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KING

Knowledge for INtegration Governance

The Contribution of Migration to European Demographic Changes

Gian Carlo Blangiardo

KING Project – Demography Unit
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KING - Knowledge for INtegration Governance

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The KING project’s objective is to elaborate a report on the **state of play** of migrant integration in Europe through an interdisciplinary approach and to provide decision- and policy-makers with **evidence-based recommendations** on the design of migrant integration-related policies and on the way they should be articulated between different policy-making levels of governance.

Migrant integration is a truly multi-faceted process. The contribution of the insights offered by different disciplines is thus essential in order better to grasp the various aspects of the presence of migrants in European societies. This is why **multidisciplinarity** is at the core of the KING research project, whose Advisory Board comprises experts of seven different disciplines:

EU Policy – Yves Pascouau

Political Science - Alberto Martinelli

Public Administration – Walter Kindermann

Social Science – Rinus Penninx

Applied Social Studies – Jenny Phillimore

Economics – Martin Kahanec & Alessandra Venturini

Demography – Gian Carlo Blangiardo

The project consists in the conduct of preliminary **Desk Research** to be followed by an empirical in-depth analysis of specific key topics identified within the desk research. To carry out these two tasks, each Advisory Board member chose and coordinated a team of three to four researchers, who have been assigned a range of topics to cover.

In the present Overview Paper Gian Carlo Blangiardo summarises and comments the papers written by the researchers of the “Demography” team he directed:

EU Policy	ADVISORY BOARD MEMBER	DESK RESEARCH PAPERS
Political Science	GIAN CARLO BLANGIARDO Overview Paper	<ul style="list-style-type: none"> • “The contribution of migration to the demography of Europe between 1991 and 2011: an overview” by Maria Rita Testa • “The expected contribution of migrations to the future European economic and socio-demographic system” by Pawel Kaczmarczyk • “Laboratories of integration at local level” by Mariachiara Di Cesare
Public Administration		
Social Science		
Applied Social Studies		
Economics		
Demography		

The project is coordinated by the **ISMU Foundation**, based in Milan (Italy).

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The Contribution of Migration to European demographic changes

1. THE GENERAL FRAMEWORK

As well known the oil crisis of the '70s gave origin to a general transformation of the productive structures of the western countries which marked the end of the expansive phase of European migration for work. The objective of the European migration policies shifted from managing the flow of labor to the control of arrivals, with the goal of zero immigration. They stood still open immigration policies of North America and of Oceania, still available to see the phenomenon of migration as a factor of economic and demographic growth, and began to develop the new poles of attraction of the Arab oil producers.

Overall, recent decades have seen a steady reduction of the differences between the most developed countries with regard to migration. The traditional European destination countries finally realized that the migrations of the past, sometimes seen as cyclical, had become a final settlement. At the same time, while they started to promote forms of temporary migration, many countries that still in the early '70s had negative net migration, become the new destination, sometimes privileged, of the migration flows of the XXI millennium.

Demo-economic scenarios

1- Economic and demographic disparities will shape the mobility of labour and skills during the 21st century.

Many reach countries will confront a stagnation or decline in their native workforces, and the same will happen in some emerging economies (i.e. China). In the meantime, working age populations will continue to grow in the slowest emerging economies and in most of the low income countries.

2- In many highly developed countries fiscal plans and social policies often are based on the assumptions of stability or population growth; so that many of them are unprepared to meet the demographic realities of the future.

3- The international migrations and internal mobility may be the way of addressing the growing demographic and persisting economic disparities.

4- Migrants manage to improve their income, their access to education or their personal security. However they also risk of being exploited and trafficked; or experiencing discrimination through labour laws, employment practices and social security system. Therefore receiving countries will have to invest more in developing smart migration, integration and non-discrimination policies

5- We must remind that migrations can't mitigate all of the labour market and demographic challenges and economic disparities of the coming years. Low income countries must work to create jobs at home; aging and declining countries have to increase their efforts to raise the retirement age as well as the labour force participation of women and marginalized groups.

2. THE CONTRIBUTION OF MIGRATION TO THE EUROPEAN ECONOMIC AND SOCIO-DEMOGRAPHIC SYSTEM

Basic questions

To what extent immigrant populations contributed, into the destination countries:

A) to support the supply of labour to EU members?

B) to mitigate the ageing trend?

C) to make available the human capital to build their future ?

D) what is the budget in terms of human capital related to international migrations within the eu members?

E) who gain and who losses into the European population mobility?

