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Welfare, Migration and the Life Course: Welfare Regimes and Migration
Patterns of EU-citizens in the Netherlands



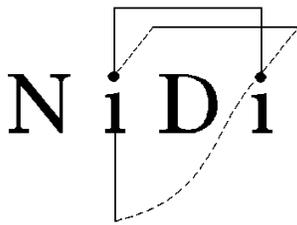
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Welfare, Migration and the Life Course: Welfare
Regimes and Migration Patterns of EU-citizens in the
Netherlands

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ABSTRACT

Migration is often understood as a rational decision of individuals or households to maximize (family) income and minimize risks. Welfare systems may be part of these rationales. Therefore, it can be expected that differences in welfare state arrangements across countries influence migration decisions. Yet empirical evidence on the relation between migration and welfare is rather mixed, particularly in the European context. Consequently, in this paper we aim to advance our understanding of the relationship between migration and welfare, based on a case-study of the Netherlands. We analyse both immigration and emigration of EU-citizens using full population register data for 2003, 2008 and 2013. In a first step, we investigate what patterns of European migration can be distinguished based on the size of the flows and life course characteristics of migrants, using a principal component analysis. Subsequently, we investigate to what extent similarities and differences in these characteristics between countries can be explained by differences between their welfare regimes. Our results indicate that different migrant types can be distinguished, and that the composition of migration flows varies with regards to these types. However, a clustering of countries based on their migration flow characteristics does not match classical welfare regime typologies.

Keywords: European Union, Migration Flows, Welfare State, Life Course

Introduction

Migration is often understood as a rational decision of individuals or households to maximize (family) income and minimize risks (see Palmer and Pytlikova 2015; Stark and Taylor 1991). Consequently, indicators related to the labour market, such as wages and unemployment rates in both the sending and the receiving country are typically employed to explain the direction of migration flows. Yet besides income resulting from labour market activities, recent scholarship acknowledges that welfare benefits might also influence migration decisions (e.g., Borjas 1999; Kurekova 2013). From a rational decision making-perspective, it is thereby expected that individuals move to countries with more developed welfare systems and benefits (Greve 2014). Nevertheless, to what extent migration decisions are *de facto* related to differentials between welfare states and their associated benefits remains surprisingly understudied. Therefore, in this paper we analyse the relationship between welfare state characteristics and migration to and from the Netherlands. We particularly focus on intra-European migration, as with the establishment of the Schengen zone it has become easier to migrate within Europe and make use of welfare arrangements in another EU country.

We aim to advance scholarly knowledge on the relationship between welfare arrangements and migration in three ways. First, most of the existing studies measured the generosity of the welfare state as the percentage of the gross domestic product spent by the government on social benefits (e.g., Geis *et al.* 2013; Jackson *et al.* 2013; Josifidis *et al.* 2014; Kurekova 2013; Palmer and Pytlikova 2015; Razin and Wahba 2015). However, it seems likely that if welfare affects migration decisions, rather than mere government spending, diverse features of the welfare state are of importance. Therefore, in this study we employ a typology of welfare regimes, to capture the set of welfare arrangements in the countries under study in a more comprehensive way. Second, we go beyond the often used one-sided view of the ‘welfare magnet hypothesis’, the expectation that more generous welfare states attract more migrants. We argue that the generosity of the welfare state in the country of origin should also be considered, as it likely plays a role as well. Furthermore, as welfare arrangements may not only affect immigration but also decisions to stay or to re-migrate, we analyse both immigration and emigration flows. Third, it can be expected that welfare benefits are particularly important for those migrants who are most likely to make use of them. So far, the few studies acknowledging this only considered migrants’ characteristics related to the labour market (e.g., Jackson *et al.* 2013; Schulzek 2012). Yet apart from

employment status, life course related characteristics such as age and family size are important indicators of welfare usage (Legrain 2008). We therefore take migrants' life course characteristics into account when studying the relationship between welfare and migration flows.

Our paper addresses two main research questions. First, what patterns of European migration (immi- and emigration) can be distinguished based on the size of migration flows and the life course characteristics of the migrants? Second, to what extent can similarities and differences in these patterns across origin countries be explained by welfare regimes? In the welfare state literature, countries are typically grouped based on systematic differences in their welfare state arrangements (e.g., Esping-Andersen 1990). We rely on this typology of welfare regimes to investigate whether intra-European migration is comparable for countries with similar welfare regimes. We investigate a ten year period, using three time points (2003, 2008 and 2013) to capture changes across the past decade.

Our study takes the Netherlands as a case study and relies on the rich register data of Statistics Netherlands. By focusing on migration flows for a single destination country, consistent, detailed and recent data over a ten-year period is available. The Netherlands provides an interesting context to study the relationship of migration flows with welfare arrangements. In the classical typology of Esping-Andersen (1990), the Netherlands is characterized as a 'hybrid' welfare state, roughly half-way between the social-democratic and the corporatist type (De Beer *et al.* 2001). Despite austerity measures over the last decades, the Dutch welfare system still belongs to the most generous ones in the world (Vis *et al.* 2008). The Netherlands forms a relevant case for our study as for many years the country has been characterized by considerable European immigration from and emigration towards different welfare systems. Next to longstanding migration between the Netherlands and (neighboring) countries such as Belgium, Germany and the UK, the subsequent enlargements of the European Union increased migration flows between the Netherlands and the new member states (Van Mol and De Valk 2016). In fact, EU citizens today make up the largest share of migrants to and from the Netherlands (Statistics Netherlands 2014).

Background

A Typology of Welfare States

The welfare state can be described as the total sum of social insurance, welfare benefits, social investment and public services provided by governments to citizens (Legrain 2008). Considerable variation exists in the way countries structure their welfare arrangements (De

Beer *et al.* 2001). In an attempt to summarize the main differences Esping-Andersen (1990) distinguished between three types of welfare regimes, based on the allocation of welfare production between state, market and households. The *liberal regime* is characterized by minimum social assistance, only covering the basic needs. Rather than collective risk-pooling the system responds to changes on the labour market. Benefits are means-tested and only provided to those who are incapable of working. The UK is a European example of this type of welfare state. The *corporatist regime* links social insurance to individuals' employment history and paid premiums. The family is placed at the center of welfare provision. The level of the benefits is wage related, with benefits mainly funded through contributions. France, Belgium and Germany approximate the corporatist welfare regime. In the *social-democratic regime*, generous social benefits are provided for all. The state has a key role in welfare production whereas the market plays a limited role, as do family-provided welfare services. The generous benefits are paid for through high general taxation. Sweden is an example of a typical social-democratic welfare state.

The position of the Netherlands in the welfare state typology is somewhat puzzling (Kammer *et al.* 2012). On the one hand, the country is characterized by generous redistributive benefits that are typical for the socio-democratic regime. On the other hand, however, these benefits are largely financed by social insurance contributions as in the corporatist regime. For this reason, the Netherlands is classified by some authors as corporatist (e.g., Gornick and Jacobs 1998), and by others as socio-democratic (e.g., Visser and Hemerijck 1997). Because the welfare state types should be understood as ideal types, the Netherlands can be best identified as a 'hybrid' welfare state, positioned somewhere between the social-democratic and the corporatist type (De Beer *et al.* 2001).

Although the typology of Esping-Andersen is one of the dominant frameworks for classifying and understanding modern welfare states, it has been criticized as well. Firstly, some scholars criticized the methodological approach, which can be described as a two-stage process of qualitative grouping followed by multiple regression (e.g. Danforth 2014). The disadvantage of such an approach is that the number of clusters generated is determined by theoretical considerations rather than the data. Subsequent studies tried to validate the typology, clustering countries by characteristics that capture central elements of welfare states. Some found a similar typology as Esping-Andersen (e.g., De Beer *et al.* 2001; Powell and Barrientos 2004), whereas others found limited differences (e.g., Danforth 2014). Secondly, the applicability of the three distinguished welfare regimes beyond a few economically advanced regions was questioned, and several studies have tried to identify

additional regime types. Some authors classified the Southern European countries as a fourth type, characterized by the rudimentary nature of many social provisions which are typically taken over by the family, while simultaneously having generous old age pensions (Fenger 2007; Gal 2010). According to the clustering of Fenger (2007), the post-communist countries should also be classified as a separate welfare type. After the collapse of the communism many Eastern European countries began their transition towards ‘Western-type’ welfare regimes. Nevertheless, these countries have had trouble ‘catching up’ due to economic and political instability (Aidukaite 2009). The Eastern European welfare states are currently characterized by high take-up rates of social security but relatively low benefit levels.

