Nadzeya Laurentsyeva and Alessandra Venturini*

The Social Integration of Immigrants and the Role of Policy – A Literature Review

Culture erosion, threats to national identity and notions of "us vs. them" often figure directly or indirectly in the discourse of opponents to immigration. The extent of these non-economic concerns largely depends on how well immigrants can integrate socially, where social integration can be understood from two perspectives. For immigrants, it means developing a sense of belonging to the host society. This often involves accepting and acting according to that society's values and norms and, if necessary, building up the social capital that is deemed necessary by the host country's institutions. The role of the native population is equally important: social integration is only feasible once immigrants are accepted as members of the society. Such mutual recognition, apart from improving individual well-being, leads to better social cohesion and has considerable economic implications, from the provision of public goods and redistribution¹ to teamwork and productivity in firms.² Yet, if immigrants and the native population differ in many social and cultural dimensions, social integration poses a challenge. Understanding the determinants of social integration and how to facilitate it thus represents a policy-relevant research area.

Researchers have considered different measures to proxy the social integration of immigrants, including self-identification, values, marriage and fertility choices, residential patterns, and civil and political engagement. On average, immigrants are found to differ from the native population in these measures.³ There are several explanations for the observed gap between immigrants and the native population. First, immigrants might be different across some fundamental characteristics, such as age or education, which are relevant for explaining social behaviour and choices. Second, in particular upon their arrival, immigrants face different constraints: a lack of language skills, insufficient economic or time resources, uncertainty regarding their length of stay, and direct obstacles to access certain areas of social life, such as voting or political activities. Third, immigrants have been exposed to a different culture either in their country of origin, ethnic neighbourhoods or in families. Culture influences preferences and beliefs and thus affects people's trust, risk attitudes and social preferences, as well as their views on religion, family ties, gender roles and political involvement.⁴ Differences in preferences and beliefs further translate to differences in observed behaviour and choices. A large body of literature documents the resilience of immigrants' original culture. For example, Alesina and Giuliano, Blau et al., and Fernandez and Fogli show that women from countries with low female labour supply are also less likely to work in their destination countries.5 Giuliano finds cultural influences in the living arrangements of immigrants.⁶ Another study reports that immigrants coming from countries with traditionally closer family ties, low generalised trust and

Nadzeya Laurentsyeva, Centre for European Policy Studies, Brussels, Belgium.

Alessandra Venturini, University of Torino, Italy; and Migration Policy Centre, Florence, Italy.

We gratefully acknowledge helpful comments provided by Afaf Rahim.

¹ See, for example, A. Alesina, R. Baqir, W. Easterly: Public Goods and Ethnic Divisions, in: The Quarterly Journal of Economics, Vol. 114, No. 4, 1999, pp. 1243-1284; and A. Alesina, E. La Ferrara: Ethnic Diversity and Economic Performance, in: Journal of Economic Literature, Vol. 43, No. 3, 2005, pp. 762-800.

² See E. Lyons: Team Production in International Labor Markets: Experimental Evidence from the Field, in: American Economic Journal: Applied Economics, Vol. 9, No. 3, 2017, pp. 70-104.

For an overview of studies focused on Europe, see Y. Algan, A. Bisin, A. Manning, T. Verdier (eds.): Cultural integration of immigrants in Europe, Oxforf 2013, Oxford University Press; and C. Dustmann, T. Frattini: Immigration: The European experience, IZA Discussion Paper 6261, Institute of Labor Economics, 2011. For the US, see R. Abramitzky, L.P. Boustan, K. Eriksson: Cultural Assimilation during the Age of Mass Migration, NBER Working Papers, No. 22381, available at https://ideas.repec.org/p/nbr/nberwo/22381. html.

⁴ L. Guiso, P. Sapienza, L. Zingales: Does Culture Affect Economic Outcomes?, in: Journal of Economic Perspectives, Vol. 20, No. 2, 2006, pp. 23-48.

⁵ A. Alesina, P. Giuliano: The power of the family, in: Journal of Economic Growth, Vol. 15, No. 2, 2010, pp. 93-125; F.D. Blau, L.M. Kahn, K.L. Papps: Gender, Source Country Characteristics, and Labor Market Assimilation among Immigrants, in: Review of Economics and Statistics, Vol. 93, No. 1, 2011, pp. 43-58; R. Fernández, A. Fogli: Culture: An Empirical Investigation of Beliefs, Work, and Fertility, in: American Economic Journal: Macroeconomics, Vol. 1, No. 1, 2009, pp. 146-177.

