

## Barriers of Culture, Networks, and Language in International Migration: A Review\*

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**Abstract.** Along with the increasing pace of globalization, recent decades faced a dramatic increase in international migrant flows as well. Compared to the flows of trade, capital and knowledge, we observe that contemporaneous complex institutional differences, historical backgrounds, and individuals' diverse socio-demographic characteristics make the migrant workers' choice of destination arguably much more uncontrollable. This study shows that migration is intertwined with culture, networks and language in a complex way, (i) by reviewing related studies on the barriers of culture, networks and language in international labor mobility, and (ii) by exploring missing gaps and prospective avenues for research. Nowadays, the migration pressure on Europe and the United States has created substantial challenges, leading to an urgent need to address the economic assimilation and social integration of migrants. Against this background, we emphasize that these non-economic factors have played an increasingly critical role in shaping international migration and its future socio-economic consequences for destination countries.

**JEL classification:** F22, Z10, Z13

**Key words:** migration, culture, networks, language

### 1 Introduction

Our life changed drastically with the pace of globalisation. For centuries, traders travelled far along the Silk Road through Asian regions, to exchange for exotic goods, culture and knowledge. Nowadays, cars are assembled in the United States with important parts coming from Japan and Germany, the Standard Chartered Bank initiates its management trainee programmes and hires graduates from all over the world, and global news networks such as CNN are broadcasting internationally and have a much broader audience than ever before.

There are countless examples that fit the four basic concepts of globalization: trade and transactions, capital and investment movements, migration and movement of people, and the dissemination of knowledge (IMF 2000). The swift expansion of transport networks

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and the prevalence of ICT use have helped to facilitate trade flows, capital flows and knowledge flows in a more or less systematic and organized manner. *Labor flows are, however, a far more complicated phenomenon to study.* On the one hand, labor flows are fundamental to creating a global economy, and the interplay among trade, capital and knowledge relies heavily on the mobility of workers (Chang 1999, Freeman 2006, Poot, Strutt 2010). On the other hand, the complex institutional differences, historical reasons, and individuals' diverse socio-demographic characteristics, make the migrant workers' choice for destinations much more uncontrollable (Massey et al. 1993, Poot 1996). Moreover, migrants' adjustment to the host society is still a heavily debated issue—both in research and the society at large. Finally, opposite to other flows, migration has a significant impact on the host society as labor force composition, consumptions patterns and even the type of commodities may change.

Social integration involves various multidimensional barriers: culture, networks and language are of particular importance. First, adjustment to a new culture and changes in identity might cause multiple stresses (Bhugra, Becker 2005). The current economic approach to cultural integration is mainly the analysis of individual incentives in forming a new cultural identity (Kónya 2007, Nekby, Rödin 2010) and in transmitting values and beliefs across generations (Bisin, Verdier 2000, 2001, Kónya 2005). Second, developing new networks at the destination facilitates economic adjustment (Edin et al. 2003, Munshi 2003, Lancee 2012a). Migrants usually start developing networks of their own ethnic group, in turn limiting social interaction with the native population in the destination as time goes on. Third, overcoming language barriers is an essential step towards social integration, which not only brings economic benefit but also increases social welfare (Lazear 1999, Florax et al. 2005, Chiswick, Miller 2015).

Therefore, the objective of this paper is to review the existing literature on migrants' location choice and adjustment to the host society, and explicitly focuses on the barriers that culture, networks and language sometimes raise. To do so, the next section first deals with a general discussion on migrants' location choice and adjustment to the host society. Subsequently, Section 3 deals with the impact culture, networks and language have on these questions. In addition to reviewing the literature, Section 4 identifies remaining research gaps. The last section summarizes shortly.

