IZA Journal of Migration
a SpringerOpen Journal

ORIGINAL ARTICLE

Open Access

Ethnic identity: a theoretical framework

Gil S Epstein[1,2*] and Odelia Heizler (Cohen)[3,4]

* Correspondence:
gil.epstein@biu.ac.il
[1]Department of Economics, Bar-Ilan
University, 52900 Ramat-Gan, Israel
[2]IZA, Bonn and CReAM, London,
England
Full list of author information is
available at the end of the article

Abstract

We present a basic theoretical framework of ethnic identity, i.e., the level of immigrant's commitment to his or her host society as well as the immigrant's commitment to his or her home society. Our model can explain the emerging empirical literature which studies the effect of the immigrants' characteristics, such as age, gender, education, religion, age at arrival, stock of immigrants in the host country, etc., on their ethnic identity (such as the *Ethnosizer*). In addition, this paper can be used as a basis for future empirical and theoretical research on this topic.

JEL classification: F22, J15, Z13.

Keywords: Ethnic identification; Ethnosizer; Immigrants; Assimilation; Integration; Separation; Marginalization

Introduction

Immigrants experience high unemployment and earn less than natives in many countries. Since the seminal paper by Chiswick (1978), the economic literature has dealt with the immigrant–native gap in the labor market. This gap can be explained by differences in human capital, age, language skills, religious and ethnic origin, and time spent in the host country, among other characteristics. However, the actual immigrant–native gap still remains to be explored. Recent studies have used ethnic identification, i.e., the degree of the immigrant's identification with the culture and society of the host country and the country of origin to explain immigrant outcomes in the labor market. Ethnic identity can change after arrival, as opposed to ethnicity which remains a permanent characteristic of the source country. Over the last years, economists have begun to explore cultural and ethnic segregation using psychology and sociology of identity theories. For example, in a seminal work, Akerlof and Kranton (2000) consider how identity, a person's sense of self, affects economic outcomes.

Akerlof and Kranton (2000) define identity as a person's sense of self or self image, and his or her identity is bound to social categories; individuals identify with people in some categories and differentiate themselves from those in others. Ethnic identity is a measurement of the feeling of belonging to a particular ethnic group. Ethnic identity can be measured in different ways. One method of measurement is simply asking a respondent about his or her identity with the majority group and the respondent's ethnic group. Battu and Zenou (2010) used this method to examine the relationship between ethnic identity and employment in the British labor market.[1] Manning and Roy (2010) found that there is a large amount of variation across countries of birth, and

Casey and Dustmann (2010) also used this method in order to examine intergenerational transmission of identity.

A different method to measure the intensity of the individual's ethnic identity called *ethnosizer* was developed by Constant et al. (2009a). This measurement uses information on language, culture, social interactions, history of migration, and ethnic self-identification and can range from zero (full commitment to the host country) to one (full commitment to the country of origin).[2] Similar to Berry (1980), the two-dimensional version of the *ethnosizer* classifies immigrants into one of four states: integration, assimilation, separation or marginalization (see Figure 1). *Assimilation* (A) is a strong identification with the host culture and society coupled with a firm conformity to its norms, values, and codes of conduct, and a weak identification with ancestry. *Integration* (I) is achieved when an individual combines, incorporates, and exhibits both strong dedication to the country of origin and commitment and conformity to the host society. *Marginalization* (M) is weak dedication to or strong detachment from either the dominant culture or the culture of origin. *Separation* (S) is an exclusive commitment to the culture of origin, even years after emigration, paired with weak involvement in the host culture and country realities.

Information from a large range of countries is accumulating in the literature on the effect of ethnic identity on economic behavior, such as participation in the labor market, income, and household ownership.

Battu et al. (2007) presented a theoretical model of the relationship between oppositional identities among ethnic groups and employment in the labor market. They showed that ethnic preferences are predicted to reduce labor market successes, where preferences are gauged in terms of remoteness, or otherwise, to white norms. Battu and Zenou (2010) illustrated this using data from Britain. They found that non-white individuals with extreme preferences experience a 6 to 7% lower probability of being in

Source: Constant et al. (2009)

