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Integration of immigrants in host countries - what we know and what works

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Abstract

Integration of immigrants is at the forefront of policy concerns in many countries. This paper starts by documenting that in most European countries immigrants face significant labour market disadvantages relative to natives. Then it discusses how public policies may affect immigrants' integration. First, we review the evidence on the effectiveness of language and introduction courses. Then, we discuss how different aspects of the migration policy framework may determine immigrants' integration patterns. In particular, based on a review of the recent literature, we highlight the role of visa length and of predictability about migration duration in shaping migrants' decisions on investments in country-specific human and social capital. Further, we discuss implications for refugee migration and also review the role of citizenship acquisition rules. The paper ends with an outlook of the consequences for sending countries.

JEL Codes: F22, J15, J61

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1. Introduction and background

The movement of people across national borders has increased rapidly over the past two decades: according to United Nations estimates, while in 1995 the world stock of international migrants amounted to about 161 million people, or 2.8% of the world population, by 2015 the global migrant stock reached almost 244 million, equivalent to 3.3% of the world population (United Nations, Department of Economic and Social Affairs, 2015). The recent surge in the stock of migrants has been especially remarkable in the more developed countries. In Europe, Northern America, Australia/New Zealand and Japan there were 92 million immigrants in 1995 (7.9% of the population), a figure that increased to more than 140 million (11.2% of the population) by 2015.

It is, therefore, perhaps not surprising that immigration is at the forefront of the policy debate in many European countries and ranks among the highest concerns in European public opinions. For instance, in the 2016 Eurobarometer, immigration was ranked as one of the two most important issues of concern for their own country by 28% of Europeans, following just unemployment, marked by 33% of respondents. The rapid rise of immigration in countries which were used to lower migration levels, may in fact pose new challenges regarding the economic, social and political integration of immigrants and their offspring. In this paper, we provide an overview of some key issues regarding immigrant's integration in the host countries' economies and societies, and provide a summary of the main findings in the literature that has studied how host countries' policies may affect immigrants' integration.

The remainder of the paper is organized as follows. Section 2 first presents some background facts about immigrants' integration across countries, with a special focus on Europe. Section 3 discusses the ways in which different aspects of policies may affect immigrants' integration, distinguishing between policy measures explicitly targeted to immigrants' integration and more general characteristics of the migration policy framework. Section 4 examines the role of citizenship acquisition in integration patterns, after which section 5 discusses implications for the origin countries. Section 6 summarizes the main findings and concludes the paper.

2. Background: stylized fact on immigrant's characteristics and integration.

In 2015 there were 48.7 million individuals in Europe living in a country other than their country of birth, which amounts to 9.6% of the European population. Most of them, 43.9 million, are concentrated in the EU15 countries, where the share of immigrants in the population is 11.1%.¹

There is a considerable degree of heterogeneity in the relative size of immigrant populations, even within the EU15. The immigrant share ranges from as low as 0.1% or 0.2% in Romania and Bulgaria, to 4.7% in Finland (the lowest among EU15 countries) to as high as 19% in Sweden, 30% in Switzerland and even 49% in Luxembourg, as shown in Figure 1.

[Figure 1 here]

Although most of the recent migration debate in Europe revolves around refugees, according to UNHCR data in 2015 there were only about 2.6 million refugees or asylum seekers in a European country, which amounts to about 5% of the total immigrant population in the continent (Dustmann et al., 2017). Therefore, the stock of forced migrants in European countries is still quite small. Rather, what characterises the most recent years, and creates the current perception of the predominance of refugee migration relative to other forms of migration (economic, family reunification, or study visas) is the sharp increase in the number of asylum applications. Between 2005 and 2015, the number of asylum applications in the European Union has increased from 235 thousand to more than 1.3 million, with a marked increase between 2012 and 2015, as shown in Figure 2.

[Figure 2 here]

Concerns about the economic integration of immigrants in European countries are often well-founded (Dustmann and Frattini, 2013). Recent evidence from the European Union Labour Force Survey (EULFS) shows that, across Europe, immigrants face labour market disadvantages relative to natives: as shown in column 1 of Table 1, working age (15-64) immigrants are on average 5.7 percentage point less likely than natives to be in employment, an 8% gap relative to the cross-country natives' employment probability of 70%.

[Table 1here]

Employment probability gaps tend to be larger in Central and Northern European countries like the Netherlands, Sweden or Germany, while they are smaller in the UK and in Ireland. Conversely, in several Southern European countries, like Greece, Italy and Portugal, the employment probability is

¹ EU15 countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom.

higher among immigrants than among natives (see Frattini and Aparicio Fenoll, 2017).² The employment probability gaps relative to natives are larger (14 p.p.) among recent immigrants (who have been in the country for at most five years) than among earlier immigrants (4 p.p.), as shown in columns 2 and 3 respectively. Although the difference in employment outcomes between immigrant cohorts can also, at least partly, be due to changes in their composition, or to differences in return migration patterns, it is also likely to reflect the acquisition of country-specific skills, like for instance language, which make immigrants more employable with time spent in the host country.

