
1 Migration and ethnicity: an introduction*

Amelie F. Constant and Klaus F. Zimmermann

1 INTRODUCTION

Migration as ‘factor mobility’ and migrants as a ‘factor of production’ are of paramount importance in economics. The different skills and education that are embodied in immigrants, while valuable in the production process, may not be appreciated by all members of the host country. In addition, migrants as human beings are an integral part of the human development in a society and a country. Yet, resistance to the spreading of diversity and concerns about the growth of the immigrant population from several groups make immigrants feel unwanted. The imbroglio of migration touches and raises problems in the social, economic, political, cultural and religious spheres not only domestically, but also internationally. Migration scholars, pundits and policymakers alike are deeply divided over the responsibilities and the best concepts for analyzing or solving the issue of international migration.

The issue of how immigrants fare in the host country especially in terms of their labor force participation and remuneration occupies the minds of social scientists, politicians and the general public. Using the natives as the gold standard, immigrants have been compared to them. If immigrants fare as well as the natives, then they are economically assimilated. Of equal importance is the question of whether immigrants socialize and mingle with the natives, if they feel comfortable in their new country or they create parallel societies, and if natives and immigrants have the right attitudes about each other. Terms such as cultural or social assimilation, acculturation, integration, and so on, have been used to capture and describe these concerns.

This chapter focuses on economic migrants, that is, individuals who leave their country and loved ones to go abroad to a new country in search of job and other economic opportunities to better their and their children’s lives. We first review the economic status quo theories on immigrant performance dealing with what is sometimes called economic assimilation: how do migrants become like natives in economic terms? We then present recent advances in economics about the formation of ethnic identity and its role in the economic and social spheres: how do identities shape and how are they related to economic success? We finally discuss the importance of attitudes and perceptions in the integration process: are they affected by economic conditions and do they influence economic performance? The chapter is designed as an introduction to the core issues of migration research. We neither attempt to cover all relevant basic knowledge nor do we discuss most of the recent advances in the field, which is the purpose of the other chapters in this volume.

2 THE ECONOMICS OF ASSIMILATION

Starting with the pioneering work of Chiswick (1978) on the assimilation of immigrant men in the United States (US), the overarching research that has preoccupied the literature deals with the economic performance of immigrants relative to that of comparable natives. The literature is set within the Mincerian human capital framework,¹ whereby immigration is perceived as an investment in human capital (Sjaastad, 1962), the young and the better educated are more likely to migrate and migration yields higher returns to the more able and the more highly motivated; assimilation is a labor market phenomenon.² The conjecture is that immigrants are rational individuals who want to maximize their lifetime utility; they are a self-selected group of individuals characterized by a strong incentive to invest in human capital and have a ferocious drive to succeed in the host country's labor market. They have set preferences that they reveal in a rational ranking order. Migrants with higher levels of human capital will command higher wages in the labor market since investment in human capital raises productivity.

Chiswick's (1978) hypothesis, as well as that of many others who followed his lead, was that the earnings of newly arrived immigrants are significantly lower than those of natives with the same observed socioeconomic characteristics, mainly because immigrants' skills are not always or perfectly transferable to the host country's labor market. However, as immigrants gain information about the functioning of the new labor market and invest in human capital in the new country, their earnings increase rapidly and can reach and even exceed the earnings of natives. When the catching up of earnings occurs, then economic assimilation is achieved, meaning that immigrants and natives are indistinguishable in terms of their earnings.

Therefore, assimilation is the rate at which the earnings of immigrants converge to the earnings of comparable natives due to their accumulation of human capital in the host country's labor market with additional years of residence (Chiswick, 1978).³ Assimilation is attributed to the positive selection of immigrants, that is, their innate ability, their high motivation for labor market success and their higher incentives to invest in host country's specific human capital. Indeed, this generation of studies⁴ found that immigrant earnings reach parity with native earnings within 10 years of residence, and after 10 years, immigrant earnings exceed the earnings of natives.

The main drawback of these studies was that the models were estimated based on a single cross-section of data that includes individuals from all ages. A new generation of studies was ignited by Borjas's (1985)⁵ seminal paper which questioned the empirical validity of the above results from cross-section data on the grounds that the assimilation effects were confounded with cohort effects. That is, based on one cross-section, the estimated earnings of immigrants of different ages are overstated if the quality of more recent immigrant cohorts is lower than that of older cohorts. Borjas (1985) attempted to estimate the selection bias which may contaminate cross-sectional comparisons and to establish a relationship between cohort quality and immigrant self-selection.

Borjas's contribution was to track the progress of a particular cohort over successive waves of cross-sectional data and to identify cohort and assimilation effects by creating synthetic cohorts.⁶ Borjas and subsequent research suggested that immigrants in the US were not necessarily positively selected. As a result, and despite the fact that earnings increase with additional years of residence, immigrants may not assimilate as rapidly as

the traditional view hypothesized, and the earnings of more recent cohorts may never reach parity with the earnings of natives.

Meanwhile, other researchers demonstrated that the age of immigrants at the time of arrival in the new host country plays a decisive role in their earnings assimilation. Indeed, the profiles of those migrating as children resemble the profiles of the native-born rather than the profiles of immigrants migrating later in life (Friedberg, 1992; Kossoudji, 1989). Assimilation for these immigrants is, therefore, not a labor market phenomenon but the result of acculturation.⁷

Afterwards, most studies agreed that the assimilation process is very slow and the earnings of male immigrants will probably never reach parity with natives. The declining skills of more recent immigrant cohorts (within cohort differences), as well as the changing national origin composition of immigrants (across cohort differences), hold back assimilation (Borjas, 1992; Chiswick, 1986). Some disparity in these findings was documented in other studies. LaLonde and Topel's (1991, 1992) different results are due, however, to the different variables chosen and to the different comparison group – whether is intra-ethnic or ethnic-native. They found that the assimilation of immigrants is mainly intergenerational and that estimates are sensitive to the choice of the base group. Yet, all these studies are subject to additional biases related to the comparability of the samples gathered across decennial censuses.

Extra selection biases exist because of the highly selective return migration, which was overlooked in the estimation of earnings assimilation. In theory, return migration is non-random and depends on immigrants' performance in the host country's labor market, whether successful or failing. Assimilation estimates based on the pool of stayers will be under- or over-estimated depending on whether or not the successful immigrants emigrate. Empirical studies can answer these possibilities. Some find higher return migration by skilled immigrants (Jasso and Rosenzweig, 1988), others by less successful immigrants (Borjas, 1989), while others find little evidence of any selectivity with respect to schooling (Chiswick, 1986).

Constant and Massey (2003) in their 14-year longitudinal study on immigrants in Germany find that emigrants are negatively selected with respect to occupational prestige and to stable full-time employment, but no selectivity with respect to human capital or gender. Return migration is strongly determined by the range and nature of social attachments to Germany and origin countries. It is also bimodal, that is, very high during the first five years from arrival, and grows higher again toward retirement. Selective emigration, however, does not appear to distort cross-sectional estimates of earnings assimilation in a relevant way.⁸

Finally, selection with respect to labor force participation, occupational attainment, labor market success by female immigrants and the performance of the children of immigrants are some aspects neglected by the literature. A study on the relative earnings of native- and foreign-born women in turn-of-the-century America revealed that immigrant women 'fared somewhat better relative to the native-born than men did', earning from 102.2 percent to 113.2 percent of the native women's wages (Fraundorf, 1978, p. 213). Long (1980), among the first to study female immigrants, found that the earnings of recent female immigrants were higher than those of natives, but this advantage declined over time. In particular, married female immigrants increased their labor force participation initially to subsidize their husbands' investments in human capital, but, later,

as their husbands earnings increased, they switched to nonmarket activities and their earnings declined.

In contrast, other studies on female immigrants found strong evidence of assimilation, which varied considerably across countries of origin (Field-Hendrey and Balkan, 1991). Studying life-cycle patterns of immigrant women's labor force participation in the US, Schoeni (1998) finds that the cross-sectional approach significantly overestimates assimilation. Nonetheless, he finds that immigrant women's assimilation measured with cohort effects is still sizable and occurs within 10 years of arrival. Japanese, Korean and Chinese women have the highest degree of assimilation in the labor market. Parallel research in Canada presented evidence that the initial earnings differential for Canadian immigrant women is likely permanent and may be even worse for highly educated women (Beach and Worswick, 1993).

Many researchers try to explain the earnings disparity between immigrants and natives by adding more characteristics to the theoretical and empirical estimation. Others like Piore (1979) argue that labor market performance is not a function of the duration of residence in the host country, but a function of when an individual came. For example, immigrants who arrived in Germany during the prosperous years of the mid-1960s until the first economic recession of the early 1970s should fare better than more recent immigrants. Miller and Chiswick (2002) corroborate this by showing that the business cycle of the host country plays an important role in the assimilation process.

