrant presence (with the exception of Belgium and the partial exception of the Netherlands).

Figure 30: Naturalized immigrants are more likely to have a high pay job and less likely to have a low-pay job than the non-naturalized

Distribution of naturalized and non-naturalized long-term immigrants across occupational categories (2021)

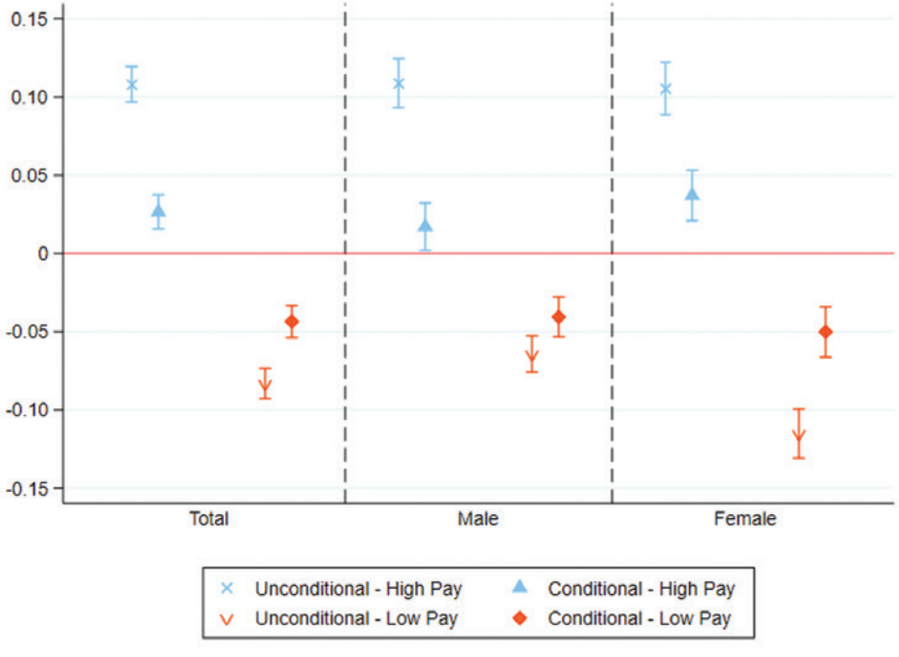


Part of the more favourable occupational distribution of foreign-born citizens relative to their non-citizen counterparts can be traced down to positive selection into citizenship. While naturalized long-term immigrants' probability of having a high pay job is 11 p.p. higher than

the non-naturalized, the gap shrinks to less than 3 p.p. when they are compared to their peers who are similar with respect to age, gender, education, origin and years of residence. Likewise, the probability that a random foreign-born citizen of the host country is employed in an elementary occupation is more than 8 p.p. lower than a random foreign-born non-citizen, but only 4.4 p.p. lower than non-citizens with similar observable characteristics (Figure 31). These patterns are common to all countries with a significant immigrant presence, and they are remarkably similar for both men and women.

Figure 31: More than half of the "naturalization premium" in occupational distribution is attributable to more favourable characteristics of naturalized citizens

Differential probability of employment in high pay and low pay occupations of naturalized and non-naturalized long-term immigrants, overall and by gender (2021)

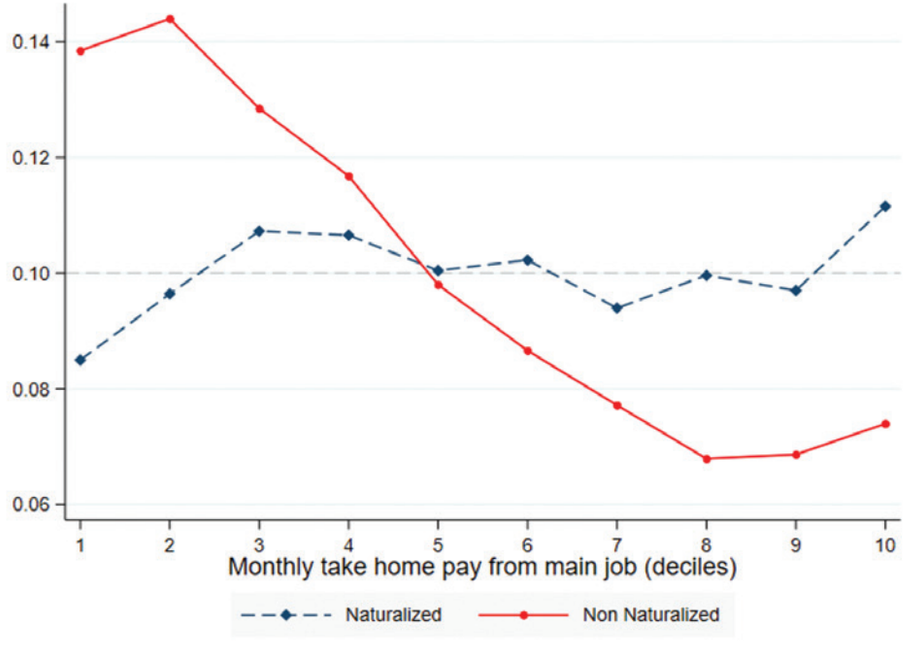


INCOME

The better occupational distribution of naturalized immigrants is reflected also in higher earnings relative to those without citizenship. Figure 32 displays the share of naturalized (dashed blue line) and non-naturalized (solid red line) long term immigrants in each decile of the national income distribution, pooling together all countries for which income information is available.[7] The distributions of the two populations across income deciles are markedly different: non-naturalized immigrants are over-concentrated in the bottom income deciles and less concentrated in the top deciles, while the distribution of naturalized immigrants is more even. About 14% of non-naturalized long-term immigrants have earnings that fall in the bottom decile of the income distribution of their country of residence, while the corresponding share is 5 p.p. lower for those who have acquired the host country nationality. Likewise, about 11% of naturalized but only about 7.5% of non-naturalized immigrants' earnings fall in the top income decile.

Figure 32: Naturalized immigrants are less likely to be in bottom income deciles than non-naturalized

Distribution of naturalized and non-naturalized immigrants along national income deciles (2020)

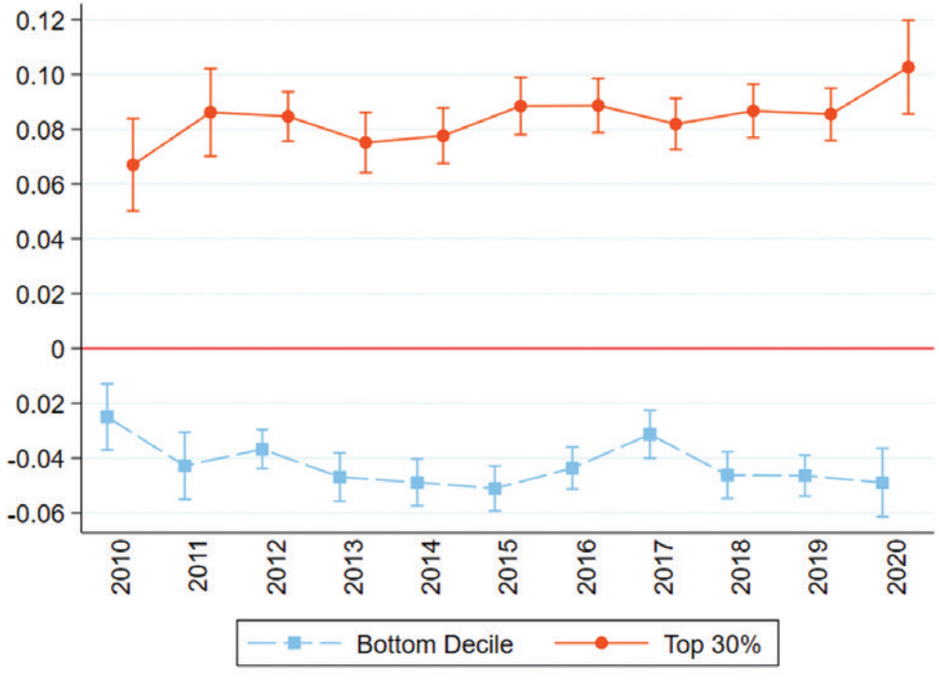


[7] *Income information is not available in 2021, but only until 2020, and it is not reported for Austria, Czech Republic, Germany, Norway, Slovakia, Slovenia, Spain and Sweden.*

The income advantage of naturalized immigrants is persistent and slightly growing over time, as shown in Figure 33, which reports the differential probability of being in the bottom income decile (blue line) and of being in the top three deciles (orange line) between naturalized and non-naturalized for all years between 2010 and 2020. Both differentials increase somehow (in absolute value) over time: in 2010 naturalized immigrants were 2.5 p.p. less likely to be in the bottom decile and 6.7 p.p. more likely to be in one of the top three deciles than the non-citizens, a differential that has increased to respectively 4.9 p.p. and 10.3 p.p. by 2020.

Figure 33: Income advantage of naturalized immigrants is persistent over time

Differential probability of being in bottom and in top three income deciles between naturalized and non-naturalized immigrants (2020)



The effect of naturalization on income is heterogeneous across different groups of immigrants. We show this in Figure 34, where we report in the top graph differentials in probability of being in the bottom income decile between citizens and non-citizens and in the bottom graph the differentials in the probability of being in the top three income deciles, overall and by gender, origin, and education. In all cases, we display both unconditional gaps and gaps relative to non-naturalized immigrants with the same individual characteristics.

Naturalization is associated with a drastic decrease in the probability of being at the bottom of

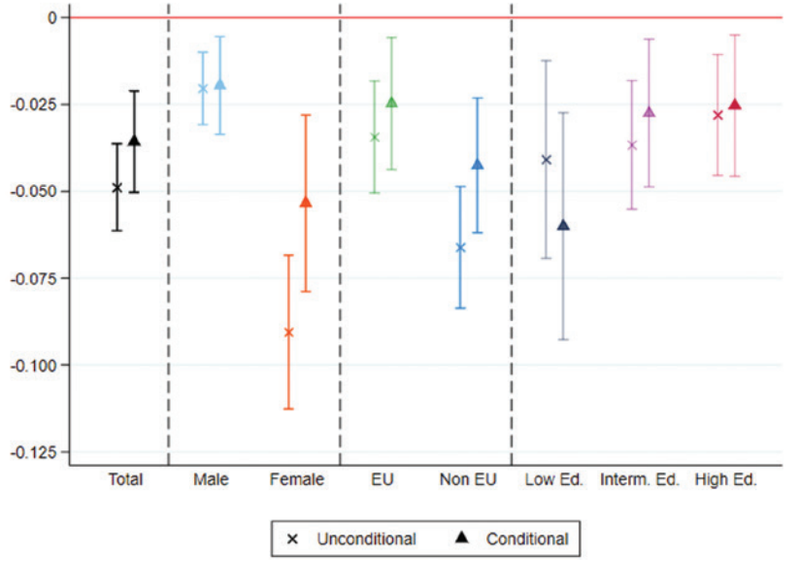
the income distribution for women (9 p.p.), whereas the corresponding differential is smaller for men (2 p.p.). However, since the baseline probability of being in the bottom decile for non-naturalized women is significantly higher than for men (24.5% vs 6.5%), in percentage terms the decrease is of similar magnitude: 37% for women and 31% for men. Conversely, the probability of being in one of the top three income deciles for naturalized immigrant men is 15 p.p. higher than for the non-naturalized, but the same differential is less than half (6.4 p.p.) among women. Since the baseline probability of being in one of the top three deciles for men is about twice that for women (23% vs 11%), in percentage terms the gender difference is less dramatic: 67% for men and 57% for women. Hence, naturalization for men is associated especially with a substantial increase in the probability of being at the top of the income distribution, whereas for women it is associated in particular with a sizable decrease in the probability of being at the bottom, though it also leads to a sizable increase in the probability of being at the top of the income distribution.

When it comes to areas of origin, naturalization is associated with a larger income premium for non-EU than for EU migrants. In fact, the gap in the probability of being in the bottom income decile between naturalized and non-naturalized non-EU migrants is twice as large as the corresponding gap for EU mobile citizens (6.6 p.p. vs 3.4 p.p.). Such a difference is not only explained by a lower baseline probability for non-naturalized EU migrants of having a low income (11%) relative to non-naturalized non-EU nationals (17%). Additionally, the increase in the probability of being in the top three income deciles for naturalized non-EU migrants is more than twice as large as for EU migrants: 14.2 vs 6.9 percentage points, which in percentage terms correspond respectively to a 112 and a 26% increase relative to the baseline.

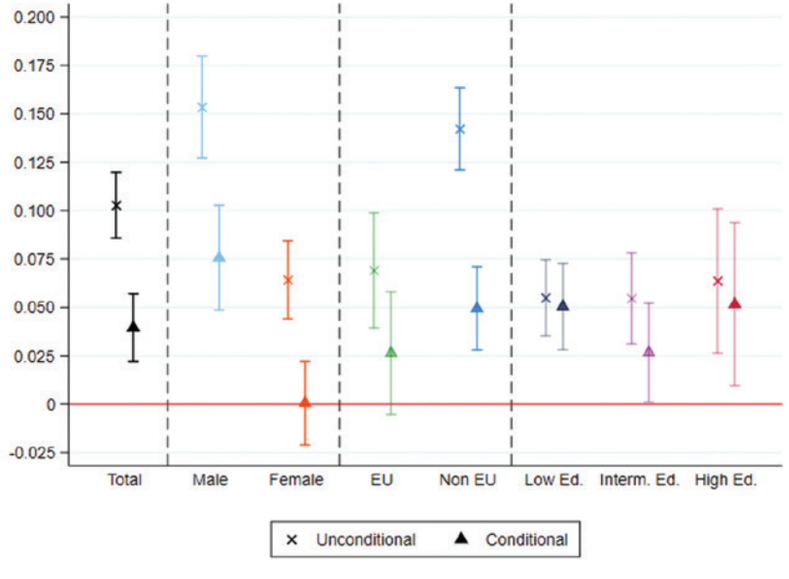
Across education groups, naturalization is associated with a similar percentage point reduction in the probability of being in the bottom income decile: 4.1 p.p., 3.7 p.p., and 3 p.p. for migrants with low, intermediate and high education, respectively. Likewise, the percentage point increase in the probability of being in the top three income deciles is similar across education groups: 5.5 for low and intermediately educated long-term migrants and 6.4 p.p. for those with tertiary education. However, the baseline probabilities of being at the bottom of the income distribution are strongly decreasing with education, and conversely the probability of being at the top of the income distribution increases with education. The probability of being in the bottom decile for non-naturalized long-term migrants decreases from 19% among the low educated, to 14.5% for those with intermediate education, until 7.5% for the highly educated. Therefore, in percentage terms the effect is strongest for the tertiary educated (a 40% reduction) and smaller for the low or intermediately educated (21% and 25% reduction respectively). Likewise, the probability of being in the top three income deciles for immigrants without host country citizenship is 7% for those with low-education, 14% for the intermediately educated and 43% for the highly educated, which implies respectively a 81, 40 and 15% increase in such a probability associated with naturalization for the three education groups.

Figure 34: Income advantage of naturalization is stronger for women and non-EU migrants

Differential probability of being in bottom income decile between naturalized and non-naturalized long-term immigrants, overall and by gender, origin, education (2020)



Differential probability of being in top three income deciles between naturalized and non-naturalized long-term immigrants, overall and by gender, origin, education (2020)



As Figure 34 shows, the strong association between citizenship and higher incomes for non-EU and female migrants is largely explained by the more favourable characteristics of the migrants in these groups who acquire the host country nationality relative to those who do not.

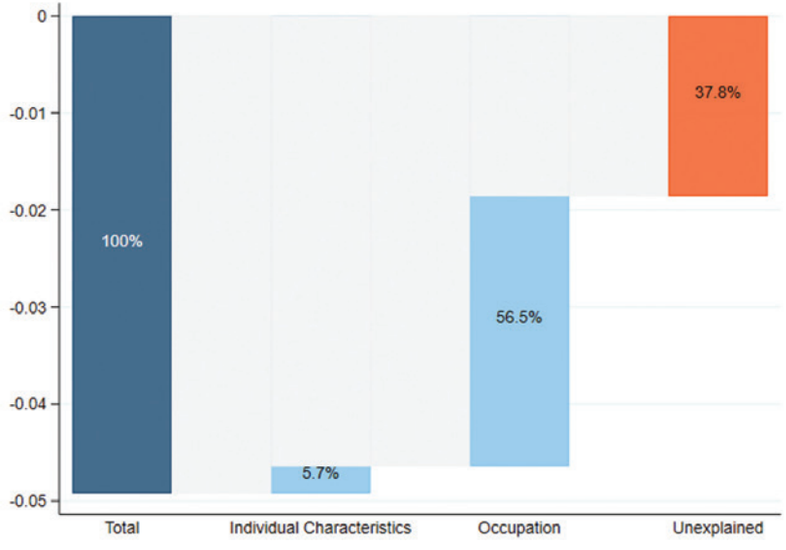
We investigate the role of individual characteristics further in Figure 35, where we have decomposed the overall differential in the probability of being in the bottom income decile (top graph) and in the top three income deciles (bottom graph) between naturalized and non-naturalized immigrants into a part which is due to differences in age, gender, education, origin and years since migration ("Individual characteristics"), a part which originates from differences in type of jobs ("Occupation") and a part which cannot be explained by neither of these two sets of variables.

Across Europe, naturalized long-term immigrants are 4.9 p.p. less likely than those who did not obtain the host country nationality to be in the bottom income decile. Only 2.8 percentage points, less than 6% of the overall gap, is explained by differences in individual characteristics between the groups. Instead, 56.5% of the gap (2.8 p.p.) can be traced down to the differential occupational distribution of naturalized and non-naturalized migrants. The remaining 38% of the gap instead remains unexplained. Looking at the other end of the income distribution spectrum, immigrants with citizenship are 10.3 p.p. more likely to be at or above the eighth decile than those without citizenship. Dissimilarities in personal characteristics account for less than one fourth of this differential (2.5 p.p.), whereas almost two thirds (63.8% of the total, or 6.6 p.p.) are explained by differences in the types of jobs performed. Only 12.2% of the overall differential remains unexplained.

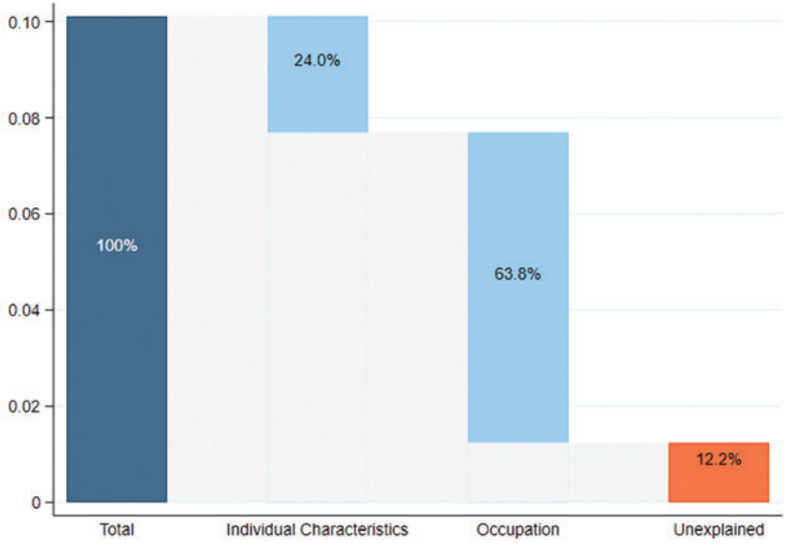
Hence, the income naturalization premium is primarily associated with access to better and more rewarding occupations than with differences in earnings within the same broad class of occupations.

Figure 35: Job characteristics explain more than half of the income advantage of naturalized immigrants

Differential probability of being in bottom income decile between naturalized and non-naturalized long-term immigrants: overall and after accounting for individual characteristics and occupational clustering (2020)



Differential probability of being in top three income deciles between naturalized and non-naturalized long-term immigrants: overall and after accounting for individual characteristics and occupational clustering (2020)



CONCLUSIONS

Over the last decade, about 2% of the foreign-born living in Europe have acquired the nationality of their country of residence. In 2021, EU member states granted citizenship to 820 thousand residents (more than 900 thousand when considering also Norway and Switzerland). Acquiring the nationality of a country has a strong symbolic value: even when the new country of citizenship does not require renunciation of the nationality of the country of origin, naturalization implies becoming formally part of a new community. Perhaps due to its highly symbolic and loaded nature, proposals to facilitate citizenship acquisition by residence or by birthright are met with considerable scepticism if not outright opposition in many European countries. On the other hand, it is often not clear why citizenship should really matter, from an economic point of view, for migrants who already are entitled to permanent residency.

The analysis we have presented in this report has shown that naturalized immigrants perform better than those who have not naturalized in several relevant labour market dimensions: employment probability, occupational quality, income. What is more, the naturalization premium is higher for those migrant categories who are in general more disadvantaged in European labour markets, like women and non-EU migrants. Importantly, we have shown that differences in individual characteristics such as age, gender, education, area of origin and years of residence between naturalized and non-naturalized migrants do not explain differences in labour market outcomes between immigrants and natives. Although it is still possible that immigrants who choose to become citizens of their host country differ in their willingness to integrate from those who do not, and therefore a causal interpretation of these findings is not warranted, this evidence suggests that facilitating access to the host country citizenship might facilitate immigrants' integration. If that is the case, naturalization might be thought of as a particularly cost-effective integration policy: the cost of naturalizing foreign citizens is close to zero, and the return – in proportion to the investment - is therefore massive. Importantly, this seems an area where policy changes may indeed make a difference. As we have shown, the minimum number of years of residency required by a country for immigrants to be eligible for naturalization is in fact negatively correlated with the share of naturalized immigrants in each country: on average one additional year of residency requirement is associated with a four percentage points lower share of naturalized immigrants.

Tables Appendix – Europe

Table A1: Stock of immigrants in Europe, overall and recent arrivals

Country	Stock		Recent Immigrants	
	Thousand	% of population	Thousand	% of immigrants
Austria	1,736	20	325	19
Belgium	1,925	17	308	16
Bulgaria	17	0	4	26
Croatia	358	9	4	1
Cyprus	194	22	63	33
Czech Republic	418	4	70	17
Denmark	540	9	69	13
Estonia	152	12	12	8
Finland	376	8	49	13
France	7,618	12	577	8
Germany	14,307	17	2,891	20
Greece	629	6	17	3
Hungary	252	3	40	16
Ireland	973	20	177	18
Italy	5,776	10	470	8
Latvia	217	12	14	7
Lithuania	147	5	12	8
Luxembourg	281	54	32	11
Malta	115	23	12	10
Netherlands	2,102	15	456	22
Norway	446	9	60	13
Poland	216	1	48	22
Portugal	645	6	49	8
Romania	47	0	17	36
Slovak Republic	61	1	8	13
Slovenia	186	9	24	13
Spain	6,667	14	1,285	19
Sweden	1,795	22	370	21
Switzerland	2,343	32	447	19
EU14	45,370	14	7,074	16
EU27	47,750	11	7,403	16
All	50,539	11	7,910	16

The table reports, for each country, the size of the immigrant population, expressed in thousands as well as share of the total population. It also reports the size of the population of recent immigrants, defined as immigrants who have been in the country for at most five years, and the share of recent immigrants over the total immigrant population. The three bottom rows report the mean values for the EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.

Table A2: Distribution of immigrants by area of origin

Country	% from EU	% from Europe non-EU	% from North Africa and the Middle East	% from Other Africa	% from Latin America	% from Other America and Oceania	% from Asia
Austria	45	36	8	2	2	1	7
Belgium	45	10	20	14	3	1	7
Bulgaria	37	63	0	0	0	0	0
Croatia	13	87	0	0	0	0	0
Cyprus	35	24	17	3	0	2	18
Czech Republic	61	26	6	1	0	1	5
Denmark	29	23	16	6	4	3	20
Estonia	4	92	3	0	0	0	0
Finland	31	26	12	9	2	1	19
France	22	10	38	16	5	1	8
Germany	36	29	22	3	2	1	8
Greece	20	54	17	1	0	6	2
Hungary	61	28	3	1	2	2	4
Ireland	36	34	2	7	5	6	11
Italy	29	25	13	6	10	1	15
Latvia	13	82	4	0	0	0	0
Lithuania	10	81	7	0	0	1	0
Luxembourg	77	8	3	4	3	1	3
Malta	100	0	0	0	0	0	0
Netherlands	26	14	18	7	17	2	16
Norway	76	24	0	0	0	0	0
Poland	31	69	0	0	0	0	0
Portugal	30	10	0	40	15	2	2
Romania	49	31	16	0	1	0	2
Slovak Republic	72	23	3	0	0	0	1
Slovenia	27	73	0	0	0	0	0
Spain	23	9	13	2	45	1	6
Sweden	28	13	28	10	5	2	15
Switzerland	58	19	4	4	6	2	7
EU14	31	20	21	7	11	1	9
EU27	31	22	20	7	10	1	9
All	32	22	19	6	10	2	9

The table reports, for each country, the share of immigrants from each area of origin out of the total immigrant population. The three bottom rows report the mean values for the EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.