As welfare state types are understood to have systematically different economic, political and social consequences, the welfare state typology developed by Esping-Andersen is often used to explain a range of personal outcomes in individual’s lives (Emmenegger *et al.* 2015; Van Kersbergen and Vis 2015). Furthermore, some authors studied whether the same typology would be found using other indicators, for example using tax and transfer policies (Kammer *et al.* 2012). In this paper, we investigate whether a similar grouping of countries can be found based on migration flows, since different welfare states will have different levels of push and pull factors for migrants and may thus reflect the welfare state types.

Welfare and Migration

In the academic literature, the welfare magnet hypothesis is often used when referring to the relationship between migration and welfare states. This hypothesis expects migrants will move to more generous welfare states (e.g., Borjas 1999). Most of the empirical evidence on this hypothesis comes from studies that examine the relationship between welfare programs and (internal) movements between American states (Giulietti 2014). However, interstate migration in the United States may not be generalizable to migration between European countries. Numbers of interstate mobility are relatively high in the US compared to mobility within the European Union (Recchi 2015). Furthermore, internal migration within the US takes place within one larger nation state, whereas intra-European migration involves national borders crossing.

The limited number of studies on the European context so far reported contrasting findings. Several studies found no empirical evidence for the existence of a welfare magnet effect (e.g., Giulietti *et al.* 2013; Josifidis *et al.* 2014), whereas others documented some support for it (e.g., De Giorgi and Pellizzari 2009; Pedersen *et al.* 2008). De Giorgi and Pellizzari (2009), for example, showed that migrants into the pre-enlargement EU chose their

destination –among other considerations– on the basis of the generosity of welfare. However, Giulietti (2014) found that when focusing on particular programs such as unemployment benefits, the evidence of a welfare magnet is weak or non-existent. Instead, factors such as income, unemployment rates and the presence of previous migrants in the receiving country appeared to be the major determinants for intra-European migration.

Most of the previous studies measured the generosity of the welfare state as the percentage of the gross domestic product spent on welfare benefits. However, this is a rather narrow interpretation of welfare generosity. In the current paper we therefore rely on a more comprehensive measure of welfare generosity, using the typology of welfare states described above.

Welfare, Migration and the Life Course

In the welfare magnet literature, it is often (implicitly) assumed that welfare is equally relevant to all. Yet benefits may influence migration decisions only as far as individuals or families anticipate making use of them. In line with this reasoning, previous studies hypothesized that generous welfare benefits will attract welfare migrants (Josifidis *et al.* 2014) or asylum seekers (Schulzek 2012), whereas they would not have the same effect on labour migrants. Welfare benefits would further be of greater importance to lower educated migrants compared to the higher educated (e.g., Razin and Wahba 2015). Nevertheless, as studies investigating the relation between welfare benefits and migration mainly focused on labour market characteristics of migrants, these studies have overlooked people in other life stages. Yet welfare usage can be expected to vary over the life course, as age and family size are vital factors influencing welfare usage (Legrain 2008). Therefore, in this study we expand on the existing literature and go beyond the traditional focus on labour migrants by adopting a life course perspective.

This Study

In this paper, we aim to shed light on the relation between migration and the welfare state by investigating intra-European migration flows to and from the Netherlands. First, we analyse what patterns of European migration can be distinguished based on the relative size of inflows and outflows, and life course characteristics of migrants. In a second step, we investigate which countries are comparable in terms of these migration patterns. Based on the assumption that welfare plays a role in migration decisions, we expect migration flows to and from the Netherlands to be similar for origin countries with similar welfare regimes. Welfare

state arrangements are further expected to attract and retain especially those migrants from less generous welfare states who are most likely to make use of these arrangements.

Our paper focuses on migration flows in three years, 2003, 2008 and 2013, in order to capture whether the size and composition of these flows varies over time. The first time point, 2003, illustrates the situation prior to the enlargement of the European Union in 2004, whereby the number of EU member states increased from 15 to 25. The second time point, 2008, is one year after a subsequent enlargement of the European Union, whereby Bulgaria and Romania gained access. In addition, 2008 was the year the global economic crisis set in. Finally, measurements in 2013 are used to gain insight in the recent situation.

Data

Our analysis is based on data from the online population register database of Statistics Netherlands (Statistics Netherlands 2014). In the Netherlands, residents are obliged to register in the municipality where they live. Registration takes place on the basis of either a Dutch birth certificate or a declaration of stay or residence (Van der Erf *et al.* 2006). The population registers include information on date of birth, country of birth, gender, household composition, immigration and emigration. As characteristics of migration flows and migrants might change over the years, in this paper these factors were investigated for three years: 2003, 2008 and 2013. For each of the investigated years we selected the top 10 EU countries with the largest numbers of migrants arriving in the Netherlands in that year. Together this resulted in a selection of 13 countries of birth for which migrant flows and characteristics of migrants are investigated: Belgium, Bulgaria, France, Germany, Greece, Hungary, Italy, Poland, Portugal, Romania, Spain, Sweden and the UK. In 2013, migrants from these countries made up around 60% of the European immigrants, and around 40% of the total immigration to the Netherlands.

Definitions

Immigration. Immigration is defined as the settlement in the Netherlands of persons born in one of the 13 identified European countries. This implies we exclude immigration of Dutch return migrants in our analyses. The Dutch population registers capture immigration by enrollments in the municipal registers, which happens when the expected stay in the Netherlands exceeds four months.

Emigration. Emigration is defined as the departure of persons born in one of the 13 identified countries from the Netherlands to a foreign country. Similarly to immigration, emigration of

the Dutch is not considered. The Dutch population registers take account of emigration by removal from the municipal registers, which happens when the expected stay abroad exceeds eight months.

Immigrants and emigrants are defined by their country of birth, thus only considering first generation migrants. In the analyses, we include crude absolute numbers as well as a measure in which immigration and emigration rates were divided by the population size of the countries of origin to adjust for variation due to differences in size.

Age. We computed the average age of individuals at the time of migration for immigrants and emigrants born in the selected countries. Furthermore, the share of migrants in five different age categories at the time of migration is included as an indicator of the age distribution of migrants. We distinguish between different age profiles in order to cover different stages in the life course: ‘children under 15 years old’, who likely migrate with their family; ‘young adolescents aged 15-25’ in the phase of study or early career; ‘migrants in the ages 25-40’ who are most likely to have or start a young family; ‘migrants in the ages 40-60’, for whom work and family life are expected to have stabilized; ‘migrants above 60 years’ who are close to or above the legal retirement age.

Gender. The proportion of males among immigrants and emigrants is included as an indicator of the gender distribution for the selected countries.

Household type. In the register data, individuals are perceived as migrating with family members when simultaneously moving with members belonging to the same family from the same address. Persons who moved together with their husband, wife or registered partner, as well as children moving with their parent(s), are included in this category. Cohabiting but unregistered couples without a common child cannot be distinguished in the data; they are treated as if they migrated without family members.

Analytical Strategy

The analytical strategy covers different steps. First, the size of migration flows and life course related characteristics of migrants born in the 13 selected EU member states are described to examine to which extent migration flows to and from the Netherlands differ from one another, as well as between points in time. Subsequently, we study which characteristics of migration flows are interrelated, and whether clusters of countries can be identified for which migration flows display more or less the same composition. This is done in two steps. First, we conduct a principal component analysis on 14 variables capturing the size of the migration flows, the proportion of migrants in several age categories and the proportion of males among

immigrants and emigrants. Principal component analysis examines whether the various characteristics of migration flows can be represented by a smaller number of underlying dimensions, called 'factors'. For each characteristic a score, or 'factor loading', is calculated on each identified factor. A high factor loading indicates that the characteristic is strongly related to the factor, whereas a low factor loading indicates a weak correlation. The pattern of factor loadings shows the way in which various migration flow characteristics are interrelated. For 2003 and 2008, four factors can be discerned in the data, and for 2013 three factors.¹ In a second step we conduct a cluster analysis of factor scores, indicating how well a country is represented by the distinguished and retained factors, in order to determine which clusters of countries are comparable in terms of characteristics of the migration flows to and from the Netherlands. All variables are standardized in the models.

Results

Migration Flows to and from the Netherlands

In Figure 1a, the development of immigration to the Netherlands between 2003 and 2013 is presented for the 13 selected countries of birth. As can be observed, for all countries of birth the number of immigrants to the Netherlands increased over this period. The countries experiencing the largest increases over time were Poland, Bulgaria and Germany. In 2003, most immigrants to the Netherlands were born in Germany, followed by immigrants born in the UK and Poland. This order changed after the enlargement of the EU in 2004, with Polish immigrants becoming the largest group. After a subsequent enlargement of the EU in 2007, the number of immigrants born in Bulgaria passed that of the UK. As a result, from 2007 onwards, the three largest groups of European immigrants to the Netherlands were born in Poland, Germany and Bulgaria. The numbers of immigrants from the remaining countries were somewhat lower, and quite close to each other (see Figure 1b).

