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Immigration Policy and Welfare State Design

A Qualitative Approach to Explore the Interaction

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Abstract in English

For the design of an immigration policy, in terms of the number and skills of the entrants and their effect on the host country, it is important to realize that the kind of welfare state matters. This study confronts three possible labour migration regimes – a temporary, an open and a selective regime – with two possible welfare state settings – a highly redistributive and a hardly redistributive welfare state. By comparing the likely outcomes between the different regimes, and by taking possible effects on the self-selection of immigrants into account, the study draws the following conclusions. First, both labour migration policy and the welfare state matter for the skill composition of labour migrants. Second, to be attractive for high-skilled labour migrants a highly distributive welfare state needs to undo its discouraging effect on these migrants. Third, a highly redistributive welfare state is attractive for low-skilled labour migrants. Because these migrants may become costly for such a welfare state once they manage to stay permanently, one should be careful with the introduction of temporary migration policies for the low-skilled.

Key words: International migration, public policy, redistribution
JEL code: D31, F22, J18, J61

Abstract in Dutch

De mate van inkomensherverdeling binnen een welvaartsstaat is belangrijk bij de vormgeving van het beleid voor arbeidsmigratie. Deze studie confronteert drie mogelijke vormen van beleid – een tijdelijk, een open en een selectief arbeidsmigratiebeleid – met twee prototypen welvaartsstaat – één met veel en één met weinig herverdeling. Door de waarschijnlijke uitkomsten van de verschillende mogelijke combinaties van beleid voor arbeidsmigratie en de welvaartsstaat met elkaar te vergelijken, en daarbij de effecten op de zelfselectie van de migranten mee te nemen, komt de studie tot de volgende conclusies. Ten eerste, zowel het migratiebeleid als de welvaartsstaat heeft invloed op de samenstelling naar opleidingsniveau van de arbeidsmigranten. Ten tweede, om aantrekkelijk te zijn voor hooggeschoolde arbeidsmigranten dient een welvaartsstaat met veel herverdeling een extra inspanning te leveren. Tot slot is een dergelijke welvaartsstaat aantrekkelijk voor laaggeschoolde arbeidsmigranten. Vanwege de mogelijke kosten voor deze welvaartsstaat, die ontstaan als deze migranten erin slagen permanent in Nederland te blijven, dient voorzichtig te worden omgegaan met tijdelijke arbeidsmigratie van laaggeschoolden.

Steekwoorden: arbeidsmigratie, welvaartsstaat, herverdeling

Een uitgebreide Nederlandse samenvatting is beschikbaar via www.cpb.nl.

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Preface

One of the tasks of CPB is to explore future economic developments and the consequences of strategic choices in social and economic policy. To inform policy makers and the general public CPB-studies like *Four Futures of Europe* and *Four Futures for the Netherlands* describe different possible futures, while *Reinventing the Welfare State* sketches alternative choices in welfare state design. This study is a follow-up of the latter study in the sense that it explores the interaction between types of welfare states and immigration policies.

The results of the study are used to discuss two recent Dutch policy proposals. Although the study was not initiated to evaluate these policy proposals explicitly, the question on the impact of the proposals arises naturally. Note however that the scope of the exercise is limited as we address the interaction between immigration policy and welfare state design, and we do not address, for example, the legal aspects and practical issues on the implementation of policies.

This report has been written by Victory Chorny, Rob Euwals and Kees Folmer. Victoria Chorny contributed to the study during the time she was working as a Young Professional at CPB. Rob Euwals and Kees Folmer are senior researchers at CPB, and they mainly contributed to the conceptual framework used in the study, as well as the policy conclusions. Besides the valuable feedback of many CPB colleagues, the study benefited from comments of Henk Fijn van Draat (Social and Economic Council of the Netherlands), Bart van Riel (Social and Economic Council of the Netherlands), Hans Roodenburg (former CPB), Arjen Taselaar (Dutch Ministry of Justice) and Kees Terwan (Dutch Ministry of Employment and Social Affairs).

Coen Teulings
Director

Summary

Many countries, including the Netherlands, are currently reconsidering their immigration policy. For the design of an effective policy, in terms of the number and skills of the entrants and their effect on the host country, it is important to realize that the welfare state matters as well. Immigration policy and welfare state design affect each other, and jointly they determine the impact of immigration on the host country.

This study confronts different immigration regimes with different welfare state settings to illustrate the interaction between the two types of policies. The assessment of the economic outcomes is based on literature reviews on (1) the impact of immigration policy and the welfare state on the selection of immigrants, and (2) the impact of immigration on the host country's economy. By comparing the likely outcomes between the different regimes, and by taking possible effects on the selection of immigrants into account, the study will draw conclusions on opportunities and risks of different options for immigration policy.

This study considers three possible immigration regimes and two possible welfare state settings. For immigration policy, we consider a TEMPORARY POLICY in which a number of low-skilled labour migrants are allowed to enter the country on a temporary basis, an OPEN POLICY in which there are almost no restrictions leading to many low-skilled labour migrants, and a SELECTIVE POLICY in which only high-skilled labour migrants are allowed to enter the country. For the welfare state, we consider a RESIDUAL WELFARE STATE, with low taxes and low benefit levels, and a UNIVERSAL WELFARE STATE, with high taxes and high benefit levels. For the interpretation of the outcomes it is important to notice that there is a difference between the two dimensions: while the options for the welfare state are shaped along the equity-efficiency trade off and optimality depends on social preferences, the options for migration policy are not shaped along a dimension that represents a basic trade off in social preferences. Therefore one immigration regime may – in theory – dominate another regime in terms of economic outcomes. As however all policy options will have winners and losers among the natives, there will not exist a regime in which all natives are better off than in all other regimes. So, optimality still depends on social preferences.

By comparing the outcomes between different immigration regimes and different welfare state settings, we are able to draw the following conclusions:

A first conclusion is that immigration policy matters. Experiences of other countries show that a selective immigration policy may lead to another skill composition of the group of labour migrants. The welfare state however co-determines the scope of immigration policy, as we will argue below.

Second, welfare state arrangements related to income redistribution and wage inequality matter. Generous welfare states with highly redistribute taxes and a relatively equal wage distribution discourage high-skilled and encourage low-skilled labour migrants to apply for a work permit. This limits the scope of immigration policy: an active immigration policy for the high-skilled needs to undo a possible discouraging effect of a generous welfare state to be successful.

Third, welfare state arrangements related to welfare benefits matter as well, but most likely to a lesser extent. Countries with high benefit levels attract more (low-skilled) immigrants – the *welfare magnet hypothesis* – but empirical evidence shows that the effect is likely to be small.

Fourth, the self-selection of immigrants, caused by their rational economic behaviour, is a curse for the welfare state. Labour migrants select countries which give them the highest pay-off. High-skilled labour migrants are likely to choose for countries with low taxes and an unequal wage distribution. These countries gain relatively little from immigration as the gain largely goes to the immigrants themselves. On the other hand, countries with a highly redistributive welfare state would like to attract high-skilled labour to redistribute from. They face however difficulties in attracting such migrants. This illustrates the simultaneity in the decision on immigration policy and welfare state design: a choice for a redistributive welfare state almost automatically limits the scope of a selective immigration policy.

Fifth, the risks associated with temporary immigration policies should be taken seriously. Potentially, such a policies yield a positive impact on the public finances. The temporary aspect is however crucial: if it is not enforced properly the policy may end up in being an open immigration policy. Such an outcome is the worst of the three immigration regimes as it may put the welfare state under pressure. So unless proven to be effective, for example in a small scale experiment, it is not advisable to introduce such a policy.

The conclusions are confronted with a recent proposal of the Dutch government and the alternative proposal of the Social and Economic Council of the Netherlands. The government proposal explicitly recognizes the differences in economic potential between migrants by defining different categories of labour migrants. The strength of the proposal is that it is clear and transparent with respect to the rights and obligations of the immigrants and employers. The council emphasizes the motives for migration, and in particular emphasizes the need for a more clearly defined category for labour migration. The proposal is less clear on the rights and obligations of the immigrants, but it is clearer on which categories are relevant for labour migrants and employers.

1 Introduction

Since the end of the 1990s, many European countries realize that they need to reconsider the design of their immigration policies. One reason is that in effect they have become immigration countries, while another is that they want to become more competitive on the worldwide labour market for high-skilled workers. The Dutch government proposed a new design of immigration policy in June 2006, while the European Commission promotes immigration as a potential tool to meet the Lisbon goals. Migration within the union may contribute to the welfare of EU countries as free labour migration allows for an optimal allocation of labour, while immigration from outside the union may contribute to the EU economy as on average immigrants are young and well-motivated to work. Immigration may lead, however, to less favourable outcomes for certain groups of native workers. Moreover, immigration may put pressure on redistribution and social insurances as well. Immigration and welfare state policy therefore interact with each other. The goal of this study is to exploit this particular interaction.

Immigration policies aim to affect the transit of persons across borders, and especially of those that intend to work or to remain within the host country. This includes, for example, labour migration, family reunification, family formation and asylum. In this study, we investigate the impact of immigration policy on the labour market and the welfare state. We focus on immigration policies that aim at goals in terms of employment and welfare state sustainability. We therefore investigate the impact of labour migration, whereby we consider family migration as well since labour migrants may have or may form families. We do not emphasize asylum immigration as in principle it is granted on the basis of humanitarian grounds.

Welfare states are designed such that they comply with social preferences on redistribution and social insurance. In public discussions on the interaction between welfare state design and immigration policy it is often emphasized that immigration impacts the sustainability of the welfare state. A fact that is often not taken into account is that the welfare state itself may impact the number and the skills of immigrants. The interaction between immigration policy and welfare state design therefore goes into both directions; while immigration policy affects the welfare state, welfare state design also affects the feasibility of goals in immigration policy.

In this study, we design prototypes of immigration and welfare state policies. We assess the economic impact of different immigration regimes in different welfare states in a qualitative fashion. We do this on the basis of theory and empirical evidence on immigration. The design of the prototypes will be as follows: the selective effect of immigration policy will be described in two dimensions: one dimension for the skills of immigrants, and one dimension for the length of stay. Both dimensions represent important policy trade offs. We will explore the impact of the different immigration regimes, i.e. by combining the two dimensions, on the

labour market and public finances in two types of welfare states. These welfare states are a residual welfare state (i.e. with low taxes and low benefit levels) and a universal welfare state (i.e. with high taxes and high benefit levels). The welfare states may be interpreted as potential institutional settings in the Netherlands in the future, but we do not quantify the parameters of the institutional settings like in De Mooij (2006).

The lessons from stylized framework will be used to discuss the recent Dutch policy proposals. Although the study was not initiated to evaluate policy proposals explicitly, it seems rather obvious to relate the conclusions to the recent proposal of the government (Dutch Ministry of Justice, 2006) and the alternative proposal of the Social and Economic Council of the Netherlands (SER, 2007). This exercise should be interpreted as a partial evaluation as only we discuss the interaction of immigration policy with the welfare state.