Figure 1 The *ethnosizer*.
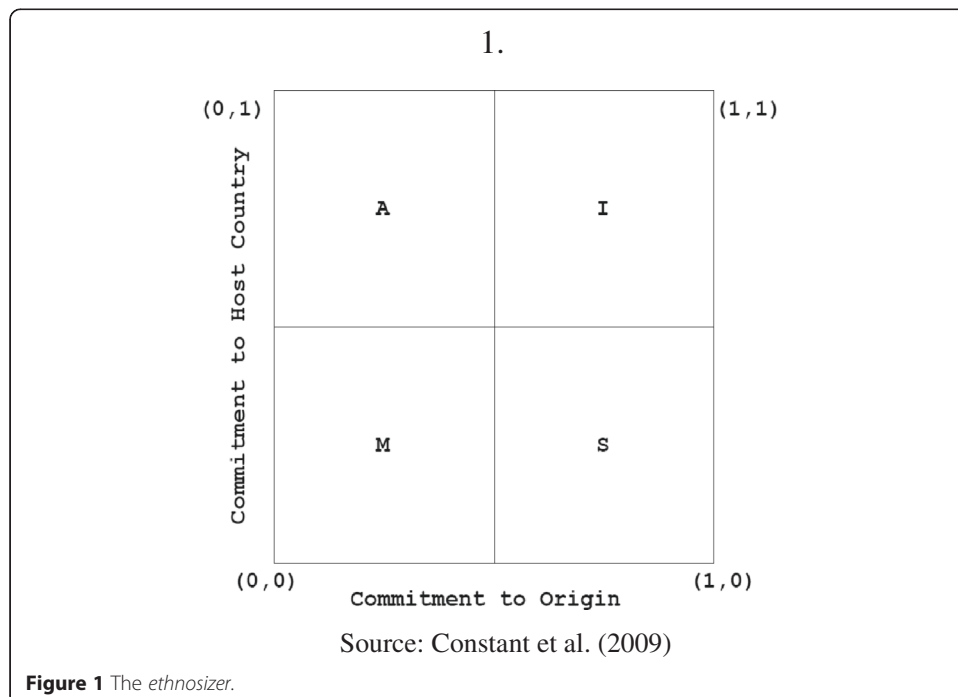
employment relative to those with less extreme views. Danzer and Ulku (2011), using data on Turks in Berlin, showed that a high degree of integration (which was a combination of political, social, and economic integration) positively and significantly affects the immigrants' income. In contrast, Casey and Dustmann (2010), using German panel data found no correlation between ethnic identity and various labor market outcomes including wages, participation, employment, and unemployment. However, they found strong intergenerational transmission of identity from one generation to the next.

There is also a rapidly growing literature on the effect of ethnic identification on economic behavior using the *ethnosizer* (see for survey, Constant and Zimmermann, 2008, 2013). Constant and Zimmermann (2009), using data from Germany, showed that immigrants (both men and women) who are separated and marginalized are less likely to work than those who are assimilated. Constant et al. (2011) found that separated migrants have a relatively slow reintegration into the labor market. Constant et al. (2006a) found that for immigrant men, preserving their attachment to the country of origin does not affect their probability of working, as long as they have a strong attachment to the host culture and society. Zimmermann (2007) showed that if male and female migrants are fully integrated, their earnings grow dramatically, but the increase in the females' earnings is higher. Full separation and full marginalization led to a decrease in labor earnings for both male and female migrants. Constant and Zimmermann (2009) did not find any significant effects of ethnic identity on immigrant workers' earnings. Constant et al. (2010) showed that reservation wages increase from first to second-generation migrants, but neither the ethnic identification or the *ethnosizer* does not explain much of this reservation wage gap. Constant et al. (2009b) found that assimilated or integrated households are more likely to own a house than those who are separated or marginalized.

Similar to the *ethnosizer*, Drydakis (2012), using data from Greece, suggested that ethnic identification is a combination of language, cultural habits (food, media, music and reading), self-identification, social interaction, and future citizenship plans. He found that assimilation and integration dramatically increase the immigrant's wage, whereas separation and marginalization decrease it. Gorinas (2014), using a Danish survey, extended the *ethnosizer* by developing *the modernization index* to measure openness to majority norms. He showed that immigrants, particularly first-generation immigrant women who share social norms with the majority experience significantly better employment outcomes but that immigrant employment is almost unaffected by ethnic identity.

This paper contributes to the rising literature on ethnic identification by offering a simple theoretical model to provide possible explanations for the different empirical results obtained in the literature. We also introduce new results that could be estimated empirically. The remainder of the article has the following structure. In the next section, we present the model. Section 3 presents the empirical illustrations of the model. The final section offers a discussion.