A worrying finding of some research is that for many immigrant groups, the labour market disadvantage among first generation immigrants persists or even grows over generations (Algan et al. 2010). Importantly, education may be playing a role in the persistence of such disadvantages. In fact, a well-known stylised fact is that in most countries the children of immigrants tend to have worse educational outcomes than the children of natives (Cobb Clark et al, 2012; Dustmann et al., 2012). Furthermore, the available evidence indicates that their relative performance with respect to the children of natives may reflect native-immigrant educational differences in their parents' generation.

[Figure 3 here]

Figure 3, reproduced from Dustmann et al. (2012), shows for instance that across countries the differences in PISA maths test scores between children of immigrants and the children of natives are strongly and significantly correlated with differences in educational achievements among their parents, as measured by the share of students with at least one parent having received tertiary education.

Finally, given the growing importance of refugee migration, especially in the public perception of European citizens, it is worth looking at what we know about the labour market integration of refugee migrants. The most recent available empirical evidence available for Europe has highlighted a considerable labour market disadvantage of refugees relative to economic migrants (Ayiar et al., 2016 and Dustmann et al., 2017).

[Figure 4 here]

Figure 4, from Dustmann et al. (2017), reports differences (conditional on age, education and gender) in employment probabilities of economic migrants (blue bars) and refugees (orange bars) from five different areas of origin relative to natives. Figures are based on analysis of the 2008

² Note that the countries where immigrants have a higher employment probability than natives also display relatively low native employment rates. Therefore, these countries are not characterised by a high probability of employment for immigrants in absolute terms, but only relative to natives.

EULFS and refer to European countries pooled. Regardless of their origin, refugees have a lower employment probability than economic migrants with similar characteristics. Importantly, the employment disadvantage is strongest for refugees from South and East Asia and from North Africa and Middle East, which are the same areas of origin of most current refugees.

In the remainder of this paper we will discuss, through a necessarily selected review of the literature, how different aspects of migration policy may influence the process of immigrants' integration in the host country.

3. Migration policy and integration

Integration policies

Public policies can play an important role in determining immigrants' integration trajectories. An important role can obviously be played by policies of destination countries that are specifically targeted to the economic and social integration of immigrants, such as language courses or active labour market programs. For instance, given the overwhelming evidence linking language proficiency of immigrants with their economic outcomes (e.g. Chiswick, 1991; Dustmann and Fabbri, 2003; Bleakley and Chin, 2004) it is natural expect that providing language training to immigrants may improve their labour market performances. Unfortunately, a rigorous empirical assessment of the effectiveness of such programs is often difficult, and therefore there are only relatively few studies evaluating this type of policies (see Rinne (2013) for a review of the challenges faced by this literature). One recent exception is the analysis of a Finnish program provided by Sarvimäki and Hämäläinen (2016). They show that a policy reform that introduced "integration plans" for unemployed immigrants who had been in Finland for less than three years was very effective in increasing their labour market earnings and decreasing their reliance on social security benefits. Importantly, the integration plans were effective mostly because, relative to the standard active labour market programs centred on job-seeking courses, they provided language courses and other training specifically designed for immigrants.

Some countries, like Sweden, have offered newly arrived immigrants introduction programs since the late 1960s. Introduction programs typically aim to provide immigrants with skills helping both their economic and social integration. To this end, such programs provide a mixture of language training, job-search courses, subsidized employment and validation of pre-immigration education and work experience, but often also information about the norms, values, history and cultural traditions of the host country. Given the heterogeneity of integration programs in terms of

organization, length, enrolment criteria, etc., it is difficult to draw generalizable inference from the evaluation of specific case studies. However, results from a policy experiment in Sweden (Andersson Joona and Nekby, 2012) show that the provision of more intensive counselling and coaching and the provision of part-time language training alongside (not before) labour market training successfully increased employment probabilities and the probability of being enrolled in other intermediary labour-market training programs one year after the end of the introduction programme, an effect that still persisted 22–30 months after registration in the programme. On the other hand, Clausen et al. (2009) provide a more dismal picture of integration programs offered to immigrants in Denmark: their results indicate lock-in effects of immigrants into most active labour market programs, with only subsidised employment being effective in increasing likelihood of employment. On the other hand, in line with the literature on the importance of language skills and despite some caution is need in the causal interpretation of their results, they also show that for participants in language courses, improvement in language proficiency has substantial positive effects on the probability of finding a job.

Some integration policies may be effective also outside the labour market context. For instance, Carlana et al. (2017) show that providing tutoring and career counselling to immigrant children displaying high academic potential is an effective way to reduce their educational segregation. Analysing a program offered to immigrant children in a sample of Italian schools, they find that treated students have a higher probability of attending an academic or technical high school track, relative to vocational education, compared to non-treated students (although the effect is statistically significant for male students only). Their results indicate that the program's effects work mostly through increased non-cognitive skills of treated students who display higher academic motivation and lower perceived environmental barriers.

Despite the importance of active integration policies, a perhaps more fundamental role in determining immigrants' integration trajectories can be played by the overall migration policy framework. Indeed, immigrants make their utility-maximizing choices subject to the constraints imposed by migration policy rules. Any change in the policy will therefore modify the constraint and, potentially, lead to changes in immigrants' decisions and thus in their outcomes. There at least two ways in which migration policies can affect integration patterns: entry requirements may affect immigrants' selection, and visa duration which influences investments in country-specific skills. In the remainder of this section, we will examine both aspects in turn.