Table A3: Gender composition of immigrants and education rates of natives and immigrants

Country	% Women	Immigrants		Natives	
		% Lower secondary education	% Tertiary education	% Lower secondary education	% Tertiary education
Austria	52	24	34	11	35
Belgium	52	31	39	16	45
Bulgaria	60	2	56	17	29
Croatia	55	20	22	12	25
Cyprus	56	20	42	13	49
Czech Republic	50	11	36	5	26
Denmark	50	26	42	16	42
Estonia	60	5	48	11	40
Finland	49	16	32	9	44
France	53	32	37	15	42
Germany	50	35	28	10	32
Greece	56	28	21	19	37
Hungary	55	10	39	14	29
Ireland	51	7	60	15	50
Italy	55	48	13	35	21
Latvia	60	5	37	8	40
Lithuania	58	3	42	5	46
Luxembourg	49	22	58	16	39
Malta	50	28	41	42	27
Netherlands	52	33	39	17	44
Norway	47	15	51	15	48
Poland	58	1	58	7	33
Portugal	57	30	36	42	29
Romania	35	14	48	19	19
Slovak Republic	55	5	34	7	28
Slovenia	48	20	20	7	43
Spain	54	35	32	35	43
Sweden	50	28	47	7	47
Switzerland	51	26	44	5	45
EU14	52	34	31	21	36
EU27	52	33	31	18	34
All	52	33	32	18	34

The table reports, for each country, the share of women among immigrants, the share of immigrants aged 25 to 64 with at most lower secondary education (ISCED 0-2), the share of immigrants aged 25 to 64 with tertiary education (ISCED 5-8) and, by comparison, the corresponding shares among the native population. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.

Table A4: Employment gap between immigrants and natives, overall

Country	Immigrants	
	Unconditional	Conditional (individual characteristics)
Austria	-0.085 ***	-0.100 ***
Belgium	-0.132 ***	-0.113 ***
Bulgaria	0.010	-0.045
Croatia	-0.062 ***	-0.014
Cyprus	-0.055 ***	-0.075 ***
Czech Republic	-0.006	-0.002
Denmark	-0.102 ***	-0.094 ***
Estonia	-0.101 ***	-0.092 ***
Finland	-0.093 ***	-0.097 ***
France	-0.125 ***	-0.096 ***
Germany	-0.127 ***	-0.103 ***
Greece	-0.113 ***	-0.100 ***
Hungary	0.023 ***	-0.007
Ireland	-0.009	-0.044 ***
Italy	-0.034 ***	-0.024 ***
Latvia	-0.069 ***	-0.033
Lithuania	-0.102 ***	-0.054 ***
Luxembourg	0.006	-0.052 ***
Malta	0.075 ***	0.009
Netherlands	-0.183 ***	-0.165 ***
Norway	-0.034 **	-0.053 ***
Poland	0.089 ***	0.008
Portugal	0.012	-0.038 **
Romania	-0.014	-0.080
Slovakia	0.010	-0.011
Slovenia	-0.096 ***	-0.034 ***
Spain	-0.063 ***	-0.077 ***
Sweden	-0.173 ***	-0.141 ***
Switzerland	-0.090 ***	-0.085 ***
EU14	-0.100 ***	-0.092 ***
EU27	-0.096 ***	-0.088 ***
All	-0.095 ***	-0.087 ***

*The table reports, for each country, the percentage point difference between immigrants and natives aged 25 to 64 in the probability of employment overall (column I), or alternatively when differences in age, gender and education characteristics are also taken into account (column II). The differences are computed as coefficients on an immigrant dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A5: Employment gap between immigrants and natives, by origin

Country	EU		Non-EU	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	-0.018 ***	-0.068 ***	-0.135 ***	-0.130 ***
Belgium	-0.004	-0.017	-0.218 ***	-0.177 ***
Bulgaria	0.156 **	0.042	-0.055 ***	-0.077
Croatia	-0.011	-0.054 *	-0.071 ***	-0.003
Cyprus	-0.007	-0.028 **	-0.081 ***	-0.082 ***
Czech Republic	-0.003	-0.007	-0.009 ***	-0.007
Denmark	0.000	-0.024 **	-0.141 ***	-0.120 ***
Estonia	-0.081	-0.106 *	-0.102 ***	-0.093 ***
Finland	-0.008	-0.021	-0.133 ***	-0.132 ***
France	-0.019	0.035 **	-0.149 ***	-0.122 ***
Germany	-0.031 ***	-0.019 ***	-0.174 ***	-0.146 ***
Greece	-0.054	-0.042	-0.127 ***	-0.094 ***
Hungary	0.052 ***	0.024 **	-0.022 ***	-0.048 ***
Ireland	0.020	-0.016	-0.026 ***	-0.062 ***
Italy	-0.024 ***	-0.018 ***	-0.038 ***	-0.005
Latvia	0.018	0.002	-0.081 ***	-0.040
Lithuania	-0.003	0.005	-0.112 ***	-0.061 ***
Luxembourg	0.026 **	-0.028 ***	-0.056 ***	-0.128 ***
Malta	0.147 ***	0.043 **	0.033 ***	-0.008
Netherlands	-0.040 ***	-0.052 ***	-0.233 ***	-0.200 ***
Norway	-0.012	-0.036 **	-0.103 ***	-0.107 ***
Poland	0.098 ***	-0.013	0.086 ***	0.013
Portugal	0.099 ***	0.014	-0.032 ***	-0.058 ***
Romania	-0.322 ***	-0.285 ***	0.062 ***	-0.070
Slovak Republic	0.006	0.012	0.018 ***	-0.063 *
Slovenia	-0.087 ***	-0.016	-0.099 ***	-0.036 ***
Spain	-0.028 *	-0.052 ***	-0.075 ***	-0.076 ***
Sweden	-0.026 ***	-0.032 ***	-0.220 ***	-0.179 ***
Switzerland	-0.021 ***	-0.028 ***	-0.173 ***	-0.155 ***
EU14	-0.022 ***	-0.027 ***	-0.132 ***	-0.114 ***
EU27	-0.020 ***	-0.025 ***	-0.128 ***	-0.109 ***
All	-0.020 ***	-0.026 ***	-0.129 ***	-0.110 ***

*The table reports, for each country and separately for EU and non-EU immigrants, the percentage point difference between immigrants and natives aged 25-64, in the probability of employment, overall (columns I and III), and when differences in age, gender and education characteristics are taken into account (columns II and IV). The differences are computed as coefficients on an immigrant dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A6: Employment gap between immigrants and natives, by years of residence

Country	Recent		Earlier	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	-0.125 ***	-0.195 ***	-0.077 ***	-0.083 ***
Belgium	-0.151 ***	-0.191 ***	-0.136 ***	-0.102 ***
Bulgaria	0.111	-0.072	0.021 ***	-0.007
Croatia	-0.366 ***	-0.407 ***	-0.057 ***	-0.004
Cyprus	-0.055 ***	-0.058 ***	-0.055 ***	-0.062 ***
Czech Republic	-0.021	-0.020	-0.003 ***	-0.004
Denmark	-0.117 ***	-0.125 ***	-0.103 ***	-0.090 ***
Estonia	-0.089 **	-0.156 ***	-0.106 ***	-0.085 ***
Finland	-0.208 ***	-0.191 ***	-0.071 ***	-0.079 ***
France	-0.223 ***	-0.239 ***	-0.115 ***	-0.081 ***
Germany	-0.214 ***	-0.210 ***	-0.107 ***	-0.080 ***
Greece	-0.238 *	-0.191 *	-0.106 ***	-0.078 ***
Hungary	-0.092 ***	-0.136 ***	0.041 ***	0.016 *
Ireland	0.027	-0.048 *	-0.013 ***	-0.043 ***
Italy	-0.262 ***	-0.186 ***	-0.017 ***	0.004
Latvia	-0.069	-0.135	-0.067 ***	-0.029
Lithuania	-0.128 *	-0.201 ***	-0.100 ***	-0.046 ***
Luxembourg	0.024	-0.099 ***	0.012 ***	-0.026 **
Malta	0.000 ***	0.000 ***	0.062 ***	0.036
Netherlands	-0.193 ***	-0.215 ***	-0.180 ***	-0.147 ***
Norway	-0.037	-0.057	-0.034 ***	-0.054 ***
Poland	0.082 **	0.010	0.094 ***	0.004
Portugal	-0.032	-0.080	0.014 ***	-0.031 **
Romania	-0.153	-0.267 ***	0.020 ***	-0.076
Slovak Republic	-0.098	-0.204 ***	0.026 ***	0.017
Slovenia	0.000 ***	0.000 ***	-0.102 ***	-0.007
Spain	-0.128 ***	-0.162 ***	-0.051 ***	-0.052 ***
Sweden	-0.301 ***	-0.267 ***	-0.141 ***	-0.116 ***
Switzerland	-0.101 ***	-0.134 ***	-0.085 ***	-0.069 ***
EU14	-0.189 ***	-0.198 ***	-0.085 ***	-0.071 ***
EU27	-0.184 ***	-0.196 ***	-0.083 ***	-0.067 ***
All	-0.177 ***	-0.191 ***	-0.082 ***	-0.067 ***

*The table reports, for each country and separately for recent (at least 5 years of residence in the country) and earlier (more than 5 years of residence in the country) immigrants, the percentage point difference between immigrants and natives aged 25-64, in the probability of employment, overall (columns I and III), and when differences in age, gender and education characteristics are taken into account (columns II and IV). The differences are computed as coefficients on an immigrant dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A7: Employment gaps between EU immigrants and natives, by years of residence

Country	EU - Recent		EU - Earlier	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	-0.050 ***	-0.118 ***	-0.010 ***	-0.055 ***
Belgium	0.054 **	0.001	-0.019 ***	-0.025 *
Bulgaria	0.243 ***	0.058 ***	0.093 ***	0.031
Croatia	-0.654 ***	-0.706 ***	0.015 ***	-0.034
Cyprus	0.024	-0.015	-0.016 ***	-0.031 **
Czech Republic	-0.006	-0.009	-0.004 ***	-0.007
Denmark	-0.026	-0.043	0.013 ***	-0.014
Estonia	0.183 ***	0.095 ***	-0.147 ***	-0.142 *
Finland	-0.112	-0.106	0.003 ***	-0.012
France	0.029	0.043	-0.026 ***	0.032 **
Germany	-0.042 ***	-0.038 ***	-0.029 ***	-0.014 **
Greece	-0.674 ***	-0.723 ***	-0.051 ***	-0.041
Hungary	-0.069 *	-0.124 ***	0.064 ***	0.039 ***
Ireland	0.073	0.056	0.013 ***	-0.026
Italy	-0.035	-0.013	-0.022 ***	-0.017 ***
Latvia	0.073	0.019	0.030 ***	0.008
Lithuania	0.193 ***	0.135 ***	-0.008 ***	0.002
Luxembourg	0.054 **	-0.058 **	0.019 ***	-0.012
Malta	0.000 ***	0.000 ***	0.157 ***	0.081 ***
Netherlands	-0.012	-0.043 **	-0.052 ***	-0.055 ***
Norway	-0.059	-0.064	-0.005 ***	-0.033 **
Poland	-0.107	-0.277 *	0.129 ***	0.016
Portugal	0.083	-0.008	0.100 ***	0.015
Romania	-0.434 ***	-0.427 **	-0.274 ***	-0.224 **
Slovak Republic	-0.032	-0.168	0.009 ***	0.025
Slovenia	0.000 ***	0.000 ***	-0.105 ***	-0.013
Spain	-0.143 *	-0.170 **	-0.020 ***	-0.043 ***
Sweden	-0.009	-0.024	-0.027 ***	-0.032 ***
Switzerland	-0.006	-0.048 ***	-0.023 ***	-0.019 ***
EU14	-0.030 ***	-0.042 ***	-0.021 ***	-0.025 ***
EU27	-0.030 ***	-0.046 ***	-0.019 ***	-0.022 ***
All	-0.027 ***	-0.049 ***	-0.019 ***	-0.023 ***

*The table reports, for each country and separately for recent (at least 5 years of residence in the country) and earlier (more than 5 years of residence in the country) EU immigrants, the percentage point difference between immigrants and natives aged 25-64, in the probability of employment, overall (columns I and III), and when differences in age, gender and education characteristics are taken into account (columns II and IV). The differences are computed as coefficients on an immigrant dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A8: Employment gaps between non-EU immigrants and natives, by years of residence

Country	Non-EU - Recent		Non-EU - Earlier	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	-0.226 ***	-0.300 ***	-0.123 ***	-0.105 ***
Belgium	-0.302 ***	-0.332 ***	-0.210 ***	-0.152 ***
Bulgaria	-0.742 ***	-0.910 ***	-0.001 ***	-0.018
Croatia	-0.169	-0.201	-0.069 ***	0.001
Cyprus	-0.085 ***	-0.071 ***	-0.080 ***	-0.081 ***
Czech Republic	-0.034	-0.029	-0.001 ***	0.000
Denmark	-0.164 ***	-0.167 ***	-0.144 ***	-0.118 ***
Estonia	-0.112 ***	-0.177 ***	-0.105 ***	-0.082 ***
Finland	-0.233 ***	-0.213 ***	-0.109 ***	-0.115 ***
France	-0.264 ***	-0.285 ***	-0.137 ***	-0.106 ***
Germany	-0.302 ***	-0.297 ***	-0.146 ***	-0.114 ***
Greece	-0.211	-0.158	-0.120 ***	-0.087 ***
Hungary	-0.109 ***	-0.145 ***	0.000 ***	-0.025
Ireland	0.010	-0.084 ***	-0.029 ***	-0.054 ***
Italy	-0.306 ***	-0.219 ***	-0.016 ***	0.014 ***
Latvia	-0.118	-0.187 *	-0.077 ***	-0.033
Lithuania	-0.140 *	-0.214 ***	-0.111 ***	-0.051 ***
Luxembourg	-0.033	-0.175 ***	-0.016 ***	-0.067 ***
Malta	0.000 ***	0.000 ***	0.010 ***	0.013
Netherlands	-0.291 ***	-0.303 ***	-0.219 ***	-0.176 ***
Norway	0.028	-0.034	-0.126 ***	-0.118 ***
Poland	0.101 **	0.038	0.080 ***	0.000
Portugal	-0.111	-0.129	-0.028 ***	-0.055 ***
Romania	-0.028	-0.195 *	0.080 ***	-0.046
Slovak Republic	-0.131	-0.223 **	0.072 ***	-0.004
Slovenia	0.000 ***	0.000 ***	-0.101 ***	-0.004
Spain	-0.126 ***	-0.160 ***	-0.062 ***	-0.056 ***
Sweden	-0.375 ***	-0.328 ***	-0.179 ***	-0.147 ***
Switzerland	-0.242 ***	-0.264 ***	-0.157 ***	-0.124 ***
EU14	-0.249 ***	-0.256 ***	-0.112 ***	-0.090 ***
EU27	-0.242 ***	-0.252 ***	-0.109 ***	-0.086 ***
All	-0.241 ***	-0.251 ***	-0.111 ***	-0.086 ***

*The table reports, for each country and separately for recent (at least 5 years of residence in the country) and earlier (more than 5 years of residence in the country) non-EU immigrants, the percentage point difference between immigrants and natives aged 25-64, in the probability of employment, overall (columns I and III), and when differences in age, gender and education characteristics are taken into account (columns II and IV). The differences are computed as coefficients on an immigrant dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A9: Differences in occupational status between immigrants and natives

Country	Unconditional	Conditional (individual characteristics)
Austria	-0.380 ***	-0.313 ***
Belgium	-0.286 ***	-0.194 ***
Bulgaria	0.566 ***	0.166
Croatia	-0.118 ***	-0.056 **
Cyprus	-0.480 ***	-0.288 ***
Czech Republic	-0.080 *	-0.174 ***
Denmark	-0.304 ***	-0.283 ***
Estonia	-0.207 ***	-0.208 ***
Finland	-0.290 ***	-0.215 ***
France	-0.238 ***	-0.131 ***
Germany	-0.409 ***	-0.287 ***
Greece	-0.491 ***	-0.213 ***
Hungary	0.152 ***	0.024
Ireland	-0.038	-0.125 ***
Italy	-0.719 ***	-0.456 ***
Latvia	-0.142 **	-0.065
Lithuania	-0.117 ***	-0.068 **
Luxembourg	0.122 ***	-0.068 ***
Netherlands	-0.203 ***	-0.116 ***
Norway	-0.262 ***	-0.285 ***
Poland	0.254 ***	-0.049
Portugal	0.110 **	-0.018
Romania	0.234 *	-0.179
Slovak Republic	-0.013	-0.103 *
Slovenia	-0.570 ***	-0.231 ***
Spain	-0.478 ***	-0.313 ***
Sweden	-0.254 ***	-0.234 ***
Switzerland	-0.185 ***	-0.071 ***
EU14	-0.369 ***	-0.245 ***
EU27	-0.315 ***	-0.205 ***
All	-0.299 ***	-0.196 ***

*The table reports, for each country, the difference in occupational status, measured by the ISEI index, between immigrants and natives aged 25-64, overall (column I), or alternatively when differences in age, gender and education characteristics are also taken into account (column II). Each cell measures the difference expressed as a fraction of the within-country standard deviation. The differences are computed as coefficients on an immigrant dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A10: Differences in occupational status between immigrants and natives, by origin

	EU		Non-EU	
Country	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	-0.162 ***	-0.219 ***	-0.574 ***	-0.405 ***
Belgium	-0.095 **	-0.100 ***	-0.465 ***	-0.285 ***
Bulgaria	1.016 ***	0.384 *	0.306	0.040
Croatia	0.007	-0.055	-0.143 ***	-0.055 *
Cyprus	-0.293 ***	-0.127 ***	-0.595 ***	-0.390 ***
Czech Republic	0.087	-0.052	-0.312 ***	-0.347 ***
Denmark	-0.065 *	-0.169 ***	-0.414 ***	-0.337 ***
Estonia	0.330 **	0.088	-0.235 ***	-0.225 ***
Finland	-0.221 ***	-0.106 **	-0.328 ***	-0.274 ***
France	-0.172 ***	-0.054	-0.256 ***	-0.153 ***
Germany	-0.379 ***	-0.286 ***	-0.427 ***	-0.287 ***
Greece	0.016	0.053	-0.633 ***	-0.287 ***
Hungary	0.161 ***	0.059 **	0.137 ***	-0.035
Ireland	-0.295 ***	-0.302 ***	0.127 ***	-0.013
Italy	-0.649 ***	-0.445 ***	-0.749 ***	-0.454 ***
Latvia	-0.067	-0.094	-0.153 **	-0.060
Lithuania	0.088	0.063	-0.142 ***	-0.084 **
Luxembourg	0.160 ***	-0.026	-0.011	-0.192 ***
Netherlands	-0.058	-0.035	-0.268 ***	-0.150 ***
Norway	-0.272 ***	-0.279 ***	-0.230 ***	-0.305 ***
Poland	0.765 ***	0.346 ***	0.092	-0.174 ***
Portugal	0.141 *	0.007	0.091	-0.035
Romania	0.759 ***	0.278 *	0.177	-0.228 *
Slovak Republic	0.024	-0.024	-0.088	-0.266 ***
Slovenia	-0.125 **	-0.062 *	-0.698 ***	-0.282 ***
Spain	-0.353 ***	-0.242 ***	-0.522 ***	-0.337 ***
Sweden	0.029	-0.076 ***	-0.368 ***	-0.302 ***
Switzerland	-0.020	0.007	-0.430 ***	-0.219 ***
EU14	-0.264 ***	-0.191 ***	-0.420 ***	-0.269 ***
EU27	-0.205 ***	-0.147 ***	-0.369 ***	-0.232 ***
All	-0.168 ***	-0.129 ***	-0.368 ***	-0.231 ***

*The table reports, for each country and separately for EU and non-EU immigrants, the difference in occupational status, measured by the ISEI index, between immigrants and natives aged 25-64, overall (columns I and III), or alternatively when differences in age, gender and education characteristics are also taken into account (columns II and IV). Each cell measures the difference expressed as a fraction of the within-country standard deviation. The differences are computed as coefficients on an immigrant dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A11: Differences in occupational status between immigrants and natives, by years of residence

Country	Recent		Earlier	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	-0.204 ***	-0.310 ***	-0.412 ***	-0.313 ***
Belgium	-0.186 ***	-0.171 ***	-0.321 ***	-0.209 ***
Bulgaria	1.703 ***	0.734 ***	0.432 *	0.094
Croatia	-0.910 ***	-0.801 **	-0.118 ***	-0.058 **
Cyprus	-0.668 ***	-0.381 ***	-0.401 ***	-0.251 ***
Czech Republic	-0.265 **	-0.411 ***	-0.049	-0.133 ***
Denmark	-0.051	-0.263 ***	-0.365 ***	-0.306 ***
Estonia	0.079	-0.364 ***	-0.278 ***	-0.205 ***
Finland	-0.237	-0.114	-0.304 ***	-0.234 ***
France	0.080	0.005	-0.258 ***	-0.146 ***
Germany	-0.366 ***	-0.374 ***	-0.417 ***	-0.269 ***
Greece	-0.360 **	-0.093	-0.500 ***	-0.221 ***
Hungary	-0.030	-0.142 **	0.176 ***	0.045 **
Ireland	0.140	-0.122	-0.074 **	-0.123 ***
Italy	-0.698 ***	-0.481 ***	-0.721 ***	-0.455 ***
Latvia	0.444 *	0.079	-0.141 **	-0.066
Lithuania	0.230	-0.108	-0.136 ***	-0.065 **
Luxembourg	0.401 ***	-0.006	-0.015	-0.114 ***
Netherlands	0.073 *	0.062	-0.278 ***	-0.159 ***
Norway	-0.402 ***	-0.348 ***	-0.242 ***	-0.278 ***
Poland	-0.076	-0.260 ***	0.363 ***	0.010
Portugal	0.417	0.154	0.095 **	-0.027
Romania	0.244	-0.193	0.232 *	-0.176
Slovak Republic	-0.320 *	-0.538 ***	0.021	-0.056
Slovenia	-0.763 ***	-0.340 ***	-0.541 ***	-0.214 ***
Spain	-0.336 ***	-0.384 ***	-0.503 ***	-0.300 ***
Sweden	-0.203 ***	-0.212 ***	-0.263 ***	-0.241 ***
Switzerland	0.123 ***	-0.002	-0.265 ***	-0.097 ***
EU14	-0.189 ***	-0.223 ***	-0.400 ***	-0.250 ***
EU27	-0.150 ***	-0.205 ***	-0.343 ***	-0.207 ***
All	-0.115 ***	-0.185 ***	-0.330 ***	-0.200 ***

*The table reports, for each country and separately for recent (at least 5 years of residence in the country) and earlier (more than 5 years of residence in the country) immigrants, the difference in occupational status, measured by the ISEI index, between immigrants and natives aged 25-64, overall (columns I and III), or alternatively when differences in age, gender and education characteristics are also taken into account (columns II and IV). Each cell measures the difference expressed as a fraction of the within-country standard deviation. The differences are computed as coefficients on an immigrant dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A12: Differences in occupational status between EU immigrants and natives, by years of residence

Country	EU - Recent		EU - Earlier	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	-0.179 ***	-0.268 ***	-0.157 ***	-0.206 ***
Belgium	-0.079	-0.049	-0.099 **	-0.114 ***
Bulgaria	1.703 ***	0.734 ***	0.436	0.089
Croatia	-0.824 ***	-0.457 ***	0.018	-0.068
Cyprus	-0.125 *	-0.095 *	-0.346 ***	-0.136 ***
Czech Republic	0.232	-0.071	0.057	-0.056
Denmark	-0.005	-0.195 **	-0.081 **	-0.176 ***
Estonia	0.590 ***	0.136	0.134	0.000
Finland	-0.369	0.022	-0.221 ***	-0.126 **
France	-0.029	0.143	-0.179 ***	-0.072 *
Germany	-0.490 ***	-0.440 ***	-0.353 ***	-0.251 ***
Greece	0.000 ***	0.000 ***	-0.007	0.023
Hungary	-0.030	-0.115	0.177 ***	0.073 ***
Ireland	-0.164	-0.292 **	-0.309 ***	-0.304 ***
Italy	-0.528 ***	-0.417 ***	-0.654 ***	-0.447 ***
Latvia	0.073	-0.075	0.073	0.030
Lithuania	1.818 ***	1.197 ***	0.040	0.031
Luxembourg	0.395 ***	0.025	0.049	-0.058 **
Netherlands	0.014	0.013	-0.090 **	-0.053
Norway	-0.462 ***	-0.327 ***	-0.248 ***	-0.276 ***
Poland	0.508	0.051	0.829 ***	0.390 ***
Portugal	0.684	0.288	0.109	-0.009
Romania	0.975	0.391 **	0.690 ***	0.243
Slovak Republic	-0.576 **	-1.029 ***	0.067	0.048
Slovenia	-0.311 *	-0.182 *	-0.116 **	-0.056
Spain	-0.049	-0.083	-0.371 ***	-0.251 ***
Sweden	0.126 **	-0.009	0.007	-0.090 ***
Switzerland	0.238 ***	0.065 **	-0.096 ***	-0.015
EU14	-0.180 ***	-0.158 ***	-0.286 ***	-0.202 ***
EU27	-0.123 ***	-0.127 ***	-0.226 ***	-0.155 ***
All	-0.045 *	-0.093 ***	-0.196 ***	-0.140 ***