## 2 People on the Move

To understand workers' migration behavior, a solid (microeconomic) theoretical foundation is necessary. In this respect, four seminal studies are worth mentioning as a starting framework. Sjaastad (1962) is the first to apply human capital theory to understanding migration, where he treats migration as an investment increasing the productivity of human resources. This cost-benefit calculation is conceptualized into monetary costs, non-monetary costs, monetary returns and non-monetary returns. Katz, Stark (1987) further take into account the information asymmetry in the model. When employers are unable to detect the ability of potential migrant workers, there would be adverse selection discouraging high-ability workers to migrate. Later, Chiswick (1999) designs a human-capital model of investment in migration, and presents scenarios when the favorable selectivity of migrant workers would occur. We note that the models in the previous three studies apply to migrants who mainly move for economic opportunities. Besides economic migration, migrants may move for 'non-economic' reasons, such as tied movers<sup>1</sup> and refugee migrants. A more sophisticated analysis is provided by Mincer (1978), who explores the effects of family ties relevant to migration decisions on the probability of migration, on consequent changes in employment and earnings of family members, and on family stability.<sup>2</sup> To further understand barriers and filters in migration decisions, we

<sup>1</sup>Tied movers are typically associated with family migration and reunification, where one spouse is moving for economic reasons and the other spouse moves for family-related reasons (the tied mover). In many cases, migration leads to an increase of total family income but a decrease in income of the tied mover

<sup>2</sup>The theoretical studies elaborated here are far from an exhaustive review of the (economic) migration literature. Though the entry barriers are different for domestic migration and international migration, there is no theoretical distinction. We refer to Bodvarsson et al. (2015) and Kondoh (2017) for a broad

need to review first a general framing of migration behavior.

First of all, migrants choose their destinations for a variety of reasons. A strand of migration literature tackles specifically the direction of labor flows and the attractiveness of regions. To summarize, three dominant factors play a significant role in affecting the migrants' choice of destination: the local characteristics of the destination, the gravity force between origin and destination, and the individual characteristics of migrants. First and foremost, employment opportunities are frequently seen as the most predominant pull factor (Hicks 1932, Greenwood, Hunt 1984). Besides the economic aspect, quality of local governance, public goods and services also increase the regional attractiveness for future residents (Tiebout 1956, Glaeser et al. 2001, Ketterer, Rodríguez-Pose 2015). Equally important is the value of local natural amenities, such as topographical, water or climate-related features. This is implicitly incorporated in the wage level and the housing price, and turns out to be another attractor for incoming migrants (Graves 1980, Roback 1982, Rappaport 2007, Dorfman et al. 2011, Rodríguez-Pose, Ketterer 2012, Cai et al. 2016). Second, the pull from origin to destination includes many terms: high income differentials, shorter physical distance, closer cultural atmosphere, linguistic proximity, and larger flows of people between origin and destination. These factors could significantly increase the migrants' probability of choosing a specific region or area (Greenwood 1975, Bartel 1989, Epstein, Gang 2006, Bauer et al. 2007, Fafchamps, Shilpi 2013, Adserà 2015). Third, some individual characteristics might affect migration patterns as well. For example, older people have higher preferences for favourable weather (Scott 2010). On the other hand, younger and highly educated households tend to move towards places with higher quality business environments (Chen, Rosenthal 2008).

Another intriguing issue which is of paramount importance to both migrants themselves and the host society, is the migrants' post-arrival adjustment, where the key question is how migrants adjust to the host society. With regard to economic assimilation, Chiswick's pioneering study with US census data shows that the earnings gains of foreign-born men are the greatest in the initial years upon arrival, tapering off with time in the destination country (Chiswick 1978). It initiated an avalanche of subsequent studies on the pattern of immigrants earnings assimilation in Canada, Australia and some European countries (see, e.g., Bloom, Gunderson 1991, Baker, Benjamin 1994, Chiswick et al. 2005, Izquierdo et al. 2009, Clark, Lindley 2009, Algan et al. 2010, Kaushal et al. 2016). The accumulation of destination-specific human capital, such as post-arrival schooling, language skill acquisition, and on-the-job training, is seen as the main instrument to realize earnings growth and occupational mobility. Nevertheless, social integration of migrants should go hand-in-hand with economic assimilation (Tselios et al. 2015). As Dustmann (1996) briefly puts it, 'one should expect that social and economic adjustment are to some extent correlated.'