Skill-selective migration policies

Migration policies can directly affect immigrants' (self-)selection. Entry requirements affect the characteristics of the immigrant population in a country. While some countries have in place mechanisms that are explicitly designed to select immigrants based on their education, or on the possession of skills that are deemed necessary for the host country labour market (see, e.g. Australia, Canada and the UK), even countries that do not explicitly point at inducing a positive selection of immigrants do operate some type of selection process.

Perhaps unsurprisingly, the evidence shows that more selective migration policies tend to lead to a more favourably selected pool of migrants, although it is not clear whether these migrants also have better labour market outcomes in destination countries. For instance, Cobb-Clark (2003) exploits a change in the Australian migration policy, which increased selection on migrants' productive skills in the late 1990s, to study the employment outcomes of immigrant cohorts arrived under the old regime as compared to those arrived under the new rules. After six months in Australia, the latter cohort displays a higher probability of employment, a higher labour force participation rate, and a lower unemployment rate. The labour market advantage of the more recent cohort is shown to depend on its higher human capital endowment, induced by the tighter selection criteria. Canadian evidence, on the other hand, indicates that skill-based immigrants have higher levels of education and report higher language ability than other classes of immigrants (Aydemir, 2014). However, the evidence about their labour market integration is less favourable: there are no differences in labour force participation between different immigration categories, while there is evidence of lower employment rates for skill-based immigrants than for kinship-based immigrants. In general, these gaps persist over the first 18 months in the country. Further, even though skill-based immigrants report significantly higher earnings, the data show a convergence of earnings across immigrant classes over time (Aydemir, 2011). Overall, the Canadian experience highlights the issue of underutilization of selected highly skilled immigrants: returns to education are much lower among immigrants than natives (Aydemir, 2011). Such lower returns imply either that assessed characteristics do not reflect immigrants' actual human capital, and thus the selection mechanism is ill-designed, or that barriers in the labour market, like difficult credentials recognition, prevent more productive use of the skills immigrants bring to the country (Aydemir, 2011).

Adopting a cross-country perspective, Antecol et al. (2013) show that immigrants to Australia and Canada, who have in place selective migration policies, have higher levels of English fluency, education, and income than immigrants in the United States, where migrants' skills are not explicitly considered among the admission criteria. While this result offers support to the

effectiveness of selective policies in facilitating immigrants' labour market integration, the authors also show that after excluding Latin American immigrants, the observable skills of immigrants are similar in the three countries. These patterns suggest that the comparatively low overall skill level of U.S. immigrants may have more to do with geographic and historical ties to Mexico than with the fact that skill-based admissions are less important in the United States than in Australia and Canada. Using a similar cross-country approach, Clarke et al. (2016) find somewhat different results: they show evidence of a substantial and persistent performance advantage of U.S. immigrants, relative to immigrants in Australia and Canada, which is evident across the earnings distribution and among immigrants from a common origin country. Based on this evidence, they argue that migration policies have a minor role in determining selection patterns. Rather, the U.S. advantage primarily would reflect the relative positive selectivity of immigrants in the United States, a consequence of the higher U.S. returns to skill and of the relative economic security of Australia's and Canada's social welfare systems.

Temporary vs. permanent visas

A second important way in which migration policies can impact on immigrants' integration is through the temporary or permanent nature of visas, and through the conditions imposed for visa renewals (see Dustmann and Gorlach (2016) for a review of the literature on temporary migration).

Why should the behaviour, and thus the integration outcomes, of temporary migrants be different from those of permanent migrants? The reason is easy to grasp is we consider that individuals' behaviour depends not only on current circumstances, but also on their expectations about the future economic environment. Consider for instance two individuals who have just moved to a new country: one is permanently settling there, whereas the second is only allowed to stay for at most one year. When making their consumption and savings decisions or deciding on their labour supply, the first person will take into account the expected evolution of labour markets, GDP and political environment in the host country, whereas the second will consider the macro-economic and policy context in both the host and the home country. Even though the two individuals are otherwise identical, therefore, the difference in their expected migration duration will lead to different behaviours. For instance, if the cost of life is lower in the origin than in the host country, temporary migrants will likely have lower reservation wages than permanent ones (and than natives), and thus accept lower-paid jobs. Further, temporary migrants are also less likely to make costly investments in host-country specific skills, like for instance, learning the host-country language, which have an

economic (higher wages and employment probability) and social (possibilities of networking with natives) payoff in the host country, but whose returns may be considerably lower in the home country. The key insight in this case is that the incentive for any investment in skills depends on the length of the payoff period for that investment (Ben-Porath, 1967). Thus, immigrants who are admitted to the country only temporarily have lower incentives to invest in country-specific human capital, leading to flatter wage profiles. These immigrants' flatter earnings profiles and lower investment in language skills or networking may reinforce segregation in the host country and result in their contributing below their economic potential. Additionally, return plans may also affect immigrants' investments in their children and impact savings and consumption choices. Temporary migrants may invest less in social capital, which has potential consequences for their social assimilation and the segregation of immigrant communities.