The model

Consider an immigrant who settles in a new country. To find a job, he or she needs assistance in his/her job search. A large number of studies have shown that social networks, i.e.,

friends and family, play a major role in job searches. The empirical evidence reveals that also in the advanced economies such as the U.S., the informal search methods are a key deterrent of labor prospects (for a survey, see Ioannides and Loury, 2004). Moreover, Kahanec and Mendola (2007) examined the effect of social networks on labor market status and show that the role of social networks may be especially pronounced for an immigrant minority group. Thus, it is assumed that the immigrant can find a job using two different methods: by investing efforts in creating networks with migrants who arrived before he or she did, c, and by investing efforts in creating networks with the natives, e.

The strength of the immigrant's social networks is a function of both the immigrant's personal contacts and his or her identification with the culture, norms, and values of the group. The level of the group's commitment to the individual increases with the individual's similarity to that group's members. Thus, the level of efficiency of the immigrant's investments, c and e, depends on the extent of the relationship between the immigrant and the members of the group. This relationship is affected by the migrant's language acquisition and adaption to the culture and values of the group, among others. Therefore, the immigrant's investments, c and e, represent his or her ethnic identification with the source society and the new society, respectively. It is assumed for simplicity that the immigrant's leisure time, T, is fixed. The immigrant therefore allocates part (or all) of his/her leisure time to creating social networks with immigrants as well as natives. The time required to create social networks with immigrants can differ from that required to create social networks with natives. Let β ($\beta > 0$) denote this difference. Clearly, creating social networks with migrants requires less investment than creating them with the local population ($\beta < 1$).

The probability of finding a job, p, depends on the immigrant's level of social networking and satisfies: $\frac{\partial p(e,c)}{\partial e} > 0, \frac{\partial p(e,c)}{\partial c} > 0, \frac{\partial^2 p(e,c)}{\partial e^2} < 0, \frac{\partial^2 p(e,c)}{\partial c^2} < 0$.

Let w denote the potential wage that the immigrants can receive in the host country. This wage depends on pre-immigration characteristics such as gender, education, religion, economic status, etc.

We normalize the cost of investing in the migrants' self-network to unity and the cost of investing in the natives' network by α ($\alpha > 1$). α depends on the cultural distance between the host country's and source country's societies. Denote this distance by d. α also depends on the immigrant's different characteristics, such as age and gender. We denote these characteristics by α.

The expected utility of the immigrant is given by:

$$E(u) = p(e,c) \cdot w - c - \alpha(d,a) \cdot e \tag{1.1}$$

s.t.

$$c + \beta e \leq T \tag{1.2}$$

Below, we assume that the time constraint is not bounding, i.e. $c + \beta e < T$. We develop the results for a bounding time constraint in the appendix and show that the main results do not change.

The optimal investment in the migrants' network, c^*, and the optimal investment in the natives' network, e^*, satisfy:

$$\frac{\partial E(u)}{\partial e} = \frac{\partial p(e,c)}{\partial e} \cdot w - \alpha(d,a) = 0$$
$$\frac{\partial E(u)}{\partial c} = \frac{\partial p(e,c)}{\partial c} \cdot w - 1 = 0$$

(1.3)

From (1.3), in equilibrium, it must hold that:

$$\frac{\partial p(e,c)}{\partial e} = \frac{\alpha}{w}$$
$$\frac{\partial p(e,c)}{\partial c} = \frac{1}{w}$$

(1.4)

We assume that the migrants have a relatively smaller population than the local population, and there is therefore a higher return for being part of the natives' network than for being part of the migrants' network. In addition, the type and the quality of the jobs provided by immigrant networks is different than the jobs provided by the native networks (see Kahanec and Mendola, 2007). Let $\lambda(\lambda < 1)$ denote the efficiency of investing in the migrant network vs. the native network. Thus:

$$\frac{\partial p(e,c)}{\partial c}|_{e=c} = \lambda \frac{\partial p(e,c)}{\partial e}|_{e=c}$$

(1.5)

Moreover, as the stock of immigrants in the host country, N, increases, the effectiveness (efficiency) of investing in the migrants' network increases: $\frac{\partial \lambda}{\partial N} > 0$.