The focus on the interaction between immigration and the welfare state implies that we abstract from several aspects of immigration policy. We clearly do not deny the importance of these aspects, but they are simply beyond the scope of this study. First, we abstract from illegal immigration. Although this is an important issue, the multidisciplinary character of illegal immigration is obviously difficult to implement in a stylized economic approach. Second, we abstract from endogenous growth. High-skilled immigration may boost the growth of the economy due to the contribution of the immigrants to research and development. Although many economists are convinced of such an impact, empirical evidence on the size of this effect is still scarce. Third, we abstract from the role that labour migration may play in solving shortages on labour market in the short run. In this sense, this study may underestimate the gains from migration as the short term gains should be added to the long term impact on the welfare state. Fourth, and related to the previous point, we abstract from issues on the implementation of immigration policy. Within our stylized approach, we will not be able to analyse the consequences of different policies like demand-driven systems with work permits and supply-driven systems with selection on the basis of points. Finally, we abstract from political economy effects. Immigration may lead to changes in the political preferences of natives, and therefore to changes in the welfare state. We consider our analysis as an input of the political process. We do not explore the possible impact on the process itself.

The remainder of the document is organised as follows. Chapter 2 discusses the impact of immigration and welfare state policy on the number and the skills of immigrants. Chapter 3 analyzes the impact of immigration on the labour market and welfare state. Chapter 4 presents the analytical framework of our scenario approach, while chapter 5 presents the labour market and welfare state outcomes of the different scenarios in a qualitative fashion. Finally, chapter 6 discusses two recent Dutch policy proposals.

2 Selection of immigrants: theory and empirical evidence

Individual circumstances like family ties and economic and political incentives are determinants of the migration decision. These determinants have a significant impact on the quantity, skill composition and direction of migration flows. The incentives are likely to lead to immigrant selection. Immigrants are neither a random sample of the population of a source country, nor a random sample of the population of a host country. It is instrumental to study immigrant selection since it has an effect on the success of immigrants in the host country, and therefore on the gains and losses they bring to the native population.

Several aspects of immigration and welfare state policy cause immigrant selection. We distinguish explicit selection implemented by the host country and self-selection. First, immigration policy may act as a barrier to migration leading to explicit selection. Criteria specified in immigration policies allow only some individuals to immigrate into a country. Second, individuals who decide to migrate have characteristics which make migration profitable, leading to self-selection in a positive sense. Third, immigration policy may affect immigrant selection indirectly as it may change incentives to migrate. For example, selective immigration policies with an option of long-term or permanent residence may give an advantage on the competitive labour market for talents. Fourth, welfare state policy may affect immigrant selection since taxes, social insurances, welfare, and the provision of public goods affect the return to immigration, potentially leading to self-selection in a negative sense. All aspects are important in the explanation of the number and the skills of immigrants.

In this chapter, we first present a theoretical review on the selection of immigrants. The theories allow us to explain the skill composition of immigration flows. Next, we analyze the impact of the two factors central in our analytical part – immigration policy and welfare state policy – on immigrant selection.

2.1 Human capital and network effects

This section discusses two important approaches to immigrant selection. First, the human capital approach explains the migration decision in terms of the return to human capital. Depending on the assumptions made on migration costs, the human capital approach predicts that immigrants are positively self-selected from the population of the host country. However, immigrants from developing countries may be negatively self-selected compared to the population of a developed host country. Second, the network approach claims that immigrants are likely to settle in a location where other immigrants from the same source country already reside. Several authors in the literature claim that network effects are so strong that they dominate all other determinants of the migration decision.

Human capital

Individuals base their decision to migrate largely on the expected net return from migration. The expected return depends on aspects like the probability to find a job, the wage, and the costs of migration. Within the human capital model, these factors mainly depend on the skills of the migrants. Accordingly, immigrant self-selection occurs because individuals migrate when the net return to their human capital is higher in the host country than in the source country: the return to human capital is the key decision variable. The human capital approach as introduced by Sjaastad (1962) and developed further by Chiswick (2000), has an important role for migration costs. It is based on the assumptions that there are direct and fixed out-of-pocket migration costs, that migration costs decrease with ability (because ability enhances efficiency in migration) and that opportunity costs of migration (foregone earnings) increase with ability. The model predicts that positive selection occurs when out-of-pocket migration costs are large or when higher skills and education levels lead to more efficient information collection. Thus, the human capital model predicts that migrants will be on average young and high-skilled, and Chiswick (2000) concludes that immigrants are positively self-selected.

In contrast to the previous authors, Borjas (1987) develops a negative self-selection hypothesis. He uses an alternative specification of the human capital model and focuses on the ratio of the wages in the host and in the source country. The main difference with the Sjaastad model is that the migration costs are a constant proportion of income, and that ability has no effect on efficiency in migration. As a result, the migration decision is based on the return to migration in terms of wages. Borjas (1987) predicts that immigrants from developing countries are likely to be negatively self-selected for two reasons. First, the low-skilled have a large incentive to migrate as developed countries often have smaller wage dispersions than developing countries. Secondly, many of the high-skilled may have a small incentive to migrate as often their skills are hardly transferable to developed countries. Differences in culture, education and economic systems are often substantial, and high skilled immigrants in developed countries often need to accept jobs for which they are overqualified.

The dispute between the believers of the positive and negative self-selection theory has not ended. Both theories are likely to contain some relevant aspects as both the US and Europe receive large numbers of both high- and low-skilled immigrants.

Network effects

The network approach predicts that individuals are more likely to migrate to host countries that have already large immigrant communities from the same source country. The approach extents the notion of migration costs in the human capital framework (Massey *et al.*, 1993, Bauer and Zimmermann, 1999a). The first immigrant faces high migration costs because of lack of information. However, the immigrant's relatives and friends will face lower migration costs

since they will be more informed. This explanation can be analogically extended not only to relatives and friends, but also to fellow citizens from the same source country. In other words, the network approach states that migration costs decrease with the amount of migrants in the host country.

Empirical evidence

Most of the empirical studies on human capital and network effects will be discussed in the next sections as these effects play an important role in the impact of immigration and welfare state policy on immigration. But we first discuss a few studies that are particularly directed towards human capital and network effects.

Several studies find that the propensity to migrate increases with education and skill level, which supports the human capital theory according to Sjaastad and Chiswick. We discuss two of these studies. First, Chiquiar and Hanson (2002) investigate selection among Mexican immigrants in the US. They find, on the one hand, that Mexican immigrants are on average more educated than residents of Mexico, and on the other hand that they are much less educated than US natives. Chiquiar and Hanson appeal to heterogeneity in migration costs in order to explain their findings. Second, Liebig and Sousa-Poza (2004) use data on immigrant intentions in 23 countries including the traditional immigration countries and large European countries. They find that immigration is mostly positively self-selected. Differences in the wage distribution between countries may reduce the positive selection, but according to their study it will not result in negative selection.

Almost all studies on network effects find clear evidence that a large amount of immigrants in a country increases the probability of migration of individuals from the same source country. Examples of such studies are Mckenzie and Rapoport (2004) for Mexican immigrants in the US, Rotte and Vogler (1998) for African and Asian immigrants in Germany, and Pedersen *et al*. (2004) for a study of migration flows into 27 OECD countries.

2.2 Immigration policy

Immigration policy has an effect on immigrant selection in several ways, and we discuss two of them. First, immigration policy affects selection directly by imposing immigration criteria. Second, it affects selection indirectly because immigration policy may also affect the incentives to migrate. This may lead to self-selection. In this section, we discuss immigration policy in light of the self-selection theories. We also review the empirical evidence on immigration policy and selection.

Theory

The human capital approach states that the return to human capital in the home and the host country, together with the costs of migration, are important for the incentive to migrate. Immigration policy affects immigration costs significantly because it obliges immigrants to fulfil certain requirements. In addition, it may also affect the return to immigration by imposing restrictions on migrants once in the country. Finally, immigration policy affects selection directly by imposing requirements on entry. We illustrate these effects by discussing evidence from countries with different immigration policies.

Restrictive and bureaucratic migration policies increase the costs of immigration. Immigrants to countries with such policies are likely to be high-skilled since they are able to overcome the costs of migration costs. However, considering globalization and the increasing competition for international talent, restrictive policies may also discourage high-skilled immigrants if there are other attractive host countries with less cumbersome policies.

Selective migration policies that aim at attracting migrants with certain characteristics and labour market skills select individuals with economic motives to migrate. Such immigrants are more likely to be employed and to have higher earnings than other immigrants. Thus, economic migrants are generally more favourably selected than migrants with other motives to migrate.

In contrast to traditional migration countries like the Australia and Canada, some countries (especially in Europe) prefer temporary immigration policies. Such policies may discourage immigration since the benefits may not outweigh the costs. In addition, immigrants usually have to invest in country-specific human capital such as language and culture in order to successfully adjust in the new situation. Thus, temporary policies may also reduce the incentives of high-skilled individuals to migrate since the return from investing in country-specific human capital is low for temporary immigrants (Dustmann, 1993). Yet, if human capital is transferable – as is the case for much high-tech knowledge - temporary policies may not be an obstacle for migration. (Boeri *et al.*, 2002). In addition, high-skilled immigrants are more likely to accept temporary migration if the host country-specific human capital also yields a return in the home country (Dustmann, 1999).

Empirical evidence

The empirical literature on selective immigration policies can be divided into two groups: some studies compare labour market characteristics of immigrants in countries with different immigration policies, while other studies compare characteristics of immigrants entering a host country through different admission channels.

Several studies compare immigrants in the United States - whose immigration policy focuses on family ties - with immigrants in Canada or Australia - where immigration policies are based on economic criteria. The main findings are that immigrants in Canada and Australia are on average more skilled and exhibit a smaller earnings differential with natives than immigrants in the US. However, when the immigrants in each country are divided into groups according to their source country, and each group is compared with its counterpart in the other countries, immigrants in the US are not found to be on average less educated than their counterparts in Canada (Duleep and Regets, 1992) or Australia (Antecol et al. (2001)). The Canadian and Australian immigration policies, thus, seem successful not because they select immigrants positively from the whole world, but because they select immigrants from certain source countries. Therefore, countries with selective immigration policies manage to control the national origin mix of their immigrants by choosing immigrants from countries where the average citizen is relatively educated and high-skilled.

Immigrants admitted through economic channels are generally found to be more skilled and earn higher wages than immigrants admitted through other channels. For the US, Jasso and Rosenzweig (1995) and Duleep and Regets (1996) find that differences between the groups become smaller with the duration of residence. For Canada, Wright and Maxim (1993) conclude that immigrants entering through the economic channel have a smaller earnings differential with natives than immigrants admitted through the family channel. Constant and Zimmermann (2005) conduct a comparative study of Germany and Denmark and find that immigrants entering through the asylum and family channel are more likely to be unemployed and to earn less than economic migrants.