Four main migration patterns can be discerned. First, migration from new member states of the European Union (i.e., Poland, Hungary, Romania and Bulgaria) overall increased. The increase in the number of immigrants born in Poland is most noticeable. Second, migration from most of the EU-15 member states increased until 2006-2007, and remained stable or decreased in the period thereafter. The largest share of EU15-migrants consisted of migrants born in Germany. Third, migration from Southern European countries increased in recent years. Interestingly, the Portuguese immigration patterns followed a different dynamic compared to other Southern European countries, as the main growth in

immigration from Portugal was observed prior to the economic crisis. Finally, for the UK and Sweden, a stable trend can be observed for the ten years under study.

In Figure 2a, emigration from the Netherlands between 2003 and 2013 is displayed for the 13 selected countries of birth. For all countries except the UK, the number of emigrants increased between 2003 and 2013, and most so for Poland, Bulgaria and Germany. Prior to 2007, emigrants born in Germany were the largest group, followed by the UK and, at a much lower level, France. In 2005, Poland entered the top three and outnumbered British emigrants by 2007, as well as those born in Germany by 2008. Since 2012, the group of Bulgarian emigrants have outpaced the British emigrants too. In more recent years, emigrants born in Poland, Germany and Bulgaria thus made up the three largest groups. For a better view on the countries with lower emigration numbers, Figure 2b zooms in on these countries.

Comparing the absolute numbers of immigrants and emigrants for different countries of origin has its pitfalls, as the number of possible migrants depends on the size of the population of the country of origin. Germany and Poland, for instance, might have such large migrant flows simply because they have larger populations. To adjust for this, we included the number of immigrants and emigrants for each country of origin in our analyses as divided by the total size of the population of the respective origin country. Computed this way, Belgium, Portugal and the UK had relatively the largest inflows and outflows of migrants to the Netherlands in 2003. In 2008 and 2013, Bulgaria and Poland had the largest inflows and outflows in relative numbers (numbers not reported, details are available on simple request to the first author).

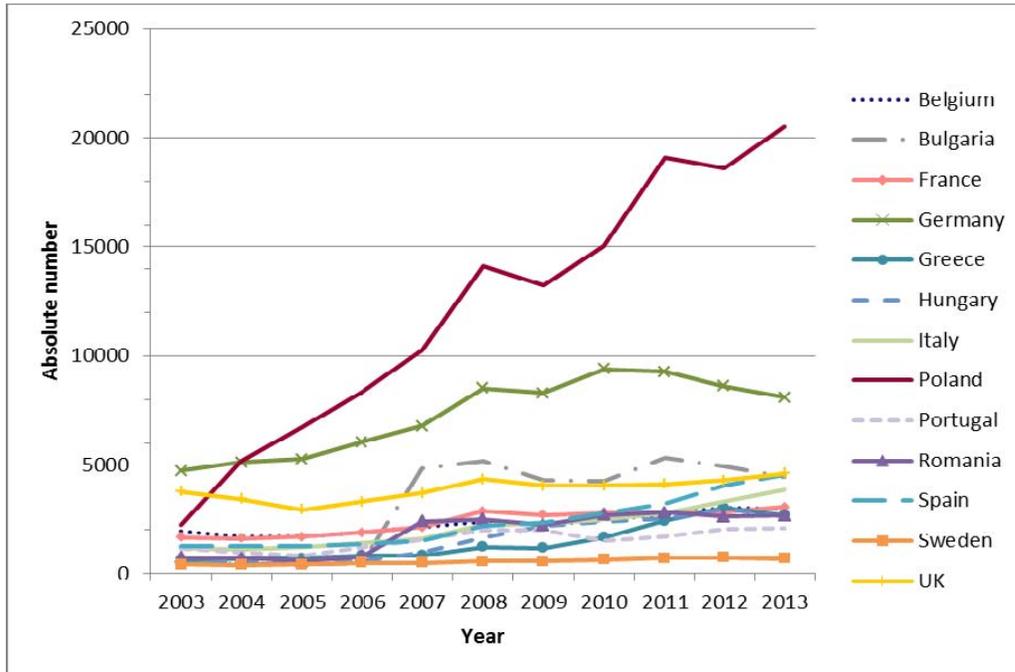
Life Course Characteristics of Migrants

In the previous section, the size of the main European migration flows to and from the Netherlands were described for the years between 2003 and 2013. In this section, we present the average age, gender distribution and family situation of these migrants, as an indicator of the average life course stage of each European migrant group.

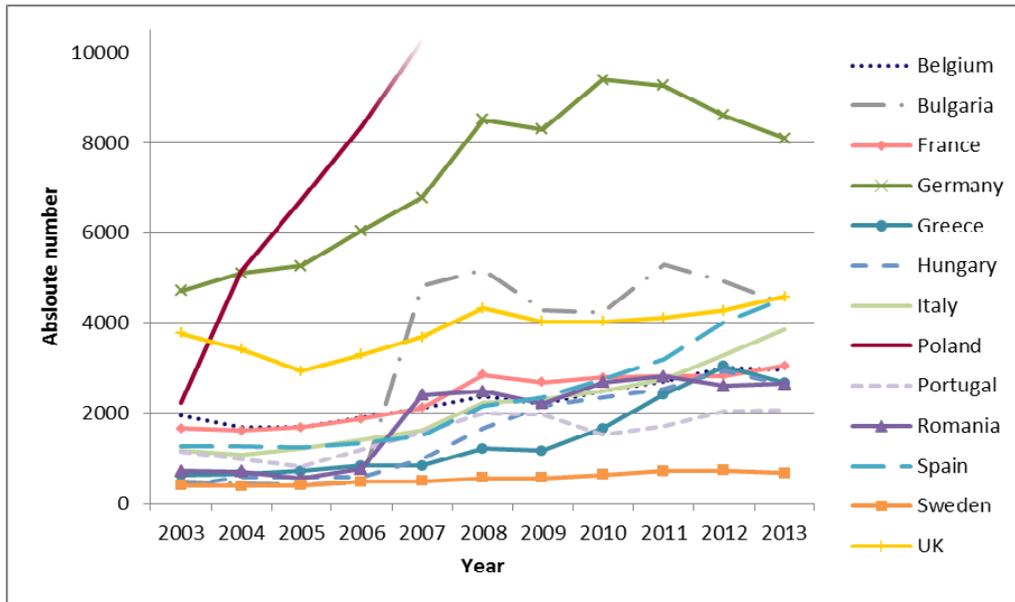
The first three columns of Table 1 present the average ages of immigrants from the 13 selected countries of birth for 2003, 2008 and 2013. In 2003, the average age was the lowest for France; immigrants from this country were on average younger than 24 when migrating. In 2008 and 2013, the average age was the lowest for immigrants from Spain. Immigrants migrating from the UK were the oldest group in 2003 and 2008, with an average age around 30. Immigrants from Poland and Hungary were with ages above 28 the oldest in 2013.