These mechanisms have been investigated, among others, by Bellemare (2007). Using a forward-looking life-cycle model in which accumulated working experience affects both wages and locational preferences he evaluates the impact of enforcing a maximum stay duration for newly admitted immigrants and demonstrates that restricting migration duration reduces the labour force participation of low-skilled migrants to Germany but has little effect on high-skilled immigrants. Using a different strategy, Cortes (2004) compares the outcomes for economic migrants and refugees in the United States. Arguing that the latter expect to stay longer and thus have stronger incentives for investment in destination-specific human capital, she demonstrates the existence of a positive effect of expected migration duration on wages (see also Khan, 1997)

Dustmann (2008), using German data, shows that human-capital investment decisions may also be affected by return plans in an intergenerational setting in which parental investments in children depend on where parents believe their children will be living in the future. Therefore the expected temporariness of migration for immigrant parents has intergenerational consequences, affecting their children's educational attainment. His estimates indicate that among second-generation immigrants, the intention by foreign-born fathers to stay permanently increases the probability of their sons' attaining upper secondary schooling.

Importantly, what matters for economic behaviour, is not the actual migration duration, but its expectation. Dustmann (1993) shows that, whereas the North American and Australian literature has consistently found that immigrants tend to close the wage gap with respect to natives with time spent in the host country, the same catch-up process has not been at work for guest workers immigrants in West Germany, where the native-immigrant earnings gap does not close over the whole migration history of the foreign worker. A key difference between the German case and the

case of Australia and North America is that immigrants to Germany were all recruited only temporarily. Thus, the incentives to invest in country-specific human capital for the latter group were considerably smaller than for immigrants who were planning to permanently settle in other countries. Indeed, the German guestworker programme was designed to meet the increasing demand for unskilled and semi-skilled labour in the German labour market in the 1950s and 1960s, and the underlying view was that "migrant workers were temporary labour units, which could be recruited, utilized and sent away again as employers required" (Castles, 1986). Residence permits were granted for limited periods, and were often valid only for specific jobs and areas, while entry of dependents was discouraged. In short, immigrants recruited through guest worker programmes were made very clear that they were expected to remain only temporarily in the country, and to work in the specific jobs they had been recruited for, which decreased their incentive to invest in additional skills that could have been valuable in the German labour market. Yet, when the programmes came to an end in 1973, the majority of foreign workers did not leave the country, and they ended up staying in Germany for considerably longer periods of time than initially expected. However, given that they had been initially recruited under the expectation of remaining in Germany only temporarily, they under-invested in German-specific human capital.

The integration cost of uncertainty about migration duration is also highlighted in a recent paper by Adda et al. (2017). The authors develop a structural model that allows them to investigate the consequences of immigrants' expectations about a possible return for their career profiles. By manipulating these expectations, they can therefore simulate the impact that immigration policies have on immigrant behaviour, how they affect selection, and what their consequences are for welfare. In particular, they demonstrate that important investment decisions are made in the early years after arrival and that initial beliefs about the migration being temporary may lead to large earnings losses over the lifecycle if such expectations are revised only at a later stage. Therefore, migration policies that manipulate such expectations may lead to welfare losses for both the immigrants and the population of the receiving country. For instance, when there is uncertainty about when and if a permanent residence permit can be obtained, changes in the probability of being granted permanent residence affect new immigrants' investments in human and social capital because an increased risk of having to leave the host country reduces the expected returns to any location-specific dimensions of human capital. The authors' simulations show that if the probability of obtaining permanence is only about 10%, the implied loss in lifetime utility amounts to around 35%. This loss decreases when the probability of obtaining permanence after five years increases but still amounts to about 5% of lifetime utility given a 90% probability of obtaining a permanent visa.

Refugee migration

A related point, which is likely to have an increasing importance in the near future, is what conditions facilitate refugees' labour market integration. The discussion in the previous section has highlighted the importance of reducing uncertainty about migration duration and shown that the most important decisions about investments in host-country human and social capital are made by migrants in the first period after arrival in the host country. These considerations may extend naturally to refugee migration, and suggest that a fast examination of asylum claims and a clear host country commitment on residence duration may favour a swifter refugee integration.³

The findings of Bakker et al. (2014) provide empirical support for the remarks above. Analysing a sample of refugees in the Netherlands, they show that a long stay in asylum accommodations negatively affects refugees' mental health and hampers their socio-economic integration. The insecurity about the future and reduced confidence due to a long stay in asylum accommodation affects refugees' chances of labour market success even in the long run. Further, the analysis demonstrates that residence status has a clear direct effect on socioeconomic integration: having a temporary refugee status hampers socio-economic integration, compared to refugees who have been granted the Dutch nationality. Similar conclusions are reached by a recent study on asylum seekers in Switzerland (Hainmueller et al., 2016), which also adds further insights. Indeed, the authors show that speed of application processing among refugees in Switzerland matters for their integration: one additional year of waiting reduces the subsequent employment rate by 4 to 5 percentage points, a 16 to 23% drop compared to the average rate. This result may be due to a skill atrophy mechanism, whereby asylum seekers who wait longer before receiving refugee status have less opportunities, and less incentives, to put their human capital to productive use, and possibly to increase it. On the other hand, the authors also show that a psychological discouragement mechanism may be at work: waiting in limbo for a decision on their future status can exacerbate the trauma already experienced by many refugees and lead to psychological stress, depression and disempowerment which decreases the likelihood of a subsequent successful integration. The fact that the negative effect of a longer waiting time is stable across different demographic and education groups suggests that the psychological discouragement mechanism may be especially relevant in explaining their results. This has strong policy implications, as it suggests that simply providing asylum seekers access to the labour market while waiting for a decision may be useful, but not sufficient to facilitate the economic integration of refugees.