Whether the investment in the migrant network is higher or lower than in the native network depends on the relationship between $\frac{\alpha}{w}$ and $\frac{1}{w}$ and the relationship between $\frac{\partial p(e,c)}{\partial e}$ and $\frac{\partial p(e,c)}{\partial c}$. Thus, whether an immigrant will invest more in one network than the other depends on the relative cost and benefit from these investments such that (see Figure 2):


Figure 2 The optimal investment in migrants' and natives' networks.
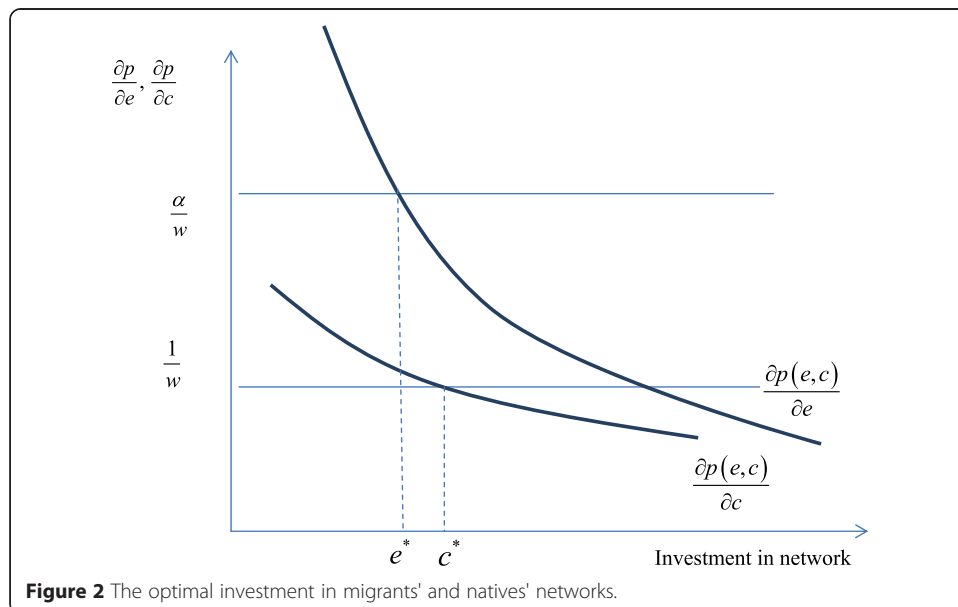
$$if \ \alpha > \frac{1}{\lambda} \ than \ c^* > e^*$$
$$if \ \alpha = \frac{1}{\lambda} \ than \ e^* = c^*$$
$$if \ \alpha < \frac{1}{\lambda} \ than \ e^* > c^*$$

Comparative statics

Let us try to understand the implications of the above results. As noted, the relative cost, α, is affected by cultural distance, d, and personal characteristics, α. The first component, cultural distance, is created by different languages, ethnicities, religions and social norms (see Ghemawat, 2001, Adsera and Pytlikova, 2012). Clearly, as the cultural distance between the source society and host society increases, the immigrant's need to invest more effort to integrate into the host society also increases; thus, the relative cost, α, increases. The second component, personal characteristics, includes the immigrant's age at entry and his or her ability to create social networks. As the immigrant's age increases, his or her ability to acquire the new language and the new social norms decreases, and thus the relative cost, α, increases (see, for example, Chiswick and Miller 2005).

Now suppose that the cultural distance between the host society and the source society, d, increases or, alternatively, that the immigrant's age at arrival increases such that the relative cost of investment in the native compared to migrant network, α, increases. Looking at Figure 3, $\frac{\alpha_0}{w}$ increases to level $\frac{\alpha_1}{w}$, and thus the immigrant's optimal investment in the native network decreases from e_0^* to e_1^*, whereas his or her optimal investment in the migrant network does not change. In other words, cultural distance between the host country and the home country or an older age on arrival decreases the ethnic identity with the host society. In term of the *ethnosizer*, cultural distance between the host country and the home country or an older age at arrival causes *marginalization* (if c_1^* is low) or *separation* (if c_0^* is high).

As shown above, the potential wage that immigrants can receive in their host country depends on pre-immigration characteristics such as gender, level of education,
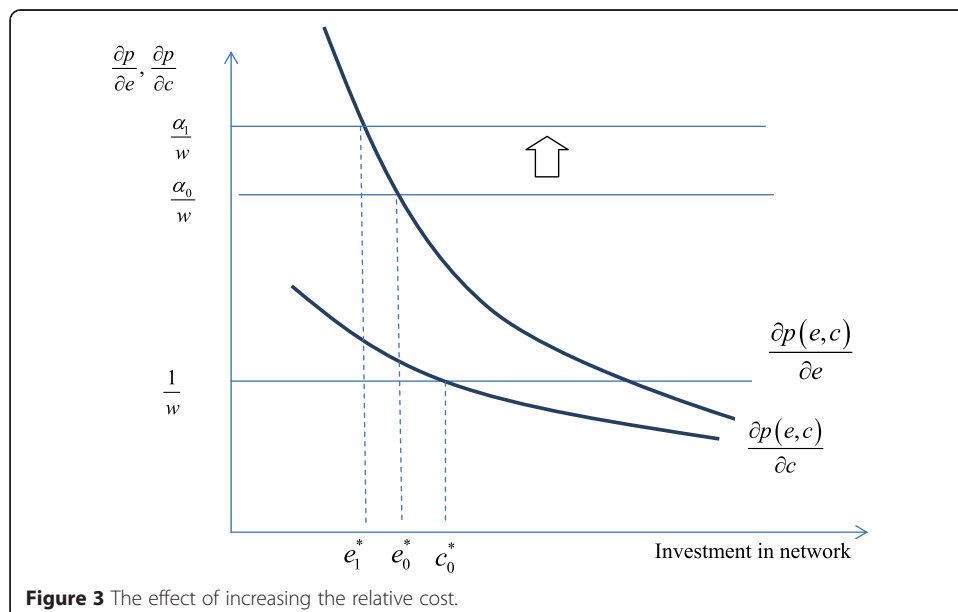