2.1 Looking at the past: the contribution of migration to the demography of Europe

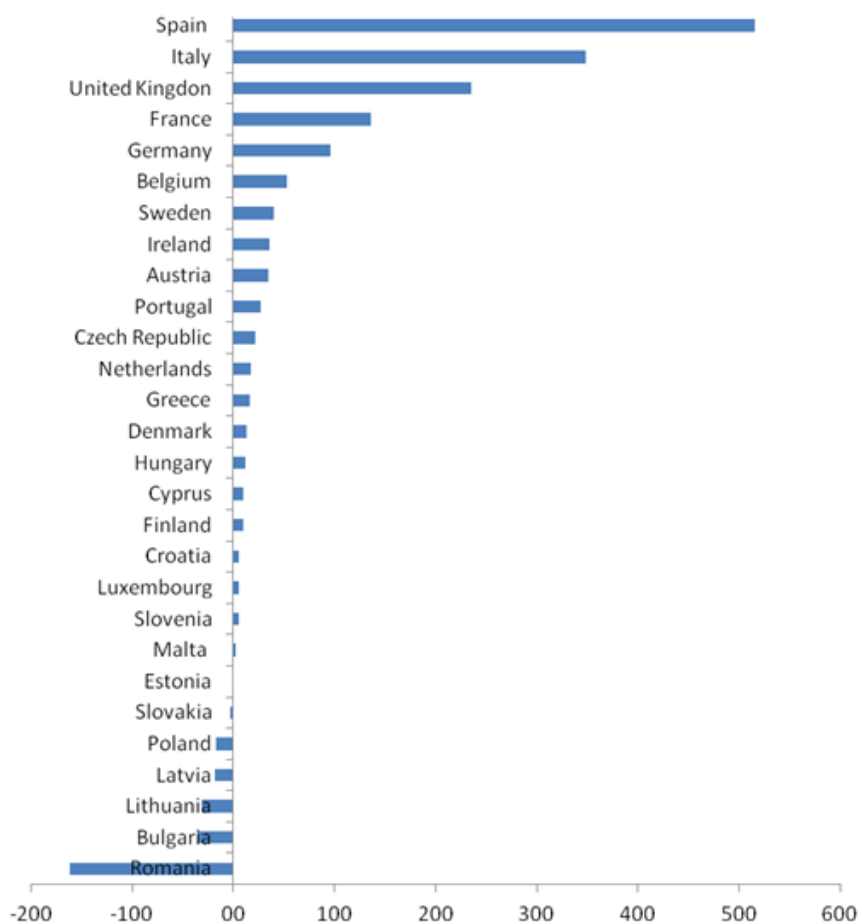
The annual contribution of migration to the EU-28 population between 2001 and 2011¹ was equal, as a whole and on average, to 1,373 thousand people². Three different clusters of countries can be detected according to the size of additional (or missing) population recorded in the period 2001-2011, mainly due to the migration flows.

A first cluster encompasses the five EU countries with the largest positive net balance, around 100 thousand people or above, namely: Spain, Italy, the United Kingdom, France, and Germany. A second group includes countries(16 overall) in which net contribution in 2001-2011, although positive was not as big as in the previous group, between one thousand and 50 thousand people, namely: Belgium, Sweden, Ireland, Austria, Portugal, the Netherlands, the Czech Republic, Greece, Denmark, Hungary, Cyprus, Finland, Croatia, Luxembourg, Slovenia and Malta. A third cluster covers countries with a negative balance in the decade 2001-2011 which are all belonging to the Eastern Europe, namely: Romania, Bulgaria, Lithuania, Latvia, Poland, Slovakia, and Estonia (Figure 1). Within this latter group Romania was the country with the biggest negative flows (minus 161 thousand people) while Estonia was the country with the smallest negative net migration (minus one thousand people).

¹ Actually by comparing resident populations at the beginning and the end of different time intervals, we get the total amount of resident people, not necessarily migrants, added or lost in the interval considered. The assumption that these inter-temporal changes in the population size, either positive or negative, are mainly due to past migrations is a reasonable one.

² The migration contribution has been computed firstly for each country and year and - within each country and year - for each age group and both genders. Afterwards the average of migration contribution by age and sex obtained for each single year has been used to compute the average net migration over the whole period.

Figure 1 - Average net contribution (thousands of people added/lost annually) in the 28 EU countries. Years 2001-2011