⁶ P. Giuliano: Living Arrangements in Western Europe: Does Cultural Origin Matter?, in: Journal of the European Economic Association, Vol. 5, No. 5, 2007, pp. 927-952.

low civil and political participation are also less politically and socially active in their destination countries.⁷

Existing research has shown that for economic outcomes the gap between immigrants and the native population reduces over time.⁸ Does social integration follow a similar pattern? While constraints that immigrants face can be modified over the years of residence in a destination country (e.g. by acquiring the language skills) or by specific policies (e.g. those that extend immigrants' rights), original beliefs and preferences are harder to change, and these might be more important for social than for economic behaviour. This raises two important questions. First, how does the social integration of immigrants evolve over years of residence in a country? Second, can policies in the destination countries influence this process? These are the central questions we try to address in this paper.⁹

Several conclusions emerge from our reading of the literature. First, there is a gap between immigrants and native-born populations across various proxies of social integration, which persists even when controlling for observable basic characteristics such as age and education. Immigrants do catch up as they spend more time in their host country, but social integration often lags behind economic participation, and the pace of integration differs when different proxies are used. Certain policies can accelerate the social integration of immigrants, with particularly strong effects for more disadvantaged groups. However, more research is needed to understand the mediating channels of these effects.

Proxies of social integration

Table 1 presents proxies of social integration that have been used in the economic literature.¹⁰ Similarity between immigrants and the native population across these measures reflects, to varying extents, whether immigrants consider themselves as – and act as – members of the host society, as well as whether they are perceived as such by the native population.

Among these proxies, the measure of self-identification represents the most direct attempt to capture the general

idea of social integration, i.e. by asking whether an immigrant feels attached to (or identifies with) the host society. The main sources of information are socio-economic surveys in which immigrants answer questions such as "Do you feel [insert nationality]?", "Do you feel part of society?", and "Do you feel at home?". It should be noted, however, that the connotations of these questions differ. For instance, ethnic attachment is not always a necessary condition for social integration. Furthermore, being selfreported, this measure tends to be statistically noisy and hard/costly to trace over the life course of an immigrant. As an alternative proxy for social integration, Abramitzky et al., for example, suggested using the way immigrants in the US name their children.¹¹ The idea behind this proxy is that immigrants who want to identify themselves and their children strongly with the host society are less likely to use foreign names. The advantages of this measure are its ready availability (in the administrative data) and the fact that naming a child is a choice by immigrants which should not be affected by financial constraints or a lack of certain rights. The results show that with more years spent in the US, immigrants chose more American names for their children.¹² While the pace of this "name-based" convergence did not differ by literacy status, it occurred faster for immigrants who were more culturally distant from US natives.

We broadly classify other proxies of social integration into four groups: culture, social participation and inclusion, demographics, and civil and political participation.

One approach to capture social integration is by directly measuring immigrants' preferences and beliefs (i.e. trust, social preferences and values) and comparing them with those of the native population. A complementary way is to compare differences in immigrants' levels of trust and social preferences with respect to their compatriots in comparison to the corresponding levels with respect to the native population of their new country. Social integration would imply that immigrants no longer consider the native population as an "outsider" group and that they express trust and willingness to cooperate with them in the same way as they do with compatriots. The same questions can be asked of the native population regarding immigrants. However, as these questions are all personal and subjective in nature, in most cases these measures are only available as self-reported in surveys. As one example of an innovative approach, Cameron et al. measure the social integration of Chinese immigrants in Australia by identifying their trust, altruism and risk attitudes during

⁷ A. Alesina, P. Giuliano: Family Ties and Political Participation, in: Journal of the European Economic Association, Vol. 9, No. 5, 2011, pp. 817-839.

⁸ European Commission: Employment and Social Developments in Europe 2016, Chapter 3, Luxembourg 2016, Publications Office of the European Union, pp. 109-147.

⁹ While acknowledging that second-generation immigrants can also experience integration problems, we focus on the integration of firstgeneration immigrants, for whom the gap is much wider.

¹⁰ We do not aim to provide an exhaustive list of possible indicators, but rather give a number of examples.

¹¹ R. Abramitzky et al., op. cit.

¹² Ibid.