Figure 3 The effect of increasing the relative cost.

Figure 4 The effect of increasing the wage.
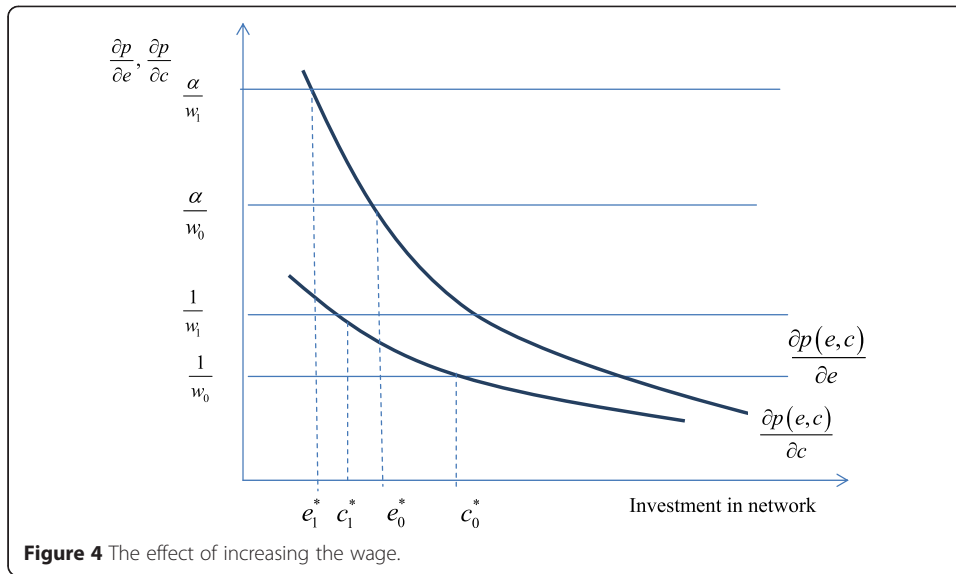
experience, etc. Take two individuals who differ in their gender or education: the first can earn w_0, whereas the second can earn w_1 ($w_0 > w_1$). Figure 4 shows that the individual with the high potential wage (which derives from college and higher education or vocational training in the source country) increases ethnic identity with the host society as well as the source society. In term of *ethnosizer*, a high potential wage at entry decreases *separation* and *marginalization*.

Finally, suppose that the efficiency level of the relative investment in the immigrant's network, $\lambda(N)$, increases. This can happen, for example, when the stock of migrants in the host country increases, thus enabling immigrants to obtain more information on the job market. It also can happen when the political strength of the minority group increases as result, for example, of the election of a minority member to parliament. It is easy

