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## ABSTRACT

### The Evaluation of Immigration Policies<sup>\*</sup>

This chapter summarizes the literature on the evaluation of immigration policies. It brings together two strands of the literature dealing with the evaluation of labor market programs and with the economic integration of immigrants. Next to immigrant selection and settlement policies, there are four types of interventions that aim at improving the economic and social outcomes of immigrants: a) introduction programs, b) language training, c) labor market programs, and d) anti-discrimination policies. The chapter discusses problems associated with the evaluation of such programs, presents methodological approaches to circumvent these problems, and surveys empirical results and findings. It concludes with lessons from previous research and identifies avenues for future research.

JEL Classification: F22, J15, J61, C21

Keywords: migration, program evaluation, immigrant selection, settlement policy, introduction programs, discrimination, language training, active labor market policy, integration

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# 1 Introduction

The persistent gaps in the economic performance between immigrants and natives provide the basis for policy interventions of various kinds. Improving the immigrants' economic and social performance is a policy challenge of growing importance as many countries will receive—and will need—an increasing number of immigrants in the future.

There are various public policies available that include strategies to select immigrants, settlement policies for immigrants upon their arrival in the host country and interventions that aim at improving the outcomes of immigrants after their arrival. Economic research, by the means of program evaluation, may help to determine which programs are effective in reaching their goals. This chapter reviews the existing policies, it discusses problems associated with the evaluation of these interventions and it surveys selected empirical evaluation studies. Although there has been considerable progress in this area, especially in recent years, it appears rather difficult to draw general conclusions from the existing literature. This chapter highlights the few findings that are consistently reported and provides explanations for the scarce evidence so far.

It should be noted that the literature on the economics of immigrants' assimilation is beyond the scope of this chapter. Constant and Zimmermann (2011) provide a comprehensive overview about theories on immigrant performance and recent advances in this area of research. For the purpose of this chapter, this literature that started with important contributions by Chiswick (1978) and Borjas (1985), among others, is taken as given and a related, but slightly different question is asked: How can public policy intervene in the immigrants' assimilation process to accelerate this process and to improve the framework in which it takes place? In this context, this chapter furthermore concentrates on the most important public policies and it focuses on interventions in receiving countries.

The remainder of this chapter is organized as follows. Section 2 discusses challenges for immigration policies. Section 3 gives a structured overview of the background and aims of different immigration policies. Section 4 discusses problems that arise when evaluating these public interventions and presents methodological approaches to circumvent them. Section 5 surveys empirical results and findings on the effects of immigration policies. Finally, Section 6 concludes with lessons from previous research and identifies avenues for future research.

## 2 Challenges for Immigration Policies

Improving the labor market participation, labor market attachment and the social mobility of immigrants is a major policy concern in many countries around the world. One of the underlying reasons is that immigration is a phenomenon of increasing importance. Figure 1 shows that the stock of the foreign-born population has remarkably increased in virtually all major OECD countries within the short period between 2005 and 2009. While this is *per se* not a worrisome development, one may be concerned that the labor market attachment of immigrants still lacks behind that of natives.

Figure 2 shows that this is the case in the majority of OECD countries.<sup>1</sup> Immigrants do not only exhibit a lower labor market attachment on average, they typically also have higher unemployment rates and lower wage rates than the native population. Moreover, the gaps in the economic performance appear relatively persistent over immigrant generations. Although one would expect the immigrant-native differences to be smaller for the immigrants' descendants, this is generally not the case (see, e.g., Algan et al., 2010, for evidence on France, Germany and the United Kingdom). The gaps in the economic performance between immigrants and natives therefore pose substantial challenges for today's societies, and they will likely cause even greater challenges in the future.

The future will bring an increasing demand for high-skilled workers, which will presumably exceed the supply of these workers in many countries. Immigration appears as *the* channel through which this demand could be met. The global competition for the world's best and brightest minds will certainly increase, with the United States and China appearing as the major players from today's perspective (see, e.g., Constant et al., 2013). European countries will also play a role, but they do not seem to be the primary destination region for today's and tomorrow's high-skilled immigrants. Although the relative demand for low-skilled workers has declined over the last decades, there has also been a continuous shift in what is considered a high-skilled worker or immigrant (Chiswick, 2011). Therefore, it appears on the one hand useful to distinguish between high-skilled and low-skilled immigrants, but on the other hand it is also very important to consider whether immigrants have skills and qualifications that meet (excess) demand in the host country's labor market. Attracting the "right" immigrants in terms of their skills and qualifications is therefore one

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<sup>1</sup> Male foreigners in the United States and female foreigners in Spain are the only two exceptions in Figure 2.

important dimension of immigration policy as this has significant implications for their subsequent economic performance.

However, immigration policy does not end after the immigrants' arrival. There are a number of public policies that may subsequently accelerate the process of their economic and social integration. Such policies include a variety of programs, some of which are particularly targeted at immigrants (e.g., language training) and others which are not (e.g., active labor market programs). Given increasingly tight fiscal constraints, policy has to make a choice about whether and which actions should be taken. It is therefore crucial to know which policies are effective in reaching their goals. Ideally, one would also like to know whether they are efficient (i.e., cost-effective) and which policies are comparatively the most effective and efficient. These answers may provide the basis for evidence-based policy making, for a better use of public expenditures and for improved economic and social outcomes.

### **3 An Overview of Immigration Policies**

Based on the previous discussion, one can distinguish between two broad categories of immigration policies: a) public interventions before and upon the arrival of immigrants that include immigrant selection and settlement policies, and b) policies and programs after the immigrants' arrival and settlement in the host country to improve their economic and social outcomes.

#### **3.1 Immigrant Selection and Settlement Policies**

Public interventions before and upon the arrival of immigrants primarily aim at influencing the pool of immigrants in the host country, i.e., their number and composition, as well as their location choice within the host country. While the former set of policies can be summarized as immigrant selection policies, the latter is referred to as settlement policies.

##### ***Immigrant Selection Policies***

Immigrant selection policies determine the access of immigrants to a host country's labor market—or they define barriers to entry. The traditional immigration countries such as Canada, Australia and New Zealand often serve as role models in this debate. Their economically motivated point systems appear as an effective tool to achieve a proper balance of qualified labor immigrants that fit the demands of their labor markets. On the other hand, the example of the United States shows that even without any sophisticated system of immigrant selection, it is possible to realize the gains of skilled immigration.