Table 1 Proxies of social integration

Dimension	Indicators	Examples in studies		
General	Self-identification	Manning and Roy (2010) ¹ Constant et al. (2014) ²		
Culture (preferences and beliefs)	Trust, social preferences (altruism, fairness, reciprocity, inequity aversion) and risk attitudes Values: gender roles, family ties, role of religion, political attitudes	Algan et al. (2013)³ Bisin et al. (2008, 2010)⁴ Cameron et al. (2015)⁵		
Social participation/ inclusion (behaviour)	Language Planned permanent stay in host country Perceived discrimination Hobbies, membership in a local social club, non-immigrant friends, reading local newspapers, residential location choices	Avitabile et al. (2013) ⁶ Hainmueller et al. (2017) ⁷		
Demographics (behaviour)	Age of marriage, intermarriage, divorce rate, fertility, household structure	Adsera and Ferrer (2014) ⁸ Furtado and Trejo (2013) ⁹ Gathmann et al. (2017) ¹⁰		
Civil and political participation (behaviour)	Active citizenship: contacting a (local) policymaker, being a member of any political party, working in a political/civil organisation or association, participating in civil activities Voting, political awareness Volunteering	Barslund et al. (forthcoming) ¹¹ Hainmueller et al. (2015) ¹²		

Note: 1 A. Manning, S. Roy: Culture clash or culture club? National identity in Britain, in: The Economic Journal, Vol. 120, No. 542, 2010; ² A. Constant, S. Schüller, K.F. Zimmermann: Ethnic Spatial Dispersion and Immigrant Identity, IZA Discussion Paper No. 7868, Institute of Labor Economics, 2013; ³Y. Algan, A. Bisin, A. Manning, T. Verdier: Cultural integration of immigrants in Europe, Oxford 2013, Oxford University Press; ⁴A. Bisin, E. Patacchini, T. Verdier, Y. Zenou: Are Muslim immigrants different in terms of cultural integration?, in: Journal of the European Economic Association, Vol. 6, No. 2-3, 2008, pp. 445-456. This paper was later updated in A. Bisin, E. Patacchini, T. Verdier, Y. Zenou: Errata Corrige: "Are Muslim Immigrants Different in Terms of Cultural Integration?", in: Journal of the European Economic Association, Vol. 9, No. 5, 2011, pp. 1012-1019; ⁵ L. Cameron, N. Erkal, L. Gangadharan, M. Zhang: Cultural integration: Experimental evidence of convergence in immigrants' preferences, in: Journal of Economic Behavior & Organization, Vol. 111, 2015, pp. 38-58; 6 C. Avitabile, I. Clots-Figueras, P. Masella: The Effect of Birthright Citizenship on Parental Integration Outcomes, in: Journal of Law and Economics, Vol. 56, No. 3, 2013, pp. 777-810; 7 J. Hainmueller, D. Hangartner, G. Pietrantuono: Catalyst or Crown: Does Naturalization Promote the Long-Term Social Integration of Immigrants?, in: American Political Science Review, Vol. 111, No. 2, 2017, pp. 256-276; * A. Adsera, A. Ferrer: Factors influencing the fertility choices of child immigrants in Canada, in: Population Studies, Vol. 68, No. 1, 2014, pp. 65-79; ⁹ D. Furtado, S.J. Trejo: Interethnic marriages and their economic effects, in: A.F. Constant, K.F. Zimmermann (eds.): International Handbook on the Economics of Migration, Cheltenham 2013, Edward Elgar, pp. 276-292; ¹⁰ C. Gathmann, N. Keller: Citizenship and Social Integration, IZA Working Paper, Institute of Labor Economics, 2017; ¹¹ M. Barslund, L. Ludolph, M. Gerardin, K. Skaaning, N. Laurentsyeva: From workers to active citizens? The link between employment and social integration of immigrants in the EU, CEPS Working Document, forthcoming; 12 J. Hainmueller, D. Hangartner, G. Pietrantuono: Naturalization fosters the long-term political integration of immigrants, in: Proceedings of the National Academy of Sciences, Vol. 112, No. 41, 2015, pp. 12651-12656.

Source: Authors' elaboration.

laboratory experiments.¹³ The results confirm that the Chinese immigrants exhibit preferences different from those of Australians. However, greater exposure to Australian culture (measured by the share of education received in Australia) is in general related to more convergence toward the norms of the native population.