*The table reports, for each country and separately for recent (at least 5 years of residence in the country) and earlier (more than 5 years of residence in the country) EU immigrants, the difference in occupational status, measured by the ISEI index, between immigrants and natives aged 25-64, overall (columns I and III), or alternatively when differences in age, gender and education characteristics are also taken into account (columns II and IV). Each cell measures the difference expressed as a fraction of the within-country standard deviation. The differences are computed as coefficients on an immigrant dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A13: Differences in occupational status between non-EU immigrants and natives, by years of residence

Country	Non-EU - Recent		Non-EU - Earlier	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	-0.249 ***	-0.382 ***	-0.612 ***	-0.406 ***
Belgium	-0.321 ***	-0.321 ***	-0.509 ***	-0.292 ***
Bulgaria	0.000 ***	0.000 ***	0.431	0.095
Croatia	-0.917 ***	-0.829 **	-0.144 ***	-0.056 *
Cyprus	-0.910 ***	-0.522 ***	-0.440 ***	-0.327 ***
Czech Republic	-0.704 ***	-0.712 ***	-0.207 **	-0.248 ***
Denmark	-0.079	-0.303 ***	-0.490 ***	-0.366 ***
Estonia	0.014	-0.427 ***	-0.294 ***	-0.213 ***
Finland	-0.196	-0.154	-0.353 ***	-0.298 ***
France	0.106	-0.031	-0.280 ***	-0.167 ***
Germany	-0.272 ***	-0.322 ***	-0.453 ***	-0.281 ***
Greece	-0.360 **	-0.093	-0.639 ***	-0.290 ***
Hungary	-0.030	-0.162 *	0.173 ***	-0.008
Ireland	0.264 ***	-0.049	0.092 **	0.001
Italy	-0.755 ***	-0.503 ***	-0.750 ***	-0.452 ***
Latvia	0.627 **	0.155	-0.168 **	-0.078
Lithuania	0.135	-0.186	-0.159 ***	-0.078 **
Luxembourg	0.412 ***	-0.053	-0.242 ***	-0.316 ***
Netherlands	0.121 **	0.105 **	-0.348 ***	-0.197 ***
Norway	-0.246	-0.404 **	-0.224 ***	-0.287 ***
Poland	-0.121	-0.284 ***	0.170 **	-0.148 **
Portugal	0.180	0.035	0.088	-0.038
Romania	0.115	-0.296	0.188	-0.216
Slovak Republic	-0.101	-0.118	-0.086	-0.294 ***
Slovenia	-0.799 ***	-0.353 ***	-0.680 ***	-0.267 ***
Spain	-0.368 ***	-0.417 ***	-0.556 ***	-0.319 ***
Sweden	-0.346 ***	-0.296 ***	-0.372 ***	-0.306 ***
Switzerland	-0.116 **	-0.153 ***	-0.498 ***	-0.247 ***
EU14	-0.194 ***	-0.255 ***	-0.453 ***	-0.272 ***
EU27	-0.164 ***	-0.245 ***	-0.399 ***	-0.231 ***
All	-0.157 ***	-0.239 ***	-0.400 ***	-0.230 ***

*The table reports, for each country and separately for recent (at least 5 years of residence in the country) and earlier (more than 5 years of residence in the country) non-EU immigrants, the difference in occupational status, measured by the ISEI index, between immigrants and natives aged 25-64, overall (columns I and III), or alternatively when differences in age, gender and education characteristics are also taken into account (columns II and IV). Each cell measures the difference expressed as a fraction of the within-country standard deviation. The differences are computed as coefficients on an immigrant dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A14: Distribution of immigrants across occupations (percentage by row)

Country	(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
Austria	4	18	11	6	19	1	14	9	19
Belgium	9	21	11	8	12	1	12	8	18
Bulgaria	10	43	10	0	17	0	7	3	11
Croatia	6	17	13	6	19	4	13	11	11
Cyprus	4	15	9	8	18	1	13	4	28
Czech Republic	6	21	11	5	16	1	16	14	10
Denmark	2	28	14	5	17	1	6	7	20
Estonia	6	21	13	5	11	0	16	16	12
Finland	1	26	12	3	23	2	12	8	13
France	7	21	14	7	17	1	11	7	16
Germany	3	18	14	8	15	1	13	10	18
Greece	2	9	5	6	24	5	19	8	21
Hungary	4	29	12	8	16	2	11	10	7
Ireland	8	30	13	7	15	1	9	7	10
Italy	2	5	6	4	23	2	19	10	28
Latvia	12	16	13	5	12	0	16	9	18
Lithuania	7	24	8	3	17	1	17	11	12
Luxembourg	5	54	10	4	7	1	6	4	9
Malta	11	22	16	7	21	0	10	6	8
Netherlands	5	31	15	9	15	1	9	6	11
Norway	7	28	13	5	17	1	15	6	8
Poland	7	32	13	7	13	1	14	8	6
Portugal	8	27	13	11	17	1	11	7	7
Romania	9	18	12	2	46	1	11	0	0
Slovak Republic	12	13	14	16	18	1	10	10	7
Slovenia	4	13	9	4	11	1	21	15	23
Spain	4	11	7	6	25	2	13	7	24
Sweden	5	32	14	4	20	1	8	6	9
Switzerland	10	27	13	8	14	1	10	5	12
EU14	4	18	12	7	18	1	13	9	19
EU27	4	18	12	7	18	1	13	9	18
All	5	19	12	7	18	1	13	8	18

The table reports, for each country, the percent distribution of immigrant workers aged 25 to 64 across one-digit ISCO occupations. Each column reports the share of immigrants employed in the corresponding one-digit occupation among all immigrants in that country. Occupations are: (I) Managers, (II) Professionals, (III) Technicians and Associate Professionals, (IV) Clerical Support Workers, (V) Service and Sales Workers, (VI) Skilled Agricultural, Forestry and Fishery Workers, (VII) Craft and Related Tradeworkers, (VIII) Plant and Machine Workers, (IX) Elementary Workers. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.

Table A15: Distribution of natives across occupations (percentage by row)

Country	(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
Austria	6	23	20	10	16	4	11	5	5
Belgium	8	28	16	13	12	1	9	6	7
Bulgaria	5	19	10	6	19	3	13	14	11
Croatia	5	18	15	10	17	4	12	10	7
Cyprus	4	24	17	13	17	2	11	5	7
Czech Republic	6	19	17	9	14	1	16	13	5
Denmark	4	33	21	7	14	2	8	5	7
Estonia	10	25	17	6	11	1	13	10	6
Finland	2	30	21	5	16	3	10	7	5
France	8	26	19	9	12	3	9	7	7
Germany	5	24	22	15	12	1	11	5	5
Greece	3	24	8	12	21	10	8	6	5
Hungary	4	20	15	8	14	3	14	13	9
Ireland	10	28	13	10	15	4	9	5	6
Italy	4	17	20	15	15	2	12	7	8
Latvia	12	22	14	5	13	2	12	10	9
Lithuania	10	27	10	5	11	3	14	11	9
Luxembourg	3	39	25	10	10	3	4	3	2
Malta	12	23	14	10	17	1	9	5	7
Netherlands	7	34	19	10	14	1	7	4	4
Norway	10	34	18	6	15	2	8	5	2
Poland	7	22	14	7	12	8	15	10	5
Portugal	7	24	12	11	17	2	13	8	7
Romania	3	18	7	5	17	7	19	14	10
Slovak Republic	6	15	17	11	16	1	15	13	6
Slovenia	5	30	17	8	12	3	11	7	7
Spain	4	22	13	12	19	2	11	8	9
Sweden	8	35	20	6	13	2	9	5	2
Switzerland	9	29	19	15	11	3	8	3	3
EU14	5	24	19	12	14	2	10	6	6
EU27	6	23	17	11	14	3	12	8	7
All	6	24	17	11	14	3	11	8	6

The table reports, for each country, the percent distribution of native workers aged 25 to 64 across one-digit ISCO occupations. Each column reports the share of natives employed in the corresponding one-digit occupation among all natives in that country. Occupations are: (I) Managers, (II) Professionals, (III) Technicians and Associate Professionals, (IV) Clerical Support Workers, (V) Service and Sales Workers, (VI) Skilled Agricultural, Forestry and Fishery Workers, (VII) Craft and Related Trade Workers, (VIII) Plant and Machine Workers, (IX) Elementary Workers. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Natives are defined based on country off birth. Source: our elaboration on EU LFS data 2021.

Table A16: Differences in the probability of having an elementary occupation between immigrants and natives

Country	Unconditional	Conditional (individual characteristics)
Austria	0.137 ***	0.112 ***
Belgium	0.115 ***	0.092 ***
Bulgaria	-0.004	0.052
Croatia	0.032 ***	0.013
Cyprus	0.208 ***	0.168 ***
Czech Republic	0.049 ***	0.042 ***
Denmark	0.134 ***	0.121 ***
Estonia	0.053 ***	0.046 ***
Finland	0.082 ***	0.077 ***
France	0.085 ***	0.053 ***
Germany	0.129 ***	0.094 ***
Greece	0.159 ***	0.138 ***
Hungary	-0.017 ***	-0.008
Ireland	0.038 ***	0.046 ***
Italy	0.199 ***	0.168 ***
Latvia	0.083 ***	0.065 ***
Lithuania	0.027 **	0.011
Luxembourg	0.071 ***	0.066 ***
Malta	0.005	0.018
Netherlands	0.069 ***	0.048 ***
Norway	0.058 ***	0.052 ***
Poland	0.013	0.036 ***
Portugal	-0.003	0.013
Romania	-0.097 ***	-0.064 ***
Slovak Republic	0.010	0.018
Slovenia	0.159 ***	0.115 ***
Spain	0.152 ***	0.138 ***
Sweden	0.074 ***	0.060 ***
Switzerland	0.089 ***	0.047 ***
EU14	0.125 ***	0.101 ***
EU27	0.121 ***	0.096 ***
All	0.119 ***	0.094 ***

*The table reports, for each country, the difference in the probability of being employed as elementary workers between immigrants and natives aged 25-64, overall (column I), or alternatively when differences in age, gender and education characteristics are also taken into account (column II). The differences are computed as coefficients on an immigrant dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A17: Differences in the probability of having an elementary occupation between immigrants and natives, by origin

Country	EU		Non-EU	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	0.086 ***	0.088 ***	0.183 ***	0.136 ***
Belgium	0.086 ***	0.080 ***	0.142 ***	0.104 ***
Bulgaria	-0.113 ***	-0.035 ***	0.058	0.103
Croatia	-0.030 **	-0.027 **	0.044 ***	0.021 *
Cyprus	0.088 ***	0.071 ***	0.280 ***	0.233 ***
Czech Republic	0.027 **	0.028 **	0.079 ***	0.061 ***
Denmark	0.098 ***	0.107 ***	0.151 ***	0.127 ***
Estonia	-0.031	-0.015	0.058 ***	0.050 ***
Finland	0.046 **	0.040 **	0.102 ***	0.098 ***
France	0.059 ***	0.028 **	0.092 ***	0.061 ***
Germany	0.114 ***	0.090 ***	0.138 ***	0.099 ***
Greece	0.035	0.032	0.193 ***	0.167 ***
Hungary	-0.008	0.004	-0.032 ***	-0.028 ***
Ireland	0.093 ***	0.096 ***	0.003	0.015
Italy	0.147 ***	0.134 ***	0.221 ***	0.182 ***
Latvia	0.121 *	0.119 *	0.077 ***	0.056 **
Lithuania	0.035	0.033	0.025 *	0.008
Luxembourg	0.058 ***	0.050 ***	0.116 ***	0.111 ***
Malta	-0.014	0.013	0.016	0.021
Netherlands	0.049 ***	0.032 ***	0.078 ***	0.055 ***
Norway	0.063 ***	0.055 ***	0.041 ***	0.040 ***
Poland	-0.027 ***	-0.001	0.025 *	0.048 ***
Portugal	-0.030 *	-0.009	0.013	0.025
Romania	-0.080 ***	-0.054 *	-0.099 ***	-0.065 ***
Slovak Republic	0.014	0.017	0.003	0.019
Slovenia	0.063 ***	0.051 ***	0.187 ***	0.136 ***
Spain	0.093 ***	0.093 ***	0.172 ***	0.154 ***
Sweden	0.042 ***	0.041 ***	0.087 ***	0.070 ***
Switzerland	0.054 ***	0.030 ***	0.143 ***	0.084 ***
EU14	0.095 ***	0.082 ***	0.139 ***	0.111 ***
EU27	0.091 ***	0.078 ***	0.136 ***	0.106 ***
All	0.087 ***	0.074 ***	0.136 ***	0.106 ***

*The table reports, for each country and separately for EU and non-EU immigrants, the difference in the probability of being employed as elementary workers between immigrants and natives aged 25-64, overall (columns I and III), or alternatively when differences in age, gender and education characteristics are also taken into account (columns II and IV). The differences are computed as coefficients on an immigrant dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A18: Differences in the probability of having an elementary occupation between immigrants and natives, by years of residence

Country	EU - Recent		EU - Earlier	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	0.144 ***	0.147 ***	0.136 ***	0.106 ***
Belgium	0.114 ***	0.099 ***	0.121 ***	0.095 ***
Bulgaria	-0.114 ***	-0.019 ***	-0.028	0.024
Croatia	0.195	0.150	0.032 ***	0.013
Cyprus	0.377 ***	0.321 ***	0.137 ***	0.114 ***
Czech Republic	0.095 ***	0.088 **	0.040 ***	0.033 ***
Denmark	0.174 ***	0.189 ***	0.145 ***	0.124 ***
Estonia	0.035	0.073 **	0.061 ***	0.046 ***
Finland	0.123 ***	0.117 **	0.077 ***	0.073 ***
France	0.064 **	0.059 **	0.084 ***	0.052 ***
Germany	0.179 ***	0.157 ***	0.119 ***	0.084 ***
Greece	0.033	-0.004	0.163 ***	0.142 ***
Hungary	-0.002	-0.003	-0.019 ***	-0.009
Ireland	0.067 **	0.096 ***	0.033 ***	0.036 ***
Italy	0.223 ***	0.194 ***	0.199 ***	0.168 ***
Latvia	0.139	0.187 **	0.061 ***	0.044 **
Lithuania	-0.034	0.011	0.030 **	0.011
Luxembourg	0.047 ***	0.053 ***	0.089 ***	0.073 ***
Malta	0.004	0.042	-0.014	0.013
Netherlands	0.054 ***	0.034 ***	0.073 ***	0.051 ***
Norway	0.071 **	0.050 *	0.057 ***	0.053 ***
Poland	0.054 *	0.074 ***	-0.002	0.023 **
Portugal	-0.013	0.009	-0.002	0.013
Romania	-0.093 ***	-0.046 **	-0.097 ***	-0.067 ***
Slovak Republic	-0.030	-0.010	0.016	0.022
Slovenia	0.183 ***	0.145 ***	0.159 ***	0.115 ***
Spain	0.137 ***	0.152 ***	0.154 ***	0.136 ***
Sweden	0.107 ***	0.094 ***	0.067 ***	0.056 ***
Switzerland	0.068 ***	0.061 ***	0.096 ***	0.047 ***
EU14	0.138 ***	0.129 ***	0.123 ***	0.098 ***
EU27	0.138 ***	0.126 ***	0.119 ***	0.093 ***
All	0.131 ***	0.121 ***	0.118 ***	0.091 ***

*The table reports, for each country and separately for recent (at least 5 years of residence in the country) and earlier (more than 5 years of residence in the country) immigrants, the difference in the probability of being employed as elementary workers between immigrants and natives aged 25-64, overall (columns I and III), or alternatively when differences in age, gender and education characteristics are also taken into account (columns II and IV). The differences are computed as coefficients on an immigrant dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A19: Differences in the probability of having an elementary occupation between EU immigrants and natives, by years of residence

Country	EU - Recent		EU - Earlier	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	0.130 ***	0.135 ***	0.075 ***	0.076 ***
Belgium	0.093 ***	0.078 ***	0.091 ***	0.087 ***
Bulgaria	-0.114 ***	-0.019 ***	-0.112 ***	-0.048 ***
Croatia	-0.075 ***	-0.069 ***	-0.028 *	-0.024 *
Cyprus	0.056 ***	0.055 ***	0.098 ***	0.076 ***
Czech Republic	0.045	0.061	0.026 *	0.024 *
Denmark	0.111 ***	0.127 ***	0.105 ***	0.113 ***
Estonia	-0.063 ***	-0.024 ***	-0.009	-0.006
Finland	0.151	0.136	0.038 *	0.032
France	0.074	0.039	0.055 ***	0.026 *
Germany	0.187 ***	0.160 ***	0.097 ***	0.075 ***
Greece	0.000 ***	0.000 ***	0.037	0.034
Hungary	0.000	0.020	-0.009	0.002
Ireland	0.131 **	0.135 **	0.088 ***	0.091 ***
Italy	0.156 ***	0.150 ***	0.147 ***	0.134 ***
Latvia	0.211	0.231	0.060	0.055
Lithuania	-0.092 ***	-0.022 *	0.038	0.035
Luxembourg	0.021	0.018	0.072 ***	0.057 ***
Malta	0.004	0.042	-0.014	0.013
Netherlands	0.040 **	0.020	0.053 ***	0.038 ***
Norway	0.072 **	0.049	0.063 ***	0.058 ***
Poland	-0.051 ***	-0.017	-0.025 **	0.000
Portugal	0.001	0.038	-0.032 *	-0.012
Romania	-0.003	0.023	-0.101 ***	-0.075 **
Slovak Republic	-0.057 ***	-0.022 **	0.018	0.020
Slovenia	0.087	0.089	0.063 ***	0.051 ***
Spain	0.069	0.078	0.095 ***	0.094 ***
Sweden	0.065 ***	0.054 ***	0.037 ***	0.039 ***
Switzerland	0.041 ***	0.042 ***	0.058 ***	0.028 ***
EU14	0.135 ***	0.119 ***	0.089 ***	0.077 ***
EU27	0.130 ***	0.112 ***	0.085 ***	0.073 ***
All	0.116 ***	0.102 ***	0.082 ***	0.070 ***

*The table reports, for each country and separately for recent (at least 5 years of residence in the country) and earlier (more than 5 years of residence in the country) EU immigrants, the difference in the probability of being employed as elementary workers between immigrants and natives aged 25-64, overall (columns I and III), or alternatively when differences in age, gender and education characteristics are also taken into account (columns II and IV). The differences are computed as coefficients on an immigrant dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A20: Differences in the probability of having an elementary occupation between non-EU immigrants and natives, by years of residence

Country	Non-EU - Recent		Non-EU - Earlier	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	0.170 ***	0.167 ***	0.184 ***	0.133 ***
Belgium	0.141 ***	0.125 ***	0.146 ***	0.104 ***
Bulgaria	0.000 ***	0.000 ***	0.000	0.048
Croatia	0.218	0.168	0.043 ***	0.020 *
Cyprus	0.518 ***	0.448 ***	0.163 ***	0.143 ***
Czech Republic	0.141 **	0.113 *	0.062 ***	0.044 **
Denmark	0.213 ***	0.227 ***	0.163 ***	0.130 ***
Estonia	0.047	0.085 **	0.064 ***	0.048 ***
Finland	0.114 **	0.110 **	0.101 ***	0.097 ***
France	0.062 **	0.065 **	0.092 ***	0.059 ***
Germany	0.174 ***	0.157 ***	0.132 ***	0.091 ***
Greece	0.033	-0.004	0.197 ***	0.172 ***
Hungary	-0.004	-0.020	-0.038 ***	-0.030 ***
Ireland	0.040	0.077 ***	-0.006	0.000
Italy	0.246 ***	0.209 ***	0.221 ***	0.182 ***
Latvia	0.106	0.167 *	0.061 **	0.043 *
Lithuania	-0.030	0.013	0.029 *	0.008
Luxembourg	0.101 ***	0.115 ***	0.147 ***	0.129 ***
Malta	0.000 ***	0.000 ***	0.000 ***	0.000 ***
Netherlands	0.065 ***	0.045 ***	0.081 ***	0.057 ***
Norway	0.067	0.054	0.036 **	0.038 **
Poland	0.062 **	0.081 ***	0.008	0.032 **
Portugal	-0.025	-0.017	0.015	0.027
Romania	-0.109 ***	-0.058 ***	-0.097 ***	-0.067 ***
Slovak Republic	-0.015	-0.003	0.009	0.025
Slovenia	0.190 ***	0.149 ***	0.187 ***	0.136 ***
Spain	0.145 ***	0.160 ***	0.178 ***	0.154 ***
Sweden	0.126 ***	0.111 ***	0.080 ***	0.065 ***
Switzerland	0.125 ***	0.106 ***	0.149 ***	0.085 ***
EU14	0.140 ***	0.134 ***	0.139 ***	0.109 ***
EU27	0.142 ***	0.134 ***	0.136 ***	0.103 ***
All	0.141 ***	0.132 ***	0.136 ***	0.103 ***

*The table reports, for each country and separately for recent (at least 5 years of residence in the country) and earlier (more than 5 years of residence in the country) non-EU immigrants, the difference in the probability of being employed as elementary workers between immigrants and natives aged 25-64, overall (columns I and III), or alternatively when differences in age, gender and education characteristics are also taken into account (columns II and IV). The differences are computed as coefficients on an immigrant dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A21: Differences in the probability of having a high paid occupation between immigrants and natives

Country	Unconditional	Conditional (individual characteristics)
Austria	-0.160 ***	-0.133 ***
Belgium	-0.104 ***	-0.061 ***
Bulgaria	0.284 ***	0.107
Croatia	-0.010	0.007
Cyprus	-0.175 ***	-0.090 ***
Czech Republic	-0.033	-0.073 ***
Denmark	-0.139 ***	-0.126 ***
Estonia	-0.110 ***	-0.115 ***
Finland	-0.151 ***	-0.102 ***
France	-0.116 ***	-0.070 ***
Germany	-0.161 ***	-0.113 ***
Greece	-0.189 ***	-0.065 ***
Hungary	0.061 ***	0.001
Ireland	0.005	-0.030 **
Italy	-0.268 ***	-0.155 ***
Latvia	-0.078 **	-0.040
Lithuania	-0.082 ***	-0.061 ***
Luxembourg	0.011	-0.058 ***
Malta	-0.012	-0.076 ***
Netherlands	-0.107 ***	-0.064 ***
Norway	-0.147 ***	-0.157 ***
Poland	0.083 ***	-0.047 *
Portugal	0.048 **	-0.019
Romania	0.110	-0.057
Slovak Republic	0.003	-0.040
Slovenia	-0.273 ***	-0.119 ***
Spain	-0.171 ***	-0.100 ***
Sweden	-0.126 ***	-0.121 ***
Switzerland	-0.078 ***	-0.039 ***
EU14	-0.155 ***	-0.101 ***
EU27	-0.149 ***	-0.098 ***
All	-0.146 ***	-0.096 ***

*The table reports, for each country, the difference in the probability of being employed in a high pay occupation (ISCO 1 digit codes 1,2 or 3) between immigrants and natives aged 25-64, overall (column I), or alternatively when differences in age, gender and education characteristics are also taken into account (column II). The differences are computed as coefficients on an immigrant dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A22: Differences in the probability of having a high paid occupation between immigrants and natives, by origin

Country	EU		Non-EU	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	-0.063 ***	-0.088 ***	-0.248 ***	-0.175 ***
Belgium	-0.016	-0.020	-0.187 ***	-0.100 ***
Bulgaria	0.398 ***	0.121	0.218 *	0.099
Croatia	0.012	-0.018	-0.014	0.012
Cyprus	-0.170 ***	-0.076 ***	-0.177 ***	-0.094 ***
Czech Republic	0.033	-0.026	-0.124 ***	-0.140 ***
Denmark	-0.055 ***	-0.093 ***	-0.178 ***	-0.141 ***
Estonia	0.135 *	0.027	-0.123 ***	-0.123 ***
Finland	-0.097 ***	-0.031	-0.180 ***	-0.141 ***
France	-0.097 ***	-0.046 **	-0.122 ***	-0.077 ***
Germany	-0.148 ***	-0.112 ***	-0.168 ***	-0.113 ***
Greece	0.000	0.012	-0.239 ***	-0.085 ***
Hungary	0.076 ***	0.027 **	0.037	-0.044 ***
Ireland	-0.122 ***	-0.114 ***	0.086 ***	0.023
Italy	-0.250 ***	-0.167 ***	-0.276 ***	-0.146 ***
Latvia	-0.007	0.009	-0.089 ***	-0.048 *
Lithuania	0.042	0.029	-0.097 ***	-0.073 ***
Luxembourg	0.028 *	-0.040 ***	-0.047 **	-0.114 ***
Malta	0.038	-0.076 *	-0.043	-0.079 **
Netherlands	-0.058 ***	-0.044 ***	-0.129 ***	-0.071 ***
Norway	-0.152 ***	-0.155 ***	-0.130 ***	-0.163 ***
Poland	0.378 ***	0.196 ***	-0.008	-0.123 ***
Portugal	0.054	-0.024	0.045 *	-0.016
Romania	0.456 ***	0.208 ***	0.068	-0.089
Slovak Republic	-0.003	-0.026	0.014	-0.067
Slovenia	-0.028	-0.010	-0.343 ***	-0.151 ***
Spain	-0.124 ***	-0.071 ***	-0.188 ***	-0.109 ***
Sweden	-0.013	-0.068 ***	-0.173 ***	-0.143 ***
Switzerland	-0.010	-0.009	-0.178 ***	-0.094 ***
EU14	-0.121 ***	-0.090 ***	-0.171 ***	-0.106 ***
EU27	-0.112 ***	-0.085 ***	-0.168 ***	-0.104 ***
All	-0.105 ***	-0.081 ***	-0.168 ***	-0.104 ***