Recently, the European Union (EU) as well as individual European countries move towards more sophisticated systems to manage labor immigration. This manifests in the *Blue Card*, an initiative to make the EU more attractive to immigrants from non-member countries. The *Blue Card* appears suited to persuading skilled workers considering immigration to focus more on the EU as a destination region, although individual EU member states have been granted a relatively large leeway in how they implement the directive and establish own standards. The directive defines EU-wide minimum standards for the approval procedures of non-EU skilled and highly qualified workers.

Some European countries, however, go beyond these EU-wide minimum standards. For example, the United Kingdom, Denmark and recently also Austria have established point systems in their national legislation. While in Denmark and in the United Kingdom recent policy movements are more into the direction of restricting immigration, the Austrian initiative appears—at least at first sight—as a comprehensive system that could indeed serve its purpose of attracting high-skilled labor immigrants. It shows in many ways similarities to a recent proposal for a combined point and quota system that has been developed for Germany (Hinte et al., 2011).

These policy initiatives document that more and more countries consider immigration as the channel through which the increasing demand for high-skilled workers can be met in the future. In particular point systems appear as effective policy instruments. However, the design of immigrant selection policies can—and should—build on evaluations of already established regimes.

### ***Settlement Policies***

Settlement policies place restrictions on where newly arrived immigrants are allowed to settle. Such restrictions have been applied in a number of countries including the United Kingdom, Germany, Sweden, Denmark and the Netherlands. The rationale for this intervention is twofold: a) immigrants should be directed away from immigrant “enclaves” to accelerate their assimilation process and to improve their economic performance; and b) immigrants should be relatively equally distributed across the host country to spread the (perceived) burden of costs for society equally across administrative districts.

However, whether these two motivations actually apply is *a priori* not clear. For example, network effects may have either a positive or a negative influence on the immigrants’ assimilation process in the host country. On the one hand, a network of co-ethnics may allow immigrants to have easier access to information about the host country’s labor market. This may include, e.g., information about job offers, vacancies, application procedures, and other

administrative procedures and informal processes. On the other hand, there is a risk of undesired assimilation processes that may be triggered by ethnic networks. For example, because unemployment rates are generally higher among immigrants, the information about the labor market that is available in these networks may be of relatively poor quality. Immigrants may then find it hard to access high-quality jobs with the help of their network of co-ethnics.

The second rationale is even harder to justify—if at all. The majority of empirical studies do not support the concern that excessive participation in welfare or social security systems might be a more common phenomenon for immigrants than for natives, and that immigration constitutes a fiscal burden for host countries (see, e.g., Council of Economic Advisers, 2007). In particular, there is only weak empirical evidence for the welfare magnet hypothesis, i.e., that immigrants are more likely to move to welfare-generous countries (Pedersen et al., 2008; De Giorgi and Pellizzari, 2009; Giulietti et al., 2012).

The effects of redirecting immigrants are nevertheless theoretically ambiguous. The ambiguity mainly arises because of the positive and negative effects an immigrant network may exert on the immigrants' assimilation process. However, it is not straightforward to isolate or to identify the impact of the location choice because typically immigrants self-select into regions of residence after arrival in the host country. This is a confounding factor any empirical evaluation study has to carefully take into account.

### **3.2 Policies and Programs for Immigrants in the Host Country**

One can distinguish between four different types of public policies and programs that aim at improving the economic and social outcomes of immigrants after their arrival and settlement in the host country: a) introduction programs, b) language training, c) active labor market programs, and d) anti-discrimination policies. These four types can be considered as the most important public policies in this context.

#### ***Introduction Programs***

Introduction programs aim at facilitating the transition from immigration to labor market and social integration. They are an integral element of immigration policies in Nordic countries for quite some time and have recently gained popularity in other countries (e.g., in Germany).<sup>2</sup>

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<sup>2</sup> For example, introduction programs have been offered to newly-arrived immigrants in Sweden since the late 1960s. See Andersson Joonas and Nekby (2012) for more details on introduction programs in the Swedish context.



Introduction programs are in principle a combination of language courses and labor market programs. For example, they can include vocational training, job search assistance and subsidized employment. They can also include courses about the history, norms, culture and traditions of the host country. However, introduction programs differ with respect to their timing as they are specifically targeted at newly-arrived immigrants.

Introduction programs therefore intervene when immigrants are particularly vulnerable, i.e., immediately after their arrival in the host country. Although this appears in principle as a promising strategy, there are a number of problems associated with these types of programs. For example, participation in introduction programs is often associated with some form of remuneration, which may generate incentives to stay longer in the program than what would be optimally the case. Although introduction programs are typically time-limited with a pre-specified maximum duration, participation may lead to substantial locking-in effects. Additionally, introduction programs may be the starting point of so-called “program careers” with multiple, sequential participations in various labor market programs.

Whether introduction programs are an effective and efficient public policy to facilitate the economic and social integration of newly-arrived immigrants thus remains an empirical question.

### ***Language Training***

The provision of language training may be part of an introduction program, but language training can also be provided as a separate program. Language skills are overwhelmingly judged as being a crucial determinant of the immigrants’ economic and social integration, and hence these programs have potentially large effects. The economic returns of language proficiency are generally substantial, although there are some cross-country differences in this respect (see, e.g., Chiswick and Miller, 1995).

Insufficient language skills of immigrants are a substantial barrier to enter the labor market. These skills are part of the immigrant’s human capital and they are—in most cases—not transferable to the host country. The economic assimilation of immigrants in the host country is therefore, at least in part, also a story about language acquisition. In this context, it appears very useful to answer the question whether immigrants should acquire these skills through formal courses (e.g., language training) or through informal activities (e.g., self-study, learning by doing). Although the language skills of immigrants generally improve with the duration of residence in the host country (Chiswick and Miller, 1992), a formal language training may accelerate the process of language

acquisition at least for some of these individuals. This may, for example, be the case for immigrants in “language enclaves” where the host country’s dominant language is not very frequently spoken (Chiswick and Miller, 1992). The exposure to the dominant language is relatively low in these areas and the opportunities for informal language training limited.