³ See Dustmann et al. (2017) for a discussion of the trade-offs faced by host countries in determining their asylum policies.

4. Citizenship as an integration tool?

Naturalisation, i.e. the acquisition of the citizenship of the host country, is sometimes perceived as an act that should formally mark the end of integration in the host country, and reward immigrants for their achievement. However, naturalisation can also act as a stimulus for integration, or allow in itself a better and more complete integration in the host country. Indeed, most research has shown that citizenship acquisition has a beneficial effect on immigrants' integration.

Several papers provide evidence that facilitating citizenship acquisition to immigrants desiring it has positive socioeconomic and cultural implications, beyond the granting of long-term work certification (Dancygier and Laitin, 2014). For instance, Bratsberg et al. (2002) use US panel data to study the effect of naturalization on wage growth, tracking the wages of young male immigrants over the period 1979–91. They find that naturalization has a highly significant impact on the earnings of immigrants, even after allowing for differences in unobserved personal characteristics of immigrants, which they capture through individual fixed effects in their econometric analysis. Wage growth accelerates following naturalization, and immigrants move into better jobs: their probability of white-collar and public-sector employment increases, as does their access to jobs in the union sector. These findings support the view that immigrants who have not achieved citizenship face barriers to certain jobs. However, the authors also acknowledge that, since naturalization is a choice that immigrants can make or not, and because they cannot exploit any exogenous change in citizenship status, their results are also consistent with the view that immigrants invest more heavily in human capital in anticipation of naturalization and receive returns on this investment only after naturalization.

Some more recent papers have dealt explicitly with the potential endogeneity of citizenship, through different strategies. For instance, Mazzolari (2009) finds that employment and earnings increased for naturalized Latin American immigrants to the USA when their home countries passed dual citizenship laws, and granted expatriates the right to naturalize in the receiving country. Bevelander and Pendakur (2012) explore the link between citizenship and employment probabilities in Sweden, using cross-sectional register data for 2006. Their estimates explicitly account for the potential endogeneity of citizenship status using years since first eligible for citizenship as an instrumental variable. Citizenship acquisition is shown to have a positive impact for a number of immigrant groups. This is particularly the case for non-EU/non-North American immigrants. In terms of intake class, refugees appear to experience substantial gains from citizenship acquisition (this is not, however, the case for immigrants entering as family class).

Two recent papers overcome the problem of non-random selection into naturalization using a natural experiment in Switzerland, where some municipalities used referendums as the mechanism to decide naturalization requests. Comparing otherwise similar immigrants who narrowly won or lost their naturalisation referendums, the authors are able to test whether citizenship has a causal effect on the social (Hainmueller et al., 2017) or political (Hainmueller et al., 2015) integration of immigrants. Measuring social integration through a scale that combines several outcomes (e.g. plans to stay in Switzerland, membership in social clubs, feelings of discrimination, reading local press) they find that receiving Swiss citizenship strongly improved long-term social integration, with effects persisting for more than a decade and a half after naturalization. The large positive effects of naturalization on integration are concentrated among the most marginalized immigrant groups, and immigrants born abroad as opposed to those born in Switzerland. Finally, integration returns to naturalization are larger, the earlier in their residency immigrants acquire Swiss citizenship, which suggests that receiving the host country citizenship just a few years faster can have a lasting impact on enhancing the long-term social integration of immigrants. Additionally, naturalization is also shown to have has a strong causal and long-lasting effect on improving the political integration of immigrants. Naturalised immigrants display a higher political knowledge (measured as knowing the name of the current Swiss Federal President and knowing the number of signatures required for a federal initiative), and they are more likely to have voted in the last federal elections, and more likely to believe that they may have some influence on the government's actions.

Germany has recently reformed twice its citizenship law, gradually moving from a system based on ancestry (*jus sanguinis*) toward a more liberal naturalization system, which also includes the possibility of citizenship acquisition by birth (*jus soli*). First, in 1991, the government introduced for the first time explicit criteria on how immigrants can obtain German citizenship, setting an age-dependent minimum residency requirement. Then, since 2000, the criteria were made less restrictive and immigrants are allowed to naturalize after eight years of residency in Germany, whereas the children of foreign parents in Germany obtain automatically citizenship at birth.

These policy changes have allowed scholars to analyse the consequences of naturalization on a variety of outcomes. Steinhardt (2012) estimates the impact of naturalization on wages of immigrants in Germany using administrative panel data. His results show that the acquisition of citizenship has a positive impact on wage growth of male immigrants in the years after the naturalization event. Naturalized female employees also display higher wages, but their wage