Other proxies in Table 1 represent the second layer: these measures reveal social integration through *immigrants' actual behaviour and choices*. These outcomes can be shaped by both immigrants' beliefs and preferences as well as by the constraints they face in the host country. For instance, marriage and fertility decisions could be af-

fected by gender values and by immigrants' career opportunities. Differences in residential patterns between immigrants and the native population could reflect preferences for living among compatriots or could simply be due to financial constraints. Civil and political integration depends on whether immigrants feel like integral members of the society and on whether they have equal access to civil and political activities. While there is some uncertainty regarding the motivations for their behaviour, the advantage of these measures is that they are usually more precisely reported in surveys. Many of these indicators can be observed in the administrative data.

We use data from the European Social Survey conducted throughout the years 2002-15 in the EU member states to illustrate the differences in economic and social outcomes between first-generation immigrants and the native population (see Table 2). For this descriptive exercise,

¹³ L. Cameron, N. Erkal, L. Gangadharan, M. Zhang: Cultural integration: Experimental evidence of convergence in immigrants' preferences, in: Journal of Economic Behavior & Organization, Vol. 111, 2015, pp. 38-58.

	(1)	(2)	(3)	(4)	(5)	(6)
	Employed ¹	Self- identification ²	Social activities ³	Language usage⁴	Feeling discriminated	Active citizen⁵
Immigrant	-0.0179	0.0277	-0.0129**	-0.303***	0.0357***	-0.121***
	(0.0110)	(0.0258)	(0.00626)	(0.0238)	(0.00948)	(0.0110)
Immigrant, non-EU	-0.0558***	-0.00631	-0.00873	-0.0418	0.110***	-0.0236
	(0.0131)	(0.00782)	(0.00746)	(0.0263)	(0.0106)	(0.0150)
Mean of dependent variable (sd)	0.6476	0.7489	0.4399	0.9029	0.0875	0.5407
	(0.4777)	(0.2458)	(0.2243)	(0.2961)	(0.2826)	(0.4983)
Observations	130101	16662	129085	130523	129897	129103
R ²	0.182	0.0817	0.0408	0.199	0.0396	0.0967

Table 2 Economic and social outcomes: immigrants vs. native population

Notes: Controls: age, gender, education level, country of residence, survey year. Baseline group: the native-born population. Robust standard errors, clustered at country-year level. * p < 0.10, ** p < 0.05, *** p < 0.01. The sample includes individuals between 20 and 65 years old, residing in Austria, Belgium, Germany, Denmark, Spain, Finland, France, the United Kingdom, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Sweden.

Definition of dependent variables: ¹ "Employment status" 1 – Employed or self-employed; 0 – Not in paid work. ² "Do you feel close to the country?" 1 – Very close; 2/3 – Close; 1/3 – Not very close; 0 – Not close at all. Responses available only for 2014-15 wave. ³ "Do you take part in social activities (compared to others of same age)?" 1 – Much more than most; 3/4 – More than most; 1/2 – About the same; 1/4– Less than most; 0 – Much less than most. ⁴ "Language most often spoken at home, first mentioned" 1 – corresponds to the official language(s) of the host country; 0 – other language. ⁵ An index of active citizenship following Hoskins et al. and Barslund et al. 1 – if a respondent participated in any civil or political activities during the last 12 months; 0 – otherwise.

Source: European Social Survey, waves 2002-15; own calculations.

we selected employment as a measure of economic integration, while self-identification, social activities, language usage, perceived discrimination and active citizenship are used as proxies for social integration. All regressions control for the observable individual characteristics, country of residence and survey year, and they distinguish between EU and non-EU immigrants. With the exception of self-identification, we note a statistically significant gap in the reported outcomes between immigrants and the native population. However, while the results for employment and discrimination are mainly driven by immigrants from non-EU countries, all immigrants on average lag behind the native population in social activities, language usage and active citizenship.

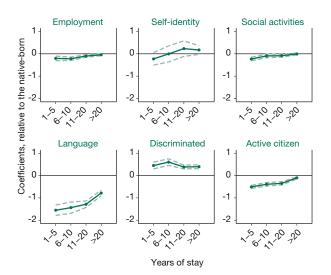
Figure 1 further illustrates how the above outcomes depend on years of stay in the host country. For better comparability, we standardise the variables to have a mean of zero and a standard deviation of one. In terms of selfidentification and social activities, the convergence to the native-born population happens relatively quickly. Catching-up in terms of active citizenship or language usage takes more time and is slower than economic integration. Perceived discrimination persists and exhibits a non-linear pattern. While Figure 1 suggests that integration outcomes improve over years of stay, the crosssectional data does not allow us to identify whether the convergence happens because immigrants indeed adjust and are accepted by the host society or because those who can better integrate at the outset stay longer in the host country, while less successful immigrants leave. We now turn to the review of the literature that has tried to identify the role of specific policies for facilitating the integration process.