Figure 1. Immigration to the Netherlands for the 13 selected countries, 2003-2013*

a. General overview



b. Detailed overview smaller flows

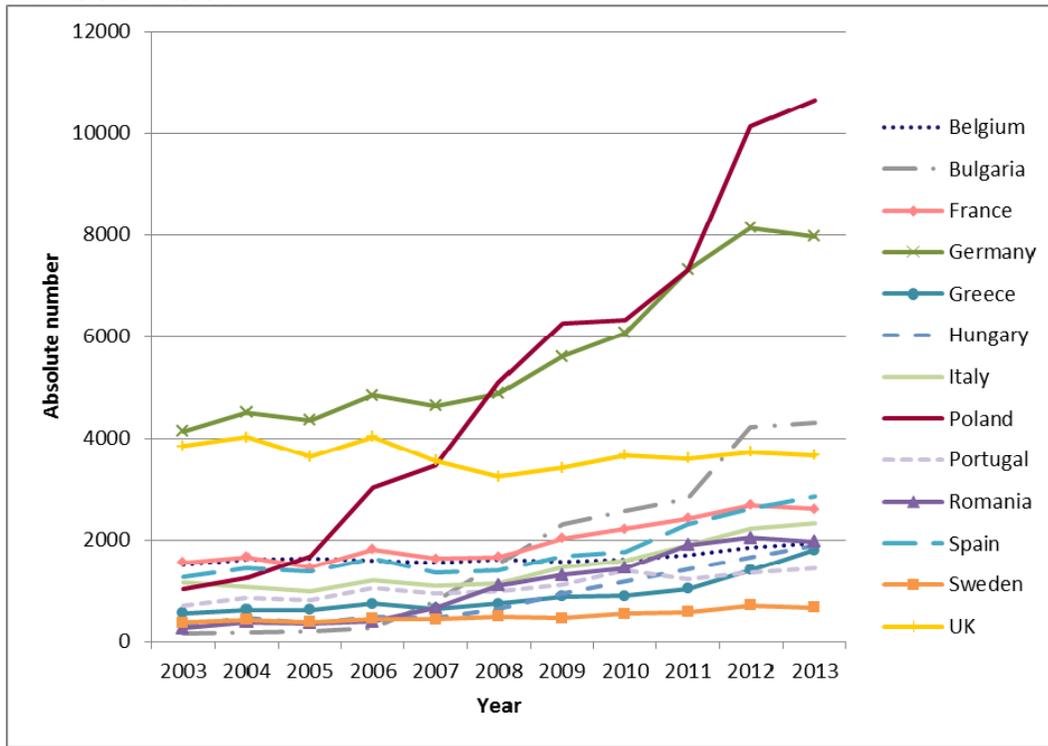


* Based on the migrant inflow in the respective years

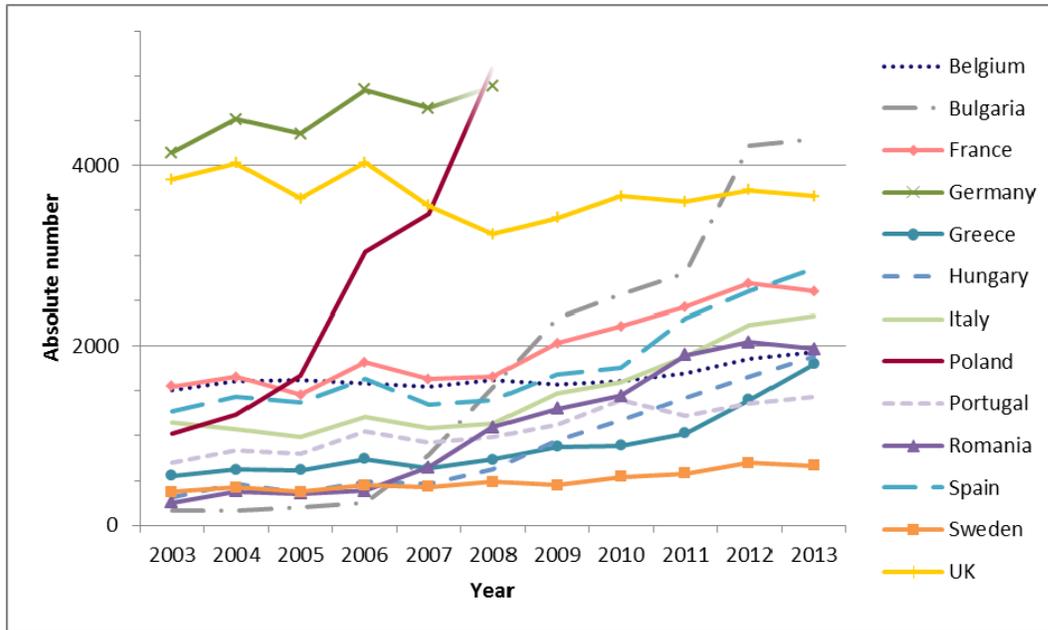
Source: Authors' calculations based on Statistics Netherlands StatLine Database (2014).

Figure 2. Emigration from the Netherlands for the 13 selected countries, 2003-2013*

a. General overview



b. Detailed overview smaller flows



* Based on the migrant outflow in the respective years

Source: Authors' calculations based on Statistics Netherlands StatLine Database (2014).

In the last three columns of Table 1, the average ages of emigrants from the selected countries are displayed. In all years under study, migrants born in France emigrated at the youngest ages, with ages close to 28 in 2003 and 2013, and just below 29 in 2008. With an average age close to 35, emigrants born in Spain formed the oldest group in 2003. However, the average age of Spanish emigrants decreased over the years under study, approximating 28 years in 2013. In 2008 and 2013, emigrants born in the UK had the highest average age.

In Table 2, the proportion of males among immigrants and emigrants born in the 13 selected countries is displayed for 2003, 2008 and 2013. We find clear differences in the gender distributions for the different origin countries. With proportions around 35% for Romania, Bulgaria and Poland, these countries had the smallest shares of male immigrants in 2003. In this year, the largest share of males was observed for Greece: above 65% of immigrants were men. In 2008, Romania and Germany had the smallest shares of male immigrants, and in 2013 Romania, Germany and Sweden, with shares around 45%. In 2008 and 2013, the largest shares of male immigrants originated from Italy and the UK. The increases in the proportions of males among immigrants born in Poland, Romania and Bulgaria between 2003 and 2008 are particularly remarkable: the proportion of males increased from around 35% to around 55% for Poland and Bulgaria, and from just over 30% to 45% for Romania over these years.

Among emigrants, the shares of males appeared to be generally somewhat higher than among immigrants. In 2003, the largest shares of males were observed for emigrants born in Greece and Portugal: above 65% of these emigrants were men. The smallest shares of male emigrants were observed for Poland and Bulgaria, with proportions of men below 45%. In 2008, a majority of female emigrants was observed for Sweden, Spain and Germany. In contrast, over 60% of the emigrants born in Italy, Greece, Poland, the UK and Portugal were men. In 2013, the proportion of males among emigrants was above 60% for Italy only. For most countries the majority of emigrants were men, yet not for France, Spain, Romania, Sweden and Germany. The share of males was lowest among emigrants born in Germany: less than 45%.

Table 3 shows for each of the 13 selected countries the share of immigrants and emigrants that migrated without family members in 2003 and 2008. Unfortunately, these data were not available for 2013. In 2003 and 2008, only a small share of immigrants entered the Netherlands simultaneously with other family members. In addition, the share of immigrants

Table 1. Average age at migration of immigrants and emigrants for 2003, 2008 and 2013 by country of birth

	Age at immigration			Age at emigration		
	2003	2008	2013	2003	2008	2013
	Mean	Mean	Mean	Mean	Mean	Mean
Belgium	24,5 (15,5)	25,4 (15,6)	25,0 (16,3)	30,6 (15,4)	30,9 (16,2)	28,6 (16,1)
Bulgaria	25,8 (9,0)	29,3 (11,1)	26,0 (13,5)	29,1 (9,8)	31,0 (10,6)	28,2 (13,5)
France	23,7 (12,3)	25,1 (10,9)	24,9 (11,4)	28,1 (13,4)	28,7 (13,1)	28,0 (10,9)
Germany	28,6 (15,1)	26,8 (12,7)	25,8 (12,0)	34,0 (15,9)	32,9 (14,9)	29,1 (11,7)
Greece	28,4 (12,7)	28,9 (11,3)	27,1 (10,8)	33,1 (13,6)	33,5 (13,7)	30,6 (11,5)
Hungary	25,6 (10,4)	28,5 (10,6)	28,4 (11,2)	31,5 (12,9)	32,4 (12,6)	30,5 (10,8)
Italy	28,0 (12,6)	28,4 (10,9)	27,3 (10,5)	32,4 (13,4)	32,3 (13,1)	29,9 (10,8)
Poland	27,3 (11,3)	28,3 (11,5)	28,4 (11,1)	30,4 (12,3)	31,6 (10,8)	30,9 (10,9)
Portugal	25,5 (12,8)	28,6 (12,8)	28,0 (12,8)	31,6 (13,3)	32,7 (15,1)	32,1 (14,1)
Romania	27,0 (10,3)	27,5 (9,8)	27,8 (10,1)	30,9 (10,1)	30,4 (10,4)	29,5 (9,5)
Spain	24,8 (11,9)	24,5 (11,3)	24,5 (11,6)	34,7 (16,6)	32,7 (15,9)	28,2 (12,5)
Sweden	24,7 (12,4)	26,6 (10,9)	25,9 (11,6)	31,6 (13,0)	32,1 (13,7)	29,6 (11,8)
UK	29,9 (15,3)	30,1 (15,6)	28,0 (15,0)	33,8 (14,6)	35,0 (15,4)	33,6 (15,3)

Source: Authors' calculations based on Statistics Netherlands StatLine Database (2014).