premium is largely due to positive self-selection into citizenship. His analysis also indicates that the impact of becoming German varies across different countries of origin: while naturalization has no impact on wages of EU immigrants, all extra-EU immigrants profit from acquiring German citizenship. Gathmann and Keller (2014) go one step further, and rather than relying purely on fixed effects panel estimates to account for self-selection into citizenship, they use the arguably exogenous variation in eligibility rules induced by the citizenship reforms to identify the effect of citizenship for labour market performance. Additionally, unlike most previous studies, they estimate not the effect of citizenship acquisition, but the effect of eligibility for citizenship in itself on immigrants' labour market outcomes. Their results show that the possibility to naturalise has no significant effects on labour market outcomes of immigrant men, while it has substantial returns for immigrant women. Differently from the findings of Bratsberg et al. (2002) for the US, they find no evidence that immigrants work more in the public sector or in a white-collar job after citizenship. Furthermore, wage returns do not appear to be driven by improvements in German language skills. Rather, about 30% of the wage returns for women are driven by their moves to jobs with a permanent contract, to larger firms and to better paying occupations in the private sector. In line with previous papers, they also confirm that wage returns are typically larger for immigrants from outside the European Union and, more generally, for immigrants from poorer countries. Further, they show that recent immigrants, both men and women, enjoy large returns to citizenship, which matters less for earlier immigrants. Importantly, all these effects results from the mere possibility to naturalize, rather than from actual citizenship acquisition, which means that liberalization of eligibility for citizenship may be an effective policy even in the absence of a considerable take-up rate (as was the case in Germany).

Overall, the cumulative (though not universal) evidence weighs in the direction of accommodative citizenship regimes having beneficial economic and social effects (Dancygier and Laitin, 2014). However, the mechanisms driving these results are still not completely clear. From an economic point of view, in most countries permanently resident immigrants, or even just legally resident aliens, obtain nearly all the rights of the country's citizens (except for voting in national elections and sometimes public sector employment). Therefore, it is unlikely that the gains from citizenship are a direct consequence of the additional acquired rights. Bloemraad (2017) highlights five other mechanisms that may be at work. First, citizenship may carry social value that provides legitimacy, beyond access to material benefits or legal rights: others in society (employers, public officials, landlords, etc.) might feel stronger obligations to fellow citizens than to non-citizens, even though they are formally entitled to the same rights. Secondly, through the combination of access to rights and legitimacy, citizenship might also facilitate mobilization for collective action. Additionally, the

conditionality of citizenship acquisition in many countries, which may for instance require immigrants to satisfy minimum residency requirements, pass a language and/or civics test, pay a fee, might produce investment or socialization that changes people's skills, motivations, actions or viewpoints. Further, from a more typically economic point of view, citizenship can also work as a signalling device vis-à-vis others. Naturalised immigrants signal their commitment to the host country and may be perceived as possessing better language ability or motivation, irrespective of their actual skills. Finally, citizenship may also have social psychological effects, providing naturalised immigrants with a sense of self-empowerment and identification which may increase their sense of well-being, even in the absence of actual changes in their factual conditions (see Bloemraad (2017) for a thorough discussion of each of these points). Although all of these mechanisms are theoretically plausible, more research is needed to understand their relative empirical relevance.

Birthright citizenship and the integration of first and second generations

The latest reform of the German citizenship law has also provided the opportunity of studying the effects of automatic citizenship acquisition for children of immigrants born in Germany on their parents' behaviour. The reform, which was voted in May 1999 and came into effect on January 1 2000, included elements of the birthright citizenship system, granting automatically German citizenship to any child born to foreign parents as long as at least one parent had been ordinarily resident in Germany for at least 8 years and had been granted permanent right of residence. The law also included some retrospective transitional provisions, whereby the German-born children of immigrants aged 10 or younger on January 1, 2000 could be naturalized if their parents satisfied the new requisites for automatic citizenship acquisition at the time of the child' birth, as long as they applied for the German citizenship before December 31, 2000. This retrospective provision provides a useful source of exogenous variation in the eligibility for citizenship among immigrants' children, which has been exploited in a series of paper.

Avitabile et al. (2013) analyse the introduction of birthright citizenship on parental integration outcomes. They show that the reform produced a significant and sizable increase in the probability of interacting with Germans for affected immigrants with a lower education backgrounds. On the other hand, more educated affected immigrants displayed significantly higher probability of reading German newspapers. Consistently with the idea of higher socio-economic integration induced by the reform, Sajons (2016) shows that introducing birthright citizenship for children has influenced the return migration behaviour of immigrant families, inducing more families affected by the reform to stay in Germany. There are several mechanisms that may explain why families whose children

are eligible for German citizenship may invest more in their social integration in the host country. First, if we think of parents' own assimilation as an investment in children's future outcomes, and since citizenship allows higher returns of human capital (see the evidence reviewed above), then birthright citizenship increases incentives to invest in children's outcomes, thus in parental integration. Additionally, the increased effort to learn the language and networking with natives, and the ensuing drop in return migration, might be due to a perception of favourable changes in attitudes of natives towards immigrants, which induces more effort to assimilate to the local culture. A last explanation links parental investment in host country-skills to the desire to maintain strong ties with their children: if children, through their host country citizenship, become part of the host society, their parents have higher incentives to become part of it too, as they do not want to become culturally distant from their offspring. Unfortunately, there is not enough evidence to empirically disentangle the three mechanisms.

5. Outlook: the effects for sending countries

Although we have so far considered only the host country perspective, it is well known – and almost obvious – that emigration may have consequences for origin countries, too (see e.g. Clemens et al. (2014), Docquier and Rapoport (2012) and Yang (2011) for an overview of the literature on brain drain-brain gain, remittances, and other types of diaspora externalities). In turn, such origin countries effects may depend on how well integrated immigrants are in the destination countries, though the effect of integration may be non-monotonic. Two of the most "classical" ways in which migration is expected to affect origin countries are brain drain/return migration and remittances. Below we will shortly discuss how the mechanisms discussed in the previous sections affect each of them.

