

Labour mobility between the regions of the EU-27 and a comparison with the USA

*by Zuzana Gáková and Lewis Dijkstra**

* the authors work for the Economic and Quantitative Analysis Unit of the Directorate General for Regional Policy of the European Commission

1. Introduction

This paper compares the labour mobility between states in the US and the regions of the EU at NUTS 2 level, introducing for the first time the regional dimension into the analysis of labour mobility in the EU. The main focus of this paper is the EU's internal labour mobility; however it also looks at the destination of working age populations moving to the US and the EU and the reasons that make EU working age residents move.

There are a number of differences between the US and the EU, including language, culture, labour legislation and the fact that the US is a federal state. Moreover, free movement of labour in the EU is only a recent phenomenon and does not apply equally to everyone. These factors therefore make it difficult to compare labour mobility between the two.

The analysis shows, however, that given the share of the US working age population who change their residence every year, labour mobility plays an important role in reducing the differences in economic development between the states. In the EU, the tendency for workers and people in general to move to another EU country or to another region of the same country is much lower. This applies to both the old and the new Member States, irrespective of their economic development or the openness of their labour market. Thus, labour mobility does not play an important role in reducing the disparities between EU regions; therefore other aspects need to be considered when designing policies to reduce economic and social disparities between regions.

2. The basic data

Internal labour mobility concerns movements in the working age population (i.e. departures and arrivals) between regions within the EU. Because there are no EU-wide data sources showing both arrivals and departures and because the next EU-wide census is not until 2011, this paper is based on two alternative indicators, which capture the most important aspects of internal labour mobility.

The first indicator shows the share of the working age population who changed their region of residence within the previous year. The data does not take into account seasonal work and education/training (unless they imply a change of residence), movement of workplace over shorter periods (daily commuting) and movement of workplace without a change in permanent residence. Thus, the observed population group will be referred to in the text as *working age residents*. The analysis presented in this paper is based on the average share of the working age residents in 2007-2008 who had changed their region of residence during the previous year. The two years were used to increase the sample size and thus the reliability of the figures. For the sake of readability, this will be referred to in the text as *the working age residents who arrived in 2008*. This indicator, however, has a major shortcoming, as it cannot show the share of the working age population who departed, so it does not reveal whether a region with a high share of arrivals has a high or a low share of departures. This indicator also does not show where the people come from. These two missing pieces of information are addressed by the second indicator.

The second indicator - net migration - shows the difference between the number of people who arrived and left during one year. While not giving actual figures for how many people

left or arrived, it does show which regions overall attracted more people and which saw more people leave. This indicator, however, does not perfectly match the previous indicator in two respects: it covers the entire population, rather than just those of working age, and it includes movements in and out of the EU, instead of just movements within the EU. Nevertheless, as most people who move are of working age and as three quarters of the people who move to an EU region come from another region within the EU, net migration is a good source of information for identifying regions losing or gaining working age populations from within the EU.

Since 2006, citizens of the eight Member States from Central and Eastern Europe, who joined in 2004, can take up a job everywhere in the EU. The only exception is Germany and Austria who continue to apply restrictions albeit with simplifications. Workers from Bulgaria and Romania have a limited or restricted access to the labour market of ten EU countries. In 2011 movement of workers in the EU will become completely free unless some Member States find that there is a serious threat to their labour market. In such cases, they can still apply restrictions to Bulgaria and Romania but only until 2013. The data therefore needs to be considered within these limits.

3. Labour mobility in the US and the EU

3.1 Internal labour mobility in the EU

In the EU, the working age population who changed their region of residence accounted for 1.21% of its total working age population (see Map 1). Yet, there are significant cross-country differences and a clear distinction between the countries in the Eastern and the Western part of the Union.