In conclusion, immigration policies affect selection directly by restricting immigration and indirectly by affecting migration incentives. Theory and empirical evidence suggest that policies based on economic criteria tend to select migrants more positively. The positive selection however mostly results from allowing immigrants from particular countries to enter the country. The next section discusses another policy factor that may affect immigrant selection, namely, the welfare state.

2.3 Welfare state policy

The design of the welfare state may affect immigrant self-selection in different ways. First, welfare benefits and public good provision raise expected income flows and offer an insurance against risks. Second, redistribution affects the expected net income flow as well. So the return from migration is likely to be affected by the welfare state since immigrants differ in their vulnerability to risks and their utilization of public goods. This section argues that the above

factors are related to skill levels of immigrants, and consequently the skill composition of immigrants may be affected by the welfare state.

Theory

The discussion on the impact of the welfare state on immigration is heavily dominated by the so-called *welfare magnet hypothesis* (Borjas, 1999). This hypothesis predicts the location choice of immigrants, differentiated by skill level. More recently, some theories also provide predictions for individual traits like risk aversion.

The *welfare magnet hypothesis* states that countries with more generous welfare systems attract more immigrants than less generous but otherwise similar countries. This hypothesis also predicts that countries with generous welfare states will attract more low-skilled immigrants. The latter results strongly relate to the negative self-selection theory of Borjas (1987), which is based on differences in wage distributions between countries.

Applying the welfare magnet hypothesis to the US, Borjas (1999) claims that immigrants locate themselves in US states that offer high welfare benefits. The argument is that once immigrants have incurred the fixed costs of migration to the US, the costs of choosing a particular state are marginal. Consequently, immigrants that have a large probability to become in need of welfare benefits will choose for states that offer high benefits. So in particular low-skilled immigrants are likely to choose for such states, as they are more likely to become unemployed. Applying the hypothesis to Europe, Boeri *et al.* (2002) claim that immigrants with skills below a certain threshold will choose for EU countries with a generous welfare state.

The welfare state may lead to self-selection in terms of skills, but it may lead to self-selection in terms of other individual traits as well. Unemployment and disability benefits reduce the labour market risks of workers, and therefore of immigrant workers as well. Risk averse immigrants are likely to value unemployment and welfare benefits highly, which influences their choice of location (Heitmueller, 2005). Thus, generous welfare states may on average attract immigrants with a higher degree of risk aversion.

Empirical evidence

The empirical evidence on the impact of the welfare state is rather mixed. Studies that also take the network effect into account generally find that networks are so important that they dominate all other effects.

Studies like Borjas and Hilton (1996), Borjas (1999) and Boeri *et al*. (2002) do find that generous welfare states attract more immigrants. First, Borjas and Hilton (1996) conclude that new immigrants to the US are likely to receive similar types of benefits as previous immigrants

from the same origin country. A possible explanation is the existence of ethnic networks that transfer information about welfare benefits to potential immigrants in the origin country. The availability of information about welfare benefits may influence migration decisions of individuals. In particular, unskilled individuals may be more likely to migrate if they have better information about the availability and accessibility of welfare benefits. Secondly, Borjas (1999) finds that immigrant welfare recipients are more likely to be clustered in states with higher welfare levels than immigrants who do not receive welfare. Finally, Boeri *et al*. (2002) show that welfare benefits in the EU countries distort the skill composition of migrants (attracting relatively low-skilled migrants). Although the authors indicate overall small effects, they suggest that some of the generous countries (like Denmark and the Netherlands) attract immigrants that are likely to become dependent on welfare and other social security benefits.

Contrary to the previous studies, Zavodny (1999), Pedersen *et al*. (2004) and Kaushal (2005) do not find evidence in favour of the welfare magnet hypothesis. Zavodny (1999) states that the primary factor explaining the location decisions of new immigrants in the US is the location of other (previous) immigrants. In fact, immigrants seem to respond more to interstate differences in migrant population than to interstate differences welfare benefits. In a study on migration flows into the OECD countries, Pedersen *et al*. (2004) conclude that the negative impact of a high tax pressure on immigration is stronger for immigration flows from low income countries than from higher income countries. The authors argue that more generous welfare states may pursue more restrictive immigration policies. Thus, generous welfare states may serve more as a barrier rather than a magnet to immigrants. Furthermore, they also indicate that network effects and immigration policies are more important than the generosity of the welfare state. Finally, Kaushal (2005) allocates immigrant women to different groups according to their economic risk of becoming welfare dependent. She investigates whether more vulnerable groups tend to settle in US states with generous welfare benefits. Her conclusion is that the most vulnerable group is not more attracted to states with higher welfare levels. In line with studies mentioned above, the author suggests that location decisions of immigrants are guided by network effects rather than welfare benefits.

2.4 Conclusions

Immigration policy and welfare state policy affect the number and the skills of immigrants. This is important as it may affect the impact that immigrants have on the host country. The literature provides an intense discussion on whether immigrants are positively or negatively self-selected. That is, are immigrants more educated or less educated than the average resident in the source and/or host country? On the basis of the literature, we draw the following conclusions.

Immigration policy clearly affects the number and the skills of immigrants. Explicit selection has a direct impact as such a policy simply selects immigrants on the basis of education and skills. Immigration policy may also have an indirect impact as it may induce self-selection by affecting the return to migration. First, countries with selective policies succeed in attracting more skilled immigrants than countries with alternative policies. The success of selective policies is the not the result of attracting the more skilled immigrants from a particular country, but it is the result of attracting immigrants from more developed countries (which are on average more skilled than immigrants from less-developed countries). Second, temporary migration policies may induce negative self-selection. Temporary policies reduce the returns from investments in human capital, leading to the fact that high-skilled immigrants and immigrants with the ability to acquire country-specific human capital choose for countries in which the period of stay is longer (which they need to recover the costs of their investments).

Welfare state arrangements like income redistribution and inequality in the wage distribution are likely to be important. Extensive welfare states with highly redistribute taxes and a relatively equal wage distribution discourage high-skilled and encourage low-skilled labour migrants to apply for a work permit. Immigration data clearly shows there is substantial immigration from low-wage countries, while several studies find substantial low-skilled immigration from countries with an unequal income distribution. Wages and incomes, both in net terms, are therefore clearly important determinants of migration flows.

Welfare state arrangements related to welfare benefits are important as well, but nevertheless the size of their impact is likely to be small. In theory social security and welfare benefits affect the expected income in the host country, and hence affect the incentives to migrate. Generous welfare states may attract more immigrants than less generous welfare states, and these immigrants will be relatively low-skilled. Some studies do find evidence in favour of the so-called *welfare magnet hypothesis*, but nevertheless the size and importance of the impact is not likely to be large.

3 Impact of immigration: theory and empirical evidence

Immigration has far reaching consequences for the host country's economy. Immigrants contribute to production by working, pay taxes and social security contributions, potentially draw from the welfare system, send their children to schools and consume. In this chapter, we focus on the impact of immigration on the host country's labour market and public finances. First, we discuss the theoretical impact of immigration on wages and unemployment. Next, we review the empirical literature of the impact of immigration on the labour market. Finally, we present a theoretical and empirical overview on the impact of immigration on public finances.

3.1 Labour market

The literature on the impact of immigration on the labour market is well-developed. In the short run, immigration may have a negative impact on the labour market position of natives who have to compete with immigrants. In the long run, however, the impact on the labour market may be small due to different adjustment processes. The adjustment of the host economy to immigration depends on labour market flexibility, output mix flexibility and factor mobility. We begin by reviewing the theory of the immigration impact on wages and unemployment. Subsequently, we present different adjustment mechanisms that may dampen the impact on wages and unemployment. We conclude with an overview of the empirical evidence on the impact of immigration.

Theory

An immigration shock alters the capital labour ratio of a host country by increasing the endowment of labour. The resulting adjustment of the host country's economy depends on the labour market flexibility. When wages are flexible, the adjustment occurs only through wages, while when wages are rigid, adjustment occurs through the level of employment as well. In addition, we investigate how the skill composition of immigrants affects the outcome on the labour market.

Impact on wages

In the short-run, when capital is relatively inelastic, immigrants decrease the earnings of the production factors to which they are substitutes (labour) and increase the earnings of the production factors to which they are complements (capital). As a result, native workers lose while native capital owners gain. The net benefit to the economy from immigration, called *immigration surplus*, is the gain of capital owners minus the loss of native workers (because of lower wages). The more wages fall as a result of immigration, the larger is the immigration surplus. This simple neoclassical theory of immigration illustrates an important trade-off: immigration increases total output of a host country, but the gains are not distributed equally

over the population of the host country. The more wages decrease, the larger is the immigration surplus but the larger is also the redistribution of income from workers to capital owners.

The impact of immigration on the labour market depends on the skills of immigrants. Once more, immigrants will decrease the wages of the workers to which they are substitutes. Skilled (unskilled) immigrants will cause the wages of skilled (unskilled) workers to decrease, thus resulting in a positive immigration surplus. However, immigrants will also increase wages of workers to which they are complements. Thus, the larger the complementarity between immigrants and natives is, the larger is the immigration surplus. Accordingly, the host economy benefits most when the skills of immigrants are different from the skills of the natives.

Impact on unemployment

Labour market institutions may create wage rigidities, which in turn may affect the impact of immigration on the labour market. For example, collective bargaining between unions and employer organizations may prevent wages from decreasing below a certain level, and minimum wages certainly do. Thus, when facing an immigration shock, a rigid economy may adjust through higher unemployment rather than lower wages. This may be particularly relevant for the lower end of the labour market, where wage rigidities may be more important than at the upper end. Therefore, adjustment through employment may be particularly relevant when immigrants are relatively unskilled.

The negative impact of immigration on the employment of natives may be more pronounced in generous welfare states since they are much more characterised by rigid labour markets, extensive unemployment insurance and restrictive labour market institutions. Dustmann and Glitz (2005) claim that immigration may cause voluntary unemployment among native workers whose wages fall. This may be relevant in generous welfare states where reservation wages are high because of unemployment and welfare benefits. In addition, restrictive labour institutions such as employment protection, high replacement rates and high business entry costs may aggravate the impact of immigration on employment even though some of these institutions may protect natives from competition in the short-run (Angrist and Kugler, 2003).

Other adjustment processes

Immigration results in adjustment processes other than changes in wages and unemployment. Those processes in turn affect the labour market. In the following, we discuss the ways in which the mobility of factors, such as capital and labour, may dampen the impact of immigration on wages and unemployment.