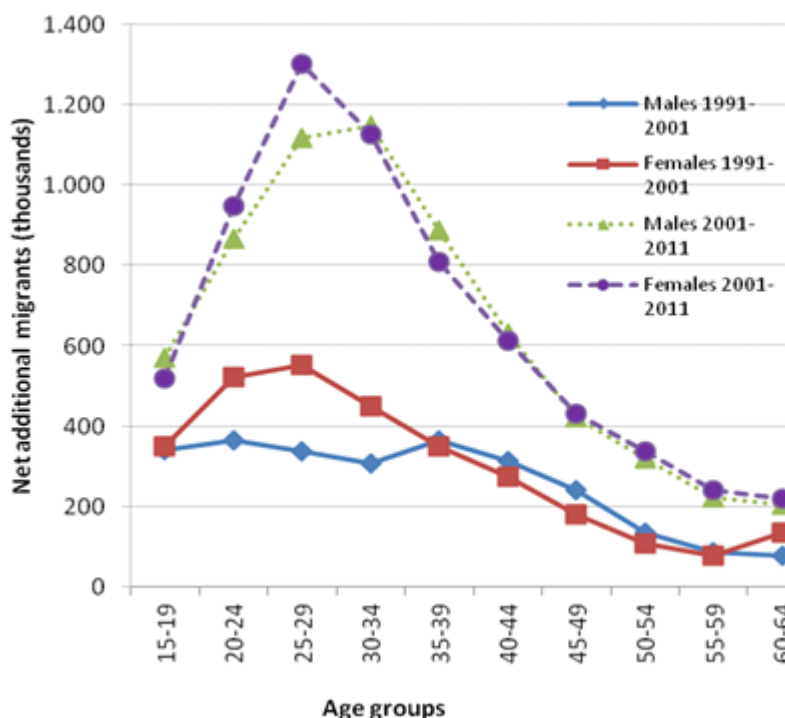


2.2 Contribution of migration to the EU working age population

International migration positively influences, above all, the working age population of receiving countries because migrants move when they are in their working ages (15-64). Most of them, indeed, migrate because they seek for a job abroad. To examine the net contribution (mainly due to migrations) to the European potential workforce in the twenty years between 1991 and 2011, a comparison between the actual (observed) EU population and the hypothetical EU population obtained under the assumptions of zero migration and constant survival rates over time has been made. More specifically, in the decade 1991-2001, the net contribution³ to the EU working-age population (either positive or negative) is computed by starting with the resident population at the initial observation year, i.e., 1991, and comparing two different populations, theoretical and actual population, at the end of the period, i.e., 2001. The theoretical resident population is derived by applying the survival rates (valid in the 90's in every country considered) to the 1991 population (which implies the assumption of zero migration in the period), while the actual resident population is just the resident population actually recorded in 2001. The same procedure has been repeated for the computation of the same contribution to the working-age population in the subsequent decade, 2001-2011. The results are presented in Figure 2 for the EU as a whole and in Figure 1 for each EU Member State.

³ See footnote 1 above.

Figure 2 - Additional contribution to the EU 28 working-age population - 1991-2011 (thousands of people acquired throughout the decade). Age profiles.



The contribution to the EU 28 working age population (more than) doubled over the period 1991-2011. Overall, there were almost 13 million people added to the EU 28 working-age population (15-64) in the decade 2001-2011 and 5.6 million in the previous decade 1991-2001. There were considerable differences by age classes. A peak of additional people in the age group 25-29 can be observed for the EU-28 as a whole (Figure 2). At these ages there were around 1,304 thousand women and 1,120 thousand men added to the EU population in the whole decade 2001-2011 (there were slightly a bit more for the male population in the subsequent age group 30-34, i.e., 1,150 thousand people). In the previous ten years the number of EU 28 additional people in the same ages (25-29) was considerably smaller: around 554 thousand women and 337 thousand men; moreover in this former period, a second peak of migrants is visible in correspondence of the age group 35-39 for males, which is more pronounced than that observed at ages 25-29 (plus 364 thousand men). This result seems to suggest that the male workforce added in the 1991-2001 was not only of a smaller size but also had a different age structure, i.e., more mature than that arrived in the most recent years: the average age of the males that were added to the whole of the EU 28 is slightly higher in the first than in the second decade (34.6 vs. 34.4).

Anyway at each working-age group, the net contribution to the EU workforce was of a bigger magnitude in the most recent decade, 2001-2011, than in the previous one, 1991-2001. The curves of the migrants in 2001-2011, both the female and the male ones, are always above those of the corresponding values recorded in 1991-2001. The differences are striking at ages 25-29 after which the curves of the additional females and males in 2001-2011 decline steeply and tend to converge with those of 1991-2001. There are also some gender differences: additional people in working age were more often females than males in the central ages 20 to 34 years in 1991-2001 and in the ages 20 to 29 in 2001-2011, as a consequence, the age profile of female migrants is steeper than that of male migrants in 1991-2001 as well as in 2001-2011.

The contribution of migrants to the EU working-age differ by the EU country area considered (Figures 1 and 2) and, more specifically, depends on whether only the original 15 EU countries are examined or also the 13

additional EU Member States, i.e., EU-28. The largest amounts of additional people in the working-age are recorded in the EU-15 which encompasses several old traditional immigrant countries, such as: France, the United Kingdom and Germany. By contrast, in the EU-28 the migration contribution is the smallest one because there are also emigrating countries, like the Eastern European countries, included in it.

In this regard, while the data confirm that the 13 EU members after enlargement show, as a whole, a negative balance of 1.5 million of losses in each of the two decades under consideration, it should be stressed, however, that has changed in the two decades to the composition kind of such loss. While in 1991-2001 more than half of the negative balance was determined by the male population, in 2001-2011 are the females which are responsible for 90% of the loss.