In the EU-15, the residential movements of the working age population represented 1.46% of the working age population, which is nearly four times more than in the Central and Eastern Member States. The regions which attracted the highest number of working age residents were located in France (2.49%), namely Limousin (4.83%), Midi-Pyrénées (4.50%) and Poitou-Charentes (3.83%) and Languedoc-Roussillon (3.82%). Portugal (2.41%) ranked second due to Lisbon (5.55%). The third country at the top was UK where most regions recorded high shares of working age population from other EU regions and Inner London (4.68%) and Outer London (4.65%) in particular.

In the Central and Eastern European Member States, the shares ranged from high rates such as 1.19% and 0.87% in the Polish Opolskie and Dolnośląskie regions to virtually zero in the Romanian Centru and Bucureşti – Ilfov regions. Only 16% of the working age population moving between EU regions choose to move to these MS.

On average, around 85% of the labour mobility within the EU was due to movements between the regions of the same country. In other words, less than one in seven cases of movements between EU regions actually implied crossing the national borders of an EU country. Therefore, the share of cross-border mobility on the EU's total labour mobility was only 0.18% of the working age population which is almost the same than the share of working age residents who moved to the EU (0.2%).

3.2 Comparing labour mobility in the US and the EU

In the US, the population who moved to another state made up 2.8% of the total working age population (see Map 2). The states with the highest share were the District of Columbia (10%) followed by Alaska (6.7%), Wyoming (6.1%), Delaware (5.4%) and Montana (5.3%).

In the US, the average share of working age residents moving from another US state was 4.77% in the 'top ten percent states' (states accounting for 10% of the US working age population) and 1.54% in the 'bottom ten percent'. In the EU, few regions had a very high share of arrivals and many of them had very low shares. There were 22 regions with a share of arrivals higher than 3% but 132 regions with a share of less than 1% and 79 regions with a share of less than 0.5%. The EU's 'top ten percent regions' had an average share of arrivals equal to 3.67% while in the 'bottom ten percent regions' it was only 0.08%.

Thus, a striking difference between the US and the EU is the spatial concentration of the working age migrants who are much more dispersed in the US than in the EU.

Table 1 – Comparison between the EU and the US, 2008

	US	EU-27	EU-15	CEECs
Share of working age residents who moved from a different region of the EU/US state	2.80%	1.21%	1.46%	0.38%
Share of working age residents who moved from a different region/state of the same country	2.80%	1.03%	1.26%	0.24%
Share of working age residents who moved from a EU country/US state	2.80%	0.18%	0.20%	0.14%
Share of working age residents who moved from outside the EU/US	0.74%	0.19%	0.23%	0.03%

Source: Eurostat, US Census Bureau, DG REGIO calculations

As mentioned above, in the EU-27, only 0.18% of the working age population changed residence to another EU country. On the basis of these results, it certainly appears true that the geographic mobility of labour is much lower in the EU. However, such a comparison is problematic because of a number of differences between the US and the EU. These include language, culture and labour legislation, the fact that the US is a federal state and that, in the EU, free movement is a rather recent phenomenon and does not apply equally to everyone. It may therefore be more appropriate to compare internal mobility in the US to the mobility of working age residents not between, but within EU countries¹. Comparing the share of working age residents who moved to another region of the same country, 1.03% in the EU to 2, 8% in the US, can somewhat reduce the gap in mobility between the two.

¹ This analysis excludes the EU Member States with only one NUTS2 region

4. The sources and the reasons for labour mobility

4.1. Which regions lost and which regions gained working age population?

The majority of regions with high share of working age residents coming from other regions of the EU had a positive net migration in 2008 (see Map 3).

The regions in the North of France and the French capital region, Central and Eastern regions of Germany, the sparsely populated regions of Finland and Sweden that all had a share of working age residents coming from other EU regions above 1% of their working age population, however, demonstrate that a high share of working age residents from other regions is not always a guarantee for positive net migration.

Some regions mainly in Italy but also Malta and the Illes Balears in Spain, on the other side, had relatively low shares of arrivals from other EU regions but show up with positive net migration. This is due to a large growth in net inward migration from outside the EU that has taken place, mainly in Southern Europe, in the recent years.

