The Role of the State in Attracting Highly-skilled Migrants



The Case of the Netherlands

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The role of the state, with regard to immigration policies in particular, is still largely seen as having an effect on international migration flows through controls and selective admittance of migrants that satisfy policy-defined targets. However, highly-skilled migrants may choose among many different locations; hence, states may need to alter their view of migration of the highly-skilled, considering the individual as the selector rather than the selected. This article acknowledges this newly emerging perspective and considers skilled migration as a supply-side problem where the role of the state is seen as one about attracting potential migrants. Different theories on determinants of migration are observed from the position of a highly-skilled individual. Following up on the overview of theories, we draw a list of qualities that are relevant for the decision-making process of a highly skilled migrant. This analysis is followed by a country-specific assessment of the Netherlands concerning its position in the competition for internationally-mobile human capital. The elements of the immigration policy and other relevant country-specific factors are observed from the perspective of incentives or disincentives to immigrate.

Introduction

The number of migrants has been increasing notably. Moreover, recent trends reveal increased migration of high-skilled workers. While most developed countries try to curtail immigration of low-skilled workers, migration of high-skilled workers is often encouraged and facilitated. These developments represent a major shift in immigration policy for most European countries that have been for long proclaiming themselves to be non-immigration countries. Public policy is still perceived as capable of influencing international migration flows through controls and selective admittance of migrants that satisfy certain policy targets. Such a view assumes an abundant pool of migrants, from which host states may select.

This article identifies the newly emerging trend of the "battle for talent" where countries compete for highly skilled labour which in turn makes individuals unprecentedly active in choosing among many possible locations.

The question that this paper addresses is how immigration policy and the socio-economic environment in a receiving country address a high-skilled migrant who can choose among several potential locations. A general theoretical overview is followed by an assessment of the Netherlands concerning its position in the competition for internationallymobile human capital.

Reasons for encouraging skilled migration

The debate on the needs for more skilled labour is predominantly defined by a small group with a high stake in this issue. Increasing complaints of companies, especially in high technology sectors, about the shortage of adequately skilled workers has led many developed countries to take new initiatives to admit more skilled immigrants (Rothgang and Schmidt, 2003). Also in the Netherlands, it was under the influence of the corporate sector that the accelerated entrance procedure for the skilled foreign workers was introduced.

This proactive approach to immigration is guided primarily by the economically oriented logic of benefiting the receiving country. Immigration policies are obviously influenced and at the same time also legitimised by labour market and public finance conditions in a given country. Technological advancements, aging of rich-country populations and globalisation of production and trade are the three long-term trends that are most often cited as the ones that most vigorously kindle international competition for talent (Kapur and McHale, 2005).

The Netherlands is strongly affected by all three of the above-mentioned trends. It is an open, knowledge-driven economy with an ageing population. Most forecasts point to serious shortages of skilled workers to meet industry demand (OECD, 2004). The employment market predictions for 2005-2010 show an average annual employment

growth of 70,000 people (ROA, 2005). These estimates show that demand will be higher for the highly educated due to the fast growth of certain sectors and due to increasing complexity of work. The foreseen shortage of high-skilled labour is a concern of the Dutch government and attracting workers with needed skills from abroad is increasingly regarded as an important approach to alleviate the skill gap.

Immigrants are increasingly seen as taxpayers that could contribute to public finances. Several studies (see Van Ewijk et al., 2000; Roodenburg et al., 2003) show that population ageing in the Netherlands will lead to increasing costs for the government in relation to public pensions and health care. In that way, immigrants could compensate for the growing costs with their tax contribution to the budget. The position of the Dutch government so far has been that immigration cannot be an appropriate policy response to population ageing. The results of the study by Roodenburg at al. (2003) support this position. Nevertheless, the effect

that immigrants have on public finances depends on their economic characteristics. The same study demonstrates that the fiscal impact is most pronounced in the case of immigrants who are 25 years of age at entry and perform well on the labour market. Thus, the inflows of immigrants that

earn high salaries¹ affect the budget balance in a positive

Globalisation of trade and production necessitates mobility of people. Competition as well as cooperation of companies in different countries requires exchange of staff. International mobility is therefore desired for the strongly internationally oriented Dutch economy and should not be impeded by restrictive migration policy.