There are also remarkable cross-country differences in the contribution of migration to the EU workforce, as shown in Figure 3, in which countries are ordered according to the size of migration contribution recorded in 2001-2011. This ranking largely corresponds to that observed in the previous decade, 1991-2001, but it does not completely match with it (Figure 1). The benefits coming from the international migration to the EU labour force were strongly concentrated in a few countries: Spain, Italy, the United Kingdom, France and Germany. Between 2001 and 2011 Spain benefited from more the 4 million additional people aged 15-64 Italy received more 3 million and the United Kingdom almost 2 million, while France and Germany registered around one million units. In the previous decade, Germany was clearly dominating as immigration country benefiting from additional working-age population, covering almost 50% of the whole contribution to the EU working-age population, followed by Spain (plus 1100 thousand people), the United Kingdom (plus around 500 thousand people), and Italy and France (plus around 300 thousand people). In most of the other EU countries the contribution to the working-age population was still positive but of a much smaller magnitude. With the exception of Belgium in 2001-2011 (almost 500 thousand additional units) and Greece in 1991-2001 (640 thousand) in all other cases the figures were between 300 thousand and a few thousand people aged between 15 and 64. Poland experienced a reversal in the sign of additional working age immigrant population during the observation period: there was a loss of 480 thousand people in the decade 1991-2001 and positive contribution (+115 thousand) in the subsequent decade 2001-2011. Many of the Eastern European countries recorded a negative balance in both the past decades. This result is reasonable given that the free circulation of people across the European countries and within the EU encouraged many people in the Eastern Europe countries to move toward the Western European countries where the labour market was more attractive and the conditions and salary levels more favorable than in the East.

Eventually looking at the incidence of contribution (or loss) on the total population in working age for each of the 28 EU countries we can find some groups that have similar dynamics (Table 1).

First we point out Cyprus and Luxembourg, whose working age population has been increased by 10-15% both decades. At a lower level we find Greece (5-10%) and, only in 2001-2011, Germany. Spain and Ireland have a substantial contribution (10-15%) but only in the second decade, together with a group of four countries (Italy, Belgium, Austria and Sweden) with a lower performance (5-10%). The set of EU Members with a moderate, but anyway positive, contribution can be completed by further nine countries: United Kingdom, Malta, Czech Republic, Denmark, Portugal, France, Hungary and Netherlands. We can then consider three countries that lost working age population in the '90s, someone heavily (like Estonia), but on the contrary that acquired working age population in last decade. They are, apart from Estonia, Slovenia, Poland. Finally there are five countries that lost labour force in both decades: Slovakia and Romania (less than 5%), Croatia and Bulgaria (more substantially) and, above all, Latvia and Lithuania. The latter suffer a loss of 10-15% of their working age population both in 1991-2001 and in 2001-2011.

Figure 3 - Contribution of migration to the working-age population (ages 15-64) (thousands of people added/lost throughout the decade). EU-28 countries

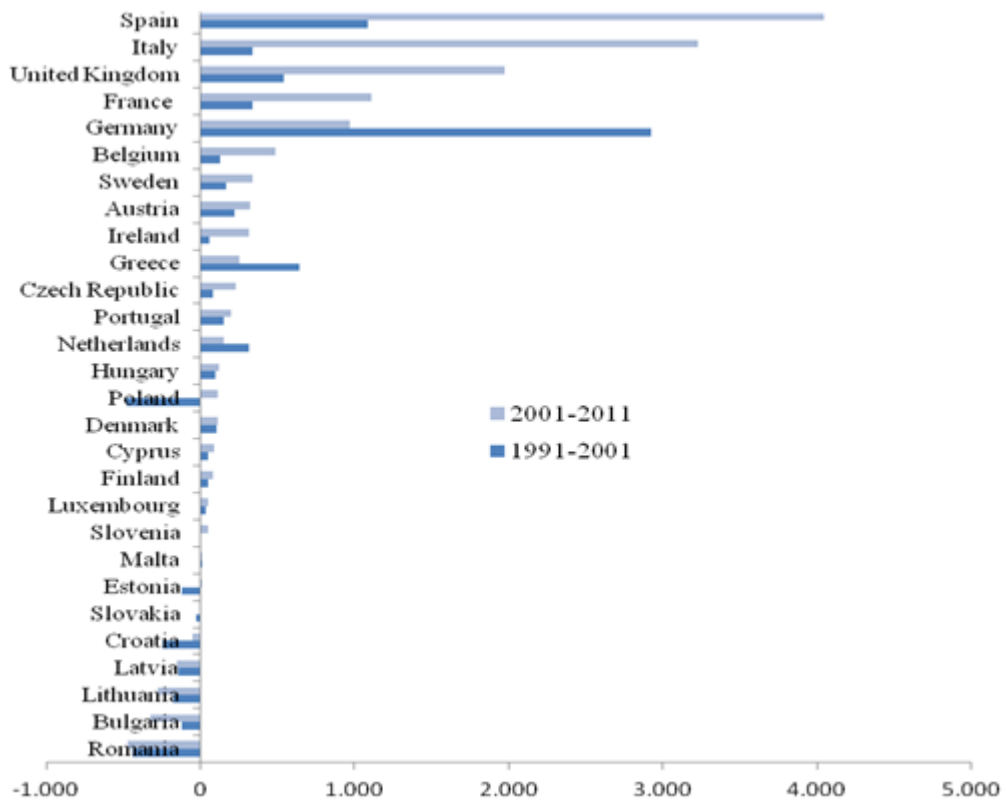


Table 1 – Cluster of EU-28 countries according to the rates of additional/lost population 15-64 throughout the whole decades 1991-2001 and 2001-2011 on the total of the corresponding residents on 2001 and 2011.