4.2. Why do workers move?

Most of the regions with low share of their working age residents moving from other EU regions (less than 0.3% of working age population) and negative net migration had above average (more than 7.2%) unemployment rates in 2007.

This was mainly the case in the Central and Eastern European Member States but also in several regions in South Italy, the Greek region of Kentriki Makedonia, the Spanish Cataluña and the German Mecklenburg-Vorpommern.

On the other hand, some of the receiving regions also had high unemployment rates. This was the case in the Portuguese capital region (8.9%), Inner London (8%), the French Midi-Pyrénées (8.1%) and Languedoc- Roussillon (10.5%) and Bremen (11.9%) and Berlin (17.1%) in Germany. High unemployment rates are thus clearly one of the main factors that cause people of working age to leave however high inward migration of working age residents is not always linked to low unemployment rates.

Some of the main receiving regions saw their level of employment grow substantially over the past seven years. It was high (more than 0.8% a year) in Inner London and most of UK regions, in Spain except of the North-western regions, Southern and Northwestern France and the island regions. In the CEEC's, only the capital regions had more dynamic performance in terms of employment creation.

With the exception of the Slovak, Czech and the Hungarian capital regions, the annual disposable income was very low (less than €10 000) in all the Central and Eastern European regions, so wages clearly act as one of the main incentives behind working age residents

leaving.² The net adjusted disposable income was highest in the German Sachsen-Anhalt and Thüringen, the capital regions in Northern Europe, Greece and Portugal and the Italian island regions. However, not all of these have high shares of inward migration. Despite lower income levels in the Cohesion Countries and Spain and Italy in particular, they experienced the largest net inward migration in the EU in the period concerned. These phenomena can partly be explained by the fact that Austria and Germany did not fully open their labour markets towards the new Member States, but instead imposed lengthy transition periods, with some exceptions for highly skilled labour from the higher earning groups. Also, the Southern European countries are mainly targeted by low skilled workers with lower incomes.

Table 2: Summary table for the top/bottom NUTS 2 regions with the highest/lowest share of arrivals, accounting for 10% of the working age population

	Top ten	Bottom ten
Share of EU workers from other EU regions, 2008	3.67%	0.08%
Share of workers from other regions of the same country, 2008	3.22%	0.05%
Share of workers from other EU countries, 2008	0.44%	0.03%
Share of non-EU workers, 2008	0.40%	0.05%
Unemployment rate, 2007	6.60%	8.30%
Net adjusted disposable income, 2006	21196 EUR	11716 EUR
Employment growth, 2000-2007	0.92%	0.29%

Source: Eurostat, DG REGIO calculations

5. Destinations of the working age population coming from outside the US and the EU

The working age residents coming from non-EU countries contributed 0.19% to the EU's total working age population in 2006 (see Map 4). Thus, despite ongoing liberalisation of the EU's labour market for its citizens, the share of working age residents arriving from outside the EU is still higher than the share of the cross-border movements of the working age residents with EU citizenship.

The share of the working age residents from non-EU countries is much higher in the EU-15 (0.23%) as in the CEEC's (0.03%). With the exception of Inner London (1.30%) and Outer London (0.98%), the preferred destinations of the non-EU working age population who changed their residence are mainly islands, coastal and border regions. Cyprus ranks the highest with a share of 1.34% of its working age population. Spain's Canary Islands (0.85%) and Balearic Islands (0.66%) also rank high. Inflows were also high in the Greek region of Dytiki Makedonia, the Spanish coastal regions of Cantabria and Region de Murcia and the

² Data on disposable income takes into account the cost of public services or the differences in the cost of living in the regions, which makes it easier to accurately measure the differences between regions.

Comunidad Foral de Navarra bordering France. Berlin and Paris also had a share of arrivals above 0.50%. Among the CEEC's, Lithuania (0.21%) and Latvia (0.13%) registered the highest share of arrivals from outside the EU. Most regions, however, had shares of arrivals from non-EU countries close to zero, in particular those with the lowest levels of economic development.

