

Working Paper No. 2

Deliverable D 8.5 November 2019

Horizon 2020 SIRIUS (770515)



Co-funded by the Horizon 2020 programme of the European Union

Reference: SIRIUS [D 8.5]

This research was conducted under the Horizon 2020 project 'SIRIUS' (770515).

The sole responsibility of this publication lies with the author. The European Union is not responsible for any use that may be made of the information contained therein

Any enquiries regarding this publication should be sent to us at: <u>christosbagavos@gmail.com</u>

This document is available for download at www.sirius-project.eu/publications/papers



The importance of foreign migration for shifts in the size of the labour force of European countries: Methodological insights and contemporary evidence from SIRIUS and from selected Non-SIRIUS countries

Christos Bagavos¹

Abstract Slowdown in population growth and population ageing challenge Europe, particularly in terms of the current and future supply of labour. In recent times, those demographic transformations take place in a context of increasing migration flows, which, along with current upward trends in the participation in the labour market of both native females and natives aged between 55-64 years, inevitably affect the total number of economically active persons. The study aims to highlight the importance of migration for labour force trends in selected European countries by placing migration in a comparative framework. It explores the separate contribution of specific groups selected on the basis of age, sex, migration status (migrants vs. non-migrants) and migrant's origin (EU nationals vs. Non-EU nationals) to overtime changes in the total labour force. The paper points out that, up to date changes in the size of the labour force of the European countries under study are largely due to immigration; either because immigration accelerates labour force growth or leads to increasing trends in the overall labour force in a context of a shrinking number of native active persons. It highlights also that the rising importance of migration for labour supply in Europe would require further implementation of policies that support migrant integration into European labour markets. The paper is prepared in the context of the Horizon 2020 SIRIUS research. Therefore SIRIUS countries i.e. the Czech Republic (CZ), Italy (IT), United Kingdom (UK), Switzerland (CH), Greece (GR), Denmark (DK) and Finland (FI) are included in the analysis. To have a broader comparative view, we include 7 other European countries i.e. Austria (AU), Germany (DE), Norway (NO), the Netherlands (NL), Belgium (BE) and Spain (SP), which are selected on the basis of their history as receiving countries as well as the availability of data.

¹ Panteion University, Athens, Greece. E-Mail: christosbagavos@gmail.com

1. Background

Slowdown in population growth and population ageing are relevant demographic challenges for European countries. In terms of consequences, their impact on the supply of labour may have significant socio-economic implications. Usually, there are two aspects of labour supply which are focused upon by extant research. The first is the total number of economically active persons as reflected in the size of the labour force i.e. the number of employed and unemployed persons (see box below). The second is the propensity of persons of working age to participate in the labour market measured by the so-called participation (or activity) rates i.e the ratio of employed and unemployed persons to the population. Both aspects are interrelated since the propensity to participate in the labour market is one of the components of the labour force, the second one is population. In addition, both aspects are affected by population ageing and demographic stagnation. Since the propensity to participate is closely related to age, the age composition of the working age population affects the overall participation rates. As for the total labour force, this is also affected by demographic trends through the shifts in the size of the total working age population as well as on the population size across every given working age cohort. On the whole, given the increase in population ageing, which results in a relative overrepresentation of higher age cohorts where participation rates are relatively low, and the trend towards decreases in the working age population, the European demographic landscape implies a decreasing pool of labour supply. Those developments are already observed in Europe. In particular for the size of the labour force, Labour Force Survey (LFS) data for the EU-28 (Eurostat 2019a) indicate that the total number of economically active persons who are EU Member State citizens has risen by around 1.2 million (from 219 to 220.2 million) between 2013 and 2017. Or, one can estimate that the labour force comprised of EU Member State citizens would have decreased by 3.5 million (or by -1.6%) under the sole effect of demographic transformation, but due to an upward trend in participation rates the total workforce has eventually increased by 0.5%.

Apart from demographic transformation, there are at least two additional aspects related to labour supply which merit further discussion. The first relies on shifts in the propensity to participate, in particular the increase in female participation rates and in participation of persons at higher ages (55-64 years). According to Eurostat (2019b) the increase in the participation rates of women in the labour market in the EU28 between 2010 and 2017 was of the order of 3.4 percentage points (from 64.4% to 67.8%). Over the same period, the upward trend in participation rates of those in the 55-64 age group was more pronounced than that of women since it rose from 49.5% to 60.6% (Eurostat 2019b). Both developments tend to help offset the negative effect of demographic developments on labour supply.

Box 1: Definitions, concepts and measures related to the labour market as used by Eurostat (2018)

Concepts related to the labour market are mainly based on guidelines of the International Labour Organization (ILO). In particular for those related to the labour force, they are usually measured using data issued from **labour force surveys**. A labour force survey (Eurostat 2018), abbreviated as **LFS**, is an inquiry directed to households, designed to obtain information on the labour market and related issues through a series of personal interviews. The European Union (EU) LFS covers all persons living in private households and excludes those in collective households, such as boarding houses, residence halls and hospitals. The definitions used are common to all EU Member States and are based on international recommendations by the International Labour Organization (ILO). The survey is conducted in European countries by National Statistical Institutes.

The **labour force** or workforce or economically active population, also shortened to active population or to active persons or to actives, includes both **employed** (employees and self-employed) and **unemployed people**, but not the **economically inactive**. The labour force expresses the number of persons wishing to have a job. Some of them have a job, so they are employed, and other don't, so they are unemployed.

An **employed person** is a person aged 15 and over (or 16 and over in Iceland and Norway) who during the reference week of the LFS, performed work - even if just for one hour a week - for pay, profit or family gain. Alternatively, he or she is a person who was not at work, but had a job or business from which he or she was temporarily absent due to illness, holiday, industrial dispute or education and training.

An **unemployed person** is defined as: someone aged 15 to 74 (in Italy, Spain, the United Kingdom, Iceland, Norway: 16 to 74 years); without work during the reference week; available to start work within the next two weeks (or has already found a job to start within the next three months); actively having sought employment at some time during the last four weeks.

A person is **economically inactive** if he or she is not part of the labour force. So inactive people are neither employed nor unemployed. The **inactive population** can include preschool children, school children, students, pensioners and housewives or -persons, for example, provided that they are not working at all and not available or looking for work either; some of these may be of working-age.

Activity rate or labour force participation rate expresses the labour force as a percent of the working-age population (defined in this study as those aged 15 to 64). Activity rate reflects the propensity of persons wishing to have a job or equally to participate in the labour market. The aggregate or overall activity rate refers to the entire working-age population. Given that age and gender are closely related to the propensity of persons to participate in the labour market, activity rates are very often calculated by age and sex.

Working-age population is not identical to the **potential labour force** (ILO 2019) which refers to persons not in employment who express an interest in this form of work but for whom existing conditions limit their active job search and/or their availability. This group is used to calculate alternative measures of labour underutilization.

The second additional aspect is international migration. Over the 2010s, European countries have experienced an increase in foreign immigration flows. For the EU-28 as a whole, immigration flows of both EU and Third Country Nationals (TCNs) rose from 2.5 to 3.4 million between 2013 and 2017 (Eurostat 2019c). In addition, 40% of

the 2017 immigrants were EU-nationals – described as 'EU-movers', i.e. EU citizens living in an EU Member State other than their country of citizenship (European Commission 2018) - and 60% were third country nationals. Those developments, associated with the relatively younger age of migrants as compared to that of natives, can partly compensate for demographic ageing and demographic slowdown and the subsequent impact on labour force (Bagavos 2019a). The role of migration for changes in labour supply in the host countries should also be seen through the different patterns of migrants and non-migrants as regards their participation in the labout market. In the EU context, there is often a contrast in terms of migrants' participation since EU nationals generally have participation rates that are as high as natives whereas TCNs may have less favourable labour market outcomes (Spielvogel and Meghnagi 2018a). Indeed, for the EU-28 in 2017 (Eurostat 2019b), country citizens recorded higher participation rates than migrants (73.5% and 71.4% respectively) and in particular TCNs (65.5%), but lower than the EU nationals (79.3%). It is also worth noting that the gap in participation rates was more pronounced for females than for males: TCNs women had participation rates of 54.8%, EU nationals of 72.6% and country citizens of 68.3% while the corresponding figures for males were 76.5%, 86.1% and 78.7% respectively.

Extant research aiming to assess the relative importance of foreign migration for changes in the labour force is rather limited. Although migration is often considered as a significant component of labour supply, it is mainly investigated in relation to its impact on the overall participation rates. Additionally, most of the time, migration is appreciated through flows (net migration) rather than stocks, without any distinction between foreign and domestic migrants. In any case, previous studies generally show the importance of migration for overall participation rates. Cully (2011), by using a decomposition method, examines both the population and participation effects of overseas born migrants on the aggregate participation rate in Australia. He finds that it added almost 2 percentage points to the aggregate participation rate over the 2001-2011 which corresponds to the total increase of that aggregate figure over that period. He also finds that, among the Australian-born, ageing deducts 2.1 percentage points from the aggregate participation rate (Australian- and overseas-born combined). However, this ageing effect of the Australian-born is fully offset by their increased propensity to participate in the labour market. Studies on net migration also confirm the importance of migration for future trends in the overall participation rates. The IMF (2018) and Hilgenstock and Kóczán (2018) document that net migration is expected to play a significant role in alleviating ageing pressures on labour supply in Europe by affecting the age composition of receiving countries' populations and in boosting the overall participation rates through the convergence of migrant participation rates toward those of natives over time. Additionally, Fuchs (2015) by decomposing the projected change in the overall labour force into a population and a participation component, reveals that, in Germany, domestic labour reserves will not be able to compensate for the demographically related loss of workers. By contrast, the analysis of Spielvogel and Meghnagi (2018b) provides quite different results as

compared to those from the above-mentioned studies, probably because qualitative elements such as education are taken into account. The authors focus on projections over the period 2015-2030, and aim at identifying the drivers of change in working-age populations and active populations in European countries, and in particular the role of net migration flows. They conclude that the main factors driving the future evolution regarding the size and composition of the 2030 labour force in EU countries will be ageing and the increasing share of tertiary-educated workers, while the role of international migration as a component of the labour force at the macro level will likely remain modest.

In this paper, we aim to investigate the contribution of foreign migration to shifts in the size of the labour force of selected European countries by providing methodological insights and coherent evidence in a comparative perspective for the 2010–2017 period. We use a mixed standardization and decomposition approach to determine to what extent trends over time in the total size of the labour force are driven by changes in population or in participation rates in the labour market of specific groups selected on the basis of age, sex, migration status and migrant's citizenship (EU nationals vs. TCNs). This allows us to explore the separate contribution of each group to shifts in the labour force and therefore investigate the contribution of migrants in a more comparative way.

The paper is prepared in the context of the SIRIUS research project (SIRIUS 2019). Thus, SIRIUS countries i.e. the Czech Republic (CZ), Italy (IT), United Kingdom (UK), Switzerland (CH), Greece (GR), Denmark (DK) and Finland (FI) are included in the analysis. In order to obtain a wider comparative view, we include 7 other European countries i.e. Austria (AU), Germany (DE), Norway (NO), the Netherlands (NL), Belgium (BE) and Spain (SP), which are selected on the basis of their experience as receiving countries as well as data availability.

2. Data and methods

The analysis is based on annual LFS data provided by Eurostat for the period 2010-2017 and extracted from the Eurostat Database (Eurostat 2019a). Data are broken down by sex, five-year age groups within the working age bracket (15-64 years) and migration status. In particular for migration status, it refers to citizens and to non-citizens; additionally we distinguish EU nationals from Third Country Nationals (TCNs). The labour Force includes employed and unemployed persons. Participation rates by five-year age groups are estimated as the ratio of employed and unemployed persons to the overall population.

On the basis of a mixed decomposition and standardization method we highlight the components of changes in the total size of the labour force, and in particular, the changing working age population effect ("population effect") and the participation rates effect ("participation effect"). Those effects are broken down by five-year age groups, sex, migration status, and the citizenship of migrants (EU nationals vs. TCNs). The method, which is presented below, relies on earlier work by Bagavos (2019b) in the context of assessing the contribution of migration in shifts in the total number of births of receiving counties, by Hotchkiss (2009) and Cully (2011) aiming to decompose changes in the aggregate labour force participation and by Fuchs (2015) who provides a decomposition of the projected change in the overall labour force.

Let f be the participation rate; P and L indicate population and labour force, respectively; and x signifies the age of the individuals.

The total labour force is given by the sum across ages of the product of participation rate multiplied by population at every given age:

$$L = \sum_{x} f_x x P_x \tag{1}$$

Then the decomposition of the change (Δ) in the total labour force between 2010 and 2017 is:

$$\Delta(L) = \sum_{x} \Delta(f_x \, x \, P_x) \tag{2}$$

and

$$\Delta(L) = \sum_{x} f_x \, x \, \Delta(P_x) + \sum_{x} P_x \, x \, \Delta(f_x) \, + \sum_{x} \Delta(f_x) \, x \, \Delta(P_x) \tag{3}$$

In equation (3), the rates and the population refer to the initial year (i.e., to the year 2010), whereas their changes (Δ) refer to the changes that occurred between 2010 and 2017.

There are two factors related to the impact of the shifts in participation rates and in population on the changes in the total labour force:

$$\sum_{x} f_x \, x \, \Delta(P_x) \tag{4}$$

is the population effect (weighted by the previous participation rate) due to changes in population, and

$$\sum_{x} P_x \, x \, \Delta(f_x) \tag{5}$$

is the participation effect (weighted by the previous population size) attributable to changes in the participation rates or else in the propensity to participate in the labour market.