More refined studies on earnings assimilation control for additional characteristics of the host country labor market, institutional variables, network effects and demographics in their quest to solve the earnings assimilation debate. Even after adding ethnicity and legal status, results show that earnings assimilation is a rather elusive realization and varies widely by nationality; immigrants earn less than comparable natives when they work as employees. In some countries like Germany and France, for example, earnings assimilation does not take place at all.

Still, immigrants who are self-employed not only exhibit higher earnings than comparable immigrants in the paid employment sector, but they earn substantially more than comparable natives (Borjas, 1986). A study in Germany shows that the earnings of self-employed Germans are not much different from the earnings of the self-employed immigrants. However, immigrants suffer a strong earnings penalty if they feel discriminated against, while they receive a premium if they are German educated (Constant and Zimmermann, 2006). New facets of immigrant performance are important and can offer key insights to an operative migration policy. We refer to, for example, immigrant performance with regard to housing, wealth, education, even crime, as well as intergenerational assimilation.

3 THE ROLE OF ETHNIC IDENTITY IN ECONOMIC INTEGRATION

3.1 The Identity-Based Theory of Utility Maximization

Personal identity is what makes individuals unique and different from others, including the self-definition of one's self. How identity forms and manifests is a dynamic process

linked to social interactions. Norms, values and rules binding members of a social group are inherent in the formation of social identities. When conflicts arise, identities may result in suboptimal behavior. Sociologists are well aware of these issues. Massey and Denton (1993, p. 8) suggest in *American Apartheid: Segregation and the Making of the Underclass*, that segregated neighborhoods can create the structural conditions for some individuals to develop ‘an oppositional culture that devalues work, schooling and marriage’ and impedes success in the larger economy.

While identity has occupied a central role in other social sciences, such as psychology, sociology and anthropology, it has not been fully incorporated in economic theory and empirics. Sen (1977), in his avant-garde piece about the rational egoistic man of Edgeworth, talked about psychological issues that underlie choice and relate to consumer decisions and production activities. He introduced the concepts of sympathy and commitment as part of the utility maximizing function, arguing that commitment as part of behavior can result in nongains-maximizing answers, even when answers are truthful. Economic theory should therefore accommodate commitment as part of behavior. While commitment does not presuppose reasoning, it does not exclude it either. In the 2000s, economists started looking at the concept of identity as a determinant of labor market attachment, performance and earnings. This is along the strand of literature that places identity, behavior and personality traits in the heart of labor markets and the performance of individuals. The quest is to explain schooling performance and economic labor market integration and unexplained wage differentials.

Some researchers have considered personality and behavior traits as part of the individual human capital, which counts differentially for men and women and for different ethnic groups (Bowles et al., 2001). In another empirical work that tries to improve human capital models and gain a greater understanding of the behavioral determinants of occupational success, Groves (2005) finds that traits such as locus of control, aggression and withdrawal are all statistically significant factors in the wage determination models of white women.

Akerlof and Kranton (2000) offer a novel theoretical framework of the utility maximization function by incorporating an individual’s self-identification as powerful motivation for behavior. They imply that if individuals achieve their ‘ideal self’ and are comfortable with their identity then their utility increases, otherwise, their utility decreases. In this framework, it is then possible that even rational individuals choose nonoptimal occupations because of identity considerations. For instance, a rational individual’s decision may very well be influenced by other social considerations as this person chooses a social category or affiliation, or a group to belong to or an occupation to self-identify with. As an example, suppose that someone identifies with and emulates being part of the armed forces. If this person fails to do so, then his or her utility decreases. This in turn may affect the identity and behavior of others around him or her, and so on and so forth. The choice of an individual to be a particular type of person then becomes a powerful economic decision with substantial changes in the conclusions in comparison with traditional economic analysis.

Bénabou and Tirole (2011) model a broad class of beliefs of individuals including their identity, which people value and invest in. They also study endogenously arising self-serving beliefs linked to pride, dignity or wishful thinking. Norms about ‘fitting in’ or not, differ across time and space (Akerlof and Kranton, 2005). Modeling identity

and work incentives, Akerlof and Kranton (2005) envisage corporate culture as the division of the workers into different groups, the prescribed behavior for each group and the extent to which workers identify with the organization or with the workgroup and adopt their respective goals. They argue that identity is an important supplement to monetary compensation and enterprises that inculcate in employees a sense of identity and attachment to an organization are well-functioning.

These emerging important contributions can very well explain labor market integration and wage differentials. Accordingly, while some individuals have the drive and human capital to integrate and succeed in the labor market, they may not reach their goal because of behavioral norms and unfulfilled or confused self-identity images.

In an empirical setting, Russo and van Hooft (2011) link identities, conflicting behavioral norms and job attributes. They find that because individuals can adhere to multiple identities, when they experience conflicting norms in the labor market, they tend to value and choose job characteristics that can reduce the degree of conflict (that is, favorable working hours and good relationships with colleagues and managers). An interesting gender split shows that while men usually resolve any conflict between career and leisure by favoring a career, for women the presence of role conflict is not associated with the importance of a career. While there is a large potential to use these frameworks for the analysis of ethnic, racial and immigrant identity along with the quest for economic inequality explanations, they have not been applied further.

3.2 Ethnic, Racial and Cultural Identity

Ethnic identity is 'developed, displayed, manipulated, or ignored in accordance with the demands of a particular situation' (Royce, quoted in Ruble, 1989, p. 401). It is whatever makes individuals the same or different in comparison to other ethnic groups. But, it may also encompass a network of strong beliefs, values and what people hold dear; it builds and shapes peoples' lives. Fearon and Laitin (2000) argue that ethnic identities are socially constructed, either by individual actions or by supra-individual discourses of ethnicity. Some studies develop economic theories of ethnic identity and explicitly explore their implications for economic behavior. Kuran (1998) has created a theory of reputational cascades that explains the evolution of behavioral ethnic codes that individuals follow to preserve social acceptance. The speed of acting ethnic is chosen under the influences of social pressures that the individuals themselves create and sustain. It is fostered by interdependencies among individual incentives that crucially affect personal choices. This theory can explain why similar societies may show very different levels of ethnic activity.

Darity et al. (2006) provide a long-term theory of racial (or ethnic) identification formation. Their evolutionary game theory model may result in equilibrium where all persons follow an individualist identity strategy, another where all persons pursue a racialist (or ethnic) identity strategy, or a mixture of both. Consequently, race or ethnicity may be more or less significant for both market and non-market social interactions. A positive impact of racial identity on economic outcomes, that is, the productivity of social interactions, is the cornerstone of the theory. This also explains the persistence of racial or ethnic privileges in market economies.

In sum, if there is a dominant or majority group or culture and a subordinate or

minority group or culture in a country, individuals in the minority group will either identify with the majority (in the hope that they will be recognized and accepted by the majority) or they will develop what is called oppositional identities and fight the majority culture because they know they will not be accepted by the majority anyway. Sociologists and anthropologists know this all too well. Ogbu (1999) argues that nonimmigrant minorities in the US constructed an oppositional collective identity after white Americans forced them into minority status and mistreatment. He finds that a Black speech community in Oakland, California, faces a dilemma in learning and using proper English because of their incompatible beliefs about standard English. However, since identity is multidimensional, science should allow for more than 'either with them or against them' identities.

It is also possible as Anderson (1999) shows in *Code of the Street* that some residents of segregated communities develop the capacity of 'code switching', which enables them to go back and forth between the predominantly white mainstream culture and the culture of their neighborhoods in order to navigate neighborhood perils. Levels of attachment to, or detachment from, the dominant culture of the country of residence can therefore be extremely pertinent and crucial for policy design.

In the Battu et al. (2007) model – where nonwhites identify with their social environment, their culture of origin, and where social networks can find them jobs – they find that individuals, who are otherwise identical, end up with totally different choices. Depending on how strong peer pressures are, nonwhites choose to adopt 'oppositional' identities because some individuals may identify with the dominant culture and others may reject that culture, even if it implies adverse labor market outcomes. In another empirical study, Battu and Zenou (2010) investigate the relationship between ethnic identity and employment. They find that in the United Kingdom (UK) individuals' identity choice is very much influenced by their social environment, that there is considerable heterogeneity in the nonwhite population in terms of preferences and that those nonwhites who develop and manifest oppositional and extreme identities are penalized in the labor market, experiencing a 6 percent to 7 percent lower probability of being in employment.

Mason (2004) establishes a stable identity formation among Mexican-Americans and other Hispanics. He shows that these ethnicities are able to increase their income substantially through acculturating into a non-Hispanic white racial identity. Bisin et al. (2006) find that, in line with their theoretical analysis, identity with and socialization to an ethnic minority are more pronounced in mixed than in segregated neighborhoods. The strength of identification with the majority culture regardless of strength of (ethnic) minority identity is important for labor market outcomes (Nekby and Rödén, 2010). Aguilera and Massey (2003) provide a better understanding of societal and economic behavior.