Figure 5 The effect of increasing the efficiency level of migrants' networks.
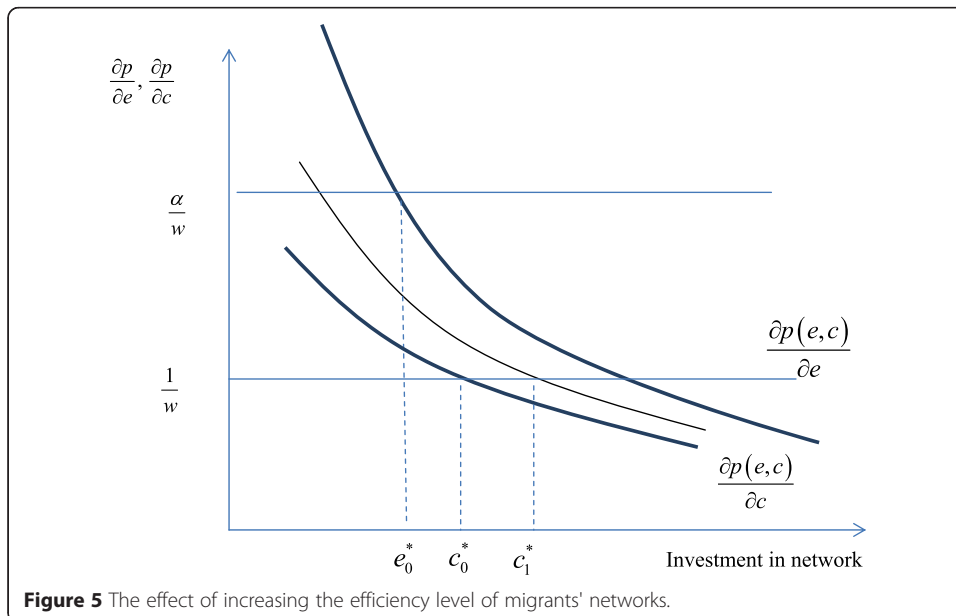
to see from Figure 5 that the immigrant will increase his/her investment in the migrant network from c_0^* to c_1^*, whereas the investment in the native network will not change. It is thus expected that when the stock of immigrants in the host country increases or the minority's political strength increases, the ethnic identity with the source society will increase. In term of *ethnosizer, separation* or *integration* will be obtained. This is consistent with the findings of Constant et al. (2009a) and Constant et al. (2006b) of differences in the ethnic identity of different groups that can be followed by the size and political strength of the groups in the host country.

Empirical evidences

Let us now empirically illustrate these results. We found that the cultural distance between the host country and the home country increases the relative cost of investing in natives' network and thus decreases the ethnic identity with the host society. In their pioneering article, Constant et al. (2009a) demonstrated characteristics that affect the immigrant's state of ethnic identification, i.e., integration, assimilation, separation and marginalization, using data from Germany. Our model explains the results of Constant et al. (2009a), showing that ex-Yugoslavs, who had a smaller cultural (linguistic) distance from Germany than Turks, Greeks, Italians or Spaniards, assimilated better. Christianity is the main religion in Germany; thus, most likely the cultural distance of Muslims from the local population in Germany would be higher than the cultural distance of Christians. Our model also explains the results of Constant et al. (2006b), showing that Muslims are less integrated and more separated than the Christians. Christian immigrants with a college or higher education from their home country integrated well, whereas Muslims did not.

We also found that personal characteristics which decrease the relative cost of investing in the natives' network decrease the ethnic identity with the host society. The personal characteristics contain: age at arrival, years since migration, birth in the destination country, and ability to acquire the new language. If the individual stays in the destination country for a long time or he was born in the destination country after his parents immigrated, then his ethnic identity with the host society will increase. We can use this outcome to explain the following results: Battu and Zenou (2010) examined five variables of oppositional ethnic identity using data from Britain. They found that individuals who were born in the UK are associated with a less oppositional stance for three of the identity variables. In addition, as one would expect, the longer an individual has been in the UK, the less hostile they would be to the native British population. Manning and Roy (2010) also studied the British identity among those living in Britain. They found that the vast majority of those born in Britain think of themselves as British, whereas newly arrived immigrants almost never think of themselves as British. But the longer they remain in the UK, the more likely it is that they do. Casey and Dustmann (2010) also predicted that years since migration increases the identity with the host society but decreases the identity with the source society for both males and females in Germany. Constant et al. (2009) found that as the age at arrival increases, separation and marginalization increase, while integration and assimilation decrease.

Another result which stems from our model is that an individual with a low potential wage has less ethnic identity with the host country as well as with the home country.

This explains the result presented by Constant et al. (2009) on the effect of education and experience upon entry into the host country on the immigrant's ethnic identification: low levels of education in the home country result in a stronger attachment to the source society, but college education produces the opposite effect. Constant et al. (2006b) also found that Christian immigrants with a college or higher education from their home country integrated well. It is expected also that females, who usually work part-time and get paid less than men assimilate less than males (see, Machin and Puhani, 2003). Constant et al. (2006b) also showed female Muslims integrated and assimilated less, and separated more, than Muslim men. Casey and Dustmann (2010) found that education is associated with stronger identity with the host society and negatively associated with ethnic minority identity.

Finally, from our model, it seems that when the stock of immigrants in the host country increases, the ethnic identity with the source society will increase. It supports what Constant et al. (2013) found, that residential ethnic clustering strengthens immigrants' identification with the origin and weakens identification with the host society, using data from Germany. They showed that living in an area where fellow co-ethnic immigrants tend to cluster appears to reduce the likelihood of an immigrant's self-identification with the host country society. Residential ethnic clustering strengthens immigrants' affiliation with the respective country of origin.