In the short-run, an economy responds to changes in the capital/labour ratio through wages. However, when capital flows freely wages may not need to change because capital is perfectly

elastic. An immigration shock decreases the capital to labour ratio, thus increasing the return to capital. As a result, capital will flow into the economy until the return to capital is equalized among the economies in the world. Since eventually wages and the return to capital do not change, natives neither gain nor lose from immigration. If, however, the skills of natives and immigrants differ immigration-induced capital inflow will not fully adjust for immigration. Thus if immigrants are relatively skilled, skilled wages will still fall and unskilled wages will increase, and unskilled immigration will have the opposite effects.

The review so far has focused on an economy which produces one good only. However, a multi-sector economy may accommodate changes in labour supply through the output mix rather than through wages. Dustmann and Glitz (2005) suggest that the following adjustment process may take place. Immigration increases the profits of the sector which uses intensively the labour factor type of the immigrants (because of lower wages) and decreases the profits of the sector using the other labour type (because of higher wages). As a result, production in the sector that experienced lower (higher) wages increases (decreases). The changes in production induce shifts in demand for labour so that wages return to their initial level in the long-run. Thus, an economy with flexible production mix and openness to trade may adjust to immigration through changes in industry structure rather than changes in wage structure.

Finally, in addition to capital and trade adjustments, other factors may adjust the economy in the medium and long-run, thus reducing the negative impact of immigration on wages and unemployment. First, native workers and firms may move out of immigrant areas. In other words, production factors may adjust by reallocating over regions. Second, native workers may move out of sectors abundant with immigrants by retraining or enhancing their skills.

Empirical evidence

The empirical literature on the impact of immigration on the labour market is well-developed. Most of the studies estimate the effect on wages and unemployment while a few attempt to measure other consequences such as native responses to immigration and changes in industry structure. The main outcome is that the average impact on wages and unemployment is negative but small. This contradicts the simple neo-classical theory on this point. Still the small impact may be explained by the adjustment mechanisms that dampen the changes in wages and unemployment. In this section, we present evidence on this subject in the US and different European countries. We also discuss studies that investigate other adjustment mechanisms such as factor mobility and industry structure.

Impact on wages and unemployment

Most empirical studies on the impact of immigration split native and immigrant workers into groups according to certain criteria, and measure the correlation between immigration and

labour market outcomes in each group. The first immigration studies split workers according to geographical location, thus measuring spatial correlations between wages and unemployment and immigration in a specific area. Several authors, including Borjas (1994), Friedberg and Hunt (1995), Bauer and Zimmermann (1999b), Dustmann and Glitz (2005) and Longhi *et al.* (2005) review spatial correlation studies. They find an overall negative but small impact of immigration on wages and employment in both US and EU, whereby the impact in Europe is considered to be slightly more negative than in the US. Theoretically, immigration may affect unemployment more negatively in Europe than in the US since the European labour markets are less flexible than in the US. For example, Angrist and Kugler (2003) find that immigration effects are more negative in countries with less flexible markets, higher replacement rates and higher business entry costs. Still, the authors conclude that even in Europe the impact of immigration on unemployment is small.

Several explanations have been proposed for the small impact reported by the literature. First, spatial correlation studies assume that the direction of causality between immigration and labour market outcomes runs one way, from immigrants to labour markets. However, location decisions of immigrants are not random and may be affected by labour markets. So, immigrants may be attracted to areas that do economically well. Second, production factors such as capital and labour may flow freely in an economy until factor prices are equalized across regions. Thus, the impact of immigration on a local labour market may be dispersed through the whole economy. Therefore, it may be then more instrumental to measure immigration effects on the aggregate level. Finally, immigration studies may not take into account different adjustment mechanisms such as changes in the trade and output mix.

More recent empirical studies split workers into different groups according to observable characteristics such as skills, age, education, work experience etc. This methodology is referred to as the skill-cell correlation approach. It accounts explicitly for the extent of natives and immigrants substitutability by splitting native and immigrant workers into different groups where in each group, natives and immigrants are assumed to be perfect substitutes. Then, the labour market outcomes of a specific cell are regressed on the relative share of immigrants in the labour supply of that cell.

Card (2001) splits US natives and immigrants according to occupations but still finds very small effects on wage and unemployment. In contrast, Borjas (2003), who splits workers according to both education and work experience, finds that immigrants may significantly reduce wages of native workers in the same education and experience group. He finds a wage elasticity of about – 0.4 (a 1 percent increase in the number of workers due to immigration leads to a – 0.4 percent decrease in the gross wage), which is larger than the consensus estimate of the overview articles which find an elasticity of about – 0.1. Possibly, Borjas finds a more negative impact than Card

because immigrants may not compete with natives in the same skill/occupation group if they have different working experiences. In addition, Borjas uses aggregate data from the US Census while Card uses local data. Finally, Ottaviano and Peri (2006) investigate the impact of immigration in US in a general equilibrium framework based on Borjas (2003) using aggregate data. The model allows capturing the effects of immigrants not only on their closest substitutes (negative effect) but on their complements as well (positive effect). In contrast to Borjas, the authors assume that immigrants are not perfect substitutes even within the same education and work experience cell (because of different occupational choices, abilities etc.). Furthermore, the authors explicitly account for the role of capital adjustment. After accounting for all of the effects, the authors find that the immigration influx of 1980-2000 has actually increased the average wage of native workers by about 2%. College and high school graduates gained the most, while high school dropouts experienced zero or small negative change. Ottaviano and Peri attempt to reconcile their results with the negative effects found in other studies. They claim that they also find a partial negative effect of immigrants on natives within the same group. However, the effects of increased wages of natives who are complements to immigrants and the increased return to capital dominate the first partial negative effect.

Other adjustment processes

The controversy on the actual impact of immigration suggests that it is instrumental to account for all possible adjustment mechanism that may affect the impact on wages and unemployment.

First, natives may move out of areas with immigrants. Thus, immigration may leave the relative regional labour supply unchanged and consequently have no effect on wages and employment. There is however no consensus in the literature on the issue of native response. For instance, Borjas *et al.* (1997) and Hatton and Tani (2003) find that in the UK immigrant inflows and native outflows are correlated while Card (2001) finds that immigrant inflows to different cities in the US have not resulted in large outflows of native in the same skill group. Pischke and Velling (1997) also do not find evidence for native outflows in Germany, and Card and Dinardo (2000) conclude that the small impact on wages is caused by other adjustment mechanisms rather than native mobility. However, Longhi *et al*. (1999) find that larger areas exhibit more adverse immigration effects than smaller areas (because factors in smaller areas can adjust faster), supporting the claim that research should be aggregate rather than regional. The impact of immigration is also larger in countries with lower internal mobility. This supports the claim that native mobility may be a response to immigration.

Second, increased labour supply may be absorbed by a changing industry structure. Card and Lewis (2005) find however that immigration has only a small effect on local industry structure. Instead, increased relative labour supply of a certain labour type in a region causes industries to use more intensively that labour type without changes in relative wages. In other words,

production technology adapts to the local mix of worker skills. This could be explained with Acemoglu's (1998) theory of skill biased technology, which suggests that firms innovate in a direction of readily available factors even without relative wage changes. Lewis (2003) finds that on-the-job computer use has increased more rapidly in US cities where the relative skilled labour supply grew the most. He concludes that standard trade models do not explain well adjustment to immigration since industries seem to respond by choosing a production technology that complements the local labour mix rather than increasing production of the relevant labour type intensive good.

3.2 Public finances

The fiscal impact of immigration is the net result of the payments in and out of the welfare state system of a host country by the immigrants over their life cycle. Immigrants contribute to fiscal balances by paying taxes and social security contributions, while they benefit from the welfare state in case they receive unemployment, disability and/or welfare benefits. They also benefit from public expenditures in the host country.

In general, immigration may have a positive fiscal impact since immigrants usually arrive at working age and participate in the host country's labour market. Thus, the host country enjoys the taxes paid by immigrant workers without the need to invest in their education since they have already acquired education in the country of origin. However, the labour market performance of immigrants may lag behind that of natives. In several countries, immigrants earn less, pay fewer taxes, and receive more often benefits than natives. Hence, there are worries that immigrants are in fact a burden to the welfare state. These worries are especially present in generous welfare states where immigrants may have difficulties in integrating in the labour market and welfare benefits are extensive. In this section, we present different factors such as immigrant characteristics and welfare state generosity that may affect the fiscal impact. We then discuss empirical studies in various countries. The fiscal impact is found to be positive in the US and in some European countries, and negative in other European countries.

Theory

The fiscal impact of immigrants depends on several factors. First, the age of immigrants at entry is crucial since many public expenditures are related to age. Thus, young immigrants are expected to have a large net contribution over their life cycle since they received their education in the home country. In addition, they work and pay taxes. Second, direct taxes paid and most benefits received depend on earnings. Thus immigrants with a high probability of being employed and high earnings are likely to be net contributors. Therefore, high-skilled immigrants are expected to have a more positive impact than low-skilled immigrants. Finally, the generosity of the welfare state affects the impact as well. Low-skilled immigrants living in a

generous welfare state may have a higher probability of being unemployed due to distortions resulting from high replacement rates and minimum wages. Thus, they will pay fewer taxes and receive more often benefits than in a less generous welfare state. Conversely, high-skilled immigrants may have equal opportunities to find employment in whatever type of welfare state. We may expect them not to draw much on benefits in any welfare state. With respect to their contributions, high-skilled immigrants may pay more taxes in a generous welfare state as income tax rates are higher. But in a less generous welfare state they may also pay higher taxes due to a larger income inequality and higher earnings. For these reasons, the theoretical link between the welfare state and the fiscal impact of immigration is ambiguous.

Empirical evidence

There are several studies that measure whether immigrants are net contributors or net beneficiaries of the welfare state. Initially, empirical evidence focused on calculating the net taxes that immigrants pay in a certain year. However, it is instrumental to take into account the net contributions that immigrants make over their life cycle since taxes, benefits and public expenditure depend much on age. In this section, we review studies that measure the impact of immigrants over their life cycle rather than just looking at total taxes received minus total benefits paid to immigrants in a certain year.

Most studies use a Generational Accounting (GA) approach in order to assess the lifetime fiscal impact of immigrants. The GA approach consists of calculating the present value of the lifetime net contribution of an immigrant to public finances (Auerbach and Oreopoulos, 1999). In other words, the present value of a lifetime net contribution is equal to total remaining lifetime tax contributions minus total remaining lifetime benefits from public expenditure. If the present value is positive, the immigrant is a net contributor to public finances.

The results of studies on the lifetime fiscal impact of immigration vary by country. Numerous studies find it to be positive and suggest that immigrants may even alleviate the fiscal imbalances associated with the ageing problem. Recent studies for the US conclude that immigrants are net contributors to public finances (Lee and Miller, 1997, Auerbach and Oreopoulos, 1999, Storeseletten, 1999). In addition, an increased rate of immigration to the US (with the same characteristics as current immigrants) could even improve the fiscal balance, though the improvement is very small relative to the overall size of the fiscal imbalance. Thus, it seems that immigrants 'pay their way into the welfare state' in the US.[1] The improvement could be considerable if the composition of immigrants is changed rather than the amount. Storesletten (1999) finds that admitting high-skilled immigrants in the age of 20-54 or medium-skilled immigrants in the age of 25-49 would balance the fiscal budget of US.

