ECONSTOR
Make Your Publications Visible.

A Service of
ZBW
Leibniz-Informationszentrum Wirtschaft
Leibniz Information Centre for Economics

Bauer, Thomas K.; Lofstrom, Magnus; Zimmermann, Klaus F.

Working Paper

Immigration Policy, Assimilation of Immigrants and Natives' Sentiments towards Immigrants: Evidence from 12 OECD-Countries

IZA Discussion Papers, No. 187

Provided in Cooperation with:
IZA – Institute of Labor Economics

Suggested Citation: Bauer, Thomas K.; Lofstrom, Magnus; Zimmermann, Klaus F. (2000) : Immigration Policy, Assimilation of Immigrants and Natives' Sentiments towards Immigrants: Evidence from 12 OECD-Countries, IZA Discussion Papers, No. 187, Institute for the Study of Labor (IZA), Bonn

This Version is available at:
https://hdl.handle.net/10419/21030

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

WWW.ECONSTOR.EU

Mitglied der Leibniz-Gemeinschaft

DISCUSSION PAPER SERIES

IZA DP No. 187

Immigration Policy, Assimilation of Immigrants and Natives' Sentiments towards Immigrants: Evidence from 12 OECD-Countries

Thomas K. Bauer
Magnus Lofstrom
Klaus F. Zimmermann

August 2000

Forschungsinstitut
zur Zukunft der Arbeit
Institute for the Study
of Labor

Immigration Policy, Assimilation of Immigrants and Natives' Sentiments towards Immigrants: Evidence from 12 OECD-Countries

Thomas K. Bauer
CEPR, London, Bonn University and IZA, Bonn

Magnus Lofstrom
IZA, Bonn

Klaus F. Zimmermann
Bonn University, DIW, Berlin, CEPR, London and IZA, Bonn

Discussion Paper No. 187
August 2000

IZA

P.O. Box 7240
D-53072 Bonn
Germany

Tel.: +49-228-3894-0
Fax: +49-228-3894-210
Email: iza@iza.org

This Discussion Paper is issued within the framework of IZA's research area *Mobility and Flexibility of Labor Markets*. Any opinions expressed here are those of the author(s) and not those of the institute. Research disseminated by IZA may include views on policy, but the institute itself takes no institutional policy positions.

The Institute for the Study of Labor (IZA) in Bonn is a local and virtual international research center and a place of communication between science, politics and business. IZA is an independent, nonprofit limited liability company (Gesellschaft mit beschränkter Haftung) supported by the Deutsche Post AG. The center is associated with the University of Bonn and offers a stimulating research environment through its research networks, research support, and visitors and doctoral programs. IZA engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public. The current research program deals with (1) mobility and flexibility of labor markets, (2) internationalization of labor markets and European integration, (3) the welfare state and labor markets, (4) labor markets in transition, (5) the future of work, (6) project evaluation and (7) general labor economics.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character.

IZA Discussion Paper No. 187
August 2000

ABSTRACT

Immigration Policy, Assimilation of Immigrants and Natives' Sentiments towards Immigrants: Evidence from 12 OECD-Countries*

As in the U.S. and Canada, migration is a controversial issue in Europe. This paper explores the possibility that immigration policy may affect the labor market assimilation of immigrants and hence natives' sentiments towards immigrants. It first reviews the assimilation literature in economics and the policy approaches taken in Europe and among the traditional immigration countries. Second, a new analysis of individual data from the OECD countries studies sentiments concerning immigration and the determinants of these sentiments is presented. Natives in countries that receive predominantly refugee migrants are relatively more concerned with immigrations impact on social issues such as crime than on the employment effects. Natives in countries with mostly economic migrants are relatively more concerned about loosing jobs to immigrants. However, the results also suggest that natives may view immigration more favorably if immigrants are selected according to the needs of the labor markets. Possible benefits of such a policy are that it may moderate social tensions in regards to migration and contribute to a better economic performance of the respective countries.

JEL Classification: J61, F22

Keywords: Assimilation of migrants, European migration policies, sentiments towards migrants

Klaus F. Zimmermann
IZA
P.O. Box 7240
D-53072 Bonn
Germany
Tel.: +49 228 38 94 200
Fax: +49 228 38 94 210
Email: zimmermann@iza.org

---

* We are grateful to Jörgen Hansen, Marc Regets, Lena Schröder, Zhihao Yu, the participants of the Swedish Economic Council's conference on "The Assimilation of Immigrants in the Labour Market", Stockholm, Sweden, March 13, 2000 and the International Economic Association Conference on "Globalisation and Labour Markets", University of Nottingham, UK, 7th – 8th July 2000 as well as an anonymous referee for their helpful comments on earlier drafts of this paper.

I. Introduction

Immigration policies vary greatly across countries, both historically and currently, and are often at the center of public debate. For example, in May 2000 the German government introduced a so-called *green card* for Non-EU IT-specialists to meet the excess demand for IT-specialists in Germany and to ensure the development and competitiveness of the German information sector. The introduction of this *green card* represents a dramatic change of German immigration policy, which concentrated so far on the regulation of the immigration of ethnic Germans from Eastern Europe, family migrants and asylum seekers. Similarly, U.S. senators Orin Hatch and Spencer Abraham recently introduced a bill that would increase the number of H-1B visas, six-year temporary visas granted to foreigners with college degrees, from 115,000 to 195,000 for the next three years. This is also an example of a proposed change in immigration policy. U.S. immigration policy has in the past primarily focused on regulating permanent immigration. Although the proposed change in the U.S. is in regards to temporary migration, it is likely to have an impact on a more long-term basis. Other countries, like Germany, have attempted to promote temporary immigration to meet current labor demands just to find that these migrants to a large extent settle permanently.

Generally, an immigration policy is designed to give preference to certain groups. For example, U.S. immigration laws give priority to individuals whose family members already reside there. Canada has implemented a point system that favors individuals with certain characteristics reflecting labor market demands. Although there is free movement of people within the European Union, laws differ across member countries in entry requirements for citizens of non-member countries. In Germany, preference is given to ethnic Germans. Sweden places no restriction on migration from the Nordic countries, including non-EU-member Norway, and allocates entry visas generously to asylum seekers and refugees.

The choice of immigration policy affects the growth and performance of an economy, the characteristics of the immigrants a country receives, as well as the perception of immigrants by the native born population. If a policy stressing labor market demands is implemented, it is also quite likely that the immigrants will perform relatively well in the labor market and hence assimilate rather rapidly and contribute to the growth and the performance of the economy. If humanitarian criteria are used in determining entry into the country, i.e. by concentrating on refugees, success in the labor market may be harder to come by for these immigrants, since their skills may be less transferable. Here, the difference in human capital between immigrants and natives is likely to be greater. Hence, assimilation

may be less likely to take place and the costs of integrating these migrants into the society and the labor market might be high.

This also means that the immigration policy indirectly determines who gains and who loses from immigration. Assuming that factor quantities are determined exogenously, economic theory tells us that groups of natives who are gross substitutes to immigrants will suffer and groups of natives who are gross complements will benefit from immigration.[1] For example, it may be argued that low skilled immigration is likely to benefit native high skilled workers, while high skilled migration may benefit native low-skilled workers. As long as migrants bring no capital with them, native capital owners will gain from migration. It should then be no surprise that sentiments towards immigrants are likely to depend on education or skill levels.

In the following section we describe the different immigration policies of the main receiving countries by differentiating between the traditional immigration countries (Australia, Canada, New Zealand and the U.S.), immigration countries with either post-colonial immigration or active recruitment (Austria, Germany, the Netherlands, Sweden, Norway and the UK) and the new immigration countries (Italy, Ireland and Spain). In Section III we provide a brief discussion of the theory of immigrant assimilation. This section further surveys the existing empirical evidence on the effects of immigration policy on the labor market assimilation of immigrants and the evidence on immigrant assimilation in Europe. We complement this literature research with an own original analysis using an alternative measure of assimilation, using data on sentiments concerning migrants. It may be argued that if immigrants assimilate, or do well in the labor market, natives' attitudes will be more favorable towards immigrants. The effects of immigration policy on natives' sentiments using individual data from 12 OECD countries are analyzed in Section IV. Section V concludes.

II. Immigration Policy

Past immigration policies has led to different compositions of, and attitudes towards, immigrants. In general, three types of immigration countries can be differentiated. For the traditional immigration countries (Australia, Canada, New Zealand and the United States) immigration was essential for the founding and the development of these countries. In addition, they are unique compared to the other types of immigration countries in that they still encourage immigration for permanent settlement on a significant scale. The second type of immigration countries are European countries with either post-colonial immigration,

(predominantly the United Kingdom, France and the Netherlands) or active labor recruitment, often seen as temporary migration (for example Austria, Germany and Sweden). Immigration in Europe became important after World War II while the traditional immigration countries displayed large inflows of migrants in the 19th century. Different from the traditional immigration countries, mass immigration in Europe occurred when these countries were already economically developed nations. Finally, some European countries just recently transformed from emigration to immigration countries (e.g. Ireland, Italy and Spain). Apart from return migration, these countries do not have a long experience with the inflow of foreign workers and are just developing immigration policies. In what follows, we will briefly describe the differences in the migration policy between and within the three types of immigration countries.

Traditional Immigration Countries

The traditional immigration countries Australia, Canada, New Zealand and the United States have had explicit immigration policies throughout the century. Australia, Canada and New Zealand have a similar history of immigration and maintain roughly similar immigration policies.[2] In all three countries immigration was mainly subject to a list of preferred source countries, which consisted mainly of the UK, Western Europe and North America. Over time, these countries changed their policy away from the preference for specific countries towards a selection of immigrants based on their labor market characteristics. Contrary to the other traditional immigration countries' policy, the US immigration policy stresses family re-unification and not labor market skills. As mentioned in the introduction, one exception is the group of foreign workers who enter on the temporary H-1B visas. Next, we will illustrate differences in historical and current immigration policies across countries.

Prior to the 1920s, immigration into the United States was relatively unrestricted. However, by the 1920s the US implemented a policy using national origin to determine who was to be given an entry visa or not. The 1965 Amendments to the Immigration and Nationality Act repealed the national origin restrictions and made family re-unification the main criterion in deciding who is allowed to immigrate to the US. The policy favoring family re-unification is still in place in the U.S., although visas are currently also allocated based on employment preferences. However, the visas granted due to employment preferences remain a small share of all visas granted. According to the Immigration and Naturalization Service's

---

[1] Greenwood and McDowell (1986) and Friedberg and Hunt (1995) survey the literature on the labor market effects of immigration.

Annual Report in 1998, 11.7 percent of the immigrants admitted into the US were in the category of employment-based preferences.

In 1967 Canada adopted a point system to allow the selection of immigrants on the basis of their ability to meet Canadian labor market needs. The recent Canadian immigration policy is based on three main objectives: social, humanitarian and economic.[3] Following these objectives, immigrants are essentially grouped into three broad admission classes: (i) the family class (spouses, fiancées, dependent children, parents and grandparents who will not enter the labor market) which corresponds to the social stream of immigration; (ii) refugees which corresponds to the humanitarian immigration stream; and (iii) independent migrants which corresponds to the economic stream. Economic migrants could be further grouped into three classes: business migrants, independent migrants and assisted relatives, where the latter two types have to go through a point system which helps to select the migrants according to skills needed in the Canadian labor market. Over time, however, the number of immigrants screened via the point system decreased from over 70 percent before 1976 to below 30 percent in the period from 1975-1982 and further to 14 percent of the total flow in the mid 1980s. This trend appears to have been reversed in the 1990s. For example, in 1995 48 percent of the immigrants in Canada either immigrated as skilled workers or as business immigrants.

The history of the immigration policy in New Zealand is similar to Canada (Winkelmann, 1999). Even though New Zealand had several specific immigration programs promoting the immigration of workers with specific skills and occupations in high demand, immigration was mainly restricted to persons from specific source countries (especially Britain and Ireland). In 1991 New Zealand introduced a point system similar to the one in Canada. In contrast to Canada and Australia, however, the majority of immigrants (61 percent in 1996) in New Zealand are subject to the selection through the point system. In 1995, 75 percent of all migrants to New Zealand entered through the economic category.

Immigration in Europe

Post World War II can be divided into four phases of immigration into Europe: i) periods of post-war adjustment and de-colonization, ii) labor migration, iii) restrained migration, and iv) dissolution of socialism and afterwards (Schmidt and Zimmermann, 1992; Zimmermann, 1995). The first period covers the years between 1945 and the early 1960s. In this period

---

2 Winkelmann (1999) provides a survey of the migration policy in New Zealand and Devoretz and Laryea (1999) for Canada. A short description of the Australian point system is given by Miller (1999).

3 See DeVoretz and Laryea (1999) for a survey of the Canadian immigration policy.

Germany experienced an inflow of about 20 million people displaced by the war. Great Britain, France, Belgium and the Netherlands were affected by return migration from European colonists and the inflow of workers from former overseas territories. The Netherlands, for example, experienced an inflow of about 70,000 immigrants from Indonesia in 1946, followed by a second wave of additional 60,000 immigrants in 1950 when Indonesia became independent (van Ours and Veenman, 1999).