Discussion

In this paper, the effects of gender, source country, religion, age at arrival, education level and experience in the source country on the immigrant's ethnic identification in the host country are explained. Specifically, we provide some theoretical explanations for the different empirical results presented in the literature on ethnic identification (for example, Constant and Zimmermann, 2013; Constant et al., 2009a; Constant et al. 2006b; Battu and Zenou 2010).

In our model, the immigrant decides simultaneously the level of commitment to the host and source country societies given the cost of investing in the migrants' self-network is higher than the cost of investing in the natives' network. The total time invested with regard to the different social networks (host and origin country networks) is optimally chosen. In our model, the individual benefits only from wages and thus divides his time between labor force participation and investing time in creating social networks. While this assumption has enabled us to understand many of the empirical results presented in the literature, there are still many open questions, such as what would happen if the migrant also benefits from leisure (spent with other migrants and natives). Another limitation of our model is that social networks established with the host society depend only on the migrant's efforts and not a function of the majority group's attitude (see Epstein and Gang, 2009, 2010). It will be interesting to examine how the degree to which the majority welcomes the minority affects the migrant's ethnic identity.

This paper not only sheds light on a great deal of empirical results, but it also suggests some avenues for future research, both theoretical and empirical – for example, the effect that the stock of immigrants has on the immigrant's ethnic identification. From our model, it stems that when the number of the immigrants from the immigrant's source country in his living area increases, the ethnic identity with the source society will increase. It is thus expected that the level of ethnic identity of identical

immigrants (i.e., which have the same age, gender, education, experience etc.) who immigrate in different periods will be different. Moreover, it is expected that the first immigrants have more ethnic identity with the host society, while the following immigrants have more ethnic identity with the source society. It will be interesting to study the residential ethnic clustering which causes a change in the state of ethnic identity. There are also many other issues to explore as well, such as the effect the political strength of the immigrant's minority group has on his ethnic identity.[3] From our model, we can derive that when the political strength of the minority group increases relative to the majority group, the ethnic identity with the source society will increase.

Endnotes

[1]Ethnic identification was captured by asking the respondents if they agreed or disagreed to the following: "In many ways, I think of myself as being [respondent's majority group in the host country]" and "In many ways, I think of myself as [respondent's ethnic group]".

[2]There are two versions of *ethnosizer*: the one-dimensional and the two-dimensional. In the former, a stronger commitment to the host country necessarily implies a weaker connection to the country of origin and vice versa. However, when considering the second version, the *ethnosizer* measurement allows simultaneous intensification of connections to the host and source countries.

[3]These would also have an effect on the policies of the economy of migration (Epstein, 2013).

Appendix

The case of a bounding time constraint, i.e., $c + \beta e = T$

The optimal investment in the native network, e*, satisfies:

$$\frac{du}{de} = \frac{\partial u}{\partial e} + \frac{\partial u}{\partial c}\frac{\partial c}{\partial e} = \frac{\partial p}{\partial e}w - \beta\frac{\partial p}{\partial c}w - \alpha + \beta = 0 \tag{1.6}$$

From(1.6), it follows that:

$$\frac{\partial p}{\partial e} = \frac{\alpha}{w} - \frac{\beta}{w} + \beta\frac{\partial p}{\partial c} \tag{1.7}$$

Using the optimal investment of immigrants in the local population, $\frac{\partial p}{\partial c} = \frac{1}{w}$, we get:

$$\frac{\partial p}{\partial e} = \frac{\alpha}{w} \tag{1.8}$$

It is clear that the optimal investment in the native network with the effective time constraint (as presented in (1.8)) is equal to that without this time constraint.

Author details
[1]Department of Economics, Bar-Ilan University, 52900 Ramat-Gan, Israel. [2]IZA, Bonn and CReAM, London, England. [3]Department of Economics and Management, Tel-Aviv-Yaffo Academic College, Tel-Aviv-Yaff, Israel. [4]IZA, Bonn, Germany.

References

Adsera A, Pytlikova M (2012) "The role of language in shaping international migration". The Economic Journal. forthcoming. In press.