[1] The term 'pay their way into the welfare state' is widely used in the immigration literature to say that immigrants are not a fiscal burden to the host country.

The fiscal impact of immigration is also found to be positive in several European countries. To illustrate, the net fiscal contribution of an average immigrant in Germany is 53,100 euros (Bonin *et al.*, 2000).[2] Additionally, increasing the amount of immigrants (with the same characteristics as current ones) can reduce the fiscal imbalance. An annual inflow of 50,000 immigrants to Italy could reduce the fiscal imbalance by 6% (Moscorola, 2001). Collado *et al.* (2004) and Mayr (2004) draw similar conclusions for Spain and Austria. Relative to the US, the beneficial impact of immigrants on the fiscal imbalances in the above mentioned European countries is larger. This could be because US already admits large flows of immigrants and faces a smaller fiscal imbalance problem than most of the European countries.[3] However, similarly to the US studies, European empirical evidence points out that admitting high-skilled immigrants in certain ages can contribute even more to reducing fiscal imbalances.

While some European welfare systems benefit from immigration, other European welfare systems turn out to lose. For the Netherlands, Roodenburg *et al.* (2003) find that immigrants need to posses social and economic characteristics at least similar to those of the Dutch in order to have a positive impact. However, most current non-Western immigrants to the Netherlands lag well behind the Dutch in terms of their labour market performance. Thus, the overall fiscal impact of immigrants in the Netherlands is negative. The authors emphasize that immigrants with better characteristics than the Dutch, the so called *high-performing immigrants*, have a positive fiscal impact for almost all ages. Storesletten (2003) draws similar conclusions for Sweden. He finds that an average new immigrant to Sweden constitutes a net cost of about $20,000 to the government. However, in contrast to the Netherlands, young immigrants in the age of 20-30 are still a net gain of about $23,000. Finally, Wadensjo and Gerdes (2004) find that the public sector in Denmark effectively redistributes from natives to immigrants. While the net transfers of Danes and Western immigrants were positive in 1991-2000, the net transfers of first- and even second-generation non-Western immigrants were negative.

Discussion

The countries mentioned above may experience different fiscal impacts of immigration because of several reasons. First, as discussed earlier, the fiscal impact is largely determined by the labour market performance of immigrants. Thus, the negative fiscal impact in the Netherlands, Denmark and Sweden could be due to the low labour market performance of immigrants in those countries. Consider, for example, Germany and US where immigrants earn on average 17% and 20% respectively less than the natives (Lang, 2005, Borjas, 1990). In contrast, non-Western immigrants in the Netherlands earn almost 30% less than the natives while the wage differential between immigrants and natives in Sweden is even larger, up to 37% (Roodenburg

[2] Based on the assumption that government expenditure (such as defence spending) increases with immigration. If government expenditure does not increase with immigration , the net fiscal contribution would be 134,000 euros.
[3] US may have a smaller fiscal imbalance because the ageing problem there is less severe than in Europe.

et al., 2003, Hansen and Lofstrom, 2003). The earnings lag of immigrants in Denmark behind the natives is smaller than in the Netherlands and Sweden, about 15% (Husted *et al*., 2001), but their participation rate in the labour force is lower than that of the natives by 25% (Pedersen and Smith, 2001). Conversely, the participation rate of immigrants in Germany is lower than the natives by only 3%, and Spanish immigrants participate in the labour force even by 12%-points more than natives (OECD, 2003). Therefore, countries with immigrants that assimilate fast on the labour market will experience fiscal gains from immigration while countries with large amounts of unemployed or low paid immigrants will experience a fiscal loss from immigration.

Second, one may notice that the countries with a negative fiscal impact have more generous welfare systems than the countries with a positive fiscal impact. Thus, the extent of welfare state generosity and type of welfare system may play a role in explaining the differences between the countries. More generous welfare states have extensive benefits and thus lose more when the labour market performance of immigrants is low. In addition, we have discussed in chapter 2 that generous welfare states may act as *welfare magnets*, which results in negative self-selection. Thus, the labour market performance of immigrants in generous welfare states may be worse because immigrants are negatively self-selected *a priori*. A related point is the idea of ethnic networks transferring information about the welfare system to newly arrived immigrants (Borjas and Hilton, 1996). If generous welfare states have more welfare dependent immigrants (because of the reasons mentioned above), a snowball effect may occur when new immigrants are pulled into the welfare system as they receive more information from previous immigrants about welfare benefits rather than job opportunities. Bertrand *et al.* (2000) claim that being surrounded by people informed about the welfare system decreases the costs of applying for welfare, increases the return from applying for welfare and decreases information about job availability. Economically significant network effects of welfare information were found in the US by both Borjas and Hilton (1996) and Bertrand *et al*(2000). All in all, the more there are already welfare dependent immigrants in a country, the more we can expect new immigrants to become welfare dependent as well. This effect may be particularly pronounced in generous welfare countries.

3.3 Conclusions

From economic theory we know that immigration has an impact on the labour market and the public finances of the host country. The inflow of immigrants decreases the wages of native workers to which they are substitutes, and increases the wages of workers to which they are complements. If wages are not flexible, immigration may lead to involuntary unemployment. The overall impact may however be small since production factors like labour and capital adjust to immigration. This dampens the impact of immigration on wages and unemployment. The extensive empirical evidence on the impact of immigration on the labour market confirms the

latter prediction: the impact of immigration on wages is likely to be negative but small. The consensus estimate for the wage elasticity is about – 0.1, while the estimate of Borjas (2003) of about – 0.4 may be interpreted as an upper bound. The scarce empirical evidence on the impact on unemployment hints at a small effect as well.

Immigration is likely to affect the fiscal balances of a host country. Immigrants pay taxes and social security contributions, they may draw on the welfare system, and they may enjoy public expenditure such as on education. Studies for various countries measure the contributions to and the benefits from the welfare state system of immigrants over their life cycle. On the whole, the fiscal impact of immigration depends on the characteristics of the immigrants and the generosity of the welfare state. Young immigrants are likely to contribute to the fiscal balances as they have acquired their education already and they can start to work at arrival. Moreover, high-skilled immigrants contribute to the fiscal balances while low-skilled immigrants contribute little. The fiscal impact of low-skilled immigrants even turns out to be negative in generous welfare state systems.

The evidence in this chapter yields that the selection of immigrants has important effects since immigrant characteristics affect the magnitude of the impact on the labour market and the fiscal balances. As was discussed in chapter 2, these characteristics are affected by immigration policy and welfare state design. So, immigration policy and welfare state design are likely to affect immigrant selection and hence the impact of immigration on the host country. As the two types of policy are interconnected they need to be both taken into account simultaneously. In the next chapter, we develop a framework to asses this particular interaction and the basis of the theoretical and empirical knowledge collected in this chapter.

4 Analytical framework: a qualitative approach

We explore the interaction between immigration and welfare state policy using a qualitative approach. We investigate the impact of different immigration regimes in two possible welfare state settings. Section 4.1 discusses the scenarios for the immigration regimes, and section 4.2 discusses the scenarios for the welfare states.

4.1 Immigration policy

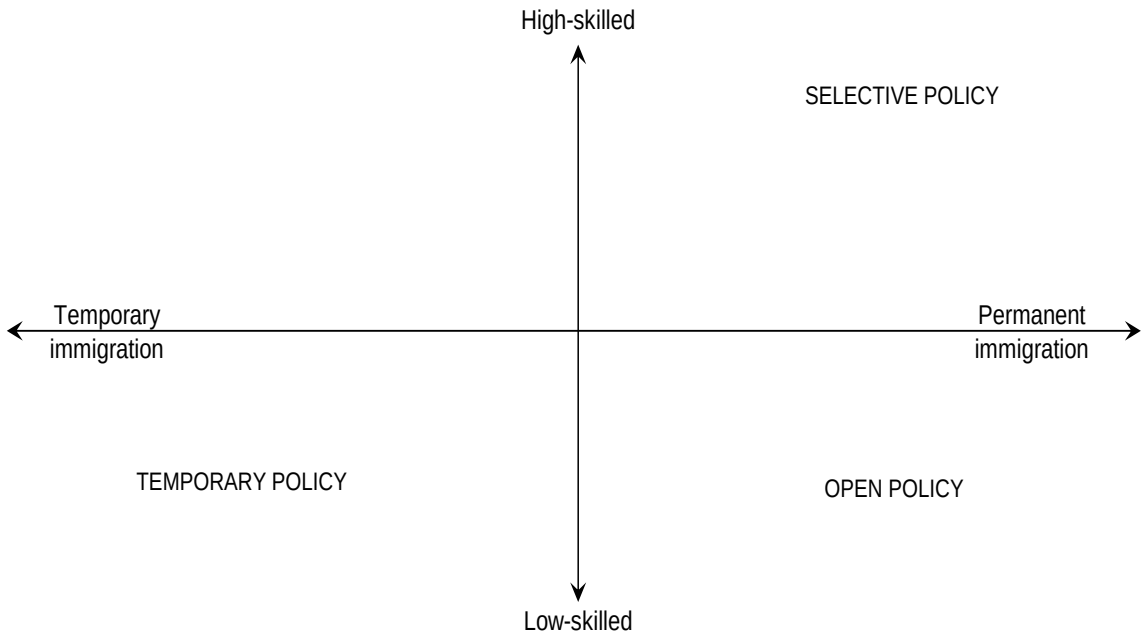
The goal of immigration policy design is to develop a set of measures that meets potential goals of economic policy. The design boils down to an proper assessment of the most important trade-offs. There is a large number of potential immigration policies as trade-offs appear in multiple dimensions. As it is impossible to explore them all, this section aims to structure the investigation on the design by distinguishing two key dimensions along which immigration policy can be characterised. From this, we develop three different immigration regimes.

Two major issues of immigration policy are the amount of *human capital* of immigrants and the *duration of stay*. *Human capital* is important for the labour market prospects of immigrants, as virtually all countries select among potential labour migrants. While non-immigration countries mostly rely on a demand-driven system in which labour migrants need to have an employment contract, immigration countries like Australia and Canada use point systems for selection purposes. Educational attainment and occupational skills play an important role. Currently, several non-immigration countries have introduced or are considering to introduce similar point systems. The *duration of stay* is important as well. While most of the typical immigration countries offer permanent residence to immigrants, most European countries provide at first instance just temporary residence. In many European countries temporary permits can be transferred into permanent permits in case the immigrant has been employed for a sufficiently long period. Only in a few countries, of which Switzerland is a prominent example, temporary migrants are expected to leave the country at the end of the permitted residence period. The duration of stay clearly has policy implications. First, countries compete for the best immigrants and immigrants may choose for countries that offer a permanent permit, or at least an opportunity to get such a permit in case of a good labour market performance. Second, immigrants in countries that offer a temporary permit may invest less in country specific human capital, and may therefore be less productive. Third, immigrants with permanent permits get the same rights as natives, and in a generous welfare state the incentives to be productive may become small at the lower end of the labour market.