Strong economic growth and the resulting labor shortages in the second half of the 1950s and the 1960s induced some European countries to open their countries for immigration. Some of the countries even established an active recruitment policy. Germany, for example introduced a guest worker system by means of a series of treaties with Italy, Spain, Greece, Turkey, Morocco, Portugal, Tunisia and Yugoslavia. Similar to Germany, Austria, the Netherlands and Sweden actively recruited unskilled workers from Southern European countries.[4] Net immigration to the north from the Mediterranean countries in the period from 1955-1973 amounted to about 5 million migrants (Zimmermann, 1995).

In the face of increasing social tensions and the fear of recessions after the first oil price shock, the period of active recruitment stopped in all of Europe. After 1973, immigration policy in the guest worker/labor recruitment countries became more restrictive. Although the guest worker program was designed for temporary migration, return migration was difficult to induce (Dustmann, 1996). Furthermore, the guest worker countries continued to allow entry of family members of former immigrants. Hence, immigration in the period from 1974-1988 was largely determined by family reunification.

Since 1988, immigration to Western Europe has been dominated by east-west migration and the inflow of asylum seekers and refugees. Large parts of the East-West migration were ethnic Germans, who migrated to Germany (Bauer et al., 1999). According to estimates of the United Nations High Commissioner for Refugees, the total number of asylum seekers and refugees in Europe in 1987 was about 190,000 but increased to 700,000 by 1992. Whereas in the 1970s and 1980s asylum seekers originated mainly in Africa and Asia, the inflow of asylum seekers and refugees from European countries increased significantly in the 1990s. This development resulted mainly from the political confusion in the former socialist states in Eastern Europe induced by the fall of the iron curtain, the war in the former Yugoslavia and the clashes between Turks and Kurds in the southeast of Turkey.

Around 1992 some European countries made the immigration of asylum seekers and refugees more restrictive. Germany, for example, changed the respective article in the

constitution to reduce the inflow of asylum seekers. This alteration allowed for sending back asylum seekers arriving from member states of the European Union or other countries, which are defined to be "safe" by law. Following the changes in asylum policy, the inflow of asylum seekers and refugees to several European countries dropped significantly after 1992. In 1995, “only” about 300,000 asylum seekers migrated to Europe. Note that much of the decrease in the number of asylum seekers and refugees was due to the end of the war in former Yugoslavia. There has also been a recent decrease in the number of asylum seekers in the UK attributed to restrictions in welfare benefit to this group (SOPEMI, 1999). It should also be noted that most European countries did not further restrict their refugee and asylum policies at this time. Notably, Sweden, Denmark, the Netherlands and Switzerland continue to accept relatively large number of refugees.

Different to most other European countries, immigration policy in the UK has been determined largely by relations with Commonwealth countries. A guest worker policy such as in Germany, Austria and the Netherlands was not in place (Hatton and Wheatley Price, 1999). Based on the British Nationality Act of 1948, immigration to the UK was restricted to citizens of the states in the Commonwealth, which had the right to enter to UK without hindrance. In the next 2 decades this open immigration policy towards states in the Commonwealth became successively more progressive in order to reduce the immigration of non-whites from the New Commonwealth and Pakistan. However, because of family reunification, the inflow of migrants from the New Commonwealth and Pakistan continued.

New Immigration countries

The so-called new immigration countries, for example Ireland, Italy and Spain, have historically been emigration countries.[5] These countries experienced a first positive net immigration after the Northern European countries stopped recruitment in the first half of the 1970s. This took place 1971 in Ireland, 1972 in Italy and 1975 in Spain. In Italy and Spain the net inflow was mainly due to natives returning from the Northern European countries. In Ireland the positive net inflow also consisted of natives returning from former immigration countries, but differently from Spain and Italy, the return migration was largely due to pull factors, i.e. strong economic growth in Ireland. Since the late 1980s, these countries have again experienced a net inflow. Differently from the situation in the 1970s, a significant number of the immigrants in 1990s are non-nationals and, particularly in Italy and Spain, a

[4] See van Ours and Veenman (1999) for a description of the migration experience and immigration policy of the Netherlands, and Bengtsson and Lundh (1999) for Sweden.

large share comes from outside the European Union. In 1994, for example, Italy (Spain) experienced an inflow of 99,105 (34,123) persons, of which 46.8% (45.6%) were natives, 6.8% (17.0%) came from other EU-countries, and 46.4% (37.4%) from non-EU-countries. In Ireland, 55% were Irish return migrants, 32% of the migrants came from other EU-countries and 23.2% from non-EU-countries (Eurostat, 1997). In Italy and Spain the non-EU-migrants mainly came from Central and Eastern Europe, Africa and Latin America. In Ireland the main part of the foreign population consists of migrants from the UK, India and Pakistan. However, recently the number of immigrants from other countries such as Australia, Malaysia, and South Africa has increased (SOPEMI, 1999).

Since immigration of non-nationals is rather new for these countries, institutional mechanisms to monitor or regulate immigration are nearly absent. Immigration policy was mainly driven from outside, i.e. by the influence of other EU countries to regulate immigration, in particular the inflow of asylum seekers. In general, the immigration policy in Italy and Spain has been directed towards the organization of legal entry, the prevention of further illegal immigration and the legalization of illegal workers already residing in these countries (see Freeman, 1995). Recent policy changes in these countries indicate that they will further follow this strategy (SOPEMI, 1999). In Ireland, recent policy changes have been mainly concerned with regulating the increasing inflow of asylum seekers and to make the asylum procedures more transparent. The basic legal framework under which foreigners can enter and work in Ireland is still based on the 1935 Aliens Act and the successive ministerial orders appended to it (SOPEMI, 1999).

Immigration Policy and Immigrant Composition

An important question is whether different immigration policies lead to a different composition of the migrants. Table 1 shows some stylized facts on the immigration experience and the composition of immigrants for the period from 1991 to 1995 for 12 OECD countries. One should mention that these numbers should be interpreted very carefully. First, the definition of immigration varies between countries. Traditional immigration countries generally differentiate between foreign-born and native-born individuals. Some European countries do not grant citizenship to anyone born in the country, nor do they readily provide passports to immigrants. Therefore, European statistics differentiate between foreigners and citizens. This means that immigrants who are labeled second- and third-generation immigrants in the U.S. may be reported as immigrants in the European statistics.

[5] See Barrett (1999) for an overview of the Irish migration experience and Bover and Vellila (1999) for

Differentiating immigrants and natives by nationality is also a problem in countries that have received many naturalized migrants (like France and United Kingdom) or that have given entry to large groups of people who are by definition citizens, such as ethnic Germans. Secondly, receiving countries differ in whether they allow asylum seekers and refugees to work, which in turn might influence labor market statistics. In Sweden, for example, asylum seekers are generally allowed to work, which is not the case in Germany. Third, official statistics generally do not capture illegal migrants, which is especially a problem in the U.S., Italy and Spain.

Table 1 shows that in Canada and New Zealand around 17 percent of the population are immigrants. In the U.S., Germany and Austria the share of immigrants in the population is around 9 percent. As expected, the new immigration countries, Ireland, Italy and Spain, have the lowest immigrant shares among all countries depicted in Table 1. From 1991 to 1995, Germany, Austria and Spain experienced the highest increase in the share of the foreign population, followed by the US, Canada and Italy. Note however that the increase in the share of foreigners in the European countries might partially be due to an increased number of second and third generation immigrants. This may be the case if immigrants have higher birthrates than natives. Column (4) of Table 1 shows that asylum seekers accounted for 61.5 percent of all immigrants in Sweden. Around one-third of all migrants to Spain and the Netherlands and one-fourth of all migrants to Germany, Norway and the United Kingdom were asylum seekers in the period 1991 to 1995. Compared to the European immigration countries, the traditional immigration countries Canada, New Zealand and the US have a considerable lower share of asylum seekers.

Some indicators of the labor market attachment of immigrants are given in columns (5) to (7) of Table 1. Column (5) shows the proportion of the immigrant share in the labor force to the immigrant share in the population. Column (5) is simply derived by dividing the proportion of foreigners in the labor force, Column (4), by the proportion of the foreign population, Column (1), by country. This gives us an indication whether immigrants are more or less likely to be in the labor force, compared to natives. Table 1 suggests, that those countries with the highest share of asylum seekers (Sweden, Norway, Spain and the Netherlands) display the highest proportion of immigrants who do not participate in the labor market. Canada and the US receive mainly labor migrants, as does Ireland, and

Spain.

correspondingly have ratios greater than 1. The negative relationship between labor force participation and the inflow of asylum seekers is not statistically significant.[6]

In column (6) and (7) of Table 1 we compare the labor market participation rates and the unemployment rates of male foreigners to those of male natives. Column (6) shows that in the new immigration countries and in Austria the labor force participation of foreigners is higher than that of natives. The ratio of foreign and native labor force participation is lowest in the Netherlands and in Sweden, which again might be the result of the high inflow of asylum seekers. Column (7) contains the ratio of the unemployment rate of immigrants to the unemployment rate of natives. Of the countries we could obtain data for, Spain has the lowest ratio. It should be noted that Spain is also the country with the highest unemployment rate among all countries considered. In the traditional immigration countries, the unemployment rate of immigrants is only slightly higher than that of natives. Immigrants have a much higher probability to be unemployed than natives in all other countries, particularly in the Netherlands and Sweden. Figure 1, which shows the share of foreigners of total unemployment relative to their share in the labor force, provides a similar picture. Roughly speaking, foreigners in the Netherlands are three times more likely to be unemployed than natives. In Sweden, immigrants are 2.5 times more likely than natives to be unemployed. In the traditional immigration countries the discrepancy between the unemployment rates of immigrants and natives is considerably lower than those observed in Europe.

Overall, Table 1 indicates two patterns: First, immigration policy has an influence not only on the size but also on the composition of immigrants. The traditional immigration countries and the new immigration countries, Ireland and Italy, receive a higher share of labor migrants than the other countries. Second, compared to natives, immigrants perform relatively well in the labor market of the traditional immigration countries. These numbers, however, give only a rough indication of the effects of immigration policies on the composition and the labor market success of immigrants. In the following section we will survey the available empirical studies on the interaction of immigration policy and the labor market success of immigrants and the existing assimilation studies in the respective countries to gain further insights. It should be pointed out that the impact of a particular immigration policy on the composition of immigrants will not only depend on the policy itself, i.e. the demand side, but also on the supply of immigrants, or the desire of foreign born individuals to migrate. The effect of a specific policy will for that reason be clouded and the effects of the policy itself on

[6] A simple OLS-regression of column (5) of Table 1 on a constant and the proportion of asylum seekers results in a coefficient of the latter of -0.325 with a standard error of 0.289.

assimilation is difficult to identify. However, we will make an attempt to draw parallels between immigration policy and labor market assimilation in the next section.

III. Immigration Policy and Assimilation

A general presumption is that immigrants who are selected according to their skills are more likely to be successful in the labor market of the receiving country, and to assimilate relatively more rapidly, as compared to chain migrants or refugees, into the new economic environment. The immigration policy in Australia, Canada and New Zealand is a good reflection of this conjecture. Furthermore, additional countries are adapting competency criteria to decide on foreigners' application for entry. In Norway, for example, the immigration and work permits are mainly issued to high skilled workers or workers with specific skills (SOPEMI, 1999). This does not apply to Nordic citizens who are given unrestricted access to each other's labor markets.

The Economic Theory of Assimilation

The presumption that immigrants who are selected according to their skills are more likely to assimilate or reach earnings parity with natives, is supported by economic theory. The predominant theoretical framework of immigrant adjustment in the labor market of the receiving country is based on the international transferability of human capital.[7] According to this model, the stock of an immigrant's human capital obtained in the country of origin may not be fully transferable to the requirements of the host country's labor market. There is an expected negative relationship between the transferability of human capital and the initial upon arrival immigrant-native earnings gap. The lower the international transferability of human capital, the higher is the earnings disadvantage of the immigrants at the time of migration. With increasing time of residence in the host country, migrants invest in country-specific human capital of the receiving country and adapt their stock of human capital acquired in the country of origin. Therefore, the human capital stock of immigrants grows relative to the human capital stock of natives, and immigrants' earnings approach but may not reach those of similar natives.[8]

The extent of human capital transferability between two countries depends on the type of skills of the individual, the similarity of the sending and receiving country with regards to

---

[7] See Chiswick (1978, 1986). Duleep and Regets (1997) provide a formal model. Based on this framework, a huge literature on the earnings assimilation of immigrants has been developed. See Borjas (1994) for an overview. Zimmermann (1994) surveys the European literature.