Until some years ago, brain drain was at the centre of the policy concerns regarding the effects of emigration on origin countries. Recently, an increasingly large literature has highlighted the possibility that migration may instead lead to a brain gain. According to this – now predominant – view, the mere possibility of migration to a country where returns to education are higher can actually lead to an increase in the stock of human capital in sending countries, as it drives up expected returns to skills and thus increases the incentives to invest in education. Moreover, brain circulation may facilitate the diffusion of knowledge, a process that is accelerated by return migration. The temporariness of visa obviously interplays with this process in two opposing ways: on the one hand, the perspective of a shorter stay in the host country, where returns to human capital are higher, reduces migrants' incentives to invest in education; on the other hand, if the host country

requires all immigrants to leave after a certain amount of time, the larger number of returning migrants and the related diffusion of knowledge increases the sending country's overall human capital (see Domingues et al. 2003). Additionally, if temporary migrants invest less in host-country human capital, and if this human capital is not entirely country-specific, then the amount of knowledge each returning migrant brings with them will be lower than the amount of knowledge that returning migrants would individually bring if temporary visa did not constrain them to shorter-than-desired permanence in the host country.

Remitting behaviour may also be influenced by host country policies in several direct ways (see De Arcangelis et al. (2015) for an example), but also in more indirect ways. For example, visa temporariness plays a role in this case, too. There is evidence from several countries of a positive association between immigrant return plans and savings and remittances decisions (e.g. Merkle and Zimmermann 1992, Pinger 2010, Dustmann and Mestres 2010a). This empirical regularity can be easily reconciled with the existing literature, that has identified three primary motives for remitting: support for remaining family members, savings for future consumption or for investments in the home country, and insurance against a future return. Each of these motives may be affected by the temporariness of migration. Family support is likely to be more common in temporary migrations, because in these cases immigrants are more likely to leave their families behind (see Funkhouser, 1995). This is even more likely to be the case for migrations that are constrained to be temporary, as temporary visa holders are often subject to more restrictions pertaining to family reunification. As regards savings in the origin country, temporary migrants have been shown to be more likely to hold assets in their home countries (Dustmann and Mestres, 2010b). Lastly, in terms of remittance as insurance, a mechanism supported by the analysis of Batista and Umblijs (2016) showing that risk-averse individuals are more likely to send remittances and to remit higher amounts, migrants planning to return at some future time may contribute to the home community in order to "pay their way" back.

6. Concluding remarks

Integration of immigrants is a key challenge confronting European countries as well as most other advanced economies. We have documented that in most European countries immigrants face significant labour market disadvantages relative to natives. Although such disadvantages are stronger among recently arrived immigrants than among those who have been longer in the host country, which suggests that a process of labour market integration may be at work, they still persist

after many years since migration and may be transmitted to the next generation. This calls for policy actions to favour or accelerate the integration process.

Some countries have, in fact, implemented policies like language or introduction courses aimed at facilitating immigrants' integration. In this paper, we have reviewed some of them, and presented studies that evaluate their effectiveness. However, we have also argued that the whole migration policy framework can play a decisive, and perhaps more important, role in determining immigrants' integration patterns. In particular, we have shown that the temporariness of visas may affect migrants' incentives to invest in country-specific human and social capital and thus affect their integration trajectories. Based on the existing literature, we have concluded that uncertainty about the migration duration may lead to sub-optimal investments and thus to a slower and less successful integration. Thus, a longer duration of working visas and a well-defined and ex-ante clear pattern toward permanent residence status may be effective and inexpensive policy measures to help integration. For the same reason, fast decisions on asylum applications may be very effective in facilitating the integration of refugees, a group of migrants for whom integration appears historically to be more problematic than for economically-motivated movers.

Another important policy aspect, which operates not at the beginning of the migration experience, but at a later stage of the process, is the regulation of citizenship acquisition. A growing body of literature has shown that naturalised immigrants tend to over-perform those who do not naturalise, and that this is not only due to positive self-selection into citizenship acquisition. Therefore, facilitating the acquisition of the host country citizenship for immigrants and for their offspring may be a very cost effective measure to promote integration. Importantly, citizenship acquisition may be particularly effective in promoting also the social and political integration of immigrants, two aspects of integration that go beyond the economic integration, and are not necessarily linked to it.

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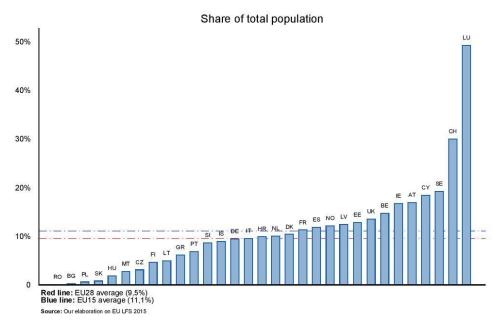
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Tables and Figures

