Outline of an Economic Theory of Assimilation

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Abstract. In an age of mass immigration, assimilation is critical not only to the success of the immigrants but also to the success of their descendants and of the host society. This paper presents an outline for an economic theory of assimilation based on the assumption that both immigrants and natives invest in assimilation, that both may in fact move in the direction of the "other," and that the notion of "distance" is subjective and reversible.

1. Introduction

We live in an age of mass immigration from poor to advanced industrialized nations (see OECD 2005 and previous years). A few countries, particularly Ireland and Greece, have moved from having been countries of emigration to having become countries of immigration in a very short time (OECD 2005 and previous years). The adjustment of large numbers of immigrants to their host societies, and of natives to newcomers, presents a significant challenge (e.g., Bauer, Loefstrom, and Zimmermann 2000; Brouard and Tiberj 2005; Heil, Smallen, and Mitchell 2005). How host societies meet this challenge may determine the success or failure of present and future generations and have implications for long term economic and social progress. Recent rioting in France (e.g., Laurence and Vaisse 2005) and clashes in Australia underline the significance of assimilation.

In the United States, immigration of a magnitude unprecedented since the late nineteenth and early twentieth centuries has triggered a debate about the new immigrants (e.g., Borjas 1987, 1990, 1994, 1999; Chiswick 1978, 1986, 1999). Because of their largely non-European origins, there are also concerns over their assimilation (e.g., Broder 2006; Carliner 2000; Portes and Zhou 1994).

While economists have made a large contribution to the analysis of economic impacts of immigration, they have paid less attention to assimilation, with most of their attention being focused on individuals’ characteristics that help or hinder the assimilation process in the labor market. However, assimilation outcomes are determined by both individual and collective decisions, on the one hand, and by the immigrant and by the native populations, on the other. This paper is an attempt to outline the elements of a more general economic model of the assimilation process. It builds on concepts developed in an extensive literature in sociology that was reviewed by Alba and Nee (1997).

Individuals go through this process of assimilation with varying success. As a result of mass immigration, society as a whole also goes through a process that changes it and may bring it a bit closer to the immigrant population, or that may take it farther from the immigrant population. Some of these changes are visual, such as the change of formerly homogenous populations in European cities to multiethnic ones, the construction of mosques, and the appearance of new types of shops, restaurants, and other ethnic businesses. There may also be cultural changes as large groups bring their festivals and celebrations, movies, and their language.

Usually, trends toward greater closeness and greater distance between immigrant and native populations occur simultaneously. Movement forward and backward is subjective and can be reversible, sometimes after generations. When Hitler came to power, Jews in Germany were among the best integrated in Europe. They were represented in the army’s officer corps and among the players of the national soccer team. They were successful in business, and among the artistic and intellectual elites. In a very short time,
the assimilation represented in these achievements was reversed and turned into rejection and alienation, and far worse.

In general, immigrants and their descendants become more similar to natives over time by improving their language skills and acquiring local human capital. They may also become more similar to natives in their legal status by obtaining long-term residency and work permits, or by becoming naturalized citizens. The host society is not left unchanged by mass immigration. It may influence school services needed (bilingual education), or even foreign policy (e.g., relations between the United States and Mexico are influenced by the large number of Mexican immigrants in the U.S.). Some changes, such as the proliferation of ethnic restaurants, bring the host society and immigrant society closer together, while other changes may drive them farther apart. For example, concerns over the increasing influence and use of Spanish in the United States motivated passage of Official English (also referred to as English Only) legislation in twenty-five states; although the laws of Alaska and Arizona were overturned by the courts as unconstitutional. In Europe, worries over immigration have been manifested to some degree by anti-immigration politics.

Assimilation is not completed with naturalization and a naturalized citizen cannot count on being accepted by all in the new home county. For example, the Swiss media regularly used to print news stories that referred to, for example, a “Turk with a Swiss passport.” Such language, published in some of country’s most respected news media, implies that it is possible to become a citizen, but not to become truly “Swiss.” Such attitudes are likely to influence the perceptions of immigrants and their descendants of their acceptance and therefore shape the assimilation process and its outcome.

This paper provides an outline of an economic theory of assimilation. Because of the complexity of the assimilation process, we are starting with a largely descriptive model, explaining the elements and features of a model of assimilation. The balance of this paper is organized into five sections. In the next section, we introduce the basic model. This is followed by a discussion of the decision to invest in assimilation. The next section for the first time extends the horizon to include assimilation across generations. A brief discussion of measures of assimilation and a summary and conclusion section complete the paper.