Additionally, the interaction effects - i.e., the impact of simultaneous shifts in the population and in the participation rates - is estimated by:

$$\sum_{x} \Delta(f_x) \, x \, \Delta(P_x) \tag{6}$$

By breaking down participation rates and population by five-year age groups, sex, migration status and the citizenship of migrants (EU nationals vs. TCNs), all the above-mentioned equations are estimated for the corresponding sub-group. Changes in the total labour force arise by summing up the results for the changes in the labour force of the various age, sex, migration and citizenship groups.

3. Results

3.1 Changes in the total size of the labour force

Table 1 presents changes in the overall labour force, working age population (15-64 years) and labour force participation rates between 2010 and 2017. We notice significant differences among countries as regards shifts in the total labour force. In SIRIUS countries such as Switzerland, the UK and Italy, the labour force has largely increased, it has slightly increased or remained almost unchanged in the Czech Republic, Denmark and Finland and it has recorded a significant decreasing trend in Greece. A quite similar pattern of diversities is observed in the other European countries; significant growth in Sweden, Austria, Norway and Germany, limited increase in Belgium and the Netherlands and a negative trend in Spain.

	Labou	ur force	Working age population	Participation rates
	(in 1,000)	(per cent)	(in 1,000)	(percentage points)
SIRIUS countries				
Check Republic	56	1.1	-483	5.7
Italy	1137	4.7	-303	3.4
United Kingdom	1536	5.0	855	2.1
Switzerland	390	9.1	297	2.7
Greece	-245	-4.9	-405	0.4
Denmark	28	1.0	57	-0.5
Finland	-1	0.0	-103	2.2
Other countries				
Austria	286	6.9	228	2.0
Germany	1915	4.8	1398	1.6
Norway	141	5.6	217	-0.8
Netherlands	156	1.8	-18	1.6
Sweden	356	7.4	178	3.4
Belgium	80	1.7	82	0.3
Spain	-652	-2.8	-1037	0.4

Table 1. Changes in the overall labour force, the total working age population and the aggregate participation rates between 2010 and 2017 in selected European countries

Source: Own estimations based on LFS data provided by Eurostat (2019a)

Divergences in labour force trends are related to different changes in terms of working age population and participation rates. In SIRIUS countries, changes in the size of the population aged 15 to 64 contrast with that in labour force, notably in the Czech Republic, Italy and Finland, while in the remaining countries, the population and labour force have moved towards the same direction. In addition, with the noticeable exception of Greece and Denmark, overall participation rates have increased over time. Increasing population and participation rates have been observed in the other European countries, though Spain and to a much lesser extent the Netherlands are the exception in terms of population and Norway in terms of

participation rates. On the whole, although there is no common pattern of changes in the working age population, shifts in participation rates have been coupled with labour force increases in the large majority of countries.

Economic recession lies behind some findings displayed in Table 1, since it has been associated with the outward mobility of natives (Spielvogel and Meghnagi 2018a) from Southern European countries in particular, and therefore with a downward trend in working age population. At the same time, the economic downturn and the subsequent lower employment opportunities probably discourage inactive persons to participate in the labour market and pushe the unemployed to exit the labour market in Greece and Spain, leading to a limited variation in participation rates.

To better describe the role of migration for changes in the overall labour force we first compare real changes in the total labour force with that which would have occurred due solely to changes in the labour force of non-migrants (Figure 1a and b). We notice the very significant role of migrants for shifts in the overall labour force. Indeed one can observe an "acceleration" effect of migration on the increase in the total labour force that would have resulted from an increasing (or stable) trend in the labour force of non-migrants. This is the case of SIRIUS countries such as the Czech Republic, Italy, the UK and Switzerland and for the large majority of the other European countries, namely Austria, Germany, Norway, the Netherlands and Sweden. For example in Switzerland, non-migrants have contributed by 3% to the increase in the total labour force (9.1%) whereas migrants by 6.1%.

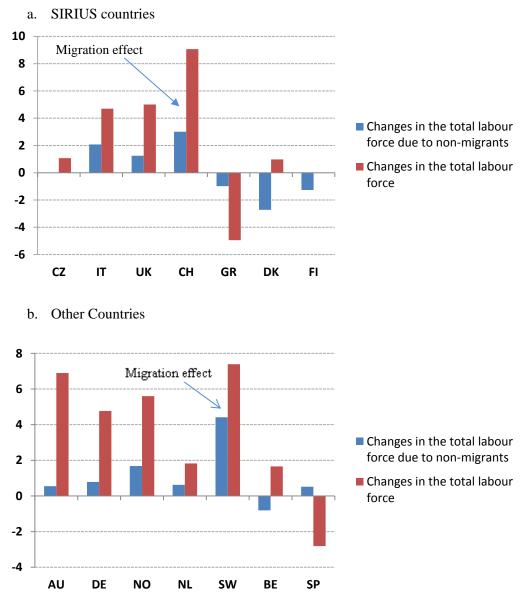


Figure 1. Changes in the labour force between 2010 and 2017 (as % of the total labour force in 2010)

Source: Own estimations based on LFS data provided by Eurostat (2019a)

We also notice an "over-compensate" effect of migration on the total labour force that would have resulted from a decreasing trend in the labour force of non-migrants. Thus migration leads to an increase in the total labour force; this is the case of Denmark, Finland and Belgium. A quite different pattern is observed in Greece and Spain; the decrease in the total labour force is accelerated by a negative migration effect coupled with a limited (negative and positive respectively) effect resulted from non-migrants.

Given the relatively limited share of migrants in both the working age population and the overall labour force, the great importance of migration for shifts in the size of the labour force seems to be a quite surprising finding. Indeed (Figures 2a and b) in 2017, with the noticeable exception of Switzerland, the share of migrants of working ages was of relatively low level since it varied between 2.5% and 11.5% in SIRIUS countries (27% in Switzerland) and between 4.7% and 16.4% in the other European countries. Similar levels are observed for the proportion of migrants in the total labour force.

However, the large effect of migration on overtime changes in the overall labour force may have resulted from differences in participation rates between migrants and non-migrants. Given the diversity in age distribution between the migrant and non migrant population and the robust association of participation rates with age, participation rates have to be estimated by controlling for age structure. Table 2 displays age-standardised (overall) participation rates, i.e. overall participation rates arising from the application of the same age distribution over both groups; this allows comparing the observed diversities in participation without any bias resulted from differences in the age structure of migrants and non-migrants. We notice that in the large majority of countries, migrants, either males or females, have lower participation rates than non-migrants; the Czech Republic and Italy are the exceptions for both sexes whereas in Greece, and to a lesser extent in Spain and the Netherlands migrant men record a higher propensity to participate in the labour market than nonmigrants. We also notice that in several cases, such as Denmark, Finland, Germany and the Netherlands, participaton rates of non-migrants significantly differ from that of migrants. The following decomposition analysis provides evidence on how diversities in terms of population and participation rates imply a distinguished role for migrants and non-migrants regarding changes in the labour force.

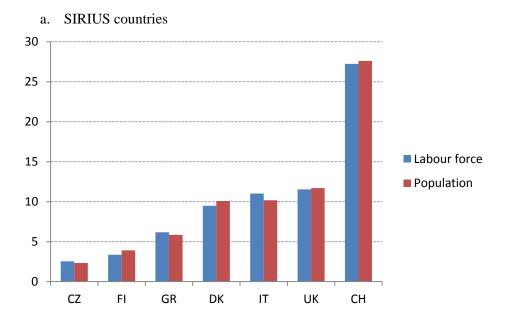
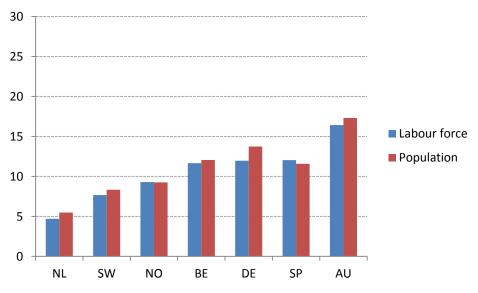


Figure 2. Shares (per cent) of migrants in the overall labour force and in working age population in 2017

b. Other Countries



Source: Own estimations based on LFS data provided by Eurostat (2019a)

	Non-r	nigrants	Mig	grants	migra	ce (Non- nts vs. rants)
	Males	Females	Males	Females	Males	Females
SIRIUS countries						
Check Republic	82.7	68.9	85.9	73.2	-3.2	-4.3
Italy	74.2	55.3	79.0	59.6	-4.8	-4.3
United Kingdom	82.0	73.3	80.2	65.9	1.8	7.3
Switzerland	87.9	80.9	86.2	70.7	1.7	10.2
Greece	75.9	61.2	84.1	59.4	-8.1	1.8
Denmark	81.8	77.1	74.7	64.1	7.1	13.0
Finland	78.5	76.0	67.9	50.2	10.6	25.8
Other countries						
Austria	81.2	74.0	77.0	61.5	4.3	12.4
Germany	83.3	76.3	75.5	56.3	7.8	20.0
Norway	78.8	75.7	79.4	67.0	-0.5	8.6
Netherlands	84.6	76.2	73.7	58.2	10.9	18.0
Sweden	84.4	81.7	80.2	66.7	4.1	15.0
Belgium	72.5	64.2	68.7	51.9	3.8	12.4
Spain	78.2	68.9	82.4	66.8	-4.2	2.1

Table 2. Age-standardized overall participation rates (per cent) in 2017 by gender and migration status in selected European countries

Source: Own estimations based on LFS data provided by Eurostat (2019a)

3.2 Findings from the decomposition analysis of trends in the size of the labour force

Table 3 summarises the results, presented in details in the Annex section (Table A for males and females and Table B for total figures), of the decomposition analysis. We notice some robust findings. First, it is confirmed that in the SIRIUS countries and in other countries as well, the increase or decrease (only in Greece and Spain) in the size of the labour force is driven by migration. There are two exceptions to that pattern; Sweden where the increasing trend in labour force results more from non-migrants than migrants and Finland where both groups are of rather similar importance for the almost zero change in the labour force. Second, in the large majority of cases, the upward trend in participation rates of non-migrants is largely mitigated or even offset by the shrinkage in their working age population leading to a limited impact of non-migrants on shifts in the overall labour force.

		Non-Migr	ants			Migrants (EU r	ationals)		Migr	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
CZ	-236	265	-30	-1	32	2	0	34	25	-1	-1	23	56	56
IT	-964	1428	38	502	212	-33	13	193	470	-24	-4	442	635	1137
UK	-228	599	12	383	1041	45	43	1129	29	-18	13	24	1153	1536
CH	39	87	4	129	178	36	9	224	25	7	4	36	260	390
GR	-135	77	9	-49	-34	0	-1	-35	-152	-16	6	-161	-196	-245
DK	-69	-3	-6	-78	60	-2	0	58	48	0	1	48	106	28
FI	-98	72	-7	-33	10	13	4	27	33	-14	-14	6	33	-1
AU	-129	132	20	23	146	11	4	161	103	0	-1	102	263	286
DE	-1182	1318	179	316	852	64	30	946	892	-141	-98	653	1599	1915
NO	74	-30	-1	42	73	-1	-1	72	29	0	-2	27	99	141
NL	-159	209	3	54	81	4	-1	84	23	-3	0	19	103	156
SW	77	138	-2	213	14	-25	-6	-17	94	43	24	161	144	356
BE	-101	48	14	-39	73	22	5	99	42	-14	-7	20	120	80
SP	-512	523	108	120	-75	9	11	-55	-606	-163	53	-717	-772	-652

Table 3. Changes (in 1,000) in the total labour force between 2010 and 2017 due to shifts in:

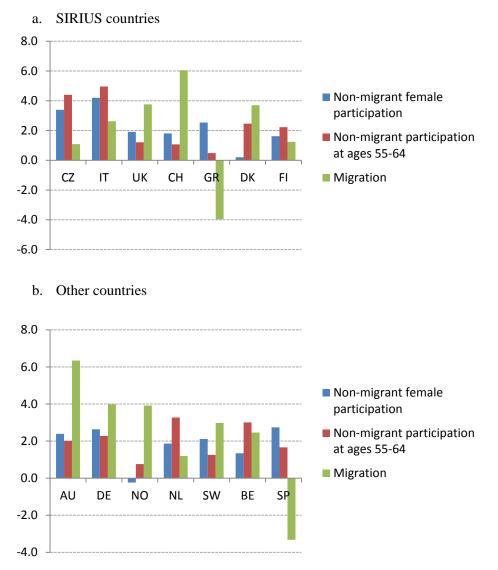
Source: Own estimations based on LFS data provided by Eurostat (2019a)

Third, the effect of migration on the overall labour force is attributed to a population rather than to a participation effect; with the marked exception of Greece and Spain, the increase in the size and the shifts in the age composition of migrants' working age population boost the overall labour force. Obviously, this significantly contrasts with population ageing and population decline among non-migrants leading to a negative effect on the overall workforce. At the same time, the participation effect of migrants is limited, and in several cases it is negative which indicates a decreasing propensity of non-country citizens to participate in the labour market, mainly related to falling participation rates of young people. Fourth, there is a great diversity among countries in the migration effect on the labour force related to migrants' origin. Indeed, in the majority of countries, the migration effect on the labour force resulted from EU nationals whereas only in Southern European countries notably Italy, Greece and Spain and in Sweden also this effect is attributable to Third Country Nationals (TCNs.). Humanitarian migration towards Sweden probably lies behind the above finding, whereas for Southern European countries it is likely to be related to the size of the irregular economy associated with the needs for a low-skilled migrant workforce. In addition, a significant number of the EU nationals living in the remaining countries are originally from Southern Europe and most likely migrated during the economic downturn.

The decomposition analysis allows for exploring two additional dimensions; the increase in participation in the labour market of both non-migrant females and nonmigrant persons aged between 55-64 years. The longstanding upward trend in participation rate for women has resulted from changes in the role of women in society. Rising tertiary education enrolments and completions as well as greater parttime employment opportunities for those who wish to reconciliate work and family life has led to higher participation rates (Cully 2011). Women are now also more likely to enter both fast growing and highly-skilled occupations than men (Spielvogel and Meghnagi 2018). Similarly, the increase in the participation rates at higher ages seems to be a rational labour supply response to longer life expectancy, as older workers aim to maximise their retirement incomes in a framework of changes in pension schemes (Cully 2011). As pointed out by Hasselhorn and Apt (2015), retirement is becoming fragmented and today there is no clear-cut "one-off" event, something which is explains the retention of older workers in the labour market.