Table 2. Percentage of males among immigrants and emigrants for 2003, 2008 and 2013 by country of birth

	Male immigrants			Male emigrants		
	2003	2008	2013	2003	2008	2013
Belgium	47	52	51	51	52	53
Bulgaria	34	55	51	42	54	53
France	52	53	51	54	52	50
Germany	48	45	44	52	49	44
Greece	66	59	56	69	63	59
Hungary	51	54	51	51	54	51
Italy	59	63	60	59	65	61
Poland	37	56	52	44	63	56
Portugal	58	60	54	67	61	58
Romania	32	45	45	47	51	47
Spain	47	49	49	5	48	49
Sweden	45	48	44	49	47	47
UK	60	61	58	60	61	59

Source: Authors' calculations based on Statistics Netherlands StatLine Database (2014).

moving together with family members seems to decrease rather than to increase over time. The share of single immigrants was smallest for Belgium: around 75% of the Belgian immigrants migrated without family members. Immigrants with the highest shares of singles were born in Bulgaria and Greece: around 95%. Among emigrants, the share moving together with family members was somewhat larger than among immigrants. The shares of single emigrants were smallest for Belgium, the UK and France, fluctuating between 60% and 70%.

Table 3. Percentage of immigrants and emigrants migrating without family members for 2003, 2008 and 2013 by country of birth

	Single immigrants		Single emigrants	
	2003	2008	2003	2008
Belgium	76	79	60	65
Bulgaria	93	97	84	94
France	85	86	60	71
Germany	84	90	68	77
Greece	93	96	81	88
Hungary	89	95	80	86
Italy	88	93	74	85
Poland	88	87	81	82
Portugal	87	89	74	78
Romania	88	93	76	86
Spain	92	90	73	78
Sweden	90	92	73	75
UK	88	87	66	67

Source: Authors' calculations based on Statistics Netherlands StatLine Database (2014).

The share of singles was largest for Bulgaria, and increased from less than 85% in 2003 to almost 95% in 2008. In fact, for most countries the share of single emigrants increased over time.

Correlation between Characteristics of Migrant Flows and Migrants

In the previous section, we compared the characteristics of migrant flows and life course related characteristics of migrants between origin countries and over time. We expected migration flows from the various countries of origin to differ from one another in size and life course related characteristics in a more or less systematic manner. In order to examine whether this is in fact the case, we conduct a principal component analysis on the 14 distinguished variables. The results of this analysis are presented in Table 4.

The factor loadings of the 14 variables distinguished on each of the factors are presented in the columns. For each year, the first two factors are clearly the most important ones: around 65 percent of the variance in characteristics of migrant groups is related to these factors. Factor 3 and 4 explain much less variance. In addition, the factor scores on these factors never exceed the threshold of ± 0.6 on the first time point.² For these reasons, we will continue with the first two factors for the remainder of this article. Countries that score high on the first factor are characterized by a large share of children and individuals in the older

Table 4. Results of a principal component analysis of 14 characteristics of the migration flows under study for 2003, 2008 and 2013.

Characteristic	2003				2008				2013		
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 1	Factor 2	Factor 3	Factor 4	Factor 1	Factor 2	Factor 3
Size inflow	0.56	-0.58	0.12	0.20		0.37	0.88	0.20	0.45	0.57	-0.62
Size outflow	0.78	-0.40	0.18	0.17	0.19	0.24	0.89	0.23	0.49	0.43	-0.72
Immigrants:											
Age 0-15	0.78	-0.35	0.29	0.21	0.72	-0.46		0.43	0.76	-0.36	-0.31
Age 15-25	-0.75	-0.52	0.26	-0.19	-0.60	-0.72		-0.23	-0.51	-0.71	
Age 25-40	-0.58	0.72		0.17	-0.50	0.78	-0.28	0.10	-0.41	0.86	0.15
Age 40-60	0.72	0.26	-0.53		0.76	0.44	0.30	-0.18	0.88	0.13	0.12
Age 60+	0.80	0.22	-0.15	-0.28	0.80	-0.29	-0.15	-0.27	0.60	-0.62	0.23
Males	0.56	0.55	0.42		0.45	0.75	-0.24	0.26	0.48	0.39	0.60
Emigrants:											
Age 0-15	0.67	-0.44		0.19	0.69	-0.48		0.30	0.78	-0.20	-0.48
Age 15-25	-0.68	-0.46	-0.12	-0.26	-0.65	-0.42	0.47		-0.48	-0.77	-0.14
Age 25-40	-0.73	0.32	0.11	0.53	-0.75	0.63			-0.69	0.70	
Age 40-60	0.84	0.17	-0.49		0.85	0.16	0.11	-0.46	0.87		0.25
Age 60+	0.19	0.28	0.55	-0.68	0.14	-0.35	-0.61	0.45	0.42	-0.47	0.62
Males	0.50	0.58	0.46	0.15	0.32	0.83	-0.23		0.48	0.52	0.58
% of variance explained	45	20	10	8	35	39	18	7	38	29	18
Accumulated variance explained	45	65	75	83	35	64	82	89	38	66	84

working ages, and a small share of young adolescents among immigrants and emigrants moving to and from the Netherlands. Furthermore, these countries are characterized by a large share of retirees among immigrants, and a small share of emigrants in the early working ages. In 2003, countries that scored high on the first factor were also associated with larger outflows, and countries that scored high on the second factor were characterized by a large share of immigrants in the early working ages. In 2008 and 2013, countries that scored high on this factor were further characterized by small shares of young adolescents among immigrants, and large shares of emigrants in the early working ages. In 2008, the proportion of males among immigrants and emigrants was relatively high for these countries. Earlier we described migrants in the ages 25-40 years as those most likely to have or start a young family. However, as the second factor is not characterized by high proportions of children among immigrants, the findings suggest that these migrants come to the Netherlands without children. In addition, as the proportion of children among emigrants is not high either, we can conclude that these migrants re-migrated before starting a family.

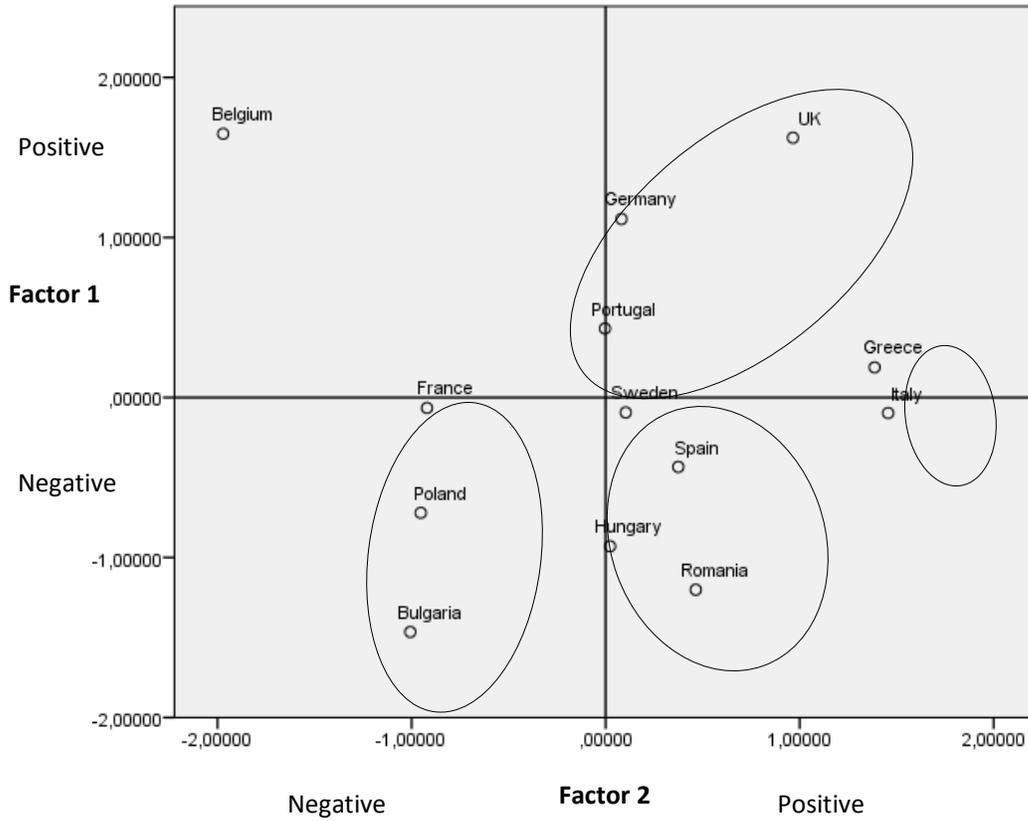
Similarities and Differences between Origin Countries