[8] A debate within the economics of immigration literature is whether immigrant wages reach parity, or even overtake, the wages of similar natives. (For a survey of this literature, see Borjas, 1994).

language, culture, labor market structure and institutional settings, and the migration motive. The higher the content of home-country specific human capital the lower is the transferability of this human capital stock to the requirements of the receiving country. A physician from Russia, for example, can more easily transfer his human capital to the requirements in Sweden, whereas the knowledge of a Russian lawyer might be not rewarded at all. The more similar two countries are with regard to language and the stage of economic development, the lower will be the initial earnings disadvantage of the immigrants compared to natives.

An important determinant of the transferability of human capital can be found in the migration motive. Here, we can simply distinguish between an economic and non-economic motivation. The decision of economic migrants to move to another country can be modeled as an income maximization problem, i.e. a person decides to move if the discounted future expected income differential between the receiving and the home country is higher than the costs of migration.[9] Economic migrants plan their movement and may have invested in the transferability of their stock of human capital and in the country-specific human capital of the receiving country in advance. Non-economic migrants, such as asylum seekers and refugees, do not migrate because of economic reasons. Rather, they migrate because of the political situation in their home country. It is reasonable to assume that these migrants do not typically plan migration and therefore do not invest in the transferability of their stock of human capital or in the country-specific human capital of the receiving country in advance. Hence, asylum seekers and refugees are likely to exhibit greater earnings disadvantages than economic migrants when compared to natives.

Immigrants may invest less in the country-specific human capital of the receiving country the older they are at the time of immigration, since the remaining working life to collect the returns from these investments is shorter. Similarly, temporary migrants will have lower incentives to make human capital investments in the receiving country than permanent immigrants, since their expected life-time returns to these investments are lower due to the shorter planned duration of residence (Dustmann, 1993). Hence, it can be expected that temporary migrants have lower earnings assimilation rates than permanent migrants. Further determinants of low human capital investments in the receiving country are ethnic enclaves. If, for example, immigrants can work for employers of the same ethnic origin and can shop in stores where employees speak their language, there are fewer incentives to assimilate to the society of the receiving country. The larger the ethnic enclaves in the receiving country, the

[9] See Bauer and Zimmermann (1998) for a survey of the theoretical and empirical literature on international migration.

lower are the returns to investments in the country specific human capital and the lower the assimilation to natives (Borjas, 2000).

To summarize, the economic theory of immigrant assimilation into the host country labor market predicts that assimilation is influenced by the characteristics of the home country, the migration motive and the expected migration duration. The more similar sending and receiving countries are concerning their economic development, the faster the assimilation. Individuals who migrate because of economic reasons and permanent migrants are expected to assimilate faster than non-economic and temporary migrants.

Empirical Evidence on the Interaction between Immigration Policy and Assimilation

Support for the theoretical predictions of the theory of skill transferability can be found in empirical studies in the economics of immigration. The characteristics of the home country of an immigrant are consistently found to be important determinants of immigrants' earnings relative to natives, even after controlling for the socio-economic characteristics of the migrant such as age, education and time in the receiving country. Borjas (1987), using U.S. data, finds that differences in the earnings of statistically similar immigrants from different sending countries can be explained by variations in the political and economic conditions of the country of origin, the income distribution of the country of origin relative to the U.S., and home country GNP. Jasso and Rosenzweig (1986) show that the significant effects of country-of-origin dummies disappear as soon as characteristics of the home country, such as GNP, literacy rate, distance, English language, the presence of US military bases are controlled for. Duleep and Regets (1994) also find significant differences in the earnings of immigrants from different source countries. According to their results, however, these differences disappear with time of residence in the U.S.. These studies consistently find that immigrants from English-speaking countries perform better than immigrants from non-English-speaking countries in the U.S..

There are only a few empirical studies analyzing the interaction between immigration policy and the quality and the speed of adjustment of immigrants. Existing studies on this issue follow two different strategies. The first group compares immigrants in the U.S., where the focus of the immigration policy is mainly on family reunification, with immigrants in Canada, where migrants are selected according to their skills. The second group investigates the difference in the skills and the wages of individuals entering the new country on different admission criteria.

Borjas (1993) and Duleep and Regets (1992) compare the Canadian point system with the immigration policy of the United States. Borjas (1993) shows that the average Canadian immigrant has about one more year of schooling than the average immigrant in the United States. He also shows that the immigrant-native wage gap is substantially lower in Canada. However, a comparison of the skills of specific national-origin groups in the two countries shows that the skills of immigrants for a *given* national origin group are not different. From this observation Borjas (1993) concludes that the Canadian point system does not help to select more skilled migrants from a given sending country. Rather, the difference in the success and quality of immigrants in the two countries can be explained with the relative favorable national-origin mix of Canadian migrants. Using two cross-section data sets from Canada and the United States, Duleep and Regets (1992) corroborate the results of Borjas (1993) and conclude that immigrants in both countries are similar in terms of education and wages within source countries.

Wright and Maxim (1993) use wage differences between migrants and comparable natives at the time of immigration as an indicator for immigrant quality and investigate the impact of the change in the Canadian immigration policy in the 1960s. The analysis of Wright and Maxim (1993) suggests that the change in the immigration policy resulted in a secular decline in the quality of migrants. Similar to Wright and Maxim (1993), Green and Green (1995) show that relative to immigrants who had to pass the point system, family migrants and refugees are concentrated in less skilled occupations. Two explanations are put forward to explain the quality decline. First, the policy change led to a change in the immigrant country-of-origin mix. More specifically, there was an increase of migrants from less developed countries and a decrease in the number of migrants from developed countries. Second, over time the share of migrants who have to go through the point system decreased and the share of refugee and chain migrants increased.

A criticism of the analysis of Wright and Maxim (1993) is the choice of earnings differentials between natives and immigrants as the only quality indicator. Investigating both, the earnings gap between natives and immigrants at the time of immigration and the earnings assimilation of Canadian immigrants, using data from the 1971, 1981 and 1986 Canadian census, Baker and Benjamin (1994) find that initial relative earnings of Canadian immigrants are falling across successive cohorts and that the rates of assimilation to the earnings of natives are small for all cohorts. Similar to Baker and Benjamin (1994), Bloom, Grenier and Gunderson (1995) find deterioration in the quality of migrants. They show, however, that

recent arrival cohorts show slower assimilation rates.[10] Bloom, Grenier and Gunderson (1995) recognize that discrimination and the recession in the early 1980s may partially explain this but state that the decline in quality is also due to the change in the Canadian immigration policy

Borjas (1992, 1994) shows that changes in the U.S. immigration policy in 1965 led to major changes in the country-of-origin mix of the immigration flows. The change in the composition of immigrants can explain the recent decline in the skills and the relative wages of successive immigration cohorts. Borjas (1992) concludes that over 90 percent of the decline in the skills and the relative wages of recent immigration cohorts can be explained by the altering source-country-mix. Winkelmann (1999) obtains similar results for New Zealand. Changes in the immigration policy of New Zealand in the 1960s and 1970s, away from a country-of-origin principle towards a skill based selection, led to an increase of the share of Asian immigrants of all employed migrants from 13 percent in 1981 to 27 percent in 1996. At the same time, a decline in the relative wages of recent arrival cohorts can be observed. Winkelmann (1999) calculates that about 80 percent of this decline can be explained by changes in the country-of-origin composition of immigrants. This study further shows that immigrants with an English language background show a lower earnings disadvantage than immigrants with no English language background. The latter, however, assimilate faster to the earnings of natives.

Jasso and Rosenzweig (1995), Barrett (1998) and Duleep and Regets (1996) compared immigrants in the U.S. who migrated under different admission criteria.[11] Using longitudinal data on the 1977 U.S. arriving cohort, Jasso and Rosenzweig (1995) show that at the time of immigration those migrants admitted on skill-based reasons are more skilled than those admitted under family reunification. Evidence is found that those admitted on skill-based reason experience downward mobility and those admitted because of family reasons face upward mobility. Hence, the difference between the two groups of migrants becomes significantly smaller with the time of residence in the US. Duleep and Regets (1996) confirm the results of Jasso and Rosenzweig (1995). Using a matched Immigration and Naturalization Service (INS) - Social Security Administration (SSA) data set, Duleep and Regets (1996) find that immigrants admitted on the basis of kinship into the U.S. earn substantially less at the time of immigration than immigrants admitted primarily on the basis of their occupational skills. The former migrants, however, experience a faster wage growth with time in the U.S. than migrants admitted on the basis of their skills. Barrett (1998) shows that there exist

[10] See also Bloom and Gunderson (1992).

significant differences across countries in the relative labor market quality of skill-based and family-based immigrants. He finds that for some countries the lack of labor-market criteria for admission does not lead to immigration of low-skilled workers (e.g. Sweden and the Netherlands), whereas for other countries the absence of skill-criteria leads to an increased inflow of low skilled people. These results suggest that a selection of immigrants based on the country of origin is more effective in selecting high-skilled workers than a policy based on skill criteria.

Overall, the above described empirical results suggest that country of origin is one of the main explanations of the labor market assimilation of immigrants. The success of immigration policies that are based on the selection of immigrants with respect to their labor market characteristics, such as in Canada, Australia and New Zealand, seem to be successful mainly because they alter the national origin mix of immigrants. These countries are not successful in attracting the most skilled immigrants from a given country, but are simply attracting individuals from countries with relatively high skill levels whose skills can easily be transferred to the requirements of the labor market of the receiving country. For example, Borjas (1992) shows that the Irish living in Canada are no more educated than the Irish living in the U.S. These findings have important consequences for the evaluation of immigration policies in Europe. As outlined above, the immigration policy of most European countries is based on priorities other than the labor market characteristics of the migrants. If these countries managed to select the "right" source countries, it may be expected that immigrants to these countries would assimilate relatively fast, assuming they could entice individuals from the “right” countries to come. In the following subsection we will provide a short survey of empirical studies on the assimilation of migrants in different European countries.

Immigrant Assimilation in Europe

Most empirical evidence on the assimilation of migrants in Europe use German data.[12] For guest workers, the existing studies suggest an initial earnings gap to natives, which range between 9 and 23 percent (Dustmann, 1993; Schmidt, 1992; Pischke, 1992; Licht and Steiner, 1994). Furthermore, these studies indicate that there is no, or only very slow, assimilation of the earnings of guest workers to those of similar natives. The empirical evidence on the labor market performance of ethnic German immigrants suggests that there is neither an initial earnings gap nor an assimilation pattern (Bauer and Zimmermann, 1997; Dunn et al., 1997; Schmidt, 1997). Both Pischke (1992) and Schmidt (1992) have analyzed the role of country of

[11] See Miller (1999) for empirical evidence on Australia.

origin on the convergence of native and immigrant earnings. Schmidt (1992), for example, estimated that Spanish workers earn 6 percent less than the group consisting of Greek, Italian and Turkish workers while immigrants from Yugoslavia earn 5 percent more than this group. Pischke (1992), roughly speaking, corroborates these results. The ethnic groups with the largest initial earnings disadvantage realized the greatest wage growth. Bauer and Zimmermann (1997) show that ethnic Germans from the former USSR perform more poorly in the German labor market than ethnic German immigrants from Poland or Romania.

There are fewer empirical studies on the labor market assimilation of immigrants for other European countries. Chiswick (1980), Bell (1997) and Shields and Wheatley Price (1998) investigate the assimilation of migrants in the UK.[13] Chiswick (1980) finds that white foreign-born workers earn the same as white native-born and that non-white foreign-born earn substantially less than white natives. His results further indicate that there is no assimilation of the earnings of immigrants. Similar to the experience of Canada, New Zealand and the U.S., the United Kingdom experienced a large change in the national-origin mix of immigrants. The change is due to the 1971 Immigration Act through which Commonwealth citizens lost their special immigration entitlement and were put in the same position as all other foreigners (Bell, 1997). The empirical results of Bell confirm the results of Chiswick (1980) in regards to the earnings gap at the time of immigration. However, for those immigrants who display an initial earnings disadvantage, Bell (1997) finds assimilation towards native earnings when he controls for cohort effects.

Kee (1993) investigates the earnings of Dutch immigrants from Turkey, Morocco, Surinam and the Antilles. Whereas schooling obtained in the home country does not generate higher earnings for Turks and Moroccans, education obtained abroad has a positive effect on the wages in the Netherlands for migrants from Surinam and the Antilles. This may be explained by the similarity of the schooling system in Surinam, the Antilles and the Netherlands. Even though years of residence have a positive impact on the wages in the Netherlands, this effect disappears once controlling for language abilities.

The importance of migration motives, country of origin and planned migration duration for the earnings development of migrants have also been stressed by Winter-Ebmer (1994) for Austria. He finds that guest workers in Austria display an earnings disadvantage and a flatter experience-wage profile than natives. Different to Germany, Turks in Austria have higher wages than migrants from the former Yugoslavia. Migrants, who migrated to Austria because income prospects in Austria were higher or because they tried to raise their

---

[12] See Bauer et al. (1999) for a survey.

standard of living, have significant higher wages than those migrated because of family or political reasons.