2. The Model

To describe the process of assimilation, we first define what sets immigrants and natives apart. To this end we introduce a “distance function” $d_i(\cdot)$, where $i = N$ or $F$, and $N$ stands for native and $F$ for foreign origin. We assume that $0 \leq d_i(\cdot) \leq 1$, where a value of 0 indicates complete assimilation and a value of 1 indicates complete alienation. “Distance” is not an objective measure of characteristics as in so many migration studies of specific groups (e.g., Cebula, Kohn, and Vedder 1973), but one of perceived differences between natives and immigrants.

Assimilation occurs at the individual and collective level, and the two levels are interrelated. The story recently told by John Kantara (2006) illustrates the possible conflicts between individual and collective assimilation based on perception differences. John’s father is from Ghana and was a student in Germany when he met, fell in love with, and married a German woman. When John was born he was by birthright a German citizen. Because of his skin color, however, he has experienced prejudice and many people automatically assume that he is not German. Even when he reported for duty in the military he had to persuade the guard that he did indeed “belong.” Here is a native citizen, highly educated and successful, who would blend in, that is, be assimilated, but because of the color of his skin is regularly experiencing rejection. That is why his article starts with the sentence “Why is it so difficult, to love this country (Kantara 2006: 1)?” His reaction demonstrates that an individual’s negative experiences have the potential to turn perceptions of distance by members of the other group into reality.

The distance measures for assimilation at both levels, individual and collective, are essentially the same, except that in individual cases the appropriate explanatory variables should reflect the individual’s characteristics with respect to human capital, religion, economic status, and so forth (equation (1)), while in the aggregate case, they should reflect the average or representative immigrant (and/or descendent) and native, respectively. In this paper we will limit ourselves to presenting the equations for the representative individual, since we are interested in mass immigration and large scale assimilation processes. For this, the collective measure is the more critical.

Since the two populations do not share the same backgrounds and experiences, it is likely that small differences in perceptions can persist for awhile, so that $d_N \neq d_F$ would not be unusual. However, large differences cannot persist for long, since interactions between the two groups reveal information to each group about the other group’s perception. In expression (1), $d_{ij}$ measures how a representative member of group $i$ thinks that a representative member of group $j$ perceives the distance between the two groups as shown below in equation (1).
For our outline of a theory, we represent human capital by a single variable, though in reality human capital has multiple dimensions. The empirical literature shows that language skills are particularly important to immigrants’ success in their new society (e.g., Friedberg 2000, Schaeffer and Bukenya 2005). In general, immigrants with internationally recognized degrees will have more of their human capital accepted in the host country than other immigrants. We therefore assume that \(d_i\) increases with the human capital difference between natives and immigrants, \(H_N - H_F\).

\(K_N - K_F\) represents a measure of differences in religion, foods, appearance, job/position held, economic status, and so forth (see Djajić 2003 for a discussion of the multi-dimensional nature of assimilation). Even more than in the case of human capital, for empirical research, different measures would have to be developed to obtain meaningful results. For the purpose of outlining an economic theory of assimilation, however, using a single measure is an acceptable simplification. We expect \(d_i\) to be positively related to the difference \(K_N - K_F\).

\(L\) denotes legal status and rights and \(L_N - L_F\) represents differences between natives and immigrants and refers to citizenship or visa status, voting, employment, residence, and other rights. As before, we expect a positive relationship between distance and the difference in the rights of natives vs. the rights of residents of foreign origin.

\(F\) is the number of immigrants and/or their descendants. For simplicity we assume that all immigrants have the same origin, otherwise we need to adjust \(F\) to reflect the diversity of the immigrant population (and their descendants).

The impact of \(F\) on \(d_i\) could be negative or positive. While larger numbers of immigrants make for more opportunities for natives and immigrants to interact and become familiar with each other, which should decrease the perceived distance, a growing population of immigrants and their descendants might be perceived by the native population as a threat to established customs and language, resulting in reduced willingness to accept cultural differences. This could leave \(d_i\) unchanged or, if immigrants’ unwillingness to adapt leads to conflicts with natives, it may increase. Since a large \(F_i\) particularly if the immigrant population is also geographically concentrated, could result in a relatively self-sufficient sub-culture in the form of ethnic enclaves, on balance the impact of \(F\) on \(d_i\) is more likely to be negative than positive.

\[d_i = d_i \left(d_i - d_f, H_N - H_F, K_N - K_F, L_N - L_F, F_i, I_i, i = N \text{ or } F, i \neq j\right)\]

\[d_i = d_i \left(|d_i - d_f|\right) \text{ for } i = N, F \text{ and } i \neq j.\]

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Natives perceive of no differences between themselves and immigrants if \(d_i = 0\). Similarly, immigrants consider themselves as completely assimilated if \(d_i = 0\). Thus, \(d_N = d_F = 0\) signals the achievement of perfect assimilation. However, given the subjective nature of the distance measure and objective differences among people, it is impossible to reach perfect assimilation. Also, some differences cannot be changed, such as the color of the skin. Differences persist not only between, but within groups, as well. In practice, therefore, there seems to be a distance \(d_i > 0\) that represents a satisfactory level of assimilation.