Lastly, and perhaps what the host society is most concerned about, is the short-term and long-term impact of migration flows on society itself. For example, do they fulfill vacancies which could have been filled by natives with the same labour characteristics, and exert an income distributional effect (Van Dijk, Folmer 1986, Greenwood, McDowell 1986, Lalonde, Topel 1997, Borjas 2005, Zorlu, Hartog 2005, Hartog 2008)? What are the impacts on the population composition and the corresponding fiscal balance (Lee, Miller 2000, Dustmann, Frattini 2014)? And do they affect the social cohesion of the host society (Alesina, La Ferrara 2005)? The public continuously addresses these questions with the aging of early cohorts and the incoming of recent cohorts.<sup>3</sup>

As mentioned above, this review on migration is conducted in the niche of migrants' locational choice and adjustment, with a particular focus on the barriers of culture, networks and language. Figure 1 summarizes the topics discussed above. In the next section, we will review some related studies on the three specific topics (culture, networks and language) in the migration literature, and thereafter discuss the current missing gaps and prospective avenues for research.

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review of migration theory.

<sup>3</sup>We refer to Nijkamp et al. (2012) for an exhaustive review of migration impact assessment as a tool to map out the relevant effects.

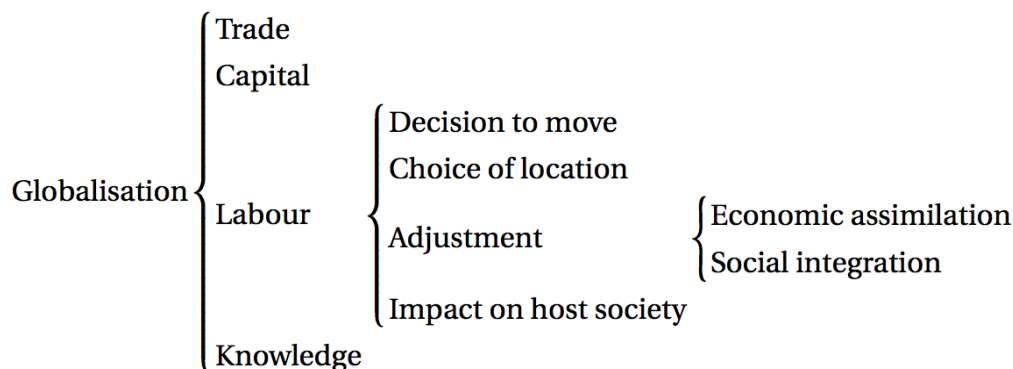


Figure 1: Niche of Research in this Review

### 3 Barriers of Culture, Networks and Language

#### 3.1 Introduction

Culture, networks and language all three play an important but complex role in migration decisions, assimilation and integration in the host society and as well in the impact migrants have on the host society. Culture and language similarity facilitate assimilation and integration and yield larger bilateral migration flows (see as well Table 1 below). However, language dissimilarity (e.g., English and Mandarin Chinese) could yield higher economic returns for the migrant as the specific language skill is scarce. Moreover, as strong migrant networks could be seen as harmful for integration, it might actually be beneficial for the migrant in the short-term as (psychological) migration costs are lowered. Finally, these three barriers are highly related with each other. For example, strong migrants networks may yield lower native language proficiency leading to persistent cultural barriers between native and migrant communities.

A summary of some previous studies on international migration and the barriers of culture, networks and language is shown in Table 1. As determinants of migration decisions, there are mixed insights and evidences about the role and strength of these barriers. Ethnic networks in a potential destination would be very likely to attract more migrants, but the effect might vary with individual portfolios. Cultural proximity and linguistic proximity are significant in some studies, but in most cases they are not more important than economic determinants. In the following three subsections, we review the recent literature and its main findings for all three types of barriers separately and deal with some of these mixed insights.

#### 3.2 Culture

Typical migrant destination countries (such as the United States) are a melting pot of people with different cultural backgrounds. Here, culture must be regarded very broadly as it could constitute social norms and values, religion beliefs, family structures and so forth of groups of people.<sup>4</sup> With respect to cultural diversity, the perspective of assimilation theory has dominated much of the sociological thinking for most of the twentieth century (see, e.g., Gordon 1964, Sandberg 1974, Alba, Nee 1997). According to this perspective, the minority group's adoption of the cultural patterns of the host society typically comes first. Indeed, Algan et al. (2012) concludes for some European countries (France, Germany, Switzerland, etc) that immigrants' values converge to the local context within a generation.