		2001-2011					
		from 10% to 15%	from 5% to 10%	from 0% to 5%	from 0% to -5%	from -5% to -10%	from -10% to -15%
1991-2001	from 10% to 15%	Cyprus Luxembourg					
	from 5% to 10%		Greece	Germany			
	from 0% to 5%	Spain Ireland	Italy Belgium Austria Sweden	United Kingdom Malta Czech Republic Denmark Portugal France Finland Hungary Netherlands			
	from -5% to 0%			Slovenia Poland	Slovakia Romania	Bulgaria	
from -10% to -5%				Croatia			
from -10% to -15%			Estonia			Latvia Lithuania	

Table 2 - Contribution to the working-age population (ages 15-64). (thousands of people added/lost throughout the decade). EU-28 countries.

Countries	Years 1991-2001			Years 2001-2011		
	Men	Women	All	Men	Women	Both
Austria	106.8	113.9	220.8	150.4	172.1	322.5
Belgium	58.2	72.3	130.5	240.5	241.8	482.3
Bulgaria	-67.9	-52.0	-119.8	-119.9	-200.4	-320.3
Croatia	-134.8	-109.5	-244.3	-24.2	-25.5	-49.7
Cyprus	17.9	28.8	46.7	39.9	51.2	91.1
Czech Republic	45.1	35.1	80.2	142.8	87.3	230.1
Denmark	51.6	55.2	106.8	48.7	63.2	111.9
Estonia	-69.0	-55.2	-124.1	3.6	1.7	5.2
Finland	28.9	19.0	47.9	46.0	36.0	82.1
France	77.7	256.8	334.5	461.0	646.8	1107.8
Germany	1528.6	1392.5	2921.1	376.0	592.2	968.2
Greece	356.1	284.4	640.5	131.7	117.1	248.8
Hungary	37.0	61.3	98.4	66.7	52.0	118.7
Ireland	29.6	29.1	58.7	145.9	169.1	315.1
Italy	112.2	229.3	341.5	1533.6	1693.7	3227.2
Latvia	-80.7	-63.6	-144.3	-74.2	-78.1	-152.3
Lithuania	-97.6	-80.7	-178.3	-137.5	-143.4	-280.9
Luxembourg	19.3	18.4	37.6	26.1	23.8	49.9
Malta	5.5	5.5	11.0	6.4	5.5	11.9
Netherlands	149.4	166.0	315.4	36.5	113.1	149.6
Poland	-251.6	-229.0	-480.7	106.7	8.1	114.8
Portugal	80.7	71.2	151.8	51.5	145.2	196.7
Romania	-243.9	-193.7	-437.5	-211.3	-260.1	-471.3
Slovakia	-18.7	-7.8	-26.5	9.0	-14.9	-5.9
Slovenia	4.0	-12.0	-7.9	34.6	12.1	46.7
Spain	588.4	501.0	1089.5	2082.3	1962.3	4044.6
Sweden	84.2	85.6	169.8	171.4	168.2	339.6
UK	156.4	381.0	537.4	1052.7	919.2	1971.8
EU-28	2573	3003	5576	6397	6559	12956
Of which EU-15	3428	3676	7104	6554	7964	13618
EU-13	-855	-673	-1528	-157	-1405	-1562

Source: Author's elaboration based on Eurostat data

Table 3 - Contribution to the working-age population (ages 15-64). % of population 15-64 added/lost throughout the whole decade on the total of the corresponding residents on 2001 and 2011. EU 28 countries

Countries	Years 1991-2001			Years 2001-2011		
	Men	Women	All	Men	Women	Both
Austria	3.9	4.2	4.1	5.3	6.1	5.7
Belgium	1.7	2.2	1.9	6.6	6.7	6.7
Bulgaria	-2.5	-1.9	-2.2	-4.7	-8.0	-6.4
Croatia	-9.0	-7.2	-8.1	-1.7	-1.7	-1.7
Cyprus	7.9	12.2	10.1	13.9	16.8	15.4
Czech Republic	1.3	1.0	1.1	3.9	2.4	3.1
Denmark	2.9	3.1	3.0	2.7	3.5	3.1
Estonia	-15.8	-11.5	-13.5	0.8	0.4	0.6
Finland	1.7	1.1	1.4	2.6	2.1	2.3
France	0.4	1.3	0.9	2.3	3.1	2.7
Germany	5.4	5.1	5.2	1.4	2.2	1.8
Greece	9.5	7.7	8.6	3.5	3.2	3.3
Hungary	1.1	1.7	1.4	2.0	1.5	1.7
Ireland	2.3	2.3	2.3	9.5	11.0	10.3
Italy	0.6	1.2	0.9	7.7	8.5	8.1
Latvia	-10.6	-7.7	-9.0	-11.0	-10.8	-10.9
Lithuania	-8.8	-6.7	-7.7	-13.9	-13.5	-13.7
Luxembourg	12.9	12.6	12.8	14.7	13.8	14.2
Malta	4.1	4.2	4.2	4.4	3.9	4.1
Netherlands	2.7	3.1	2.9	0.7	2.0	1.3
Poland	-1.9	-1.7	-1.8	0.8	0.1	0.4
Portugal	2.4	2.0	2.2	1.5	4.1	2.8
Romania	-3.2	-2.5	-2.8	-2.8	-3.5	-3.1
Slovakia	-1.0	-0.4	-0.7	0.5	-0.8	-0.2
Slovenia	0.6	-1.7	-0.6	4.7	1.8	3.3
Spain	4.2	3.6	3.9	13.2	12.6	12.9
Sweden	2.9	3.0	3.0	5.5	5.6	5.6
UK	0.8	2.0	1.4	5.1	4.5	4.8
EU-28	1.6	1.8	1.7	3.8	3.9	3.8
Of which EU-15	2.7	2.9	2.7	5.0	5.4	5.2
EU-13	-2.3	-1.8	-2.0	-0.4	-1.3	-0.9