6. Conclusions

The analysis has shown that the share of working age residents who arrived in 2008 in another EU region represented 1.21% of the EU's working age population. The regions in the EU-15 had a share three times higher than the CEEC's and this share was higher in the north than in the south. More than 85% of the movements were between regions of the same country. This implied a very low rate of cross-border labour mobility accounting for only 0.18% of the EU's working age population. In the US, the share of the working age population who moved to another state amounted to 2.8%. Due to a number of differences between the US and the EU, it appears more appropriate to compare mobility of working age residents not between, but within EU countries (1.03%) to internal mobility in the US (2.80%).

The top regions of the EU had a share of arrivals of 3.67%, while in the bottom regions; it was only 0.08%, compared to 4.77% and 1.54% in the top and the bottom states of the US. Therefore, a striking difference between the US and the EU was the large dispersion of people moving between the US states compared to EU regions. The share of the non-EU working age residents who arrived in 2008 was 0.19% of the EU's working age population; four times lower than in the US. Thus, despite ongoing liberalisation of the EU's labour market for its citizens, the share of working age residents arriving from outside the EU is still higher than the share of the cross-border movements of the working age residents with EU citizenship.

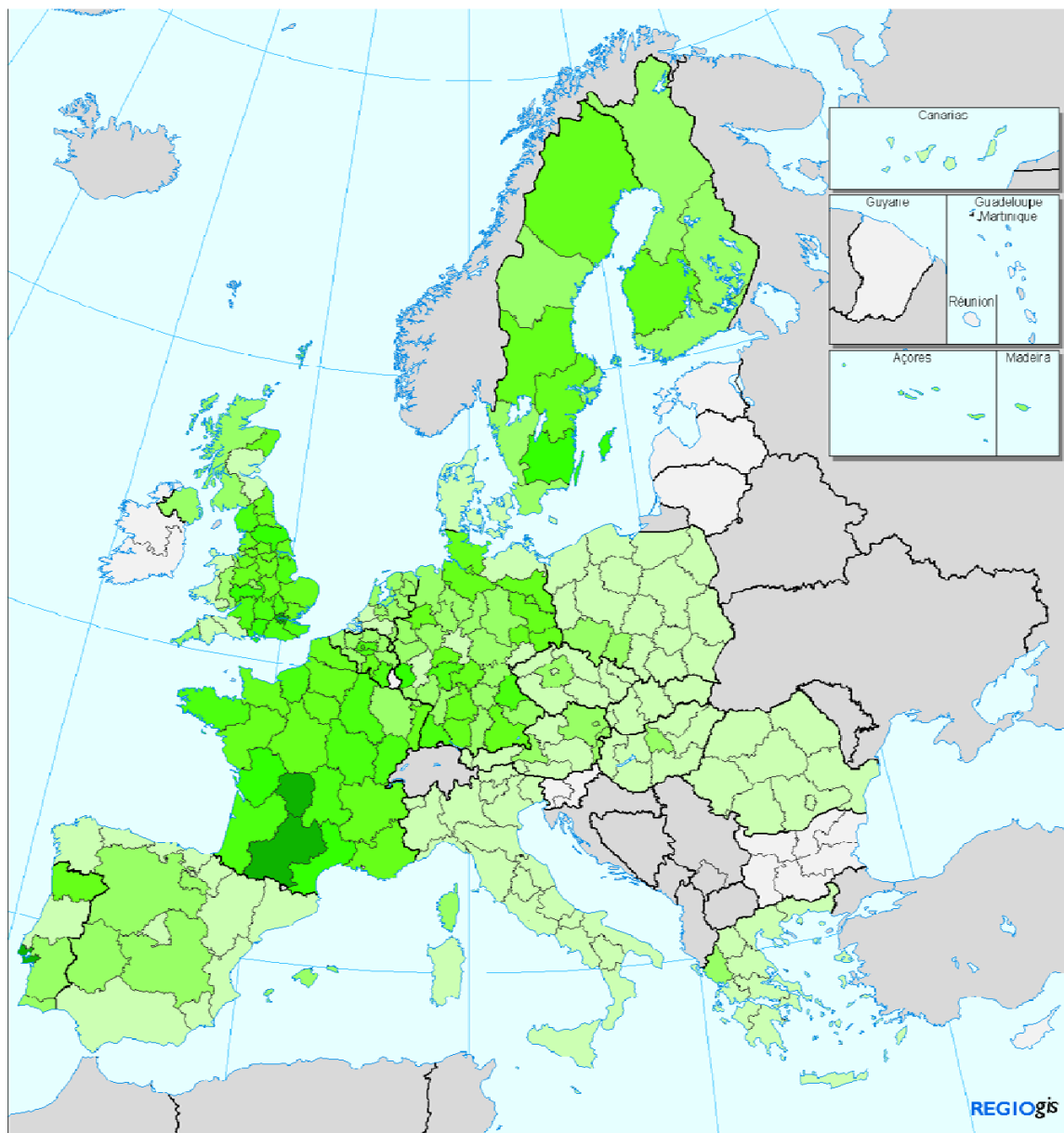
The working age residents coming from abroad chose different destinations from those who come from the EU or the US. People arriving from outside the US were slightly more concentrated than from within the US, but still much more dispersed than the working age population in the EU coming from a non Member State. The analysis has also shown that the main incentives behind people of working age leaving their regions are high unemployment rates and low wages, compared to the rest of the EU. In the receiving regions, working age residents are driven mainly by new employment opportunities.