It is, however, not straightforward to evaluate the effects of language training. A problem may arise if language skills are unobserved or measured with considerable error, since immigrants self-select (or are selected) into language training based on their language proficiency. If this selection process cannot be carefully addressed, it may cause a bias in the estimated effects of participation.

### ***Active Labor Market Programs***

Next to passive labor market policies, which are not specifically considered in this chapter, active labor market policies comprise a variety of programs that aim at increasing employment and wages of disadvantaged groups in the labor market. These programs can be either precisely targeted at particular groups of individuals (e.g., youth employment and training measures, employment programs for the disabled) or more broadly targeted at unemployed individuals. The latter programs include public employment services and activation measures, training programs, and subsidized employment or self-employment.

Public employment services generally aim at promoting matches between firms with vacant job and job seekers. Next to administering unemployment benefits, they provide help in the form of measures such as placement and counseling activities, vocational guidance, and job search courses. They moreover implement activation measures in form of job search requirements and monitoring, and they may apply sanctions. Training programs are predominantly provided in form of classroom training. These programs may either serve to compensate a gap a general education (e.g., for high school dropouts) or aim at updating skills and qualifications of workers (e.g., for long-term unemployed). Subsidized employment involves either temporary or permanent transfers to private firms (e.g., wage or hiring subsidies), or the creation of temporary jobs for disadvantaged groups in the public sector (e.g., job creation schemes). Additionally, start-up subsidies that promote self-employment or entrepreneurship are increasingly popular.

These labor market programs are in general not specifically targeted at immigrants.<sup>3</sup> However, immigrants are typically overrepresented in these programs which is for example due to their higher unemployment rates. It is thus important to assess the effects of these programs on immigrants, and there are at least two more reasons for it. First, program effects may be heterogeneous between immigrants and natives, and these effects may even differ within the immigrant population. If such differences exist, they should be taken into account when assigning individuals to these programs. Second, labor market programs compete with other policy measures that aim at improving the immigrants' economic performance. Their relative performance should therefore guide which programs are adequate for whom.

### ***Anti-Discrimination Policies***

Immigrants face discrimination in several markets. Discrimination is for example documented in a wide range of consumer markets such as the market for new cars (e.g., Ayres and Siegelman, 1995) or the housing market (e.g., Ondrich et al., 2003). Nevertheless, the labor market is presumably the most important market where discrimination is present. For example, wage gaps between immigrants and natives are present in many countries (Adsera and Chiswick, 2007), and at least part of these gaps may be due to discrimination.

But employers' discriminatory behavior in the labor market may not only affect wage setting. Numerous empirical studies find a substantial extent of discrimination in the hiring decisions of firms (e.g., Bertrand and Mullainathan, 2004; Carlsson and Rooth, 2007; Kaas and Manger, 2012). However, from a theoretical point of view, firms should hire the most productive workers—no matter where they are from or what gender they have. Discrimination is a market failure, and it is costly to the firms. For example, Weber and Zulehner (2009) show that firms with strong preferences for discrimination have significantly shorter survival rates.

Discrimination as a market failure provides the basis for policy interventions of various kinds. Next to anti-discrimination legislations that have been implemented in many countries, anonymous job applications have recently gained attention and popularity. Their intuition is straightforward: removing information about characteristics that employers may discriminate against should reduce or even abandon discrimination in hiring. Discrimination becomes virtually impossible, at least in the first stage of the hiring process which is the decision about the invitation for a job interview. It may, however, be the case

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<sup>3</sup> Introduction programs and language training are labor market programs which are specifically targeted at immigrants. We consider these two types separately.

that discrimination then takes place at a later stage in the hiring process when the decision about a job offer is made. Several European countries have recently conducted experiments with anonymous job applications (e.g., France, the Netherlands, and Germany).

## 4 Methodological Considerations

The aim of any evaluation study is to identify and to measure the causal effects of a public policy, program or intervention. The key challenge is to find a credible estimate for the counterfactual situation. In other words, it is crucial to answer the following question: What would have happened in the absence of treatment? The literature on the econometrics of program evaluation that addresses this question has made impressive improvements over the past decades, and therefore a comprehensive overview about this literature is beyond the scope of this chapter. The interested reader may refer, e.g., to Imbens and Wooldridge (2009) who provide the broader picture, including a historical overview as well as references to more technical research.

### 4.1 The Econometrics of Program Evaluation

Ideally, one would like to compare the observed impact of a given intervention on the participant who potentially benefits with what would have happened if the measure had not been applied to the individual. Since the latter outcome is unobserved, the (fundamental) evaluation problem is essentially a problem of missing data. The solution strategy is to assume that available data on the behavior of other individuals can—under certain conditions—replace the missing data. This requires to specify a control group that reasonably approximates the counterfactual outcome of the treatment group.

The evaluation literature typically concentrates on population average gains from treatment—and usually on the average treatment effect on the treated (ATT or  $\Delta_{ATT}$ ), which is formally given by:

$$\Delta_{ATT} = E(\Delta | D=1) = E(Y^1 | D=1) - E(Y^0 | D=1) \quad (1)$$

where  $Y^1$  denotes the outcome of interest in case of participation ( $D=1$ ) and  $Y^0$  the outcome in case of non-participation ( $D=0$ ). It is the principle task of any evaluation study to find a credible estimate for the second term on the right hand side of equation (1), which is unobserved for the participants.

One possible solution could be to simply compare the mean outcomes of participants and non-participants. However, if  $E(Y^0 | D=1) \neq E(Y^0 | D=0)$ , estimating

the ATT from the difference between the sub-population means of these two groups would yield a selection bias.

There are various ways to avoid or to minimize the selection bias. One straightforward and, hence, attractive option are randomized experiments. Randomly choosing individuals that are treated ensures that all other aspects of the environment are on average the same for participants and non-participants. This procedure provides the right counterfactual and rules out selection bias. Randomization allows to use individuals in the control group as an image of what would have happened to treated individuals in the absence of treatment. Nevertheless, randomized experiments may suffer from a number of problems. First, they it may not be possible to implement a randomized experiment because of ethical or practical reasons—and if it is possible, they are relatively costly. Second, the external validity of the experiment may be doubtful.