By combining the two key dimensions we obtain four possible models for immigration policy (figure 4.1). First, the lower-left quadrant reflects a TEMPORARY POLICY as it allows low-skilled

immigrants to work in a host country on a temporary basis. This policy attracts substantial attention from economists and policy makers (see, for example, Boeri *et al.* (2003), Martin *et al.*, (2006)). A host country gains as the low-skilled labour immigrants are willing to take up jobs that natives refuse, while the labour immigrants also gain as they are able to earn more than in their home country. The temporary aspect is however crucial: in case it is not enforced properly the policy may end up as a permanent policy. Second, the lower-right quadrant reflects an OPEN POLICY as it allows immigrants to enter the country freely. Due to the push factors in immigration the policy is likely to result in a relatively large share of low-skilled immigrants. Third, the upper-right quadrant reflects a SELECTIVE POLICY as only immigrants with valuable human capital will be allowed to enter the country. One may think of a supply-driven system like a point system that offers labour migrants a permanent permit, but also of a demand-driven system that provides a temporary duration of stay with an option for a permanent permit in case the migrant is employed sufficiently long. While a supply-driven system may have an advantage in attracting the best immigrants, a demand-driven system has the advantage of guaranteed employment in the initial years. This trade off between a supply and a demand driven system, despite its importance, is beyond the scope of the study.

Figure 4.1 Design of immigration policy [a]



[a] The temporary policy is considered to be temporary as the government offers residencies with a limited duration without offering a possibility to extent the stay of duration. The permanent policies may offer permanent residencies, but may as well offer temporary residencies with an option of extension in the case of a good labour market performance.

In this study, we will not consider the upper-left quadrant of figure 4.1 as the policy does not seem credible: a temporary policy for high-skilled workers is likely to fail in attracting the desired immigrants. Furthermore, the residence period may simply be too short to overcome the costs of the relatively long training period for high-skilled jobs.

4.2 Welfare state design

The goal of welfare state design is to develop two welfare states that reflect differences in preferences with respect to the trade-off between efficiency and equity. So compared to the previous section, we distinguish only one key dimension along which welfare state policy can be characterised. In one welfare state efficiency is more important, while the other welfare state equity aspects dominate.

The first is a RESIDUAL WELFARE STATE with low tax rates and low benefit levels, while the second one is a UNIVERSAL WELFARE STATE with high tax rates and high benefit levels. The welfare states resemble two of the three ones defined in De Mooij (2006). For this study there is no need to parameterise the different elements of each welfare state, like tax rates and benefit levels, as we will not quantify the impact of immigration. Furthermore, in contrast to the previous study we do not explore the trade-off between centralisation and decentralisation. The reason is that the impact of the different immigration scenarios are less clear-cut along this dimension. Our main purpose is to indicate how welfare states that differ in a lot of aspects may react to immigration, rather than to discuss the impact on all possible countries and systems. For readers less familiar with De Mooij (2006), the two welfare states partly resemble the well-known welfare state typology of Esping-Anderson (1990). The RESIDUAL WELFARE STATE resembles the *liberal* welfare states, which cover countries like the United States, the United Kingdom and Ireland, while the UNIVERSAL WELFARE STATE resembles the *social-democratic* welfare states, which cover the Scandinavian countries Denmark, Norway, Sweden and Finland.

The RESIDUAL WELFARE STATE focuses on individual responsibility, where the government supports the most vulnerable groups via targeted measures. For the large group of middle and high incomes, public provisions are largely phased out. The labour market is relatively flexible. Due to a relatively low degree of employment protection, lay-off rates are high and replacement rates of unemployed are low. Tight eligibility rules and the possibility of sanctions stimulate the search effort of the unemployed. In addition, sectoral trade unions attend more weight in the wage bargaining process to employment rather than to wages.

The UNIVERSAL WELFARE STATE provides collective, generous welfare state arrangements. Complementary policies like child care subsidies, activation of the low-skilled and education subsidies avoid severe distortions of labour markets. This further expands public spending, but

these expenditures are geared towards participation. Universal income security and uniform public services mitigate poverty and ensure equal opportunities. Stringent rules, mandatory workfare and tough sanctions complement these provisions to maintain a high level of participation. The philosophy is to organise insurance via explicit social insurance. Employment protection is rather severe in this welfare state, but due to high participation it may nevertheless be less severe than in the current Dutch situation. The labour market therefore becomes somewhat more flexible, and this increases the ability to integrate outsiders. Sectoral trade unions are relatively centralised and partly internalise the consequences of their behaviour on outsiders, but nevertheless put weight on wages at the expense of employment.

As the welfare states differ in their average tax burden, benefit levels and labour market institutions, labour market outcomes also differ across welfare states (table 4.1). In this study we will not discuss these differences. Interested readers find the results for one particular parameterisation of the welfare states in De Mooij (2006). Here, we will focus on the impact per welfare state caused by various immigration regimes.

Table 4.1 Characteristics of two possible welfare states [a]

	Residual	Universal
Taxes and benefits		
Tax rates	low	high
Benefit levels	low	high
Redistribution	little	much
Labour market regulation		
Minimum wages	low	high
Employment protection	little	Much
Union wage bargaining	little	Much
Labour market outcomes		
Labour supply	high	Medium
Real gross wage rate	high	Medium
Unemployment	low	medium
GDP	high	medium

[a] See De Mooij (2006) for a possible parameterisation of the welfare states. The labour market outcomes are calculated for the same demographic projection for the population. The public deficit is assumed to be the same percentage of GD for each welfare state.

4.3 Position within the literature

The qualitative approach with a design of the different policy options fits into the CPB study on welfare state design (De Mooij, 2006). The approach is however new within the literature on immigration and welfare states. The literature contains two approaches: a theoretical one based on macro modelling, and a empirical one based on international comparisons using survey data. Studies on the macro modelling of immigration mostly try to answer one of the following two questions: what is the general equilibrium effect of immigration on the economic outcomes of the natives? And what is political economy effect of immigration on the welfare state? The first question is handled by articles like Smidt *et al.* (1994), Sarris and Zografakis (1999) and Ferri *et al.* (2002). In particular the last two articles apply their models to specific countries, namely Greece and Spain. The second question is handled by articles that model the political economy of the welfare state. These models generally show that immigration may alter the preferences and therefore the voting behaviour of natives. This may lead to changes in the welfare state (Razin and Sadka, 2000, 2005, Kemnitz, 2002, and Börner and Uebelmesse, 2007).

The availability of international comparable survey data allows the explicit comparison of the labour market position and welfare state dependency of immigrants between countries. For this purpose, Boeri *et al.* (2002) and Boeri (2006) use the European Community Household Survey. One general finding is that the individual characteristics if immigrants are more important than country and welfare state specific effects. In particular Boeri *et al.* (2002) discusses the interaction between immigration and welfare state policy in debt (see chapter 2 for discussion).

The position of the current study within the literature is that it assesses the interaction between immigration and welfare state in a qualitative fashion. The policy options described in this chapter will offer a comprehensive but qualitative overview of the interaction. The aforementioned literature is summarized in chapters 2 and 3, and will be taken into account explicitly in the assessment of the likely outcomes. This will be done in the next chapter.

5 The impact of immigration

In this chapter, we investigate the *impact of a particular immigration shock* in a welfare state in the medium to long-term run, say 25 years. For example, is an extensive welfare state ('UNIVERSAL WELFARE STATE') more vulnerable to permanent low-skilled immigration than a minimal welfare stare ('RESIDUAL WELFARE STATE')? Which system envisages the highest impact on wages? And what is the impact on public finances in each of the welfare states?

We present the impact of the immigration regimes on the labour market and public finances in a qualitative fashion. We assume that the underlying demographic projection is the same for each welfare state. An immigration shock will cause a deviation from the baseline demographic projection in each of the welfare states and hence a deviation from the baseline economic projection. Note that this central projection is welfare state dependent due to the differences in taxes, benefit levels and labour market institutions (see chapter 4). In this study we are not interested in these baseline projections per welfare state, but we analyze the impact per welfare state caused by the different immigration regimes.

Immigration regimes are assumed to be implemented in the near future, and to lead to a gradual increase in the population in the long run. The labour migrants may be high- or low-skilled. We will specify in more detail what we mean by temporary and permanent immigrants. Temporary workers are considered to have a work permit with a limited duration. Every year a certain group of labour migrants is allowed to enter the country. At the end of the residence period they leave. We assume that the temporary migrants supply labour as if they were single individuals of a certain skill type. Of course they may have families, but they stay in the country of origin. In contrast to this, permanent labour migrants get a work permit with an unlimited duration. They are allowed to take their family with them and their partners may also be employed. As several of them will stay, they will age in the host country as well. For this reason, a permanent immigration policy will lead to a increase of the population with mixed skill types. For example, high-skilled labour migrants may bring partners and children, and some of them will be low-skilled. The policy will lead to more pensioners as the labour migrants will age in the host country. This is an important point of difference with a temporary immigration policy, in which all labour migrants are in working age and may be of one particular skill type.

5.1 Temporary immigration of low-skilled workers

The TEMPORARY POLICY constitutes temporary immigration of low-skilled workers. The regime offers impermanent residence permits that cannot be extended. The regime additionally includes an active and credible return policy. The latter aspect is crucial, and we return to it in the next chapter. As labour migrants are assumed to be singles of working age, their demographic

structure is very different from the one of the natives. The fiscal impact of the policy is likely to be positive as many of the labour migrants work and pay income taxes, and few of them will be dependent on transfers from the welfare state. But is there reason to believe that the impact is more positive in one welfare state compared to the other? This section discusses the details and the economic and fiscal consequences of the policy.

Table 5.1 Labour market and fiscal impact of a TEMPORARY immigration policy [a]

Welfare state [b]	Residual	Universal
Working age population [c]		
low-skilled	++	++
high-skilled	□	□
Labour supply (natives)		
low-skilled	– –	– –
high-skilled	++	++
Real gross wage rate		
low-skilled	– –	–
high-skilled	++	+
Unemployment [d]		
low-skilled	+	++
high-skilled	–	– –
Fiscal impact	++	++
Total GDP	++	++
GDP accruing to natives	++	++

[a] The policy allows low-skilled labour migrants to enter on a temporary basis. The host country population increases with a certain percentage as every year a fixed amount of temporary work permits is granted (see chapter 4 for details).