Labour mobility is one of the aspects of labour market flexibility, which is important for a number of reasons. Besides adjustment to changes in demand, the demand and adaptation to new technologies and to other changes induced by globalisation, flexible labour markets also play an important role in providing macroeconomic adjustment where exchange rates and monetary policy cannot be used, e.g. in a single currency area. In addition, the issue of labour market flexibility is strongly linked with demographic factors, as estimates suggest that the labour force in the EU will contract significantly, which will have serious consequences for the ratio of workers to pensioners.

Labour migration is a politically sensitive topic with a wide range of concerns both for both receiving and sending regions. In receiving regions an influx of workers may lead to reduced income for low skill jobs, displacement of local workers and/or an increase of the costs of social and welfare services. For sending regions, the main concern is the permanent loss of high skilled and more dynamic residents, which reduces their growth potential. However,

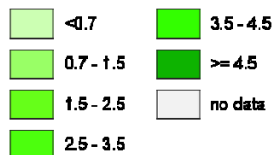
empirical evidence has shown that migrants frequently move for short-term periods; many of them on a regular, often seasonal, basis, as migration is not usually regarded as a once-and-for-all decision, but rather as part of a long-term adjustment process, where people respond to longer-run expectations in both markets, and in which migrants choose to work for a limited period in another market acquiring skills and improving their own and their families' lives through remittances sent to the home country.

It is not clear, however, what the appropriate rate of labour mobility in the EU should be. As it stands now, it cannot serve as an appropriate adjustment mechanism for divergent economic conditions between different regions, especially in the context of monetary union. Therefore, aspects other than labour mobility need to be considered when designing policies to reduce economic and social disparities between regions.



Map 1: Share of working age residents who moved from a different EU region within the last year, 2007-2008