In Figures 3a and b we compare the effect of changes in participation of the two above-mentioned groups on shifts in labour force with the corresponding effect due to migrants. Figures are presented as a percentage of the total labour force in 2010. For the SIRIUS countries, in particular the Czech Republic, Italy and to a much lesser extent Finland, we observe a stronger effect of the upward female participation than migration on shifts in the total size of the labour force, where the opposite holds true for the remaining countries (Figure 3a). A quite similar pattern is recorded when the migration effect is compared with that of the participation effect of non-migrants aged 55-64 years (Figure 3b). Obviously, this similar pattern is related to the fact that women aged 55-64 years account for a significant part of the increase in participation for this age group. Last, the role of migration for changes in the labour force compared to that of the female participation and the participation at ages 55-64, seems to be more pronounced in the other countries rather than in the SIRIUS countries. The only exceptions among the group of the other European countries is the Netherlands, both in terms of the female and the 55-64 group participation, and Belgium where the effect of the increasing participation of those aged 55-64 on the shifts in the labour force is more pronounced than that of migrants. In any case, both increasing participation of non-migrant women and non-migrant persons at higher ages significantly affect the relative effect of migrants and non-migrants on the overall labour force.

Figure 3. Comparison of the effect of non-migrant female participation, of non-migrant participation at ages 55-64 and of migration on changes in the total labour force between 2010 and 2017 (as % of the total labour force in 2010)



Source: Own estimations based on LFS data provided by Eurostat (2019a)

18

4. Conclusions

This paper reveals that immigration has played a significant role for increasing the size of the labour force in the European countries under study in the recent past; either by accelerating the labour force growth or by leading to growing trends in the overall labour force in a context of a shrinking pool of native active persons. This was mainly driven by shifts in the number of migrants than in migrant participation in the labour market. In practice, the population component of migration alleviates the pressures of declining growth in the working age population and population ageing on the size of the labour force. The paper also highlights that, the higher participation of EU nationals as compared to that of TCNs, implies that the migration effect on overtime trends in the overall labour force is more pronounced for countries hosting EU rather than TCNs.

Given that further population ageing and a shrinking working age population are expected to be two of the main features of future demographic developments, migration might be an even more significant component of the labour force than it has been in the past. In this context, since migration can hardly fully compensate for this gloomy demographic landscape, increasing migrants' participation in the labour market may mitigate pressures on the overall labour force. This would require further implementation of policies that support migrant integration, such as the recognition and development of educational and skill qualifications, language and professional training as well as the provision of employment services.

References

- Bagavos (2019a). *Immigration and trends in the labour force of the 7 European SIRIUS countries (2010-2017)*. Paper presented at the SIRIUS conference on "Integrating migrants, refugees and asylum seekers into European labour markets: enablers and barriers", Glasgow 29-30 August.
- Bagavos (2019b). On the multifaceted impact of migration on the fertility of receiving countries: Methodological insights and contemporary evidence for Europe, the United States, and Australia. *Demographic Research*, 41(1): 1.36
- European Commission (2018). 2018 Annual Report on intra-EU Labour Mobility. https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8174&further Pubs=yes
- Eurostat (2019a). Eurostat Database. Population by sex, age, citizenship and labour status (1 000) [lfsa_pganws].

https://ec.europa.eu/eurostat/data/database

Eurostat (2019b). Eurostat Database. Activity rates by sex, age and citizenship (%) [lfsa_argan].

https://ec.europa.eu/eurostat/data/database

Eurostat (2019c). Eurostat Database. *Immigration by age group, sex and citizenship* [migr_imm1ctz].

https://ec.europa.eu/eurostat/data/database

Eurostat (2018). Glossary Statistics-Explained.

https://ec.europa.eu/eurostat/statistics-explained/index.php/Thematic_glossaries

- Cully, M. (2011). "How much do migrants account for the unexpected rise in the labour force participation rate in Australia over the past decade?" Paper presented at the Australian Conference of Economists. <u>https://www.homeaffairs.gov.au/research-and-stats/files/migrants-account-unexpected-rise-labour-force-rate-aus-2000-2010.pdf</u>
- Fuchs, J. (2015). Decomposing the effects of population ageing on labour supply. *Athens Journal of Social Science*, 2(2): 109-126.
- Hasselhorn, H.M. and Apt, W. (Eds) (2015). Understanding employment participation of older workers: Creating a knowledge base for future labour market challenges. Federal Ministry of Labour and Social Affairs. <u>https://www.jp-demographic.eu/wp-</u> content/uploads/2015/07/JPIUEP_Brochure1.pdf
- Hilgenstock, B. and Kóczán, Z. (2018). Storm Clouds Ahead? Migration and Labor Force Participation Rates in Europe. IMF Working Paper WP/18/148. <u>https://www.imf.org/en/Publications/WP/Issues/2018/06/22/Storm-Clouds-Ahead-Migration-and-Labor-Force-Participation-Rates-in-Europe-46013</u>
- Hotchkiss, J.L. (2009). Decomposing Changes in the Aggregate Labor Force Participation Rate. Federal Reserve Bank of Atlanta Working Paper 2009-6. <u>https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1433124</u>

ILO (2019). Glossary of Statistical Terms.

https://www.ilo.org/ilostat-files/Documents/Statistical%20Glossary.pdf

IMF (2018). *World Economic Outlook 2018-April 2018*. Chapter 2: Labor force participation in advanced economies: drivers and prospects.

https://www.imf.org/en/Publications/WEO/Issues/2018/03/20/world-economicoutlook-april-2018#Chapter%202

- Spielvogel, G. and Meghnagi, M. (2018a). The contribution of migration to the dynamics of the labour force in OECD countries: 2005-2015. OECD Social, Employment and Migration Working Papers No. 203 <u>https://www.oecd-ilibrary.org/employment/the-contribution-of-migration-to-thedynamics-of-the-labour-force-in-oecd-countries_a301bef8-en</u>
- Spielvogel, G. and Meghnagi, M. (2018b). Assessing the role of migration in European labour force growth by 2030. OECD Social, Employment and Migration Working Papers No. 204.

https://www.oecd-ilibrary.org/employment/assessing-the-role-of-migration-ineuropean-labour-force-growth-by-2030_6953a8ba-en

SIRIUS (2019). Skills and Integration of Migrants Refugees and Asylum Applicants in European Labour Markets. Horizon 2020 Research Project.

https://www.sirius-project.eu/

			Table A. Cl	langes (II	i 1,000) in the	e male and fema		e betwee	en 2010 and 2	of / due to shift	ts m:			
							h Republic							
		Non-Mig				Migrants (EU r	nationals)		Migr	ants (Third cour	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
						Μ	ales							
15-19	-6.0	-3.4	0.8	-8.6	0.0	0.0	0.0	0.0	0.6	-0.5	-0.4	-0.3	-0.3	-8.9
20-24	-49.3	5.3	-1.2	-45.3	-0.8	0.3	-0.1	-0.6	0.1	0.1	0.0	0.2	-0.4	-45.7
25-29	-38.7	-0.4	0.0	-39.0	-0.5	-0.1	0.0	-0.6	-0.5	-0.2	0.0	-0.7	-1.3	-40.3
30-34	-101.9	-2.9	0.6	-104.1	6.6	0.0	0.0	6.6	2.6	-0.3	-0.2	2.1	8.7	-95.4
35-39	-25.7	-2.0	0.1	-27.6	6.5	0.0	0.0	6.5	2.0	-0.4	-0.1	1.5	8.0	-19.6
40-44	103.4	2.2	0.7	106.3	3.3	0.0	0.0	3.3	3.2	0.2	0.2	3.6	6.9	113.2
45-49	15.0	-0.5	0.0	14.4	3.4	-0.2	-0.4	2.8	3.0	-0.1	-0.1	2.8	5.6	20.0
50-54	9.0	6.4	0.2	15.6	0.5	0.1	0.0	0.6	0.6	0.1	0.0	0.8	1.4	17.0
55-59	-51.3	14.0	-2.3	-39.6	-0.1	0.0	0.0	-0.1	2.0	0.0	0.0	2.0	1.9	-37.7
60-64	-3.4	70.5	-1.8	65.4	0.5	0.1	0.2	0.8	0.6	-0.2	-0.5	0.0	0.8	66.2
Total	-148.9	89.2	-2.9	-62.5	19.4	0.2	-0.3	19.3	14.2	-1.1	-1.0	12.0	31.3	-31.2
						Fer	nales							<u>. </u>
15-19	-3.7	0.8	-0.2	-3.1	0.0	0.0	0.0	0.0	2.6	-0.6	-1.5	0.5	0.5	-2.6
20-24	-31.4	7.0	-1.6	-25.9	-0.5	0.1	0.0	-0.4	0.0	-0.2	0.0	-0.2	-0.6	-26.5
25-29	-20.7	9.7	-0.9	-11.8	2.2	0.7	0.4	3.2	-1.9	-0.8	0.3	-2.3	0.9	-10.9
30-34	-64.3	14.9	-3.4	-52.8	4.1	0.5	0.9	5.4	1.6	0.6	0.2	2.4	7.8	-45.0
35-39	-21.4	-9.8	0.6	-30.6	3.6	-0.1	-0.3	3.2	3.4	-0.1	-0.1	3.2	6.4	-24.2
40-44	92.8	-4.5	-1.4	87.0	2.8	-0.1	-0.1	2.6	1.2	0.3	0.3	1.7	4.3	91.3
45-49	12.4	3.6	0.1	16.1	0.6	-0.1	-0.1	0.4	1.4	0.3	0.3	2.0	2.4	18.5
50-54	-1.5	10.7	-0.1	9.1	-0.5	0.3	-0.1	-0.3	1.4	0.0	0.0	1.5	1.2	10.3
55-59	-46.1	87.4	-17.3	24.0	-0.2	0.2	-0.1	0.0	0.8	0.1	0.3	1.2	1.2	25.2
60-64	-3.2	56.3	-3.1	50.0	0.2	0.0	0.0	0.2	0.0	0.2	0.5	0.7	0.9	50.9
Total	-87.1	176.2	-27.1	62.0	12.3	1.4	0.6	14.3	10.5	-0.1	0.3	10.7	25.0	87.0

Annex Table A. Changes (in 1,000) in the male and female labour force between 2010 and 2017 due to shifts in:

_							Italy							
		Non-Mig	rants			Migrants (EU 1	nationals)		Migr	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
						Ν	A ales							
15-19	-3.4	-29.8	0.7	-32.5	1.4	-1.7	-0.6	-0.9	0.6	-4.6	-0.2	-4.2	-5.1	-37.6
20-24	-11.8	-49.6	0.8	-60.7	-1.9	-7.7	0.5	-9.1	17.1	-3.1	-0.8	13.2	4.1	-56.6
25-29	-45.2	-19.2	0.8	-63.7	-8.8	-2.7	0.5	-11.1	22.4	0.1	0.0	22.5	11.4	-52.3
30-34	-301.9	-18.3	3.5	-316.7	-9.7	-2.4	0.3	-11.8	38.4	-9.1	-2.1	27.1	15.3	-301.4
35-39	-417.9	-20.6	4.5	-434.1	9.5	-0.8	-0.1	8.6	48.7	-0.3	-0.1	48.3	56.9	-377.2
40-44	-163.3	-18.9	1.5	-180.7	26.7	-1.5	-0.8	24.4	35.1	-1.1	-0.3	33.7	58.1	-122.6
45-49	54.6	-19.3	-0.5	34.8	30.8	-0.7	-0.8	29.3	38.6	-1.7	-0.6	36.3	65.6	100.4
50-54	306.9	1.0	0.2	308.1	14.8	-1.1	-0.9	12.8	42.5	-1.6	-1.1	39.8	52.6	360.7
55-59	135.8	211.7	24.1	371.7	10.9	0.9	1.5	13.4	23.2	-0.8	-0.7	21.8	35.2	406.9
60-64	-11.1	375.4	-7.8	356.5	4.3	0.7	1.1	6.1	12.2	1.4	1.8	15.4	21.5	378.0
Total	-457.3	412.3	27.7	-17.3	78.1	-17.1	0.7	61.7	278.8	-20.9	-4.0	253.9	315.6	298.3
						Fe	emales							
15-19	-2.6	-2.8	0.1	-5.3	0.7	-0.2	-0.1	0.4	0.5	-3.5	-0.2	-3.2	-2.8	-2.6
20-24	-14.9	-16.9	0.5	-31.3	-8.0	-7.7	2.3	-13.4	0.5	5.1	0.1	5.7	-7.7	-26.5
25-29	-63.8	22.0	-1.6	-43.4	-9.5	-6.7	1.0	-15.2	8.3	2.1	0.3	10.7	-4.5	-10.9
30-34	-244.4	30.2	-6.1	-220.3	-3.8	-7.3	0.3	-10.7	15.2	4.5	0.7	20.5	9.8	-45.0
35-39	-327.2	70.8	-16.0	-272.4	24.1	-0.1	-0.1	23.9	20.3	-4.4	-0.9	15.0	38.9	-24.2
40-44	-126.6	90.5	-7.7	-43.8	28.8	-0.1	0.0	28.7	25.1	-3.3	-0.9	20.9	49.6	91.3
45-49	13.7	93.2	0.9	107.8	45.7	2.2	2.7	50.6	39.1	-8.3	-4.0	26.8	77.4	18.5
50-54	184.0	116.9	19.4	320.3	25.0	3.4	3.3	31.7	35.8	1.5	1.0	38.3	70.0	10.3
55-59	79.4	262.7	28.0	370.1	25.0	-1.8	-3.0	20.2	29.3	0.0	0.0	29.2	49.4	25.2
60-64	-4.5	349.6	-7.3	337.9	6.2	2.9	5.8	14.9	17.2	3.0	3.7	23.9	38.8	50.9
Total	-506.7	1016.0	10.3	519.6	134.3	-15.6	12.4	131.1	191.3	-3.2	-0.3	187.8	318.9	87.0