[b] The residual welfare state has low tax rates and low benefit levels, while the universal welfare state has high tax rates and high benefit levels (see chapter 4 and De Mooij, 2006).

[c] The outcomes are: strong increase (++), moderately strong increase (+), almost no change (□), moderately strong decrease (–), strong decrease (– –). The outcomes can be compared horizontally, i.e. between welfare states and between immigration policies, but not vertically, i.e. between the different economic outcomes. The reason for the latter comparison not to be possible is that magnitude of the adjustments varies substantially between outcomes.

[d] In the universal welfare state we assume the wage bargaining process to affect the level of unemployment. This is actually open to discussion as the literature on wage bargaining states that centralised unions may incorporate the external effect of their wage claim on unemployment. The empirical literature does not show consensus on this issue.

In the temporary immigration regime, each year a limited group of labour migrants is allowed to enter the labour market of the host country. As the immigration flow consists by assumption of single persons only immigrants do not apply for child care and educational facilities in the host country. However, one may assume that they are entitled to child allowances and send the money abroad to their families. In addition, the employee part of pension premiums may be reimbursed and transferred to the home country as well. During their stay in the host country, the labour migrants are eligible to long term care, unemployment and disability payments and government assistance as they have the same rights as the inland population. This is in line with

international treaties on international labour migration. Of course, such treaties may change over time, and they may make immigration more or less profitable for the host country. We do however not discuss what the consequences of changes in the rights of immigrants will be for migration flows and their fiscal consequences.

The temporary immigration policy causes the working age population of low-skilled to increase rather strongly (table 5.1). Depending on the exact definition of low-skilled, a 1% increase of the overall population will cause an increase of this particular group with much more than 1%. The working age population of high-skilled is likely to increase slightly as natives may upgrade their skills. Nevertheless we interpret this small change as being close to zero.

In both welfare states we expect the labour supply of low-skilled natives to decrease, and of the high-skilled natives to increase. In the residual welfare state this will be mainly due to changes in the real gross wage, while in the universal welfare state a discouraged worker effect due to an increase in the unemployment level may play a role. In the universal welfare state the real gross wages may be expected to decrease less than in the residual welfare state due to differences the wage bargaining process. In a universal welfare state, the downward pressure on wages may be partly transmitted to unemployment as unions may not be willing to accept a more substantial decrease in wages. In both welfare states, the impact on the high-skilled workers is relatively large as the inflow of low-skilled workers is relatively large. The high-skilled are better off in terms of real wages, and they react by increasing their labour supply.

The fiscal impact of the temporary immigration policy is positive in both welfare states: the labour migrants, arrive, work, pay taxes, and leave. They do not age in the host country, and they do not bring partners and children. Of course there may be some counteracting effects: they may nevertheless receive child benefits and send the money home, they may be able to take some of their accumulated pension rights with them, and they may consume less than average in the host country as they will save a substantial part of their income to take it home. This will however not undo the positive fiscal impact as the net result of paying taxes and hardly having claims on the welfare state is clearly positive.

As all migrants are of working age and almost all of them will work, Gross Domestic Product (GDP) will increase substantially. A large part of the increase will be paid to the labour migrants in the form of wages. The increase in GDP accruing to natives may nevertheless be substantial as the positive fiscal impact may be used for productive purposes like decreasing taxes. The increase in GDP per head is hardly driven by the so-called immigration surplus, which is known to be rather small (Borjas (1999)). But despite the many potential positive effects of the policy, clearly not everyone is better off as low-skilled natives lose due to their lower real gross wages.

5.2 Permanent immigration of low-skilled workers

The OPEN POLICY constitutes a liberal (non-selective) immigration policy, which because of push factors in immigration leads to a relatively high share of low-skilled immigrants. For reasons of comparison between the different immigration regimes we assume the number of immigrants to be limited to a certain maximum amount. In other words, we ignore the fact that an open policy may attract a relatively large number of immigrants. Furthermore, we assume the policy to lead to permanent immigration. This does not necessarily mean that immigrants receive a permanent permit upon arrival; immigrants may also receive a temporary permit with an option to stay after a certain period of employment.

In the open immigration regime, each year a number of non-selected labour immigrants enters the country. So initially the demographic and skill structure of immigrants and natives differs substantially as the labour immigrants are of working age, and relatively low-skilled. Over time the demographic and skill structure of the immigrants becomes however more similar to the one of natives: the immigrants will become eligible to family reunification, the immigrants will age themselves, and the children may become more skilled than their parents. On the really long run, one may even expect the (former) immigrants and the natives to become completely similar. But before this has taken place, the regime will lead to an immigrant population with relatively many low-skilled individuals.

The open immigration policy causes the working age population of low-skilled workers to increase (table 5.2), but the increase is less strong than for the temporary immigration policy (compare table 5.1). The working age population of high-skilled is may increase slightly as natives may upgrade their skills, but again this happens at a lower intensity than for the temporary immigration policy.

In both welfare states we expect a moderate change in the labour supply of low-skilled and high-skilled natives. In the residual welfare state this will again be due mainly to changes in the real gross wage, while in the universal welfare state a discouraged worker effect may play a role. In both welfare states, the high-skilled workers are slightly better off in terms of real wages and unemployment, and they react by increasing their labour supply.

The fiscal impact of the open immigration policy is negative in both welfare states: the low-skilled labour migrants may have a job in the first years after arrival, but afterwards their employment opportunities are likely to diminish slowly over time and they may become dependent on the welfare state. As argued in section 3.2, this partly depends on the welfare state. In a residual welfare state the fiscal impact is small as benefit levels are low and the amount of redistribution from high-skilled to low-skilled is limited. In a universal welfare state

the fiscal impact is large, and low-skilled immigrants are more likely to become a burden to welfare state.

Table 5.2 Labour market and fiscal impact of a OPEN immigration policy [a]

Welfare state [b]	Residual	Universal
Working age population [c]		
low-skilled	+	+
high-skilled	□	□
Labour supply (natives)		
low-skilled	–	–
high-skilled	+	+
Real gross wage rate		
low-skilled	–	□
high-skilled	+	□
Unemployment [d]		
low-skilled	□	+
high-skilled	□	–
Fiscal impact	–	– –
Total GDP	+	+
GDP accruing to natives	–	– –

[a] The policy allows labour migrants to enter the country on a non-selective basis. Due to push factors in immigration, the policy leads to a relatively high share of low-skilled immigrants (see chapter 4 for details).
[b] The residual welfare state has low tax rates and low benefit levels, while the universal welfare state has high tax rates and high benefit levels (see chapter 4 and De Mooij, 2006).
[c] The outcomes are: strong increase (++), moderately strong increase (+), almost no change (□), moderately strong decrease (–), strong decrease (– –). The outcomes can be compared horizontally, i.e. between welfare states and between immigration policies, but not vertically, i.e. between the different economic outcomes. The reason for the latter comparison not to be possible is that magnitude of the adjustments varies substantially between outcomes.
[d] In the universal welfare state we assume the wage bargaining process to affect the level of unemployment. This is actually open to discussion as the literature on wage bargaining states that centralised unions may incorporate the external effect of their wage claim on unemployment. The empirical literature does not show consensus on this issue.

Permanent low-skilled immigration causes GDP to increase, but a large part of the increase is paid to the immigrants in the form of wages. As the immigrants are low-skilled and this type of workers is more likely to become dependent on the welfare state, the GDP accruing to natives is likely to be negative. And this will be particularly true in the universal welfare state, in which benefit levels are rather high.

5.3 Permanent immigration of high-skilled workers

The SELECTIVE POLICY selects labour migrants on the basis of their education, skills and work experience. We assume the policy to be open ended in terms of the number of immigrants per year. Nevertheless we expect the number of immigrants per year to be limited due to the

competitiveness of the international labour markets. We assume immigrants get either a permanent permit or temporary permits with an option of extension in case of a successful employment career.

Table 5.3 Labour market and fiscal impact of a SELECTIVE immigration policy [a]

Welfare state [b]	Residual	Universal
Working age population [c]		
low-skilled	□	□
high-skilled	+	+
Labour supply (natives)		
low-skilled	+	+
high-skilled	–	–
Real gross wage rate		
low-skilled	+	□
high-skilled	–	□
Unemployment [d]		
low-skilled	□	–
high-skilled	□	+
Fiscal impact	+	++
Total GDP	++	++
GDP accruing to natives	+	++

[a] The policy allows labour migrants to enter the country on a selective basis, leading to a relatively high share of high-skilled immigrants. Not all immigrants will be high-skilled however, as family members of which a part are low-skilled are allowed to enter as well (see chapter 4 for details).

[b] The residual welfare state has low tax rates and low benefit levels, while the universal welfare state has high tax rates and high benefit levels (see chapter 4 and De Mooij, 2006).

[c] The outcomes are: strong increase (++), moderately strong increase (+), almost no change (□), moderately strong decrease (–), strong decrease (– –). The outcomes can be compared horizontally, i.e. between welfare states and between immigration policies, but not vertically, i.e. between the different economic outcomes. The reason for the latter comparison not to be possible is that magnitude of the adjustments varies substantially between outcomes.

[d] In the universal welfare state we assume the wage bargaining process to affect the level of unemployment. This is actually open to discussion as the literature on wage bargaining states that centralised unions may incorporate the external effect of their wage claim on unemployment. The empirical literature does not show consensus on this issue.

Like the open regime the demographic and skill structure of immigrants and natives will differ initially. But again the demographic and skill composition of immigrants and natives will become more alike over time. The immigrants become eligible to family reunification, and they age themselves. So overall the regime leads to an immigrant population with relatively many high-skilled individuals, but clearly not all immigrants will be high-skilled and in working age.

The selective policy causes the working age population of high-skilled workers to increase (table 5.3). The working age population of low-skilled may increase slightly as the incentive to acquire skills becomes somewhat smaller. Nevertheless this effect is likely to be limited.

In both welfare states, we expect a moderate change in the labour supply. In case of low-skilled natives we expect a moderate increase, and for high-skilled natives a moderate decrease. In the residual welfare state changes in the real gross wage trigger the results, while in the universal welfare state there may again be a discouraged worker effect. In both welfare states, the low-skilled workers are better off in terms of real wages and unemployment, and they react by increasing their labour supply.

The fiscal impact of the selective immigration policy is positive in both welfare states as high-skilled workers are net contributors. In a residual welfare state the fiscal impact is relatively small as tax rates are rather low: the welfare state only collects a limited amount of extra tax revenues. In a universal welfare state the fiscal impact is larger as tax proceeds rise more substantially. Here the arrival of high-skilled immigrants is particularly good news as there are more high-skilled workers to redistribute from.

Permanent high-skilled immigration causes GDP to increase. Part of the increase is paid to the immigrants in the form of wages, and the immigration surplus is known to be rather small. The positive fiscal impact causes however a second and probably more important effect on the GDP accruing to natives. This is particularly true in a universal welfare state, as tax rates are high.