<sup>4</sup>Widely accepted definitions of culture are difficult to give. The one that comes closest is the one of Hofstede (1982). Culture is "the collective programming of the mind that distinguishes the members of one group or category of people from others".

Table 1: Previous Studies on International Migration and Barriers of Culture, Networks and Language

Reference	Countries and Years	Results
Bartel (1989)	The United States in 1980	The main determinants of the recent immigrant's location choice is the percentage of his ethnic group that resides in a standard metropolitan statistical area.
Gross, Schmitt (2003)	OECD countries from the mid 1980s to the mid 1990s	the existence of similar cultural communities attracts new immigrants. However, the effect is not homogeneous for all types of source and destination countries.
Bauer et al. (2005)	Mexican migration to the United States	Enclaves (networks) negatively affect the language proficiency of migrants. Migrants choose smaller networks as location as their English proficiency improves.
Clark et al. (2007)	The United States from 1971 to 1978	The attraction force of networks and language are strong.
Pedersen et al. (2008)	OECD countries from 1990 to 2000	Network effects are strong, but vary between different groups of welfare states and between countries according to the type of immigration policy being applied.
McKenzie, Rapoport (2010)	Mexican migration to the United States in 1997	There is a positive or education-neutral selection in communities with weak migrant networks but a negative self-selection in communities with stronger networks.
Mayda (2010)	OECD countries from 1980 to 1996	Network effect imply that the bilateral migration flows are highly correlated over time. It could be driven by both supply factors and demand factors. The impact of a common language is not statistically significant.
Grogger, Hanson (2011)	OECD countries in 2000	Emigration is greater toward destinations that share a common language with the source. The pull of an existing migrant stock in a destination is stronger for less-skilled migrants.
Beine et al. (2011)	OECD countries in 1990 and 2000	Diasporas increase migration flows and lower their average educational level. Diasporas also explain majority of the variability of migration flows and selection.
Belot, Ederveen (2012)	OECD countries from 1990 to 2003	Cultural barriers do a much better job in explaining the pattern of migration flows between developed countries than traditional economic variables such as income and unemployment differentials.
Caragliu et al. (2013)	EUROSTAT 2002-2007 & OECD 1998-2007	Trust, financial, and institutional distance exert a negative effect on migration flows, but results results are sensitive to alternative choice of distance measures.
Adserà, Pytlikova (2015)	OECD countries from 1980 to 2010	Migration rates increase with linguistic proximity and with English at destination. Softer linguistic requirements for naturalisation and larger linguistic communities at destination encourage more migrants to move.
Wang et al. (2016)	European countries at the NUTS1 level in 2010	Cultural diversity increases regional attractiveness, while the average cultural distance between the natives and immigrants at the region greatly weakens attractiveness.

Nevertheless, various barriers to assimilation have more or less preserved the migrants' cultural character over time. With the increasing diversity of origins in contemporary migrants, more researchers start paying attention to the economic benefits reaped from similar or distinctive sets of values and beliefs. [Ottaviano, Peri \(2005\)](#) and [Suedekum et al. \(2014\)](#) both find a positive effect of cultural diversity on local productivity, and then on wage and employment density of native workers. [Ozgen et al. \(2013\)](#) and [Brunow, Blien \(2014\)](#) demonstrate positive economic impacts of cultural diversity on productivity and innovation at the firm level. [Niebuhr \(2010\)](#) shows that the difference in knowledge and capabilities of workers from diverse cultural backgrounds enhances the performance of regional R&D sectors. [Rodríguez-Pose, Hardy \(2015\)](#) found that diversity amongst highly skilled workers exerts the strongest impact upon start-up intensities. Note that the measurement of cultural diversity measured is a decisive and complicating factor when the impact on the local economy is examined. See [Nijkamp, Poot \(2015\)](#) and [Arribas-Bel et al. \(2016\)](#) for a summary and extensive discussion of cultural diversity measurement.