						Unite	d Kingdom							
		Non-Mig	rants			Migrants (EU	nationals)		Migra	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
						Ν	A ales							
15-19	-66.1	-84.5	7.5	-143.1	12.7	0.0	0.0	12.7	-4.2	-1.9	0.5	-5.6	7.1	-136.0
20-24	46.9	-54.5	-1.7	-9.3	23.5	2.5	1.0	27.0	-10.9	-16.7	2.8	-24.8	2.2	-7.1
25-29	180.7	12.0	1.4	194.0	60.1	2.4	0.9	63.3	-43.3	-12.4	3.7	-52.0	11.3	205.3
30-34	55.2	-2.2	-0.1	52.9	123.9	0.8	0.7	125.4	0.5	-5.7	0.0	-5.2	120.2	173.1
35-39	-101.8	27.3	-1.6	-76.2	120.3	3.8	4.5	128.5	-10.2	-0.2	0.0	-10.4	118.1	41.9
40-44	-370.3	13.7	-2.6	-359.2	94.0	2.9	5.0	101.9	11.0	0.1	0.0	11.1	113.0	-246.2
45-49	-93.1	11.7	-0.6	-81.9	58.6	1.1	1.2	60.9	12.1	4.8	1.2	18.2	79.1	-2.8
50-54	207.2	28.5	3.6	239.3	45.4	0.8	1.0	47.1	10.5	-0.7	-0.2	9.7	56.8	296.1
55-59	193.6	7.7	1.1	202.3	23.5	2.6	2.3	28.4	10.6	1.8	0.9	13.3	41.7	244.0
60-64	-65.6	54.6	-3.4	-14.4	3.2	3.2	0.8	7.3	9.9	-1.5	-1.1	7.3	14.6	0.2
Total	-13.3	14.2	3.4	4.4	565.2	20.1	17.2	602.5	-13.9	-32.3	7.8	-38.4	564.1	568.5
							emales						•	<u>. </u>
15-19	-110.1	-49.1	7.3	-151.9	0.0	0.0	0.0	0.0	-1.1	17.3	-0.9	15.3	15.3	-136.6
20-24	-52.2	65.0	-2.6	10.2	33.2	3.1	1.4	37.8	3.0	-5.6	-0.4	-2.9	34.9	45.1
25-29	56.8	86.4	3.6	146.7	62.9	2.1	0.9	66.0	-17.3	-11.2	1.8	-26.7	39.3	186.0
30-34	62.4	54.1	2.6	119.1	101.9	-0.1	-0.1	101.8	-0.3	0.2	0.0	-0.1	101.7	220.8
35-39	-125.0	64.5	-5.5	-66.0	112.9	5.6	8.1	126.6	8.7	3.7	0.3	12.7	139.3	73.3
40-44	-345.2	3.5	-0.7	-342.4	68.7	3.5	4.3	76.5	19.0	6.4	2.3	27.7	104.2	-238.2
45-49	-84.1	-2.3	0.1	-86.3	56.8	5.9	7.9	70.6	13.1	-1.6	-0.4	11.1	81.7	-4.6
50-54	235.5	54.7	8.6	298.7	25.2	0.5	0.3	26.0	7.4	-1.4	-0.3	5.7	31.7	330.4
55-59	185.1	61.6	9.6	256.3	13.2	5.2	2.9	21.3	3.9	-4.0	-0.6	-0.7	20.6	276.9
60-64	-37.5	246.2	-14.5	194.2	1.2	-0.9	-0.3	0.0	6.5	10.3	3.4	20.3	20.3	214.5
Total	-214.4	584.6	8.4	378.6	476.2	24.9	25.4	526.6	42.9	14.2	5.3	62.4	589.0	967.6

						Swi	itzerland							
		Non-Mig	rants			Migrants (EU 1	nationals)		Migr	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
						М	ales							
15-19	-8.4	3.7	-0.3	-5.0	1.3	2.6	0.3	4.2	-2.5	-1.2	0.2	-3.4	0.8	-4.2
20-24	3.1	-5.2	-0.1	-2.2	1.1	0.9	0.0	2.0	2.8	-0.1	0.0	2.7	4.7	2.5
25-29	24.0	0.5	0.1	24.5	1.9	1.0	0.0	2.9	-2.4	1.4	-0.1	-1.1	1.8	26.3
30-34	15.0	-0.8	-0.1	14.1	11.1	1.1	0.2	12.4	6.1	0.6	0.1	6.8	19.2	33.3
35-39	-14.8	-1.8	0.2	-16.5	23.5	0.6	0.2	24.3	5.3	0.7	0.1	6.1	30.4	13.9
40-44	-42.3	0.8	-0.2	-41.7	11.4	2.0	0.4	13.8	-0.9	0.0	0.0	-0.9	12.9	-28.8
45-49	-15.4	-0.8	0.1	-16.1	16.2	0.6	0.2	17.0	-1.7	-0.5	0.0	-2.1	14.9	-1.2
50-54	29.7	1.3	0.2	31.2	23.4	1.4	0.9	25.8	0.1	2.1	0.0	2.2	28.0	59.2
55-59	23.7	3.5	0.5	27.7	15.1	0.3	0.2	15.6	3.1	0.8	0.3	4.2	19.8	47.5
60-64	8.4	8.1	0.5	17.0	0.6	1.9	0.1	2.5	1.7	1.6	1.2	4.6	7.1	24.1
Total	22.9	9.3	0.8	33.0	105.6	12.4	2.5	120.5	11.7	5.5	1.9	19.1	139.6	172.6
							males							-
15-19	-4.8	-4.3	0.2	-8.9	0.8	0.1	0.0	1.0	-1.4	1.3	-0.2	-0.3	0.7	-8.2
20-24	-4.0	4.7	-0.1	0.6	3.7	-1.2	-0.2	2.2	-1.0	0.8	0.0	-0.3	1.9	2.5
25-29	21.2	6.1	0.9	28.2	9.4	2.6	0.8	12.8	-8.6	-2.6	0.8	-10.4	2.4	30.6
30-34	10.3	7.9	0.6	18.7	12.2	3.5	1.0	16.7	2.8	-0.3	0.0	2.5	19.2	37.9
35-39	-9.0	10.5	-0.6	0.9	14.0	3.8	1.2	19.0	5.0	-1.3	-0.3	3.4	22.4	23.3
40-44	-35.3	6.5	-1.2	-30.0	7.1	4.1	0.7	11.9	4.4	2.3	0.5	7.2	19.1	-10.9
45-49	-16.3	3.4	-0.2	-13.1	9.1	2.3	0.7	12.1	2.1	0.5	0.1	2.6	14.7	1.6
50-54	27.1	8.6	1.2	36.9	10.2	3.4	1.7	15.3	5.9	-0.3	-0.2	5.4	20.7	57.6
55-59	25.0	12.0	1.9	38.9	7.4	3.0	1.5	11.9	2.5	1.6	1.0	5.1	17.0	55.9
60-64	1.5	22.3	0.4	24.2	-1.2	2.3	-0.4	0.7	1.5	0.1	0.2	1.8	2.5	26.7
Total	15.7	77.7	3.0	96.4	72.7	24.0	6.9	103.6	13.1	2.0	1.9	17.0	120.6	217.0

						(Freece							
		Non-Mig	rants			Migrants (EU r	nationals)		Migr	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
						Μ	ales							
15-19	-1.4	-5.6	0.4	-6.6	0.0	0.0	0.0	0.0	-2.4	-1.8	0.7	-3.5	-3.5	-10.1
20-24	-10.0	-20.8	1.5	-29.3	-1.5	-0.4	0.2	-1.7	-14.3	-3.8	2.1	-16.1	-17.8	-47.1
25-29	-53.4	-10.5	1.8	-62.0	-3.3	0.0	0.0	-3.3	-28.2	-2.4	1.5	-29.0	-32.3	-94.3
30-34	-41.7	-1.8	0.2	-43.3	-5.0	-0.2	0.1	-5.1	-28.9	-2.3	1.4	-29.8	-34.9	-78.2
35-39	0.0	-1.2	0.0	-1.2	-1.7	0.3	-0.1	-1.5	-23.8	-0.5	0.2	-24.0	-25.5	-26.7
40-44	2.6	-1.8	0.0	0.8	-1.1	0.6	-0.1	-0.6	-13.2	-0.5	0.2	-13.6	-14.2	-13.4
45-49	44.7	-7.7	-1.1	35.9	0.0	-0.6	0.0	-0.6	1.6	-0.6	-0.1	1.0	0.4	36.3
50-54	0.7	2.0	0.0	2.7	-0.8	-0.1	0.0	-0.9	-3.7	-1.0	0.2	-4.5	-5.4	-2.7
55-59	4.5	2.9	0.1	7.4	-0.4	0.3	-0.1	-0.2	0.3	0.4	0.0	0.7	0.5	7.9
60-64	6.0	-3.9	-0.2	1.9	0.3	-0.1	0.0	0.1	0.4	-0.5	-0.1	-0.1	0.0	1.9
Total	-48.0	-48.4	2.7	-93.7	-13.5	-0.3	0.0	-13.8	-112.2	-13.0	6.3	-118.9	-132.7	-226.4
						Fer	nales							
15-19	-0.5	-0.5	0.0	-1.0	0.0	0.0	0.0	0.0	-0.6	-0.6	0.1	-1.1	-1.1	-2.1
20-24	-15.2	-10.7	1.2	-24.6	-1.9	0.2	-0.1	-1.8	-6.8	1.7	-1.2	-6.2	-8.0	-32.6
25-29	-58.1	-9.5	2.0	-65.6	-3.3	1.1	-0.7	-2.9	-8.4	-1.1	0.5	-9.0	-11.9	-77.5
30-34	-33.7	14.3	-1.7	-21.1	-5.2	0.7	-0.4	-5.0	-12.0	-2.1	0.9	-13.1	-18.1	-39.2
35-39	-9.5	19.8	-0.7	9.6	-2.3	-0.5	0.2	-2.7	-6.7	2.7	-0.8	-4.7	-7.4	2.2
40-44	-16.0	23.1	-1.2	5.9	-3.5	-0.8	0.3	-3.9	-2.2	-1.3	0.1	-3.4	-7.3	-1.4
45-49	12.5	26.4	1.3	40.3	-0.7	0.9	-0.1	0.1	-3.0	-2.1	0.4	-4.7	-4.6	35.7
50-54	17.6	37.3	3.3	58.1	-2.0	0.4	-0.1	-1.7	-2.1	0.8	-0.1	-1.5	-3.2	54.9
55-59	14.3	16.6	1.9	32.8	-1.7	-0.6	0.2	-2.1	1.1	0.0	0.0	1.1	-1.0	31.8
60-64	2.0	8.4	0.3	10.7	0.0	-0.8	0.0	-0.8	1.0	-0.6	-0.2	0.2	-0.6	10.1
Total	-86.6	125.3	6.4	45.1	-20.6	0.6	-0.8	-20.8	-39.5	-2.7	-0.2	-42.4	-63.2	-18.1

						De	enmark							
		Non-Mig	rants			Migrants (EU r	nationals)		Migra	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
						Ma	ales							
15-19	-3.4	-7.9	0.3	-11.0	0.0	0.0	0.0	0.0	0.6	-0.6	-0.1	-0.1	-0.1	-11.1
20-24	17.9	-11.5	-1.6	4.8	1.6	0.5	0.3	2.3	3.6	0.0	0.0	3.6	5.9	10.7
25-29	18.7	-4.1	-0.6	14.0	7.3	0.1	0.2	7.6	4.8	-0.8	-0.5	3.5	11.1	25.1
30-34	-20.8	-6.8	0.9	-26.7	8.6	0.0	0.0	8.6	7.8	-0.2	-0.2	7.4	16.0	-10.7
35-39	-38.8	-4.1	0.9	-42.0	8.0	-0.2	-0.3	7.5	7.1	-0.8	-0.7	5.7	13.2	-28.8
40-44	-20.9	-1.9	0.2	-22.6	3.0	-0.1	0.0	2.9	2.5	-0.6	-0.2	1.7	4.6	-18.0
45-49	-15.2	0.6	0.0	-14.7	4.3	0.0	0.0	4.2	3.7	0.6	0.6	5.0	9.2	-5.5
50-54	21.1	-1.6	-0.2	19.3	3.7	0.0	0.0	3.8	2.6	-0.7	-0.5	1.4	5.2	24.5
55-59	2.0	1.0	0.0	3.0	-0.4	-1.0	0.1	-1.3	2.1	-0.5	-0.5	1.1	-0.2	2.8
60-64	-8.9	27.5	-2.7	15.8	0.5	0.3	0.1	0.9	0.3	0.6	0.8	1.7	2.6	18.4
Total	-48.2	-9.0	-2.9	-60.1	36.6	-0.4	0.3	36.5	35.2	-2.9	-1.3	31.0	67.5	7.4
						Fen	nales							
15-19	-0.7	-6.0	0.0	-6.6	0.0	0.0	0.0	0.0	-1.3	-0.2	0.1	-1.5	-1.5	-8.1
20-24	18.8	-6.6	-1.1	11.1	2.3	0.3	0.4	3.0	0.2	-0.2	0.0	0.0	3.0	14.1
25-29	18.2	-5.9	-1.0	11.3	6.5	-0.2	-0.3	6.0	0.0	0.5	0.0	0.5	6.5	17.8
30-34	-18.4	-8.7	1.2	-26.0	5.4	0.5	0.6	6.5	2.5	0.2	0.1	2.8	9.3	-16.7
35-39	-28.6	-3.1	0.6	-31.1	2.6	0.1	0.0	2.7	1.8	1.8	0.5	4.1	6.8	-24.3
40-44	-16.3	-4.4	0.4	-20.2	1.6	-0.6	-0.2	0.9	3.8	1.2	0.7	5.7	6.6	-13.6
45-49	-7.6	-1.3	0.1	-8.8	1.8	0.3	0.2	2.3	1.2	-0.2	0.0	0.9	3.2	-5.6
50-54	18.0	-0.5	-0.1	17.4	1.0	-0.8	-0.2	0.0	2.8	-0.3	-0.3	2.1	2.1	19.5
55-59	0.5	7.3	0.0	7.8	1.7	-0.9	-0.6	0.1	1.0	0.7	1.2	2.9	3.0	10.8
60-64	-5.0	35.0	-2.9	27.1	0.0	0.0	0.0	0.0	0.5	-0.7	-0.1	-0.3	-0.3	26.8
Total	-21.1	5.8	-2.7	-18.0	22.9	-1.3	-0.1	21.5	12.4	2.9	2.0	17.2	38.7	20.7