Policy impacts

This section discusses the effects of two specific policy areas that can affect immigrants' social integration: naturalisation and settlement. We selected these policies for three reasons. First, they are often subject to political debate in the destination countries. Therefore, it is useful to summarise the actual impact they have on society - in our case, by influencing immigrants' integration. Second, while these policies are present in many countries, their design and implementation vary. Although countries develop policies according to their own specific environments, there could be scope to learn from international experiences. Third, all these policies have already been in place for some time and have thus potentially affected the outcomes of several immigrant cohorts. Moreover, some countries have modified their policies, thus generating policy experiments that can be used to identify causal implications.

Figure 1

Economic and social integration of immigrants in the EU, over years of stay



Notes: The figure is based on the same regressions as in Table 2, but it adds dummies for different years of stay: 1-5, 6-10, 11-20 and >20. The plotted coefficients correspond to these dummies and show the gap in a given outcome between a native-born and an immigrant with x years of stay. For comparability, we standardised all the variables to have a mean of zero and a standard deviation of one. The coefficients therefore can be interpreted in terms of standard deviations.

Controls: age, gender, education level, country of residence, survey year. Baseline group: the native-born population. Robust standard errors, clustered at country-year level. The sample includes individuals between 20 and 65 years old, residing in Austria, Belgium, Germany, Denmark, Spain, Finland, France, the United Kingdom, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Sweden.

Source: European Social Survey, waves 2002-15; own calculations.

Naturalisation

Naturalisation, i.e. granting citizenship, makes immigrants legally identical in terms of their rights and responsibilities to the native population. These "additional" rights for naturalised immigrants vary from country to country, but usually include full access to employment and job mobility, secured residence status, voting rights and the possibility to run for office. Naturalisation can thus provide immigrants with broader career opportunities and hence increase their income. A more certain residence status and thus a longer "pay-off" period can give immigrants stronger incentives to invest in their human capital, namely language skills or vocational and academic degrees. Removing the constraint on immigrants' political participation is likely to increase their political involvement. Finally, merely by becoming citizens, immigrants can start to feel more welcome and more attached to their host countries and thus more inclined to follow norms and engage in social life. There is, however, an opposing view that citizenship represents a reward for immigrants who have already attained a sufficient integration level. Thus, if anything, granting citizenship can reduce the incentives for immigrants to further invest in their integration.¹⁴

Studies evaluating the effects of naturalisation on immigrants' labour market outcomes yield varying conclusions. While some studies do not find any positive effect,¹⁵ others report evidence for a "naturalisation premium".¹⁶ However, in many cases, researchers acknowledge that this premium is explained by self-selection to naturalisation, i.e. an immigrant's decision to become naturalised depends on his or her individual characteristics, which are also relevant for labour market outcomes.

Gathmann and Keller avoid this self-selection problem by studying the effects of two German naturalisation reforms.¹⁷ Regarding labour market outcomes, faster naturalisation has weak effects on employment and earnings for men, but sizeable employment and earnings effects for women due to higher labour force attachment. Furthermore, the authors find that both female and male naturalised immigrants have more formal education, better German language skills and higher quality jobs. In a companion paper, Gathmann et al. proxy social integra-

- 15 For the Netherlands, see P. Bevelander, J. Veenman: Naturalisation and Socioeconomic Integration: The Case of the Netherlands, IZA Discussion Papers No. 2153, Institute of Labor Economics, 2006, available at https://ideas.repec.org/p/iza/izadps/dp2153.html; for the US, see B.R. Chiswick: The Earnings of Immigrants and Their Sons, in: Challenge, Vol. 21, No. 2, 1978, pp. 55-61; and for Sweden, see K. Scott: The economics of citizenship: Is there a naturalization effect?, in: P. Bevelander, D.J. DeVoretz (eds.): The Economics of Citizenship, Malmö 2008, Malmö University, pp. 105-126.
- 16 For North America, see D.J. DeVoretz, S. Pivnenko: The economic causes and consequences of Canadian citizenship, in: Journal of International Migration and Integration, Vol. 6, No. 3, 2005, pp. 435-468; for the Netherlands, see P. Bevelander, J. Veenman, op. cit.; for Sweden, see P. Bevelander, R. Pendakur: Citizenship, Coethnic Populations, and Employment Probabilities of Immigrants in Sweden, in: Journal of International Migration and Integration, Vol. 13, No. 2, 2012, pp. 203-222; and for Germany, see M.F. Steinhardt: Does citizenship matter? The economic impact of naturalizations in Germany, in: Labour Economics, Vol. 19, No. 6, 2012, pp. 813-823.
- 17 C. Gathmann, N. Keller: Access to Citizenship and the Economic Assimilation of Immigrants, in: The Economic Journal, forthcoming, available at http://onlinelibrary.wiley.com/doi/10.1111/ecoj.12546/ abstract. The first reform in 1991 defined age-dependent residency requirements for naturalisation to be either 8 or 15 years. The second immigration reform in 2000 equalised and reduced residency requirements for all immigrants to 8 years.