Expanding on the concept of ethnic human capital, Chiswick (2009) shows that economic determinants of 'successful' and 'disadvantaged' group outcomes are sensitive to the relationship between ethnic and general human capital, especially with regard to externalities in the processes by which they are formed. Policies that welcome ethnic diversity within the larger society without encouraging separation would be desirable. A genuinely inclusive policy of multiculturalism would also be beneficial.

Notice, however, that while there is a general understanding of flexible ethnic identity

among many social scientists, there is still no consensus on all the elements that compose ethnic identity. In the aforementioned studies, some use a self-reported identification question, others use religion and language, and so on. Reviewing the relevant literature outside economics, we find that among the suggested and widely used key elements of ethnic identity are the subjective expression of one's commitment to, sense of belonging to or self-identification with the culture, values and beliefs of a specific ethnic group and social life (Makabe, 1979; Masuda et al., 1970; Unger et al., 2002). Most frequently employed are cultural elements such as language, religion, media and food preferences, celebrated holidays and behavior (Phinney, 1990, 1992; Unger et al., 2002).

3.3 A Theory of Ethnic Identity

While ethnic identity exists even when migrants are in their home country,⁹ it surfaces and manifests when they arrive in a host country that is dominated by a different ethnicity, culture, language and so on. Typically, immigrants come from countries where they are part of the majority and become part of the minority in the host country.¹⁰ Ethnic identity is then like an attribute that an individual can have for some time, he or she can lose it and acquire a new one, or lose it and never take on or assume another one. While it is unique to the individual – in the sense that even people from the same country of origin can have different ethnic identities – ethnic identity can create feedback loops as individuals interact with other or the same ethnicities.

In contrast, ethnicity is what people are born with, is static as well as permanent and usually denotes segments of the host country population with economic and social inequality between the dominant and minority groups, with political and social repercussions. As the United Nations Economic Commission for Europe (UNECE, 2006, p. 100) put it, 'ethnicity is based on a shared understanding of the history and territorial origins (regional, national) of an ethnic group or community as well as on particular cultural characteristics: language and/or religion and/or specific customs and ways of life'. Ethnicity is thus more related to the roots of peoples, their ancestry, the actual territory and physical boundaries of a country. Here the reference is the group, a shared sense of peoplehood and not the individual.

Ethnic identity, ethnicity and culture are very much related, but they designate different things. While the role of ethnicity or country of origin is documented to be a significant determinant of labor force participation and earnings as well as other socioeconomic areas concerned with integration (for example, homeownership, citizenship, voting and entrepreneurship) the role of culture and ethnic identity on economic outcomes is less widely acceptable.

There is a growing literature on the effects of culture on economic outcomes. Guiso et al. (2006) (using beliefs about trust) show a pervasive impact of culture in many economic choices. The value of cultural diversity is evidenced in US cities through its net positive effect on the productivity of natives (Ottaviano and Peri, 2006). Bellini et al. (2009) confirm that diversity is positively correlated with productivity in 12 of the EU15 European countries and causation runs from the former to the latter. In Germany, the cultural diversity of people fosters the recognition, absorption and realization of entrepreneurial opportunities and has a positive impact on new firm formation, even more than the diversity of firms (Audretsch et al., 2010). Zimmermann (2007a), special issues

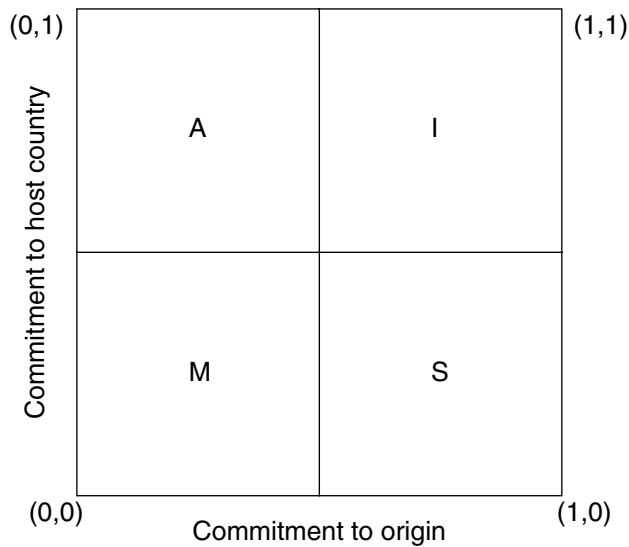
of the *Journal of Population Economics* (volume 20, issue 3, 2007), *International Journal of Manpower* (volume 30, issue 1–2, 2009) and *Research in Labor Economics* (volume 29, 2009) have documented the rising interest of economists in the field of ethnicity and identity.

In 2006, Constant et al. were the first to introduce the multidimensional concept of ethnic identity in economics, by borrowing literature from social psychology and other social sciences. Following the original work of Berry et al. (1989),¹¹ they developed a framework of ethnic identity and tested it empirically with German data. Specifically, they created a two-dimensional quantitative index – the ethnosizer – that measures the degree of the ethnic identity of immigrants. Ethnic identity is how individuals perceive themselves within an environment as they categorize and compare themselves to others of the same or a different ethnicity. It is the closeness or distance immigrants feel from their own ethnicity or from other ethnicities, as they try to fit into the host society; it can differ among migrants of the same origin, or be comparable among migrants of different ethnic backgrounds. In stark distinction to ethnicity, ethnic identity attempts to measure how people perceive *themselves* rather than their ancestors. The authors allow for the individuality, personality, distinctiveness and character of a person in an ethnic group to prevail, to differ from one person to another, and to alter and evolve in different directions. They define ethnic identity to be the balance between commitment to, affinity to or self-identification with the culture, norms and society of origin, and commitment to or self-identification with the host culture and society.

Constant et al. (2009a) propose that an immigrant moves along a plane formed by two positive vectors normalized from 0 to 1, with 1 representing maximum commitment. The horizontal axis measures commitment to and self-identification with the country of origin, and the vertical axis commitment to and self-identification with the host country. The origin of the Cartesian co-ordinates (0,0) shows that an immigrant has no commitment to either the home or host country. Point (0,1) exhibits maximum commitment to the culture of origin and no identification with the host country. Diametrically opposite is point (1,0) that indicates immigrants who achieve full adaptation of the new culture and norms while they deny their own heritage.

If commitments to the home and host countries are linearly dependent and mutually exclusive and they sum up to one, then immigrants move along the diagonal (1,0) to (0,1).¹² This is the case of the one-dimensional ethnosizer. That is, if immigrants retain their ethnic culture and norms they must not identify with the host country, and vice versa if they adopt the persona of the host country they must shed their ethnic and cultural identity related to the home country.

Confronted with both cultures, which combination of commitments do migrants choose to uphold? The two-dimensional ethnosizer of Figure 1.1 answers this question and shows where exactly migrants are in the positive quadrant. As illustrated in Figure 1.1, the ethnosizer contains four states or regimes of ethnic identity differentiated by the strength of cultural and social commitments. Quadrants A, I, M and S correspond to: assimilation (A), a pronounced identification with the host culture and society, coupled with a firm conformity to the norms, values and codes of conduct, and a weak identification with the ancestry; Integration (I), an achieved amalgam of both dedication to and identification with the origin and commitment and conformity to the host society. This is the case of a perfect bicultural state; marginalization (M), a strong detachment



Source: Constant et al. (2009a).

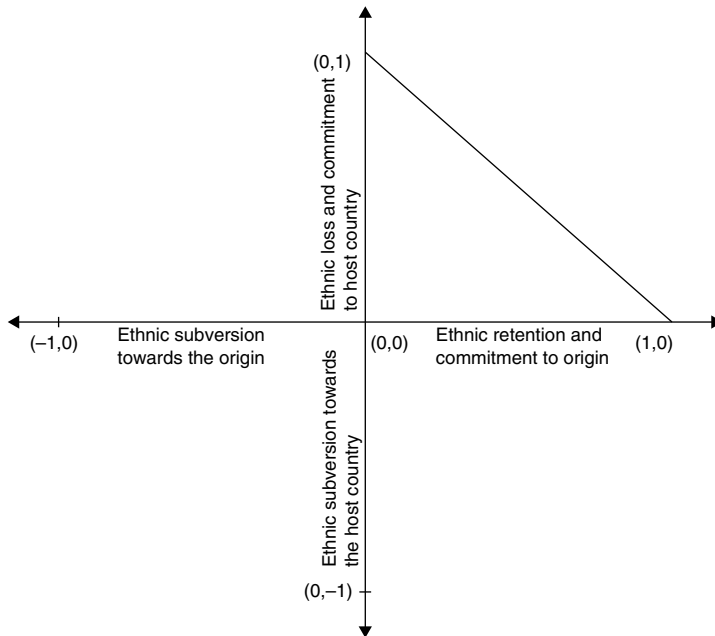
Figure 1.1 *The two-dimensional non-negative ethnosizer*

from either the dominant culture or the culture of origin; and, separation (S), an exclusive commitment to the culture of origin even after years of emigration, paired with weak involvement in the host culture and country realities. Starting at point (1,0), a migrant can undergo a more complicated journey through the various states, leaving separation towards integration, assimilation or marginalization, or remaining separated.