Source: Author's elaboration based on Eurostat data

2.3 Human capital and migrations: which contribution to the EU demographic asset?

Migration can influence not only the population size but also its structure. It is common opinion that the changes in population age structure due to migration are beneficial to contrast the EU population ageing process and to mitigate its socioeconomic consequences.

No doubt that this potential contribution of migration is extremely important as a support to slow, if unable to reverse, the growing aging, but can we consider it like a definitive solution? The answer can be sometimes yes, but only if the contribution of migration flows is evaluated according to the traditional logic of "living in the present", i.e. opposing the actual "the number" of the elderly (the burden) to the "number" of the working age population (the support) in a certain instant.

If, however, we introduce an approach taking into account the contribution of flows from a perspective of future permanence (final) in the host society, the contribution of immigration as "the antidote" to aging is less clear.

Tables 4 and 5 show, for each EU-28 country, the ageing rates (percentage of over 65) and the old age dependency ratios (people over 65 Vs. people aged 20-64) both through the age distribution of residents (average 2001-2011) and through the similar distribution of the population acquired (or lost) in the same decade. In EU countries with a positive average net migration in 2001-2011 data point out that such positive balance contributes to slow their ageing (with the sole exception of the Portugal). Indeed both indicators for the acquired population (column B) are lower than for the residents as a whole (column A): a net contribution of non-elderly population higher than the average value between the residents in the host society is therefore a factor in slowing down the process of aging⁴.

Vice versa, for EU countries with negative net migration in 2001-2011 aging manifests itself through a loss of youth population (by a proportion higher than the average value between the residents) or through a positive net balance for people over 65.

Short-term changes in ageing rates and in old-age dependency ratios can be expected to be downwards when immigration prevails, and upwards when emigration prevails, as the majority of migrants are aged 20-35 years. But over a longer period changes will depend on the cumulated effect of immigrants, as some of them will get older into the destination countries.

With the aim to assess the future impact of migration on population ageing and, more generally, on human capital of sending/receiving countries, life-years acquired or lost by any given EU country population have been computed by applying the life expectancy - for each age and gender - to the net migration population distribution by age and sex corresponding to the average annual contribution 2001-2011. Life-years are the years that migrants are expected to live in the destination country under the hypothetical assumption of keeping their permanent residence in the immigration country.

Following this methodological approach⁵, we have to correct the assessment regarding the effect of rejuvenation of immigration (and ageing effect of emigration), or limit it to the short term.

⁴ For some countries it is the contribution of old people itself that show a negative balance.

⁵ On the basis of the potential demography the concept of demographic asset, DA - and the complementary one of the demographic gross domestic product, Δ GDP, (Hersch 1942, 1944, 1948; Blangiardo 2012; Blangiardo e Rimoldi 2013) - can be computed for any given population at any given time. The DA is the number of additional potential years of life that the population can spend in its future. It can grow by the contribution of the new births (and improvements in survival conditions), net of those years consumed (by living) or lost (by dying), plus or minus the number of potential years of life received from or given to other countries population (by migrations). For any given time and country, the Δ GDP can be considered as the gross additive/positive contribution to the DA through births and net migrations. Hence, the DA and the Δ GDP can be seen as the stock and the flow measures, respectively, of the time/future years of a certain population.

Table 4 - Ageing rate (*) according to: A) age distribution of residents; B) age distribution of people acquired / lost in 2001-2011; C) share in retirement of the future life years that will be spent by people acquired / lost in 2001-2011

Countries	A - Actual values (average 2001-2011)	B - Additional/lost people values	C - Additional/lost life-years values
EU Countries with a positive average net migration 2001-2011			
Austria	16.5	[--]	29.7
Belgium	17.1	[--]	30.5
Croatia	16.8	[--]	26.5
Cyprus	12.1	4.7	33.8
Czech Republic	14.4	[--]	28.2
Denmark	15.4	0.4	27.7
Finland	16.1	3.9	31.5
France	16.5	1.3	36.6
Germany	19.1	[--]	26.0
Greece	18.2	5.2	24.2
Hungary	16.1	[--]	29.3
Ireland	11.1	[--]	31.4
Italy	19.6	4.7	35.3
Luxembourg	14.0	[--]	29.8
Malta	13.8	14.1	40.4
Netherlands	14.4	[--]	24.4
Portugal	17.4	27.6	55.9
Slovenia	15.6	1.9	28.8
Spain	16.8	4.6	34.9
Sweden	17.5	0.5	30.8
United Kingdom	16.1	[--]	29.2
EU Countries with a negative average net migration 2001-2011			
Bulgaria	17.4	[+]	22.1
Estonia	16.6	[+]	25.2
Latvia	16.8	7.0	27.0
Lithuania	16.0	[+]	24.0
Poland	13.1	4.0	32.3
Romania	13.7	[+]	23.5
Slovakia	11.9	7.7	34.5
EU-28	16.7	2.4	34.3
Of which EU-15	17.4	2.0	32.9
EU-13	14.3	[+]	22.6