One of the solutions to meet the increasing demand for skilled workers is knowledge migration. In October 2004, the Netherlands introduced a "knowledge migrant" scheme with the aim to improve the current situation of a relatively low share of foreign skilled workers in the labour force. As memorandum Towards a Modern Migration Policy explains "the basic aim is to make the Netherlands more attractive for high-level knowledge workers and talented scientists, and to respond more closely to the needs of Dutch society, companies and knowledge institutes" (Ministry of Justice, 2006).

Determinants of the level and flow of migration

The neoclassical theory of migration (Todaro, 1969; Harris and Todaro, 1970; Bauer and Zimmermann, 1995), which has been empirically confirmed by a large number of papers, proposes that people migrate to areas with a higher wage level. The micro-economic equivalent to this theory considers migrants as utility-maximising agents who migrate when they expect higher utility in a different location, net of migration cost. Individuals compare locally expected earnings with their expected earning in different countries.

Most studies acknowledge the importance of economic factors in migration decisions but they also increasingly realise that they do not cover all events that can trigger migration. The importance of subjective factors has been recognised some time ago. The human capital theory (Sjastaad, 1962) sees migrants weighing benefits and costs on the basis of their own human capital. It emphasises the expectations of a migrant and takes into account also nonmonetary costs and benefits. Living conditions do influence the attractiveness of a country. As Massey et al. (1993) has put it, immigration can occur even when earnings in a receiving country are not higher if the living conditions look particularly attractive.

Since the future earnings from moving to a different location strongly affect the migration decision, the opportunities for career advancement also play an important role. Therefore, opening up opportunities for immigrants to access high positions and providing prospects for professional development by making use of training, has an effect on attractiveness of a country.

The human capital theory predicts that the young migrate first since the period to reap the returns on

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Early theories assumed migration decisions were based on completely in-

longer. Accordingly, governments should focus their policies on this target group and adjust immigration policies to make them more attractive to younger mi-

dividualistic assessments. However, the theory of economics of family migration and also the "new economics of labour migration" (NELM) see migration as a family and household decision. A household will only migrate when utility gains of some of the household members exceed the utility loss of other household members (Mincer, 1978). Acknowledging family as the decision-making unit places equal importance to the considerations of both partners. "Trailing spouses" often face problems such as work permit restrictions, lack of job opportunities abroad, language and cultural differences, lost promotional opportunities, lack of transferable skills, and financial implications (Koser and Salt, 1997). That is especially the case for high-skilled workers as they are in many cases members of dual-career couples. Allowing spouses to accompany the principal migrant and giving them access to work is an important attribute of an attractive destination. Liebig (2003) further expands on the importance of family as a decision-making unit by recommending day-care services for children and good schooling opportunities for their present well-being as well as for their later income.

The NELM theory (Stark and Bloom, 1985; Stark, 1991) sees migration decision as a way to maximise household income and to diversify risks by allocating family members to different settings. When receiving countries' conditions are to some extent independent of economic condition in the country of origin, migration is considered as insurance against income deterioration. For high-skilled people that migrate to diversify risk, a country will become more attractive when it provides more security for migrants and their families. Access to social security provisions, such as health insurance, child benefits and employment protection, therefore plays a role in making a destination country more

The NELM theory draws attention also to the role of

transaction costs in determining migration choice. In general, transaction costs increase with the skill level but also with the country-specificity of skills. Recognition of migrants' education qualifications or other job-related achievements therefore bears crucial relevance for migration decisions of the highly skilled. To promote the geographical mobility of skilled workers across countries, governments should thus improve recognition of foreign qualifications. Countries

that have developed efficient ways to evaluate previously obtained skills and certify credentials in an efficient manner would therefore have an advantage in competition for skilled workers.