Successful multicultural and/or multiethnic societies accept and respect differences between individuals and groups, while previously homogenous societies that have become multicultural only recently because of mass immigration may find this difficult to accept. Similarly, citizens of homogenous societies when first faced with mass immigration from ethnically and culturally different regions may perceive the differences between them and the newcomers to be greater than citizens of heterogeneous societies who are accustomed to living with people of different backgrounds and characteristics.

We assume that \(d_i\) can be changed by investing in assimilation (see equation (1)). The cost of assimilation is a function of how much an individual seeks to reduce distance. The cost consists of investing in immi-
Again, B_i represents the benefits of either group where C_i represents the cost for natives and immigrants, respectively. The social cost is then given by the sum C_N+C_F. We assume that \( \frac{\partial C_i}{\partial d_i} < 0 \). The influence of F on cost is ambiguous. A large ethnic community may reduce opportunities to interact with natives and therefore reduce opportunities to practice and improve language skills. Conversely, such a community could be a source of support and knowledge by those who came before and are available to help newcomers make the transition to the host society. While reducing d_i is costly, it also generates benefits B_i.

\[
B_i = B_i(d_i, d_j, F), \; i = N \text{ or } F, \; j = N \text{ or } F, \; i \neq j.
\]

Again, B_i represents the benefits of either group and B_N+B_F is the social benefit. Although we assume that \( \frac{\partial B_i}{\partial d_i} < 0 \), in general, we cannot exclude exceptions. For example, if immigrants’ enhanced employment rights enable them to compete more effectively for jobs, not all natives will experience such a decrease in “distance” as beneficial. For immigrants, too, not all adjustments required will necessarily be welcomed. For example, immigrant Muslim families may struggle with the host society’s expectations of the role of women versus the traditions within which that they grew up. This may also result in intergenerational conflict within immigrant families. The Turkish-German movie “Head On” (German title of movie is “Gegen die Wand,” “Against the Wall”) provides an artist’s insight in the tensions of living between cultures that may be encountered by members of the second generation, in particular (Akin 2004). More generally, the successes of a number of movies with immigrant themes in the United States, Germany, and Switzerland are an indication of the general public’s awareness of and interest in issues related to mass immigration.

The social benefits and costs are the sum of many individual benefits and costs, not just of people, but also of public and private organizations with a stake in assimilation. Unfortunately, all of these interests are not necessarily in harmony. While most of the focus is on disharmony between goals of natives and immigrants, within group conflicts are also not unusual and can occur, for example, when established immigrants feel their gains threatened by newcomers.

We will ignore the possibility of within group conflict and measure tension between native and immigrant populations by the difference \( d_N - d_F \). If it is zero, the perceptions of the two populations of the degree of assimilation coincide. This does not mean that there are no problems, but that they are viewed through the same lens by both populations. If this is the case, they should find it easier to agree on programs and policies to ameliorate or solve them than otherwise. It is clear, however, that the existence of tension will impact assimilation, as explained earlier.

### 3. Investing in Assimilation

Since both natives and immigrants are affected by assimilation, both have an incentive to invest in changing \( d_i \) as evident from equations (3) and (4). This is a case of joint production (Beattie and Taylor 1985) because a change in \( d_N \) also changes \( d_F \) and vice versa. This would not be a problem if decisions about the level of \( d_i \) were coordinated. In that case the outcome would be Pareto Efficient. However, decisions are made by many different individuals, natives and immigrants, and by many different institutions, including employers, schools, governments at all levels, and religious institutions. This situation virtually guarantees that the level of assimilation achieved will not be socially optimal.

In addition there is the problem of different perceptions. For example, assume that \( d_N > d_F \), which means that natives perceive immigrants as being less assimilated than the latter see themselves. If the difference is large, this could lead to frustration and disappointment on the part of the immigrant population, who may feel that their efforts at assimilation are poorly rewarded because of the feedback they receive from the native population. This would serve as a disincentive to additional investment in assimilation.

In the opposite case of \( d_N < d_F \), if natives overestimate the assimilation of immigrants, both the immigrant and the native population may end up frustrated. The former will be asked to do more than they are capable of, and the latter will end up with unmet expectations.