The principal component analysis shows that the differentiation of migration flows to and from the Netherlands relates mainly to two issues, namely 1) the share of migrants migrating as a family or outside the working ages, and 2) the share of migrants migrating as singles in the (early) working ages. Factor scores were calculated for each origin country to determine the position of the countries on these two factors, as shown in Figure 3 (factor 1 on the y-axis and factor 2 on the x-axis). This way, countries that score high on the first factor and low on the second are placed in the upper left corner, countries with high scores on both factors in the upper right corner, countries that score low on the first factor and high on the second factor in the lower right corner, and countries that score low on both factors in the lower left corner. Thereafter, we conducted a cluster analysis to examine which countries display similar patterns of migrant characteristics. The distinguished clusters are represented by circles in Figure 3.³

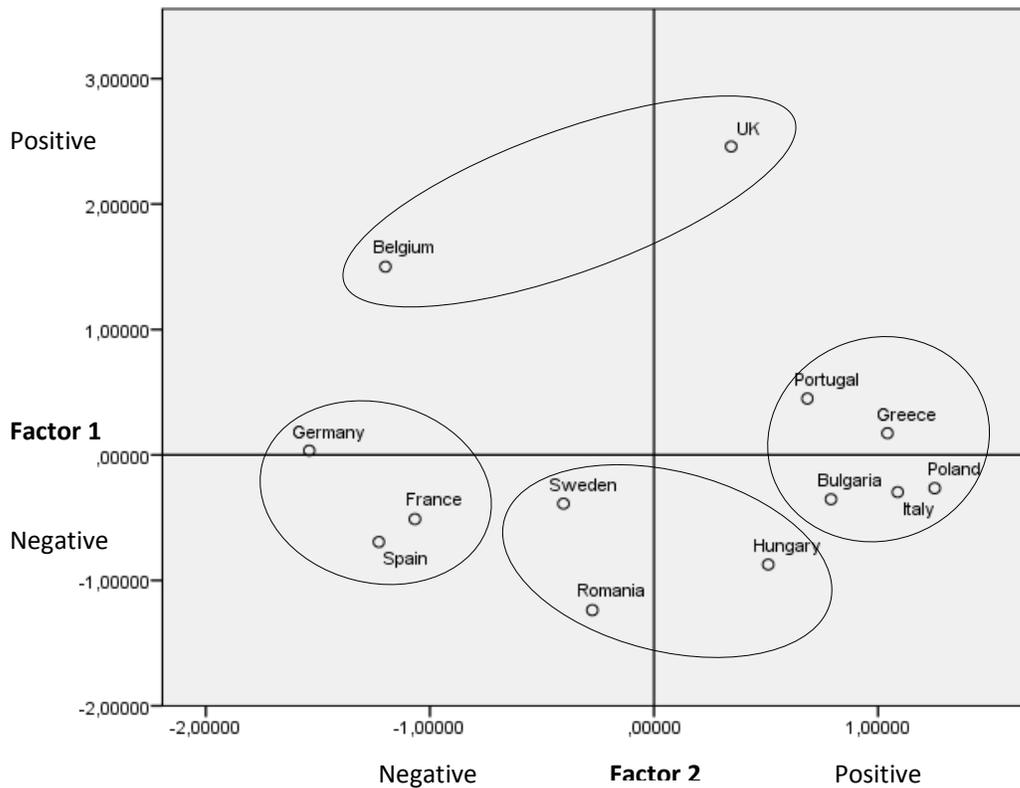
For 2003, four clusters of countries were distinguished. First, Greece and Italy are grouped together. These countries were characterized by a relatively large group of individuals in the early working ages migrating to and from the Netherlands. The main type of migration between these countries and the Netherlands in 2003 hence seems to be labour migration. Second, Spain, Sweden, Hungary and Romania had average or slightly above

Figure 3. Positioning of the countries included in this study with respect to the first two factors in Table 4 for 2003 (a), 2008(b) and 2013 (c)

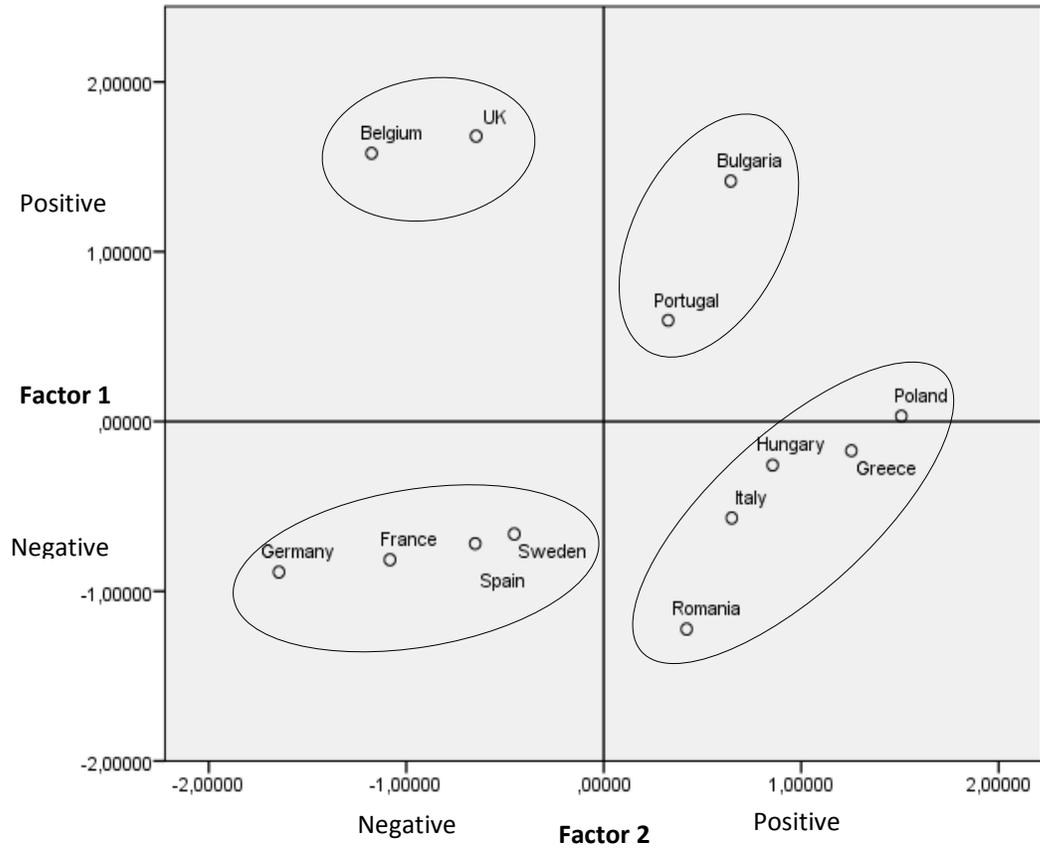
a. 2003



b. 2008



c. 2013



average shares of migrants in the early working ages, and small shares of families and older migrants. Third, Germany, Portugal and the UK were by relatively high shares of families and older migrants. Although these countries are grouped together, Portugal and Germany were further characterized by average shares of migrants in the early working ages, whereas a larger share of this type of migrants can be observed for the UK in 2003. France, Poland and Bulgaria make up the fourth cluster. These countries were characterized by small shares of migrants in the early working ages, and average (France) or small (Poland and Bulgaria) shares of families and older migrants. Belgium did not fit any of described clusters, and was characterized by a particularly small share of young workers, and a high share of families and older migrants. The small distance between Belgium and the Netherlands probably explains the large share of families and elderly moving between these countries. As can be observed in Table 4, the first factor was associated with larger outflows of migrants for 2003. As especially the Eastern European countries scored low on this factor, this finding might relate to EU membership. Previous research already illustrated that the return rate of EU citizens is far above that of non-EU nationals (EUROSTAT 2000). As becomes apparent from the discussion above, the grouping of the countries in 2003 did not match the conventional welfare state typology.