The policy debate over to what extent the immigrants should adapt to the local cultural values and beliefs is often tense. The answer 'yes' or 'no' is never a satisfying remedy for social integration.<sup>5</sup> It calls for more research that touches upon the quantitative measurement of cultural adoption, and interdisciplinary studies on the subsets of cultural traits or beliefs to be transmitted and integrated. [Desmet et al. \(2017\)](#) defined culture as traits reflecting norms, attitudes and preferences, and showed that the variation within an ethnic group is larger than that between groups. Ethnic diversity differs from cultural heterogeneity. Several novel attempts have been made in this direction as well, as a proper measure of cultural composition should reflect the degree to which key human values are shared in society between one country and the other country. Different dimensions of cultural values, beliefs and attitudes are linked to various economic outcomes (see, e.g., [White, Tadesse 2008](#), [Beugelsdijk, Maseland 2011](#), [Beugelsdijk, Klasing 2016](#), [Wang et al. 2016](#), [Tubadji, Nijkamp 2015](#), [Ginsburgh, Noury 2008](#)). Another interesting measure created by [Constant et al. \(2009\)](#) reflects the degree of ethnic identity (the ethnosizer) by combining information on language, culture, societal interaction, history of migration, and ethnic self-identification, which enables researchers to classify immigrants into four states: integration, assimilation, separation, and marginalization. This measure quantifies migrants' commitment both to the origin and to the destination, and can be linked to explain a number of immigrants' economic and social behaviours.

### 3.3 Networks

The topic of social networks seems to be quite a full-fledged field in migration research.<sup>6</sup> Apart from the role of social interaction in relation to fertility, smoking, crime, friendship, etcetera (see, inter alia, [Kohler et al. 2001](#), [Soetevent, Kooreman 2007](#), [Bernasco et al. 2017](#), [Xu 2017](#)), economists, psychologists and sociologists have conducted especially a number of studies on the importance of social networks, especially, for labor market performance, as social networks might facilitate finding a job in the migrant community but could harm acquiring skill necessary for finding high-skilled jobs outside the migrant community (see, e.g., [Rees 1966](#), [Granovetter 1974](#), [Lin et al. 1981](#), [Montgomery 1991](#), [Ioannides, Loury 2004](#), [Wahba, Zenou 2005](#)). Recently, a growing area of literature has emerged, which focuses on the distinction between the co-ethnic network and the inter-ethnic network for migrants ([Putnam 2000](#), [Munshi 2003](#), [Kazemipur 2006](#), [Patacchini, Zenou 2012](#), [Lancee 2012b](#), [Tselios et al. 2015, 2016](#), [Chiswick, Wang 2016](#)). It turns out that contact with natives yields unambiguously positive returns, because it provides immigrants with

<sup>5</sup>An interesting finding in [Rodríguez-Pose, Von Berlepsch \(2015\)](#) shows that the economic legacy of mass migration in the United States is less linked to the national origin of the migrants than to the migrants' preserved self-selective character.

<sup>6</sup>There is a related field dealing with herd effects. Network effects are not exactly the same as herd effects as the latter is related with signaling ("I will go where I have observed others go, because all those who went before me cannot be wrong, even though I would have chosen to go elsewhere." [Epstein \(2008\)](#)). So, herd effects might lead to ethnic clustering and thus network effects with respect to integration and assimilation in the the host society. But, in migration destination choices herd effect and network effects are different from each other. As herd and network effects are difficult to discern in migration choices and herd effects matter less for adjustment in the host society, we do not consider herd effects in this review.

information on higher quality job offers and assistance in assimilation. However, the economic returns of co-ethnic contacts are less clear-cut. Socializing with co-ethnics provides assistance in job information and initial settlement. Yet, while embedding into co-ethnic networks enhances ethnic solidarity, it retards contact with the host society. This may hamper upward economic mobility.

Still, there is a missing gap in this field. To fully utilize social networks to integrate, it is necessary to investigate the network formation process. Glaeser (2001) calls especially for more work on the causes of social capital. 'Indeed, the weakness of this research is not in either the theory or the empirical work on the effects of social capital. The real weakness is the lack of both theory and empirical work focusing on the causes of social capital. If we are going to change the level of social capital, we must have a coherent model of the formation of social capital and a body of empirical work that we trust about the formation of norms and networks.' While Jackson, Wolinsky (1996), Bala, Goyal (2000), Brueckner (2006), and Currarini et al. (2009) model network stability on the basis of cooperative game theory, few studies have looked at the meso-level determinants of individual social networks, such as local labor market conditions. If any, Roskrugue et al. (2012) tried to explain individual social capital formation by the local expenditure on social infrastructure; Wang (2016) positioned immigrants' social capital formation in local labor market conditions; Zenou (2015) and Sato, Zenou (2015) related social network formation with local job-destruction and job-information rate.