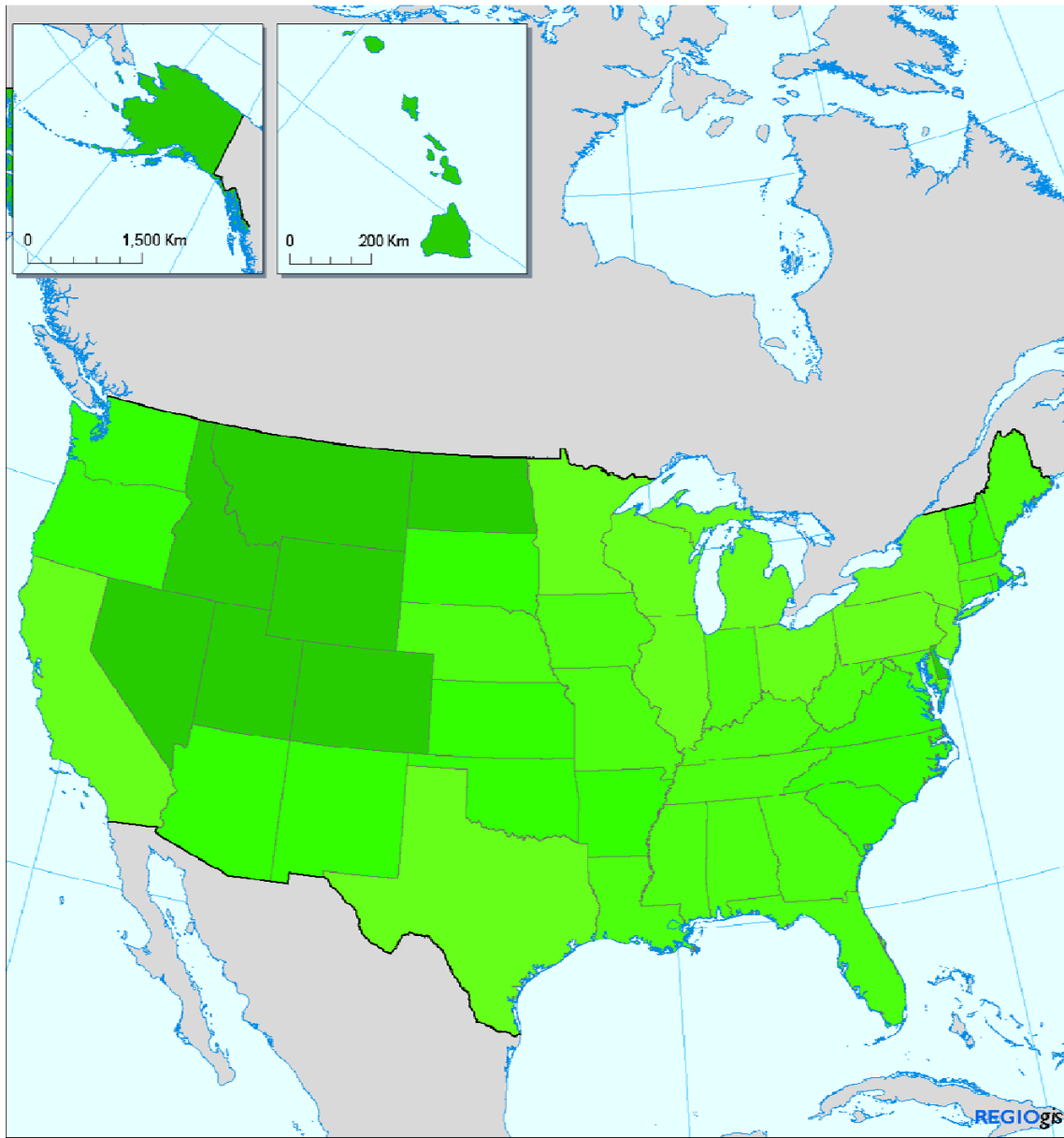
% of working age population



Arrivals from another NUTS2 region of the same country
and from another EU country
Source: Eurostat

0 500 Km

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Map2: Share of working age residents who moved from a different US state within the last year, 2008