Non-experimental methods are a in general a valuable alternative to randomized experiments. For example, natural experiments split the population into two groups, where one group is exposed to a treatment or a policy change and the other one is not. The method relies on the identifying assumption that in the absence of treatment, the change in the outcome would be the same in the two groups. This common trend assumption ensures that the treatment effect can be estimated as the difference in the change of the outcome variable between the two groups over time (i.e., with a difference-in-differences approach). The key virtue of this approach is its transparency. However, one may again question the external validity of the results. Additionally, some external policy change is required that affects two groups of the population differently—and typically such a policy change does not come overnight, and therefore anticipation effects are likely to occur.

Matching methods explicitly recognize non-random selection into treatment, but they rely on the assumption that this selection is based on observable variables. The simple idea of this approach is that the best counterfactual untreated outcome for a participant is the outcome of a non-participant whose observable characteristics are as close as possible to his or her characteristics. As in the case of linear regressions, matching estimators rely on a conditional independence assumption. Furthermore, matching estimators require a common support condition to hold. To avoid the curse of dimensionality, propensity score matching methods can be used (Rosenbaum and Rubin, 1983).<sup>4</sup>

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<sup>4</sup> See, e.g., Caliendo and Kopeinig (2008) for practical guidance when implementing propensity score matching methods.

The regression discontinuity design requires a variable that is correlated with both treatment status and the outcome of interest. In the sharp regression discontinuity design, there is a cut-off point above which treatment takes place.<sup>5</sup> If this cut-off point is somewhat arbitrary, one can compare the outcomes of individuals just below this point to those of individuals just above this point. It is likely that those individuals are relatively similar, and therefore this comparison yields a consistent estimate of the (local) treatment effect. The advantages of the regression discontinuity design are that the underlying assumptions are credible and easy to defend and that the estimator is relatively easy to compute. Sometimes it is also the only alternative. The main disadvantage is that treatment effects can only be estimated at the discontinuity—and occasionally this point is not very relevant.

Finally, the instrumental variable approach may be used to estimate treatment effects—if an instrument is available. Finding a credible instrument is usually very difficult and poses the major challenge this approach involves.

## **4.2 Some Specific Problems of Immigration Policies**

Next to the general problems that a researcher is confronted with when evaluating the impacts of any given policy intervention, there are additional challenges that are associated with the evaluation of immigration policies.

First, data availability is a more severe constraint when evaluating the effects of immigration policies. For instance, in many receiving countries, immigration status can only be approximated by citizenship. This information is usually not sufficient, but it is often the only available information that is recorded (e.g., when data is collected primarily for administrative purposes). This has for example implications when the effects of participation in a labor market program for immigrants are contrasted to those for natives because naturalized immigrants would be included in the native population. However, if the effect for this group differs from that for natives, one would only be able to measure a mixture of both effects.

Second, the evaluation problem, or the problem of missing data, becomes in generally more severe. In many cases, unobserved heterogeneity is very likely to be present. This is for example the case when evaluating the effects of language training. As mentioned above, a problem arises when language skills are unobserved (or measured with error) because typically immigrants self-

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<sup>5</sup> In the fuzzy regression discontinuity design, crossing the cut-off point does not change the probability of receiving treatment from zero to one. It is, however, sufficient that the treatment probability changes discretely at some point.

select (or are selected) into language training based on their language proficiency. In this case, the selection process into treatment cannot be carefully addressed and the estimated effects likely suffer from selection bias.

An additional constraint in terms of data arises when data would be needed from both sending countries and the receiving country. This could be the case if one is interested in the effects of immigrant selection policies that aim at influencing the decision to immigrate of individuals in sending countries. It is, however, only very rarely the case that such data are available.

Finally, it is often hard to isolate the impacts of the change in a single policy parameter because in reality, policy parameters are frequently altered at the same time. The researcher may then want to decompose treatment effects into different components, if possible.

## **5 A Survey of Empirical Results and Findings**

Immigration policies are analyzed in a number of empirical evaluation studies. Below, selected studies are surveyed that assess the effects of the previously discussed public policies and use the methods that are outlined above. Table 1 provides an overview about these studies, their methodological approaches, and their main results.<sup>6</sup>

### **5.1 Immigrant Selection and Settlement Policies**

The empirical evidence on the effects of immigrant selection policies and settlement policies is scarce. Some studies exist, but the literature is far from being conclusive about the impacts of these policies. Note that although in principle studies that evaluate policy changes in sending countries may be relevant in this context (see Card, 1990 as an example of such a study), these studies are not considered below.

#### ***Immigrant Selection Policies***

One approach to evaluate the effects of immigrant selection policies is to focus on one country. For example, Cobb-Clark (2003) takes advantage of a policy reform of the Australian immigration program in the late 1990s when she analyzes to what extent the choice of selection criteria influences the labor

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<sup>6</sup> Note that the ambition of this survey of the empirical literature is *not* to provide a complete picture of all studies that exist, but rather to give an overview about the methods that are applied in the literature as well as about some lessons that can be drawn from the findings of selected studies.

market integration of immigrants. The Australian government altered the selection criteria by focusing more on immigrant's productive skills. She compares two cohorts of immigrants to Australia to assess whether this policy change increased the labor market outcomes of the immigrants. The first cohort arrived between 1993 and 1995 under the old selection criteria, and the second cohort between 1999 and 2000 under the new and tighter criteria. These two cohorts differ substantially with regard to their labor market outcomes six months after arrival in Australia. The second cohort is characterized by a higher employment-to-population ratio, a higher labor force participation rate, and a lower unemployment rate. A decomposition analysis reveals that the higher human capital endowment of the second cohort, which is due to the tighter immigration selection criteria, is instrumental for their improved labor market integration. However, this effect is reinforced by simultaneous changes in the labor market conditions and in the income-support policy.

Instead of focusing on a single country, an alternative approach is to study differences between countries. For example, Picot and Sweetman (2011) contrast Canada's immigration policy and labor market outcomes of Canadian immigrants to the Swedish immigration experience. Motivated by the observation that immigrants to Canada enjoy labor market outcomes that are more favorable than those of Swedish immigrants, the authors argue that large part of this difference is related to differences in immigrant selection policies. Unfortunately, the study only provides descriptive evidence for this conclusion.