						F	inland							
		Non-Mig	rants			Migrants (EU r	nationals)		Migr	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
						Ma	ales							
15-19	-3.8	5.3	-0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
20-24	1.9	1.4	0.0	3.3	0.0	0.0	0.0	0.0	-1.8	0.3	-0.2	-1.6	-1.6	1.7
25-29	-0.1	-4.3	0.0	-4.4	0.8	-0.2	-0.1	0.6	4.3	-0.1	-0.2	4.0	4.6	0.2
30-34	-0.4	-5.8	0.0	-6.2	3.1	-0.1	-0.2	2.8	2.7	-0.2	-0.2	2.3	5.1	-1.1
35-39	16.9	-1.9	-0.2	14.8	1.9	-0.1	-0.1	1.7	2.3	0.1	0.0	2.4	4.1	18.9
40-44	-18.5	-1.1	0.1	-19.5	1.5	0.0	0.0	1.5	2.1	0.0	0.0	2.1	3.6	-15.9
45-49	-21.8	3.1	-0.4	-19.1	1.4	-0.2	-0.1	1.2	1.2	0.3	0.8	2.2	3.4	-15.7
50-54	-4.2	4.9	-0.1	0.6	1.0	0.2	0.1	1.4	0.8	0.0	0.0	0.9	2.3	2.9
55-59	-7.7	10.4	-0.6	2.1	0.0	0.0	0.0	0.0	0.5	-0.1	0.0	0.4	0.4	2.5
60-64	-8.5	17.3	-1.7	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1
Total	-46.2	29.3	-3.3	-20.3	9.8	-0.3	-0.3	9.2	12.2	0.3	0.3	12.7	21.9	1.6
							nales							
15-19	-7.6	8.0	-1.1	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.7
20-24	3.3	3.7	0.1	7.1	0.0	0.0	0.0	0.0	0.9	-0.5	-0.2	0.2	0.2	7.3
25-29	-3.5	0.5	0.0	-3.0	0.0	1.6	0.5	2.1	2.2	-1.7	-1.2	-0.7	1.4	-1.6
30-34	5.0	-1.4	-0.1	3.5	0.0	1.6	1.2	2.8	1.0	-1.5	-0.4	-0.9	1.9	5.4
35-39	6.9	-2.6	-0.1	4.2	0.0	2.5	0.6	3.1	3.7	-2.4	-2.5	-1.2	1.9	6.1
40-44	-12.5	-0.2	0.0	-12.6	0.0	2.1	1.1	3.2	2.9	-2.0	-1.7	-0.8	2.4	-10.2
45-49	-22.4	-0.4	0.0	-22.7	0.0	1.8	0.7	2.5	1.9	-1.9	-1.2	-1.2	1.3	-21.4
50-54	-2.9	4.0	-0.1	1.0	0.0	2.2	-0.1	2.1	1.9	-2.2	-1.4	-1.7	0.4	1.4
55-59	-10.6	5.3	-0.4	-5.6	0.0	1.8	0.4	2.1	6.5	-1.9	-5.5	-0.9	1.2	-4.4
60-64	-7.4	25.5	-2.2	15.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.9
Total	-51.7	42.6	-3.8	-12.9	0.0	13.5	4.4	17.9	21.0	-14.1	-14.0	-7.2	10.7	-2.2

						A	ustria							
		Non-Mig	rants			Migrants (EU r	nationals)		Migr	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
						М	ales							
15-19	-17.6	-14.2	2.4	-29.4	2.0	-0.8	-0.5	0.7	4.4	-2.3	-1.2	0.9	1.6	-27.8
20-24	1.2	-8.5	-0.1	-7.3	1.8	0.6	0.2	2.6	8.0	-0.2	-0.1	7.7	10.3	3.0
25-29	3.7	1.3	0.0	5.1	8.0	0.9	0.6	9.6	10.5	-1.9	-0.9	7.7	17.3	22.4
30-34	14.4	-1.7	-0.1	12.6	16.3	0.0	0.0	16.2	4.4	-0.5	-0.1	3.8	20.0	32.6
35-39	-33.5	0.5	-0.1	-33.1	16.6	0.5	0.5	17.5	12.1	-0.2	-0.1	11.9	29.4	-3.7
40-44	-83.1	2.0	-0.6	-81.7	10.7	0.5	0.4	11.6	10.3	0.0	0.0	10.2	21.8	-59.9
45-49	-27.5	4.2	-0.4	-23.7	7.4	0.7	0.4	8.5	6.1	-0.8	-0.3	5.0	13.5	-10.2
50-54	36.0	8.8	1.3	46.1	11.8	0.1	0.2	12.0	4.6	-0.5	-0.2	4.0	16.0	62.1
55-59	45.1	20.3	5.8	71.1	3.6	0.7	0.4	4.7	2.5	2.2	0.7	5.4	10.1	81.2
60-64	6.7	19.8	2.3	28.8	0.2	2.4	0.1	2.7	0.5	1.4	0.4	2.3	5.0	33.8
Total	-54.6	32.6	10.6	-11.5	78.3	5.5	2.3	86.1	63.4	-2.8	-1.8	58.9	145.0	133.5
						Fer	nales							
15-19	-12.2	-9.6	1.5	-20.4	0.0	0.0	0.0	0.0	1.3	-1.0	-0.2	0.1	0.1	-20.3
20-24	-6.4	5.3	-0.2	-1.3	4.1	0.7	0.4	5.2	5.4	-1.0	-0.4	3.9	9.1	7.8
25-29	-1.6	5.6	0.0	3.9	7.8	1.8	0.9	10.5	3.4	0.8	0.2	4.4	14.9	18.8
30-34	5.4	9.7	0.3	15.3	10.9	1.6	1.1	13.6	6.9	0.5	0.2	7.6	21.2	36.5
35-39	-36.7	11.7	-2.0	-27.0	15.7	-0.8	-0.8	14.1	7.5	-0.1	-0.1	7.3	21.4	-5.6
40-44	-62.0	4.8	-1.1	-58.4	6.0	1.1	0.4	7.5	5.6	-0.6	-0.2	4.8	12.3	-46.1
45-49	-23.0	10.3	-0.9	-13.6	7.8	1.1	0.7	9.6	5.8	1.3	0.6	7.7	17.3	3.7
50-54	31.2	18.0	2.6	51.8	7.2	1.2	1.3	9.7	2.1	0.2	0.0	2.3	12.0	63.8
55-59	28.5	35.8	8.6	72.9	3.1	1.2	0.8	5.1	1.6	1.9	0.5	4.1	9.2	82.1
60-64	2.8	7.7	0.7	11.1	5.2	-2.1	-3.2	0.0	0.0	0.6	0.1	0.7	0.7	11.8
Total	-74.1	99.1	9.3	34.3	67.9	5.8	1.6	75.3	39.6	2.5	0.8	42.9	118.2	152.5

						G	ermany							
		Non-Mig	rants			Migrants (EU	nationals)		Migr	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
						Ν	Iales							
15-19	-7.5	-31.5	0.4	-38.6	6.3	0.9	0.4	7.6	6.0	-5.1	-0.8	0.1	7.7	-30.9
20-24	-154.9	-14.4	1.4	-167.8	32.4	4.8	3.5	40.7	111.4	-24.5	-28.7	58.2	98.9	-68.9
25-29	69.3	7.5	0.3	77.1	99.3	4.0	5.1	108.4	143.3	-25.5	-24.2	93.5	201.9	279.0
30-34	154.5	-6.8	-0.6	147.1	93.7	0.8	0.8	95.3	87.6	-29.1	-12.1	46.3	141.6	288.7
35-39	-42.1	-11.2	0.2	-53.1	84.3	0.5	0.3	85.1	67.2	-24.4	-7.7	35.1	120.2	67.1
40-44	-1041.5	-28.6	10.0	-1060.1	71.2	-1.9	-1.3	68.0	61.9	-16.9	-5.7	39.3	107.3	-952.8
45-49	-447.0	0.0	0.0	-447.0	60.6	0.3	0.2	61.0	69.5	-5.7	-2.8	61.0	122.0	-325.0
50-54	371.6	41.5	6.1	419.2	50.0	2.5	1.4	53.9	82.2	-4.2	-4.2	73.8	127.7	546.9
55-59	354.2	62.1	10.5	426.8	37.9	2.5	1.2	41.6	33.3	-0.2	-0.1	33.0	74.6	501.4
60-64	226.6	241.0	50.9	518.5	13.1	16.1	4.5	33.7	-7.9	16.1	-2.8	5.3	39.0	557.5
Total	-516.8	259.6	79.3	-177.9	548.7	30.4	16.2	595.3	654.4	-119.6	-89.2	445.6	1040.9	863.0
						Fe	emales							
15-19	-17.6	5.0	-0.2	-12.7	5.3	0.0	0.0	5.3	-2.5	-4.8	0.4	-6.9	-1.6	-14.3
20-24	-220.7	52.1	-7.9	-176.6	24.9	3.1	2.0	29.9	27.4	-16.7	-6.0	4.6	34.5	-142.1
25-29	6.4	54.1	0.2	60.7	51.9	-0.6	-0.4	50.9	31.8	-2.9	-0.9	28.0	78.9	139.6
30-34	104.1	49.5	3.2	156.8	43.8	3.2	1.7	48.7	21.2	-2.4	-0.4	18.4	67.1	223.9
35-39	-45.3	43.6	-1.1	-2.8	32.0	-0.1	0.0	31.9	24.9	-4.9	-0.9	19.1	51.0	48.2
40-44	-885.2	48.4	-16.6	-853.4	52.0	3.4	2.0	57.3	51.0	0.9	0.4	52.3	109.6	-743.8
45-49	-360.2	89.3	-12.2	-283.1	47.0	4.3	2.7	54.0	44.9	-1.4	-0.7	42.9	96.9	-186.2
50-54	304.3	103.7	13.7	421.7	25.0	4.5	1.8	31.3	39.3	-1.3	-0.8	37.3	68.6	490.3
55-59	288.3	192.8	30.9	512.0	15.4	6.1	1.8	23.3	-0.2	0.9	0.0	0.7	24.0	536.0
60-64	160.9	420.2	90.1	671.2	6.2	9.9	2.3	18.4	0.0	11.0	0.0	10.9	29.3	700.5
Total	-664.9	1058.6	100.0	493.8	303.5	33.7	13.8	351.0	237.9	-21.6	-8.9	207.3	558.3	1052.1

						Ν	orway							
		Non-Mig	rants			Migrants (EU r	nationals)		Migr	ants (Third cou	ntry nationals)		Migrants	All
_	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
						Ma	ales							
15-19	-1.0	-5.7	0.1	-6.6	0.7	0.1	0.0	0.8	0.2	0.1	0.0	0.3	1.1	-5.5
20-24	11.9	-6.3	-0.7	4.9	-0.1	-0.6	0.0	-0.7	1.9	-0.2	-0.2	1.5	0.8	5.7
25-29	27.1	-4.6	-1.0	21.5	-0.1	0.2	0.0	0.1	0.5	0.2	0.0	0.7	0.8	22.3
30-34	4.4	-3.1	-0.1	1.2	7.8	-0.8	-0.5	6.5	5.3	-0.4	-0.3	4.5	11.0	12.2
35-39	-15.4	-4.8	0.5	-19.7	8.6	-0.1	-0.1	8.5	3.8	-0.6	-0.4	2.8	11.3	-8.4
40-44	-10.6	-1.9	0.1	-12.3	6.7	0.4	0.3	7.5	-0.2	0.0	0.0	-0.2	7.3	-5.0
45-49	8.0	-1.0	-0.1	6.9	5.7	0.1	0.2	6.0	2.3	0.0	-0.1	2.2	8.2	15.1
50-54	12.5	-6.0	-0.5	6.0	5.2	0.5	0.8	6.4	0.5	0.2	0.1	0.8	7.2	13.2
55-59	4.8	1.9	0.1	6.8	4.0	0.5	0.7	5.2	1.6	-0.2	-0.5	1.0	6.2	13.0
60-64	-0.3	7.1	0.0	6.8	3.0	-0.4	-0.6	2.1	0.5	-0.1	0.0	0.4	2.5	9.3
Total	41.5	-24.4	-1.6	15.5	41.7	-0.1	0.8	42.4	16.4	-1.1	-1.3	14.0	56.4	71.9
						Fen	nales							
15-19	-2.4	-5.9	0.2	-8.1	0.8	0.0	0.0	0.8	0.9	-0.4	-0.5	0.1	0.9	-7.2
20-24	6.4	-3.3	-0.2	2.9	0.7	-0.1	0.0	0.6	1.1	0.0	0.0	1.0	1.6	4.5
25-29	16.8	0.8	0.1	17.7	6.1	-0.3	-0.5	5.3	0.7	0.2	0.0	0.9	6.2	23.9
30-34	8.0	-5.0	-0.3	2.6	6.1	-0.2	-0.2	5.7	0.6	1.7	0.2	2.4	8.1	10.7
35-39	-17.2	-1.8	0.2	-18.8	7.5	0.0	0.0	7.6	2.9	0.0	0.0	3.0	10.6	-8.2
40-44	-10.6	-0.3	0.0	-10.9	4.8	-0.3	-0.3	4.1	1.4	0.7	0.3	2.4	6.5	-4.4
45-49	13.6	0.8	0.1	14.5	2.5	-0.2	-0.1	2.2	3.0	-0.5	-0.5	2.0	4.2	18.7
50-54	9.0	-1.5	-0.1	7.4	2.4	-0.1	-0.1	2.2	1.1	-0.3	-0.3	0.5	2.7	10.1
55-59	7.1	2.4	0.2	9.7	1.1	-0.1	-0.1	0.9	0.1	0.0	0.0	0.1	1.0	10.7
60-64	1.9	7.8	0.2	9.9	-0.2	0.7	-0.1	0.3	0.4	-0.1	-0.1	0.3	0.6	10.5
Total	32.5	-5.9	0.4	26.9	31.8	-0.7	-1.4	29.7	12.3	1.3	-0.9	12.7	42.4	69.3