Several papers on immigrant integration show that language skills are important to the performance of immigrants in receiving countries (e.g. Chiswick and Miller, 1999) and therefore indicate

that language barriers work as an important obstacle for reaping returns to human capital investment in destination

The "amenity" literature (Graves, 1979; Graves et al., 1979, 1982; Krupka, 2007) makes another valuable contribution to the supply-side study of migration. Local characteristics referred to as amenities, affect the quality of life because people have preferences for certain types of amenities. Those that belong to the "creative class" move to areas with an attractive life style and a tolerant atmosphere (Florida, 2002, 2005).

The presence of social networks and access to them also play a role in mobility behaviour (Massey et al., 1993). Much of the movement of the skilled from the developed world goes through these networks. They can be considered as a form of social capital that people utilise to get access to information as well as other support for immigration and integration in the host country. Such networks can also be created or at least facilitated by fostering links with those who come from abroad. Supporting international cooperation of research institutes and encouraging student exchange programmes are just two more such examples. Since student exchange acts as an important determinant of later international labour market mobility (Parey and Waldinger (2008)), many countries attempt to attract highly skilled workers through policies relating to student mobility programs.

The next important issue raised in migration theories is the self-selection process. Borjas (1987) explains the incentives of individuals to migrate to different locations by dispersion in the earnings distributions. When the wage distribution in the host country is more unequal than in the home country, highly skilled persons will be motivated to migrate since the home country taxes skilled workers more than the host country. There are different ways to make returns to skills more progressive. One such way is the introduction of a taxation regime that is favourable to high earners. Several studies have supported that people with high income prefer to move to regions with lower taxation.

Although Borjas (1987) supports the perception of migrants as active selectors of a destination country, we must still take into account the political, economic and cultural structure of countries of origin and host countries.

Theories, such as migration systems theory (Fawcett, 1989; Kritz and Zlotnik, 1992) or the historical-structuralist theory (Frank, 1966; Wallerstein, 1974) explain migration with the existence of prior links between sending and receiving countries, and thus do not allow for much rational behaviour on the side of migrants. Geographical and cultural proximity between the host and the home country determine the flows and can hence explain the concentration of migrants in just

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a few destination countries. While Docquier et al. (2006) show that colonial ties and linguistic barriers matter more for unskilled migrants, they are also significant across different skill levels. Theories emphasising the structural factors can, therefore, help to explain why the influence of public policy on migration flows is uncertain and questionable. When developing an active immi-

gration policy, governments should therefore be aware of the impact of these structural factors.

Practice in the Netherlands: The knowledge migrant scheme

While good employment and wage opportunities in the host country operate as one of the crucial pull factors, there are many other ways for governments to have an active role in attracting mobile workers to their labour market. By way of an example, this section reviews the elements of the Dutch immigration policy and some other relevant country-specific factors.

Efficient application procedures are recognised as an important means of sending out positive signals to prospective migrants. For foreigners who meet the conditions of the skilled worker regulation, obtaining a residence permit in the Netherlands is easier and can be done quicker than for those who apply for a residence permit via the regular procedure based on paid employment (European Migration Network, 2005). For instance, within two weeks knowledge workers from non-EU countries no longer need a work permit and receive a residence permit for a maximum of five years. Most of the burden for the administrative procedures is on the employer. The employer must sign an agreement with the Immigration and Naturalization Service (IND) in order to be eligible for the accelerated procedure. This agreement holds the employer responsible for a number of procedures, such as the request for the MVV (Authorisation of Temporary Stay), the application for a residence permit as well as for guaranteeing that information in the application is correct.

While migrants are allowed to work almost immediately after they enter the country, there are yet some procedural obstacles that are often mentioned by migrants (IND Information and Analysis Centre, 2005). Moreover, many potential employers have not signed the agreement with IND and are therefore not entitled to the fast-track procedure.