*The table reports, for each country and separately for EU and non-EU immigrants, the difference in the probability of being employed in a high pay occupation (ISCO 1 digit codes 1, 2 or 3) between immigrants and natives aged 25-64, overall (columns I and III), or alternatively when differences in age, gender and education characteristics are also taken into account (columns II and IV). The differences are computed as coefficients on an immigrant dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A23: Differences in the probability of having a high paid occupation between immigrants and natives, by years of residence

Country	Recent		Earlier	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	-0.087 ***	-0.129 ***	-0.173 ***	-0.133 ***
Belgium	-0.072 **	-0.066 ***	-0.118 ***	-0.066 ***
Bulgaria	0.657 ***	0.226 ***	0.252 **	0.100
Croatia	-0.334 ***	-0.290 *	-0.112 ***	-0.045 ***
Cyprus	-0.211 ***	-0.074 ***	-0.159 ***	-0.089 ***
Czech Republic	-0.094 *	-0.162 ***	-0.025	-0.060 ***
Denmark	-0.055 **	-0.129 ***	-0.165 ***	-0.106 ***
Estonia	-0.010	-0.215 ***	-0.175 ***	-0.142 ***
Finland	-0.178 ***	-0.100	-0.133 ***	-0.103 ***
France	-0.009	-0.047	-0.191 ***	-0.067 ***
Germany	-0.135 ***	-0.147 ***	-0.177 ***	-0.089 ***
Greece	-0.219 **	-0.127	-0.149 ***	-0.104 ***
Hungary	-0.045	-0.094 ***	-0.120 ***	-0.072 ***
Ireland	0.094 **	-0.003	-0.009	0.007
Italy	-0.240 ***	-0.144 ***	0.075 ***	0.013
Latvia	0.220 **	0.039	-0.013	-0.035 **
Lithuania	-0.029	-0.173 **	-0.270 ***	-0.155 ***
Luxembourg	0.103 ***	-0.067 ***	-0.085 ***	-0.055 ***
Malta	0.087	-0.069	-0.047 **	-0.077 ***
Netherlands	-0.015	-0.001	-0.080 **	-0.046
Norway	-0.241 ***	-0.209 ***	0.038	-0.076 *
Poland	-0.054	-0.129 ***	-0.132 ***	-0.079 ***
Portugal	0.134	0.022	-0.133 ***	-0.150 ***
Romania	-0.025	-0.182 *	0.128 ***	-0.025
Slovak Republic	-0.111	-0.188 *	0.044 *	-0.021
Slovenia	-0.401 ***	-0.189 ***	0.134 *	-0.035
Spain	-0.139 ***	-0.160 ***	-0.125 ***	-0.120 ***
Sweden	-0.129 ***	-0.124 ***	-0.273 ***	-0.119 ***
Switzerland	0.050 ***	-0.023 **	0.017	-0.021
EU14	-0.101 ***	-0.107 ***	-0.163 ***	-0.100 ***
EU27	-0.101 ***	-0.112 ***	-0.157 ***	-0.096 ***
All	-0.090 ***	-0.106 ***	-0.155 ***	-0.095 ***

*The table reports, for each country and separately for recent (at least 5 years of residence in the country) and earlier (more than 5 years of residence in the country) immigrants, the difference in the probability of being employed in a high-pay occupation (ISCO 1 digit codes 1, 2 or 3) between immigrants and natives aged 25-64, overall (columns I and III), or alternatively when differences in age, gender and education characteristics are also taken into account (columns II and IV). The differences are computed as coefficients on an immigrant dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A24: Differences in the probability of having a high paid occupation between EU immigrants and natives, by years of residence

Country	EU - Recent		EU - Earlier	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	-0.070 ***	-0.105 ***	-0.061 ***	-0.084 ***
Belgium	-0.031	-0.021	-0.015	-0.023
Bulgaria	0.657 ***	0.226 ***	0.180	0.032
Croatia	-0.372 ***	-0.136 ***	0.016	-0.024
Cyprus	-0.121 ***	-0.090 ***	-0.186 ***	-0.070 ***
Czech Republic	0.148 *	0.004	0.009	-0.036
Denmark	-0.053	-0.116 ***	-0.060 ***	-0.097 ***
Estonia	0.268 **	0.071	0.029	-0.024
Finland	-0.238 *	-0.077	-0.090 ***	-0.030
France	-0.072	-0.014	-0.094 ***	-0.048 **
Germany	-0.206 ***	-0.194 ***	-0.135 ***	-0.093 ***
Greece	0.000 ***	0.000 ***	-0.013	-0.005
Hungary	-0.019	-0.056	0.084 ***	0.034 ***
Ireland	-0.057	-0.088	-0.132 ***	-0.123 ***
Italy	-0.177 ***	-0.131 ***	-0.253 ***	-0.169 ***
Latvia	0.067	0.027	0.052	0.065
Lithuania	0.531 ***	0.222 ***	0.029	0.024
Luxembourg	0.096 ***	-0.060 **	-0.020	-0.053 ***
Malta	0.087	-0.069	0.038	-0.076 *
Netherlands	-0.053 *	-0.028	-0.060 ***	-0.050 ***
Norway	-0.258 ***	-0.188 ***	-0.139 ***	-0.152 ***
Poland	0.259	0.086	0.406 ***	0.212 ***
Portugal	0.212	0.023	0.044	-0.026
Romania	0.328	0.070	0.491 ***	0.245 **
Slovak Republic	-0.289 ***	-0.477 ***	0.016	0.005
Slovenia	-0.161	-0.094 **	-0.028	-0.010
Spain	0.017	0.008	-0.132 ***	-0.076 ***
Sweden	0.034	-0.022	-0.023 **	-0.078 ***
Switzerland	0.096 ***	0.003	-0.042 ***	-0.013 **
EU14	-0.121 ***	-0.108 ***	-0.122 ***	-0.088 ***
EU27	-0.112 ***	-0.107 ***	-0.113 ***	-0.082 ***
All	-0.084 ***	-0.094 ***	-0.108 ***	-0.079 ***

*The table reports, for each country and separately for recent (at least 5 years of residence in the country) and earlier (more than 5 years of residence in the country) EU immigrants, the difference in the probability of being employed in a high pay occupation (ISCO 1 digit codes 1,2 or 3 between immigrants and natives aged 25-64, overall (columns I and III), or alternatively when differences in age, gender and education characteristics are also taken into account (columns II and IV). The differences are computed as coefficients on an immigrant dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table A25: Differences in the probability of having a high paid occupation between non-EU immigrants and natives, by years of residence

Country	Non-EU - Recent		Non-EU - Earlier	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	-0.119 ***	-0.169 ***	-0.263 ***	-0.175 ***
Belgium	-0.125 ***	-0.124 ***	-0.205 ***	-0.102 ***
Bulgaria	0.000 ***	0.000 ***	0.277 **	0.123
Croatia	-0.331 ***	-0.303 *	-0.014	0.013
Cyprus	-0.250 ***	-0.068 ***	-0.142 ***	-0.097 ***
Czech Republic	-0.314 ***	-0.315 ***	-0.075 **	-0.095 ***
Denmark	-0.057 *	-0.137 ***	-0.226 ***	-0.163 ***
Estonia	-0.042	-0.249 ***	-0.139 ***	-0.106 ***
Finland	-0.159 **	-0.107	-0.185 ***	-0.148 ***
France	0.006	-0.056 *	-0.127 ***	-0.079 ***
Germany	-0.082 ***	-0.111 ***	-0.183 ***	-0.114 ***
Greece	-0.219 **	-0.127	-0.239 ***	-0.083 ***
Hungary	-0.064	-0.123 ***	0.059 **	-0.027
Ireland	0.157 ***	0.034	0.071 ***	0.024
Italy	-0.261 ***	-0.148 ***	-0.277 ***	-0.145 ***
Latvia	0.288 ***	0.044	-0.097 ***	-0.061 **
Lithuania	-0.062	-0.196 **	-0.099 ***	-0.065 ***
Luxembourg	0.118 ***	-0.079 **	-0.144 ***	-0.156 ***
Malta	0.000 ***	0.000 ***	0.000 ***	0.000 ***
Netherlands	0.016	0.023	-0.160 ***	-0.089 ***
Norway	-0.197 **	-0.272 ***	-0.116 ***	-0.144 ***
Poland	-0.078	-0.146 ***	0.017	-0.121 ***
Portugal	0.064	0.020	0.044	-0.018
Romania	-0.088	-0.226 **	0.095	-0.066
Slovak Republic	-0.010	-0.022	0.021	-0.080
Slovenia	-0.420 ***	-0.197 ***	-0.343 ***	-0.151 ***
Spain	-0.157 ***	-0.179 ***	-0.195 ***	-0.093 ***
Sweden	-0.202 ***	-0.166 ***	-0.166 ***	-0.139 ***
Switzerland	-0.043 **	-0.079 ***	-0.208 ***	-0.100 ***
EU14	-0.090 ***	-0.106 ***	-0.183 ***	-0.105 ***
EU27	-0.095 ***	-0.114 ***	-0.178 ***	-0.102 ***
All	-0.093 ***	-0.113 ***	-0.179 ***	-0.102 ***

*The table reports, for each country and separately for recent (at least 5 years of residence in the country) and earlier (more than 5 years of residence in the country) non-EU immigrants, the difference in the probability of being employed in a high pay occupation (ISCO 1 digit codes 1,2 or 3 between immigrants and natives aged 25-64, overall (columns I and III), or alternatively when differences in age, gender and education characteristics are also taken into account (columns II and IV). The differences are computed as coefficients on an immigrant dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Tables Appendix - Citizenship Acquisition and the Naturalization Premium

Table B1: Number of naturalizations (in thousands), 2011-2021

Country	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Austria	7	7	7	8	8	9	9	9	11	9	16
Belgium	30	39	35	19	27	32	37	36	41	34	39
Bulgaria	1	2	1	1	1	2	1	1	1	1	2
Croatia	3	1	1	1	1	4	1	1	1	1	1
Cyprus	1	2	1	2	2	3	4	3	3	3	2
Czech Republic	2	2	2	5	3	5	3	2	3	3	4
Denmark	4	4	2	5	12	15	7	3	2	7	6
Estonia	2	1	1	2	1	2	1	1	1	1	1
Finland	5	9	9	8	8	9	12	9	10	8	7
France	115	96	97	106	114	119	114	110	110	86	130
Germany	110	115	112	111	110	113	115	117	132	111	130
Greece	18	20	29	21	14	33	34	28	16	13	10
Hungary	21	18	9	9	4	4	3	4	3	2	3
Ireland	11	25	24	21	14	10	8	8	6	5	10
Italy	56	65	101	130	178	202	147	113	127	132	121
Latvia	2	4	3	2	2	2	2	2	2	1	1
Lithuania	0	0	0	0	0	0	0	0	0	0	0
Luxembourg	3	5	3	3	3	3	5	7	6	5	5
Malta	0	1	0	0	1	1	2	1	1	1	1
Netherlands	29	31	26	33	28	29	28	28	34	56	63
Norway	14	13	13	16	12	14	22	10	13	20	41
Poland	3	4	4	4	4	4	4	5	6	7	7
Portugal	23	22	24	21	20	25	18	21	21	32	25
Romania			2	2	2	5	7	6	6	2	7
Slovak Republic	0	0	0	0	0	0	1	1	1	1	1
Slovenia	2	1	1	1	1	1	2	2	2	2	2
Spain	115	94	226	206	114	151	66	91	99	126	144
Sweden	37	50	50	44	49	61	69	64	64	80	89
Switzerland	36	34	34	33	41	43	45	42	41	34	37
EU14	560	582	745	734	699	811	671	644	678	705	796
EU27	607	627	772	762	722	844	701	672	706	729	827
All	648	664	819	811	775	901	767	725	761	783	905

The table reports, for each country, the number of naturalizations occurred in every year between 2011 and 2021, expressed in thousands. The three bottom rows report the total values for the EU14 and EU27 countries as well as for all countries. Source: Eurostat data 2023.

Table B2: Naturalizations by origin (in thousands), cumulated over 2011-2021

Country	EU27	Other Europe	North Africa and Middle East	Other Africa	Latin America	Other America and Oceania	Asia	Stateless and Unknown
Austria	15	48	14	4	2	3	11	2
Belgium	90	54	100	65	11	4	30	14
Bulgaria	0	10	2	0	0	0	0	0
Croatia	2	9	0	0	1	0	0	3
Cyprus	5	14	3	0	0	1	2	0
Czech Republic	7	21	3	0	0	0	2	0
Denmark	9	11	15	6	1	2	14	10
Estonia	0	12	0	0	0	0	0	1
Finland	13	31	14	15	1	1	17	2
France	96	138	475	311	39	42	71	25
Germany	296	392	237	61	30	11	119	129
Greece	7	215	9	1	1	1	3	1
Hungary	61	14	2	0	1	0	1	0
Ireland	25	12	9	34	4	4	49	5
Italy	122	420	324	130	152	24	199	1
Latvia	1	21	0	0	0	0	0	0
Lithuania	0	1	0	0	0	0	0	1
Luxembourg	33	9	1	2	1	1	1	0
Malta	1	4	2	0	0	1	1	0
Netherlands	23	64	129	64	18	6	52	27
Norway	27	24	25	49	5	4	48	6
Poland	3	40	5	1	0	1	3	0
Portugal	9	45	6	93	75	1	23	0
Romania	0	9	1	0	0	0	0	26
Slovak Republic	1	2	0	0	0	0	0	0
Slovenia	2	15	0	0	0	0	0	0
Spain	36	16	270	114	736	187	61	12
Sweden	114	80	216	87	16	10	83	52
Switzerland	216	81	19	27	14	10	26	27
EU14	889	1,535	1,819	987	1,086	297	732	279
EU27	973	1,707	1,837	989	1,088	301	743	312
All	1,215	1,812	1,882	1,065	1,107	315	817	345

The table reports, for each country and each macro-area of origin, the number of naturalizations occurred between 2011 and 2021, expressed in thousands. The three bottom rows report the total values for the EU14 and EU27 countries as well as for all countries. Source: our elaboration on Eurostat data 2023.

Table B3: Annual naturalization rates, 2011 - 2021

Country	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Austria	0.74	0.75	0.74	0.71	0.71	0.68	0.68	0.68	0.74	0.61	1.07
Belgium	2.56	3.22	2.85	1.51	2.13	2.41	2.78	2.65	2.90	2.36	2.70
Bulgaria	1.58	4.44	1.79	1.65	1.94	2.20	1.15	1.16	0.77	0.81	1.90
Croatia		4.64	3.45	2.16	3.26	9.71	1.50	1.64	1.69	1.32	0.71
Cyprus	0.79	0.89	0.67	1.02	1.63	2.24	2.66	2.14	1.84	1.70	1.15
Czech Republic	0.39	0.41	0.53	1.16	0.57	0.96	0.68	0.45	0.53	0.45	0.68
Denmark	1.23	1.00	0.47	1.20	2.78	3.25	1.50	0.56	0.34	1.32	1.20
Estonia	0.73	0.65	0.67	0.83	0.45	0.90	0.45	0.39	0.39	0.39	0.52
Finland	2.74	5.00	4.60	4.00	3.62	4.11	5.05	3.72	3.77	2.94	2.40
France	2.96	2.43	2.38	2.50	2.60	2.67	2.47	2.36	2.20	1.68	2.50
Germany	1.79	1.81	1.68	1.58	1.46	1.30	1.25	1.21	1.31	1.07	1.23
Greece	1.88	2.20	3.32	2.45	1.70	4.16	4.24	3.41	1.96	1.46	1.10
Hungary	9.82	12.84	6.50	6.23	2.78	2.76	1.85	2.17	1.80	1.07	1.29
Ireland	1.92	4.54	4.52	3.99	2.55	1.84	1.45	1.42	0.95	0.85	1.50
Italy	1.45	1.61	2.30	2.64	3.55	4.01	2.90	2.19	2.54	2.62	2.35
Latvia	0.72	1.17	0.98	0.70	0.64	0.68	0.64	0.62	0.62	0.44	0.34
Lithuania	1.06	0.88	0.83	0.85	0.81	0.94	0.93	0.48	0.25	0.23	0.19
Luxembourg	1.54	2.04	1.07	1.29	1.24	1.23	1.77	2.41	1.94	1.57	1.65
Malta	1.23	3.26	1.77	1.08	1.71	3.19	3.63	1.55	0.92	1.14	1.11
Netherlands	4.25	4.44	3.62	4.44	3.60	3.42	3.02	2.81	3.20	4.84	5.37
Norway	3.91	3.11	2.95	3.29	2.42	2.57	3.87	1.81	2.26	3.26	6.83
Poland	4.34	4.42	4.22	4.02	3.67	2.46	2.01	2.14	2.21	1.95	1.62
Portugal	5.22	4.99	5.87	5.26	5.16	6.46	4.53	5.06	4.39	5.45	3.70
Romania			2.16	2.28	2.34	4.22	5.95	5.62	4.73	1.27	4.65
Slovak Republic	0.40	0.36	0.28	0.40	0.50	0.74	0.93	0.99	0.77	0.69	0.72
Slovenia	2.15	1.74	1.61	1.09	1.24	1.20	1.37	1.62	1.38	1.10	1.06
Spain	2.16	1.80	4.45	4.40	2.57	3.42	1.50	1.99	2.04	2.42	2.68
Sweden	5.89	7.77	7.61	6.33	6.71	7.93	8.19	7.20	6.98	8.64	10.01
Switzerland	2.04	1.85	1.82	1.70	2.04	2.10	2.14	2.00	1.92	1.57	1.67
EU14	2.26	2.30	2.87	2.74	2.54	2.79	2.24	2.06	2.10	2.11	2.24
EU27	2.21	2.21	2.73	2.63	2.41	2.68	2.15	1.98	2.01	1.99	2.33
All	2.22	2.20	2.68	2.58	2.39	2.64	2.18	1.98	2.01	1.99	2.21

The table reports, for each country, the share of naturalizations that occurred in every year between 2011 and 2021 over the number of residents without citizenship on the 1st of January of that same year. The three bottom rows report the mean values for the EU14 and EU27 countries as well as for all countries. Source: Eurostat data 2023.

Table B4: Naturalized immigrants in Europe (in thousands), overall and by years of residence (2021)

Country	Total		Recent		Earlier		Long-term	
	Stock of Naturalized Immigrants	% of Immigrants	Stock of Naturalized Immigrants	% of Immigrants	Stock of Naturalized Immigrants	% of Immigrants	Stock of Naturalized Immigrants	% of Immigrants
Austria	490	28	10	3	480	34	470	42
Belgium	858	45	19	6	768	51	727	57
Bulgaria	11	62	3	63	7	61	7	67
Croatia	348	97	2	48	332	98	328	98
Cyprus	45	23	3	4	42	32	40	38
Czech Republic	190	45	8	12	176	52	169	58
Denmark	202	38	4	6	125	34	121	42
Estonia	51	34	1	6	47	36	47	38
Finland	170	46	2	3	163	52	150	62
France	3,843	51	56	10	3,480	55	3,349	59
Germany	5,348	38	145	5	5,200	46	5,024	56
Greece	320	51	1	6	315	52	308	53
Hungary	194	77	19	48	175	82	156	85
Ireland	353	36	16	9	326	42	304	48
Italy	1,749	30	52	11	1,660	32	1,602	35
Latvia	78	36	6	41	63	36	61	36
Lithuania	123	84	6	48	118	88	111	90
Luxembourg	49	17	1	4	26	21	24	25
Malta	15	27	1	8	13	31	12	46
Netherlands	1,273	61	51	11	1,220	75	1,125	81
Norway	126	28	2	3	112	30	108	36
Poland	125	58	13	28	88	61	78	75
Portugal	561	87	24	50	537	90	526	92
Romania	23	48	9	54	14	45	10	47
Slovak Republic	46	76	4	45	43	80	39	85
Slovenia	106	57	1	4	105	65	104	75
Spain	2,084	31	161	12	1,923	36	1,810	38
Sweden	1,140	64	36	10	1,084	77	906	85
Switzerland	731	31	19	4	664	36	647	43
EU14	18,441	41	579	8	17,307	47	16,448	53
EU27	19,797	42	655	9	18,529	48	17,608	54
All	20,653	41	675	9	19,305	47	18,363	53

The table reports, for each country, the number of naturalized immigrants in the population, expressed in thousands as well as a share of the total immigrant population, overall (columns I and II) and distinguishing between immigrant that have been in the country for at most 5 years (columns III and IV), for more than 5 years (columns V and VI) and for at least 10 years (columns VII and VIII). The three bottom rows report the values for the EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.

Table B5: Naturalized immigrants in Europe (in thousands), by sex (2021)

Country	Men		Women	
	Stock of Naturalized Immigrants	% of Immigrants	Stock of Naturalized Immigrants	% of Immigrants
Austria	214	40	256	44
Belgium	375	58	424	59
Bulgaria	1	37	6	78
Croatia	154	98	188	98
Cyprus	14	31	26	43
Czech Republic	76	53	97	63
Denmark	85	48	89	49
Estonia	17	32	34	41
Finland	73	55	83	69
France	1,678	57	1,979	59
Germany	2,371	55	2,655	57
Greece	130	51	183	56
Hungary	67	85	90	85
Ireland	151	46	164	49
Italy	691	32	948	37
Latvia	26	34	44	37
Lithuania	45	87	66	91
Luxembourg	21	19	24	22
Malta	6	43	6	49
Netherlands	520	82	606	81
Norway	53	33	67	45
Poland	36	73	66	82
Portugal	228	93	299	91
Romania	6	44	4	50
Slovak Republic	14	76	25	92
Slovenia	51	69	53	81
Spain	797	36	1,014	40
Sweden	446	85	480	85
Switzerland	287	38	408	49
EU14	7,779	51	9,204	54
EU27	8,291	52	9,909	55
All	8,631	51	10,383	54

The table reports, for each country, the number of naturalized long-term immigrants (at least 10 years of residence in the country) in the population, expressed in thousands as well as share of the total population of immigrants, distinguishing between male (columns I and II) and female (columns III and IV) immigrants. The three bottom rows report the values for the EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.

Table B6: Naturalized immigrants in Europe (in thousands), by origin (2021)

Country	EU		Non-EU	
	Stock of Naturalized Immigrants	% of Immigrants	Stock of Naturalized Immigrants	% of Immigrants
Austria	170	37	300	46
Belgium	222	36	576	77
Bulgaria	1	60	6	69
Croatia	41	95	301	98
Cyprus	10	22	31	48
Czech Republic	135	68	39	38
Denmark	39	38	135	53
Estonia	2	46	48	37
Finland	48	54	108	65
France	635	43	3,022	62
Germany	1,739	53	3,288	58
Greece	80	70	233	49
Hungary	112	88	45	77
Ireland	41	16	275	67
Italy	494	34	1,145	35
Latvia	12	54	58	34
Lithuania	9	82	102	90
Luxembourg	31	18	15	31
Malta	1	9	10	98
Netherlands	150	50	976	90
Norway	71	30	50	65
Poland	39	78	63	80
Portugal	160	88	367	93
Romania	6	85	4	27
Slovak Republic	30	84	8	90
Slovenia	41	91	63	67
Spain	245	19	1,565	46
Sweden	284	76	642	90
Switzerland	357	40	338	50
EU14	4,337	42	12,646	57
EU27	4,776	44	13,424	58
All	5,203	44	13,811	58

The table reports, for each country, the number of naturalized long-term immigrants (at least 10 years of residence in the country) in the population, expressed in thousands as well as share of the total population of immigrants, distinguishing between EU (columns I and II) and non-EU (columns III and IV) immigrants. The three bottom rows report the values for the EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.