Immigrants who arrived in Sweden during the labor recruitment period appear to have performed quite well in the Swedish labor market (see for example Wadensjö, 1983, and Ekberg, 1994). As in other developed countries, there appears to have been a decline in the relative labor market performance of more recent immigrants. This can be traced back to a change in the country-of-origin composition from Nordic countries toward immigrants from non-OECD countries, where the latter are mostly refugees or relatives of refugees (Aguilar and Gustafsson, 1994; Edin et al., 2000). Edin et al. (2000), for example, show that immigrants from Nordic countries show some earnings assimilation but are not expected to reach earnings parity with similar Swedish natives in the long-run. After 10 years in Sweden they show an earnings disadvantage of about 10 to 20 percent. Non-OECD immigrants have a higher earnings disadvantage to similar Swedish workers at the time of immigration than immigrants from Nordic countries and experience a similar earnings assimilation pattern. In the long-run, however, non-OECD immigrants still show an earnings disadvantage of approximately 25 to 35 percent. The poor performance of recent immigrants can also be found in Norway (Hayfron, 1998).

Assimilation studies for the new immigration countries Italy, Spain and Ireland are rather rare. Venturini and Villosio (2000) study the labor market situation of immigrants in Italy. Their empirical analysis shows that the average wage gap between immigrants and natives in 1993 was between 13 - 21 percent, depending on the country-of-origin. Immigrants from Asia show the greatest disadvantage, followed by migrants from Africa. Immigrants from Latin America and East Europe appear to display the smallest wage gap. Using an Oaxaca decomposition, Venturini and Villosio (2000) show that in 1993 only 61 percent of the wage gap between natives and immigrants can be explained by differences in observable characteristics. Based on data from 1991 and 1993, the authors further find that wage assimilation is observed. Barrett and O´Connell (1999) analyze the earnings of Irish return migrants who graduated from a school in Ireland. They conclude that return migrants show an earnings advantage over those who stayed in Ireland and that this premium is positively related to the time the migrants stayed abroad.

Three things can be learned from reviewing these assimilation studies. First, country-of-origin differences and admission criteria have a strong influence on the labor market performance of immigrants. Second, nearly all countries recently experienced a decline in the

[13] See Hatton and Wheatley Price (1999) for a survey of the literature on migration in the UK.

so-called “quality” of immigrants, as measured by the upon arrival immigrant-native wage gap. This holds true for countries with a focus on family reunification, as well as countries with a selective immigration policy. The review has shown that in all cases the decrease in the quality of the migrants is related to a change in the country of origin mix of the immigrants. The evidence indicates that especially migrants from different cultural background and from different schooling systems, compared to the culture and schooling system of the receiving country, are responsible for the quality decrease. Examples are, Mexicans and Asians in the U.S., Asians in Canada and New Zealand and refugees in Europe. Third, even though all countries face a decrease in the so called “quality” of immigrants, an assimilation of immigrants to natives can only be observed in those countries that are selecting their migrants according to labor market characteristics such as in Canada and New Zealand.

IV. Natives’ Sentiments of Immigrants

If immigration policy can affect skill levels and labor market performance of immigrants, as argued above, does it also impact natives’ sentiments of immigrants? Although the direction of causality is hard to disentangle, i.e. if immigrant tolerance leads to an open policy or if an open policy leads to tolerance, it is informative to see if there is a relationship between immigration policy and sentiments. Given the variation in labor market performance of immigrants across countries, it would not be surprising if sentiments of immigrants also varied across nations. One question is whether immigrant sentiments vary across countries with different immigration policies? That is, does a policy that attracts relatively skilled workers, or those that are in some sense "needed" by the labor market, also imply greater tolerance towards immigrants? Put differently, if immigrants assimilate into the new country, it seems reasonable to believe that natives view immigrants favorably or at least less negatively.

The data used to analyze these questions comes from the International Social Survey Programme (ISSP). The ISSP is a continuing annual program of cross-national collaboration on surveys covering a variety of topics deemed important for social science research. In 1995, ISSP compiled representative cross-national data on national identity. Included in the survey were questions about the perception of immigrants and immigration. The countries included in the analysis below are (i) the United States, Canada, and New Zealand (the traditional immigration countries), (ii) the United Kingdom, Germany, Austria, the Netherlands, Norway, and Sweden (the European immigration countries), and (iii) Ireland, Italy and Spain (the new European immigration countries). The number of observations used in the analysis

ranges from 801 for Austria to 1655 for the Netherlands. Given that the data used is cross sectional from one point in time and only covers 12 countries, the results are suggestive rather than conclusive. For example, given the available data constraints, it is futile to estimate discrete sentiment equations that control for observed country characteristics, such as unemployment, economic growth, level and growth of immigration, in order to directly identify immigration policy effects on natives' attitudes towards immigrants. Instead, the approach we take is to show some descriptive statistics of immigrant sentiments for these 12 countries, test whether across country differences in attitudes can be explained by differences in individual characteristics, and what the role of these variables are on sentiments. We also try to determine factors within each country that explains why natives think immigration should be reduced. We use these suggestive results to draw parallels between natives' sentiments of immigration and immigration policy.

As expected, sentiments towards immigrants vary dramatically across countries. Responses to three different questions are shown in Figure 2. The bars shown in this figure represent the proportion of native-born individuals who stated that they "strongly agree" or "agree" with the statement. The statements are: "Immigrants are generally good for the economy"; "Immigrants take jobs away from people who were born in this country" and "The number of immigrants to this country nowadays should be reduced".

The country where natives are most likely to respond that immigrants are generally good for the economy is Canada. Given an immigration policy that stresses the selection of immigrants following the needs of the domestic labor market, it is not very surprising that native-born Canadians view immigrants in this regard quite favorably. Also note that natives in New Zealand, another country that is stressing skills in its immigration policy, also think to a relatively large extent that immigrants are good for the economy. At the other end of the spectrum are Norway and the Netherlands. This is also not very surprising given that both of these countries predominantly receive refugee immigrants. Our review of empirical studies on immigrant assimilation in the last section has shown that refugee immigrants are often found to have weaker labor force attachments than economic migrants. As we have already noted in the discussion of Table 1, this is indeed the case in Norway and the Netherlands. The ratio of immigrants to natives labor force participation is 0.68 in both countries, the lowest of all countries included in the study.

Natives in the new immigration countries Ireland and Spain seem to have the most favorable sentiments in regards to whether immigration should be reduced. Low immigrant proportions may be one reason for this. In the case of Ireland, the impressive economic

growth in the 1990s may be an explanation of the attitudes of natives. Not all of the new immigration countries hold such favorable opinions of immigrants. Figure 2 shows that about three quarters of native Italians think immigration should be reduced in Italy. It should be noted that the national origin composition of immigrants is quite different in Spain and Italy. In Italy, only about 15 percent of immigrants in 1996 were from EU countries whereas 60 percent of the foreign population in Spain was from EU countries in 1996 (SOPEMI, 1999). Germans and Swedes also feel to a large extent that immigration should be limited. Large refugee inflows in the 1990s may be a partial explanation for this.

One commonly heard concern about immigration is that immigrants take jobs away from natives. This sentiment appears indeed to be prevalent in the UK, where about half of the native population feels that immigrants take jobs away. At the other end of the spectrum is Sweden where only about 16 percent report that they feel the threat from immigrants in the labor market. Natives in the Netherlands and Norway share generally the sentiments of native Swedes. These three countries all experienced relatively large inflows of immigrants from former Yugoslavia in the first half of the 1990s. It may very well be that natives feel less threatened by refugees than economic migrants. As in Sweden, Norway and the Netherlands, only a small share of the Canadian native population feels that immigrants take jobs away from natives. One may think that this is a result of the respective selective immigration policy. This conclusion, however, is contradicted by sentiments of natives in New Zealand, which is among the four countries with the highest share of natives who respond that immigrants have negative effects on the labor market success of natives.

Is it possible that differences in sentiments towards immigrants between countries can partially be explained by differences in socioeconomic characteristics? To test this we estimated separate probit models of whether immigrants are generally good for the economy, whether immigrants take jobs away and whether immigration should be reduced. For each of these three dependent variables we have estimated four models. During the estimation process, we add successively socio-economic characteristics of the respondent to the basic model, which includes only dummy variables indicating the receiving countries with Sweden acting as reference group. The estimated marginal effects are presented in Tables 2, 3 and 4.

Table 2 shows the estimation results of the probit models where the dependent variable takes the value one when a respondent strongly agrees or agrees with the statement that immigrants are generally good for the economy. The results for Model 1, where we include only country dummies, indicate that there are significant differences between the countries, which is consistent with Figure 2. Model 2 in Table 2 presents the findings when

we add controls for age, gender, marital status, residing in a city and both parents being citizens. It appears that including these factors does not alter the relative sentiments significantly across countries. The results however indicate that age, being female and residing in a city have positive impacts on the probability that a person responds that immigrants are generally good for the economy. If both of the respondent's parents are citizens, the perception of immigrants' effect on the economy is significantly more negative. Although the estimated marginal effects change somewhat when education dummies are included, as shown in Model 3, it does not change the ranking significantly. Model 4 also includes an indicator variable for whether the respondent is unemployed. Somewhat surprisingly, being unemployed does not appear to affect the perception of immigrants' contribution to the economy.

The results from estimating the probability models of natives' sentiments in regards to whether immigrants take jobs away and if immigration should be reduced are presented in Tables 4 and 5. Generally speaking, the findings indicate that the relatively more educated have a more positive impression of immigrants. Although being unemployed does not change natives' perception of immigrants in regards to the impact on the economy or whether immigration should be reduced, it does seem to increase the probability that a person thinks that immigrants take jobs away. Overall, differences in individual characteristics do not seem to explain differences in the perception of immigrants across countries.

Natives in the two countries included in this study that uses skill criteria in granting entry visas, Canada and New Zealand, seem to have relatively favorable attitudes in regards to immigrants' contribution to the economy. Not surprisingly, natives in countries that mainly receive immigrants from developing countries, mostly refugees, are not convinced that immigrants are generally good for the economy. Although sentiments in Canada are generally sympathetic towards immigrants, New Zealanders are quite skeptical about natives loosing jobs to immigrants. Natives in countries where the immigration policy is such that entry visas are allocated generously to asylum seekers and refugees, e.g. the Netherlands, Norway and Sweden, are not particularly concerned about the threat that immigrants may take away their jobs, but feel that immigrants may not positively contribute to the economy. It seems plausible that both of these factors will affect whether a person thinks that immigration should be reduced or not.

Natives' sentiments towards immigrants are likely to be reflections of the country's immigration policy, as well as the assimilation of immigrants. We have argued above that the current immigration policies that stresses labor market demands, not surprisingly, lead to

higher skill levels and greater labor market success of immigrants. However, the greater labor market success of these immigrants may also lead to a greater perceived threat of native workers from competing skilled foreign workers. At the same time, poor labor market success of immigrants may lead natives to be concerned about the overall impact of immigration on the economy. Another sometimes heard concern about low skilled, and illegal immigration, is that immigrants are more prone to be active in criminal activities. The sentiment in regards to crime rates may be also a good proxy for other factors generating social tensions.

To be able to disentangle the factors that drive natives' sentiments, in particular in regards to the number of immigrants, we have undertaken two approaches. First, we have calculated the proportions of individuals who respond that immigrants take jobs away and that immigrants increase crime rates, conditional on responding that they think immigration inflows should be reduced. Note that natives in general may have negative attitudes towards immigrants without thinking that immigration inflows should be reduced. To identify the factors that explain why natives think that immigration should be lowered, and the relative importance of these factors for this group of natives, we condition the sample on the answer indicating a desire to reduce migrant inflows. These proportions are presented in Table 5. Second, we have estimated country specific probability models of the statement that immigration should be reduced.

Our first goal is to examine if natives are more concerned about the impact of immigration on jobs or crime. To do this, we compare the proportion of natives who respond that immigrants take jobs away and the proportion who feel that immigrants increase crime rates, conditional on having responded that immigration flows should be reduced. There is a quite clear pattern in Table 5. Natives in traditional immigration countries, who predominantly receive economic migrants, seem to be mostly concerned about loosing their jobs to immigrants. For example, 65 percent of native-born Americans who respond that immigration should be reduced think that they may lose jobs to immigrants. Slightly less than 47 percent of these Americans feel that immigration increases crime rates. Natives in the European immigration countries, however, are more concerned about an increase in crime rates, with the exception of the UK. 87.4 percent of native-born Norwegians who thinks that the number of immigrants should be reduced are concerned about higher crime rates, while only 30.2 percent think that immigrants take jobs away from natives. The difference in sentiments between these two types of immigration countries is likely to be a reflection of the relatively weak immigrant labor force attachment in the countries with relatively large inflows of refugees, as was shown in Table 1.