For 2008, again four clusters can be distinguished, but the grouping of countries is slightly different compared to 2003. One of the main changes in the clustering is the increase in the share of migrants in the early working ages for Poland, Hungary, Bulgaria and Portugal. For Poland, Hungary and Bulgaria this increase probably resulted from these countries joining the EU in 2004 and 2007. As EU nationals, it has become easier for migrants from these countries to live and work in the Netherlands. Remarkably, a similar change was not observed for the other new member state, Romania. Instead, migration flows between Romania and Italy intensified after the country joined the EU in 2007 (Gijsberts and Lubbers 2015). Despite the more generous welfare arrangements in the Netherlands, Italy is the main country of destination of Romanian migrants. The relative increase of migrants in the early working ages born in Portugal might result from the economic situation in the country: Portugal suffered from low economic growth rates well before the start of the economic crisis (Lourtie 2011). In addition, the share of Spanish migrants in the early working ages decreased, and among German migrants the share migrating with children or at older ages decreased as well. Conversely, the share of young adolescents among these groups increased.

Also for 2013, four clusters are distinguished again. Again, some main changes since 2008 can be observed. First, Germany, France, Sweden and Spain moved towards negative scores on both factors over the years under study, to form a joint cluster in 2013. This development seems to be the result of a growing share of young adolescents moving between these countries and the Netherlands, as this age group is negatively associated with both factors. Interestingly, these countries were characterized by relatively large shares of female migrants as well (see Table 2). Possibly, these migration flows were characterized by large shares of migrants moving to the Netherlands to study. It might also be that particularly young workers migrated from these countries to find work in the Netherlands. Second, in contrast with the previous time points, in 2013 the share of migrants in the early working ages was below average for the UK. Third, in 2013, the Eastern European and Mediterranean countries all scored relatively high on the factor representing migrants in the early working ages, with Spain being the only exception. This indicated that from the countries with less favourable labour market conditions, particularly individuals in the working ages 25-40 moved to and from the Netherlands, probably to find work. Finally, it is remarkable that in 2013 the new EU member states Hungary, Poland and Romania were mainly characterized by labour migration, yet for Bulgaria large shares of families and older migrants were moving to and from the Netherlands as well.

Additional Analyses

Data on the household type of migrants at the time of migration were unfortunately not available for 2013. To keep the models comparable over the three time points, we therefore estimated the models for 2003 and 2008, including the proportions of singles among immigrants and emigrants, and compared the findings to the ones reported before.

For 2003, the two main factors largely correspond between the two models. The first factor is further associated with smaller shares of immigrants and emigrants migrating without family members, and the second factor with larger shares of males among immigrants and emigrants. For 2008, however, some differences in factor loadings were observed. First, the first factor of the model with the variables on household type seems to represent the opposite of the first factor in the model when these variables are not included: countries that scored high on the first factor in the model including migrants' household type were characterized by small proportions of children and older migrants. However, when we changed the sign of the factor scores for the first factor, the positioning of countries was comparable across the two models. Second, in the model including variables on the

household type, the proportions of migrants in the early working ages load on the factor of family migration, and the proportion of migrants in the older working ages on the labour migration factor. For the reported models the opposite pattern was observed. Still, the positioning of countries on the second factor was comparable between the two models. The different factor loadings might indicate that in 2008 individuals migrating with family members were somewhat younger than in 2003. Possibly, this is explained by the intensified migration flows from the new EU member states in 2008: people from these countries might start a family at relatively younger ages.

Discussion

This study aimed to advance our understanding of the relationship between migration and welfare. Our results indicated that a clustering of countries based on characteristics of their migration flows to and from the Netherlands does not match the classical welfare regime typology commonly used in the academic literature. This was the case for each of the years we have analysed (2003, 2008 and 2013). Based on the presented analyses, several conclusions can be made.

First, we investigated what patterns and characteristics of migration to and from the Netherlands could be distinguished, and to what extent various countries of origin differed from each other regarding these patterns. We thereby focused on characteristics of migrants related to the life course. Results of a principal component analysis showed that the differentiation of migration to and from the Netherlands relates mainly to two issues, namely the share of migrants migrating as a family or outside the working ages, and the share of migrants migrating as singles in the (early) working ages. The countries under study appeared to score differently on these two factors, not only compared to each other, but also over time. This implies that it is crucial to include life course characteristics into the analyses of migration and its relation to welfare.

Second, we tested whether similarities and differences in patterns of characteristics of migration flows between countries can be explained by differences in their welfare regimes. To answer this question, we employed a typology of welfare regimes firmly established in the welfare state literature. We expected migrants to and from the Netherlands originating from similar welfare regimes to be comparable in terms of their life-course characteristics. In our study, the UK, the European country that would approximate the liberal welfare regime most, was clustered with corporatist states Germany and Portugal for 2003, and for later years with Belgium. Sweden, the classic example of the socio-democratic welfare regime, was clustered

with Eastern European states Hungary and Romania for 2003 and 2008, and for 2013 with the corporatist regimes of Germany, France and Spain. These examples illustrate that the welfare regime types described and generally confirmed in the welfare state literature do not match a clustering of countries based on their migration flows in the past decade. In addition, whereas welfare regimes can be expected to be more or less stable over time, the clustering of countries based on the size and composition of their migration flows appeared to change substantially over a period of ten years.

We further expected welfare state arrangements to attract especially those migrants from less generous welfare states who are most likely to make use of these arrangements. Single migrants in the working ages are least likely to benefit from generous welfare arrangements, whereas families with children and older migrants are most likely to do so. Therefore, we expected the migration flows with the largest shares of families and elderly to originate from the least generous welfare states. However, our findings did not support this idea. In each of the years under study, Belgium and the UK were the countries with the largest shares of children and elderly among migrants. Although the Dutch welfare state might in some respects be considered more generous than these origin countries, Belgium and the UK do not seem to be the least advantageous welfare states included in the analysis. Welfare spending of these countries, for instance, is higher than in the Eastern European countries. Less advantaged countries, on the other hand, were generally characterized by much lower shares of migrants outside the working ages. Rather than differences in the welfare state, this finding suggests that relative closeness of Belgium and the UK to the Netherlands facilitates migration for people with young children or at older ages irrespective of welfare provisions.

The EU enlargements of 2004 and 2007 form an interesting context, as they did not only facilitate migration from the Eastern European countries to the Netherlands, but also Eastern European migrants' access to welfare benefits in the Netherlands. Over the years under study, especially the share of migrants in the early working ages increased for the Eastern European countries. In addition, the share of male migrants increased. In 2008, migrants born in Hungary and Bulgaria were on average older, and migrated more often without family members than in 2003. Together, these findings suggest that, rather than to profit from generous welfare benefits, Eastern European migrants moved to the Netherlands to work. For 2013, a remarkably different pattern is observed for Bulgaria: in this year the share of children and older migrants was relatively high. This seems to be in line with findings reported by the Netherlands Institute for Social Research (SCP), indicating that in

recent years, Bulgarian migrants in the Netherlands increasingly expected to stay (Gijsberts and Lubbers 2015). While increasing numbers of labour migrants migrated from Eastern Europe to the Netherlands, we found that among British migrants the share of labour migrants declined after 2008. Possibly, less labour migrants decided to move between the UK and the Netherlands because of the changed economic climate after the crisis set in. This development was not observed for migrants from the Eastern and Southern member states. Migration might still remain an attractive option as these countries were hit more severely by the financial crisis than the Netherlands; the relative position of the country in terms of financial crisis again might be more important than welfare benefits per se.

Another interesting development was detected for migrants born in Germany, France, Spain and Sweden. Over the years, migration from these countries became less and less characterized by large shares of children and elderly, or migrants in the ages 25-40. Instead, the flows contained large shares of migrants in the young adulthood ages between 15-25. Migrants in this age category probably came to the Netherlands for study, an internship, a gap year or a first job. This is in line with findings of a previous report indicating that in recent years, Germany, Spain and France were the countries with the largest inflows of study migrants in the Netherlands (Jennissen and Nicolaas 2014). Furthermore, high youth unemployment in Spain after the economic crisis might have simulated young Spaniards to move abroad (see for example Van Mol 2016).

Finally, some limitations of our study should be mentioned. First, unregistered migration, as well as short term or circular migration, are not included in the Dutch population register. This is unfortunate, as these forms might be increasingly important in the European context (e.g. short-term seasonal workers, retirement migrants). However, as migrants have to register in the Netherlands to gain access to Dutch welfare arrangements, we do not expect our conclusion to significantly change by including unregistered migrants.

A second limitation of the current study is that we only considered migration flows to and from the Netherlands. Because of this, we do not know whether the composition of migration flows is mainly a result from the situation in the Netherlands, or from the situation in the country of origin. Further research is needed to investigate whether our findings differ depending on diverse interactions between origin and destination context. Third, the findings of this study suggest that welfare arrangements do not affect migration decisions, and that other factors, such as the economic and political situation, have a greater influence on migration flows. However, the clustering of countries based on migration characteristics might not correspond to the welfare regime typology because the typology does not capture

those differences in welfare arrangements that are most important to migrants. Rather than the full package of arrangements, specific benefits might impact migration decisions. As we did not include precise indicators of welfare arrangements, nor other contextual factors in our analysis, we cannot provide a conclusive answer yet. However, our findings do support the idea that different migration streams are covering different types of migrants (based on life course characteristics), implying that migrants should not be treated as one homogenous group when studying the relation between welfare and migration, as different social policies are likely to affect different types of migrants.