According to the scheme, knowledge migrants are defined as immigrants who have been offered a position receiving a certain income which is stipulated by the Minister of Social Affairs and Employment on an annual basis. The simplicity and straightforwardness of the relevant

criteria enable employers as well as prospective workers to assess fairly easily whether they are able to comply with them

One of these criteria refers to salaries. This criterion is important for companies that use the knowledge migrant scheme (IND Information and Analysis Centre, 2005). The scheme had to be modified in respect to scientific researchers and foreign doctors completing their studies in the Netherlands to become a specialist. Since November 2006, the salary criterion does not apply for them and they only need to be a member of a research area according to university practice. Furthermore, the salary criterion has been lowered for foreign students entering the labour market immediately after completing studies at Dutch higher education institutions.

A feature of the salary criterion is that it does not require elaborate standards for validating skills and previous experiences. However, this criterion does not apply to all people that have a potential to contribute to the Dutch economy. Foreigners that want to establish themselves as self-employed do not fall within the scope of the knowledge migrant scheme. Thus, new criteria for setting up businesses were introduced in May 2006 in order to remove the obstacles for this group of immigrants.² An advantage of the new system is that it offers a clearer perspective for potential migrant's eligibility for residence in the Netherlands (Ministry of Economic Affairs, 2006).

An important instrument that a country can use to attract highly skilled migrants is to offer possibilities for permanent

settlement. When immigrants hold an employment contract for an indefinite period in the Netherlands, residence permits are granted for the duration of five years. In the case of employment contract for a definite period, immigrants are granted permits for the duration of the contract.

Extension of a residence permit is possible as long as a migrant meets the conditions for residence. In this respect, the Netherlands offers rather generous possibilities for settlement in the country. Since migrants have a prospect to stay there for a longer period of time, they may be more interested in investing in country-specific human capital. Although there are no integration requirements for knowledge migrants, many employers offer language training.

Prospects for professional development are an additional aspect for motivating people to migrate to a particular country. Knowledge migrants in the Netherlands are allowed to switch employers as long as they meet the salary criterion. When this condition cannot be met, it is still possible for that person to stay in the country but the residence permit needs to be re-issued.

When aiming to attract highly skilled people, a host country has to take family considerations into account. The Dutch knowledge scheme subjects family members of skilled workers to a simplified procedure when they apply for residence permits. When their application is submitted simultaneously with the principal migrant's application, the accelerated procedure applies also to family migrants. Moreover, there are no restrictions for family members to enter the Dutch labour market. Knowledge migrants as well

as accompanying family members are exempt from integration requirements.

Provision of public goods, such as child benefits, employment protection or health insurance matter for a migrant when calculating the expected costs and security of his or her migration decision. In the Netherlands, all working residents can apply for child benefits. Conversely, employment protection is much more limited.

When an employment contract is terminated, the knowledge migrant scheme allows a period of three months to search for a new job.³ When knowledge migrants hold temporary contracts which come to an end without foreseen extension, they can no longer stay in the country on the basis of their current residence permits.

The situation of a migrant that becomes sick or occupationally disabled is rather insecure. Basically, the rule applies that as long as a migrant meets the salary criterion, he is allowed to hold the residence permit as a knowledge migrant. This criterion can be met on the grounds of the salary or the benefits that one receives in case of illness or partial occupational disability. However, when illness results in complete occupational disability, the residence permit will be revoked. Limited social security might work as a disincentive if migrants move due to risk-diversifying strategy.

Fiscal incentives for attracting high earners have been recognised in the so called 30% tax rule. The Netherlands has one of the more attractive taxation regimes when it comes to highly-skilled workers. 30% of the salary is

reimbursed tax-free if the Tax and Customs Administration considers the applicant eligible. A Returns to skills are thus made more progressive which matters especially for those that receive high salaries.