### 3.4 Language

Language skills are considered as major economic assets for individuals, as they facilitate communication on the job and are a major determinant of economic gains in the host country. Indeed, a frequently found result and widely accepted fact is that adult male immigrants with a fluent level in the local language earn a wage premium in the range from 5 % to 35 % (see, e.g., Carliner 1981, McManus et al. 1983, Grenier 1984, Chiswick 1998, Chiswick, Miller 2002, Dustmann, Fabbri 2003, Budria, Swedberg 2012, Beckhusen et al. 2013, Chiswick, Wang 2016). A unified methodology in most of the studies is to employ a human capital earnings function (Mincer 1974). Two cumbersome issues lead to biased estimates in the regression: misclassified language indicators (Dustmann, Van Soest 2001), and endogeneity between language and earnings (Chiswick, Miller 1995). Refined datasets, valid instruments, and using longitudinal feature of dataset, could all increase the precision of the estimates.

Besides, a number of studies look at foreign language (other than the local language) skills (Grin 2001, Fry, Lowell 2003, Henley, Jones 2005, Christofides, Swidinsky 2010, Williams 2011, Ginsburgh, Prieto-Rodriguez 2011, Toomet 2011, Isphording 2013, Di Paolo, Tansel 2015, Stohr 2015, Chiswick, Miller 2016). Although acquiring a foreign language skill is not compulsory for migrants to integrate, mastering a foreign language skill has its economic value and is well appreciated in the labour market in most cases (European Commission 2008).

It should be noted however, that the reward patterns for natives and migrants are not necessarily the same. For low-educated group of migrants, they do not seem to benefit from using a foreign language (Wang et al. 2017, Lang, Siniver 2009). Under the circumstance that migrants are not fully fluent in the local language at the destination, they have to choose which type of human capital to invest in to maximise their future earnings.

The conventional models (Lazear 1999) need to be extended by incorporating multiple linguistic skills, where benefits of each language should be clearly weighed. The cost of acquiring a language, on the other hand, is associated with its degree of difficulty, which is closely correlated with the linguistic distances between one's mother tongue and the new language. Chiswick, Miller (2015) and Ginsburgh, Weber (2014) have summarized some methods to compute linguistic distances up to date, namely, (1) language Ethnologue, (2) lexicostatistical distances, and (3) the Levenshtein distance. More interestingly, recent cross-country studies by Chen (2013) and Roberts et al. (2015) have related the structure of people's language (e.g., the use of tense) to decision making, where the linguistic contents contributed significantly to explaining peoples' economic behavior. Whether the

language structure is also associated with the effort to acquire a linguistic skill, remains an empirical question to be tested.

#### 4 Future Research Agenda

The dynamics of the regional or urban demographic and cultural fabric and its continuing attractiveness for incoming migrants is a fascinating field that deserves to be thoroughly studied. The regional cultural composition is more often studied in a static setting. In reality, however, the regional cultural composition keeps evolving, with the inflow of migrants and with the evolution of cultural integration. Consider how the Dutch culture in the 17th century transformed with the inflow of migrants from Flanders and the Portuguese and Spanish Sephardi Jewish community in the 16th century, and the French Huguenot community in the 17th century. Clearly, the contemporaneous world is becoming more and more globalised. Moving between countries will likely become for many people much easier in the future with the sharply decreasing cost of travel. Physical barriers (such as borders and distance) are in many cases no longer the predominant factor that prevents the labor flow. In the meantime, more and more temporary migration decisions take place due to the emerging trend to move frequently for studying or working reasons. In that case, migrants might trade off their preferred cultural composition for higher productivity and wages in a specific region. It is of course interesting to study regional culture integration over time in combination with the pace of a region or city that is continuously absorbing immigrants over time. Is there a steady state for regional cultural composition in terms of specific values and beliefs? And what are the evolution paths for cultural evolution?