						Net	herlands							
		Non-Mig	rants			Migrants (EU r	nationals)		Migra	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
						М	ales							
15-19	5.9	4.9	0.1	10.9	0.7	0.3	0.1	1.1	0.3	1.4	0.1	1.8	2.9	13.8
20-24	16.7	-22.9	-1.0	-7.2	0.9	-0.6	-0.2	0.1	1.7	0.4	0.1	2.2	2.3	-4.9
25-29	44.5	-13.4	-1.4	29.7	6.2	-0.4	-0.4	5.5	-2.9	-1.3	0.3	-4.0	1.5	31.2
30-34	10.9	-5.8	-0.1	5.0	5.5	-0.5	-0.3	4.7	1.9	-2.2	-0.2	-0.5	4.2	9.2
35-39	-74.2	-3.6	0.5	-77.3	8.8	-0.5	-0.3	8.0	0.6	-1.7	-0.1	-1.2	6.8	-70.5
40-44	-134.4	-10.2	2.4	-142.3	8.7	-0.4	-0.3	7.9	2.8	-0.3	-0.1	2.4	10.3	-132.0
45-49	-26.0	-13.4	0.6	-38.8	5.6	0.0	0.0	5.6	3.8	-0.7	-0.3	2.8	8.4	-30.4
50-54	30.9	-4.0	-0.2	26.6	4.4	0.0	0.0	4.3	3.8	-0.8	-0.6	2.5	6.8	33.4
55-59	41.5	3.1	0.3	44.9	-0.1	1.7	0.0	1.6	1.3	-0.4	-0.2	0.7	2.3	47.2
60-64	-5.6	114.9	-2.4	106.9	-0.3	1.4	-0.1	1.0	-0.1	0.7	0.0	0.6	1.6	108.5
Total	-89.9	49.7	-1.4	-41.6	40.4	0.9	-1.5	39.8	13.2	-4.9	-1.0	7.3	47.1	5.5
						Fei	males							
15-19	4.7	11.4	0.2	16.2	2.7	-0.5	-0.7	1.5	0.3	0.5	0.0	0.8	2.3	18.5
20-24	19.6	-10.6	-0.6	8.5	0.4	1.6	0.2	2.2	0.2	0.3	0.0	0.5	2.7	11.2
25-29	38.3	-9.6	-0.9	27.8	6.6	-0.1	-0.1	6.4	-2.4	0.2	0.0	-2.3	4.1	31.9
30-34	-0.5	-6.3	0.0	-6.8	6.5	0.2	0.1	6.8	2.7	-1.6	-0.3	0.8	7.6	0.8
35-39	-66.6	-2.0	0.3	-68.3	5.9	-1.0	-0.4	4.5	2.7	0.0	0.0	2.7	7.2	-61.1
40-44	-103.5	-11.3	2.3	-112.5	5.7	-0.1	0.0	5.6	2.4	0.2	0.1	2.7	8.3	-104.2
45-49	-9.8	9.8	-0.2	-0.2	4.4	-0.1	0.0	4.3	0.5	0.4	0.0	0.9	5.2	5.0
50-54	22.2	16.1	0.8	39.1	5.0	1.5	1.3	7.8	1.3	0.7	0.3	2.3	10.1	49.2
55-59	29.7	52.7	4.9	87.3	1.6	1.7	0.7	4.0	1.8	0.1	0.1	2.0	6.0	93.3
60-64	-2.9	109.1	-2.1	104.1	2.1	-0.6	-0.6	0.9	0.1	0.6	0.4	1.1	2.0	106.1
Total	-68.8	159.3	4.6	95.2	41.0	2.6	0.4	44.0	9.5	1.5	0.6	11.5	55.5	150.7

						S	weden							
		Non-Mig	rants			Migrants (EU r	nationals)		Migr	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
						М	ales							
15-19	-13.9	2.8	-0.4	-11.5	0.9	-0.5	-0.4	0.0	0.3	1.6	1.1	3.0	3.0	-8.5
20-24	-5.0	-2.2	0.0	-7.2	0.8	-0.1	0.0	0.7	11.1	0.1	0.1	11.3	12.0	4.8
25-29	54.5	-0.6	-0.1	53.8	2.5	0.2	0.1	2.7	9.1	0.8	0.5	10.4	13.1	66.9
30-34	12.3	-1.3	-0.1	10.9	3.5	0.0	0.0	3.5	17.3	1.4	2.1	20.9	24.4	35.3
35-39	-22.3	2.1	-0.2	-20.3	3.3	0.3	0.1	3.7	11.7	0.7	0.9	13.3	17.0	-3.3
40-44	-15.5	4.1	-0.2	-11.6	1.3	-0.2	0.0	1.0	6.2	0.0	0.0	6.2	7.2	-4.4
45-49	5.8	2.2	0.0	8.1	0.0	-0.3	0.0	-0.3	3.8	0.8	0.4	5.0	4.7	12.8
50-54	39.9	9.9	1.6	51.4	1.5	-0.5	-0.1	0.9	1.5	1.3	0.4	3.3	4.2	55.6
55-59	3.6	8.9	0.1	12.6	-0.6	1.1	-0.1	0.4	3.1	-0.2	-0.2	2.7	3.1	15.7
60-64	-18.1	10.2	-0.9	-8.8	-2.0	0.1	0.0	-1.9	0.5	0.7	0.2	1.4	-0.5	-9.3
Total	41.3	36.2	-0.1	77.4	11.2	0.0	-0.6	10.7	64.7	7.2	5.6	77.5	88.2	165.6
							nales							
15-19	-18.5	12.3	-2.2	-8.5	0.5	-0.3	-0.1	0.1	0.3	0.3	0.1	0.7	0.8	-7.7
20-24	-5.6	4.1	-0.1	-1.6	2.3	-2.4	-1.7	-1.8	1.6	4.4	2.1	8.1	6.3	4.7
25-29	47.0	9.0	2.0	58.0	0.4	-2.1	-0.2	-1.9	10.4	1.4	1.1	12.8	10.9	68.9
30-34	13.9	5.0	0.3	19.2	3.5	-4.1	-2.5	-3.1	8.0	4.9	3.0	15.9	12.8	32.0
35-39	-19.5	7.4	-0.6	-12.6	1.1	-5.2	-0.7	-4.7	6.6	4.2	3.0	13.9	9.2	-3.4
40-44	-12.3	4.9	-0.2	-7.6	-0.3	-1.4	0.1	-1.7	5.6	2.1	1.8	9.5	7.8	0.2
45-49	7.2	10.8	0.3	18.3	-0.3	-6.3	0.2	-6.5	-0.5	7.7	4.1	11.3	4.8	23.1
50-54	36.7	7.0	1.1	44.8	-0.7	-4.7	0.3	-5.2	-0.7	7.0	1.1	7.4	2.2	47.0
55-59	3.2	12.2	0.2	15.6	-3.4	0.8	-0.2	-2.8	-3.1	3.3	2.4	2.6	-0.2	15.4
60-64	-16.8	29.2	-2.7	9.7	-0.8	1.0	-0.2	0.0	0.8	0.0	0.0	0.8	0.8	10.5
Total	35.3	102.0	-2.0	135.3	2.4	-24.8	-5.1	-27.6	29.0	35.4	18.7	83.0	55.4	190.7

						B	elgium							
		Non-Mig	rants			Migrants (EU n	ationals)		Migra	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
						Ma	ales							
15-19	-1.9	-5.0	0.3	-6.6	0.0	0.0	0.0	0.0	0.3	-0.3	0.0	0.0	0.0	-6.6
20-24	-2.3	-24.4	0.3	-26.4	1.7	-1.9	-0.4	-0.6	1.3	-1.3	-0.3	-0.3	-0.9	-27.3
25-29	9.1	-14.9	-0.5	-6.3	9.7	1.0	0.5	11.2	-1.5	-1.4	0.1	-2.8	8.4	2.1
30-34	-11.7	-10.1	0.4	-21.4	8.3	-0.5	-0.2	7.7	4.3	1.6	0.4	6.3	14.0	-7.4
35-39	-10.8	-2.0	0.1	-12.7	4.5	-0.6	-0.1	3.8	2.1	-0.8	-0.1	1.2	5.0	-7.7
40-44	-40.1	-4.9	0.6	-44.4	2.2	-1.2	-0.1	0.9	6.1	0.6	0.3	7.0	7.9	-36.5
45-49	-29.5	-3.8	0.3	-33.0	4.4	-1.2	-0.2	3.1	4.8	-0.1	-0.1	4.6	7.7	-25.3
50-54	6.9	-4.9	-0.1	1.9	6.8	0.2	0.1	7.1	2.8	0.9	0.7	4.4	11.5	13.4
55-59	24.3	30.2	3.5	58.0	0.4	4.5	0.1	5.0	1.0	0.0	0.0	0.9	5.9	63.9
60-64	4.4	22.2	1.3	27.9	0.0	8.9	1.2	10.2	4.0	-7.2	-3.7	-6.9	3.3	31.2
Total	-51.6	-17.5	6.1	-63.0	38.1	9.3	1.0	48.4	25.2	-8.1	-2.7	14.4	62.8	-0.2
							nales		-					
15-19	-1.1	-2.1	0.1	-3.1	0.0	0.0	0.0	0.0	-1.1	2.6	-1.5	0.0	0.0	-3.1
20-24	-3.1	-25.7	0.5	-28.3	1.8	-0.2	0.0	1.6	-0.3	-1.2	0.1	-1.4	0.2	-28.1
25-29	7.7	-11.1	-0.3	-3.7	8.3	-0.3	-0.1	7.9	0.2	-1.8	0.0	-1.6	6.3	2.6
30-34	-7.2	-4.9	0.1	-11.9	4.7	-0.2	0.0	4.5	6.0	-2.4	-1.2	2.4	6.9	-5.0
35-39	-14.6	-7.5	0.4	-21.7	5.7	0.9	0.2	6.8	7.0	-1.5	-1.4	4.1	10.9	-10.8
40-44	-28.7	-2.0	0.2	-30.5	2.4	1.8	0.2	4.4	2.1	0.0	0.0	2.0	6.4	-24.1
45-49	-24.4	9.1	-0.8	-16.1	3.7	2.3	0.5	6.5	2.3	-0.8	-0.4	1.1	7.6	-8.5
50-54	5.5	15.9	0.3	21.8	4.3	1.6	0.5	6.4	0.0	0.5	0.0	0.5	6.9	28.7
55-59	13.4	66.2	5.9	85.5	3.9	2.9	1.6	8.4	0.2	0.4	0.1	0.7	9.1	94.6
60-64	2.9	27.3	1.7	31.9	0.1	3.4	0.9	4.4	-0.1	-2.0	0.1	-2.0	2.4	34.3
Total	-49.4	65.2	8.2	23.9	35.0	12.3	3.6	50.9	16.3	-6.2	-4.3	5.8	56.7	80.6