Akerlof GA, Kranton RE (2000) Economics and Identity. Q J Econ 115(3):715–753

Battu H, Mwale M, Zenou Y (2007) Oppositional identities and the labor market. J Popul Econ 20(3):643–667

Battu H, Zenou Y (2010) Oppositional Identities and Employment for Ethnic Minorities: Evidence from England. Econ J 120(542):F52–F71

Berry J (1980) Acculturation as Varieties of Adaptation. In: Padilla AM (ed) Acculturation: Theory, Models and Some New Findings. Boulder, CO, Westview, pp 9–25

Casey T, Dustmann C (2010) Immigrants' identity, economic outcomes and the transmission of identity across generations. Econ J 120(542):F31–F51

Chiswick BR (1978) The Effect of Americanization on the Earnings of Foreign-Born Men. J Political Econ 86:897–922

Chiswick BR, Miller PM (2005) Do Enclaves Matter in Immigrant Adjustment? City Community 4(1):5–35

Constant A, Gataullina L, Zimmermann KF (2006a) "Gender, Ethnic Identity and Work", IZA Discussion Paper No. 2420.

Constant A, Gataullina L, Zimmermann KF (2009a) Ethnosizing Immigrants. J Econ Behav Organ 69(3):274–287

Constant A, Gataullina L, Zimmermann L, Zimmermann KF (2006b) "Clash of Cultures: Muslims and Christians in the Ethnosizing Process", IZA Discussion Paper No. 2350.

Constant A, Kahanec M, Rinne U, Zimmermann KF (2011) Ethnicity, Job Search and Labor Market Reintegration of the Unemployed. Int J Manpow 32:753–776

Constant A, Schüller S, Zimmermann KF (2013) Ethnic Spatial Dispersion and Immigrant Identity. IZA, Bonn, IZA DP No. 7868

Constant A, Krause A, Rinne U, Zimmermann KF (2010) Reservation Wages of First and Second Generation Migrants. IZA, Bonn, IZA DP No. 5396

Constant A, Roberts R, Zimmermann KF (2009b) Ethnic Identity and Immigrant Homeownership. Urban Stud 46(9):1879–1898

Constant A, Zimmermann KF (2008) Measuring Ethnic Identity and Its Impact on Economic Behavior. J Eur Econ Assoc 6(2–3):424–433

Constant A, Zimmermann KF (2009) Work and Money: Payoffs by Ethnic Identity and Gender. Res Labor Econ 29:3–30

Constant A, Zimmermann KF (2013) "Immigrants, Ethnic Identities and the Nation-State." In:Constant, A. and Zimmermann, K.F. (Eds). International Handbook on the Economics of Migration. Edward Elgar, 259–275. ISBN 978-1-84542-629-3.

Danzer AM, Ulku H (2011) Integration, Social Networks and Economic Success of Immigrants: A Case Study of the Turkish Community in Berlin. Kyklos 64:342–365

Drydakis N (2012) Ethnic Identity and Immigrants' Wages in Greece. Int J Intercultural Relat 36:389–402

Epstein GS (2013) "Issues on the Political Economy of Migration" in International Handbook on the Economics of Migration, A. Constant and K. F. Zimmermann (eds), Edward Elgar: Edward Eglar Publishing Limited, Cheltenham, UK; ISBN 978-1-84542-629-3.

Epstein GS, Gang IN (2009) Ethnicity, assimilation and harassment in the labor market. Res Labor Econ 79:67–90

Epstein GS, Gang, IN (2010) "A Political Economy of the Immigrant Assimilation: Internal Dynamics" in Gil S. Epstein, and Ira N. Gang, (Eds), Migration and Culture: Frontiers of Economics and Globalization, volume 8, Emerald Group Publishing Limited, Howard House, Wagon Lane, Bingley BD16 1WA UK.

Ghemawat P (2001) Distance Still Matters: The Hard Reality of Global Expansion. Harv Bus Rev 79(8):137–147

Gorinas C (2014) Ethnic Identity, Majority Norms, and the Native–Immigrant Employment Gap. J Popul Econ 27:225–250

Ioannides YM, Loury LD (2004) Job Information Networks, Neighborhood Effects, and Inequality. J Econ Lit 42(4):1056–1093

Kahanec M, Mendola M (2007) Social Determinants of Labor Market Status of Ethnic Minorities in Britain. Res Labor Econ 29:167–195

Machin S, Puhani PA (2003) Subject of degree and the gender wage differential: evidence from the UK and Germany. Econ Lett 79(3):393–400

Manning A, Roy S (2010) Culture Clash or Culture Club? National Identity in Britain*. The Economic Journal 120(542):F72–F100

Zimmermann KF (2007) "Migrant Ethnic Identity: Concept and Policy Implications." The Cyprus Economic Society Annual Lecture in Economics. IZA Discussion Paper No. 3056.