When considered as a game, investing in assimilation has aspects of a prisoners’ dilemma. Both foreigners and natives (considered as groups) know that investing in assimilation is beneficial. But because investing in lowering \( d_N \) also lowers \( d_F \) and vice versa, each group has an incentive to wait for the other to take the initiative and bear more of the cost. The host country government can apply leverage to encourage
foreign residents to invest in assimilation, but much of this leverage is gone once the immigrant is naturalized.

The nature of the game is determined by the prevailing attitudes and values toward immigrants and assimilation in the host society (Gans 1997). If the host society values a homogenous culture and assigns all the responsibilities for adjusting to the immigrants and expects them to strive to become as similar to natives as they possibly can, then the game resembles a zero sum game as any gain in assimilation comes at the loss of the immigrants’ previous identity. By contrast, a society that values diversity and is therefore willing to incorporate some of the culture of the immigrants and make it part of its own turns the game into a positive sum game. The former approach is what we see in homogenous countries that have only recently become large immigrant destinations. The latter approach is more common in multicultural societies such as the United States or Canada, and seems to be slowly gaining support in European immigration destinations.

The outcome of the game will be influenced by the spatial concentration of the immigrant communities. If they are spatially concentrated, they tend to be linguistically and culturally more self-sufficient. Thus, waiting for the host government to subsidize assimilation is a workable strategy both because of political power and because of efficiencies in the delivery of services, which are absent if the immigrant population is dispersed across the host country.

Policy toward immigrants and assimilation can also usefully be thought of as a game. Because immigrants are usually unevenly distributed across the nation, there is a regional dimension to assimilation. The interests of sub-national governments may differ according to the concentration and type of immigrant population present. But work permit, residency, and naturalization laws are jointly determined at the national level by representatives from all regions. Thus, national laws reflect a compromise between sometimes competing interests. The likelihood that the outcome will be suboptimal increases the more unequal the distribution of immigrants, with a few regions having a very large but most regions having only a very small immigrant population.

The smaller the immigrant population as a percent of the total population, the smaller will be the externality from either its success or failure to assimilate. Hence, in regions with few immigrants, the incentive for public support for assimilation measures is smaller than in regions with many immigrants. If assimilation policy is made exclusively at the national level then the outcome could be suboptimal laws and programs that are “too generous” in some and “not generous enough” in other regions, based on the concentration of immigrant populations.

The conclusion of this brief discussion is that, in practice, an optimal assimilation policy is a highly unlikely outcome. It relies on decisions by individuals, mostly immigrants, different levels of government as outlined above, and other organizations representing immigrants and their descendants and/or natives, respectively. No mechanism exists to harmonize these overlapping and competing interests.

4. Intergenerational Concerns

Until now we have considered only the assimilation of immigrants. From society’s perspective, even more important is the assimilation of their descendants, who are natives, even if not always citizens, of the host country. Portes and Zhou (1994) argue that descendants of immigrants who were born and raised in the host country are more sensitive than the initial immigrants to how the natives regard them. They react to feeling rejected by distancing themselves from the host society. This view is given empirical support by a study of foreign residents from five European nations in Germany (Schaef er and Bukenya 2005). In terms of modeling, this means that $d_{Nt} < d_{NLt}$, where $t$ refers to the generation of the immigrants and $t$ to later generations.

Intuitively, this makes sense. Those born, grown up, and educated in the schools of the host country absorb most of its values and speak its language well. They are therefore more similar to natives than the initial immigrant generation and most likely a large part of their identity is connected to the host country. In countries that award citizenship on the jus solis principle, e.g., the United States, they are in fact citizens by birth. Even in countries where they are not granted automatic citizenship, that they should want acceptance and feel disappointment and possibly alienation if they do not get it seems plausible. In this respect, they are likely to be different from the immigrant generation who had been shaped by their upbringing and education in the country of origin. The immigrant generation accepted that they were different and, within reasonable boundaries, were not alienated if natives perceived them as different and inter-

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1 There are two approaches to granting citizenship at birth. Some countries grant citizenship to anyone born on their soil (jus solis). Other countries grant citizenship to any child born to or adopted by a citizen that is based on blood relationships (jus sanguinis). The United States belong to the former and Switzerland to the latter. Germany also used to belong to the latter but recently changed its law and now uses jus solis, but with conditions.
acted with them accordingly.