Table B7: Naturalized immigrants in Europe (in thousands), by education (2021)

Country	Low Education		Intermediate Education		High Education	
	Stock of Naturalized Immigrants	% of Immigrants	Stock of Naturalized Immigrants	% of Immigrants	Stock of Naturalized Immigrants	% of Immigrants
Austria	135	41	201	42	127	43
Belgium	310	61	249	59	217	56
Bulgaria	0	35	5	67	3	73
Croatia	101	99	171	98	69	99
Cyprus	5	23	13	30	22	53
Czech Republic	36	67	97	60	35	48
Denmark	40	45	57	50	57	52
Estonia	6	31	21	34	22	46
Finland	25	51	75	60	55	70
France	1,069	47	1,138	63	1,237	69
Germany	1,322	40	2,366	66	1,245	64
Greece	57	35	170	58	84	69
Hungary	22	90	75	85	55	83
Ireland	44	57	94	41	155	53
Italy	661	29	699	38	254	48
Latvia	8	36	32	29	25	47
Lithuania	7	89	63	93	37	86
Luxembourg	9	14	16	29	20	20
Malta	5	58	4	42	3	38
Netherlands	354	80	377	86	335	78
Norway	28	47	36	36	47	35
Poland	24	96	41	76	20	63
Portugal	165	90	178	94	180	92
Romania	3	59	2	24	3	40
Slovak Republic	6	96	21	83	9	84
Slovenia	26	75	54	72	23	85
Spain	605	32	584	39	598	48
Sweden	243	83	319	88	356	84
Switzerland	161	32	251	47	261	52
EU14	5,038	42	6,522	57	4,919	62
EU27	5,287	43	7,120	58	5,246	62
All	5,476	43	7,407	57	5,555	61

The table reports, for each country, the number of naturalized long-term immigrants (at least 10 years of residence in the country) in the population, expressed in thousands as well as share of the total population of immigrants, distinguishing between low (columns I and II), intermediately (columns III and IV) and highly educated (columns V and VI) immigrants. The three bottom rows report the values for the EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.

Table B8: Share of naturalized immigrants, by years of residence in the country (2021)

Country	Years since migration						
	1-4	*5-9*	*10-14*	*15-19*	*20-24*	*25-29*	*30-34*
Austria	3	4	11	19	38	49	60
Belgium	7	14	39	57	68	69	56
Bulgaria	63	24	28	30	78	100	76
Croatia	43	85	91	97	98	98	98
Cyprus	4	6	14	30	45	68	79
Czech Republic	11	15	19	42	51	81	74
Denmark	7	4	14	28	50	55	65
Estonia	6	6	24	28	16	44	41
Finland	3	16	42	60	68	74	76
France	10	17	28	46	51	60	59
Germany	5	7	27	48	60	69	71
Greece	5	25	19	31	37	53	73
Hungary	43	66	66	79	87	89	93
Ireland	9	15	30	35	55	58	62
Italy	11	10	13	22	35	47	53
Latvia	37	38	50	26	44	54	53
Lithuania	45	63	49	61	63	87	95
Luxembourg	4	6	11	14	31	38	29
Malta	15	8	11	31	58	52	98
Netherlands	11	33	55	74	83	89	91
Norway	3	5	16	41	47	68	67
Poland	27	26	44	26	51	72	80
Portugal	49	47	71	84	86	94	91
Romania	62	39	65	45	22	41	35
Slovak Republic	48	48	78	56	48	88	89
Slovenia	4	7	23	52	62	78	93
Spain	12	16	24	32	44	51	63
Sweden	7	43	77	85	89	94	88
Switzerland	4	5	17	37	53	44	53
EU14	8	13	27	39	52	65	68
EU27	9	14	27	39	53	66	69
All	8	13	27	39	53	65	68

The table reports, for each country and for each bracket of years of residence in the country, the share of naturalized immigrants. The three bottom rows report the mean values for the EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.

Table B9: Requirements for naturalization (2020)

Country	Years of Residence	Additional Requirements				
		Language	Knowledge	Criminal	Economic	Renunciation
Austria	10	Yes	Yes	Yes	Yes	Yes
Belgium	10	Yes	No	Yes	Yes	No
Bulgaria	10	Yes	No	Yes	Yes	Yes
Croatia	8	Yes	Yes	No	No	Yes
Cyprus	5	No	No	No	No	No
Czech Republic	5	Yes	Yes	No	Yes	No
Denmark	9	Yes	Yes	Yes	Yes	No
Estonia	9	Yes	Yes	No	Yes	Yes
Finland	5	Yes	No	Yes	Yes	No
France	5	Yes	Yes	Yes	Yes	No
Germany	8	Yes	Yes	Yes	Yes	Yes
Greece	7	Yes	Yes	Yes	Yes	No
Hungary	8	Yes	Yes	Yes	Yes	No
Ireland	5	No	No	Yes	No	No
Italy	10	No	No	Yes	Yes	No
Latvia	5	Yes	Yes	Yes	Yes	Yes
Lithuania	10	Yes	Yes	Yes	Yes	Yes
Luxembourg	5	Yes	No	Yes	No	Yes
Netherlands	5	Yes	No	Yes	No	Yes
Norway	7	Yes	Yes	Yes	No	Yes
Poland	3	Yes	No	Yes	Yes	No
Portugal	5	Yes	No	Yes	No	No
Romania	8	Yes	Yes	Yes	Yes	No
Slovak Republic	8	Yes	Yes	Yes	No	Yes
Slovenia	10	Yes	No	Yes	Yes	Yes
Spain	10	Yes	Yes	Yes	Yes	Yes
Sweden	5	No	No	No	No	No
Switzerland	12	No	No	No	No	No
	Mean	**Shares of countries with additional requirements**				
EU14	7	0.79	0.43	0.93	0.64	0.36
EU27	7	0.85	0.54	0.81	0.69	0.46
All	7	0.82	0.54	0.79	0.64	0.46

The table reports, for each country, the years of residence an immigrant is required to have in order to become eligible for naturalization (column I) as well as whether each country has ("Yes") or does not have ("No") additional language requirement (column II), knowledge requirements (column III), criminal requirements (column IV), economic requirements (column V) and renunciation requirements (column VI). The three bottom rows report the mean of Years of Residence for the EU14 and EU27 countries as well as for all countries, and the shares of countries that have additional requirements. Immigrants are defined as foreign-born. Source: our elaboration on data from GLOBALCIT Citizenship Law Dataset.

Table B10: Employment gap over time between naturalized and non-naturalized immigrants

Year	EU14	EU27	All	Italy
		Unconditional		
2010	0.061 ***	0.059 ***	0.057 ***	-0.122 ***
2011	0.047 ***	0.045 ***	0.042 ***	-0.114 ***
2012	0.049 ***	0.047 ***	0.044 ***	-0.103 ***
2013	0.040 ***	0.039 ***	0.036 ***	-0.080 ***
2014	0.046 ***	0.044 ***	0.042 ***	-0.067 ***
2015	0.042 ***	0.040 ***	0.039 ***	-0.075 ***
2016	0.037 ***	0.035 ***	0.033 ***	-0.079 ***
2017	0.027 ***	0.026 ***	0.024 ***	-0.084 ***
2018	0.031 ***	0.029 ***	0.027 ***	-0.069 ***
2019	0.034 ***	0.032 ***	0.028 ***	-0.057 ***
2020	0.035 ***	0.034 ***	0.030 ***	-0.035 ***
2021	0.047 ***	0.044 ***	0.042 ***	-0.041 ***
		Conditional		
2010	0.037 ***	0.037 ***	0.035 ***	-0.107 ***
2011	0.026 ***	0.025 ***	0.023 ***	-0.109 ***
2012	0.032 ***	0.032 ***	0.029 ***	-0.098 ***
2013	0.025 ***	0.025 ***	0.023 ***	-0.084 ***
2014	0.026 ***	0.026 ***	0.024 ***	-0.076 ***
2015	0.026 ***	0.026 ***	0.024 ***	-0.082 ***
2016	0.023 ***	0.022 ***	0.020 ***	-0.087 ***
2017	0.016 ***	0.016 ***	0.014 ***	-0.092 ***
2018	0.018 ***	0.017 ***	0.015 ***	-0.076 ***
2019	0.017 ***	0.017 ***	0.015 ***	-0.066 ***
2020	0.023 ***	0.023 ***	0.020 ***	-0.043 ***
2021	0.035 ***	0.034 ***	0.032 ***	-0.044 ***

*The table reports, for each year, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of employment, overall (top of the table), and when differences in age, years of residence in the country, gender and education characteristics are taken into account (bottom of the table). The differences are computed as coefficients on a naturalized dummy interacted with the years dummies in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2010-2021.*

Table B11: Employment gap over time between naturalized and non-naturalized immigrants, men

Year	EU14	EU27	All	Italy
		Unconditional		
2010	0.060 ***	0.058 ***	0.056 ***	-0.047 ***
2011	0.045 ***	0.042 ***	0.040 ***	-0.040 ***
2012	0.042 ***	0.039 ***	0.038 ***	-0.036 ***
2013	0.032 ***	0.031 ***	0.029 ***	-0.024 **
2014	0.033 ***	0.031 ***	0.029 ***	-0.014
2015	0.030 ***	0.028 ***	0.027 ***	-0.019 **
2016	0.028 ***	0.025 ***	0.024 ***	-0.022 **
2017	0.010	0.008	0.008	-0.043 ***
2018	0.016 ***	0.014 **	0.013 **	-0.044 ***
2019	0.024 ***	0.022 ***	0.019 ***	-0.029 ***
2020	0.017 **	0.014 *	0.012	-0.013
2021	0.033 ***	0.030 ***	0.029 ***	-0.018 *
		Conditional		
2010	0.038 ***	0.038 ***	0.035 ***	-0.044 ***
2011	0.029 ***	0.028 ***	0.025 ***	-0.041 ***
2012	0.032 ***	0.030 ***	0.029 ***	-0.035 ***
2013	0.024 ***	0.024 ***	0.022 ***	-0.029 ***
2014	0.022 ***	0.022 ***	0.020 ***	-0.013
2015	0.023 ***	0.022 ***	0.021 ***	-0.015
2016	0.022 ***	0.021 ***	0.019 ***	-0.022 **
2017	0.003	0.003	0.002	-0.043 ***
2018	0.011 *	0.010	0.009	-0.040 ***
2019	0.014 **	0.013 **	0.012 **	-0.025 ***
2020	0.015 *	0.014 *	0.011	-0.004
2021	0.026 ***	0.025 ***	0.024 ***	-0.009

*The table reports, for each year, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) male immigrants aged 25-64, in the probability of employment, overall (top of the table), and when differences in age, years of residence in the country, gender and education characteristics are taken into account (bottom of the table). The differences are computed as coefficients on a naturalized dummy interacted with the years dummies in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2010-2021.*

Table B12: Employment gap over time between naturalized and non-naturalized immigrants, women

Year	EU14	EU27	All	Italy
		Unconditional		
2010	0.075 ***	0.073 ***	0.072 ***	-0.127 ***
2011	0.057 ***	0.057 ***	0.054 ***	-0.131 ***
2012	0.065 ***	0.064 ***	0.060 ***	-0.117 ***
2013	0.056 ***	0.055 ***	0.052 ***	-0.096 ***
2014	0.064 ***	0.062 ***	0.060 ***	-0.090 ***
2015	0.060 ***	0.059 ***	0.058 ***	-0.100 ***
2016	0.054 ***	0.053 ***	0.051 ***	-0.101 ***
2017	0.052 ***	0.053 ***	0.051 ***	-0.091 ***
2018	0.054 ***	0.053 ***	0.050 ***	-0.062 ***
2019	0.051 ***	0.050 ***	0.045 ***	-0.054 ***
2020	0.059 ***	0.059 ***	0.054 ***	-0.029 ***
2021	0.069 ***	0.068 ***	0.064 ***	-0.031 ***
		Conditional		
2010	0.037 ***	0.037 ***	0.034 ***	-0.155 ***
2011	0.021 ***	0.022 ***	0.020 ***	-0.164 ***
2012	0.032 **	0.032 **	0.028 **	-0.151 ***
2013	0.024 ***	0.024 ***	0.021 ***	-0.134 ***
2014	0.029 ***	0.028 ***	0.025 ***	-0.130 ***
2015	0.029 ***	0.028 ***	0.027 ***	-0.138 ***
2016	0.024 ***	0.023 ***	0.021 ***	-0.138 ***
2017	0.027 ***	0.028 ***	0.025 ***	-0.130 ***
2018	0.024 ***	0.023 ***	0.020 ***	-0.101 ***
2019	0.020 ***	0.020 ***	0.017 ***	-0.095 ***
2020	0.031 ***	0.032 ***	0.028 ***	-0.069 ***
2021	0.043 ***	0.042 ***	0.039 ***	-0.065 ***

*The table reports, for each year, the percentage point between naturalized and non-naturalized long-term (at least 10 years of residence in the country) female immigrants aged 25-64, in the probability of employment, overall (top of the table), and when differences in age, years of residence in the country, gender and education characteristics are taken into account (bottom of the table). The differences are computed as coefficients on a naturalized dummy interacted with the years dummies in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2010-2021.*

Table B13: Employment gap between naturalized and non-naturalized immigrants (2021)

Country	Unconditional	Conditional (individual characteristics)
Austria	0.010	0.041 ***
Belgium	-0.041 *	0.075 ***
Bulgaria	-0.065	0.077
Croatia	0.179 **	0.112
Cyprus	-0.048 ***	0.014
Czech Republic	-0.046	-0.020
Denmark	-0.031 *	0.015
Estonia	0.081 ***	0.086 ***
Finland	0.043	0.005
France	0.056 ***	0.088 ***
Germany	0.113 ***	0.085 ***
Greece	0.016	0.028
Hungary	0.000	0.020
Ireland	0.013	0.048
Italy	-0.041 ***	-0.035 ***
Latvia	0.042	0.001
Lithuania	-0.021	0.111 **
Luxembourg	-0.059 **	-0.032
Malta	-0.168 ***	-0.060
Netherlands	-0.075 ***	-0.073 ***
Norway	-0.121 ***	-0.065
Poland	0.043	0.090 *
Portugal	-0.022	-0.033
Romania	0.080	0.029
Slovak Republic	-0.131 ***	-0.034
Slovenia	-0.146 ***	0.032
Spain	0.077 ***	0.061 ***
Sweden	0.032 **	0.042 ***
Switzerland	0.025 ***	0.043 ***
EU14	0.047 ***	0.046 ***
EU27	0.044 ***	0.044 ***
All	0.042 ***	0.043 ***

*The table reports, for each country, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of employment, overall (column I), and when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (column II). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table B14: Employment gap between naturalized and non-naturalized immigrants, by sex (2021)

Country	Men		Women	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	0.015	0.059 ***	0.009	0.018
Belgium	-0.029	0.049	-0.053	0.086 **
Bulgaria	0.158	-0.046 ***	-0.255	-0.286
Croatia	0.026	0.027	0.258 **	0.153 **
Cyprus	-0.047 *	0.017	-0.008	0.017
Czech Republic	-0.079 **	-0.034	0.033	-0.001
Denmark	-0.075 ***	-0.016	0.008	0.048 *
Estonia	0.049	0.064	0.117 ***	0.070
Finland	0.018	-0.027	0.088	0.034
France	0.038 *	0.065 **	0.082 ***	0.105 ***
Germany	0.079 ***	0.067 ***	0.145 ***	0.100 ***
Greece	0.032	0.055	0.040	0.016
Hungary	-0.055 **	-0.065 *	0.041	0.098 **
Ireland	0.020	0.046	0.019	0.056
Italy	-0.017 *	0.017	-0.031 ***	-0.071 ***
Latvia	0.023	-0.058	0.063	0.006
Lithuania	-0.041	0.067	0.005	0.145 **
Luxembourg	-0.085 **	-0.041	-0.029	-0.014
Malta	-0.120 ***	-0.101	-0.206 **	0.004
Netherlands	-0.090 ***	-0.113 ***	-0.069 ***	-0.042
Norway	-0.071	0.012	-0.150 ***	-0.114 *
Poland	0.052	0.026	0.020	0.073
Portugal	-0.028	-0.084	-0.018	0.008
Romania	0.101	0.087	0.255	0.047
Slovak Republic	-0.021	0.051	-0.212 **	-0.148 *
Slovenia	-0.216 ***	-0.030	0.010	0.135 ***
Spain	0.043 *	0.027	0.115 ***	0.084 ***
Sweden	0.023	0.042 *	0.044 *	0.055 **
Switzerland	0.040 ***	0.055 ***	0.031 **	0.028 *
EU14	0.033 ***	0.038 ***	0.069 ***	0.054 ***
EU27	0.030 ***	0.036 ***	0.068 ***	0.053 ***
All	0.029 ***	0.036 ***	0.064 ***	0.051 ***

*The table reports, for each country and separately for male (columns I and II) and female (columns III and IV) immigrants, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of employment, overall (columns I and III), and when differences in age, years of residence in the country, origin and education characteristics are taken into account (columns II and IV). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table B15: Employment gap between naturalized and non-naturalized immigrants, by origin (2021)

Country	EU		Non - EU	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	-0.034 **	-0.020	0.060 ***	0.064 ***
Belgium	-0.026	0.032	0.095 **	0.116 ***
Bulgaria	0.444	1.000 ***	-0.269 *	-0.072
Croatia	0.223	0.116	0.167	0.115
Cyprus	-0.062 **	0.021	-0.015	0.016
Czech Republic	-0.098 **	-0.020	0.030	-0.023
Denmark	0.006	0.021	0.006	0.011
Estonia	0.300	0.193	0.072 **	0.077 **
Finland	-0.078	-0.242 ***	0.134 **	0.107 *
France	-0.016	0.028	0.092 ***	0.102 ***
Germany	0.059 ***	0.030 **	0.153 ***	0.109 ***
Greece	0.198 **	0.183 **	-0.042	-0.009
Hungary	0.035	0.054 *	-0.066	-0.016
Ireland	-0.060	-0.120 **	0.102 ***	0.107 ***
Italy	-0.066 ***	-0.056 ***	-0.030 ***	-0.024 **
Latvia	-0.101	0.059	0.059	-0.010
Lithuania	-0.154 *	-0.100	0.010	0.134 **
Luxembourg	-0.019	-0.003	-0.124 **	-0.111 *
Malta	-0.108	0.044	-0.210 ***	-0.132
Netherlands	-0.050	-0.042	0.015	-0.073 ***
Norway	-0.061	-0.067	-0.189 ***	-0.030
Poland	0.137 *	-0.044	0.012	0.077
Portugal	-0.005	-0.031	-0.011	-0.047
Romania	-0.280	1.833 ***	0.118	-0.004
Slovak Republic	-0.120 **	-0.002	-0.206 ***	-0.189 *
Slovenia	-0.227 ***	-0.058	-0.144 ***	0.050 *
Spain	0.084 ***	0.109 *	0.090 ***	0.055 **
Sweden	0.021	0.046 **	0.100 ***	0.062 ***
Switzerland	0.014	0.036 ***	0.071 ***	0.048 ***
EU14	0.014	0.013	0.082 ***	0.062 ***
EU27	0.011	0.013	0.080 ***	0.061 ***
All	0.010	0.013	0.078 ***	0.060 ***

*The table reports, for each country and separately for EU (columns I and II) and non-EU (columns III and IV) immigrants, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country)immigrants aged 25-64, in the probability of employment, overall (columns I and III), and when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (columns II and IV). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table B16: Employment gap between naturalized and non-naturalized immigrants, by education (2021)

Country	Low Education		Intermediate Education		High Education	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	0.036 *	0.078 ***	-0.009	0.013	0.015	0.033 *
Belgium	0.043	0.170 ***	0.016	0.094 **	-0.083 ***	-0.046
Bulgaria	-0.269 *	-0.072	0.147	0.192	-0.252	-0.971 ***
Croatia	0.270 **	0.200 *	0.201 *	0.161	-0.142 ***	-0.079
Cyprus	-0.180 ***	-0.132 *	-0.102 ***	0.046	0.006	0.027
Czech Republic	-0.257 **	-0.061	-0.040	0.000	0.011	-0.048
Denmark	-0.149 ***	-0.090 **	-0.036	0.043	0.017	0.059 **
Estonia	0.085	0.087	0.045	0.074	0.094 **	0.093 **
Finland	0.013	0.142	-0.036	-0.071	0.056	0.088
France	0.035	0.103 ***	-0.030	0.045	0.071 **	0.107 ***
Germany	0.100 ***	0.110 ***	0.044 ***	0.049 ***	0.090 ***	0.086 ***
Greece	-0.091	0.005	0.044	0.098 *	-0.093	-0.165 *
Hungary	-0.101 *	0.030	0.027	0.025	0.002	0.033
Ireland	0.000	0.122	-0.008	0.009	0.016	0.067 *
Italy	-0.088 ***	-0.037 ***	-0.045 ***	-0.039 ***	0.045 ***	-0.001
Latvia	0.049	0.223	-0.006	-0.001	0.009	0.007
Lithuania	-0.315 **	-0.038	0.012	0.061	0.028	0.218 ***
Luxembourg	-0.056	-0.023	-0.046	0.012	-0.068 **	-0.050
Malta	-0.246 **	-0.083	-0.131 **	0.165	-0.012	-0.035
Netherlands	-0.104 ***	-0.073 *	-0.081 **	-0.098 **	-0.047 **	-0.055 *
Norway	-0.180 *	0.020	-0.162 **	-0.115	-0.005	-0.038
Poland	0.000 ***	0.000 ***	0.046	0.174 **	0.028	-0.010
Portugal	-0.085	-0.028	0.076	-0.003	-0.023	-0.081
Romania	0.426	0.740	-0.127	0.011	0.204	0.108
Slovak Republic	0.245	-0.436	-0.111 **	-0.083	-0.113 ***	0.043
Slovenia	-0.202 ***	0.080	-0.208 ***	0.003	0.042	0.117 **
Spain	0.019	-0.029	0.111 ***	0.149 ***	0.050	0.072 *
Sweden	0.030	0.071 *	0.065 **	0.096 ***	0.005	-0.002
Switzerland	-0.020	0.031	-0.007	0.051 ***	0.011	0.032 **
EU14	0.018 *	0.043 ***	0.016 *	0.040 ***	0.044 ***	0.052 ***
EU27	0.016	0.042 ***	0.014 *	0.038 ***	0.043 ***	0.050 ***
All	0.013	0.041 ***	0.011	0.037 ***	0.040 ***	0.048 ***

*The table reports, for each country and separately for low (columns I and II), intermediately (columns III and IV) and highly educated (columns V and VI) immigrants, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of employment, overall (columns I, III and V), and when differences in age, years of residence in the country, gender and origin characteristics are taken into account (columns II, IV and VI). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table B17: Distribution of naturalized immigrants across occupations (percentage by row, 2021)

Country	(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
Austria	4	17	13	8	19	1	13	10	16
Belgium	9	16	12	9	15	1	12	10	18
Bulgaria	0	27	20	0	17	0	13	5	17
Croatia	6	17	13	5	20	4	13	11	11
Cyprus	6	23	19	14	20	2	7	2	7
Czech Republic	8	16	11	9	19	0	14	14	9
Denmark	2	30	19	7	20	0	3	8	10
Estonia	6	22	22	6	10	1	10	15	8
Finland	2	24	17	5	26	1	9	9	7
France	7	24	17	9	17	1	8	7	9
Germany	3	17	17	10	15	1	13	11	13
Greece	2	12	8	11	27	4	15	6	15
Hungary	5	29	16	9	14	3	11	10	6
Ireland	10	34	12	7	17	1	7	6	5
Italy	3	10	12	8	19	2	18	10	17
Latvia	15	18	16	5	18	0	9	6	12
Lithuania	5	22	8	4	17	1	17	13	12
Luxembourg	3	48	19	8	11	1	3	4	4
Malta	14	14	20	13	21	0	7	3	7
Netherlands	5	25	17	10	18	1	7	7	10
Norway	10	28	19	7	18	1	8	5	5
Poland	11	41	13	9	10	2	6	3	5
Portugal	8	26	13	12	17	0	11	8	6
Romania	12	31	27	0	18	7	6	0	0
Slovak Republic	10	18	12	15	20	0	8	13	5
Slovenia	4	18	13	6	14	1	13	14	17
Spain	3	13	10	8	24	1	12	7	22
Sweden	6	32	16	4	22	0	7	6	7
Switzerland	11	27	15	12	16	1	7	4	8
EU14	5	19	15	9	18	1	11	9	13
EU27	5	20	15	9	18	1	11	9	13
All	5	20	15	9	18	1	11	9	13

The table reports, for each country, the percent distribution across one-digit ISCO occupations of naturalized long-term (at least 10 years of residence in the country) immigrant workers aged 25-64. Each column reports the share of immigrants employed in the corresponding one-digit occupation among all immigrants in that country. Occupations are: (I) Managers, (II) Professionals, (III) Technicians and Associate Professionals, (IV) Clerical Support Workers, (V) Service and Sales Workers, (VI) Skilled Agricultural, Forestry and Fishery Workers, (VII) Craft and Related Trade Workers, (VIII) Plant and Machine Workers, (IX) Elementary Workers. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.