¹⁴ For a review of this discussion, see J. Hainmueller, D. Hangartner, G. Pietrantuono: Catalyst or Crown: Does Naturalization Promote the Long-Term Social Integration of Immigrants?, in: American Political Science Review, Vol. 111, No. 2, 2017, pp. 256-276.

tion using the demographic choices of immigrants.¹⁸ They find that access to naturalisation increases the marriage age and the probability of intermarriages. For female immigrants – especially highly skilled ones – it postpones childbirth. The authors also report that non-EU immigrant females, although more different at the baseline, adjust to a greater degree. Finally, the paper shows that higher earnings for women can be an important intermediate step linking naturalisation to marriage and fertility decisions. However, the causality between economic integration and demographic convergence remains an open issue.

In Hainmueller et al., the authors exploit the fact that in certain Swiss municipalities, the granting of citizenship rights to individual immigrants took place through local referendums on a case-by-case basis.¹⁹ They then compare the outcomes of winners and losers of these referendums. As a proxy for social integration, they use an index comprising the following characteristics: plan to stay in Switzerland, feeling of being discriminated, membership in a social club and reading Swiss newspapers rather than those from an origin country. The analysis shows that winning the citizenship referendum strongly improves immigrants' long-term social integration, with the returns to naturalisation being much larger for more marginalised immigrant groups. A previous study by the same authors used the same setting to investigate the effect of naturalisation on the political participation of immigrants.²⁰ They found that immigrants also increased their political participation (consisting of formal political participation, political knowledge and political efficacy). However, for political integration, the effects of naturalisation are stronger for second-generation immigrants, those with higher education levels or those coming from richer EU countries.

Another type of naturalisation policy grants birthright citizenship to newborn children of immigrants. Avitabile et al. evaluated the effect of such a policy in Germany and found that foreign-born parents were more likely to interact with the local community and use the German language if their children were entitled to German citizenship at birth.²¹ A subsequent study by the same authors reports that birthright citizenship reduces the fertility of immigrants, consistent with Becker's "quality-quantity" model.²²

Settlement or immigrant dispersal policy

Immigrants – particularly those who are newly arrived – tend to settle close to their former compatriots. This might lead to the ethnic concentration and spatial segregation of immigrants. Policies can influence these settlement patterns, both indirectly, e.g. by offering housing subsidies in certain areas, or in special cases also directly, e.g. by relocating refugees. Such policies have been implemented in countries including Germany, Sweden, Denmark and Canada. The policy-relevant research question is whether these immigrant (ethnic) networks are good or bad for immigrants' integration.

There are several channels through which immigrant networks can affect outcomes. On the one hand, it is easier to preserve the original culture within the immigrant community. By interacting mainly with compatriots, immigrants might face lower incentives to acquire destinationspecific skills. On the other hand, immigrant communities may provide a sheltered environment, share experiences and thus reduce the individual costs of economic and social integration.²³ Immigrant networks can also affect social integration through the economic channel, for example if the presence of a network helps with finding a job and thus makes more financial resources available for social activities. The main challenge that researchers face in evaluating the effects of immigrant networks is that immigrants choose their residence based on their characteristics and needs: those in need of support or those for whom integration is particularly challenging might prefer to settle close to their ethnic community.