(*) People aged 65 and more on total (per 100)

[--] The net balance of people over65 aged is negative (outflow is higher than inflow)

[+] The net balance of people over65 aged is positive (inflow is higher than outflow)

Table 5 - Old age dependency ratios (*) according to: A) age distribution of residents; B) age distribution of people acquired / lost in 2001-2011; C) share in retirement of the future life years that will be spent by people acquired / lost in 2001-2011

Countries	A - Actual values (average 2001-2011)	B - Additional/lost people values	C - Additional/lost life-years values
EU Countries with a positive average net migration 2001-2011			
Austria	26.7	[--]	45.7
Belgium	28.6	[--]	47.4
Croatia	27.6	[--]	39.8
Cyprus	20.0	6.6	54.3
Czech Republic	22.4	[--]	41.7
Denmark	25.6	6.5	41.5
Finland	26.7	5.7	50.4
France	28.2	2.5	63.6
Germany	31.3	[--]	37.3
Greece	29.5	8.8	32.6
Hungary	26.0	[--]	44.2
Ireland	18.2	[--]	48.4
Italy	32.0	6.4	57.9
Luxembourg	22.7	[--]	44.8
Malta	22.2	19.6	71.3
Netherlands	23.4	[--]	34.2
Portugal	28.5	40.4	115.6
Slovenia	24.3	2.6	43.7
Spain	26.5	6.3	57.0
Sweden	29.8	0.7	48.7
United Kingdom	27.1	[--]	43.1
EU Countries with a negative average net migration 2001-2011			
Bulgaria	28.0	[+]	32,0
Estonia	27.3	[+]	34.0
Latvia	27.8	9.5	39.0
Lithuania	26.9	[+]	34.4
Poland	21.0	5.1	47.8
Romania	22.0	[+]	32.7
Slovakia	18.7	7.7	48.6
EU-28	27.4	3.4	55.5
Of which EU-15	28.7	2.8	52.0
EU-13	22.9	[+]	31.3

(*) People aged 65 and more on people aged 20-64 (per 100)

[--] The net balance of people over65 aged is negative (outflow is higher than inflow)

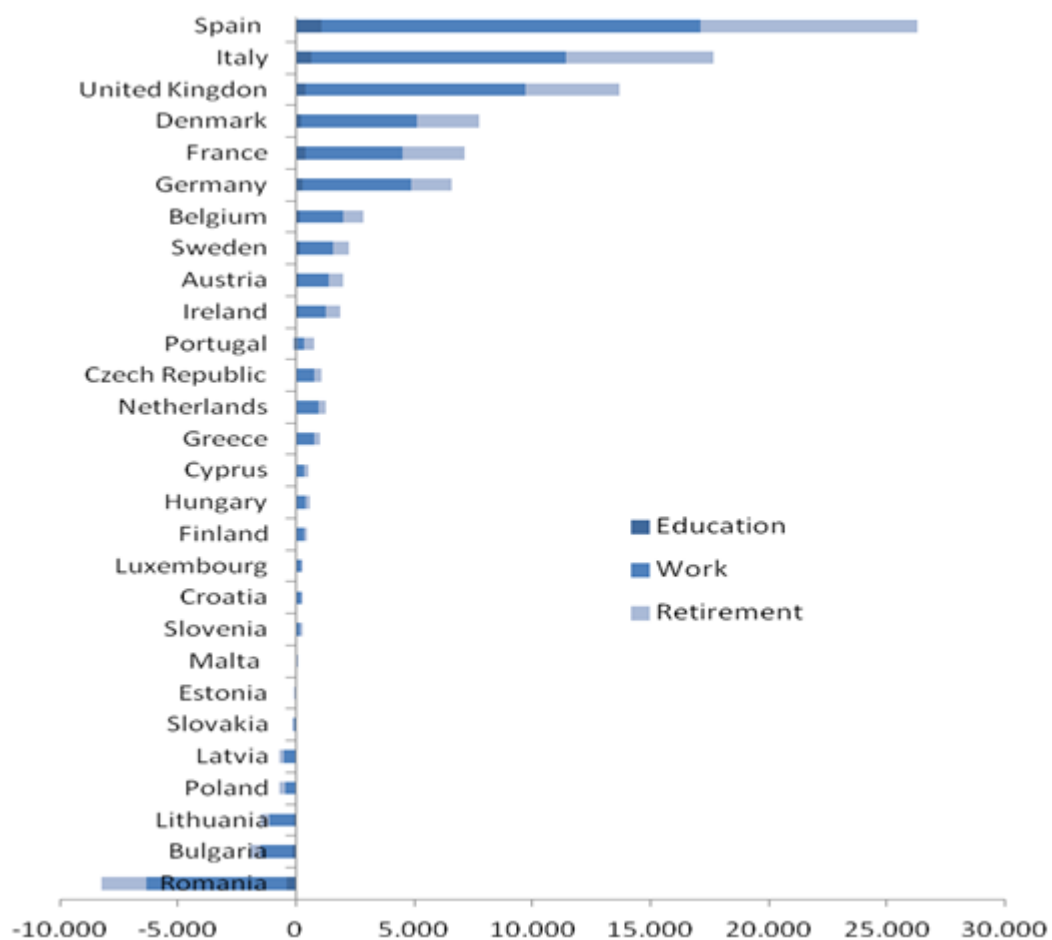
[+] The net balance of people over65 aged is positive (inflow is higher than outflow)