Constant and Zimmermann (2008) augment the theoretical possibilities of the formation and manifestation of ethnic identity to include negative commitments. Assuming a plane formed by two axes representing commitment to the home and host countries, an immigrant has four quadrants to express his or her ethnic identity. Commitment to and self-identification with the country of origin is measured along the horizontal axis, and commitment to and self-identification with the host country along the vertical axis.

Figure 1.2 illustrates the theoretical model of a complete multidimensional ethnic identity of positive, fanatical, and subvert ethnic identity. Point (0,0) represents the stance of immigrants who have lost all ethnic identity related to the country of origin. A movement to the right along the positive part of the horizontal axis (or in the northeast quadrant) indicates ethnic retention and increasing commitment to the country of origin. Moving beyond point (1,0), suggests that immigrants not only identify with the country of origin but they do more fanatically so practicing extreme views. Going in the other direction along the negative part of the horizontal vector indicates immigrants who can turn against their own heritage and culture.

With respect to commitment to the host country, point (0,0) exhibits no identification with the host country either. Immigrants going north on the vertical axis to point (0,1) evince increasing identification with the host country. Moving beyond point (0,1) indicates the case of overzealous migrants, who over-identify with the host country.



Source: Constant and Zimmermann (2008).

Figure 1.2 Complete illustration of ethnic identity; retention, relinquishment and subversion

Going south on the negative part of the vertical axis, shows dissatisfied and disgruntled immigrants with the host country who can develop a subverted self-identification towards it. Note that, when migrants move along the negative part of the vertical axis, they can be either in the southeast or the southwest quadrant. The southeast quadrant represents immigrants who keep the ethnic identity of the home country and oppose the host country. While being in the southwest quadrant is a valid theoretical possibility of individuals turning against both countries, it is rather unlikely to happen in the real world (if we assume rational and mentally sound individuals).

In reality, individuals may exhibit strong association with, commitment to and malcontent with either or both the culture of ancestry and the host culture. The two-dimensional model of the measurement of ethnic identity suggests that commitments to two different societies can coexist and influence each other in several ways. In other words, the level of dedication to the original society does not preclude the degree of the commitment to the host society. This assumption recognizes that a migrant, who strongly identifies with the culture and values of his or her ancestry, may or may not have a strong involvement with the dominant culture. Similarly, a migrant with a strong affinity to the values and beliefs of the host country may or may not totally identify with the culture of ancestry. At the same time, migrants may also be completely detached from the home or host country. The two-dimensional ethnosizer of Constant et al. (2009a) allows for this case as well.

While they are theoretically possible, the negative parts of Figure 1.2 are impossible

to be examined empirically. No survey to our knowledge so far has any questions on negativity towards either the home or host country culture.

3.4 Ethnosizing Migrants and Economic Integration

To empirically test the ethnic identity of immigrants, Constant et al. (2009a) developed an index, the ethnosizer. They define the verb ethnosize¹³ to quantify how ethnic is an individual. Based on data from the German Socio-Economic Panel (GSOEP) they construct the four states or regimes of the two-dimensional ethnosizer by identifying pairs of questions that transmit information on personal devotion and commitment to both the German culture and society and to the culture and society of origin. They choose five essential elements of cultural and societal commitment that compose the ethnic identity, as they are widely accepted in social psychology. These elements pertain to both the country of origin and the host country and give us a multidimensional view. They are: (1) language; (2) visible cultural elements; (3) ethnic self-identification; (4) ethnic interactions with natives; and (5) future citizenship and locational plans. In some cases, individuals may be classified clearly with one concept, in other cases not at all. In most cases, people will fall in several different regimes at the same time.

For example, with respect to element 3, immigrants who answered that they self-identify with Germany but not with the country of origin are considered assimilated. Immigrants who self-identify with both the country of origin and the host country are classified as integrated. Those with total identification with the country of origin and little or no identification with Germany are labeled separated, and those who cannot self-identify with either country are classified as marginalized. The same classification is applied with respect to the other four elements of ethnic identity. Providing equal weights to the five elements, each of the four measures or regimes of the ethnosizer can take a value between zero and five, and add up to five for each individual.

The idea of the index of ethnic identity is that it can be used to test the performance of immigrants in the host country's labor market and possibly explain unexplained differences and deficiencies. Potentially it can also be used to compare immigrants with natives and revisit the earnings assimilation literature.

Zimmermann et al. (2008) find that human capital acquired in the host country does not affect the attachment and affinity to the receiving country. Instead, it is pre-migration characteristics that dominate ethnic self-identification. In particular, human capital acquired in the home country leads to lower identification with the host country for both men and women immigrants, while men only have a higher affiliation with the original ethnicity and culture. However, Aspachs-Bracons et al. (2008) have shown that compulsory language policy implemented in Catalonia have an effect on identity.

Constant and Zimmermann (2008) argue that while ethnic identity should affect work participation and cultural activities as human capital formation does, the ethnic identity of those working should not be influenced by work intensity and education from the receiving country. Applying the ethnosizer on a sample of working men, they find that the ethnosizer mainly depends on pre-migration characteristics, suggesting that ethnic identity is predictable through characteristics measured at the time of entry in the host country. They also find that the ethnosizer is de facto independent of measured economic activity and significantly affects economic outcomes.

Zimmermann (2007b) deals with the role of ethnic identity in earnings. Adding the two-dimensional ethnoser to standard tobit regressions to examine the particular contribution of ethnic identity, he finds that ethnic identity matters significantly and that the findings are very robust with respect to the concrete model specification. That is, the inclusion of the ethnoser does not change the parameter estimates of the standard variables in any relevant way. Nevertheless, the parameter estimates of the ethnic identity have a strong impact on economic behavior.

Constant and Zimmermann (2009) extend this framework to model the labor force participation and earnings of both men and women immigrants, because men and women may have completely different understanding and expression of their ethnic identity.¹⁴ This is based on the idea that immigrants are mostly useful in the host country when they bring different talents and skills than natives possess. If the resulting diversity reflects ethnic characteristics that are relatively scarce, the labor market functions smoothly. In the case of a homogeneous population, there is always the risk of lost creativity. 'Successful migration implies integration, assimilation, loyalty and good citizenship but also diversity and multiple identities' (Hieronymi, 2005, p. 132). There are costs and benefits associated with this cultural capital embodied in immigrants. When immigrants and natives complement each other, there can be a win-win situation; immigrants and natives can profit and the economy and society can benefit from creativity, dynamism and greater prosperity.

Constant and Zimmermann (2009) find that the ethnic identity of immigrants is a strong determinant of their labor force participation. They also find interesting gender dynamics, whereby separated or marginalized men have a much lower probability to work when compared with immigrants who totally identify with natives and demonstrate a strong commitment to German society. However, being assimilated does not offer a particular advantage to the working probabilities of men compared with the identity state of being integrated. In contrast, women who identify with both cultures (are integrated) have a much higher probability to work than women who only identify with natives (are assimilated). Separated or marginalized women have lower chances of joining the labor force than those who are assimilated. Unexpectedly, the authors find that once immigrants start working, ethnic identity does not affect their earnings in a significant way. This is consistent with other studies on the effect of identity and personality on occupations and earnings. Therefore, the findings reported in Zimmermann (2007b) on earnings using tobit regressions are driven by the decision to work.

Dealing with other forms of economic integration, Constant et al. (2009c) study the home ownership and wealth of immigrants. They find that immigrants with a stronger commitment to the host country are more likely to achieve home ownership for a given set of socioeconomic and demographic characteristics, regardless of their level of attachment to their home country. That is, assimilated and integrated immigrants move up to home ownership.

Other forms of immigrant integration can also offer valuable insights into their economic integration. For example, immigrants who integrate in the political arena by naturalizing may follow different paths of economic integration in the host country. Naturalization, in turn, may very well be influenced by ethnic identity. Zimmermann et al. (2009) study how ethnic identity can affect the probabilities of actual naturalization, future naturalization and refusal of naturalization. They find that integration in

German society has a stronger effect on naturalization than ethnic origin and religion, and women immigrant household heads are more likely to want to acquire or to already have acquired German citizenship.