We also estimate country specific probability models of whether immigration should be reduced or not. We include indicator variables for whether the person thinks that immigrants: take jobs away, increase crime rates, immigrants are generally good for the economy and whether the respondent thinks that imports of foreign goods should be limited. Note that by comparing the proportion of the marginal effects of these variables to the predicted probability across countries, we can analyze what the main causes of the sentiments of natives are across countries. This allows us to compare sentiments across countries with different immigration policies. For example, we can look at whether immigrants in countries with skill criteria are more concerned about loosing their jobs than they are about the impact of the general economy, compared to countries with large refugee inflows.

The inclusion of a variable for limiting imports reflects the possibility that individuals may have general sentiments towards a more, or less, closed economy. Another possibility is that people realize that imported goods are substitutes for imported foreign labor. Before we discuss the results from the probability models, we want to explore the relationship between limiting imports and limiting immigration graphically. In Figure 3 we show for each country the proportion of individuals who respond that they think immigration should be limited, on the y-axis, and the corresponding proportion of respondents who think imports should be restricted, on the x-axis. Roughly speaking, Northeast in the figure represents sentiments of more closed economies. Furthermore, countries below the 45-degree line can be said to favor imports of foreign labor over imports of goods. Somewhat surprisingly, the country that appears to be the least “open” among these 12 OECD countries is the U.S. However, the U.S. is also one among the five countries, Canada, Ireland, Spain, Austria and the U.S., who seem to favor immigrants over imported goods. It is also interesting to note that most of the countries that currently see mostly refugee immigrants are above the 45-degree line. We will explore further the relationship between these two sentiments next.

To investigate the relationship between the sentiments discussed above, we estimated separate probit models for each country of the sentiment "number of immigrants should be reduced". This variable is set to 1 if the respondent answered that he/she thinks that immigration should be reduced and 0 if he/she thinks that immigration should remain the same or if it should be increased. The independent variables are indicator variables for the responses: immigrants take jobs away, increase crime rates, are generally good for the economy and imports of foreign goods should be limited. The results are presented in Table 6.

The concerns about the impact of immigration appear to be divided across countries with different immigration policies, or at least across countries with inflows of economic and

political migrants. By investigating the magnitude of the estimated marginal effects within countries we can shed light on the reasons natives would like to alter immigration inflows. Natives in countries where the majority of current immigrants are asylum seekers and refugees are relatively more concerned with the impact of immigration on crime than on jobs than are natives in countries with skill criteria. However, natives in the countries who receive mostly economic migrants, the U.S., Canada, New Zealand and the U.K. appear to be more apprehensive about loosing their jobs to immigrants. At the same time, there is a strong relationship between the impact of immigration on the economy and whether natives feel that immigration should be reduced. Not surprisingly, natives who feel that immigrants are good for the economy are also more likely to respond that immigration should not be reduced.

Three things can be learned from the analysis of natives' sentiments of immigrants. First, in countries where immigrants are selected according to their labor market characteristics, natives most likely believe that immigrants are generally good for the economy. Second, socio-economic characteristics of the respondents such as education, gender and employment status do not seem to explain differences in the perception of immigrants across countries. Our results indicate, however, that the relatively more educated have a more positive view of immigrants. Third, in the traditional immigration countries, the fear that immigrants take jobs away is the main explanation for thinking that immigration should be reduced. In countries that receive mainly refugees and asylum seekers, natives who think that immigration should be reduced are mostly concerned about increased crime rates. This may be interpreted as general concerns about social tensions.

V. Conclusions

This study has found some evidence that the design of an immigration policy may be important for the prospect of immigrant assimilation, or labor market success, and for the development of sentiments of natives towards immigrants. As has been shown, current immigration policies give priority to particular groups of people, and these preferences vary greatly across the major receiving countries. Whereas Canada and New Zealand focus on the selection of immigrants following the needs of their labor markets, other countries either put a preference on the immigration of family members of former migrants, such as the U.S., or on ethnic groups, such as ethnic Germans from the former USSR in Germany, or citizens of the Commonwealth in the UK. In Sweden, Norway, and the Netherlands the majority of new immigrants typically consist of refugees and asylum seekers.

Economic theory predicts that immigrants from countries that are similar to the host country, with respect to economic development, the schooling system, language and culture, assimilate well into the labor market. This is likely due to a rapid transferability of the human capital they accumulated in their home country. In addition, the migration motive is important for the labor market success of immigrants. A survey of empirical studies on the assimilation of migrants in different countries has shown that indeed the country-of-origin and the migration motive are among the most important determinants of the labor success of migrants. In particular, it has been shown that the success of immigration policies selecting migrants on the basis of their skills, such as in Canada and New Zealand, seem to be successful, not primarily because they attract the most skilled migrants from a given country, but because they alter the national origin mix of immigrants. The survey has further shown that nearly all significant receiving countries recently experienced a declined in the quality of immigrants, as measured by the upon arrival immigrant-native wage gap. In all cases, the decrease in the quality of migrants comes together with a significant change in the country-of-origin mix of the immigrants. Finally, even though all countries face a decline in the quality of migrants, an assimilation of immigrants to natives can be observed only in those countries that select immigrants on the basis of their labor market characteristics.

It is difficult to disentangle to what extent the sentiments of the population are in line with policy or policy is in line with sentiments. We think that there are at least indications that immigration policies affect natives' sentiments of immigrants. Analyzing individual data from 12 OECD countries, we find signs suggesting that natives in countries selecting immigrants on their skills are more likely to think that immigrants are generally good for the economy than in countries which receive mainly asylum seekers and refugees. Natives in Canada and New Zealand, however, are more concerned that immigration negatively affects their own labor market situation, whereas in countries that receive mainly non-economic migrants, natives are mostly concerned about increasing crime rates. Socio-economic characteristics of the respondents such as education, gender and employment status do not seem to explain the major differences in the perception of immigrants across countries. Our results indicate, however, that the relatively more educated have a more positive view of immigrants.

This all has interesting policy implications. Policy-makers are typically concerned about re-election, and hence must be interested in the emotions of voters caused by immigration. There are two important channels by which re-election might be affected: First, there are social tensions caused by ethnic rivalry and other negative social externalities such as crime. In this paper we have used the measured concerns about crime as a proxy for all

these potential social tensions. Second, immigration can improve the economic conditions in a country. Since the popularity of a government depends largely on its economic success, a well-chosen migration policy can be effective. For example, European governments might be able to increase their popularity by means of a migration policy that relies more on the respective country's labor market needs. Popularity might increase further by such a policy since social tensions may decline with a relatively higher proportion of labor migrants, as our results suggest. It is also important to realize that any humanitarian policy can be costly in an economic sense. However, by reducing negative attitudes towards immigrants in the native population through a migration policy that stresses the economic needs of the receiving country, the government may also be able to increase the number of admitted humanitarian immigrants without risking not being re-elected.

References

Aguilar, R. and B. Gustafsson (1994): "Immigrants in Sweden's Labour Market during the 1980s," *Scandinavian Journal of Social Welfare*, 3, 139-147.

Baker, M. and D. Benjamin (1994): "The Performance of Immigrants in the Canadian Labor Market," *Journal of Labor Economics*, 12(3), 369-405.

Barrett, A. (1998): "The Effect of Immigrant Admission Criteria on Immigrant Labour Market Characteristics," *Population Research and Policy Review*, 17(5), 439-456.

Barrett, A. (1999): "Irish Migration: Characteristics, Causes and Consequences," *IZA Discussion Paper No. 97*. IZA, Bonn.

Barrett, A. and P. J. O'Connell (1999): "Is There a Wage Premium for Returning Irish Migrants?," mimeo., ESRI, Ireland.

Bauer, T. and K. F. Zimmermann (1997): "Unemployment and Wages of Ethnic German," *Quarterly Review of Economics and Statistics*, 37, 361-377.

Bauer, T. and K. F. Zimmermann (1998): "Causes of International Migration: A Survey," in C. Gorter, P. Nijkamp und J. Poot (Eds.): *Crossing Borders. Regional and Urban Perspectives on International Migration*. Aldershot:, 95-127.

Bauer, T., B. Dietz, K. F. Zimmermann and E. Zwintz (1999): "German Migration: Development, Assimilation and Labor Market Effects," mimeo., IZA, Bonn.

Bell, B. D. (1997): "The Performance of Immigrants in the United Kingdom: Evidence from the GHS," *Economic Journal*, 107, 333-344.

Bengtsson, T. and C. Lundh (1999): "From Boom to Bust: The Economic Integration of Immigrants in Post War Sweden," mimeo., Lund University, Sweden.

Bloom, D. E. and M. Gunderson (1992): "An Analysis of the Earnings of Canadian Immigrants," in G. J. Borjas and R. B. Freeman (eds.): *Immigration and the Work Force: Economic Consequences for the United States and Source Areas*. Chicago: University of Chicago Press, 321-342.

Bloom, D. E., G. Grenier and M. Gunderson (1995): "The Changing Labour Market Position of Canadian Immigrants," *Canadian Journal of Economics*, 987-1005.

Borjas, G. J. (1987): "Self-Selection and the Earnings of Immigrants," *American Economic Review*, 77, 531-553.

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: Economic Consequences for the United States and Source Areas*. Chicago: University of Chicago Press, 17-47.

Borjas, G. J. (1993): "Immigration Policy, National Origin, and Immigrant Skills: A Comparison of Canada and the United States," in D. Card and R. B. Freeman (eds.): *Small Differences that Matter*. Chicago: University of Chicago Press, 21-43.

Borjas, G. J. (1994): "The Economics of Immigration," *Journal of Economic Literature*, 32, 1667-1717.

Borjas, G. J. (2000): "Ethnic Enclaves and Immigrant Assimilation." Paper presented at the Swedish Economic Council's conference on: *The Assimilation of Immigrants in the Labour Market*, Stockholm, March 13, 2000

Bover, O. and P. Vellila (1999): "Migration in Spain: Historical Background and Current Trends," *IZA Discussion Paper No. 88*. IZA, Bonn.

Chiswick, B.. R. (1978): "The Effect of Americanization on the Earnings of Foreign-Born Men," *Journal of Political Economy*, 86, 897-921.

Chiswick, B. R. (1980): "The Earnings of White and Coloured Male Immigrants in Britain," *Economica*, 47, 81-87.

Chiswick, B. R. (1986): "Human Capital and the Labor Market Adjustment of Immigrants: Testing Alternative Hypotheses," in O. Stark (ed.): *Research in Human Capital and*

Development: Migration, Human Capital and Development, 4. Greenwich, CT: Jai Press, 1-26.

DeVoretz, J. and S. A. Laryea (1999): "Canadian Immigration Experience: Any Lessons for Europe?," *IZA Discussion Paper No. 59*. IZA, Bonn.

Duleep, H. O. and M. C. Regets (1992): "Some Evidence on the Effects of Admission Criteria on Immigrants Assimilation," in B. R. Chiswick (ed.): *Immigration, Language and Ethnicity: Canada and the U.S.*. Washington (D.C.): American Enterprise Institute, 410-439.

Duleep, H. O. and M. C. Regets (1992): "Country of Origin and Immigrant Quality," *Urban Institute Working Paper No. PRIP-UI-28*. Urban Institute, Washington DC.

Duleep, H. O. and M. C. Regets (1996): "Admission Criteria and Immigrant Earnings Profiles," *International Migration Review*, 30(2), 571-590.

Duleep, H. O. and M. C. Regets (1997): "Immigrants and Human-Capital Investments," *American Economic Review Papers and Proceedings*, 82(2), 186-191.

Dunn, T. A., M. Kreyenfeld and M. E. Lovely (1997): "Communist Human Capital in a Capitalist Labor Market: The Experience of East German and Ethnic German Immigrants to West Germany," *Vierteljahreshefte zur Wirtschaftsforschung*, 1.

Dustmann, C. (1993): "Earnings Adjustment of Temporary Migrants," *Journal of Population Economics*, 6, 153-168.

Dustmann, C. (1996): "Return Migration: The European Experience," *Economic Policy*, 22, 213-250.

Edin, P.-A., R. LaLonde, and O. Aslund (2000): "Emigration of Immigrants and Measures of Immigrant Assimilation: Evidence from Sweden." Paper presented at the Swedish Economic Council's conference on: *The Assimilation of Immigrants in the Labour Market*, Stockholm, March 13, 2000

Ekberg, J. (1994): "Economic Progress of Immigrants in Sweden from 1970 to 1990: a Longitudinal Study," *Scandinavian Journal of Social Welfare*, 3, 148-157.

Eurostat (1997): *Wanderungsstatistik 1997*. Luxembourg: Statistical Office of the European Communities.

Eurostat (1999): *Eurostat Yearbook: A Statistical Eye on Europe*. Luxembourg: Statistical Office of the European Communities.

Freeman, G. P. (1995): "Modes of Immigration Politics in Liberal Democratic States," *International Migration Review*, 29(4), 881-902.

Friedberg, R. M. and J. Hunt (1995): "The Impact of Immigrants on Host Country Wages, Employment and Growth," *Journal of Economic Perspectives*, 9, 23-44.

Gaston, Noel and Doug Nelson (2000): "The Employment and Wage Effects of Immigration: Trade and Labour Economics Perspectives," mimeo., Tulane University, New Orleans.