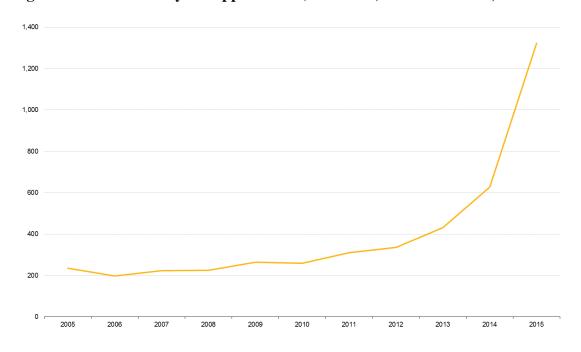
Figure 1- Stock of immigrants in the European Union (% of population) by country, 2015

Immigrants in the European Union



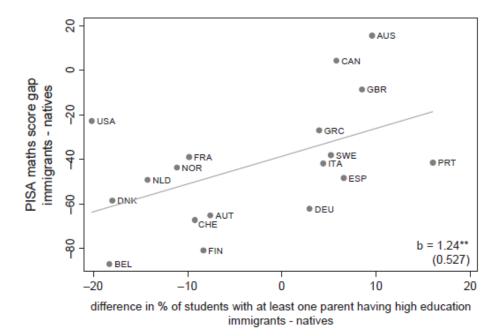
Note: The figure reports the share of immigrants in the total population of each European country in 2015 (vertical bars), as well as the EU28 and the EU15 average (horizontal scattered lines). Immigrants are defined as foreign-born except for Germany where they are defined as foreign nationals. Source: our elaboration on EULFS 2015.

Figure 2 - Number of asylum applications (thousands) in EU countries, 2005-2015



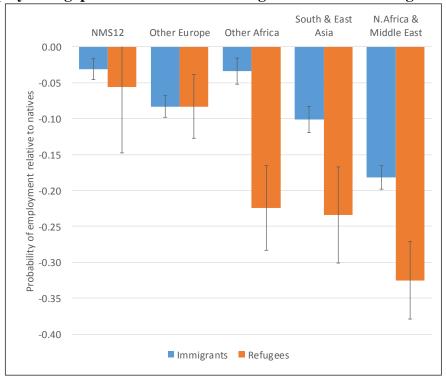
Note. The Figure reports the number of asylum applications (in thousands) across EU countries in years 2005-2015. Source: Eurostat (migr_asyatz) and (migr_asyappctza).

Figure 3- Immigrant-native differences in parental education and maths test scores



Note: The figure plots the average gap in mathematics test scores between immigrants and natives versus the difference in the share of immigrant and native students with at least one parent who has tertiary education. Source: Figure 2 in Dustmann, Frattini and Lanzara (2012).

Figure 4 - Employment gaps relative to natives: refugees and economic migrants by origin



Note. The figure reports differences in employment probabilities relative to natives for non-EU15 economic immigrants (blue bars) and refugees (orange bars), alongside their 90 percent confidence intervals, by area of origin across Europe. Gaps are estimated through separate linear probability models. Regressions control for gender, age, education (dummy variables for lower secondary and tertiary education), and host country fixed effects. Estimates are based EULFS 2008.

Source: Figure 9 in Dustmann, Fasani, Frattini, Minale and Schoenberg (2017).

Table 1- Immigrant-native differences in employment probability in Europe, 2015

C	All	Recent	Earlier
Country	immigrants	immigrants	immigrants
Austria	-0.081	-0.117	-0.071
Belgium	-0.103	-0.126	-0.097
Bulgaria	-0.107	-0.264	-0.022 °
Croatia	0.004 °	-0.184	0.007 $^{\circ}$
Cyprus	0.059	0.123	0.035
Czech Republic	0.010 °	-0.067	0.022
Denmark	-0.112	-0.127	-0.107
Estonia	-0.019 °	0.021 °	-0.020 °
Finland	-0.100	-0.254	-0.059
France	-0.096	-0.278	-0.073
Germany	-0.125	-0.182	-0.106
Greece	0.018	-0.127	0.029
Hungary	0.072	0.011 °	0.081
Iceland	-0.037	-0.071	-0.033
Ireland	-0.008	-0.055	0.006 $^{\circ}$
Italy	0.027	-0.161	0.046
Latvia	-0.045	-0.293	-0.035
Lithuania	0.009 °	0.007 °	0.009 $^{\circ}$
Luxembourg	0.068	0.093	0.057
Malta	0.064	0.010 °	0.070
Netherlands	-0.151	-0.307	-0.135
Norway	-0.069	-0.106	-0.050
Poland	-0.044	-0.047	-0.006 °
Portugal	0.045	-0.226	0.067
Romania	-0.015 °	-0.164	0.178
Slovak Republic	-0.043	0.051 °	-0.061
Slovenia	-0.046	-0.152	-0.035
Spain	-0.031	-0.106	-0.022
Sweden	-0.144	-0.305	-0.100
Switzerland	-0.054	-0.080	-0.046
United Kingdom	-0.026	-0.076	-0.009
EU15	-0.059	-0.151	-0.040
All	-0.057	-0.143	-0.038

Note: The table reports, for each country and for all EU15 or all countries pooled, the percentage point difference between immigrants and natives in the probability of employment. The differences are computed as coefficients on an immigrant dummy in a linear probability model which also includes quarter dummies. The pooled regressions include also country dummies. Column 1 reports results for the whole immigrant population. Column 2 "Recent" (3 "Earlier") reports results for immigrants who have been in the country for at most five years (for more than years). o indicates that the coefficient is not is statistically significant at the 10 percent significance level.

Source: our elaboration on EULFS 2015.