							Spain							ł
		Non-Migi	,rants			Migrants (EU n	nationals)		Mig	grants (Third cou	untry nationals	3)	Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population		-		Total	Total
							Males							/
15-19	7.6	-62.6	-2.6	-57.7	0.0	-1.6	0.0	-1.6	-12.7	-8.0	2.8	-17.9	-19.5	-77.2
20-24	-85.6	-106.8	12.4	-180.0	-6.1	-3.3	0.5	-8.9	-32.4	-14.0	4.2	-42.2	-51.1	-231.1
25-29	-261.9	-26.3	5.7	-282.5	-22.8	-1.2	0.4	-23.7	-100.5	-10.9	5.5	-105.9	-129.6	-412.1
30-34	-418.2	-12.8	3.4	-427.5	-53.8	-5.0	2.2	-56.6	-139.2	-12.9	6.3	-145.7	-202.3	-629.8
35-39	-148.5	1.8	-0.2	-146.8	-5.1	1.0	-0.1	-4.1	-78.3	-0.1	0.0	-78.4	-82.5	-229.3
40-44	108.7	1.0	0.1	109.8	-5.9	0.2	0.0	-5.7	-33.1	-3.5	0.6	-36.0	-41.7	68.1
45-49	95.0	2.3	0.2	97.4	15.5	-1.3	-0.3	13.9	4.5	-3.5	-0.1	0.8	14.7	112.1
50-54	178.4	18.2	2.6	199.1	9.1	4.8	1.1	15.0	11.5	-1.8	-0.3	9.4	24.4	223.5
55-59	208.8	29.1	6.3	244.3	7.0	1.4	0.4	8.8	2.0	-0.2	0.0	1.8	10.6	254.9
60-64	47.0	43.4	3.9	94.3	0.8	7.8	0.7	9.3	9.6	0.5	0.4	10.5	19.8	114.1
Total	-268.6	-112.7	31.7	-349.6	-61.3	2.8	4.9	-53.6	-368.6	-54.4	19.4	-403.6	-457.2	-806.8
- <u> </u>							Females							
15-19	5.7	-48.7	-2.1	-45.1	-0.9	-1.0	0.1	-1.8	-5.6	-2.6	0.7	-7.5	-9.3	-54.4
20-24	-64.2	-82.4	8.3	-138.3	-15.1	-10.2	3.2	-22.1	-36.1	-15.2	5.2	-46.1	-68.2	-206.5
25-29	-204.8	-10.5	2.0	-213.3	-27.8	-2.0	0.6	-29.2	-86.0	-31.2	13.2	-104.0	-133.2	-346.5
30-34	-328.7	28.9	-7.3	-307.1	-11.6	-0.3	0.0	-11.8	-85.8	-38.4	13.3	-110.9	-122.7	-429.8
35-39	-98.8	93.4	-7.1	-12.5	12.6	-6.8	-1.0	4.7	-24.4	-12.5	1.5	-35.4	-30.7	-43.2
40-44	76.3	129.7	8.0	214.0	6.3	6.8	0.6	13.7	-10.8	-0.2	0.0	-11.0	2.7	216.7
45-49	62.7	92.9	5.0	160.6	21.4	-1.2	-0.6	19.7	2.6	-0.5	0.0	2.1	21.8	182.4
50-54	150.1	119.4	19.0	288.5	-3.1	5.0	-0.5	1.5	-0.4	-6.2	0.0	-6.6	-5.1	283.4
55-59	128.9	181.6	38.8	349.3	3.6	8.1	2.3	14.0	7.3	-2.0	-0.5	4.8	18.8	368.1
60-64	29.6	131.7	11.9	173.2	0.7	7.8	1.5	10.0	1.4	-0.1	0.0	1.3	11.3	184.5
Total	-243.2	635.9	76.6	469.3	-13.9	6.2	6.4	-1.3	-237.7	-109.0	33.4	-313.3	-314.6	154.7

		Non-Mig	rants			Migrants (EU r	nationals)		Migra	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
		-				Czech	Republic			-				
15-19	-9.7	-2.6	0.6	-11.7	0.0	0.0	0.0	0.0	3.1	-1.1	-1.8	0.2	0.2	-11.5
20-24	-80.7	12.3	-2.8	-71.2	-1.2	0.4	-0.2	-1.0	0.1	-0.1	0.0	0.0	-1.0	-72.2
25-29	-59.3	9.4	-0.8	-50.8	1.7	0.5	0.4	2.6	-2.4	-1.0	0.4	-3.0	-0.4	-51.2
30-34	-166.2	12.0	-2.8	-156.9	10.7	0.5	0.9	12.0	4.2	0.3	0.0	4.5	16.5	-140.4
35-39	-47.1	-11.8	0.7	-58.2	10.1	-0.1	-0.3	9.7	5.4	-0.4	-0.2	4.7	14.4	-43.8
40-44	196.2	-2.2	-0.7	193.3	6.1	-0.1	-0.1	5.9	4.4	0.5	0.5	5.3	11.2	204.5
45-49	27.4	3.0	0.1	30.5	4.0	-0.3	-0.4	3.2	4.4	0.2	0.1	4.8	8.0	38.5
50-54	7.5	17.1	0.1	24.7	0.0	0.4	-0.1	0.3	2.1	0.2	0.1	2.3	2.6	27.3
55-59	-97.4	101.4	-19.6	-15.6	-0.3	0.2	-0.1	-0.1	2.8	0.1	0.3	3.2	3.1	-12.5
60-64	-6.6	126.9	-4.9	115.4	0.7	0.1	0.2	1.0	0.6	0.1	0.0	0.7	1.7	117.1
Total	-236.0	265.4	-29.9	-0.5	31.7	1.6	0.3	33.6	24.7	-1.3	-0.7	22.7	56.3	55.8
						It	taly							
15-19	-5.9	-32.7	0.8	-37.8	2.2	-1.9	-0.7	-0.5	1.1	-8.1	-0.4	-7.4	-7.9	-45.7
20-24	-26.7	-66.6	1.3	-92.0	-9.9	-15.5	2.8	-22.5	17.6	2.0	-0.8	18.9	-3.6	-95.6
25-29	-109.0	2.7	-0.8	-107.1	-18.3	-9.5	1.5	-26.3	30.7	2.2	0.3	33.2	6.9	-100.2
30-34	-546.3	11.9	-2.6	-537.0	-13.5	-9.6	0.6	-22.5	53.6	-4.6	-1.4	47.6	25.1	-511.9
35-39	-745.1	50.2	-11.5	-706.5	33.6	-0.9	-0.2	32.5	69.1	-4.8	-1.0	63.3	95.8	-610.7
40-44	-289.9	71.6	-6.2	-224.5	55.6	-1.6	-0.8	53.1	60.1	-4.4	-1.1	54.6	107.7	-116.8
45-49	68.3	73.9	0.4	142.6	76.5	1.5	2.0	79.9	77.7	-9.9	-4.6	63.1	143.0	285.6
50-54	490.9	117.9	19.6	628.4	39.8	2.3	2.4	44.5	78.3	-0.1	-0.1	78.1	122.6	751.0
55-59	215.2	474.4	52.2	741.8	35.9	-0.9	-1.4	33.6	52.5	-0.8	-0.7	51.0	84.6	826.4
60-64	-15.6	725.0	-15.0	694.4	10.5	3.6	6.9	21.0	29.4	4.4	5.5	39.3	60.3	754.7
Total	-964.1	1428.4	38.0	502.3	212.4	-32.7	13.1	192.8	470.1	-24.1	-4.4	441.7	634.5	1136.8

Annex Table B. Changes (in 1,000) in the total labour force between 2010 and 2017 due to shifts in:

		Non-Mig	rants			Migrants (EU	nationals)		Migr	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
					-	United	l Kingdom							
15-19	-176.2	-133.5	14.8	-295.0	12.7	0.0	0.0	12.7	-5.3	15.4	-0.4	9.7	22.4	-272.6
20-24	-5.3	10.5	-4.4	0.9	56.8	5.6	2.4	64.8	-7.9	-22.2	2.4	-27.7	37.1	38.0
25-29	237.5	98.3	4.9	340.7	123.0	4.5	1.8	129.3	-60.6	-23.6	5.5	-78.7	50.6	391.3
30-34	117.6	51.8	2.5	172.0	225.8	0.7	0.6	227.2	0.2	-5.5	0.0	-5.3	221.9	393.9
35-39	-226.9	91.8	-7.1	-142.2	233.1	9.4	12.6	255.1	-1.6	3.5	0.4	2.3	257.4	115.2
40-44	-715.4	17.1	-3.3	-701.6	162.7	6.4	9.3	178.4	30.0	6.5	2.3	38.8	217.2	-484.4
45-49	-177.2	9.4	-0.5	-168.2	115.5	7.0	9.0	131.5	25.3	3.2	0.8	29.3	160.8	-7.4
50-54	442.7	83.2	12.1	538.0	70.6	1.2	1.3	73.1	17.9	-2.0	-0.4	15.4	88.5	626.5
55-59	378.7	69.3	10.7	458.6	36.7	7.8	5.2	49.7	14.5	-2.2	0.3	12.6	62.3	520.9
60-64	-103.1	300.8	-17.9	179.8	4.5	2.3	0.5	7.3	16.4	8.8	2.3	27.6	34.9	214.7
Total	-227.7	598.8	11.9	383.0	1041.5	45.0	42.6	1129.1	29.0	-18.1	13.1	24.0	1153.1	1536.1
							tzerland							
15-19	-13.2	-0.6	-0.1	-13.9	2.1	2.7	0.3	5.2	-3.9	0.1	0.0	-3.7	1.5	-12.4
20-24	-0.9	-0.5	-0.2	-1.6	4.7	-0.3	-0.2	4.2	1.8	0.7	-0.1	2.4	6.6	5.0
25-29	45.2	6.6	0.9	52.7	11.3	3.6	0.8	15.7	-11.0	-1.2	0.7	-11.5	4.2	56.9
30-34	25.2	7.1	0.5	32.8	23.4	4.6	1.2	29.1	8.9	0.3	0.1	9.3	38.4	71.2
35-39	-23.8	8.7	-0.4	-15.6	37.5	4.3	1.5	43.3	10.3	-0.7	-0.1	9.5	52.8	37.2
40-44	-77.6	7.2	-1.3	-71.7	18.5	6.1	1.1	25.7	3.5	2.3	0.5	6.3	32.0	-39.7
45-49	-31.7	2.7	-0.2	-29.2	25.3	3.0	0.9	29.1	0.4	0.0	0.1	0.5	29.6	0.4
50-54	56.8	9.9	1.4	68.1	33.6	4.9	2.6	41.1	6.0	1.8	-0.2	7.6	48.7	116.8
55-59	48.7	15.5	2.4	66.6	22.5	3.4	1.6	27.5	5.6	2.4	1.3	9.3	36.8	103.4
60-64	9.9	30.5	0.9	41.2	-0.7	4.2	-0.3	3.2	3.2	1.7	1.4	6.4	9.6	50.8
Total	38.6	87.0	3.9	129.4	178.3	36.4	9.5	224.1	24.8	7.5	3.8	36.1	260.2	389.6

		Non-Mig	rants			Migrants (EU 1	nationals)		Migr	ants (Third cou	ntry nationals)	1	Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
	•	•				G	reece		•	•				
15-19	-1.9	-6.1	0.4	-7.6	0.0	0.0	0.0	0.0	-3.0	-2.5	0.8	-4.6	-4.6	-12.2
20-24	-25.2	-31.5	2.8	-53.9	-3.3	-0.2	0.1	-3.5	-21.1	-2.1	0.9	-22.3	-25.8	-79.7
25-29	-111.5	-20.0	3.9	-127.6	-6.6	1.1	-0.7	-6.2	-36.6	-3.5	2.1	-38.0	-44.2	-171.8
30-34	-75.4	12.5	-1.5	-64.4	-10.3	0.5	-0.3	-10.1	-40.9	-4.4	2.3	-42.9	-53.0	-117.4
35-39	-9.5	18.6	-0.7	8.4	-4.0	-0.2	0.1	-4.2	-30.4	2.2	-0.5	-28.7	-32.9	-24.5
40-44	-13.4	21.3	-1.2	6.7	-4.5	-0.2	0.2	-4.5	-15.4	-1.9	0.3	-17.0	-21.5	-14.8
45-49	57.2	18.8	0.2	76.2	-0.7	0.3	-0.1	-0.5	-1.3	-2.7	0.3	-3.7	-4.2	72.0
50-54	18.3	39.3	3.3	60.8	-2.8	0.3	-0.1	-2.6	-5.8	-0.2	0.1	-6.0	-8.6	52.2
55-59	18.7	19.5	2.0	40.2	-2.2	-0.3	0.2	-2.3	1.4	0.4	0.0	1.8	-0.5	39.7
60-64	8.1	4.5	0.1	12.6	0.3	-0.9	0.0	-0.7	1.5	-1.1	-0.3	0.1	-0.6	12.0
Total	-134.6	76.8	9.2	-48.6	-34.1	0.2	-0.7	-34.6	-151.7	-15.7	6.1	-161.3	-195.9	-244.5
						D	enmark							
15-19	-4.0	-13.9	0.3	-17.6	0.0	0.0	0.0	0.0	-0.7	-0.9	0.0	-1.6	-1.6	-19.2
20-24	36.7	-18.0	-2.7	15.9	3.9	0.8	0.6	5.3	3.7	-0.2	0.0	3.6	8.9	24.8
25-29	37.0	-10.0	-1.6	25.3	13.7	-0.1	-0.1	13.6	4.8	-0.3	-0.5	4.0	17.6	42.9
30-34	-39.2	-15.6	2.1	-52.7	14.0	0.5	0.6	15.1	10.3	0.0	-0.2	10.2	25.3	-27.4
35-39	-67.4	-7.2	1.5	-73.1	10.6	-0.1	-0.3	10.2	9.0	1.0	-0.2	9.8	20.0	-53.1
40-44	-37.1	-6.3	0.7	-42.8	4.7	-0.7	-0.2	3.8	6.3	0.6	0.4	7.4	11.2	-31.6
45-49	-22.8	-0.7	0.0	-23.5	6.1	0.3	0.1	6.5	4.9	0.4	0.6	5.9	12.4	-11.1
50-54	39.1	-2.1	-0.3	36.7	4.7	-0.7	-0.2	3.8	5.3	-1.0	-0.8	3.5	7.3	44.0
55-59	2.5	8.3	0.0	10.8	1.3	-1.9	-0.6	-1.2	3.1	0.2	0.7	4.0	2.8	13.6
60-64	-13.9	62.4	-5.6	42.9	0.5	0.3	0.1	0.9	0.8	-0.1	0.7	1.4	2.3	45.2
Total	-69.3	-3.2	-5.6	-78.1	59.5	-1.7	0.1	58.0	47.6	-0.1	0.7	48.2	106.2	28.1