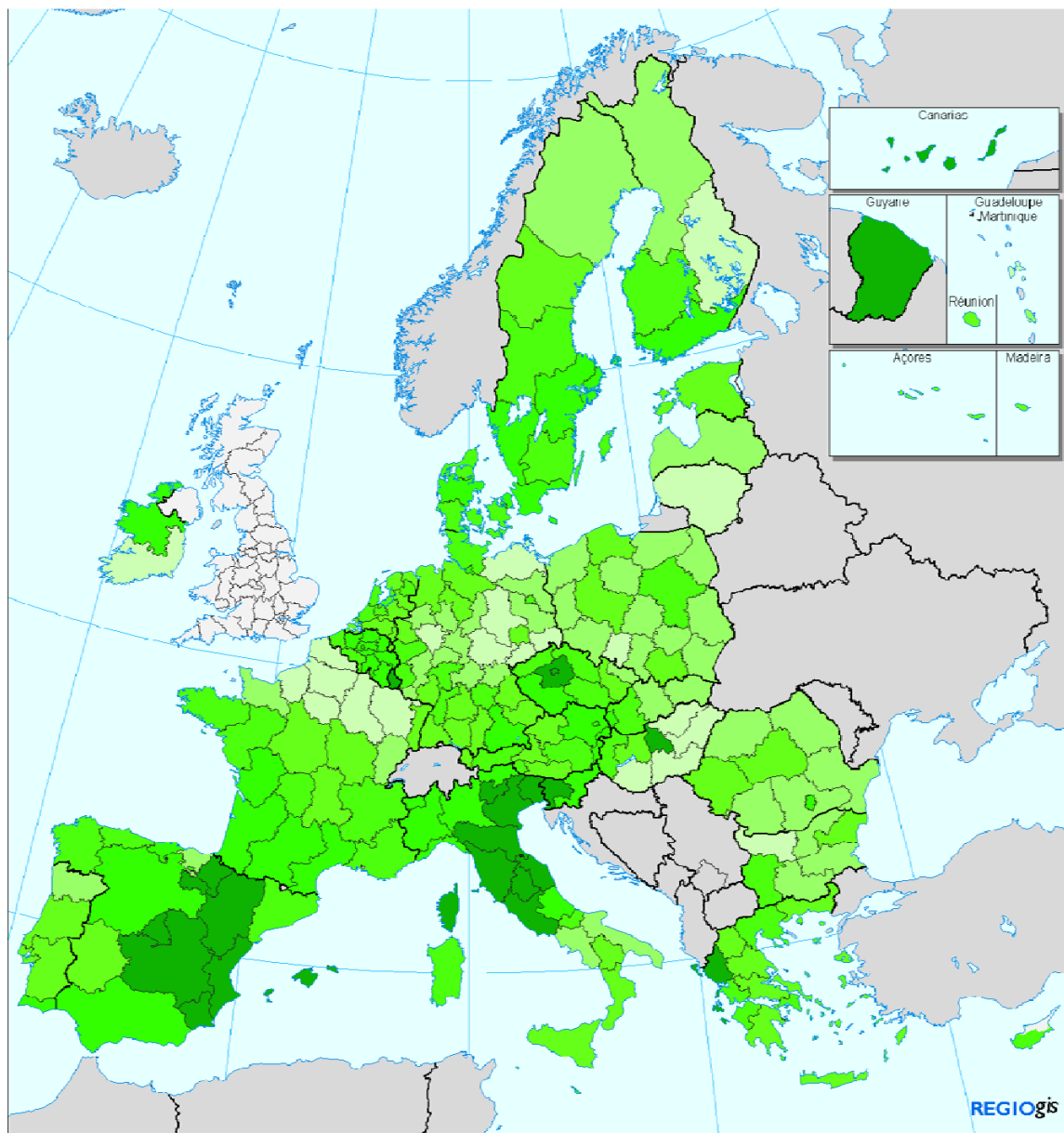
% of working age population

- <0.7
- 0.7 - 1.5
- 1.5 - 2.5
- 2.5 - 3.0
- 3.5 - 4.5
- ≥ 4.5

US average: 2.80

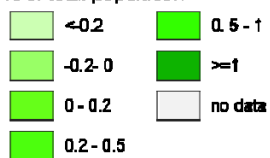