The risk proclivity of immigrants and individuals in general in a society is important to study as it affects many socioeconomic facets, from gambling to obesity, to crime, to labor market performance. Bonin et al. (2012) explore the role of ethnic identity in the risk proclivity of immigrant and native Germans. Specifically, they use measures of immigrants' ethnic persistence and assimilation. They find that assimilation or adaptation to the attitudes of the majority population closes the immigrant–native gap in risk proclivity, while stronger commitment to the home country or ethnic persistence preserves it. As risk attitudes are behaviorally relevant, and vary by ethnic origin, these results could also help explain differences in the economic assimilation of immigrants.

3.5 Empirical Ethnic Identity Issues

This section provides two empirical ethnic self-identification examinations to support the usefulness of the ethnic identity approach. The first is, to what extent does the ethnosizer differ from the direct measure of¹⁵ provided by survey data? The self-identification question is subjective, and hence open to debate. People are asked, for example, how native or foreign they feel and how much they identify with one or the other country. The ethnosizer, however, uses another four elements besides the self-identification question; elements that are objective, such as what people did or are actually doing. This can balance the judgement the self-identification question provides. Table 1.1 uses data from the GSOEP optimized for the purpose of comparison of the ethnosizer with the direct measure of ethnic self-identification. We observe 1339 individual migrants and generate 6695 observations that are cross-classified according to the four regimes (assimilation, integration, marginalization and separation). The cells on the main diagonal of the contingency table contain the cases where self-classification coincides with the judgement of the ethnosizer. The agreement is, in general, small: 45.9 percent for integration, 53.6 percent for assimilation, 54.9 percent for separation and 31.9 percent for marginalization (percentages from the column totals). From those who consider themselves to be marginalized, in 23.7 percent of the cases we find evidence of integration. In 32.5 percent of the cases for those who self-report integration, we find evidence of assimilation. Self-classified assimilation goes with 12.6 percent cases of marginalization, and self-reported separation coincides with 21 percent cases of integration. This provides support for the attempt to balance the self-evaluation question out through the ethnosizer.

The second example demonstrates the differences the ethnic identity regimes have for economic performance. Here, we choose data from a new frontier survey, the German IZA Evaluation Dataset (Caliendo et al., 2011), that collects data on ethnic self-identity of immigrants and natives who are unemployed and who receive unemployment benefits. The assumption is that for immigrants the alternative to the home culture is German, and for the native Germans the alternative culture is international. Table 1.2 contains raw data on the net hourly reservation wages for natives and immigrants and the reservation wage ratio (reservation wage divided by the respective wage in the last job) for all four ethnic identity regimes. For immigrants, reservation wages are the highest if they

Table 1.1 Direct measure of ethnic self-identification and the ethnosizer

Ethnosizer: four regimes	Self-identification				Total
	Integration	Assimilation	Separation	Marginalization	
Assimilation	143 <i>32.50</i> 2.14	488 <i>53.62</i> 7.29	435 <i>12.52</i> 6.50	378 <i>20.21</i> 5.65	1444 21.58
Integration	202 <i>45.91</i> 3.02	219 <i>24.07</i> 3.27	729 <i>20.98</i> 10.89	444 <i>23.74</i> 6.63	1594 23.81
Marginalization	33 <i>7.50</i> 0.49	115 <i>12.64</i> 1.72	403 <i>11.60</i> 6.02	597 <i>31.93</i> 8.92	1148 17.15
Separation	62 <i>14.09</i> 0.93	88 <i>9.67</i> 1.31	1908 <i>54.90</i> 28.50	451 <i>24.12</i> 6.74	2509 37.48
Total	440 <i>100.00</i> 6.57	910 <i>100.00</i> 13.59	3475 <i>100.00</i> 51.90	1870 <i>100.00</i> 27.93	6695 100.00

Notes:

Own calculations on the basis of the GSOEP (Zimmermann, 2007b).

Number of individuals: 1339.

Bold numbers are cell counts, followed by percentages of the column totals (*italic*) and the relative frequencies of the total sample size.

Table 1.2 Ethnic identity regimes and reservation wages

Ethnosizer: four regimes	Reservation wages		Reservation wage ratio	
	Immigrants	Natives	Immigrants	Natives
Assimilation	7.29	7.10	1.10	1.08
Integration	7.61	7.73	1.12	1.12
Marginalization	7.16	6.72	1.19	1.12
Separation	6.98	7.15	1.15	1.20

Notes: Sample sizes are 1515 migrants and 5975 natives.

Net hourly reservation wage in euros measured about three months after unemployment entry.

Reservation wage ratio is defined as the reservation wage divided by the last net wage from (self-)employment before entering unemployment.

Source: IZA Evaluation Dataset (wave 1: 2007–08), own calculations.

are integrated, followed by those assimilated, marginalized and separated. Assimilated and integrated immigrants report reservation wages which are roughly 10 percent higher than their previous hourly wages. However, separated and marginalized immigrants' reservation wages exceed their previous hourly wages by 15 percent and 18 percent, respectively.

This picture is different for natives, where those integrated have the highest reservation wages, those marginalized have the lowest and the others rank in between. Assimilated, integrated and marginalized natives report reservation wages which are between 8 percent and 12 percent higher than their previous hourly wages. However, the reservation wages of separated natives exceed their previous hourly wages by 20 percent. This suggests that identity matters for labor market behavior.

4 ATTITUDES FROM AND ABOUT IMMIGRANTS IN THE INTEGRATION PROCESS

Attitudes are extremely relevant in the integration setting as they represent the position a person has towards others. Attitudes could be feelings or emotions towards a fact, a negative mindset, or the way people respond to a stimulus. They reflect complex historical, psychological and social processes, can change according to experience and stimuli, and can be positive, negative or neutral ranging from xenophilia or allophilia to xenophobia.

Attitudes and sentiments towards migrants, foreigners or ethnic minorities vary widely across countries. They may arise from ethnic or racial antipathy and xenophobia, or may be based on economic fears regarding the labor market and the welfare state, and one's own economic outlook. Since immigration is the consequence of policy, migration policy is partly responsible for the types of immigrants a country receives, their economic performance, the functioning of the economy and, hence, natives' perceptions towards immigrants. While attitudes and perceptions form or influence our behavior, they are also the outcome of a complex social, political and economic process, shaped through the engagement of individuals in social and working life and influenced by public discourse and the media. This suggests that attitudes are only partly predetermined, and are also the outcome of a complex economic, political and social reality.

In the scientific literature, the concepts of ethnicity, ethnic identity, multiculturalism, social exclusion and xenophobia are relatively well researched by sociologists, social psychologist, cultural anthropologists and political theorists. Phinney et al. (2001) argue that ethnic and national identity are inter-related and play a role in the psychological well-being of immigrants. They perceive this as an interaction between the attitudes and characteristics of immigrants and how the host society responds to them. That is, ethnic identity strongly interacts and changes with the immigrant policy a country has and with the attitudes of natives. The strengths of ethnic identity vary according to the support immigrants receive to keep their ethnic culture and the pressure immigrants receive to assimilate and relinquish their ethnic values and norms. The authors find that the best adaptation is achieved by a combination of a strong ethnic identity and a strong national identity. When the host society accepts multiculturalism and immigrants want to keep their ethnic identity, then ethnic identity is strong. When immigrants are pressured to assimilate but they are accepted, then national identity is strong. When immigrants face real or perceived hostility towards them, then some may reject their ethnic identity while others may over-exhibit their ethnic identity. For example, they find that immigrants in Finland have largely marginalized identities, in the Netherlands have overly separated identities and in Israel half of the immigrants were assimilated and half integrated.

Overall, integrated ethnic identities are associated with higher levels of well-being than are other ethnic identity states.

There is also a growing literature in economics on the attitudes towards immigrants and ethnic minorities. Bauer et al. (2000) study the effect of different immigration policies in OECD countries on attitudes towards immigrants and document the relevance of economically motivated migration policy for the social acceptance of immigrants. Analyzing the role of labor market competition, immigrant concentration, racial/ethnic bias, educational attainment and a set of other variables that potentially determine attitudes towards immigrants, Gang et al. (2010) find that negative attitudes towards foreigners have increased and those who directly compete with immigrants have stronger negative attitudes towards foreigners. About 12 percent of the increased anti-foreigner attitudes are explained by differences in people's characteristics and 88 percent of the rising anti-foreigner sentiment is related to behavioral changes among the population that has strengthened the impact of various individual characteristics on negative attitudes towards foreigners. Key among these behavioral changes is the fact that the strength of the ameliorating impact of education on anti-foreigner attitudes diminished over time. Overall, people with higher levels of education and occupational skills are more likely to favor immigration and cultural diversity regardless of the skill attributes of the immigrants in question, and they are also more likely to believe that immigration generates benefits for the host economy as a whole (Hainmueller and Hiscox, 2007).