Green, A. G. and D. A. Green (1995): "Canadian Immigration Policy: The Effectiveness of the Point System and Other Instruments," *Canadian Journal of Economics*, 28, 1006-1041.

Greenwood, M. J. and J. M. McDowell (1986): "The Factor Market Consequences of US Immigration," *Journal of Economic Literature*, 24(4), 1738-1772.

Hatton, T. J. and S. Wheatley Price (1999): "Migration, Migrants and Policy in the United Kingdom," *IZA Discussion Paper No. 81*. IZA, Bonn.

Hayfron, J. E. (1998): "The Performance of Immigrants in the Norwegian Labor Market," *Journal of Population Economics*, 11, 293-303.

Jasso, G. and M. R. Rosenzweig (1995): "Do Immigrants Screened for Skills Do Better than Family Reunification Immigrants?," *International Migration Review*, 29, 85-111.

Kee, P. (1993): *The Economic Status of Male Immigrants in the Netherlands*. Dissertation, University of Amsterdam.

Licht, G. und V. Steiner (1994): "Assimilation, Labor Market Experience, and Earnings Profiles of Temporary Workers and Permanent Immigrant Workers in Germany," *International Review of Applied Economics*, 8, 130-156.

Miller, P. W. (1999): "Immigration Policy and Immigrant Quality: The Australian Points System," *American Economic Review Papers and Proceedings*, 82(2), 192-197.

OECD (1997): *Labour Force Statistics 1976-1996.*Paris: OECD.

Pischke, J.-S. (1992): "Assimilation and the Earnings of Guestworkers in Germany," *ZEW Discussion Papers No. 92-17*. ZEW, Mannheim.

Schmidt, C. M. (1992): "Country-of-Origin Differences in the Earnings of German Immigrants," *University of Munich Discussion Paper No. 92-29*. University of Munich, Munich.

Schmidt, C.M. (1997): "Immigrant Performance in Germany: Labor Earnings of Ethnic German Migrants and Foreign Guest-Workers," *Quarterly Review of Economics and Statistics*, 37, 379-397.

Schmidt, C.M. and K. F. Zimmermann (1992): "Migration Pressure in Germany: Past and Future," in K. F. Zimmermann (ed.): *Migration and Economic Development.* Heidelberg: Springer-Verlag, 201-230.

Shields, M. A. and S. Wheatley Price (1998): "The Earnings of Male Immigrants in England: Evidence from the quarterly LFS," *Applied Economics*, 1157-1168.

SOPEMI (1998): *Trends in International Migration*. Paris: OECD.

SOPEMI (1999): *Trends in International Migration*. Paris: OECD.

Van Ours, J. C. and J. Veenman (1999): " The Netherlands: Old Emigrants - Young Immigrant Country," *IZA Discussion Paper No. 80*. IZA, Bonn.

Winkelmann, R. (1999): "Immigration: The New Zealand Experience," *IZA Discussion Paper No. 61*. IZA, Bonn.

Winkelmann, L. and R. Winkelmann (1998): *Immigrants in the New Zealand labour market: A study of their labour market outcomes*. Wellington: New Zealand Department of Labour.

Winter-Ebmer, R. (1994): "Motivation for Migration and Economic Success," *Journal of Economic Psychology*, 15, 269-284.

Wright, R. E. and P. S. Maxim (1993): "Immigration Policy and Immigrant Quality: Empirical Evidence from Canada," *Journal of Population Economics*, 6, 337-352.

Zimmermann, K. F. (1994): "European Migration: Push and Pull," Proceedings volume of the World Bank Annual Conference on Development Economics 1994. Supplement to *The World Bank Economic Review* and *The World Bank Research Observer*, 1995, 313-342. Reprinted in: *International Regional Science Review*, 19 (1996), 95-128.

Zimmermann, K. F. (1995): "Tackling the European Migration Problem," *Journal of Economic Perspectives*, 9(2), 45-62.

Table 1.
Immigrant Proportions, Asylum Seekers and Immigrant Employment

	Proportion Immigrants in Population 1995	Change 1991-95 Proportion Immigrants	Proportion of Asylum Seekers on 1991-95 Total Inflow	Share of Foreign Labor Force in Total Labor Force 1995	(4) / (1)	Immigrant/Native Male Labor Force Participation Ratio 1995	Immigrant/Native Male Unemployment Ratio 1995	Unemployment Rate 1995
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
USA	8.8%	16.4%	11.6%	9.4%[1]	1.07	-	1.28	5.5%
Canada	17.4%	14.5%	11.8%	18.5%[2]	1.06	0.97	-	9.5%
New Zealand	17.5%	6.0%	4.2%	17.6%	1.01	0.92	1.24	6.3%
United Kingdom	3.4%	11.3%	18.5%	3.5%	1.03	0.90	1.67	8.6%
Germany	8.8%	22.0%	20.7%	9.0%	1.02	0.99	2.48	8.1%
Austria	9.0%	35.8%	-	9.9%	1.10	1.06	1.68	3.9%
The Netherlands	4.7%	-1.0%	29.3%	3.2%	0.68	0.78	4.36	7.0%
Norway	3.7%	8.8%	20.0%	2.5%	0.68	-	-	4.9%
Sweden	5.2%	7.7%	61.5%	5.1%	0.98	0.82	2.90	7.7%
Ireland	2.7%	9.6%	0.5%	2.9%	1.07	1.04[4]	-	12.1%
Italy	1.7%	14.9%	7.2%	1.7%	1.00	1.15	-	12.0%
Spain	1.2%	38.6%	30.2%	0.9%	0.75	1.14	1.15	22.6%

Notes:
[1]: 1990
[2]: 1991
[3]: Male and Female.
Data Source: OECD (1997); SOPEMI (1998, 1999); Eurostat (1998); Winkelmann and Winkelmann (1998); own calculations.

Table 2.
Estimated Marginal Effects from Probit Models of Response "Immigrants are Generally Good for the Economy" (Reference country is Sweden)

	Model 1	Model 2	Model 3	Model 4
USA	0.0653	0.0792	0.0463	0.0478
	(0.0212)	(0.0248)	(0.0247)	(0.0247)
Canada	0.3709	0.3978	0.3676	0.3700
	(0.0196)	(0.0226)	(0.0237)	(0.0237)
New Zealand	0.2441	0.2305	0.2031	0.2044
	(0.0230)	(0.0270)	(0.0274)	(0.0276)
United Kingdom	-0.1084	-0.0926	-0.1065	-0.1061
	(0.0188)	(0.0197)	(0.0192)	(0.0192)
Germany	0.1137	0.1269	0.1418	0.1420
	(0.0202)	(0.0206)	(0.0210)	(0.0210)
Austria	0.1792	0.1906	0.2260	0.2268
	(0.0234)	(0.0237)	(0.0241)	(0.0241)
The Netherlands	-0.1057	-0.0820	-0.0910	-0.0913
	(0.0165)	(0.0177)	(0.0175)	(0.0176)
Norway	-0.1499	-0.1259	-0.1340	-0.1328
	(0.0163)	(0.0175)	(0.0172)	(0.0172)
Ireland	0.3166	0.3365	0.3364	0.3375
	(0.0222)	(0.0230)	(0.0232)	(0.0232)
Italy	-0.0437	-0.0169	-0.0159	-0.0138
	(0.0199)	(0.0288)	(0.0290)	(0.0291)
Spain	0.0073	0.0452	0.0602	0.0553
	(0.0212)	(0.0232)	(0.0236)	(0.0236)
Age		0.0022	0.0028	0.0028
		(0.0003)	(0.0003)	(0.0003)
Female		0.0264	0.0228	0.0228
		(0.0088)	(0.0088)	(0.0088)
Married		-0.0018	-0.0007	-0.0007
		(0.0093)	(0.0093)	(0.0094)
Reside in City		0.0212	0.0129	0.0138
		(0.0100)	(0.0100)	(0.0101)
Both Parents Citizens		-0.1641	-0.1577	-0.1586
		(0.0209)	(0.0210)	(0.0211)
Secondary Schooling			0.0628	0.0624
			(0.0120)	(0.0121)
College			0.1373	0.1361
			(0.0125)	(0.0125)
Unemployed				0.0249
				(0.0209)
Number of Obs.		11,754		
Log Likelihood	-6658	-6583	-6521	-6521

Notes: The marginal effects are calculated based on the sample means for continuous variables and for a discrete change of dummy variables from 0 to 1. Standard errors appear in parentheses. Data source: 1995 International Social Survey Programme.

Table 3.
Estimated Marginal Effects from Probit Model of Response "Immigrants Take Jobs Away"
(Reference country is Sweden)*

	Model 1	Model 2	Model 3	Model 4
USA	0.3617	0.3375	0.4316	0.4343
	(0.0207)	(0.0245)	(0.0231)	(0.0230)
Canada	0.1078	0.0693	0.1549	0.1618
	(0.0223)	(0.0259)	(0.0277)	(0.0278)
New Zealand	0.2839	0.2790	0.3586	0.3615
	(0.0234)	(0.0272)	(0.0265)	(0.0266)
United Kingdom	0.3743	0.3497	0.4059	0.4066
	(0.0213)	(0.0230)	(0.0225)	(0.0225)
Germany	0.2226	0.2001	0.1826	0.1844
	(0.0215)	(0.0220)	(0.0224)	(0.0224)
Austria	0.2479	0.2290	0.1798	0.1837
	(0.0239)	(0.0245)	(0.0250)	(0.0251)
The Netherlands	0.1446	0.1194	0.1538	0.1572
	(0.0211)	(0.0217)	(0.0224)	(0.0224)
Norway	0.0505	0.0317	0.0574	0.0602
	(0.0222)	(0.0226)	(0.0235)	(0.0236)
Ireland	0.2555	0.2325	0.2527	0.2547
	(0.0236)	(0.0247)	(0.0251)	(0.0251)
Italy	0.2423	0.1897	0.2069	0.2139
	(0.0231)	(0.0323)	(0.0330)	(0.0330)
Spain	0.3172	0.2882	0.2751	0.2691
	(0.0222)	(0.0241)	(0.0248)	(0.0249)
Age		0.0026	0.0014	0.0016
		(0.0003)	(0.0003)	(0.0003)
Female		0.0118	0.0205	0.0192
		(0.0087)	(0.0087)	(0.0088)
Married		-0.0228	-0.0270	-0.0244
		(0.0092)	(0.0093)	(0.0093)
Reside in City		-0.0239	-0.0092	-0.0089
		(0.0098)	(0.0100)	(0.0100)
Both Parents Citizens		0.1358	0.1233	0.1256
		(0.0165)	(0.0169)	(0.0169)
Secondary Schooling			-0.1455	-0.1436
			(0.0099)	(0.0100)
College			-0.2343	-0.2321
			(0.0091)	(0.0092)
Unemployed				0.0715
				(0.0208)
Number of Obs.		12,236		
Log Likelihood	-7455	-7379	-7120	-7114

Notes: The marginal effects are calculated based on the sample means for continuous variables and for a discrete change of dummy variables from 0 to 1. Standard errors appear in parentheses. Data source: 1995 International Social Survey Programme.

Table 4.
Estimated Marginal Effects from Probit Model of Response "Immigration Should be Reduced" (Reference country is Sweden)*

	Model 1	Model 2	Model 3	Model 4
USA	-0.0442	-0.0581	-0.0003	-0.0012
	(0.0219)	(0.0259)	(0.0260)	(0.0260)
Canada	-0.2803	-0.2792	-0.2290	-0.2291
	(0.0194)	(0.0227)	(0.0243)	(0.0243)
New Zealand	-0.0747	-0.0700	-0.0208	-0.0218
	(0.0230)	(0.0269)	(0.0270)	(0.0272)
United Kingdom	-0.0140	-0.0421	-0.0139	-0.0146
	(0.0224)	(0.0237)	(0.0239)	(0.0239)
Germany	0.0934	0.0739	0.0547	0.0555
	(0.0189)	(0.0200)	(0.0205)	(0.0205)
Austria	-0.1463	-0.1626	-0.2160	-0.2155
	(0.0226)	(0.0229)	(0.0228)	(0.0228)
The Netherlands	-0.0873	-0.1079	-0.0922	-0.0932
	(0.0194)	(0.0205)	(0.0208)	(0.0209)
Norway	-0.0708	-0.0819	-0.0657	-0.0656
	(0.0207)	(0.0217)	(0.0219)	(0.0220)
Ireland	-0.4646	-0.4888	-0.4940	-0.4935
	(0.0158)	(0.0153)	(0.0153)	(0.0154)
Italy	0.0671	0.0396	0.0401	0.0401
	(0.0212)	(0.0308)	(0.0312)	(0.0313)
Spain	-0.2991	-0.3257	-0.3508	-0.3532
	(0.0204)	(0.0211)	(0.0206)	(0.0206)
Age		0.0029	0.0020	0.0020
		(0.0003)	(0.0003)	(0.0003)
Female		0.0119	0.0187	0.0185
		(0.0094)	(0.0095)	(0.0096)
Married		0.0122	0.0122	0.0124
		(0.0100)	(0.0101)	(0.0101)
Reside in City		-0.0347	-0.0197	-0.0200
		(0.0108)	(0.0109)	(0.0109)
Both Parents Citizens		0.1611	0.1533	0.1548
		(0.0209)	(0.0212)	(0.0213)
Secondary Schooling			-0.1050	-0.1025
			(0.0124)	(0.0125)
College			-0.2380	-0.2362
			(0.0126)	(0.0127)
Unemployed				0.0074
				(0.0219)
Number of Obs.		11,771		
Log likelihood	-7382	-7296	-7126	-7126

Notes: The marginal effects are calculated based on the sample means for continuous variables and for a discrete change of dummy variables from 0 to 1. Standard errors appear in parentheses. Data source: 1995 International Social Survey Programme.