The literature investigating the impact of ethnic networks on the economic outcomes of immigrants has so far produced mixed results. Edin et al. use data from a dispersal policy in Sweden and find that networks positively affect the earnings of less-skilled immigrants.²⁴ They also suggest that networks might have a positive effect on the available information about the destination country but reduce incentives to acquire human capital. Damm studies the effects of a dispersal policy in Denmark and also

C. Gathmann, N. Keller, O. Monscheuer: Citizenship and Social Integration, IZA Working Paper, Institute of Labor Economics, 2017.
J. Hainmueller et al., op. cit.

²⁰ J. Hainmueller, D. Hangartner, G. Pietrantuono: Naturalization fosters the long-term political integration of immigrants, in: Proceedings of the National Academy of Sciences, Vol. 112, No. 41, 2015, pp. 12651-12656.

²¹ C. Avitabile, I. Clots-Figueras, P. Masella: The Effect of Birthright Citizenship on Parental Integration Outcomes, in: Journal of Law and Economics, Vol. 56, No. 3, 2013, pp. 777-810.

²² C. Avitabile, I. Clots-Figueras, P. Masella: Citizenship, Fertility, and Parental Investments, in: American Economic Journal: Applied Economics, Vol. 6, No. 4, 2014, pp. 35-65.

²³ T.J. Hatton, A. Leigh: Immigrants assimilate as communities, not just as individuals, in: Journal of Population Economics, Vol. 24, No. 2, 2011, pp. 389-419.

²⁴ P.-A. Edin, P. Fredriksson, O. Åslund: Ethnic enclaves and the economic success of immigrants – Evidence from a natural experiment, in: The Quarterly Journal of Economics, Vol. 118, No. 1, 2003, pp. 329-357.

finds a large positive static effect of ethnic networks on earnings.²⁵ In contrast, Xie and Gough analyse the role of ethnic enclaves on labour market outcomes in the US and find no evidence of a positive effect on earnings of new immigrants.²⁶ In a recent paper, Battisti et al. study the dynamic effects of ethnic networks in Germany.²⁷ They find that in the first years after arrival, ethnic networks increase the chances of being employed, but at the same time they reduce the probability of investing in additional human capital. The initial network effect is in particular strong for low- and medium-skilled immigrants, while it is close to zero for highly educated immigrants. In the longer term, the initial positive effect of a network on earnings disappears. Moreover, exposure to an ethnic network appears to lower wages and increases the likelihood of being mismatched in the job after several years of residence in Germany.

Regarding social integration, the results have been similarly non-uniform. Some research reports lower language skills for immigrants living in ethnic enclaves.²⁸ These studies cannot distinguish between language acquisition before and after migration, however, and can be biased by the fact that immigrants with low motivation to learn the language choose to live in enclaves. Aydemir exploits the random allocation of refugees within Canada and finds that immigrants in ethnic enclaves tend to invest more in language and job-related training.²⁹ These results could, however, be specific to the case of refugees and/or Canadian institutions.

Yet, Bisin et al. use other proxies for the social integration of immigrants in the UK (self-reported importance of religion, attitudes toward intermarriage and the importance of racial composition in schools) and also find no evidence that ethnic neighbourhoods spur intense religious and cultural identification for ethnic minorities, in general, and for Muslims, in particular.³⁰ Constant et al. also connect ethnic clustering with ethnic identity formation.³¹ The authors employ survey data from the German Socio-Economic Panel to obtain self-reported measures of immigrants' self-identification. The study suggests that ethnic clustering strengthens immigrants' retention of their original national identity and weakens their identification as Germans. The effects are nonlinear, however, and only become significant at relatively high levels of co-ethnic concentration.

Conclusion

As with economic integration, immigrants' social integration improves along with their years of residence in destination countries. Policies have some potential to influence the process of social integration.

The recent research shows that naturalisation seems to positively impact immigrants' social integration, be it proxied by marriage and fertility choices, social inclusion measures, or political activity. There is some evidence that demographic integration, in particular for women, is mediated by better economic opportunities following naturalisation. The exact channels of the naturalisation effect are yet to be understood.

Overall, existing studies do not report strong negative results for the effect of ethnic networks on the social integration of immigrants. However, several research results warn of possible adverse effects in the longer term due to lower investments in human capital. More research could be undertaken to investigate the network effect on various proxies for social integration (in particular the development of values, trust, or social preferences and the acquisition of human capital), to study dynamic effects (short- vs. long-term outcomes), and to take into account the quality of the network, e.g. the network's level of integration or its cultural proximity to the host culture. While many studies have evaluated the role of the pre-existing network upon the arrival of immigrants, relatively few studies have looked at how the simultaneous arrival of immigrants or the growth of the network over time affects

²⁵ A.P. Damm: Ethnic enclaves and immigrant labor market outcomes: Quasi-experimental evidence, in: Journal of Labor Economics, Vol. 27, No. 2, 2009, pp. 281-314.