Antecol et al. (2003) also study cross-country differences in the immigrants population and compare immigrants in the three major receiving countries Australia, Canada and the United States. Using cross-sectional data from the early 1990s, they provide evidence that relative to natives, Australian and Canadian immigrants have higher levels of English fluency, education, and income than immigrants in the United States. However, after excluding Latin American immigrants to the United States, immigrants' observable skills are similar in the three countries. The authors conclude that the relatively low skill level of immigrants to the United States is related to its geographical and historical ties to Mexico rather than to the fact that skill-based admission systems are less important in the United States than in Australia or Canada.<sup>7</sup>

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<sup>7</sup> Note that this conclusion is different from the one of Borjas (1993). He concludes that the Canadian "point system works because it alters the national-origin mix of immigrant flows" (Borjas, 1993, p. 40).



### ***Settlement Policies***

Edin et al. (2004) take advantage of a natural experiment and use a difference-in-differences estimator to measure the effects of the introduction of a settlement policy in Sweden. This reform of the Swedish immigration policy in 1985 featured the dispersion of refugee immigrants, but at the same time the reform also changed the approach to labor market integration. The authors find that immigrants experienced substantial long-run losses after the reform. This negative effect appears to be due to both components of the reform, although more than half of the effect stems from a common component that affected immigrants regardless of location. The authors therefore argue that the second component of the reform, namely the shift in the policy focus from labor market assimilation to income support, is mainly responsible for the negative long-run effects. However, they also conclude that the effect of the settlement policy (alone) would have been even more negative if the immigrants had stayed in their assigned locations. Subsequent internal mobility of the immigrants—away from their initial locations—could offset at least part of the negative effect.

## **5.2 Policies and Programs for Immigrants in the Host Country**

Although there are a number of studies that evaluate the effects of policies and programs for immigrants in the host country, it appears rather difficult to draw any general conclusions from this literature. One consistent finding, however, is that programs that are closely linked to the labor market (e.g., work experience and wage subsidies) generate relatively large positive effects.

### ***Introduction Programs***

Svantesson and Aranki (2006) assess the impact of different introduction activities in Sweden on the immigrants' short-run employment probability. Their results indicate heterogeneous impacts for different activities. Whereas for example labor market practice has a positive effect, other activities do not seem to have any impact or even a negative effect on the employment probability. Among the latter are language practice and contact to caseworkers. However, the study fails to take into account the problem of (self-)selection into treatment, and therefore the estimated effects are likely biased.

The problem of (self-)selection into treatment is more carefully addressed in Andersson Joona and Nekby (2012) who rely on a randomized experiment. They analyze the effects of the Trial Introduction Program (TIP) in Sweden in comparison to regular introduction programs. In participating municipalities, newly-arrived immigrants were randomly assigned either into TIP or into regular

introduction programs. The authors find significant positive effects of TIP on the probability of attaining regular employment and even larger effects on the probability of entering other training programs. They therefore conclude that more intensive counseling and coaching as well as more flexible language training—which are the main innovations of TIP compared to regular introduction programs—may foster transitions into regular employment for newly-arrived immigrants. However, outcomes are measured relatively shortly after the end of the program, and the (long-term) effects of the higher enrollment rates into subsequent training programs are not evaluated.

### ***Language Training***

Hayfron (2001) analyzes the effects of language training in Norway for a selected sample of immigrant men from Pakistan, Chile and Morocco. Using an instrumental variable approach to account for selection into treatment, his results indicate that participants in language training are more likely to acquire speaking and reading proficiency in the Norwegian language than non-participants. However, in contrast to many other studies, he does not find a significant effect of improved language proficiency on immigrants' earnings.

Christensen and Stanat (2007) examine the relationship between school achievement and competence in the language of instruction of immigrant children. They survey school language policies and practices in fourteen immigrant-receiving countries and identify approaches that may help immigrant students to improve proficiency in the language of instruction. Their recommendations include making long-term investments in systematic language support programs and training teachers in second-language acquisition. However, the authors do not base these recommendations on evaluation studies. Instead, they identify practices of countries in which performance differences between immigrant children and other students are small.

### ***Active Labor Market Programs***

There is in general a huge variety of active labor markets programs available that are either specifically targeted at immigrants or immigrants participate in these measures next to the native population. Therefore, two broad categories of evaluation studies assessing the impacts of these programs for immigrants can be distinguished: a) studies focusing on targeted programs where the overall impact corresponds to the impact for immigrants, and b) studies analyzing whether impacts are heterogeneous for the immigrant population.

Aslund and Johansson (2011) evaluate an active labor market program which is specifically targeted at immigrants. They analyze the effectiveness of an

immigrant workplace introduction program in Sweden which aims at helping immigrants and refugees who are in general considered employable, but at the same time expected to face substantial difficulties in finding work. The program had previously been used for disabled workers and mainly involves intensified counseling, job search assistance, a workplace introduction, and monitoring. Using a difference-in-differences approach in which the authors compare labor market transitions in municipalities that implemented the program to those in other municipalities, their results suggest that the program increased transitions from unemployment to work experience schemes, and also improved the employment probabilities of participants. The authors furthermore provide some rough calculations of the program's efficiency. However, some caution seems appropriate since the analysis of an artificial reform generates similar effects, at least on employment probabilities. This casts doubts whether the estimated program effects are indeed causal.

Another example for a study assessing the impacts of a targeted program is Sarvimäki and Hämäläinen (2010). They evaluate the effects of an integration program for immigrants to Finland. This program consists of an individualized sequence of training and subsidized employment, and non-compliance is sanctioned by reductions in welfare benefits. The evaluation exploits a discontinuity that made participation obligatory on 1 May, 1999 only for those who had immigrated after 1 May, 1997. As this threshold date was set more than one year after the relevant immigration decision had been made, the assumption that immigrants who entered shortly before and shortly after the threshold date are comparable is likely to hold. The authors find that the program strongly increased the employment and earnings of immigrants and reduced their dependency on social benefits.

Clausen et al. (2009) do not focus on specifically targeted programs, but analyze the effects of participation in different active labor market programs for newly-arrived immigrants in Denmark. They use the timing-of-events duration model and take account of language course participation and progression in destination country language skills. In their view, the assumption of no anticipation effects is likely to hold for newly-arrived immigrants. Their results indicate substantial locking-in effects for participants in most programs that are analyzed. The only exception are wage subsidies. They moreover find significantly positive program effects on the hazard rate to regular employment for these wage subsidies. Such effects are not found for other types of programs. For participants in language courses, improvements in language proficiency have significant and substantial positive effects on the hazard rate to employment. The authors conclude that subsidized employment in the private

sector is by far the most effective program, at least in the short-run perspective—and at the same time, it is the least frequently applied program in Denmark.