By a long-term vision if we consider the ageing rates and the old dependency ratios referred to life-years that the additional (or lost) population will spend into the destination country (or will not spend into the country of origin) we can see (Table 4 and 5 column C), that the values of the two indicators are much higher than the current ones.

The number of additional life-years to be spent in retirement ages is also quite high, for many EU countries: it is more than half of the years to be spent in work for EU-15 as a whole. As a consequence, although migration is mainly a resource for the EU labour force, we should also consider the relevant costs in terms of welfare system that should be paid for migrants.

In order to investigate the future impact of the demographic asset (AD) that migrations can bring or subtract to each EU members, we can split the total life-years acquired or lost into life-years spent in education, in work and in retirement, as shown in figure 4.

Figure 4 - Design of the additional/missing life-years due to the average net contribution 2001-2011 (thousands of people acquired/lost annually).EU-28 countries



A look at the net life-years gained (or lost) by each EU country population in the three main age groups 0-19, 20-64, 65 and above, shows that most of the benefits (or the loss) coming from the international migration to the EU demography concerns the working ages population segment which is considerably enriched (or decreased) by migration flows. By contrast, the net life-years spent in education are not so many because the segment of very young population (0 to 19 years) is not as big as that of working age in the international migration⁶. This result points out that migration is mainly a resource for the receiving

⁶ It should be remarked that we are referring only to the contribution of the migrant population and not also of the second generations that follow from it.

countries because the migrants have received their education in their origin countries but they spend their acquired knowledge in the destination countries contributing to enlarge the working age population.

In particular, in table 6 we show the AD details for the EU countries with the large migration flows between 2001 and 2011.

Table 6 - Life-years added/lost as a result of the average net annual contribution. Years 2001-2011 – Selected EU Countries

<i>Panel A. Five most important EU immigrating countries</i>						
	Spain	Italy	UK	France	Germany	EU-28
Education (ages 0-19)	1,051	648	411	423	294	2,855
Work (ages 20-64)	16,084	10,790	9,288	4,100	4,559	46,003
Retirement (ages 65+)	9,172	6,248	4,000	2,605	1,702	25,511
Total	26,307	17,686	13,699	7,128	6,555	74,369
<i>Panel B. Five most important EU emigrating countries</i>						
	Romania	Bulgaria	Lithuania	Latvia	Poland	EU-13
Education (ages 0-19)	-382	-167	-96	-28	-2	-544
Work (ages 20-64)	-5,932	-1,442	-1,044	-505	-481	-7,572
Retirement (ages 65+)	-1,939	-429	-360	-197	-230	-2,371
Total	-8,253	-1,938	-1,500	-730	-713	-10,487

Note. The figures refer to the average annual net life-years i.e., difference between years gained and years lost in the same decade due to migration occurred in the decade 2001-2011.

As can be seen (Table 6, Panel A), Spain is the first EU country benefiting from the international migration, followed by Italy, United Kingdom, France and Germany. Spain gained almost 30% of the life-years acquired by the whole EU-28; the same percentages are clearly lower for Italy (22%), the UK (17%), France (9%) and Germany (8%).

These five most important immigrating countries covered almost 90% of the total life-years gained by the EU-28 as a whole. Moreover, for each EU country, life-years are gained more in the central life stage deserved to working activities (ages 20-64) than in the other life stages deserved either to investments in education (ages 0-19), or to retirement (ages 65 and above), although the changes in retirement is not marginal and can't be ignored.

Romania was the EU country losing at most from migrations, with its negative annual balance of 380 thousand life-years of education, almost 6 million life-years of working, and almost two million life-years of retirement, it covered more than half of the total loss in terms of life-years registered in the EU-28 as a whole. Romania is followed by Bulgaria, Lithuania, Latvia and Poland. In these latter four countries the negative contribution of migration in the years 2001-2011 was of a smaller magnitude: Bulgaria and Lithuania recorded a deficit of over one million life-years of working, while in Latvia and Poland the same deficit was of just half a million life-years (Table 5, Panel B). The negative balance was less pronounced in

the education and retirement life-years than in the working life stage for the same reasons mentioned above (i.e., migrants being mainly in the working ages).