Dustmann and Preston (2004) show that in the UK, attitudes towards foreigners depend on where immigrants come from. Those from other European countries face more favorable attitudes than those from Asia or the West Indies. Looking at the formation of attitudes towards future immigrants they find evidence that economic matters such as welfare and labor market performance contribute to negative perceptions. However, it is striking that the most important determinant is non-economic; it is racial intolerance. Moreover, high concentrations of ethnic minorities are associated with more hostile attitudes towards immigrants in Germany (Gang and Rivera-Batiz, 1994). Continuing on the quest for the determinants of attitudes, Card et al. (2005) show that attitudes toward immigration vary systematically with age, education and urban/rural location, and that there is substantial variation in the strength of anti-immigrant opinion across European countries.

If immigrants are to switch identities in light of different attitudes from natives this may very well result in different economic integration patterns. Manning and Roy (2010), in a theoretical and empirical exercise, discuss the cultural assimilation of immigrants in the UK, the British identity and the views on rights and responsibilities in societies. They find that almost all UK-born immigrants see themselves as British and others feel more British the longer they stay in the UK. However, not all of the white UK-born population thinks of these immigrants as British, because they are more concerned about values than national identity. For example, they are worried that Pakistanis who feel British are causing problems but are not worried about Italians who do not feel British and cause problems. How people see others and how they see themselves is the interesting question.

Epstein and Gang (2009) acknowledge the three elements required to bring minorities into line with the majority: assimilation efforts, time and the degree to which the majority welcomes the minority. They set up a theoretical model to examine the consequences for assimilation and harassment of growth in the minority population, time and the role

of political institutions. They find that as the size of the minority increases, assimilation and the effort to assimilate also increases. But growth in the minority also increases harassment by the majority. If the groups are very asymmetric, the best thing to do is for the minority to fight harassment and continue with assimilation. If the asymmetry between the abilities of both groups to affect the minority's productivity is less than the ratio between the effects of the marginal efficiency of their investments on their rents, then the minority will give up on assimilation. Lastly, the minority will give up on its assimilation efforts if the majority is strong and united against the minority.

The role of culture and family attitudes towards employment rates in OECD countries is studied by Cahuc and Algan (2007). They argue that family labor supply interactions and cross-country heterogeneity in family culture are key to explaining divergent employment rates and employment gaps. The emphasis is on employment disparities that mostly affect specific demographic groups like women. In particular, they show that people facing a priori the same economic environment by living in the same country – but who differ by the national origin of their ancestors – have significantly different family attitudes, even after controlling for all their relevant socioeconomic individual characteristics. That is, they confirm cultural foundations of family attitudes. In addition, their family attitudes are perfectly in line with those currently expressed in their country of origin. They show that the stronger preferences for family activities in European countries may explain both their lower female employment rate and the fall in the employment rates of younger and older people. As valuable as explaining the facts is, it is a different matter than implementing recommendations such as the Lisbon agenda. Cahuc and Algan (2007) wonder if this implementation can be reached and if it can be welfare improving, given the cultural forces that reign in some segments of the population.

Constant et al. (2009b) study opinions and attitudes towards immigrants and minorities and their interactions with other barriers to minorities' economic integration. They use a unique dataset that gauges the perspectives of expert stakeholders and of ethnic minorities on their integration situation and the main barriers that hinder it. In this survey both immigrants and natives were asked about attitudes and perceptions towards others and about themselves. They find that ethnic minorities face integration problems and the natives' general negative attitudes are a key factor of the challenging situation of minorities. While discrimination is acknowledged as the single most important integration barrier, low education and self-confidence as well as cultural differences also hinder integration. Lastly, minorities do want change as long as it comes about by policies based on the principle of equal treatment.

5 CONCLUSIONS AND OUTLOOK

This chapter has reviewed the economic assimilation of labor migrants, the evolution of bi-ethnic identities and the value and relevance of perceptions and attitudes, within the broader framework of the economic integration of immigrants. There is evidence that 'soft' factors such as attitudes, perceptions and identities do affect economic behavior more than they are driven by them. Some of these issues are further studied in Chapter 14, in this volume, by Constant and Zimmermann.

However, most of the findings are still based on cross-sectional evidence and available

only for a few countries. We need to expand our analysis to the available panel datasets and to employ cross-national comparisons especially of the performance and adaptation of specific ethnic groups in different cultural settings. A major difficulty here that future research should try to tackle is to model the endogeneity of the processes of economic performance and social and cultural interactions.

The often expressed societal norms, and even political innuendos, that migrants should assimilate is not a conclusion that can be derived from economic reasoning. First, migrant groups hardly ever reach economic assimilation, at least not the first-generation migrants. If people with a migration background, the second generation, are performing like natives in an economic sense, they are often also ethnically assimilated. Second, labor migrants pulled by the host country are requested because they exhibit scarce characteristics – in the short or the long run. Hence, they are wanted because they are different, either because they have talent or skills which are not sufficiently produced at a certain time or because they bring with them ethnic capital that is valuable for the global competitiveness of the receiving economy. Research is needed to better understand and empirically validate ethnic capital and its potential use in the economy.

Globalization and demographic changes will lead to a higher level of permanent and temporary labor migration around the world. Circular migration, the move of workers back and forth as well as onwards will become even more regular and standard than it currently is. (See Chapter 3 on circular migration by Constant et al. in this volume for further details.) This increases the demand for individuals with multiethnic identities and generates more diversity within migrant-receiving countries. Coping with increasing ethnic, cultural and religious diversity, especially in societies with either a history of conflicts between certain groups, or a strong tradition of cultural homogeneity, is not an easy task. Hence, this will also raise the importance of attitudes. Observing and understanding future labor migration trends and their interactions with cultural and societal conditions is therefore a future research agenda of great importance. This volume, in particular in Parts III and IV, offers a number of chapters that address these challenges, including Chapter 10 on ethnic hiring by Neumark, Chapter 12 on occupational sorting of ethnic groups by Patel et al. and Chapter 18 on immigration–religiosity intersections by García-Muñoz and Neuman.

NOTES

- * Financial support from the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG) for the project on 'Ethnic Diversity and Labor Market Success' in the DFG-Priority Program 'Flexibility in Heterogeneous Labor Markets' (Flexibilisierungspotenziale bei heterogenen Arbeitsmärkten) is gratefully acknowledged. This is an updated version of Amelie F. Constant and Klaus F. Zimmermann (2011), 'Migration, ethnicity and economic integration', in M.N. Jovanovic (ed.), *International Handbook of Economic Integration*, Edward Elgar Publishing, Cheltenham, UK and Northampton, MA, USA, pp. 145–68.
1. Human capital theory, as formulated by Becker (1991) and Mincer (1974), evaluates how improvement in the skills and talents of workers influences future real income. Investment in human capital includes education, labor market experience (with specific or general on-the-job training), health (both mental and physical), and knowledge about the labor market. An increase in skill increases productivity and earnings, but at the cost of foregone income. Human capital theory posits that wage differentials result from differences in human capital accumulation and specialization. Investment in human capital in the host country should help disadvantaged groups (immigrants) increase their earnings and approach the earnings of natives.

2. Another theory that can explain the economic assimilation of immigrants is the segmented labor market theory, as first formulated by Doeringer and Piore (1971). Here, the labor markets are divided into a primary or capital-intensive sector with skilled workers and secondary or labor-intensive sector with mostly unskilled workers assigned menial jobs. Earnings differentials across the primary and secondary sectors are significant, and market forces are unable to erode these differentials. Consequently, immigrants who are in the second tier, earn lower wages than natives, their wages increase slowly over time, wages are rigid upwards but flexible downwards and can fall if supply increases (Piore, 1979). The wage gap between immigrants and natives is expected to widen over time and additional years of residence in the host country do not affect the economic process of the assimilation of immigrants.
3. Alternatively, some researchers define assimilation as the increase in the immigrants earnings brought about by additional years of residence in the host country. Others measure assimilation as the rate at which the earnings of newly arrived immigrants converge to the earnings of other ethnically similar immigrants residing in the host country for more than 25 years.
4. These studies include Carliner (1980), Borjas (1982) and Abbott and Beach (1993), to name a few of the early contributors.
5. Jasso and Rosenzweig (1986, 1990), Bloom and Gunderson (1991) and Schoeni (1998), just to name a few of the first longitudinal studies.
6. This is an alternative method to longitudinal data analysis and is typically used with decennial censuses or CPS data.
7. In contrast to the first- and second-generation immigrants, these immigrant children are often called the half generation.
8. Allowing for other theories, such as the new economics of labor migration, studies on return migration there may not be a unitary process of return migration, but several (Constant and Massey, 2002). The authors also caution against an over-reliance on single theories in understanding and explaining international migration.
9. Constant and Zimmermann (2007) consider the ethnic identity of natives in Germany. Inevitably, natives are also affected by the incoming migrants in several dimensions. For example, they can become more cosmopolitan and open to new cultures, stay locked in their own ethnic identity or even develop an identity opposing immigrants, or their own culture.
10. An exception is the case of Jews who are usually a minority in the home country and become part of the majority when they migrate to Israel.
11. See also Berry (1980) and Phinney (1990, 1992).
12. See Figure 1.2 for this illustration.
13. The word comes from the combination of the terms 'ethnic' and 'size' (ethno/size), where 'size' indicates its status as a form of measurement of the ethnic identity.
14. Ethnic identity, much like personality and other individual characteristics, influences labor market outcomes. We know, for example, that preferences affecting earnings, efficacy and other psychological aspects of individuals are significant influencers of earnings (Bowles et al., 2001). Moreover, cultural hypotheses are economically important for fundamental economic issues like national rates of saving (Guiso et al., 2006). Beliefs that people value and invest in have important economic implications (Bénabou and Tirole, 2011).
15. See Zimmermann et al. (2007, 2008) for an econometric analysis of ethnic self-identification using GSOEP data.