Cohen-Goldner and Eckstein (2010) investigate the effects of public training programs for a sample of high-skilled female immigrants from the Former Soviet Union to Israel. Based on a dynamic discrete choice model that accounts for selection into training and employment, they find that participation in training significantly increases wages in white-collar occupations, but not in blue-collar occupations. Participation in training furthermore increases the job offer rates in both occupations. The results of counterfactual policy simulations allow the authors to conclude that a substantial social gain would result from increasing the access to public training programs.

Aldashev et al. (2010) evaluate the effects of short-term off-the-job programs (aptitude tests, job search training, skill provision and combined training programs) separately for natives and immigrants in Germany. Using propensity score matching methods, the authors find that aptitude tests and skill provision have positive treatment effects for all participants and to some extent, immigrants benefit more than natives. Skill provision has a positive “immigrant fixed effect” on female immigrants and aptitude tests for all immigrants. This suggests that the productivity of immigrants is undervalued, but revealed after they have participated in a program. Job search training seems to be ineffective for all male participants. The effects for women depend on the ethnic group they belong to. Female natives gain from job search training, whereas it negatively affects female immigrants. Since this difference persists if observable variables are controlled for, there is a negative “immigrant fixed effect.” Any combined training programs are ineffective for all participants.

Heinesen et al. (2011) analyze the effects of different active labor market programs on the exit rate to regular employment for non-western immigrants in Denmark who receive social assistance. Using the timing-of-events duration model, the authors find large positive effects for participants after program exit, but even during the programs, most effects are positive. The authors report the largest effects for subsidized employment programs, although also direct employment programs and other programs reduce the duration of social assistance spells substantially. The effects are generally larger if program entry is at least after six months of previous unemployment.

In the portfolio of active labor market programs, start-up subsidies for the unemployed have become increasingly important in many OECD countries. Self-employment might be a very attractive alternative for immigrants who are

potentially discriminated in dependent employment.<sup>8</sup> Caliendo and Künn (2011) evaluate the long-term effects of two start-up programs in Germany and investigate, among other things, the effect heterogeneity with respect to nationality. Whereas they find that that start-up subsidies for the unemployed tend to be most effective for disadvantaged groups in the labor market, treatment effects for immigrants are somewhat lower than those for natives. Nevertheless, the effects for immigrants are still significantly positive and very large in absolute value.

Next to the actual impacts of participation, active labor market programs may already have an impact if participation appears likely. This could affect the job search behavior of the unemployed. Bergemann et al. (2011) assess potential differences in these *ex ante* effects between natives and immigrants in Germany. The presence and direction of such effects depend both on whether the individual's gain of the treatment is positive or negative and on the probability of entering such a program. The *ex ante* effects on Turkish migrants seem to differ most from those on native Germans. If participation is expected, natives and immigrants from Central and Eastern European countries significantly increase their search effort. In contrast, Turkish immigrants do not adjust their search behavior. The authors thus conclude that Turkish migrants do not dislike participation in active labor market programs as much as natives and immigrants from Central and Eastern European countries do.

### ***Anti-Discrimination Policies***

Anonymous job applications are increasingly promoted as a way to combat employment discrimination.<sup>9</sup> For example, Aslund and Nordström Skans (2012) present empirical evidence on the effectiveness of anonymous job applications. They use data from a field experiment in the Swedish city of Gothenburg, where such applications were used in parts of the local administration. Difference-in-differences estimates suggest that anonymous job applications increase the chances of advancing to interviews for both women and immigrants of non-Western origin. Women also experience a higher job offer probability. The latter effect is not found for immigrants.

Krause et al. (2011) also rely on data from a randomized experiment when assessing the effects of anonymous job applications in a particular labor market,

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<sup>8</sup> See, e.g., Clark and Drinkwater (2000) for some evidence on the interaction between ethnicity and self-employment in the United Kingdom.

<sup>9</sup> See, e.g., Krause et al. (2010) for an overview about the extent of discrimination in hiring decisions in various countries as well as about international experiences with anonymous job applications.

namely the annual job market for Ph.D. economists. Applicants at a European-based economic research institute were randomly assigned into treatment, in which case certain characteristics (e.g., name, gender, age, contact details, nationality) were removed from applications. The authors find that anonymous job applications are overall not associated with a higher or lower probability to receive an interview invitation. But whereas female applicants are more likely to receive an interview invitation relative to their male counterparts with standard applications, this relative advantage levels with anonymous job applications. The authors do not find differential effects by ethnic origin.

Although the empirical evidence on the effects of anonymous job applications is relatively scarce, more results are expected to become available soon (e.g., from field experiments in France and Germany).

## **6 Conclusions and Outlook**

Although the empirical evidence on the effects of various immigration policies is relatively scarce, it appears important to highlight the few findings that are consistently reported.

First, the findings about the effects of immigrant selection policies are somewhat mixed. On the one hand, the general pattern that emerges is that more sophisticated regimes to manage immigration are effective policy tools and lead to the desired outcome of improved labor market integration. On the other hand, the United States appear as a special case in this context. Second, settlement policies do not seem to improve the economic and social outcomes of immigrants. Although the empirical evidence is very scarce, the existing study even highlights that the negative effects of this policy are at least partly offset by subsequent internal mobility of immigrants. Third, among the public policies that intervene after the immigrants' arrival in the host country, programs that are relatively closely linked to the labor market (e.g., work experience and wage subsidies) appear as the comparatively most effective programs. Attention should be devoted to substantial locking-in effects, which are found for most programs, and to the fact that participation in some of these programs appears to lead to subsequent program participation and "program careers."