Notes

1. A factor is considered to be significant if the so-called 'eigenvalue' of the factor in question exceeds one.
2. 0.6 is the advised threshold for factor loadings by (Guadagnoli and Velicer 1988).
3. A hierarchical cluster analysis was performed, using the so-called linkage method. Other grouping methods resulted in comparable outcomes.

Disclosure statement

No potential conflict of interest was reported by the authors.

References

- Aidukaite, J. 2009. Old welfare state theories and new welfare regimes in eastern europe: Challenges and implications. *Communist and Post-Communist Studies* 42, no. 1: 23-39.
- Borjas, G.J. 1999. Immigration and welfare magnets. *Journal of Labor Economics* 17, no. 4: 607-37.
- Danforth, B. 2014. Worlds of welfare in time: A historical reassessment of the three-world typology. *Journal of European Social Policy* 24, no. 2: 164-82.
- De Beer, P.T., J.M. Wildeboer Schut and J.C. Vrooman. 2001. *On worlds of welfare: Institutions and their effects in eleven welfare states*. Den Haag: Sociaal en Cultureel Planbureau.
<Go to ISI>://WOS:000175351500031
- De Giorgi, G. and M. Pellizzari. 2009. Welfare migration in europe. *Labour Economics* 16, no. 4: 353-63.
- Emmenegger, P., J. Kvist, P. Marx and K. Petersen. 2015. Three worlds of welfare capitalism: The making of a classic. *Journal of European Social Policy* 25, no. 1: 3-13.
- Esping-Andersen, G. 1990. *The three worlds of welfare capitalism*. Oxford: Polity Press.
- Eurostat. 2000. European social statistics: Migration. Theme 3, population and social statistics. . Luxembourg: Office for Official Publications of the European Communities.
- Fenger, M. 2007. Welfare regimes in central and eastern europe: Incorporating post-communist countries in a welfare regime typology. *Contemporary Issues and Ideas in Social Sciences* 3, no. 2: 1-30.
- Gal, J. 2010. Is there an extended family of mediterranean welfare states? *Journal of European Social Policy* 20, no. 4: 283-300.
- Geis, W., S. Uebelmesser and M. Werding. 2013. How do migrants choose their destination country? An analysis of institutional determinants. *Review of International Economics* 21, no. 5: 825-40.
- Gijsberts, M. and M. Lubbers. 2015. Langer in nederland. Ontwikkelingen in de leefsituatie van migranten uit polen en bulgarije in de eerste jaren na migratie. Den Haag: Sociaal en Cultureel Planbureau.
- Giulietti, C. 2014. The welfare magnet hypothesis and the welfare take-up of migrants. *IZA World of Labor* 37.
- Giulietti, C., M. Guzi, M. Kahanec and K.F. Zimmermann. 2013. Unemployment benefits and immigration: Evidence from the eu. *International Journal of Manpower* 34, no. 1: 24-38.
- Gornick, J.C. and J.A. Jacobs. 1998. Gender, the welfare state, and public employment: A comparative study of seven industrialized countries. *American Sociological Review* 63, no. 5: 688-710.
- Greve, B. 2014. Free movement as a threat for universal welfare states? *European Review* 22, no. 3: 388-402.
- Guadagnoli, E. and W. Velicer. 1988. Relation of sample size to the stability of component patterns. *Psychological Bulletin* 103: 265-75.

- Jackson, A.L., D.L. Ortmeier and M.A. Quinn. 2013. Are immigrants really attracted to the welfare state? Evidence from oecd countries. *International Economics and Economic Policy* 10, no. 4: 491-519.
- Jennissen, R. and H. Nicolaas. 2014. De nederlandse migratiekaart 2013. Achtergronden en ontwikkelingen in internationale migratiestromen in de periode vanaf 2000. In *Cahiers 2014-08*. Den Haag: WODC & CBS.
- Josifidis, K., N. Supic, E.B. Pucar and S. Srdic. 2014. Labour migration flows: Eu8+2 vs eu-15. *Journal of Business Economics and Management* 15, no. 1: 41-55.
- Kammer, A., J. Niehues and A. Peichl. 2012. Welfare regimes and welfare state outcomes in europe. *Journal of European Social Policy* 22, no. 5: 455-71.
- Kurekova, L. 2013. Welfare systems as emigration factor: Evidence from the new accession states. *Jcms-Journal of Common Market Studies* 51, no. 4: 721-39.
- Legrain, P. 2008. Is free migration compatible with a european-style welfare state?: The Globalisation Council.
- Lourtie, P. 2011. Understanding portugal in the context of the euro crisis. Paper prepared for resolving the european debt crisis, a conference hosted by the peterson institute for international economics and bruegel. Chantilly, France.
- Palmer, J.R.B. and M. Pytlikova. 2015. Labor market laws and intra-european migration: The role of the state in shaping destination choices. *European Journal of Population* 31, no. 2: 127-53.
- Pedersen, P.J., M. Pytlikova and N. Smith. 2008. Selection and network effects-migration flows into oecd countries 1990-2000. *European Economic Review* 52, no. 7: 1160-86.
- Powell, M. and A. Barrientos. 2004. Welfare regimes and the welfare mix. *European Journal of Political Research* 43: 83-105.
- Razin, A. and J. Wahba. 2015. Welfare magnet hypothesis, fiscal burden, and immigration skill selectivity. *Scandinavian Journal of Economics* 117, no. 2: 369-402.
- Recchi, E. 2015. *Mobile europe. The theory and practice of free movement in the eu*. Basingstoke: Palgrave Macmillan.
- Schulzek, N. 2012. The impact of welfare systems on immigration: An analysis of welfare magnets as a pull-factor for asylum seekers and labour migrants. London: LSE Migration Studies Unit.
- Stark, O. and J.E. Taylor. 1991. Migration incentives, migration types - the role of relative deprivation. *Economic Journal* 101, no. 408: 1163-78.
- Statline database <http://statline.cbs.nl/statweb/> (accessed October 2015).
- Van Der Erf, R., L. Heering and E. Spaan. 2006. Country report: Netherlands. . In *Thesim: Towards harmonised european statistics on international migration*, eds Poulain, M, Perrin, N and Singleton, A, pp. 553-64. Louvain-la-Neuve (Belgium): Presses universitaires de Louvain.
- Van Kersbergen, K. and B. Vis. 2015. Three worlds' typology: Moving beyond normal science? *Journal of European Social Policy* 25, no. 1: 111-23.
- Van Mol, C. 2016. Migration aspirations of european youth in times of crisis. *Journal of Youth Studies*.
- Van Mol, C. and H.a.G. De Valk. 2016. Migration and immigrants in europe: A historical and demographic perspective. In *Integration processes and policies in europe. Contexts, levels and actors.*, eds Garcés-Mascareñas, B and Penninx, R, 31-55. Dordrecht: Springer.
- Vis, B., K. Van Kersbergen and U. Becker. 2008. The politics of welfare state reform in the netherlands: Explaining a never-ending puzzle. *Acta Politica* 43, no. 2-3: 333-56.
- Visser, J. and A.C. Hemerijck. 1997. *A dutch miracle: Job growth, welfare reform and corporatism in the netherlands*. . Amsterdam: Amsterdam University Press.

Migration is often understood as a rational decision of individuals or households to maximize (family) income and minimize risks. Welfare systems may be part of these rationales. Therefore, it can be expected that differences in welfare state arrangements across countries influence migration decisions. Yet empirical evidence on the relation between migration and welfare is rather mixed, particularly in the European context. Consequently, in this paper we aim to advance our understanding of the relationship between migration and welfare, based on a case-study of the Netherlands. We analyse both immigration and emigration of EU-citizens using full population register data for 2003, 2008 and 2013. In a first step, we investigate what patterns of European migration can be distinguished based on the size of the flows and life course characteristics of migrants, using a principal component analysis. Subsequently, we investigate to what extent similarities and differences in these characteristics between countries can be explained by differences between their welfare regimes. Our results indicate that different migrant types can be distinguished, and that the composition of migration flows varies with regards to these types. However, a clustering of countries based on their migration flow characteristics does not match classical welfare regime typologies.

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