Table B18: Distribution of non-naturalized immigrants across occupations (percentage by row, 2021)

Country	(I)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)
Austria	5	16	11	6	19	1	14	9	19
Belgium	11	25	11	8	11	1	12	5	17
Bulgaria	43	9	0	0	39	0	0	0	9
Croatia	4	28	24	0	5	0	14	18	6
Cyprus	3	11	6	6	26	0	21	4	22
Czech Republic	6	19	12	4	18	1	18	13	10
Denmark	2	22	11	5	19	2	7	8	25
Estonia	5	13	9	3	15	0	20	18	17
Finland	1	22	10	2	18	3	19	7	19
France	6	13	11	5	18	2	16	8	21
Germany	4	14	11	8	18	1	14	10	20
Greece	3	6	1	1	22	5	23	11	27
Hungary	3	32	13	10	22	1	7	4	6
Ireland	8	19	11	8	17	1	12	11	12
Italy	2	3	4	3	23	2	20	10	33
Latvia	11	6	9	4	12	0	23	12	22
Lithuania	23	17	5	3	15	0	16	9	13
Luxembourg	5	50	10	4	7	1	7	5	12
Malta	13	25	13	5	19	0	18	4	4
Netherlands	6	30	14	7	14	1	10	4	14
Norway	7	33	12	5	13	1	17	7	6
Poland	12	37	12	2	16	2	11	3	6
Portugal	12	27	13	6	20	3	11	2	6
Romania	5	15	6	0	72	0	2	0	0
Slovak Republic	9	8	27	7	20	0	13	5	12
Slovenia	4	6	5	3	5	1	32	14	29
Spain	3	7	6	5	25	3	15	9	27
Sweden	7	29	15	4	17	1	10	4	11
Switzerland	8	19	12	8	16	1	13	7	16
EU14	4	12	8	5	20	2	16	9	24
EU27	4	12	8	5	20	2	16	9	24
All	4	12	9	6	20	2	16	9	23

The table reports, for each country, the percent distribution across one-digit ISCO occupations of non-naturalized long-term (at least 10 years of residence in the country) immigrant workers aged 25-64. Each column reports the share of immigrants employed in the corresponding one-digit occupation among all immigrants in that country. Occupations are: (I) Managers, (II) Professionals, (III) Technicians and Associate Professionals, (IV) Clerical Support Workers, (V) Service and Sales Workers, (VI) Skilled Agricultural, Forestry and Fishery Workers, (VII) Craft and Related Trade Workers, (VIII) Plant and Machine Workers, (IX) Elementary Workers. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.

Table B19: Differences in the probability of having an elementary occupation between naturalized and non-naturalized immigrants (2021)

Country	Unconditional	Conditional (individual characteristics)
Austria	-0.035 ***	-0.034 ***
Belgium	0.021	0.006
Bulgaria	-0.002	0.208
Croatia	0.049	0.022
Cyprus	-0.158 ***	-0.042 **
Czech Republic	-0.002	-0.008
Denmark	-0.151 ***	-0.095 ***
Estonia	-0.094 ***	-0.112 ***
Finland	-0.127 ***	-0.109 ***
France	-0.113 ***	-0.072 ***
Germany	-0.077 ***	-0.018 **
Greece	-0.136 ***	-0.037
Hungary	-0.006	-0.028
Ireland	-0.073 ***	-0.006
Italy	-0.157 ***	-0.104 ***
Latvia	-0.081 *	-0.057
Lithuania	-0.010	-0.068
Luxembourg	-0.104 ***	-0.069 ***
Malta	0.024	0.060
Netherlands	-0.036 **	-0.028
Norway	-0.015	-0.013
Poland	-0.002	-0.019
Portugal	0.006	0.067
Romania	0.000 ***	0.000 ***
Slovak Republic	-0.072	-0.067
Slovenia	-0.119 ***	-0.125 ***
Spain	-0.054 ***	-0.011
Sweden	-0.041 ***	-0.037 ***
Switzerland	-0.083 ***	-0.053 ***
EU14	-0.085 ***	-0.043 ***
EU27	-0.084 ***	-0.043 ***
All	-0.083 ***	-0.044 ***

*The table reports, for each country, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being employed as elementary workers, overall (column I), and when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (column II). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table B20: Differences in the probability of having an elementary occupation between naturalized and non-naturalized immigrants, by sex (2021)

Country	Men		Women	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	-0.016	-0.017	-0.058 ***	-0.050 ***
Belgium	0.023	-0.015	0.023	0.026
Bulgaria	0.267	2.380 ***	0.000	-0.328
Croatia	0.083 ***	0.075 **	-0.005	-0.056
Cyprus	-0.090 ***	-0.055 **	-0.255 ***	-0.006
Czech Republic	0.034	0.031	-0.072	-0.046
Denmark	-0.130 ***	-0.100 ***	-0.173 ***	-0.067 ***
Estonia	-0.081 ***	-0.099 ***	-0.130 ***	-0.124 ***
Finland	-0.084 *	-0.091 *	-0.243 ***	-0.159 **
France	-0.071 ***	-0.041 *	-0.173 ***	-0.110 ***
Germany	-0.045 ***	-0.010	-0.118 ***	-0.033 **
Greece	-0.048	0.019	-0.278 ***	-0.090
Hungary	0.026 *	0.000	-0.036	-0.057
Ireland	-0.055 **	-0.002	-0.095 ***	0.008
Italy	-0.140 ***	-0.066 ***	-0.187 ***	-0.153 ***
Latvia	-0.168 ***	-0.146 **	-0.045	-0.002
Lithuania	-0.017	-0.027	-0.016	-0.084
Luxembourg	-0.047 ***	-0.019	-0.177 ***	-0.097 ***
Malta	0.039	0.121	0.019	0.030
Netherlands	-0.035	-0.041	-0.034	-0.020
Norway	-0.004	-0.013	-0.039	-0.014
Poland	0.013	0.018	-0.021	-0.099
Portugal	-0.075	-0.113	0.063 *	0.128 **
Romania	0.000 ***	0.000 ***	0.000 ***	0.000 ***
Slovak Republic	-0.030	-0.024	-0.190 *	-0.186 **
Slovenia	-0.141 ***	-0.123 ***	-0.191 ***	-0.159 ***
Spain	-0.080 ***	-0.051 *	-0.052 *	0.016
Sweden	-0.047 ***	-0.055 ***	-0.036 *	-0.025
Switzerland	-0.047 ***	-0.022 **	-0.137 ***	-0.082 ***
EU14	-0.067 ***	-0.043 ***	-0.115 ***	-0.047 ***
EU27	-0.066 ***	-0.041 ***	-0.115 ***	-0.048 ***
All	-0.064 ***	-0.041 ***	-0.115 ***	-0.050 ***

*The table reports, for each country and separately for male (columns I and II) and female (columns III and IV) immigrants, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being employed as elementary workers, overall (columns I and III), and when differences in age, years of residence in the country, origin and education characteristics are taken into account (columns II and IV). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table B21: Differences in the probability of having an elementary occupation between naturalized and non-naturalized immigrants, by origin (2021)

Country	EU		Non - EU	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	-0.041 ***	0.001	-0.082 ***	-0.051 ***
Belgium	0.044	0.062 *	-0.058	-0.052
Bulgaria	0.000 ***	0.000 ***	0.057	0.302
Croatia	0.053 **	0.031	0.048	0.006
Cyprus	-0.061 **	0.013	-0.228 ***	-0.072 ***
Czech Republic	0.013	0.001	-0.011	-0.035
Denmark	-0.157 ***	-0.080 ***	-0.176 ***	-0.105 ***
Estonia	-0.091	-0.079	-0.090 ***	-0.110 ***
Finland	-0.108 **	-0.070	-0.166 ***	-0.132 **
France	-0.111 ***	-0.096 ***	-0.127 ***	-0.068 ***
Germany	-0.069 ***	-0.004	-0.094 ***	-0.027 **
Greece	-0.010	0.056	-0.135 ***	-0.054
Hungary	-0.039	-0.040	0.001	-0.006
Ireland	0.049	0.100	-0.057 **	-0.044 *
Italy	-0.119 ***	-0.092 ***	-0.177 ***	-0.111 ***
Latvia	-0.173	-0.326 **	-0.074	-0.036
Lithuania	0.097	-0.126	-0.030	-0.068
Luxembourg	-0.108 ***	-0.061 ***	-0.140 ***	-0.072
Malta	0.057	0.016	0.108 **	0.116 *
Netherlands	-0.040	-0.001	-0.088 ***	-0.044
Norway	-0.032	-0.020	0.045	0.016
Poland	0.018	0.016	-0.016	-0.058
Portugal	-0.001	0.031	0.008	0.109
Romania	0.000 ***	0.000 ***	0.000 ***	0.000 ***
Slovak Republic	-0.117 **	-0.106 *	0.120 **	0.280 ***
Slovenia	-0.091	-0.161 ***	-0.100 ***	-0.126 ***
Spain	-0.140 ***	-0.044	-0.060 **	-0.011
Sweden	-0.067 ***	-0.055 ***	-0.047 **	-0.010
Switzerland	-0.067 ***	-0.024 ***	-0.140 ***	-0.088 ***
EU14	-0.081 ***	-0.024 ***	-0.106 ***	-0.050 ***
EU27	-0.078 ***	-0.024 ***	-0.105 ***	-0.051 ***
All	-0.076 ***	-0.025 ***	-0.106 ***	-0.052 ***

*The table reports, for each country and separately for EU (columns I and II) and non-EU (columns III and IV) immigrants, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being employed as elementary workers, overall (columns I and III), and when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (columns II and IV). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table B22: Differences in the probability of having an elementary occupation between naturalized and non-naturalized immigrants, by education (2021)

Country	Low Education		Intermediate Education		High Education	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	-0.087 ***	-0.053 **	-0.042 ***	-0.033 **	0.001	-0.008
Belgium	0.035	0.050	-0.092 **	-0.030	0.013	-0.004
Bulgaria	0.057	0.302	0.000	-0.297 ***	0.000 ***	0.000 ***
Croatia	-0.706 ***	-0.673 ***	0.114 ***	0.077 ***	0.012	-0.003
Cyprus	-0.142 **	0.025	-0.138 ***	-0.063	-0.062 ***	-0.037 **
Czech Republic	0.169	0.146	-0.022	-0.019	0.000 ***	0.000 ***
Denmark	-0.218 ***	-0.165 ***	-0.147 ***	-0.120 ***	-0.048 ***	-0.027
Estonia	0.026	0.151	-0.085 **	-0.142 ***	-0.083 **	-0.089 ***
Finland	0.111	0.023	-0.150 ***	-0.110 **	-0.079 *	-0.087 *
France	-0.131 ***	-0.178 ***	-0.068 **	-0.058 **	-0.026 *	-0.007
Germany	-0.035 *	-0.027	-0.041 ***	-0.011	-0.031 ***	-0.022 *
Greece	-0.063	-0.021	-0.072	-0.066	-0.118	-0.039
Hungary	-0.257 *	-0.436 ***	0.008	0.000	0.004	-0.002
Ireland	-0.138	-0.086	-0.062	0.044	-0.047 **	-0.010
Italy	-0.115 ***	-0.103 ***	-0.136 ***	-0.093 ***	-0.166 ***	-0.125 ***
Latvia	-0.292	-1.611 ***	0.004	-0.051	-0.055	-0.073
Lithuania	0.243	0.075	-0.085	-0.105	-0.017	-0.034
Luxembourg	-0.151 **	-0.083	-0.142 ***	-0.119 **	-0.004	-0.011
Malta	0.081	0.042	-0.008	0.110	0.000 ***	0.000 ***
Netherlands	-0.007	-0.016	-0.107 ***	-0.114 ***	-0.001	0.015
Norway	-0.121	-0.098	-0.001	0.031	-0.016	-0.001
Poland	1.000 ***	1.000 ***	-0.027	-0.093	-0.006	-0.003
Portugal	0.145 **	0.282 ***	-0.076	-0.029	-0.043	-0.013
Romania	0.000 ***	0.000 ***	0.000 ***	0.000 ***	0.000 ***	0.000 ***
Slovak Republic	0.000 ***	0.000 ***	-0.146 **	-0.100	0.070 *	0.112 **
Slovenia	0.133 *	-0.029	-0.117 ***	-0.170 ***	-0.096 **	-0.099 **
Spain	-0.036	-0.055	0.033	0.022	-0.024	0.005
Sweden	-0.035	-0.064	-0.110 ***	-0.082 ***	-0.009	-0.007
Switzerland	-0.098 ***	-0.123 ***	-0.036 ***	-0.055 ***	-0.014 ***	-0.016 **
EU14	-0.065 ***	-0.065 ***	-0.059 ***	-0.038 ***	-0.036 ***	-0.022 ***
EU27	-0.064 ***	-0.064 ***	-0.058 ***	-0.038 ***	-0.035 ***	-0.022 ***
All	-0.066 ***	-0.067 ***	-0.057 ***	-0.039 ***	-0.034 ***	-0.021 ***

*The table reports, for each country and separately for low (columns I and II), intermediately educated (columns III and IV) and highly educated (columns V and VI) immigrants, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being employed as elementary workers, overall (columns I, III and V), and when differences in age, years of residence in the country, gender and origin characteristics are taken into account (columns II, IV and VI). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table B23: Differences in the probability of having a high paid occupation between naturalized and non-naturalized immigrants (2021)

Country	Unconditional	Conditional (individual characteristics)
Austria	0.028 ***	0.044 ***
Belgium	-0.141 ***	-0.064 **
Bulgaria	-0.063	0.403
Croatia	-0.209	-0.173
Cyprus	0.289 ***	0.127 ***
Czech Republic	-0.021	0.029
Denmark	0.148 ***	0.091 ***
Estonia	0.248 ***	0.179 ***
Finland	0.118 **	0.009
France	0.184 ***	0.056 ***
Germany	0.097 ***	0.034 ***
Greece	0.137 ***	-0.008
Hungary	0.010	0.045
Ireland	0.170 ***	0.021
Italy	0.168 ***	0.052 ***
Latvia	0.266 ***	0.110 *
Lithuania	-0.086	0.027
Luxembourg	0.111 ***	0.059 *
Malta	-0.066	-0.121
Netherlands	-0.024	-0.027
Norway	0.049	-0.033
Poland	0.035	0.016
Portugal	-0.068	-0.162 **
Romania	0.337 **	0.247 *
Slovak Republic	-0.062	0.038
Slovenia	0.205 ***	0.041
Spain	0.099 ***	0.007
Sweden	0.023	0.007
Switzerland	0.146 ***	0.065 ***
EU14	0.107 ***	0.023 ***
EU27	0.107 ***	0.024 ***
All	0.108 ***	0.027 ***

*The table reports, for each country, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being employed in a high-pay occupation (ISCO 1-digit codes 1, 2 or 3), overall (column I), and when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (column II). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table B24: Differences in the probability of having a high paid occupation between naturalized and non-naturalized immigrants, by sex (2021)

Country	Men		Women	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	0.032 **	0.037 **	0.022	0.050 ***
Belgium	-0.172 ***	-0.084 *	-0.100 **	-0.049
Bulgaria	-0.554	-1.673 ***	0.222	1.799 ***
Croatia	-0.088	-0.194	-0.386 **	-0.207 **
Cyprus	0.253 ***	0.037	0.321 ***	0.184 ***
Czech Republic	-0.075	0.033	0.082	-0.004
Denmark	0.105 ***	0.095 ***	0.193 ***	0.097 ***
Estonia	0.292 ***	0.273 ***	0.196 ***	0.088 *
Finland	0.063	0.031	0.194 ***	-0.006
France	0.224 ***	0.078 ***	0.141 ***	0.029
Germany	0.086 ***	0.016	0.106 ***	0.052 ***
Greece	0.078	-0.032	0.210 ***	0.007
Hungary	-0.023	0.014	0.040	0.058
Ireland	0.133 ***	-0.043	0.214 ***	0.093
Italy	0.145 ***	0.030 ***	0.192 ***	0.076 ***
Latvia	0.449 ***	0.299 ***	0.127	-0.002
Lithuania	-0.163 *	-0.054	0.001	0.100
Luxembourg	0.094 *	0.039	0.121 **	0.088 *
Malta	-0.032	-0.152	-0.156	-0.085
Netherlands	-0.015	-0.043	-0.031	-0.011
Norway	0.062	-0.044	0.011	-0.036
Poland	0.059	-0.021	0.016	0.058
Portugal	-0.082	-0.096	-0.073	-0.184 **
Romania	0.247	0.165	0.742 ***	0.656 ***
Slovak Republic	-0.126	-0.024	0.106	0.145
Slovenia	0.215 ***	0.032	0.105 **	0.057
Spain	0.129 ***	-0.010	0.069 **	0.024
Sweden	0.055 **	0.003	-0.017	0.017
Switzerland	0.151 ***	0.061 ***	0.146 ***	0.064 ***
EU14	0.108 ***	0.013	0.104 ***	0.035 ***
EU27	0.107 ***	0.014 *	0.104 ***	0.036 ***
All	0.109 ***	0.017 **	0.105 ***	0.037 ***

*The table reports, for each country and separately for male (columns I and II) and female (columns III and IV) immigrants, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being employed in a high-pay occupation (ISCO 1-digit codes 1,2 or 3), overall (columns I and III), and when differences in age, years of residence in the country, origin and education characteristics are taken into account (columns II and IV). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table B25: Differences in the probability of having a high paid occupation between naturalized and non-naturalized immigrants, by origin (2021)

Country	EU		Non - EU	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	0.054 ***	0.016	0.099 ***	0.060 ***
Belgium	-0.146 ***	-0.106 **	0.019	0.000
Bulgaria	1.000 ***	1.000 ***	-0.175	0.248
Croatia	-0.110	-0.263	-0.226	-0.114
Cyprus	0.315 ***	0.101 **	0.288 ***	0.136 ***
Czech Republic	-0.037	0.045	-0.030	0.028
Denmark	0.225 ***	0.090 **	0.186 ***	0.101 ***
Estonia	0.312	0.314	0.243 ***	0.176 ***
Finland	0.174 **	-0.001	0.117 *	0.020
France	0.185 ***	0.054	0.199 ***	0.059 **
Germany	0.138 ***	0.046 **	0.093 ***	0.025 *
Greece	0.261 ***	0.087	0.059	-0.040
Hungary	-0.099 *	0.002	0.150 **	0.083
Ireland	0.141 **	0.035	0.035	0.010
Italy	0.169 ***	0.043 ***	0.169 ***	0.057 ***
Latvia	-0.140	-0.089	0.327 ***	0.134 **
Lithuania	-0.369 ***	0.131	-0.013	0.025
Luxembourg	0.156 ***	0.071 *	0.105	0.026
Malta	0.061	-0.039	-0.551 ***	-0.264 **
Netherlands	0.077 *	-0.028	0.021	-0.035
Norway	0.077	-0.058	-0.028	-0.003
Poland	0.088	-0.106	0.033	-0.115
Portugal	-0.181	-0.197 **	0.039	-0.130
Romania	0.617	1.000 ***	0.363 **	0.260 *
Slovak Republic	-0.058	0.043	-0.038	-0.223
Slovenia	0.117 *	0.057	0.153 ***	0.047
Spain	0.161 ***	0.145 **	0.102 ***	-0.009
Sweden	0.049 *	0.037	0.071 **	-0.003
Switzerland	0.184 ***	0.065 ***	0.171 ***	0.059 ***
EU14	0.127 ***	0.032 ***	0.123 ***	0.022 ***
EU27	0.121 ***	0.031 ***	0.124 ***	0.024 ***
All	0.125 ***	0.035 ***	0.125 ***	0.025 ***

*The table reports, for each country and separately for EU (columns I and II) and non-EU (columns III and IV) immigrants, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being employed in a high-pay occupation (ISCO 1-digit codes 1,2 or 3), overall (columns I and III), and when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (columns II and IV). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table B26: Differences in the probability of having a high paid occupation between naturalized and non-naturalized immigrants, by education (2021)

Country	Low Education		Intermediate Education		High Education	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	0.026 **	0.021 **	0.055 ***	0.053 ***	0.004	0.063 ***
Belgium	-0.056	-0.042	0.022	0.025	-0.116 ***	-0.150 ***
Bulgaria	-0.175	0.248	0.463	2.727 ***	0.000 ***	-2.034 ***
Croatia	0.085	0.021	-0.235	-0.123	-0.211 ***	-0.121 **
Cyprus	0.063	-0.086 *	0.163 ***	0.127 ***	0.154 ***	0.140 ***
Czech Republic	0.066	0.007	-0.020	0.028	-0.016	0.050
Denmark	0.120 ***	0.116 **	0.142 ***	0.154 ***	0.027	0.032
Estonia	-0.008	0.101	0.159 ***	0.167 ***	0.217 ***	0.200 ***
Finland	-0.034	0.062	0.071	-0.004	-0.048	-0.023
France	0.079 ***	0.053 *	0.072 **	0.045	0.096 ***	0.076 **
Germany	0.007	0.006	0.063 ***	0.042 **	0.049 **	0.037
Greece	0.000	-0.006	0.043	0.001	0.253 **	0.007
Hungary	0.135 ***	0.117 ***	0.061	-0.008	0.076 *	0.020
Ireland	0.028	-0.089	0.061	-0.090	0.161 ***	0.080
Italy	0.022 ***	0.018 **	0.142 ***	0.038 ***	0.306 ***	0.170 ***
Latvia	-0.139	-1.611 ***	0.064	0.063	0.292 ***	0.176 *
Lithuania	0.091	0.080	0.028	0.006	-0.009	0.061
Luxembourg	0.077	0.067	0.224 ***	0.141	-0.035	0.010
Malta	-0.041	0.384	-0.038	-0.120	0.066	-0.314 *
Netherlands	0.001	0.003	0.015	0.004	-0.013	-0.072 *
Norway	0.137	0.120	0.007	-0.060	0.060	-0.067
Poland	0.000 ***	0.000 ***	0.187	0.251 **	-0.059	-0.099
Portugal	-0.179	-0.196	0.093	-0.055	-0.065	-0.144
Romania	0.000 ***	0.000 ***	0.197	0.300	0.176	-0.197
Slovak Republic	0.000 ***	0.000 ***	-0.135 *	-0.033	0.084	0.154
Slovenia	-0.051	-0.080	0.118 ***	0.038	0.107 *	0.139 *
Spain	0.021	-0.002	-0.053 **	-0.089 ***	0.157 ***	0.126 **
Sweden	0.002	-0.035	0.052	0.015	0.051 **	0.018
Switzerland	0.022	0.024	0.088 ***	0.106 ***	0.023	0.047 ***
EU14	0.021 ***	0.011	0.058 ***	0.014	0.087 ***	0.048 ***
EU27	0.021 ***	0.011	0.057 ***	0.016 *	0.086 ***	0.050 ***
All	0.022 ***	0.012 *	0.058 ***	0.019 **	0.082 ***	0.049 ***

*The table reports, for each country and separately for low (columns I and II), intermediately (columns III and IV) and highly educated (columns V and VI) immigrants, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being employed in a high-pay occupation (ISCO 1-digit codes 1,2 or 3), overall (columns I,III and V), and when differences in age, years of residence in the country, gender and origin characteristics are taken into account (columns II, IV and VI). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table B27: Differences in occupational status between naturalized and non-naturalized immigrants (2021)

Country	Unconditional	Conditional (individual characteristics)
Austria	0.054 **	0.069 ***
Belgium	-0.263 ***	-0.091
Bulgaria	-0.107	0.511
Croatia	-0.554 **	-0.423 ***
Cyprus	0.544 ***	0.163 ***
Czech Republic	0.044	0.115
Denmark	0.335 ***	0.241 ***
Estonia	0.457 ***	0.377 ***
Finland	0.219 **	0.029
France	0.447 ***	0.182 ***
Germany	0.238 ***	0.079 ***
Greece	0.497 ***	0.155 *
Hungary	0.062	0.132 *
Ireland	0.383 ***	0.139 *
Italy	0.571 ***	0.220 ***
Latvia	0.462 ***	0.245 **
Lithuania	-0.110	0.216 **
Luxembourg	0.172 **	0.077
Netherlands	-0.050	-0.043
Norway	0.078	-0.021
Poland	0.076	-0.038
Portugal	0.034	-0.226 **
Romania	0.377	0.143
Slovak Republic	0.123	0.341 **
Slovenia	0.385 ***	0.175 ***
Spain	0.285 ***	0.087
Sweden	0.033	0.056
Switzerland	0.308 ***	0.161 ***
EU14	0.274 ***	0.096 ***
EU27	0.271 ***	0.097 ***
All	0.266 ***	0.099 ***

*The table reports, for each country, the difference in occupational status, measured by the ISEI index, between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, overall (column I), or alternatively when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (column II). Each cell measures the difference expressed as a fraction of the within-country standard deviation. The differences are computed as coefficients on a naturalized dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table B28: Differences in occupational status between naturalized and non-naturalized immigrants, by sex (2021)