REFERENCES

- Abbott, M.G. and C.M. Beach (1993), 'Immigrant earnings differentials and birth-year effects for men in Canada: post-war-1972', *Canadian Journal of Economics*, **26** (3), 505–24.
- Aguilera, M.B. and D.S. Massey (2003), 'Social capital and wages of Mexican migrants: new hypotheses and tests', *Social Forces*, **82** (2), 671–701.
- Akerlof, G.A. and R.E. Kranton (2000), 'Economics and identity', *Quarterly Journal of Economics*, **115** (3), 715–53.
- Akerlof, G.A. and R.E. Kranton (2005), 'Identity and the economics of organizations', *Journal of Economic Perspectives*, **19** (1), 9–32.
- Anderson, E. (1999), *Code of the Street: Decency, Violence, and the Moral Life of the Inner City*, New York: Norton.
- Aspachs-Bracons, O., I. Clots-Figueras, J. Costa-Font and P. Masella (2008), 'Compulsory language educational policies and identity formation', *Journal of the European Economic Association*, **6** (2–3), 434–44.

- Audretsch, D.B., D. Dohse and A. Niebuhr (2010), 'Cultural diversity and entrepreneurship: a regional analysis for Germany', *The Annals of Regional Science*, **45** (1), 55–85.
- Battu, H. and Y. Zenou (2010), 'Oppositional identities and employment for ethnic minorities: evidence from England', *Economic Journal*, **524** (120), F52–F71.
- Battu, H., M. McDonald and Y. Zenou (2007), 'Oppositional identities and the labor market', *Journal of Population Economics*, **20** (3), 643–67.
- Bauer, T.K., M. Lofstrom and K.F. Zimmermann (2000), 'Immigration policy, assimilation of immigrants and natives' sentiments towards immigrants: evidence from 12 OECD-countries', *Swedish Economic Policy Review*, **7** (2), 11–53.
- Beach, C.M. and C. Worswick (1993), 'Is there a double-negative effect on the earnings of immigrant women?', *Canadian Public Policy*, **19** (1), 36–53.
- Becker, G.S. (1991), 'Investment in human capital: a theoretical analysis', in R.E. Kuenne (ed.), *Microeconomics: Theoretical and Applied 1*, International Library of Critical Writings in economics 11, Aldershot, UK and Brookfield, VT, USA: Edward Elgar.
- Bellini, E., G.I.P. Ottaviano, D. Pinelli and G. Prarolo (2009), 'Cultural diversity and economic performance: evidence from European regions', *Nota di Lavori 632009*, Milano: Fondazione Eni Enrico Mattei (FEEM).
- Bénabou, R. and J. Tirole (2011), 'Identity, morals, and taboos: beliefs as assets', *Quarterly Journal of Economics*, **126** (2), 805–55.
- Berry, J. (1980), 'Acculturation as varieties of adaptation.', in A.M. Padilla (ed.), *Acculturation: Theory, Models and Some New Findings*, Boulder, CO: Westview, pp.9–25.
- Berry, J., U. Kim, S. Power, M. Young and M. Bujaki (1989), 'Acculturation attitudes in plural societies', *Applied Psychology: An International Review*, **38** (2), 185–206.
- Bisin, A., E. Patacchini, T. Verdier and Y. Zenou (2006), 'Bend it like Beckham': identity, socialization and assimilation', CEPR Discussion Paper No. 5662, Centre for Economic Policy Research (CEPR) London.
- Bloom, D.E. and M. Gunderson (1991), 'An analysis of the earnings of Canadian immigrants', in J.M. Abowd and R.B. Freeman (eds), *Immigration, Trade, and the Labor Market*, Chicago, IL: University of Chicago Press, pp.321–42.
- Bonin, H., A. Constant, K. Tatsiramos and K.F. Zimmermann (2012), 'Ethnic persistence, assimilation and risk proclivity', *IZA Journal of Migration*, **1**(5), available at: <http://www.izajom/content/1/1/5>.
- Borjas, G.J. (1982), 'The earnings of male hispanic immigrants in the United States', *Industrial Labor Relations Review*, **35** (3), 343–53.
- Borjas, G.J. (1985), 'Assimilation, changes in cohort quality, and the earnings of immigrants', *Journal of Labor Economics*, **3** (4), 463–89.
- Borjas, G.J. (1986), 'The self-employment experience of immigrants', *The Journal of Human Resources*, **21** (4), 485–506.
- Borjas, G.J. (1989), 'Immigrant and emigrant earnings: a longitudinal study', *Economic Inquiry*, **27** (1), 21–37.
- Borjas, G.J. (1992), 'National origin and the skills of immigrants in the postwar period', in G.J. Borjas and R.B. Freeman (eds), *Immigration and the Work Force*, Chicago, IL: University of Chicago Press for the National Bureau of Economic Research, pp.17–48.
- Bowles, S., H. Gintis and M. Osborne (2001), 'Incentive-enhancing preferences: personality, behavior, and earnings', *American Economic Review*, **91** (2), 155–8.
- Cahuc, P. and Y. Algan (2007), 'The roots of low European employment: family culture?', in J. Frankel and C. Pissarides (eds), *NBER International Seminar on Macroeconomics 2005*, Cambridge, MA: MIT Press, pp.65–109.
- Caliendo, M., A. Falk, L. Kaiser, H. Schneider, A. Uhlendorff, G. van den Berg and K.F. Zimmermann (2011), 'The IZA evaluation dataset: towards evidence-based labor policy making', *International Journal of Manpower*, **32** (7), 731–52.
- Card, D., C. Dustmann and I. Preston (2005), 'Understanding attitudes to immigration: the migration and minority module of the first European social survey', CREAM Discussion Paper No. 0305, University College Centre, Department of Economics, Centre for Research and Analysis of Migration (CREAM), London.
- Carliner, G. (1980), 'Wages, earnings and hours of first, second, and third generation American males', *Economic Inquiry*, **18** (1), 87–102.
- Chiswick, B.R. (1978), 'The effect of Americanization on the earnings of foreign-born men', *Journal of Political Economy*, **86** (5), 897–922.
- Chiswick, B.R. (1986), 'Is the new immigration less skilled than the old?', *Journal of Labor Economics*, **4** (2), 168–92.
- Chiswick, C.U. (2009), 'The economic determinants of ethnic assimilation', *Journal of Population Economics*, **22** (4), 859–80.
- Constant A. and D.S. Massey (2002), 'Return migration by German guestworkers: neoclassical versus new economic theories', *International Migration*, **40** (4), 5–38.