The social network formation and the dynamics of social networks evolution are thus worth being studied as well. Few studies focus on how the network is formed in the beginning if two identical migrants were to be exposed to different groups, *ceteris paribus*. The evolution of initial network composition might be closely correlated with individuals' life-cycle behavior and local labor market conditions in later stages. Is there a lock-in effect for immigrants who have developed a dense co-ethnic network upon arrival? Can it cause a social status trap? In reality, we do see that path dependency exists in many cases. For example, ethnic segregation influences migrants' choice of schools for their kids. It is highly likely that their kids are still getting substantial exposure to their own ethnic group. If so, how to trigger immigrants to reach out to the native people? There are some life-cycle behavioral elements that might play a role here in facilitating the formation of native networks, which deserves further attention. Events such as fertility, employment and job changes could to a large extent affect their network composition. In that case, how stable would the network be? And on the meso-level, how does this contribute to social cohesion of the local society? In the meantime, bridging this topic to the urban economic literature will supplement the missing elements in the current model, i.e. urban amenities, environmental sustainability, housing price, cost of living, etc. The interdependent relationship with the urban characteristics and social interaction deserves much more attention, with the decreasing cost of communication, and the increasing use of networks in job activities.

With regard to language, a promising extension may be fundamental research on human capital investment, both regarding local language and foreign language skills for migrants. Given the limited time for human capital accumulation, a comparison between the economic payoffs from the local language and another foreign language needs to be incorporated into conventional language acquisition theory. The cost function of acquiring a specific language then should be associated with the linguistic distance from one's mother tongue. This has, so far, not yet received due attention in the migration economic literature. Second, given that the prevalence of English is quite common in various (e.g. Nordic) countries, it remains interesting to investigate the deterring effect on migrant workers of foreign language proficiency at work on local language proficiency. This might well fit the pattern of a substantial share of high-skilled workers in Europe who use English only, and in the meantime are well integrated into the host society. A third strand of future research could be focused on the social benefits of acquiring



local language proficiency and foreign language skills. For the majority, speaking a common language reduces the cost of communication on the meso-level, and implicitly works as a channel to increase transactions and to promote regional economic growth. A fourth extension is a further merging of current individual data with firm data, in order to provide a more thorough analysis of the heterogeneous labor market returns to different languages. The firm data record the specific tasks of workers, and details on the requirements (communication, technical skills, etc). With the increasing accessibility to international databases nowadays, this is foreseeably a new and promising direction in the literature.

Finally, an area that received less (empirical) attention but is arguably becoming increasingly more important is out-migration (and then specifically of migrants). Nowadays, migrant destination countries face student migrants, temporary labor migrants, and even retired migrants desiring to return to their country of origin. This might lead to (human) capital skills flowing back to origin countries, as the inverse of a brain drain. In all likelihood, these migrant flows become larger in the near future and is an issue that definitely deserves more attention.

## 5 Concluding Remarks

Migration is nowadays high on the political agenda in Europe due to the recent influx of migrants from the Middle East and North African countries to Europe. The alarming rise of migrant arrivals has created substantial challenges for Europe, which is facing an urgent need to address the economic assimilation and social integration of migrants and refugees. This long-term process requires gradual steps, given that many migrants are very different from natives in terms of economic situation, skills, and cultural background. It is, therefore, essential to know how strong the barriers are for incoming migrants to live in a new country, and what the economic payoffs are once they have overcome the barriers.

We have demonstrated that migration is in a complex way intertwined with culture, networks, and language. Geographic proximity does not necessarily mean cultural proximity, nor does it mean linguistic proximity. Many precise measurements of these definitions are nowadays being developed with contributions from economists, sociologists, geographers, linguists, etcetera. Many more studies still need to be undertaken to link them to regional economic growth or individual economic progress. Clearly, this review paper offers by no means an analysis of the complete range of topics related to barriers of culture, networks, and language for migration. Its modest task is to achieve the goal of providing informal insights into the significant role of migration barriers and the necessity to overcome them from a socio-economic perspective.

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