Country	Men		Women	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	0.037	0.050 *	0.073 **	0.087 ***
Belgium	-0.248 ***	-0.057	-0.287 ***	-0.136 *
Bulgaria	-0.994	-3.524 ***	0.108	3.044 ***
Croatia	-0.244	-0.459 **	-0.955 **	-0.474 ***
Cyprus	0.364 ***	0.007	0.724 ***	0.240 ***
Czech Republic	-0.094	0.077	0.314 **	0.131
Denmark	0.287 ***	0.280 ***	0.388 ***	0.195 ***
Estonia	0.482 ***	0.452 ***	0.483 ***	0.302 ***
Finland	0.094	0.053	0.521 ***	0.046
France	0.500 ***	0.200 ***	0.416 ***	0.171 ***
Germany	0.212 ***	0.056 *	0.274 ***	0.105 ***
Greece	0.371 ***	0.212 *	0.689 ***	0.062
Hungary	0.045	0.042	0.078	0.219 **
Ireland	0.347 ***	0.086	0.426 ***	0.177
Italy	0.481 ***	0.123 ***	0.708 ***	0.335 ***
Latvia	0.812 ***	0.656 ***	0.317	0.071
Lithuania	-0.360 **	0.000	0.255	0.385 ***
Luxembourg	0.085	-0.032	0.270 ***	0.179 *
Netherlands	-0.017	-0.003	-0.088	-0.073
Norway	0.077	-0.083	0.084	0.047
Poland	0.092	-0.083	0.047	0.174
Portugal	0.069	0.078	-0.010	-0.321 **
Romania	0.193	-0.018	0.987 ***	0.842 **
Slovak Republic	-0.192	-0.062	0.662 ***	0.895 ***
Slovenia	0.467 ***	0.157 **	0.310 ***	0.255 **
Spain	0.380 ***	0.104	0.227 ***	0.090
Sweden	0.060	0.026	0.008	0.105 **
Switzerland	0.301 ***	0.124 ***	0.358 ***	0.190 ***
EU14	0.276 ***	0.093 ***	0.287 ***	0.104 ***
EU27	0.271 ***	0.092 ***	0.289 ***	0.107 ***
All	0.266 ***	0.093 ***	0.285 ***	0.110 ***

*The table reports, for each country and separately for male (columns I and II) and female (columns III and IV) immigrants, the difference in occupational status, measured by the ISEI index, between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, overall (columns I and III), or alternatively when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (columns II and IV). Each cell measures the difference expressed as a fraction of the within-country standard deviation. The differences are computed as coefficients on a naturalized dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table B29: Differences in occupational status between naturalized and non-naturalized immigrants, by origin (2021)

Country	EU		Non - EU	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	0.128 ***	0.011	0.192 ***	0.106 ***
Belgium	-0.253 **	-0.171 **	0.060	0.035
Bulgaria	1.944 ***	1.944 ***	-0.333	0.163
Croatia	-0.223	-0.557 *	-0.631 **	-0.318 **
Cyprus	0.481 ***	0.071	0.640 ***	0.204 ***
Czech Republic	0.045	0.204 *	-0.083	0.011
Denmark	0.557 ***	0.295 ***	0.411 ***	0.244 ***
Estonia	0.658	0.396	0.444 ***	0.375 ***
Finland	0.324 **	-0.058	0.217 *	0.071
France	0.385 ***	0.145	0.498 ***	0.200 ***
Germany	0.296 ***	0.084 **	0.247 ***	0.073 ***
Greece	0.583 ***	0.264	0.344 ***	0.106
Hungary	-0.116	0.031	0.313 **	0.313 **
Ireland	0.328 **	0.095	0.201 **	0.158 *
Italy	0.521 ***	0.189 ***	0.600 ***	0.243 ***
Latvia	-0.083	0.204	0.547 ***	0.246 *
Lithuania	-0.849 ***	0.237	0.051	0.237 *
Luxembourg	0.249 ***	0.101	0.201	-0.026
Netherlands	0.115	-0.086	0.102	-0.028
Norway	0.203 *	-0.029	-0.206	-0.107
Poland	0.072	-0.166	0.104	-0.193
Portugal	-0.228	-0.273 *	0.301 *	-0.171
Romania	1.284	2.335 ***	0.403	0.165
Slovak Republic	0.211	0.358 **	-0.039	-0.464 **
Slovenia	0.184	0.159	0.288 ***	0.202 ***
Spain	0.472 ***	0.321 ***	0.305 ***	0.063
Sweden	0.178 ***	0.181 ***	0.059	-0.046
Switzerland	0.372 ***	0.145 ***	0.383 ***	0.168 ***
EU14	0.291 ***	0.085 ***	0.327 ***	0.107 ***
EU27	0.281 ***	0.086 ***	0.326 ***	0.107 ***
All	0.283 ***	0.093 ***	0.320 ***	0.107 ***

*The table reports, for each country and separately for EU (columns I and II) and non-EU (columns III and IV) immigrants, the difference in occupational status, measured by the ISEI index, between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, overall (columns I and III), or alternatively when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (columns II and IV). Each cell measures the difference expressed as a fraction of the within-country standard deviation. The differences are computed as coefficients on a naturalized dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table B30: Differences in occupational status between naturalized and non-naturalized immigrants, by education (2021)

Country	Low Education		Intermediate Education		High Education	
	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)	Unconditional	Conditional (individual characteristics)
Austria	0.085 ***	0.043	0.092 ***	0.063 **	0.007	0.122 **
Belgium	-0.046	-0.046	0.095	0.028	-0.232 ***	-0.180 *
Bulgaria	-0.333	0.163	0.329	4.141 ***	0.062	-4.852 ***
Croatia	0.619 ***	0.341 ***	-0.540 ***	-0.310 **	-0.710 ***	-0.660 ***
Cyprus	0.038	-0.237 **	0.349 ***	0.128 **	0.234 ***	0.220 ***
Czech Republic	-0.106	-0.036	0.024	0.080	0.121	0.211
Denmark	0.284 ***	0.231 ***	0.302 ***	0.325 ***	0.093	0.191 ***
Estonia	0.126	0.175	0.205 **	0.285 ***	0.484 ***	0.494 ***
Finland	0.004	0.049	0.168 *	0.046	-0.206	-0.094
France	0.231 ***	0.248 ***	0.162 ***	0.102 *	0.270 ***	0.226 ***
Germany	0.060 **	0.064 **	0.133 ***	0.063 **	0.105 **	0.107 **
Greece	0.073	0.099	0.328 ***	0.285 **	0.576 **	0.055
Hungary	0.281 **	0.377 ***	0.126	-0.029	0.251 ***	0.187
Ireland	0.028	-0.089	0.150 *	-0.114	0.350 ***	0.268 ***
Italy	0.209 ***	0.142 ***	0.453 ***	0.181 ***	0.950 ***	0.526 ***
Latvia	-0.163	-1.058 ***	-0.042	0.077	0.598 ***	0.571 ***
Lithuania	0.350	0.679	0.161	0.203	-0.035	0.200
Luxembourg	0.180 *	0.116	0.423 ***	0.370 ***	-0.185 ***	-0.083
Netherlands	-0.013	0.054	0.092	0.059	-0.064	-0.170 **
Norway	0.370 *	0.350	0.071	-0.064	0.061	-0.082
Poland	-0.335 ***	-0.335 ***	0.320 *	0.276	-0.156	-0.237
Portugal	-0.256	-0.373 **	0.290 *	0.063	0.063	-0.174
Romania	-0.802 ***	-0.739 ***	0.056	0.157	0.154	-0.351
Slovak Republic	0.000 ***	0.000 ***	-0.087	-0.034	0.547 **	0.788 ***
Slovenia	-0.277 ***	-0.087	0.149 ***	0.194 ***	0.313 *	0.396 **
Spain	0.086 *	0.110 **	-0.062	-0.086	0.333 ***	0.250 *
Sweden	-0.008	-0.011	0.143 **	0.098	0.045	0.055
Switzerland	0.119 ***	0.146 ***	0.156 ***	0.208 ***	0.045	0.127 ***
EU14	0.105 ***	0.097 ***	0.148 ***	0.061 ***	0.201 ***	0.144 ***
EU27	0.104 ***	0.096 ***	0.145 ***	0.063 ***	0.201 ***	0.151 ***
All	0.104 ***	0.097 ***	0.142 ***	0.068 ***	0.185 ***	0.143 ***

*The table reports, for each country and separately for low (columns I and II), intermediately (columns III and IV) and highly educated (columns V and VI) immigrants, the difference in occupational status, measured by the ISEI index, between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, overall (columns I, III and V), or alternatively when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (columns II, IV and VI). Each cell measures the difference expressed as a fraction of the within-country standard deviation. The differences are computed as coefficients on a naturalized dummy in a linear regression model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2021.*

Table B31: Differences in the probability of being in the bottom decile between naturalized and non-naturalized immigrants, over time

Year	EU14	EU27	All	Italy
	Unconditional			
2010	-0.026 ***	-0.026 ***	-0.025 ***	-0.060 ***
2011	-0.046 ***	-0.046 ***	-0.043 ***	-0.066 ***
2012	-0.039 ***	-0.039 ***	-0.037 ***	-0.073 ***
2013	-0.049 ***	-0.049 ***	-0.047 ***	-0.082 ***
2014	-0.052 ***	-0.051 ***	-0.049 ***	-0.103 ***
2015	-0.054 ***	-0.053 ***	-0.051 ***	-0.099 ***
2016	-0.046 ***	-0.046 ***	-0.044 ***	-0.078 ***
2017	-0.033 ***	-0.032 ***	-0.031 ***	-0.079 ***
2018	-0.048 ***	-0.048 ***	-0.046 ***	-0.059 ***
2019	-0.049 ***	-0.048 ***	-0.046 ***	-0.058 ***
2020	-0.055 ***	-0.054 ***	-0.049 ***	-0.064 ***
	Conditional			
2010	-0.009	-0.010	-0.010 *	-0.044 ***
2011	-0.024 ***	-0.024 ***	-0.023 ***	-0.044 ***
2012	-0.022 ***	-0.022 ***	-0.021 ***	-0.053 ***
2013	-0.031 ***	-0.031 ***	-0.030 ***	-0.059 ***
2014	-0.031 ***	-0.031 ***	-0.029 ***	-0.072 ***
2015	-0.034 ***	-0.034 ***	-0.032 ***	-0.070 ***
2016	-0.026 ***	-0.027 ***	-0.025 ***	-0.049 ***
2017	-0.016 ***	-0.016 ***	-0.015 ***	-0.052 ***
2018	-0.028 ***	-0.029 ***	-0.028 ***	-0.035 ***
2019	-0.025 ***	-0.026 ***	-0.025 ***	-0.035 ***
2020	-0.029 ***	-0.029 ***	-0.026 ***	-0.040 ***

*The table reports, for each year, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being in the bottom decile, overall (top of the table), and when differences in age, years of residence in the country, gender and education characteristics are taken into account (bottom of the table). The differences are computed as coefficients on a naturalized dummy interacted with the years dummies in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2010.*

Table B32: Differences in the probability of being in the bottom decile between naturalized and non-naturalized immigrants (2020)

Country	Unconditional	Conditional (individual characteristics)	Conditional (individual and job-related characteristics)
Belgium	0.000	-0.008	0.001
Bulgaria	0.000	0.000	0.000 ***
Croatia	0.028	0.056	0.147
Cyprus	-0.077 ***	-0.053 ***	-0.051 ***
Denmark	0.003	0.001	0.001
Estonia	-0.049 **	-0.063 ***	-0.042 *
Finland	-0.024	-0.038	0.025
France	-0.077 ***	-0.051 **	-0.031 *
Greece	-0.050 ***	-0.016	-0.012
Hungary	0.059 *	-0.015	0.000
Ireland	-0.004	-0.015	-0.009
Italy	-0.064 ***	-0.048 ***	-0.014 *
Latvia	-0.012	0.018	-0.091
Lithuania	0.006	0.027	0.005
Luxembourg	-0.059 ***	-0.029	-0.019
Malta	-0.033	0.019	0.020
Netherlands	-0.007	-0.004	-0.009
Poland	0.000 ***	0.000 ***	0.000 ***
Portugal	-0.097 ***	-0.025	-0.002
Romania	0.166	0.467	1.763 ***
Switzerland	-0.008	-0.007	0.004
EU14	-0.055 ***	-0.040 ***	-0.020 ***
EU27	-0.054 ***	-0.039 ***	-0.019 ***
All	-0.049 ***	-0.036 ***	-0.019 ***

*The table reports, for each country, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being in the bottom decile, overall (column I), when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (column II) and when differences in occupations and full/part time employment are taken into account together with individual characteristics (column III). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2020.*

Table B33: Differences in the probability of being in the bottom decile between naturalized and non-naturalized immigrants, by sex (2020)

Country	Men			Women		
	Unconditional	Conditional (individual characteristics)	Conditional (individual and job-related characteristics)	Unconditional	Conditional (individual characteristics)	Conditional (individual and job-related characteristics)
Belgium	0.010	-0.001	0.003	-0.006	-0.009	-0.004
Bulgaria	0.000	0.000	0.000 ***	0.000	0.000	0.000 ***
Croatia	0.027 **	-0.002	0.017	-0.104	0.024	0.360
Cyprus	-0.026 ***	-0.027 ***	-0.022 **	-0.145 ***	-0.091 ***	-0.094 ***
Denmark	0.012	0.005	0.005	-0.007	-0.005	-0.009
Estonia	-0.036 *	-0.040 **	-0.021	-0.101 ***	-0.082 **	-0.047
Finland	0.003	-0.066	0.000	-0.074	-0.034	0.049
France	-0.019	-0.005	-0.001	-0.155 ***	-0.109 ***	-0.062 **
Greece	-0.041 *	-0.015	0.005	-0.081 ***	-0.020	-0.036
Hungary	0.033	-0.003	-0.050	0.081 *	-0.053	-0.104 *
Ireland	0.015 *	0.007	0.005	-0.032 **	-0.030	-0.023
Italy	-0.047 ***	-0.047 ***	-0.037 ***	-0.100 ***	-0.052 ***	0.011
Latvia	0.049	0.081	-0.059	-0.059	0.010	-0.014
Lithuania	-0.032	-0.083	-0.089	0.043	0.092	0.084
Luxembourg	-0.038 ***	-0.031	-0.015	-0.099 ***	-0.028	-0.013
Malta	0.030 *	0.028	0.019	-0.055	0.003	0.020
Netherlands	-0.009	-0.024	-0.035 **	-0.007	0.010	0.017
Poland	0.000 ***	0.000 ***	0.000 ***	0.000 ***	0.000 ***	0.000 ***
Portugal	-0.011	-0.022	0.005	-0.161 ***	-0.031	-0.012
Romania	0.331	0.415	1.370	0.000 ***	0.000 ***	0.000 ***
Switzerland	-0.002	-0.005	-0.007	-0.028 **	-0.006	0.013
EU14	-0.023 ***	--0.022 ***	-0.014 **	-0.100 ***	-0.062 ***	-0.027 **
EU27	-0.022 ***	-0.021 **	-0.013 *	-0.099 ***	-0.061 ***	-0.027 **
All	-0.020 ***	-0.020 ***	-0.013 **	-0.090 ***	-0.053 ***	-0.025 **

*The table reports, for each country and separately for male (columns I, II and III) and female (columns IV, V and VI) immigrants, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being in the bottom decile, overall (columns I and IV), when differences in age, years of residence in the country, origin and education characteristics are taken into account (columns II and V), and when differences in occupations and full/part time employment are taken into account together with individual characteristics (columns III and VI). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2020.*

Table B34: Differences in the probability of being in the bottom decile between naturalized and non-naturalized immigrants, by origin (2020)

Country	EU			Non-EU		
	Unconditional	Conditional (individual characteristics)	Conditional (individual and job-related characteristics)	Unconditional	Conditional (individual characteristics)	Conditional (individual and job-related characteristics)
Belgium	0.009	-0.011	-0.033	-0.014	-0.009	0.022
Bulgaria	0.000 ***	0.000 ***	0.000 ***	0.000	0.000	0.000 ***
Croatia	0.053	0.021	-0.014	-0.044	0.054	0.035
Cyprus	-0.019	-0.010	0.003	-0.165 ***	-0.087 ***	-0.090 ***
Denmark	-0.008	-0.021 *	0.008	-0.001	0.008	0.000
Estonia	0.060	-0.168	-0.021	-0.054 ***	-0.064 ***	-0.052 **
Finland	-0.008	-0.057	0.044	-0.043	-0.053	-0.006
France	-0.083 ***	-0.057 **	-0.035	-0.089 ***	-0.048 *	-0.034 *
Greece	-0.098 **	0.004	-0.035	-0.036 *	-0.018	-0.008
Hungary	-0.011	-0.058	-0.074 **	0.230 ***	0.082	0.186 *
Ireland	-0.004	-0.011	-0.003	-0.014	-0.016	-0.013
Italy	-0.045 ***	-0.012	0.017	-0.073 ***	-0.060 ***	-0.023 ***
Latvia	0.004	0.071	-4.000 ***	-0.007	0.028	-0.067
Lithuania	0.150 *	0.260 *	-0.015	-0.007	-0.009	-0.010
Luxembourg	-0.071 ***	-0.010	-0.019	-0.064	-0.107 *	-0.006
Malta	-0.014	0.034	-0.009	0.096 **	0.120 **	0.176 *
Netherlands	-0.001	0.002	0.006	-0.026	-0.011	-0.009
Poland	-0.046	-0.019	0.052	-0.125 ***	-0.040	-0.032
Portugal	0.000 ***	0.000 ***	0.000 ***	0.162	0.467	1.763 ***
Romania	0.003	-0.001	0.008	-0.035 **	-0.014	0.000
Switzerland	0.009	-0.011	-0.033	-0.014	-0.009	0.022
EU14	-0.043 ***	-0.032 **	-0.017 *	-0.072 ***	-0.046 ***	-0.024 ***
EU27	-0.042 ***	-0.032 ***	-0.018 *	-0.070 ***	-0.045 ***	-0.023 **
All	-0.034 ***	-0.025 **	-0.015 *	-0.066 ***	-0.043 ***	-0.022 ***

*The table reports, for each country and separately for EU (columns I, II and III) and non-EU (columns IV, V and VI) immigrants, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being in the bottom decile, overall (columns I and IV), when differences in age, years of residence in the country, origin and education characteristics are taken into account (columns II and V), and when differences in occupations and full/part time employment are taken into account together with individual characteristics (columns III and VI). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2020.*

Table B35: Differences in the probability of being in the bottom decile between naturalized and non-naturalized immigrants, low education (2020)

Country	Unconditional	Conditional (individual characteristics)	Conditional (individual and job-related characteristics)
Belgium	-0.010	0.010	0.032
Bulgaria			
Croatia	0.279 ***	0.095	-0.549 ***
Cyprus	-0.175 ***	-0.143 **	-0.345 ***
Denmark	0.060 *	0.041	0.062
Estonia	-0.088	-0.077	-0.031
Finland	-0.120	-0.050	1.457
France	-0.048	-0.090 *	-0.068 *
Greece	-0.028	-0.032	-0.005
Hungary	-0.078	-0.265 **	0.103
Ireland	-0.114 *	-0.059	-0.159
Italy	-0.053 ***	-0.050 ***	-0.022 *
Latvia	-0.393	-1.268 ***	0.067 ***
Lithuania	0.222	-0.407 *	0.000
Luxembourg	-0.033	-0.048	0.071
Malta	0.134 **	0.303 *	0.272 *
Netherlands	-0.040	-0.028	-0.022
Poland			
Portugal	-0.031	-0.033	-0.017
Romania			
Switzerland	0.012	-0.010	0.001
EU14	-0.045 ***	-0.064 ***	-0.035 **
EU27	-0.045 ***	-0.064 ***	-0.035 **
All	-0.041 ***	-0.060 ***	-0.032 **

*The table reports, for each country, the percentage point difference between low educated naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being in the bottom decile, overall (column I), when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (column II) and when differences in occupations and full/part time employment are taken into account together with individual characteristics (column III). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2020.*

Table B36: Differences in the probability of being in the bottom decile between naturalized and non-naturalized immigrants, intermediate education (2020)

Country	Unconditional	Conditional (individual characteristics)	Conditional (individual and job-related characteristics)
Belgium	-0.031	-0.008	0.001
Bulgaria	0.000 ***	1.000 ***	1.000 ***
Croatia	0.114 ***	0.222 ***	0.153 **
Cyprus	-0.067 ***	-0.068 ***	-0.045 *
Denmark	-0.012	-0.016	-0.025
Estonia	-0.030	-0.069 **	-0.025
Finland	0.068	0.037	0.103
France	-0.049 *	-0.029	-0.044 *
Greece	-0.028	-0.011	-0.029
Hungary	0.088	0.039	0.033
Ireland	0.023	0.015	0.007
Italy	-0.056 ***	-0.038 ***	-0.017
Latvia	-0.003	-0.015	-0.119
Lithuania	0.024	0.052	0.090 **
Luxembourg	-0.073 *	-0.068	-0.078
Malta	0.066 *	0.095 *	0.139
Netherlands	0.009	-0.007	-0.007
Poland	0.000 ***	0.000 ***	0.000 ***
Portugal	-0.148 ***	-0.067	0.029
Romania	0.000 ***	0.000 ***	0.000 ***
Switzerland	-0.005	-0.013	0.000
EU14	-0.043 ***	-0.028 **	-0.018 *
EU27	-0.041 ***	-0.029 **	-0.019
All	-0.037 ***	-0.028 **	-0.018

*The table reports, for each country, the percentage point difference between intermediately educated naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being in the bottom decile, overall (column I), when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (column II) and when differences in occupations and full/part time employment are taken into account together with individual characteristics (column III). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2020.*

Table B37: Differences in the probability of being in the bottom decile between naturalized and non-naturalized immigrants, high education (2020)

Country	Unconditional	Conditional (individual characteristics)	Conditional (individual and job-related characteristics)
Belgium	-0.003	-0.015	-0.015
Bulgaria	0.000 ***	0.000 ***	0.000 ***
Croatia	-0.153	-0.174	-1.000 ***
Cyprus	-0.041 **	-0.039 **	-0.021
Denmark	0.011	-0.002	-0.010
Estonia	-0.039	-0.058 *	-0.025
Finland	-0.103 *	-0.130 *	-0.048
France	-0.041 *	-0.044	-0.005
Greece	-0.003	0.040	-0.007
Hungary	0.027	-0.026	0.013
Ireland	-0.015	-0.021	-0.016
Italy	-0.082 ***	-0.061 ***	0.007
Latvia	0.124	0.201 *	0.035
Lithuania	-0.039	-0.010	-0.113
Luxembourg	-0.011	-0.005	-0.025
Malta	-0.163 *	-0.172 **	-0.132 *
Netherlands	-0.001	0.006	-0.012
Poland			
Portugal	-0.010	0.036	0.007
Romania	0.195	0.397	-0.054
Switzerland	0.002	0.001	0.011
EU14	-0.035 ***	-0.032 **	-0.015
EU27	-0.033 ***	-0.030 **	-0.012
All	-0.028 ***	-0.025 **	-0.011

*The table reports, for each country, the percentage point difference between highly educated naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being in the bottom decile, overall (column I), when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (column II) and when differences in occupations and full/part time employment are taken into account together with individual characteristics (column III). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2020.*

Table B38: Differences in the probability of being in the top three income deciles between naturalized and non-naturalized immigrants, over time (2020)

Year	EU14	EU27	All	Italy
		Unconditional		
2010	0.066 ***	0.065 ***	0.067 ***	0.151 ***
2011	0.088 ***	0.087 ***	0.086 ***	0.170 ***
2012	0.087 ***	0.085 ***	0.085 ***	0.157 ***
2013	0.077 ***	0.075 ***	0.075 ***	0.156 ***
2014	0.079 ***	0.078 ***	0.078 ***	0.181 ***
2015	0.089 ***	0.088 ***	0.089 ***	0.181 ***
2016	0.090 ***	0.089 ***	0.089 ***	0.191 ***
2017	0.083 ***	0.082 ***	0.082 ***	0.166 ***
2018	0.086 ***	0.086 ***	0.087 ***	0.136 ***
2019	0.086 ***	0.085 ***	0.086 ***	0.129 ***
2020	0.105 ***	0.103 ***	0.103 ***	0.136 ***
		Conditional		
2010	0.007	0.008	0.011	0.056 ***
2011	0.022 ***	0.022 ***	0.023 ***	0.068 ***
2012	0.026 ***	0.024 ***	0.025 ***	0.057 ***
2013	0.016 ***	0.015 ***	0.016 ***	0.050 ***
2014	0.013 **	0.013 **	0.014 ***	0.072 ***
2015	0.024 ***	0.024 ***	0.025 ***	0.072 ***
2016	0.023 ***	0.024 ***	0.024 ***	0.085 ***
2017	0.024 ***	0.023 ***	0.024 ***	0.068 ***
2018	0.020 ***	0.021 ***	0.022 ***	0.040 ***
2019	0.015 ***	0.015 ***	0.016 ***	0.031 ***
2020	0.007	0.009	0.012	0.042 ***

*The table reports, for each year, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being in the top three deciles, overall (top of the table), and when differences in age, years of residence in the country, gender and education characteristics are taken into account (bottom of the table). The differences are computed as coefficients on a naturalized dummy interacted with the years dummies in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2010-2020.*

Table B39: Differences in the probability of being in the top three income deciles between naturalized and non-naturalized immigrants (2020)