5.4 Conclusions

This chapter considers three options for immigration policy: a TEMPORARY POLICY in which a limited number of low-skilled labour migrants are allowed to enter the country on a temporary basis, an OPEN POLICY in which there are almost no restrictions leading to many low-skilled labour migrants, and a SELECTIVE POLICY in which only high-skilled labour migrants are allowed to enter the country. The options for immigration policy have been applied to two different welfare state designs: a RESIDUAL WELFARE STATE, with low taxes and low benefit levels, and a UNIVERSAL WELFARE STATE, with high taxes and high benefit levels.

Before we discuss the conclusions of the qualitative exercise, we need to make a remark on a difference in interpretation of the policy options on immigration and welfare state. While the options for the welfare state have been shaped along the equity-efficiency trade off and optimality depends on social preferences, the options for migration policy have not been not shaped along dimensions that represent basic trade offs in social preferences. Therefore one option may – in theory – dominate another policy in terms of outcomes. As however all policy options will have winners and losers among the natives, there will not exist an immigration regime in which all natives are better off than in all other regimes. So optimality still depends on social preferences.

General conclusions of the welfare states are: a TEMPORARY POLICY has a substantial positive impact on GDP accruing to natives. A major reason for the positive outcome is that the labour migrants arrive, work, pay taxes and social security contributions, and leave. The policy does however not lead to an improvement for all natives as at least in the short run low-skilled natives are likely to face lower wages and higher unemployment. An OPEN POLICY is likely to have a negative impact on GDP accruing to natives. The policy will lead to an increase in the number of low-skilled in a host country, and the low-skilled generally do not have a positive impact on the fiscal balances of a country. The overall outcome nevertheless depends on the design of the welfare state; in particular in a country with an extensive welfare state the policy will have a negative impact. Still high-skilled natives may gain as wages of low-skilled workers decrease. A SELECTIVE POLICY is likely to have a positive on GDP accruing to natives. The reason that we explored in this study is that high-skilled immigrants are likely to contribute to the fiscal balances of a host country. And besides this reason, there may actually be more arguments for a positive impact of high-skilled immigrants (see the second-last paragraph of the introduction). Still the policy may not lead to an improvement for all natives as at least in the short run the high-skilled natives will face more competition on the labour market.

A first general conclusion can be drawn by combining the conclusions on the temporary and the open policy: the risks associated with a temporary immigration policy should be taken explicitly into account in the design of an immigration strategy. Potentially, such a temporary policy yields a substantial positive impact on the public finances. The temporary aspect is however crucial: if it is not enforced properly one may end up in an open immigration policy. Such an outcome is the worst of the three immigration scenario's as it puts the welfare state under severe pressure. So unless proven to be effective, for example in a small scale experiment, it is not advisable to introduce such a policy.

A second general conclusion can be drawn by combining the conclusions of chapter 2 – on the selection of immigrants – and chapter 5 – on the economic impact of immigration in different welfare states: self-selection of immigrants, caused by their rational economic behaviour, is a curse for the welfare state. Immigrants select countries which give them the highest net pay-off. High-skilled labour migrants are therefore likely to choose for countries with low taxes and an unequal wage distribution. These countries gain relatively little from immigration as the gain largely goes to the immigrants themselves. On the other hand, countries with a redistributive welfare state would like to attract high-skilled labour to redistribute from. They face however difficulties in attracting such migrants. This illustrates the simultaneity in the decision on immigration policy and welfare state design: a choice for a redistributive welfare state almost automatically limits the scope of a selective immigration policy.

6 Lessons for Dutch immigration policy

The conclusions of chapters 2 to 5 will be used to discuss two recent proposals on immigration policy. The study was not initiated to evaluate policy proposals explicitly. Nevertheless it is natural to relate the conclusions to the proposal of the Dutch government (Dutch Ministry of Justice, 2006) and the alternative proposal of the Social and Economic Council of the Netherlands (SER, 2007). The exercise should be interpreted as a partial evaluation as we only discuss the interaction between immigration policy and welfare state design. The first section discusses the two proposals in more detail. The second section relates the conclusions of the study to the proposals.

6.1 Two recent policy proposals

The former Dutch government has put immigration policy prominently on the political agenda by proposing a reorganisation of the policy (Dutch Ministry of Justice, 2006). One objective of the proposal is to make admission policy more transparent, while another objective is to make the policy more 'inviting' to high-skilled and talented migrants. The new government has decided to take up the proposal. The Social and Economic Council has reacted by proposing some adjustments, and by suggesting an alternative structure of the acknowledged immigrant types (SER, 2007). In the following we discuss an aspect that is strongly related to the welfare state: the acknowledged types of immigrants and their rights and obligations. Of course the proposal of the government and the alternative suggestions of the council include many more aspects, like legal aspects and the practical issues on the implementation of policies, but we do not discuss them as they are beyond the scope of the study.

Proposal of the Dutch government

The government proposal concerns an admission model that comprises of five 'residence tiers'. Admission is granted on the basis of one of these tiers, and each of them contains a uniform package of rights and obligations. The five tiers are: (1) exchanges and temporary labour migrants, (2) students and labour migrants with professional skills, (3) high-skilled labour migrants, (4) family, and (5) humanitarian reasons. Besides the rights and obligations, the proposal provides examples on the types of migrants to which a specific tier applies. So the proposal does not provide an exhaustive list for all types of migrants. We discuss the first three tiers as they consider labour migration and are therefore within the scope of our study.

1. The first tier deals with the admission of immigrants who want to come to the Netherlands in the context of a strictly temporary period of labour (or cultural) exchange. The residence permit has a maximum validity of one year and cannot be renewed. An immigrant in the tier who wants to be readmitted or wants to extend his stay in another tier will first have to return to his

country of origin and submit a new application from there. The tier will contain, for example, seasonal labour migrants, youth exchanges, and au pairs.

2. The second tier deals with the admission of immigrants in the context of professionally skilled labour (and in the context of study). The labour migrants will be subject to a labour market evaluation, which in practice means that the worker needs to have professional skills for which there is lack of supply in the Dutch and EU labour market. It is possible for the immigrant to switch to another job within the function or residence objective for which the immigrant was admitted. The residency permit can be extended, and after a certain time period the permit will have an unlimited residency period. When the family members of the immigrant join him/her in the Netherlands they will also be admitted in this tier. The tier will contain students and workers with specific professional skills, for example, welders.
3. The third tier deals with the admission of high-skilled labour migrants. The immigrant can move freely in the labour market, provided his/her work remains within the context of the relevant functions. The residence permit can be granted for a maximum period of five years, and after a certain time period the permit will have an unlimited residency period. When the family members of the migrant join him/her in the Netherlands they will also be admitted in this tier. The tier will contain migrants that earn a labour income above a certain threshold, and in the future it may also contain migrants that qualify for the Dutch labour market by means of a point system.

Alternative proposal of Social and Economic Council of the Netherlands

The Social and Economic Council clearly supports the general goal of redesigning the Dutch policy such that it becomes 'inviting' to high-skills and talented labour migrants. Nevertheless the council proposes an alternative structure for the acknowledged types of labour migrants (SER, 2007). Their argument is that the difference between the temporary labour migrants and the labour migrants with specific professional skills is unclear in practice. For both employers and migrants it may become unclear which tier applies to a certain labour migrant.

The council proposes to have one tier for labour migration by combining the first and second tier. The tier will contain two types of permits: (1) permits of at most 24 weeks which can not be extended, and (2) permits of at most 3 years which may be extended. As the first and the second tier of the government proposal also contain non-labour migration, the council proposes to create an additional tier for study and socio-cultural exchange. The high-skilled labour migrants remain to have an own tier. So while the proposal of the Dutch government is based on the rights and obligations of immigrants, the classification of the council is more based on the purpose of stay.

6.2 Evaluation on the interaction with the welfare state

The proposal of the Dutch government is transparent in terms of welfare state sustainability. The first residence tier deals with temporary labour migration as it offers work permits with a limited duration. The immigrants in this scheme will be low-skilled on average, and they may become a net burden for the welfare state in case they would receive a permanent residence permit. That is the case, even if a temporary labour migrant is successful in the labour market, the low wage and the access to welfare and social security would lead to the same incentive problems that low-skilled natives are facing. The limited rights of the immigrants in the tier can therefore be justified by the fact that it keeps the risk for welfare state sustainability small.[4] The second tier deals with labour migrants with professional skills for which there is lack of supply in the labour market. Note that the labour market evaluation in this tier should be sufficiently selective in the sense that the skills of the labour migrants should guarantee a prosperous employment career. In other words, the labour migrants should reach a participation rate and an average wage which is at least around the national average, and preferably even higher. The economic potential of such labour migrants is different from the ones in the first tier, in particular as the extension of a residency permit can be made dependent on the success of the individual migrant. The successful migrants are much more likely to become net contributors to the welfare state. So the more extensive rights in this tier are justified by the low risk for the sustainability of the welfare state. Labour migrants in the third tier will not face a labour market evaluation. This is justified by the fact that they are likely to become net contributors to the welfare state anyhow.

The strength of the government proposal is the definition of the rights and obligations in each of the tiers. In the first tier it is made clear that the duration of stay is temporary, that the immigrant first has to leave the country to request for a new residence permit, and that there is no right on family unification. In contrast to this, the second and third tier are more 'inviting'. Family unification is allowed for, and family members do not face labour market restrictions.

The alternative proposal of the Social and Economic Council is less transparent in terms of welfare state sustainability, but the council argues that their proposal is more transparent for the parties involved, including the employers and the labour migrants. In practice it may sometimes be hard to make a clear distinction between temporary labour migrants and labour migrants with professional skills for which there is lack of supply in the labour market. So their alternative

[4] The first tier however contains a group of labour migrants which are not likely to become a net burden for the welfare state: the secondment of employees (which remains in the employment of a company established outside the Netherlands). These migrants have a stable labour relation and will not be low-skilled on average. The limitation of their rights seems a somewhat strong policy instrument.

scheme combines labour migrants with and without a prosperous future employment career. In their proposal, the labour migrants with a short-term work permit will however have less rights. So the rights and obligations will still be related to the duration of the work permit.

One of the conclusions of this study is that a temporary migration policy is only successful if the temporary aspect is enforced properly. If not, the policy may end up in an open immigration policy and this policy has a negative impact on the welfare state. Therefore the government proposal makes a strong point in making a distinction between temporary and non-temporary labour migrants. However, the scheme may not work properly if the scheme leads to confusion for both employers and migrants. It is an open question whether an alternative structure of the acknowledged types of immigrants, which is proposed by the Social and Economic Council of the Netherlands, is the right answer to the problem. It is now up to the new government to consider all arguments relevant to this issue, and to come up with a revised proposal on the new Dutch immigration policy.

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