²⁶ Y. Xie, M. Gough: Ethnic enclaves and the earnings of immigrants, in: Demography, Vol. 48, No. 4, 2011, pp. 1293-1315.

²⁷ M. Battisti, G. Peri, A. Romiti: Dynamic Effects of Co-Ethnic Networks on Immigrants' Economic Success, NBER Working Paper No. 22389, 2016.

²⁸ See B.R. Chiswick, P.W. Miller: A model of destination-language acquisition: Application to male immigrants in Canada, in: Demography, Vol. 38, No. 3, 2001, pp. 391-409; and C. Warman: Ethnic enclaves and immigrant earnings growth, in: Canadian Journal of Economics/Revue Canadienne d'Èconomique, Vol. 40, No. 2, 2007, pp. 401-422.

²⁹ A. Aydemir: Ethnic Enclaves and Human Capital Investments: Evidence from a Natural Experiment, mimeo, 2012.

³⁰ A. Bisin, E. Patacchini, T. Verdier, Y. Zenou: Are Muslim immigrants different in terms of cultural integration?, in: Journal of the European Economic Association, Vol. 6, No. 2-3, 2008, pp. 445-456. This paper was later updated in A. Bisin, E. Patacchini, T. Verdier, Y. Zenou: Errata Corrige: "Are Muslim Immigrants Different in Terms of Cultural Integration?", in: Journal of the European Economic Association, Vol. 9, No. 5, 2011, pp. 1012-1019.

³¹ A. Constant, S. Schüller, K.F. Zimmermann: Ethnic Spatial Dispersion and Immigrant Identity, IZA Discussion Paper No. 7868, Institute of Labor Economics, 2013.

social integration.³² A related study could investigate the effects of family reunion on the subsequent integration of immigrants.

In this survey, we reviewed the research evaluating naturalisation and settlement policies. We acknowledge the growing literature that looks at the effects of other immigration policies: access to work,³³ legalisation of irregular immigrants³⁴ and access to voting rights³⁵.

One particularly interesting area of research is to understand the interactions between economic and social integration as well as between different dimensions of social integration. For instance, is employment and, hence, are policies that target economic integration sufficient for the social integration of migrants? Can social integration happen before economic integration and then facilitate the latter? Research investigating these links could contribute to the development of more efficient integration policies.³⁶

Finally, while most of the studies so far have focused on analysing integration from the immigrant perspective, it is also important to understand how the same policies influence the native population and their attitudes and behaviour toward immigrants.

³² Notable exceptions are L.A. Beaman: Social networks and the dynamics of labour market outcomes: Evidence from refugees resettled in the US, in: The Review of Economic Studies, Vol. 79, No. 1, 2011, pp. 128-161; and S. Braun, N. Dwenger: The local environment shapes refugee integration: Evidence from post-war Germany, Hohenheim Discussion Papers in Business, Economics and Social Sciences 10-2017, University of Hohenheim, 2017.

³³ J. Hainmueller, D. Hangartner, D. Lawrence: When lives are put on hold: Lengthy asylum processes decrease employment among refugees, in: Science Advances, Vol. 2, No. 8, 2016.

³⁴ See P. Pinotti: Clicking on heaven's door: The effect of immigrant legalization on crime, in: The American Economic Review, Vol. 107, No. 1, 2017, pp. 138-168; and O. Havrylchyk, N. Ukrayinchuk: Living in Limbo: Economic and Social Costs for Refugees, mimeo, 2017, available at https://ssrn.com/abstract=2880065.

³⁵ M. Slotwinski, A. Stutzer, C. Gorinas: Democratic Involvement and Immigrants' Compliance with the Law, IZA Discussion Paper No. 10550, Institute of Labor Economics, 2017.

³⁶ See, for example R. Koopmans: Does assimilation work? Sociocultural determinants of labour market participation of European Muslims, in: Journal of Ethnic and Migration Studies, Vol. 42, No. 2, 2016, pp. 197-216; and M. Barslund, L. Ludolph, M. Gerardin, K. Skaaning, N. Laurentsyeva: From workers to active citizens? The link between employment and social integration of immigrants in the EU, CEPS Working Document, forthcoming.