There are several reasons why it is difficult to draw general conclusions from the existing literature. First, most of the evaluation studies concentrate on the effects of participation in a given program for the participants in this measure. This makes it hard to judge what effects would result if that program would be extended. For example, at least part of the reason why wage subsidies are relatively effective might be that they are typically employed only at a small

scale. Second, most of the studies only evaluate the short-term effects of programs. However, these effects may be very different from the long-term effects as for example participation in one program may lead to participation in another program. Third, most evaluation studies that exist provide evidence for Nordic countries such as Sweden, Norway, and Denmark. This is very likely related to better access to high-quality data in these countries, but it nevertheless appears hard to generalize from findings that may be specific to a particular institutional environment. Fourth, there are virtually no studies that evaluate the efficiency of programs or assess the comparative effectiveness (or efficiency) of different interventions. However, these results would be particularly relevant from a policy perspective as they could provide the basis for evidence-based policy making.

Therefore, although substantial progress has been made in recent years regarding the evaluation of immigration policies, there is still considerable scope for future research.

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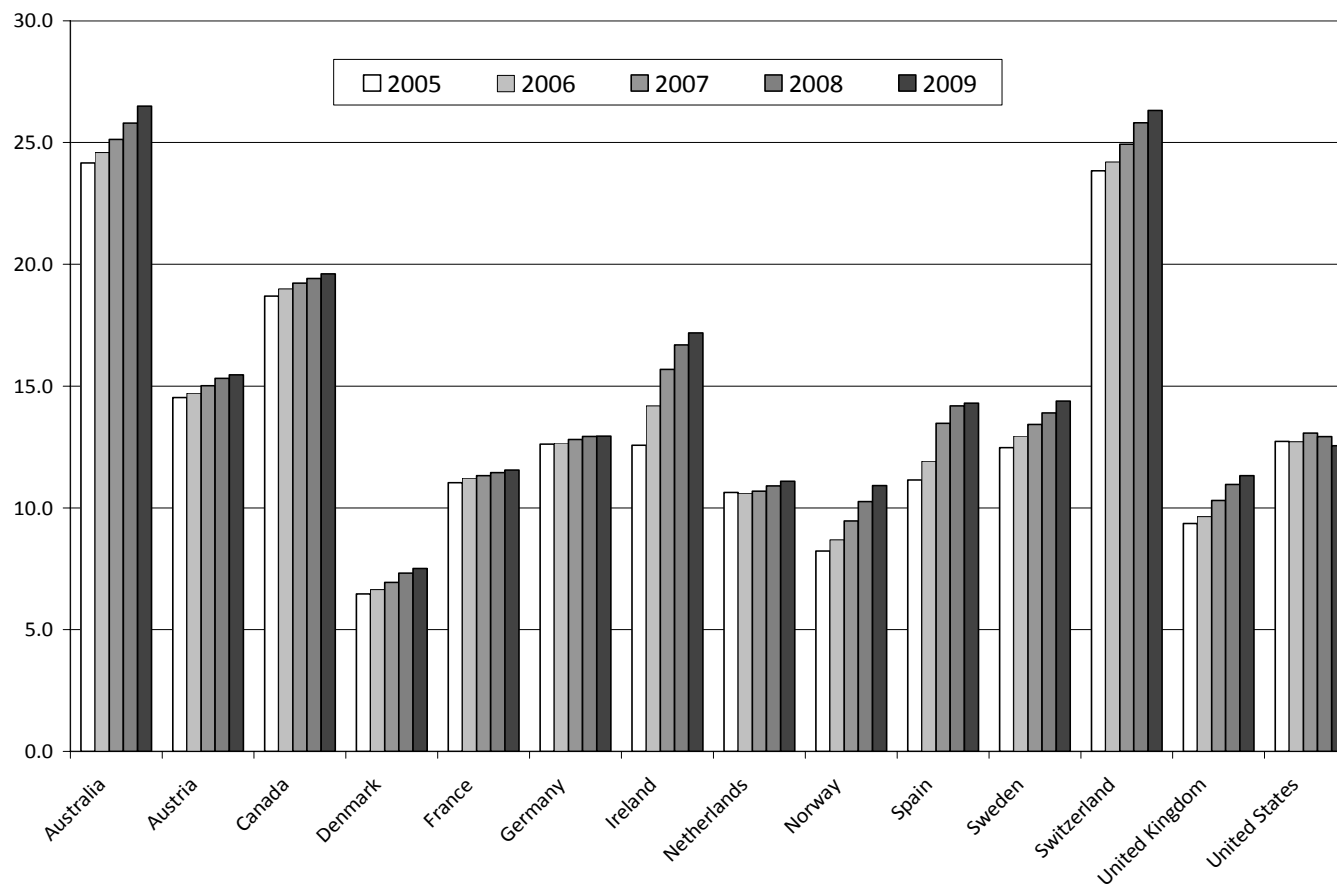
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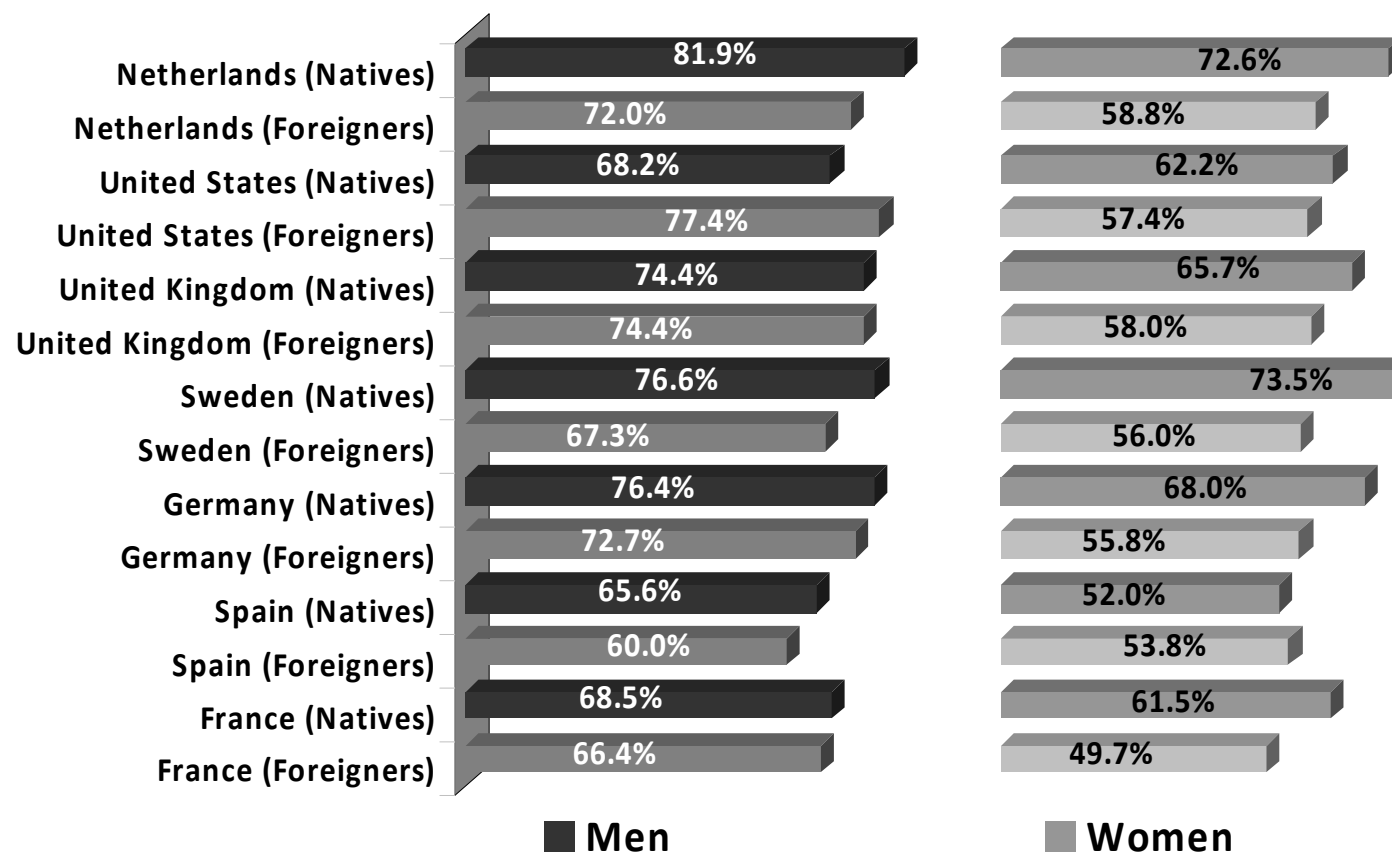
**Figure 1: Stock of Foreign-Born Population in Selected OECD Countries (2005-2009)**