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The Netherlands, as many other countries, has realised that foreign students

give to educational institutions an international dimension and gain from them in a number of ways. One-year master programmes that are mostly taught in English are considered an important pull factor. The international orientation of Dutch research institutes and universities in turn increases the chances for future mobility and creates networks with skilled people from abroad. Moreover, foreign students have one year time to look for positions as highly-skilled migrants after the completion of their studies in the Netherlands.

Conclusion

The Netherlands has one of

the more attractive taxation

regimes when it comes to

Theory and empirical research indicate that there are certain structural factors in migration flows that cannot be fully determined by public policy. Nevertheless, these factors can be partly influenced by overall economic and social conditions and institutional features. Governments can certainly shape the institutions and processes that provide the link between potential migrants and employers. Creating social networks by fostering exchange can also be influential. The internationalisation of the Dutch education system is the case in point since it provides an infrastructure that attracts foreign students and retains some of them by providing generous possibilities for finding employment.

Several other measures show that the Dutch immigration policy has indeed incorporated many instruments that make the country more attractive to migrants. Several obstacles have been removed in order to establish a fast-track entry system. With some measures, it has gone even further and made settlement particularly attractive. The taxation scheme is one such example where the Netherlands sends out a positive message to internationally mobile workers.

A good migration policy should also consider family members, especially when countries compete for highly skilled migrants and no longer have the luxury of selecting from many eager applicants.

In conclusion, this paper has shown that there many different factors that have to be taken into account by governments that want to attract highly skilled people and influence their decision to migrate and to choose a particular host country.

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Appendix 1: Overview of theories and implications for public policy

Theories of determinants of migration	Implications for the attractiveness of a host country
The neoclassical theory of migration Todaro (1969), Harris and Todaro (1970)	Higher wage levels Employment opportunities
The human capital theory Sjastaad (1962)	Subjective factors Living conditions Opportunities for career advancement
The theory of economics of family migration Mincer (1978)	Possibilities for family migration Access of a spouse to the labour market Schooling opportunities Day-care services for children
The New Economics of Labour Migration Stark and Bloom (1985), Stark (1991)	Access to social security provisions Public recruitment agencies Standards for validating skills and previous experiences
Amenities literature Graves (1979), Krupka (2007), Florida (2002, 2005)	Cultural activities for international skilled workers
Migration Network Theory Massey et al. (1993)	Encouraging graduate student exchange Fostering international cooperation of professional staff
Migrant self-selection Borjas (1987)	Progressive return to skills
Historical-structuralist approach, Migration systems theory Fawcett (1989), Kritz and Zlotnik (1992) Frank (1966), Wallerstein (1974)	Fostering networks of highly skilled Building up systems Promoting cross-country ties (bilateral agreements)

NOTES

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 The salary level is a single criterion that constitutes a knowledge migrant according to the Dutch Knowledge migrant scheme.
- The new regulation is used internally by the IND to assess their residence applications on the basis of a point system which looks at applicants' personal characteristics, business plan and added value for the Dutch economy. The clearly defined point system makes the evaluation of the application more straightforward and faster. Applicants are no longer assessed as to whether the same work could be completed by a Dutch person or a foreigner with a valid residence permit.
- During the job search period the migrant has to support himself.
- Migrants are assessed by their level of education, working experiences, recommendations from the employer and comparison of the salary level in the Netherlands to that in the

- country of origin. The tax office assesses also whether an applicant has expertise in high demand on the Dutch labour market. When the application for the reduced taxes is approved, this rule applies for utmost ten years.
- On the other hand, the tuition fees for non-EU students might work as a disincentive for people from developing countries. Nevertheless, compared to other countries that are the main competitors for skilled workers and students, these costs are considerably lower and can thus work as comparative advantage.
- Salary criterion as required for other knowledge migrants does not hold for those that find work at their education level immediately after the completion of studies. Even in the case of using the job search period, the salary criterion has been lowered so that it corresponds better to the actual salary levels of beginners on the labour market.