- Constant, A. and D.S. Massey (2003), 'Self-selection, earnings, and out-migration: a longitudinal study of immigrants to Germany', *Journal of Population Economics*, **16** (4), 631–53.
- Constant, A. and K.F. Zimmermann (2006), 'The making of entrepreneurs in Germany: are native men and immigrants alike?', *Small Business Economics*, **26** (3), 279–300.
- Constant, A.F. and K.F. Zimmermann (2007), 'Does ethnosizing pay? Gender and native-migrant differences', mimeo, presented at the 4th Annual Migration Meeting, Institute for the Study of Labor (IZA), Bonn.
- Constant, A.F. and K.F. Zimmermann (2008), 'Measuring ethnic identity and its impact on economic behavior', *Journal of the European Economic Association*, **6** (2–3), 424–33.
- Constant, A.F. and K.F. Zimmermann (2009), 'Work and money: payoffs by ethnic identity and gender', *Research in Labor Economics*, **29**, 3–30.
- Constant, A.F., L. Gataullina and K.F. Zimmermann (2006), 'Ethnosizing immigrants', IZA Discussion Paper No. 2040, Institute for the Study of Labor (IZA), Bonn.
- Constant, A.F., L. Gataullina and K.F. Zimmermann (2009a), 'Ethnosizing immigrants', *Journal of Economic Behavior and Organization*, **69** (3), 274–87.
- Constant, A.F., M. Kahanec and K.F. Zimmermann (2009b), 'Attitudes towards immigrants, other integration barriers and their veracity', *International Journal of Manpower*, **30** (1/2), 5–14.
- Constant, A., R. Roberts and K.F. Zimmermann (2009c), 'Ethnic identity and immigrant homeownership', *Urban Studies*, **46** (9), 1879–98.
- Darity, W.A., P.L. Mason and J.B. Stewart (2006), 'The economics of identity: the origin and persistence of racial identity norms', *Journal of Economic Behavior and Organization*, **60** (3), 283–305.
- Doeringer, P.B. and M.J. Piore (1971), *Internal Labor Markets and Manpower Analysis*, Lexington, MA: D.C. Heath.
- Dustmann, C. and I. Preston (2004), 'Is immigration good or bad for the economy? Analysis of attitudinal responses', *Research in Labor Economics*, **24**, 3–34.
- Epstein, G.S. and I.N. Gang (2009), 'Ethnicity, assimilation and harassment in the labor market', *Research in Labor Economics*, **29**, 67–88.
- Fearon, J.D. and D.D. Laitin (2000), 'Violence and the social construction of ethnic identity', *International Organization*, **54** (4), 845–77.
- Field-Hendrey, E. and E. Balkan (1991), 'Earnings and assimilation of female immigrants', *Applied Economics*, **23** (10), 1665–72.
- Fraundorf, M.N. (1978), 'Relative earnings of native- and foreign-born women', *Explorations in Economic History*, **15** (2), 211–20.
- Friedberg, R.M. (1992), 'The labor market assimilation of immigrants in the United States: the role of age at arrival', working paper, Providence, RI: Brown University.
- Gang, I.N. and F.L. Rivera-Batiz (1994), 'Unemployment and attitudes towards foreigners in Germany', in G. Steinmann and R. Ulrich (eds), *Economic Consequences of Immigration to Germany*, Heidelberg: Physica-Verlag, pp. 121–54.
- Gang, I.N., F.L. Rivera-Batiz and M.-S. Yun (2010), 'Changes in attitudes toward immigrants in Europe: before and after the fall of the Berlin Wall', in G.S. Epstein and I.N. Gang (eds), *Migration and Culture*, Bingley: Emerald Publishing, pp. 649–76.
- Groves, M.O. (2005), 'How important is your personality? Labor market returns to personality for women in the US and UK', *Journal of Economic Psychology*, **26** (6), 827–41.
- Guiso, L., P. Sapienza and L. Zingales (2006), 'Does culture affect economic outcomes?', *Journal of Economic Perspectives*, **20** (2), 23–48.
- Hainmueller, J. and M.J. Hiscox (2007), 'Educated preferences: explaining attitudes toward immigration in Europe', *International Organization*, **61** (2), 399–442.
- Hieronimi, O. (2005), 'Identity, integration and assimilation: factors of success and failure of migration', *Refugee Survey Quarterly*, **24** (4), 132–50.
- Jasso, G. and M.R. Rosenzweig (1986), 'What's in a name? Country-of-origin influences on the earnings of immigrants in the United States', in O. Stark and I. Sirageldin (eds), *Research in Human Capital and Development 4, A Research Annual*, Greenwich, CT: JAI Press, pp. 75–106.
- Jasso, G. and M.R. Rosenzweig (1988), 'How well do U.S. immigrants do? Vintage effects, emigration selectivity, and occupational mobility of immigrants', in P.T. Schulz (ed.), *Research of Population Economics 6, A Research Annual*, Greenwich, CT: JAI Press, pp. 229–53.
- Jasso, G. and M.R. Rosenzweig (1990), *The New Chosen People: Immigrants in the United States*, New York: Russel Sage Foundation.
- Kossoudji, S.A. (1989), 'Immigrant worker assimilation: is it a labor market phenomenon?', *The Journal of Human Resources*, **24** (3), 494–526.
- Kuran, T. (1998), 'Ethnic norms and their transformation through reputational cascades', *Journal of Legal Studies*, **27** (2), 623–59.

- LaLonde, R.J. and R.H. Topel (1991), 'Immigrants in the American labor market: quality, assimilation, and distributional effects', *American Economic Review*, **81** (2), 297–302.
- LaLonde, R.J. and R.H. Topel (1992), 'The assimilation of immigrants in the U.S. labor market', in G. Borjas and R. Freeman (eds), *Immigration and the Work Force*, Chicago, IL: University of Chicago Press, pp. 67–92.
- Long, J.E. (1980), 'The effect of Americanization on earnings: some evidence for women', *Journal of Political Economy*, **88** (3), 620–29.
- Makabe, T. (1979), 'Ethnic identity scale and social mobility: the case of Nisei in Toronto', *The Canadian Review of Sociology and Anthropology*, **16** (2), 136–45.
- Manning, A. and S. Roy (2010), 'Culture clash or culture club: national identity in Britain', *Economic Journal*, **120** (542), F72–F100.
- Mason, P.L. (2004), 'Annual income, hourly wages, and identity among Mexican-Americans and other Latinos', *Industrial Relations*, **43** (4), 817–34.
- Massey, D.S. and N.A. Denton (1993), *American Apartheid: Segregation and the Making of the Underclass*, Cambridge, MA: Harvard University Press.
- Masuda, M., G. Matsumoto and G. Meredith (1970), 'Ethnic identity in three generations of Japanese Americans', *Journal of Social Psychology*, **81** (2), 199–207.
- Miller, P.W. and B.R. Chiswick (2002), 'Immigrant earnings: language skills, linguistic concentrations and the business cycle', *Journal of Population Economics*, **15** (1), 31–57.
- Mincer, J. (1974), 'Family investments in human capital: earnings of women', *Journal of Political Economy*, **82** (2), Pt2, S76–S108.
- Nekby, L. and M. Rödin (2010), 'Acculturation identity and employment among second and middle generation immigrants', *Journal of Economic Psychology*, **31** (1), 35–50.
- Ogbu, J. (1999), 'Beyond language: ebonics, proper English, and identity in a Black-American speech community', *American Educational Research Journal*, **36** (2), 147–84.
- Ottaviano, G.I.P. and G. Peri (2006), 'The economic value of cultural diversity: evidence from US cities', *Journal of Economic Geography*, **6** (1), 9–44.
- Phinney, J.S. (1990), 'Ethnic identity in adolescents and adults: review of research', *Psychological Bulletin*, **180** (3), 499–514.
- Phinney, J.S. (1992), 'The multigroup ethnic identity measure: a new scale for use with diverse groups', *Journal of Adolescent Research*, **7** (2), 156–76.
- Phinney, J.S., G. Horenczyk, K. Liebkind and P. Vedder (2001), 'Ethnic identity, immigration, and well-being: an international perspective', *Journal of Social Issues*, **57** (3), 493–510.
- Piore, M.J. (1979), *Birds of Passage: Migrant Labor and Industrial Societies*, Cambridge: Cambridge University Press.
- Ruble, B. (1989), 'Ethnicity and Soviet cities', *Soviet Studies*, **41** (3), 401–14.
- Russo, G. and E. van Hoof (2011), 'Identities, conflicting behavioural norms and the importance of job attributes', *Journal of Economic Psychology*, **32** (1), 103–19.
- Schoeni, R.F. (1998), 'Labor market assimilation of immigrant women', *Industrial and Labor Relations Review*, **51** (3), 483–500.
- Sen, A. (1977), 'Rational fools: a critique of the behavioral foundations of economic theory', *Philosophy and Public Affairs*, **6** (4), 317–44.
- Sjaastad, L.A. (1962), 'The costs and returns of human migration', *Journal of Political Economy*, **70** (5), pt 2, 80–93.
- Unger, J., P. Gallaher, S. Shakib, A. Ritt-Olson, P. Palmer and C. Johnson (2002), 'The AHIMSA Acculturation Scale: a new measure of acculturation for adolescents in a multicultural society', *Journal of Early Adolescence*, **22** (3), 225–51.
- United Nations Economic Commission for Europe (UNECE) (2006), *Conference of European Statisticians Recommendations for the 2010 Censuses of Population and Housing*, New York: United Nations.
- Zimmermann, K.F. (2007a), 'The economics of migrant ethnicity', *Journal of Population Economics*, **20** (3), 487–94.
- Zimmermann, K.F. (2007b), 'Migrant ethnic identity: concept and policy implications', *Ekonomia*, **10** (1), 1–17.
- Zimmermann, K.F., A.F. Constant and L. Gataullina (2009), 'Naturalization proclivities, ethnicity and integration', *International Journal of Manpower*, **30** (1–2), 70–82.
- Zimmermann, L., L. Gataullina, A. Constant and K.F. Zimmermann (2008), 'Human capital and ethnic self-identification of migrants', *Economics Letters*, **98** (3), 235–39.
- Zimmermann, L., K.F. Zimmermann and A. Constant (2007), 'Ethnic self-identification of first-generation immigrants', *International Migration Review*, **41** (3), 769–81.