Source: OECD International Migration Outlook 2011.

Note: In percent of total population.

**Figure 2: Employment-to-Population Ratios of Natives and Foreigners in Selected OECD Countries (2010)**



Source: OECD International Migration Outlook 2011.

**Table 1: Selected Evaluation Studies of Immigration Policies**

	Country (Region)	Methodology	Main Results
<b><i>Immigrant Selection Policies</i></b>			
Cobb-Clark (2003)	Australia	Comparison of two cohorts of immigrants who arrived under old and new selection criteria (1993-95 vs. 1999/2000)	Tighter selection criteria improve the (short-run) labor market outcomes of immigrants; this effect is reinforced by improved labor market conditions and changes in the income-support policy
Picot and Sweetman (2011)	Canada, Sweden	Descriptive comparison of immigrants' labor market outcomes	Large part of the cross-country difference in immigrants' economic performance is related to different selection policies
Antecol et al. (2003)	Australia, Canada, United States	Cross-sectional analysis of the immigrant population in three countries (1990/91)	After excluding Latin American immigrants to the United States, immigrants' observable skills are similar in the three countries
<b><i>Settlement Policies</i></b>			
Edin et al. (2004)	Sweden	Natural experiment and difference-in-differences approach: reform in 1985	Long-run negative effects of change of policy focus (to income support) <i>and</i> of settlement policy; latter effect at least partly offset by internal mobility
<b><i>Introduction Programs</i></b>			
Svantesson and Aranki (2006)	Sweden	Regression analysis; introduction activities as explanatory variables	Heterogeneous effects of different introduction activities on short-run employment probability
Andersson Joona and Nekby (2012)	Sweden	Randomized experiment (TIP vs. regular introduction programs)	Significant positive effects of TIP on the employment probability and on the probability of entering other training

(Table 1, continued)

	Country (Region)	Methodology	Main Results
<b><i>Language Training</i></b>			
Hayfron (2001)	Norway	Instrumental variable approach	Participants in language training more likely to acquire speaking and reading proficiency; no effects on earnings
Christensen and Stanat (2007)	14 countries	Survey of “best practices” to help immigrant students	Good practices include systematic language support programs and teachers’ training in second-language acquisition
<b><i>Active Labor Market Programs</i></b>			
Aslund and Johansson (2011)	Sweden	Natural experiment: difference-in-differences approach at municipality level	Workplace introduction program increases transitions to work experience schemes and improves the employment probabilities
Sarvimäki and Hämäläinen (2010)	Finland	Regression discontinuity design at threshold date	Program strongly increased employment and earnings of immigrants
Clausen et al. (2009)	Denmark	Duration model (timing-of-events approach)	Subsidized employment in the private sector is the most effective program
Cohen-Goldner and Eckstein (2010)	Israel	Dynamic structural model of training/employment	Participation in training significantly increases wages and job offer rates
Aldashev et al. (2010)	Germany	Propensity score matching	Heterogeneous effects of different program for immigrants vs. natives
Heinesen et al. (2011)	Denmark	Duration model (timing-of-events approach)	Large and significant effects; largest effects for subsidized employment

(Table 1, continued)

	Country (Region)	Methodology	Main Results
<b>Active Labor Market Programs (continued)</b>			
Caliendo and Künn (2011)	Germany	Conditional propensity score matching	Significantly positive treatment effects for immigrants (slightly lower than for natives)
Bergemann et al. (2011)	Germany	Regression analysis and propensity score matching	Heterogeneous <i>ex ante</i> effects for immigrants that differ from those of natives
<b>Anti-Discrimination Policies</b>			
Aslund and Nordström Skans (2012)	Sweden (Gothenburg)	Randomized experiment	Anonymous job applications increase interview invitation probabilities for women and immigrants; higher job offer rates for women, but not for immigrants
Krause et al. (2011)	Europe (Annual Job Market)	Randomized experiment	Relative advantage of female applicants levels with anonymous job applications; no differential effects by ethnic origin

Source: Author's illustration.