Table 5.

Proportion of Natives who Responded "Immigrants Take Jobs Away" and "Immigrants Increases Crime Rates", Conditional on Responding "Immigration Should be Reduced".

	Observed Probability: Number of Immigrants Should be Reduced	Immigrants Take Jobs Away	Immigrants Increase Crime Rates
USA	66.1%	65.0%	46.9%
Canada	40.9%	47.3%	40.1%
New Zealand	61.9%	56.8%	36.6%
United Kingdom	68.6%	65.5%	36.7%
Germany	77.7%	44.8%	71.4%
Austria	56.1%	51.7%	83.1%
The Netherlands	61.1%	42.0%	54.0%
Norway	63.9%	30.2%	87.4%
Sweden	69.2%	24.4%	75.3%
Ireland	21.1%	68.0%	29.3%
Italy	75.5%	45.9%	75.0%
Spain	39.7%	67.6%	46.2%

Notes: Data source: 1995 International Social Survey Programme.

Table 6.

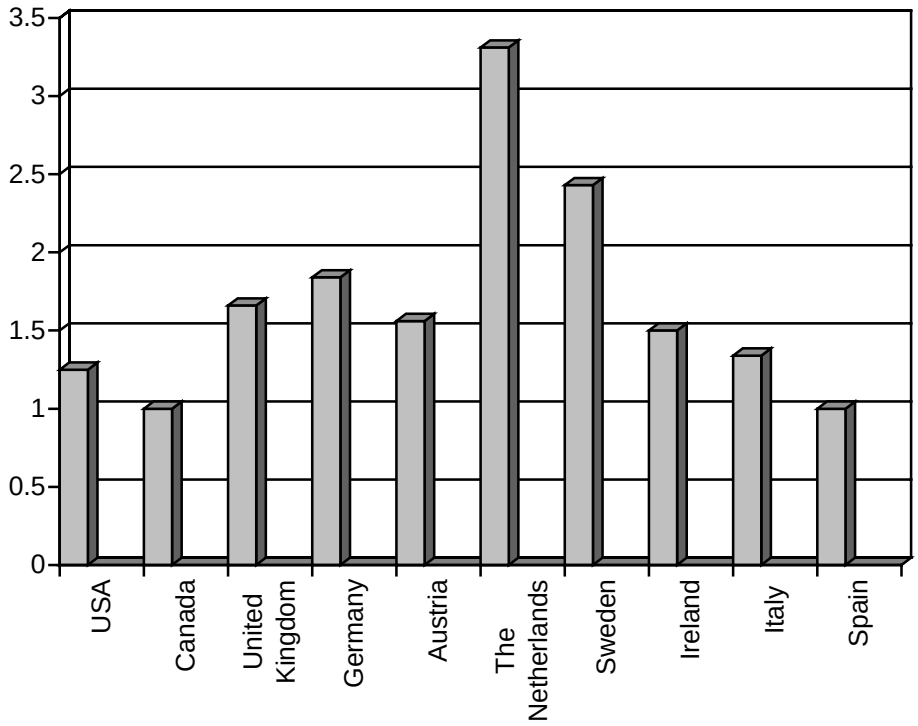
Estimated Marginal Effects from Country specific probit models of response: "The Number of Immigrants Should be Reduced"

	Predicted Probability: Number of Immigrants Should be Reduced	**Immigrants Take Jobs Away** M.E.	**Immigrants Increase Crime Rates** M.E.	**Immigrants are Good for the Economy** M.E.	**Imports of Foreign Goods Should be Limited** M.E.
USA	69.4%	0.2235	0.1391	-0.2801	0.1243
		(0.0343)	(0.0347)	(0.0352)	(0.0371)
Canada	40.3%	0.2763	0.2597	-0.3013	0.1346
		(0.0393)	(0.0412)	(0.0324)	(0.0315)
New Zealand	65.3%	0.2449	0.1685	-0.2483	0.1228
		(0.0368)	(0.0416)	(0.0353)	(0.0366)
United Kingdom	73.6%	0.2818	0.1701	-0.3007	0.1732
		(0.0344)	(0.0363)	(0.0521)	(0.0378)
Germany	84.7%	0.1202	0.2401	-0.1480	0.1078
		(0.0242)	(0.0256)	(0.0245)	(0.0223)
Austria	56.8%	0.1469	0.3650	-0.2418	0.1424
		(0.0431)	(0.0391)	(0.0386)	(0.0445)
The Netherlands	65.6%	0.2816	0.3119	-0.2618	0.1559
		(0.0256)	(0.0238)	(0.0360)	(0.0267)
Norway	67.2%	0.2784	0.4162	-0.3389	0.0990
		(0.0317)	(0.0335)	(0.0498)	(0.0318)
Sweden	74.3%	0.1733	0.3032	-0.3766	0.0513
		(0.0395)	(0.0341)	(0.0395)	(0.0333)
Ireland	21.1%	0.1879	0.1245	-0.1202	0.1121
		(0.0316)	(0.0464)	(0.0291)	(0.0267)
Italy	80.3%	0.1236	0.2398	-0.2506	0.1112
		(0.0287)	(0.0321)	(0.0389)	(0.0295)
Spain	38.0%	0.2603	0.2081	-0.1035	0.1484
		(0.0369)	(0.0415)	(0.0395)	(0.0406)

Notes: Standard errors appear in parentheses. The marginal effects are calculated based on the sample means for continuous variables and for a discrete change of dummy variables from 0 to 1. Data source: 1995 International Social Survey Programme.

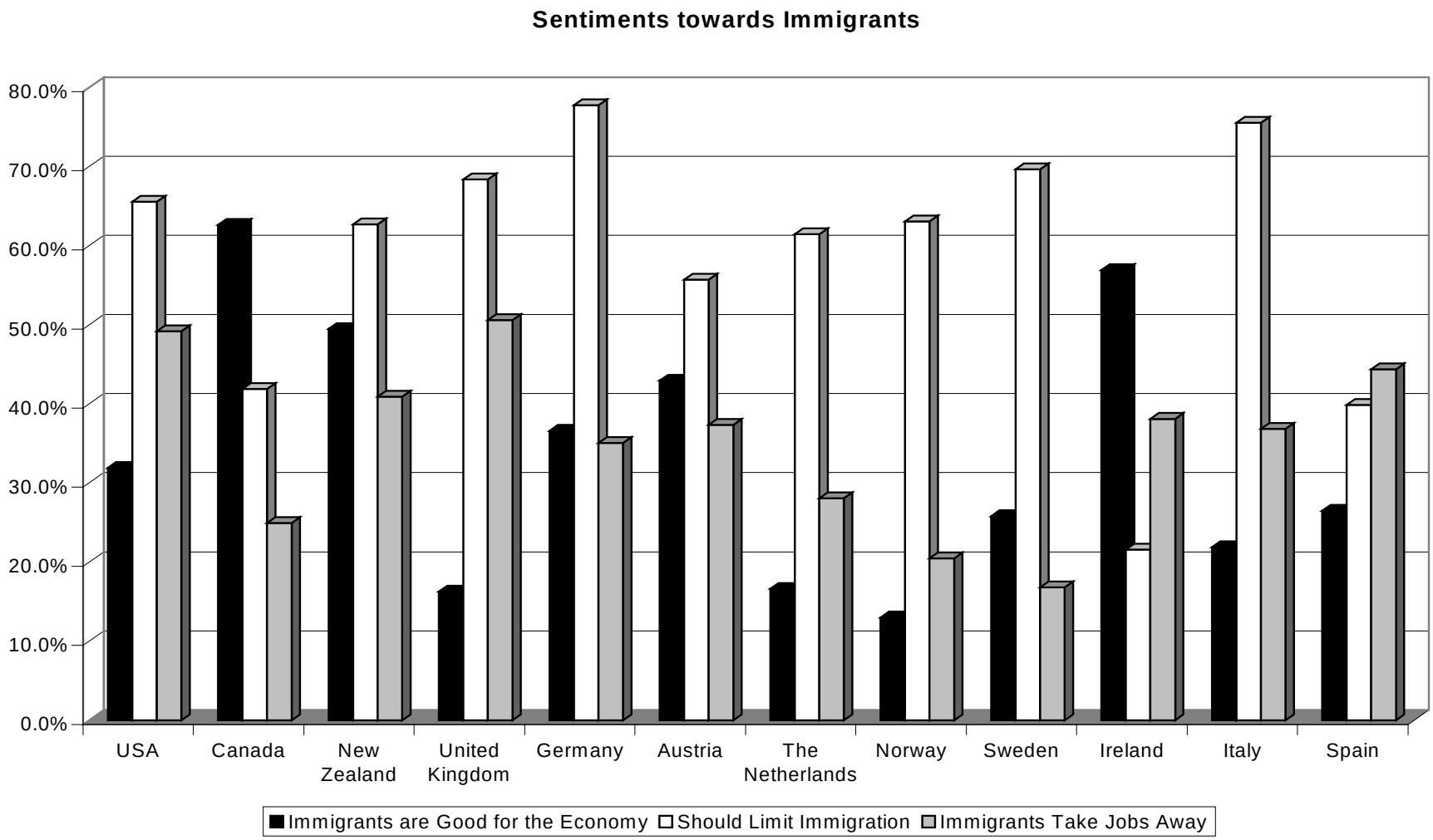
Figure 1:

Share of Foreigners in Total Unemployment Relative to their Share in the Labor Force (1995)



Source: SOPEMI (1998).

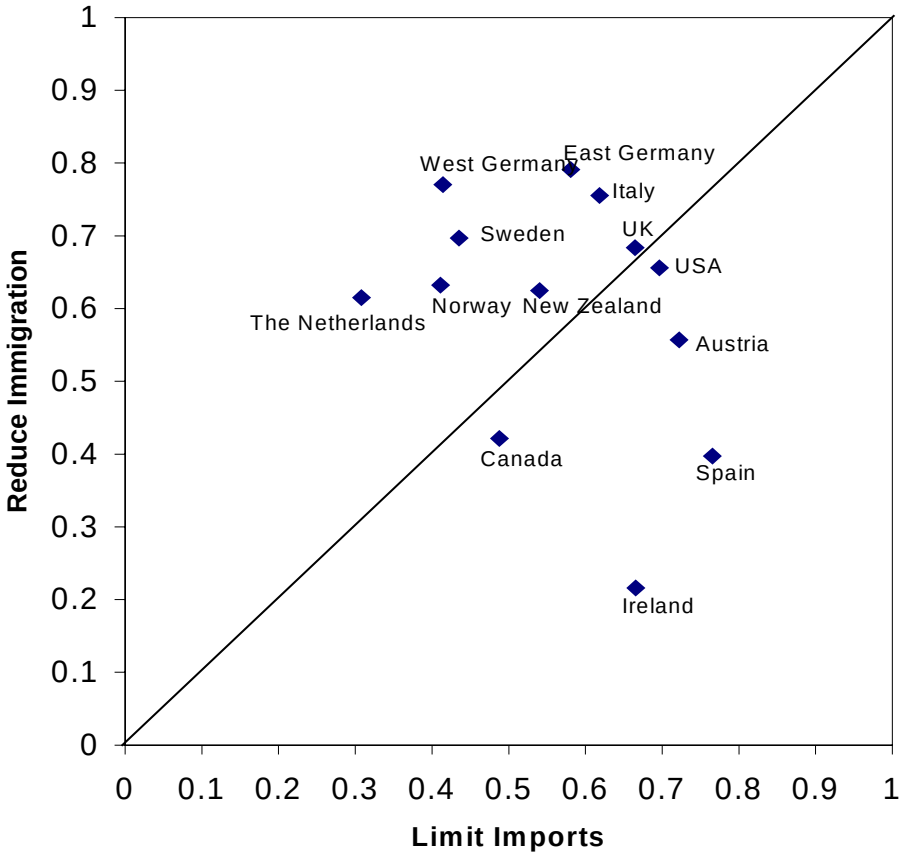
Figure 2:



Data Source: 1995 International Social Survey Programme, own calculations.

Figure 3:

The Relationship between Sentiments towards Limiting Immigration and Reducing Immigration



Source: 1995 International Social Survey Programme, own calculations.