The development of \( d_{Nt} \) is critical. A necessary condition of successful assimilation is that \( d_{Nt} \) decreases from one generation to the next and eventually approaches an acceptable level \( d \). A second condition is that \( d_{Nt} \) decreases at approximately the same rate as \( d_{Nt} \). We have already discussed the problem that could arise when they diverge from each other. Small differences should not have much impact, particularly since assimilation measures multiple dimensions (language, education, food, legal status, dress, customs, appearance, heritage, gender relations, and so forth), most of which are subjective. Therefore, an empirical assessment of the degree of assimilation comes with a significant “margin of error.” Thus the progress of assimilation over time can be modeled as a set of difference or differential equations, one for natives and one for immigrants and their descendants. Problems are indicated if the equations do not converge, or if they converge but at much different rates, so that at times perceptions about assimilation between natives and immigrants are predicted to be far apart.

We defined \( d_{it} \) for \( t=1 \) in equation (1). A modification is required for \( t>1 \). The “distance” depends on at least one additional variable, namely the degree of assimilation of the parents’ generation. Hence, equation (5):

\[
d_{it} = d_{i,t-1} - d_{it} - H_{it} - H_{it} - K_{it} - K_{it} - L_{it} - L_{it} - F_{it}, \quad i = N \text{ or } F, \quad i \neq j, \quad t > 1.
\]

We assume a positive relationship between \( d_{it} \) and \( d_{i,t-1} \), so that failure to assimilate in one generation has spillover effects into the next.

The subjective nature of this measure can be illustrated by the example of the Amish in the United States. By several indicators, such as dress, educational attainment, or use of technology, they are clearly more different from mainstream America than many recent immigrants. Although they have a long history in the United States, they have preserved their language, which they speak among themselves. Maybe if they were a more numerous and less pacifist minority they would encounter resistance from the majority. Instead, they seem to be viewed as a living part of America’s heritage.

5. Measuring Assimilation of Individuals

Because many aspects of assimilation are subjective and based on perceptions, finding reliable measures of assimilation from secondary data for empirical analysis is challenging. There are several candidates in the case of foreign residents. Schaeffer and Bukenya (2005) use the intention to acquire citizenship and the intended length of stay, respectively. The problem with both measures is that they are not independent of conditions in the immigrants’ country of origin. In their study, the economic gains from acquiring citizenship were significant for non-EU and insignificant for EU-citizens (Schaeffer and Bukenya 2005). Similarly, in the case of immigrants in the United States, is naturalization a commitment to the host society or is it a move to enhance career options, i.e., federal employment, and secure legal status and access to government services? The interpretation of the measure is further complicated by the possibility of dual citizenship (for examples of different policies, see Howard 2005). Citizenship has another disadvantage. Once it has been acquired, it cannot be used to indicate additional progress toward assimilation. Thus, additional or alternative measures are needed.

Given the centrality of language skills, they can serve as a good measure for the immigrant generation. Language skills are not equally useful, however, to check the assimilation of children born and educated in the host society and therefore of intergenerational assimilation. In addition, language skills are multidimensional, encompassing written and spoken skills, and therefore relatively expensive to assess reliably, which makes information about them not as widely available. Dual citizenship, where it is allowed, or number of visits to the country of origin, could serve as proxies of assimilation.

Stevens and Schoen (1988) use linguistic intermarriage as an indicator facilitating assimilation. The idea is that in families where the parents do not speak the same mother tongue the children are more likely to grow up speaking English or be bilingual from birth. While this is an interesting approach, it is limited to a sub-group of immigrants and/or their descendants. This brief section demonstrates the difficulties inherent not only in theoretical but also in the empirical modeling of assimilation.

6. Summary and Conclusions

Assimilation is a multi-dimensional process. The dimensions are sociological, political, economic, spatial, and temporal. Many individuals and institutions participate in shaping the assimilation process and its outcomes. Some aspects of “distance” are based on subjective perceptions which change over time. As history has repeatedly taught us, progress is not guaranteed and can be reversed. These are characteristics that make modeling assimilation challenging. Their subjective nature makes even finding reliable measures of assimilation difficult.
Because of the complexity of the assimilation process, particularly when considered over several generations, we think that it is unlikely that we can develop a rigorous comprehensive theory that will yield useful results. Instead, we believe that the process should be approached in steps. For example, how do individual decision makers decide how much to invest in assimilation? What factors are most important? Do lenient naturalization policies encourage assimilation or only citizenship acquisition? Are individuals holding dual citizenship assimilating at a slower pace than those who are required to drop their original citizenship? What factors most influence the attitudes of natives toward immigrants and their assimilation? How does the spatial distribution of immigrants influence assimilation and assimilation policy? These are questions for theoretical and empirical study. Sociologists have been working on them for some time, while economists have studied only a few of them and then only rarely. Given the magnitude of the immigration populations in most OECD countries, it is time to change this.

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References