Country	Unconditional	Conditional (individual characteristics)	Conditional (individual and job-related characteristics)
Belgium	-0.131 ***	-0.054 *	-0.050 *
Bulgaria	-0.118	-0.018	-0.026 ***
Croatia	-0.032	0.212 **	0.318 ***
Cyprus	0.176 ***	0.089 ***	0.031 *
Denmark	0.054 ***	0.053 **	0.014
Estonia	0.093 ***	0.146 ***	0.111 ***
Finland	-0.049	-0.086	-0.022
France	0.154 ***	0.049 **	-0.005
Greece	0.104 ***	0.014	-0.002
Hungary	-0.112 *	-0.061	-0.094
Ireland	0.089 ***	0.032	0.036 **
Italy	0.136 ***	0.050 ***	0.026 ***
Latvia	0.108	0.050	0.154
Lithuania	0.015	0.080	0.049
Luxembourg	-0.015	0.019	-0.015
Malta	0.013	0.222 **	0.221 ***
Netherlands	0.031	0.019	0.017
Poland	0.000 ***	0.000 ***	0.000 ***
Portugal	0.191 ***	0.006	-0.013
Romania	0.122	0.170	3.072 ***
Switzerland	0.098 ***	0.057 ***	0.029 ***
EU14	0.105 ***	0.033 ***	0.006
EU27	0.103 ***	0.036 ***	0.009
All	0.103 ***	0.039 ***	0.012

*The table reports, for each country, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being in the top three deciles, overall (column I), when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (column II) and when differences in occupations and full/part time employment are taken into account together with individual characteristics (column III). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2020.*

Table B40: Differences in the probability of being in the top three income deciles between naturalized and non-naturalized immigrants, by sex (2020)

Country	Men			Women		
	Unconditional	Conditional (individual characteristics)	Conditional (individual and job-related characteristics)	Unconditional	Conditional (individual characteristics)	Conditional (individual and job-related characteristics)
Belgium	-0.164 ***	-0.017	-0.016	-0.102 ***	-0.075 **	-0.071 **
Bulgaria	-0.118	-0.018	-0.026 ***	-0.118	-0.018	-0.026 ***
Croatia	-0.104	0.168	0.369 **	0.288 ***	0.383 **	0.511 **
Cyprus	0.218 ***	0.098 **	0.063 **	0.154 ***	0.067 **	0.018
Denmark	0.059 **	0.065 *	0.019	0.061 ***	0.041	0.015
Estonia	0.223 ***	0.263 ***	0.264 ***	0.071 ***	0.069 ***	0.027
Finland	-0.130	-0.178 *	-0.038	0.087	0.066	0.095
France	0.227 ***	0.096 ***	0.027	0.090 ***	-0.010	-0.033
Greece	0.138 ***	0.037	0.028	0.065 ***	-0.025	-0.048 **
Hungary	0.012	0.063	0.025	-0.241 **	-0.155	-0.168
Ireland	0.100 ***	0.073 **	0.117 ***	0.102 ***	0.008	-0.011
Italy	0.171 ***	0.068 ***	0.043 ***	0.108 ***	0.033 ***	0.002
Latvia	0.060	-0.048	-0.044	0.169 *	0.107	0.230 *
Lithuania	0.044	0.112	0.358 ***	0.009	0.084	-0.060
Luxembourg	-0.009	-0.015	-0.072	-0.013	0.058	0.057
Malta	0.168 *	0.311 **	0.181	-0.080	0.086	0.069
Netherlands	0.124 ***	0.084	0.078	-0.058	-0.052	-0.023
Poland	0.000 ***	0.000 ***	0.000 ***	0.000 ***	0.000 ***	0.000 ***
Portugal	0.230 ***	0.095 **	0.027	0.156 ***	-0.069 ***	-0.026
Romania	0.147	0.193	-3.074 **	0.548	-1.091 ***	-1.091 ***
Switzerland	0.171 ***	0.093 ***	0.049 ***	0.058 ***	0.022 *	0.007
EU14	0.153 ***	0.068 ***	0.031 **	0.065 ***	-0.005	-0.022 *
EU27	0.152 ***	0.071 ***	0.035 **	0.065 ***	-0.002	-0.019 *
All	0.153 ***	0.076 ***	0.038 ***	0.064 ***	0.001	-0.017 *

*The table reports, for each country and separately for male (columns I, II and III) and female (columns IV, V and VI) immigrants, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being in the top three deciles, overall (columns I and IV), when differences in age, years of residence in the country, origin and education characteristics are taken into account (columns II and V), and when differences in occupations and full/part time employment are taken into account together with individual characteristics (columns III and VI). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2020.*

Table B41: Differences in the probability of being in the top three income deciles between naturalized and non-naturalized immigrants, by origin (2020)

Country	EU			Non-EU		
	Unconditional	Conditional (individual characteristics)	Conditional (individual and job-related characteristics)	Unconditional	Conditional (individual characteristics)	Conditional (individual and job-related characteristics)
Belgium	-0.155 ***	-0.044	-0.025	-0.003	-0.024	-0.027
Bulgaria	0.000 ***	0.000 ***	0.000 ***	-0.049	-0.018	-0.026 ***
Croatia	-0.302	0.006	0.573	0.320 ***	0.306 ***	0.396 **
Cyprus	0.130 ***	0.007	-0.018	0.202 ***	0.147 ***	0.040 *
Denmark	-0.017	-0.012	-0.029	0.109 ***	0.068 ***	0.025
Estonia	-0.204 *	0.160	-0.120	0.118 ***	0.150 ***	0.123 ***
Finland	-0.070	-0.172 *	0.039	-0.034	-0.049	-0.011
France	0.090 *	0.022	-0.039	0.188 ***	0.058 **	0.008
Greece	0.163 ***	-0.042	-0.175 ***	0.074 ***	0.028 *	0.018
Hungary	-0.104	-0.057	-0.094	-0.155	-0.024	-0.553 ***
Ireland	0.042	0.023	0.006	0.020	0.036	0.043 *
Italy	0.131 ***	0.044 **	0.031 *	0.142 ***	0.056 ***	0.025 ***
Latvia	-0.262	-0.051	26.714 ***	0.158 **	0.084	0.167
Lithuania	-0.367 **	0.053	0.161	0.052	0.076	0.058
Luxembourg	0.020	0.006	-0.029	-0.032	0.021	-0.032
Malta	0.172	0.194 *	0.283 ***	0.436 ***	0.236 **	0.213 *
Netherlands	0.073	0.037	0.070	0.056	0.014	0.000
Poland				0.000 ***	0.000 ***	0.000 ***
Portugal	-0.111 **	-0.079	-0.044	0.339 ***	0.074 ***	0.041 *
Romania	0.548	-1.091 ***	-1.091 ***	0.122	0.170	3.072 ***
Switzerland	0.134 ***	0.068 ***	0.048 ***	0.107 ***	0.035 **	0.006
EU14	0.056 ***	0.017	-0.003	0.149 ***	0.047 ***	0.013
EU27	0.052 ***	0.014	-0.003	0.148 ***	0.051 ***	0.016
All	0.069 ***	0.026	0.007	0.142 ***	0.049 ***	0.015

*The table reports, for each country and separately for EU (columns I, II and III) and non-EU (columns IV, V and VI) immigrants, the percentage point difference between naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being in the top three deciles, overall (columns I and IV), when differences in age, years of residence in the country, origin and education characteristics are taken into account (columns II and V), and when differences in occupations and full/part time employment are taken into account together with individual characteristics (columns III and VI). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2020.*

Table B42: Differences in the probability of being in the top three income deciles between naturalized and non-naturalized immigrants, low education (2020)

Country	Unconditional	Conditional (individual characteristics)	Conditional (individual and job-related characteristics)
Belgium	0.001	-0.019	-0.017
Bulgaria			
Croatia	0.048	0.127	1.005 ***
Cyprus	0.070 *	0.022	0.058 **
Denmark	0.040	0.058	-0.026
Estonia	0.160	0.156	0.450
Finland	0.005	0.103	-1.018
France	0.030	0.065 **	0.033
Greece	0.025	0.036	0.017
Hungary	0.188 ***	0.251 ***	0.266 **
Ireland	-0.007	0.006	0.028
Italy	0.087 ***	0.046 ***	0.035 ***
Latvia	0.235	0.034 ***	-0.133 ***
Lithuania	0.000 ***	0.000 ***	0.000 ***
Luxembourg	-0.002	0.012	-0.011
Malta	0.134 **	0.155	0.276 **
Netherlands	0.065	0.086	0.068
Poland			
Portugal	0.097 ***	0.037 *	0.012
Romania			
Switzerland	0.023	0.032 *	0.016
EU14	0.058 ***	0.051 ***	0.031 ***
EU27	0.059 ***	0.052 ***	0.032 ***
All	0.055 ***	0.050 ***	0.030 ***

*The table reports, for each country, the percentage point difference between low educated naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being in the top three deciles, overall (column I), when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (column II) and when differences in occupations and full/part time employment are taken into account together with individual characteristics (column III). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2020.*

Table B43: Differences in the probability of being in the top three income deciles between naturalized and non-naturalized immigrants, intermediate education (2020)

Country	Unconditional	Conditional (individual characteristics)	Conditional (individual and job-related characteristics)
Belgium	-0.049	-0.087 **	-0.096 ***
Bulgaria	0.000 ***	0.000 ***	0.000 ***
Croatia	0.253 ***	0.276 ***	0.160
Cyprus	0.087 ***	0.047	0.028
Denmark	0.054 **	0.070 **	0.017
Estonia	0.126 ***	0.173 ***	0.185 ***
Finland	-0.274 ***	-0.263 ***	-0.081
France	0.030	-0.005	-0.039
Greece	0.047 **	-0.025	-0.025
Hungary	-0.085	-0.074	-0.131
Ireland	0.004	0.007	0.042 *
Italy	0.104 ***	0.054 ***	0.031 **
Latvia	0.141 *	0.064	0.133
Lithuania	0.029	0.051	0.091 **
Luxembourg	0.015	0.038	-0.014
Malta	-0.057	0.088	-0.045
Netherlands	0.087 **	0.079	0.050
Poland	0.000 ***	0.000 ***	0.000 ***
Portugal	0.091 **	0.003	-0.027
Romania	-0.170	-0.850 ***	-0.850 ***
Switzerland	0.051 ***	0.072 ***	0.045 ***
EU14	0.054 ***	0.016	-0.005
EU27	0.056 ***	0.020	0.001
All	0.055 ***	0.027 **	0.006

*The table reports, for each country, the percentage point difference between intermediately educated naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being in the top three deciles, overall (column I), when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (column II) and when differences in occupations and full/part time employment are taken into account together with individual characteristics (column III). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2020.*

Table B44: Differences in the probability of being in the top three income deciles between naturalized and non-naturalized immigrants, high education (2020)

Country	Unconditional	Conditional (individual characteristics)	Conditional (individual and job-related characteristics)
Belgium	-0.166 ***	-0.030	-0.011
Bulgaria	-0.024	0.000 ***	0.000 ***
Croatia	-0.050	-0.078	0.446 *
Cyprus	0.150 ***	0.118 ***	0.023
Denmark	-0.003	0.045	0.034
Estonia	0.038	0.131 ***	0.056
Finland	0.077	0.060	0.153
France	0.122 **	0.096 *	-0.034
Greece	0.184 ***	0.067	-0.009
Hungary	-0.093	-0.067	-0.122
Ireland	0.124 ***	0.054 *	0.042
Italy	0.218 ***	0.061 **	-0.002
Latvia	-0.071	0.010	0.095
Lithuania	-0.026	0.166	0.101
Luxembourg	-0.133 ***	-0.016	-0.017
Malta	0.245 **	0.441 ***	0.311 **
Netherlands	-0.017	-0.065	-0.034
Poland			
Portugal	0.080	-0.089	0.003
Romania	0.153	0.618	2.354 ***
Switzerland	0.002	0.059 ***	0.015
EU14	0.075 ***	0.045 *	-0.007
EU27	0.072 ***	0.051 **	0.000
All	0.064 ***	0.052 **	0.002

*The table reports, for each country, the percentage point difference between highly educated naturalized and non-naturalized long-term (at least 10 years of residence in the country) immigrants aged 25-64, in the probability of being in the top three deciles, overall (column I), when differences in age, years of residence in the country, gender, origin and education characteristics are taken into account (column II) and when differences in occupations and full/part time employment are taken into account together with individual characteristics (column III). The differences are computed as coefficients on a naturalized dummy in a linear probability model. See Technical Appendix for details. *, **, *** indicate that the difference is statistically significant at the 10, 5 and 1 percent significance level, respectively. The three bottom rows report the mean values for EU14 and EU27 countries as well as for all countries. Immigrants are defined as foreign-born. Source: our elaboration on EU LFS data 2020.*

Technical Appendix 1 – Europe

DATASET

Our analysis is based on the 2021 yearly wave of the European Labour Force Survey (EU LFS). The EU LFS is conducted in the 27 Member States of the European Union (thus it does not include the UK), 2 candidate countries and 3 countries of the European Free Trade Association (EFTA). At the moment, the LFS microdata for scientific purposes contain data for all Member States plus Iceland, Norway and Switzerland. These are the countries we use in our analysis, with the exception of Iceland for which no annual data are currently available for 2021. The EU LFS is a large quarterly household survey of people aged 15 and over as well as of persons outside the labour force. The National Statistical Institutes of each member country are responsible for selecting the sample, preparing the questionnaires, conducting the direct interviews among households, and forwarding the results to Eurostat in accordance with the common coding scheme.

SAMPLE

We include in our sample all individuals for which country of birth is known (except for Malta where we include all residents, see below). In the analysis of education levels and labour market outcomes we include only individuals in working age and who are likely to have finished their full-time education (25-64 years old).

VARIABLES

We use the following variables, derived from the EU LFS, in our analysis.

Immigrant: A dummy variable equal to one if individuals are born outside of their country of residence and zero otherwise, based on the original EU LFS variable *countryb* which records individuals' country of birth. The variable *countryb* is equal to one when the individual is born in the residence country (*Immigrant* equals 0 in this case) and takes values higher than one when the individual is born abroad (*Immigrant* equals 1 in these cases): the different codes identify the region of birth and vary across different years and countries. In addition, in the case of Malta, we also consider as immigrants those observations with missing country of birth as Malta does not release information on *countryb* for residents whose origin is not from one of the 27 member states of the European Union.

Recent immigrant: We define as recent immigrants those with no more than five years of residence in the country, as reported by the variable *yearesid*.

Education levels: We use the three education groups defined by the variable hatlev1d in the EU LFS. Low education includes less than primary, primary and lower secondary education (ISCED levels 0-2). Intermediate education corresponds to upper secondary and post-secondary non-tertiary education (ISCED levels 3 and 4). High educated individuals have short-cycle tertiary, bachelor or equivalent or doctoral or equivalent degrees (ISCED levels 5 and higher).

Employed: A binary variable which recodes the original EU LFS variable *ilostat* to one if the individual is employed or self-employed (*ilostat* equal to one), and zero otherwise (*ilostat* equal to 2 or 3).

Part time employment: We create a dummy variable, *pt*, for part time employment using the variable *ftpt*, provided in EU LFS. It records whether the individual is employed full time (*ftpt* equal to one), or part time (*ftpt* equal to 2).

ISEI: The Socio-Economic Index of Occupational Status, a continuous index which scores occupations in relation to their average education and income levels, thus capturing the attributes of occupation that convert education into income. It is assigned to each employed individual by matching three-digit ISCO codes for occupation (*isco08_3d*) with their corresponding value of the ISEI index. We then normalize the index by subtracting the sample mean and dividing by the sample standard deviation. The normalization is performed at country level unless differently specified.

Elementary Occupation: We define an *elementary job* dummy, which takes value one when an individual is employed in an elementary occupation, and zero otherwise. We define elementary occupations as those with a one-digit ISCO code equal to nine. We derive the one-digit ISCO codes from the *isco08_1d* variable in the EU LFS.

High Pay Occupations: We define a *high pay job* dummy, which takes value one when an individual is employed in as either a manager, professional or associate professionals, and zero otherwise. We define high pay occupations as those with a one-digit ISCO code equal to one, two or three. We derive the one-digit ISCO codes from the *isco08_1d* variable in the EU LFS.

Male: A dummy variable equal to one if individuals are male and zero if they are female, based on the EU LFS variable sex which records individuals' gender. The variable sex is equal to one when the individual is male, and to two when the individual is female. This definition is used in all countries.

WEIGHTS

We use the sampling weights provided in the EU LFS (variable *coeffy*) throughout the analysis.

REGRESSION ANALYSIS

To obtain employment probability differentials we estimate regressions of the type:

$$Depvar_{ic} = \beta_0 + \beta_1\, imm_{ic} + \beta_2 male_{ic} + \beta_3 age_{ic} + \beta_4\, age^2_{ic} + \boldsymbol{\beta_5} Edu_{ic} + \boldsymbol{\beta_6} D_c + \boldsymbol{\beta_7} D_q + \varepsilon_{ic} \quad (A1)$$

where *Depvar* is the employed dummy, *imm* stands for the immigrant indicator, *male* is a dummy for male, *age* is the age in years and age^2 is its square, *Edu* are the three education dummies defined above, D_c is a set of country dummies and D_q are quarter dummies that capture potential seasonality. In some specifications we substitute the *imm* dummy with a set of dummies for recent and non-recent immigrants, or for EU and non-EU immigrants, as well as with their pairwise combinations. Each of the figures reported in the tables corresponds to the coefficient β_1 resulting in each case. We estimate equation (A1) first separately for each country and then for all the EU14 countries pooled, the EU27 countries and for the whole sample of countries.

We provide *unconditional* employment gap estimating equation (A1) including only the variables imm, D_c, and D_q; we also estimate the employment gap within a country controlling for individual characteristics including male, age and *Edu.* Finally, we estimate the complete model for *conditional* gaps (including individual characteristics).

We obtain estimates of differences in occupational status and of the probability of being in the elementary or high paid occupation (managers, professionals or associate professionals) by running the same regressions described above, where the dependent variable is replaced, respectively, with:

- *ISEI,* the standardized index of occupational status.
- Dummy for being employed as elementary workers.
- Dummy for being employed as managers, professionals or associate professionals.

Technical Appendix 2 - Citizenship Acquisition and the Naturalization Premium

DATASET

Our analysis is based on the 2010 to 2021 yearly waves of the European Labour Force Survey (EU LFS), which we described in Technical Appendix 1, as well as on data coming from Eurostat (online data codes: MIGR_ACQS and MIGR_POP3CTB).

SAMPLE

We include in our sample all individuals for which either years of residence in the host country or country of birth is known (with the same exception for Malta as above) (see below). In our analysis of labour market outcomes, we include only immigrants aged between 25 and 64 years old with at least 10 years of residence in the host country. In our analysis on the income distribution, we do not include Austria, Czech Republic, Germany, Spain, Norway, Sweden, Slovenia and Slovak Republic, as the variable required for this analysis is not available for these countries. Data on income distribution are only available for the EU LFS waves from 2010 to 2020.

VARIABLES

In addition to the variables described in Technical Appendix 1, we use/modified the following variables, derived from the EU LFS, for our analysis.

Immigrant: In addition to what described in Technical Appendix 1, because data on country of birth are not available for Germany before 2017, we also define as immigrants all those individual in the EU LFFS waves from 2010 to 2016 with residence in Germany and the variable ***yearesid*** different from 999, which indicates individuals born in the residence country who never lived abroad for a period of at least one year.

Naturalized: A dummy variable equal to one if foreign born individuals are citizens of their host country and zero otherwise, based on the EU LFS variable citizenship which records individuals' nationality. The variable follows the standard code list SCL_GEO and takes value "NAT" for individual with citizenship in the country of residence.

Income deciles: The dummy ***bottom decile*** is equal to one for individuals whose monthly take home pay from the main job is in the bottom decile of the national distribution, and zero otherwise. Similarly, the binary variable ***top deciles*** takes value one for individuals whose monthly take home pay from the main job is in the top three deciles of the national income distribution, and zero otherwise. The dummies are based on the EU LFS variable ***incdecil***, which is only recorded for employees.

WEIGHTS

We use the sampling weights provided in the EU LFS (variable coeffy) throughout the analysis.

REGRESSION ANALYSIS

We estimate the differential between naturalized and non-naturalized immigrants for the following dependent variables (which are explained in detail in the previous paragraph):

- *probability of employment*
- *occupational prestige (ISEI index)*
- *probability of working in an elementary occupation*
- *probability of working in a high pay occupation*
- *probability of being in the bottom decile of the monthly income distribution*
- *probability of being in the top three deciles of the monthly income distribution*

For each of these dependent variables, we estimate a regression of the following type:

$$Depvar_{ic} = \beta_0+\beta_1\, natu_{ic}+\beta_2 male_{ic}+\beta_3 age_{ic}+\beta_4 age^2_{ic}+\beta_5 YoR_{ic}+\beta_6 YoR^2_{ic}+\boldsymbol{\beta_7} Dedu_{ic}+\boldsymbol{\beta_8} D_c+\boldsymbol{\beta_9} D_q+\boldsymbol{\beta_{10}} D_o+\varepsilon_{ic} \quad (B1)$$

where *Depvar* is each of the described dependent variables, *natu* stands for the naturalized indicator, *male* is a dummy identifying males, *age* is the age in years and age^2 is its square, *YoR* is the years of residence in the host country and YoR^2 is its square, *Dedu* are the three education dummies defined above, D_c is a set of country dummies, D_q are quarter dummies that capture potential seasonality and D_o are origins dummies distinguishing between immigrants from EU, Europe outside EU, Africa and Middle East, America and Oceania, Asia and, in the case of Malta, Immigrants outside EU. In some specifications we restrict the regression to specific categories such as men and women, EU and non-EU immigrants and, finally, low educated, intermediately educated and highly educated.

We provide *unconditional* gaps estimating equation (B1) including only the variables *nat*, D_c and D_q; we then estimate the complete model for *conditional* gaps (including the above specified individual characteristics).

For regressions run in multiple years, the specification becomes the following:

$$Depvar_{ic} = \beta_0+\beta_1\, natu_{ic} * D_y+\beta_2 male_{ic}+\beta_3 age_{ic}+\beta_4 age^2_{ic}+\beta_5 YoR_{ic}+\beta_6 YoR^2_{ic}+\boldsymbol{\beta_7} Dedu_{ic}+\boldsymbol{\beta_8} D_c * D_y+ \boldsymbol{\beta_9} D_q+\boldsymbol{\beta_{10}} D_o+\boldsymbol{\beta_{11}} D_y+ \varepsilon_{ic} \quad (B2)$$

Where D_y are dummies identifying the year of the survey and the symbol * is used to indicate the interactions with the dummies. In this case, *unconditional* gaps are estimated including only the variables *natu*, (D_c * D_y) and D_q.

To assess the impact of individual characteristics and occupation on the difference in the probability of having a wage in the lowest decile or in the top three deciles we perform a Gelbach[8] decomposition of the coefficient on $natu_i$ (Figure 35).

In the analysis on position in income distribution, besides estimating unconditional and conditional gaps as described above, we estimate an extra equation by augmenting (B1) with a set of dummies for three-digits ISCO occupations and a dummy for part time employment. The resulting equations are as follows:

$$Per_{ic} = \beta_0+\beta_1+natu_{ic}+\beta_2 male_{ic}+\beta_3 age_{ic}+\beta_4 age^2_{ic}+\beta_5 YoR_{ic}+\beta_6 YoR^2_{ic}+\boldsymbol{\beta_7} Dedu_{ic}+\boldsymbol{\beta_8} D_c+\boldsymbol{\beta_9} D_q+\boldsymbol{\beta_{10}} D_o+ \boldsymbol{\beta_{11}} Docc_{ic}+\boldsymbol{\beta_{12}} pt_{ic}+\varepsilon_{ic} \quad (B1.1)$$

Where *Per* is the binary indicator for the corresponding percentile (*bottom decile* or *top three deciles*), *Docc* represents the vector of occupation dummies and *pt* is the dummy for part time employment.

[8] *Jonah B. Gelbach, 2016. "When Do Covariates Matter? And Which Ones, and How Much?," Journal of Labor Economics, University of Chicago Press, vol. 34(2), pages 509-543.*

Migration Observatory

The Migration Observatory is a Centro Studi Luca d'Agliano - Collegio Carlo Alberto joint research initiative which has been funded by the Compagnia di San Paolo since 2016. The main objective is to study analytically topical issues on migration, such as the implications of different migration policies from an international and cross-disciplinary perspective. Also, it aims to construct a critical mass of academic knowledge in order to increase the visibility of Collegio Carlo Alberto and Centro Studi Luca d'Agliano in the policy debate. The Migration Observatory activities are organised in collaboration with FIERI.

Centro Studi Luca d'Agliano

The Centro Studi Luca d'Agliano was founded in Turin in 1986 by the family of Luca d'Agliano, his friends, and some of his teachers. It is currently located at the Collegio Carlo Alberto in Torino and at the University of Milan. It is a non-profit research institution contributing original research in the field of international and development economics. Particular emphasis is placed on the training of young scholars and in giving them the opportunity of acquiring a truly international perspective. The activities of the Centro Studi mainly focus on academic research, but it also greatly contributes to the policy debate.

Fondazione Collegio Carlo Alberto

The Collegio Carlo Alberto is a foundation created in 2004 as a joint initiative of the Compagnia di San Paolo and the University of Torino. Its mission is to foster research and high education in the social sciences, in accordance with the values and practices of the international academic community, through a threefold action plan: the production of first-rate research in Economics, Public Policy, Social Sciences and Law; the provision of top-level undergraduate and graduate education in the above disciplines; the contribution to the public policy debate.

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