IZA Discussion Papers

No.	Author(s)	Title	Area	Date
91	M. Lechner	Identification and Estimation of Causal Effects of Multiple Treatments Under the Conditional Independence Assumption	6	12/99
92	R. E. Wright	The Rate of Return to Private Schooling	5	12/99
93	M. Lechner	An Evaluation of Public-Sector-Sponsored Continuous Vocational Training Programs in East Germany	6	12/99
94	M. Eichler M. Lechner	An Evaluation of Public Employment Programmes in the East German State of Sachsen-Anhalt	6	12/99
95	P. Cahuc A. Zylberberg	Job Protection, Minimum Wage and Unemployment	3	12/99
96	P. Cahuc A. Zylberberg	Redundancy Payments, Incomplete Labor Contracts, Unemployment and Welfare	3	12/99
97	A. Barrett	Irish Migration: Characteristics, Causes and Consequences	1	12/99
98	J.P. Haisken-DeNew C. M. Schmidt	Industry Wage Differentials Revisited: A Longitudinal Comparison of Germany and USA	1/5	12/99
99	R. T. Riphahn	Residential Location and Youth Unemployment: The Economic Geography of School-to-Work-Transitions	1	12/99
100	J. Hansen M. Lofstrom	Immigrant Assimilation and Welfare Participation: Do Immigrants Assimilate Into or Out-of Welfare?	1/3	12/99
101	L. Husted H. S. Nielsen M. Rosholm N. Smith	Employment and Wage Assimilation of Male First Generation Immigrants in Denmark	3	1/00
102	B. van der Klaauw J. C. van Ours	Labor Supply and Matching Rates for Welfare Recipients: An Analysis Using Neighborhood Characteristics	2/3	1/00
103	K. Brännäs	Estimation in a Duration Model for Evaluating Educational Programs	6	1/00
104	S. Kohns	Different Skill Levels and Firing Costs in a Matching Model with Uncertainty – An Extension of Mortensen and Pissarides (1994)	1	1/00
105	G. Brunello C. Graziano B. Parigi	Ownership or Performance: What Determines Board of Directors' Turnover in Italy?	1	1/00

106	L. Bellmann S. Bender U. Hornsteiner	Job Tenure of Two Cohorts of Young German Men 1979 - 1990: An analysis of the (West-)German Employment Statistic Register Sample concerning multivariate failure times and unobserved heterogeneity	1	1/00
107	J. C. van Ours G. Ridder	Fast Track or Failure: A Study of the Completion Rates of Graduate Students in Economics	5	1/00
108	J. Boone J. C. van Ours	Modeling Financial Incentives to Get Unemployed Back to Work	3/6	1/00
109	G. J. van den Berg B. van der Klaauw	Combining Micro and Macro Unemployment Duration Data	3	1/00
110	D. DeVoretz C. Werner	A Theory of Social Forces and Immigrant Second Language Acquisition	1	2/00
111	V. Sorm K. Terrell	Sectoral Restructuring and Labor Mobility: A Comparative Look at the Czech Republic	1/4	2/00
112	L. Bellmann T. Schank	Innovations, Wages and Demand for Heterogeneous Labour: New Evidence from a Matched Employer-Employee Data-Set	5	2/00
113	R. Euwals	Do Mandatory Pensions Decrease Household Savings? Evidence for the Netherlands	3	2/00
114	G. Brunello A. Medio	An Explanation of International Differences in Education and Workplace Training	2	2/00
115	A. Cigno F. C. Rosati	Why do Indian Children Work, and is it Bad for Them?	3	2/00
116	C. Belzil	Unemployment Insurance and Subsequent Job Duration: Job Matching vs. Unobserved Heterogeneity	3	2/00
117	S. Bender A. Haas C. Klose	IAB Employment Subsample 1975-1995. Opportunities for Analysis Provided by the Anonymised Subsample	7	2/00
118	M. A. Shields M. E. Ward	Improving Nurse Retention in the British National Health Service: The Impact of Job Satisfaction on Intentions to Quit	5	2/00
119	A. Lindbeck D. J. Snower	The Division of Labor and the Market for Organizations	5	2/00
120	P. T. Pereira P. S. Martins	Does Education Reduce Wage Inequality? Quantile Regressions Evidence from Fifteen European Countries	5	2/00
121	J. C. van Ours	Do Active Labor Market Policies Help Unemployed Workers to Find and Keep Regular Jobs?	4/6	3/00
122	D. Munich J. Svejnar K. Terrell	Returns to Human Capital under the Communist Wage Grid and During the Transition to a Market Economy	4	3/00
123	J. Hunt	Why Do People Still Live in East Germany?	1	3/00

124	R. T. Riphahn	Rational Poverty or Poor Rationality? The Take-up of Social Assistance Benefits	3	3/00
125	F. Büchel J. R. Frick	The Income Portfolio of Immigrants in Germany - Effects of Ethnic Origin and Assimilation. Or: Who Gains from Income Re-Distribution?	1/3	3/00
126	J. Fersterer R. Winter-Ebmer	Smoking, Discount Rates, and Returns to Education	5	3/00
127	M. Karanassou D. J. Snower	Characteristics of Unemployment Dynamics: The Chain Reaction Approach	3	3/00
128	O. Ashenfelter D. Ashmore O. Deschênes	Do Unemployment Insurance Recipients Actively Seek Work? Evidence From Randomized Trials in Four U.S. States	6	3/00
129	B. R. Chiswick M. E. Hurst	The Employment, Unemployment and Unemployment Compensation Benefits of Immigrants	1/3	3/00
130	G. Brunello S. Comi C. Lucifora	The Returns to Education in Italy: A New Look at the Evidence	5	3/00
131	B. R. Chiswick	Are Immigrants Favorably Self-Selected? An Economic Analysis	1	3/00
132	R. A. Hart	Hours and Wages in the Depression: British Engineering, 1926-1938	7	3/00
133	D. N. F. Bell R. A. Hart O. Hübler W. Schwerdt	Paid and Unpaid Overtime Working in Germany and the UK	1	3/00
134	A. D. Kugler G. Saint-Paul	Hiring and Firing Costs, Adverse Selection and Long-term Unemployment	3	3/00
135	A. Barrett P. J. O'Connell	Is There a Wage Premium for Returning Irish Migrants?	1	3/00
136	M. Bräuninger M. Pannenberg	Unemployment and Productivity Growth: An Empirical Analysis within the Augmented Solow Model	3	3/00
137	J.-St. Pischke	Continuous Training in Germany	5	3/00
138	J. Zweimüller R. Winter-Ebmer	Firm-specific Training: Consequences for Job Mobility	1	3/00
139	R. A. Hart Y. Ma	Wages, Hours and Human Capital over the Life Cycle	1	3/00
140	G. Brunello S. Comi	Education and Earnings Growth: Evidence from 11 European Countries	2/5	4/00
141	R. Hujer M. Wellner	The Effects of Public Sector Sponsored Training on Individual Employment Performance in East Germany	6	4/00

142	J. J. Dolado F. Felgueroso J. F. Jimeno	Explaining Youth Labor Market Problems in Spain: Crowding-Out, Institutions, or Technology Shifts?	3	4/00
143	P. J. Luke M. E. Schaffer	Wage Determination in Russia: An Econometric Investigation	4	4/00
144	G. Saint-Paul	Flexibility vs. Rigidity: Does Spain have the worst of both Worlds?	1	4/00
145	M.-S. Yun	Decomposition Analysis for a Binary Choice Model	7	4/00
146	T. K. Bauer J. P. Haisken-DeNew	Employer Learning and the Returns to Schooling	5	4/00
147	M. Belot J. C. van Ours	Does the Recent Success of Some OECD Countries in Lowering their Unemployment Rates Lie in the Clever Design of their Labour Market Reforms?	3	4/00
148	L. Goerke	Employment Effects of Labour Taxation in an Efficiency Wage Model with Alternative Budget Constraints and Time Horizons	3	5/00
149	R. Lalive J. C. van Ours J. Zweimüller	The Impact of Active Labor Market Programs and Benefit Entitlement Rules on the Duration of Unemployment	3/6	5/00
150	J. DiNardo K. F. Hallock J.-St. Pischke	Unions and the Labor Market for Managers	7	5/00
151	M. Ward	Gender, Salary and Promotion in the Academic Profession	5	5/00
152	J. J. Dolado F. Felgueroso J. F. Jimeno	The Role of the Minimum Wage in the Welfare State: An Appraisal	3	5/00
153	A. S. Kalwij M. Gregory	Overtime Hours in Great Britain over the Period 1975-1999: A Panel Data Analysis	3	5/00
154	M. Gerfin M. Lechner	Microeconometric Evaluation of the Active Labour Market Policy in Switzerland	6	5/00
155	J. Hansen	The Duration of Immigrants' Unemployment Spells: Evidence from Sweden	1/3	5/00
156	C. Dustmann F. Fabbri	Language Proficiency and Labour Market Performance of Immigrants in the UK	1	5/00
157	P. Apps R. Rees	Household Production, Full Consumption and the Costs of Children	7	5/00
158	A. Björklund T. Eriksson M. Jäntti O. Raaum E. Österbacka	Brother Correlations in Earnings in Denmark, Finland, Norway and Sweden Compared to the United States	5	5/00

159	P.- J. Jost M. Kräkel	Preemptive Behavior in Sequential Tournaments	5	5/00
160	M. Lofstrom	A Comparison of the Human Capital and Signaling Models: The Case of the Self-Employed and the Increase in the Schooling Premium in the 1980's	5	6/00
161	V. Gimpelson D. Treisman G. Monusova	Public Employment and Redistributive Politics: Evidence from Russia's Regions	4	6/00
162	C. Dustmann M. E. Rochina-Barrachina	Selection Correction in Panel Data Models: An Application to Labour Supply and Wages	6	6/00
163	R. A. Hart Y. Ma	Why do Firms Pay an Overtime Premium?	5	6/00
164	M. A. Shields S. Wheatley Price	Racial Harassment, Job Satisfaction and Intentions to Quit: Evidence from the British Nursing Profession	5	6/00
165	P. J. Pedersen	Immigration in a High Unemployment Economy: The Recent Danish Experience	1	6/00
166	Z. MacDonald M. A. Shields	The Impact of Alcohol Consumption on Occupational Attainment in England	5	6/00
167	A. Barrett J. FitzGerald B. Nolan	Earnings Inequality, Returns to Education and Immigration into Ireland	5	6/00
168	G. S. Epstein A. L. Hillman	Social Harmony at the Boundaries of the Welfare State: Immigrants and Social Transfers	3	6/00
169	R. Winkelmann	Immigration Policies and their Impact: The Case of New Zealand and Australia	1	7/00
170	T. K. Bauer K. F. Zimmermann	Immigration Policy in Integrated National Economies	1	7/00
171	C. Dustmann F. Windmeijer	Wages and the Demand for Health – A Life Cycle Analysis	5	7/00
172	D. Card	Reforming the Financial Incentives of the Welfare System	3	7/00
173	D. S. Hamermesh	Timing, Togetherness and Time Windfalls	5	7/00
174	E. Fehr J.-R. Tyran	Does Money Illusion Matter? An Experimental Approach	7	7/00
175	M. Lofstrom	Self-Employment and Earnings among High-Skilled Immigrants in the United States	1	7/00
176	O. Hübler W. Meyer	Industrial Relations and the Wage Differentials between Skilled and Unskilled Blue-Collar Workers within Establishments: An Empirical Analysis with Data of Manufacturing Firms	5	7/00

177	B. R. Chiswick G. Repetto	Immigrant Adjustment in Israel: Literacy and Fluency in Hebrew and Earnings	1	7/00
178	R. Euwals M. Ward	The Renumeration of British Academics	5	7/00
179	E. Wasmer P. Weil	The Macroeconomics of Labor and Credit Market Imperfections	2	8/00
180	T. K. Bauer I. N. Gang	Sibling Rivalry in Educational Attainment: The German Case	5	8/00
181	E. Wasmer Y. Zenou	Space, Search and Efficiency	2	8/00
182	M. Fertig C. M. Schmidt	Discretionary Measures of Active Labor Market Policy: The German Employment Promotion Reform in Perspective	6	8/00
183	M. Fertig C. M. Schmidt	Aggregate-Level Migration Studies as a Tool for Forecasting Future Migration Streams	1	8/00
184	M. Corak B. Gustafsson T. Österberg	Intergenerational Influences on the Receipt of Unemployment Insurance in Canada and Sweden	3	8/00
185	H. Bonin K. F. Zimmermann	The Post-Unification German Labor Market	4	8/00
186	C. Dustmann	Temporary Migration and Economic Assimilation	1	8/00
187	T. K. Bauer M. Lofstrom K. F. Zimmermann	Immigration Policy, Assimilation of Immigrants and Natives' Sentiments towards Immigrants: Evidence from 12 OECD-Countries	1	8/00

An updated list of IZA Discussion Papers is available on the center‘s homepage *www.iza.org*.