		Non-Mig	rants			Migrants (EU	nationals)		Migr	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
	-					Fi	nland							
15-19	-11.4	13.4	-1.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
20-24	5.2	5.1	0.1	10.4	0.0	0.0	0.0	0.0	-0.9	-0.1	-0.3	-1.4	-1.4	9.0
25-29	-3.6	-3.8	0.0	-7.4	0.8	1.4	0.5	2.7	6.6	-1.9	-1.4	3.3	6.0	-1.4
30-34	4.6	-7.3	0.0	-2.7	3.1	1.5	1.0	5.6	3.7	-1.7	-0.6	1.4	7.0	4.3
35-39	23.8	-4.4	-0.4	19.0	1.9	2.3	0.6	4.8	6.0	-2.4	-2.4	1.2	6.0	25.0
40-44	-31.0	-1.3	0.1	-32.1	1.5	2.1	1.1	4.7	5.0	-2.0	-1.7	1.3	6.0	-26.1
45-49	-44.2	2.7	-0.3	-41.8	1.4	1.7	0.6	3.7	3.1	-1.7	-0.4	1.0	4.7	-37.1
50-54	-7.1	8.9	-0.2	1.6	1.0	2.4	0.0	3.5	2.7	-2.1	-1.4	-0.8	2.7	4.3
55-59	-18.3	15.7	-0.9	-3.5	0.0	1.8	0.4	2.1	7.0	-2.0	-5.5	-0.5	1.6	-1.9
60-64	-16.0	42.9	-3.9	23.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0
Total	-97.9	71.9	-7.2	-33.2	9.8	13.1	4.2	27.1	33.1	-13.9	-13.8	5.5	32.6	-0.6
					•		ustria		•				•	
15-19	-29.9	-23.8	3.8	-49.8	2.0	-0.8	-0.5	0.7	5.7	-3.3	-1.4	1.0	1.7	-48.1
20-24	-5.1	-3.2	-0.3	-8.6	5.9	1.3	0.6	7.8	13.4	-1.2	-0.5	11.6	19.4	10.8
25-29	2.1	6.9	0.0	9.0	15.8	2.7	1.6	20.1	13.9	-1.1	-0.7	12.1	32.2	41.2
30-34	19.7	8.0	0.2	27.9	27.2	1.6	1.0	29.8	11.3	-0.1	0.1	11.4	41.2	69.1
35-39	-70.3	12.2	-2.1	-60.1	32.3	-0.4	-0.3	31.6	19.6	-0.3	-0.1	19.2	50.8	-9.3
40-44	-145.2	6.8	-1.7	-140.1	16.7	1.6	0.8	19.1	15.9	-0.7	-0.2	15.0	34.1	-106.0
45-49	-50.5	14.5	-1.3	-37.3	15.2	1.8	1.1	18.1	11.9	0.4	0.3	12.7	30.8	-6.5
50-54	67.2	26.8	3.9	97.9	18.9	1.3	1.5	21.7	6.7	-0.3	-0.1	6.3	28.0	125.9
55-59	73.6	56.0	14.4	144.0	6.7	1.9	1.2	9.8	4.1	4.2	1.2	9.5	19.3	163.3
60-64	9.5	27.4	3.0	39.9	5.4	0.3	-3.0	2.7	0.5	2.0	0.5	3.0	5.7	45.6
Total	-128.7	131.6	19.9	22.8	146.1	11.3	4.0	161.4	103.0	-0.3	-0.9	101.8	263.2	286.0

		Non-Mig	rants			Migrants (EU	nationals)		Migr	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation		Total	•	Participation	•	Total	Total	Total
	.	•			•	Ge	ermany		•	•				
15-19	-25.0	-26.4	0.2	-51.3	11.5	0.9	0.4	12.9	3.5	-9.9	-0.4	-6.8	6.1	-45.2
20-24	-375.6	37.7	-6.5	-344.4	57.3	7.9	5.4	70.6	138.8	-41.2	-34.8	62.8	133.4	-211.0
25-29	75.7	61.6	0.5	137.8	151.3	3.4	4.6	159.3	175.1	-28.5	-25.1	121.5	280.8	418.6
30-34	258.6	42.7	2.6	303.9	137.5	4.0	2.4	144.0	108.8	-31.6	-12.6	64.7	208.7	512.6
35-39	-87.4	32.4	-0.9	-55.9	116.3	0.4	0.3	117.0	92.1	-29.3	-8.6	54.2	171.2	115.3
				-										-
40-44	-1926.7	19.8	-6.6	1913.5	123.1	1.5	0.7	125.3	112.9	-16.0	-5.3	91.6	216.9	1696.6
45-49	-807.2	89.2	-12.2	-730.1	107.6	4.6	2.8	115.0	114.5	-7.1	-3.5	103.9	218.9	-511.2
50-54	675.9	145.2	19.8	840.9	75.0	7.0	3.2	85.2	121.5	-5.5	-4.9	111.1	196.3	1037.2
55-59	642.6	254.8	41.4	938.8	53.3	8.5	3.0	64.9	33.1	0.7	-0.1	33.7	98.6	1037.4
60-64	387.5	661.2	141.0	1189.7	19.3	25.9	6.9	52.1	-8.0	27.0	-2.9	16.2	68.3	1258.0
Total	-1181.7	1318.2	179.4	315.9	852.2	64.1	29.9	946.3	892.2	-141.2	-98.1	652.9	1599.2	1915.1
					_		orway						-	
15-19	-3.4	-11.6	0.3	-14.7	1.5	0.0	0.0	1.6	1.1	-0.3	-0.4	0.4	2.0	-12.7
20-24	18.3	-9.6	-0.9	7.8	0.6	-0.7	0.0	-0.1	3.0	-0.3	-0.2	2.5	2.4	10.2
25-29	43.8	-3.7	-0.9	39.2	6.1	-0.2	-0.5	5.4	1.2	0.3	0.0	1.6	7.0	46.2
30-34	12.4	-8.1	-0.4	3.8	13.9	-1.0	-0.7	12.2	5.8	1.3	-0.2	6.9	19.1	22.9
35-39	-32.6	-6.6	0.7	-38.5	16.2	-0.1	0.0	16.1	6.7	-0.5	-0.4	5.8	21.9	-16.6
40-44	-21.2	-2.1	0.1	-23.2	11.5	0.1	0.0	11.6	1.3	0.6	0.3	2.2	13.8	-9.4
45-49	21.6	-0.2	0.0	21.4	8.2	-0.1	0.1	8.2	5.4	-0.5	-0.6	4.2	12.4	33.8
50-54	21.5	-7.4	-0.6	13.4	7.6	0.3	0.7	8.6	1.6	-0.1	-0.2	1.3	9.9	23.3
55-59	11.9	4.3	0.2	16.5	5.1	0.4	0.6	6.1	1.7	-0.1	-0.5	1.1	7.2	23.7
60-64	1.7	14.8	0.2	16.7	2.8	0.3	-0.7	2.4	0.9	-0.1	-0.1	0.7	3.1	19.8
Total	74.0	-30.3	-1.3	42.4	73.5	-0.8	-0.6	72.1	28.7	0.2	-2.2	26.7	98.8	141.2

		Non-Mig	rants			Migrants (EU	nationals)		Migr	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
						Netł	nerlands			-				
15-19	10.6	16.3	0.3	27.1	3.4	-0.2	-0.6	2.6	0.6	1.9	0.1	2.6	5.2	32.3
20-24	36.3	-33.4	-1.6	1.3	1.3	1.0	0.0	2.3	1.9	0.7	0.1	2.7	5.0	6.3
25-29	82.9	-23.0	-2.3	57.5	12.8	-0.5	-0.4	11.9	-5.4	-1.2	0.2	-6.3	5.6	63.1
30-34	10.4	-12.1	-0.1	-1.8	12.0	-0.3	-0.2	11.5	4.6	-3.7	-0.5	0.3	11.8	10.0
35-39	-140.8	-5.6	0.8	-145.6	14.7	-1.5	-0.7	12.5	3.3	-1.7	-0.1	1.5	14.0	-131.6
40-44	-237.9	-21.5	4.7	-254.8	14.4	-0.5	-0.4	13.5	5.2	-0.1	0.0	5.1	18.6	-236.2
45-49	-35.8	-3.6	0.4	-39.0	10.0	-0.1	0.0	9.9	4.3	-0.3	-0.2	3.7	13.6	-25.4
50-54	53.1	12.1	0.6	65.7	9.4	1.5	1.3	12.1	5.2	-0.1	-0.3	4.8	16.9	82.6
55-59	71.2	55.9	5.1	132.2	1.6	3.4	0.7	5.6	3.1	-0.3	-0.1	2.7	8.3	140.5
60-64	-8.5	224.0	-4.6	211.0	1.8	0.8	-0.7	1.9	0.0	1.4	0.4	1.7	3.6	214.6
Total	-158.7	209.0	3.3	53.6	81.4	3.5	-1.1	83.8	22.7	-3.5	-0.4	18.8	102.6	156.2
					-		weden		_					
15-19	-32.4	15.1	-2.6	-20.0	1.4	-0.8	-0.5	0.1	0.7	1.9	1.1	3.7	3.8	-16.2
20-24	-10.6	1.9	-0.1	-8.8	3.1	-2.5	-1.7	-1.1	12.7	4.4	2.3	19.4	18.3	9.5
25-29	101.5	8.4	1.9	111.8	2.9	-1.9	-0.2	0.8	19.4	2.2	1.6	23.2	24.0	135.8
30-34	26.2	3.7	0.2	30.1	7.0	-4.2	-2.5	0.4	25.3	6.3	5.2	36.8	37.2	67.3
35-39	-41.7	9.5	-0.7	-32.9	4.5	-4.9	-0.6	-1.0	18.3	5.0	3.9	27.2	26.2	-6.7
40-44	-27.8	9.1	-0.4	-19.2	1.0	-1.7	0.0	-0.7	11.8	2.1	1.8	15.7	15.0	-4.2
45-49	13.0	13.0	0.3	26.4	-0.3	-6.6	0.2	-6.8	3.3	8.5	4.5	16.3	9.5	35.9
50-54	76.6	17.0	2.6	96.2	0.8	-5.2	0.1	-4.3	0.9	8.3	1.5	10.7	6.4	102.6
55-59	6.8	21.1	0.3	28.2	-4.0	1.9	-0.3	-2.4	0.0	3.1	2.2	5.3	2.9	31.1
60-64	-34.9	39.4	-3.6	0.9	-2.8	1.1	-0.3	-1.9	1.3	0.7	0.2	2.2	0.3	1.2
Total	76.6	138.2	-2.1	212.7	13.6	-24.8	-5.7	-16.9	93.7	42.6	24.2	160.5	143.6	356.3

		Non-Mig	rants			Migrants (EU	nationals)		Migr	ants (Third cou	ntry nationals)		Migrants	All
	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Population	Participation	Interactions	Total	Total	Total
	-	-				Be	elgium			-				
15-19	-2.9	-7.1	0.4	-9.7	0.0	0.0	0.0	0.0	-0.8	2.3	-1.5	0.0	0.0	-9.7
20-24	-5.4	-50.1	0.8	-54.7	3.5	-2.1	-0.4	1.0	1.1	-2.5	-0.2	-1.7	-0.7	-55.4
25-29	16.8	-26.0	-0.8	-10.0	18.0	0.7	0.4	19.1	-1.3	-3.2	0.1	-4.4	14.7	4.7
30-34	-18.9	-15.0	0.5	-33.3	13.0	-0.6	-0.2	12.2	10.4	-0.9	-0.8	8.7	20.9	-12.4
35-39	-25.4	-9.5	0.5	-34.4	10.2	0.3	0.1	10.6	9.1	-2.3	-1.5	5.3	15.9	-18.5
40-44	-68.7	-7.0	0.8	-74.9	4.6	0.6	0.1	5.3	8.1	0.5	0.3	9.0	14.3	-60.6
45-49	-53.9	5.3	-0.4	-49.1	8.2	1.2	0.3	9.6	7.0	-0.8	-0.5	5.7	15.3	-33.8
50-54	12.4	11.0	0.2	23.7	11.1	1.8	0.6	13.5	2.9	1.3	0.7	4.9	18.4	42.1
55-59	37.7	96.5	9.3	143.5	4.3	7.4	1.7	13.4	1.1	0.4	0.1	1.6	15.0	158.5
60-64	7.3	49.5	3.0	59.8	0.2	12.4	2.1	14.6	3.9	-9.1	-3.7	-8.9	5.7	65.5
Total	-101.0	47.7	14.3	-39.1	73.1	21.6	4.6	99.3	41.5	-14.3	-7.0	20.2	119.5	80.4
							Spain							
15-19	13.3	-111.3	-4.8	-102.8	-0.9	-2.6	0.1	-3.4	-18.3	-10.6	3.5	-25.4	-28.8	-131.6
20-24	-149.8	-189.2	20.7	-318.3	-21.2	-13.5	3.7	-31.0	-68.5	-29.3	9.4	-88.3	-119.3	-437.6
25-29	-466.6	-36.8	7.6	-495.8	-50.7	-3.3	1.0	-52.9	-186.4	-42.1	18.7	-209.9	-262.8	-758.6
30-34	-746.9	16.1	-3.8	-734.6	-65.3	-5.2	2.2	-68.4	-225.0	-51.2	19.6	-256.6	-325.0	-1059.6
35-39	-247.2	95.2	-7.3	-159.3	7.5	-5.8	-1.1	0.6	-102.7	-12.7	1.5	-113.8	-113.2	-272.5
40-44	185.0	130.7	8.1	323.8	0.4	7.0	0.6	8.0	-43.9	-3.7	0.6	-47.0	-39.0	284.8
45-49	157.7	95.2	5.2	258.0	36.9	-2.4	-0.9	33.6	7.1	-4.0	-0.2	2.9	36.5	294.5
50-54	328.4	137.6	21.6	487.6	6.0	9.8	0.7	16.5	11.1	-8.0	-0.3	2.8	19.3	506.9
55-59	337.7	210.7	45.1	593.6	10.6	9.5	2.7	22.8	9.4	-2.2	-0.5	6.6	29.4	623.0
60-64	76.6	175.1	15.8	267.5	1.5	15.6	2.1	19.3	11.0	0.4	0.4	11.8	31.1	298.6
Total	-511.8	523.2	108.3	119.7	-75.2	9.1	11.2	-54.9	-606.3	-163.4	52.8	-716.9	-771.8	-652.1