Source: US Census Bureau

0 1,000 Km



Map 3: Net migration, 2008

% of total population

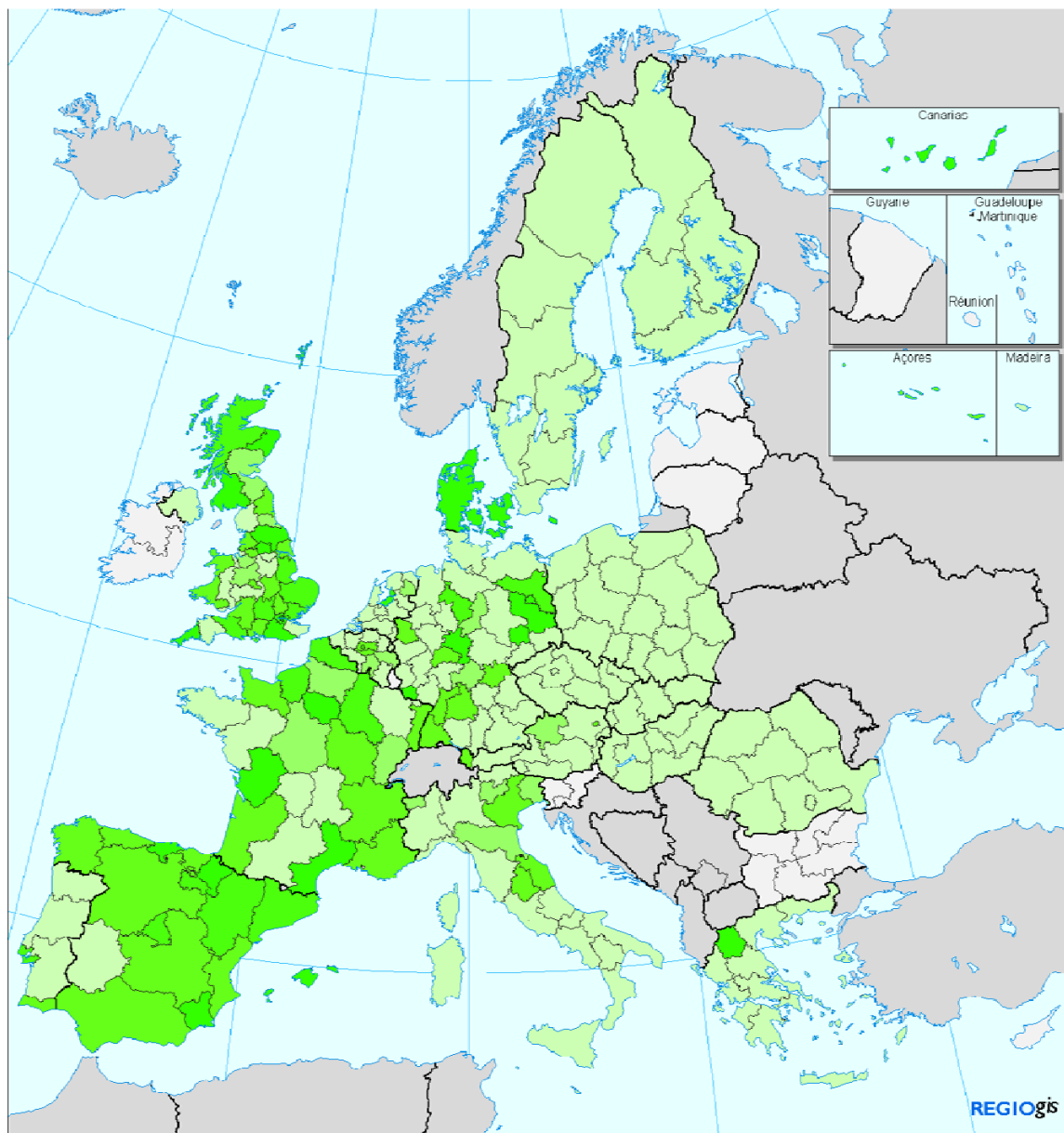


EU-27 = 0.3

Source: Eurostat

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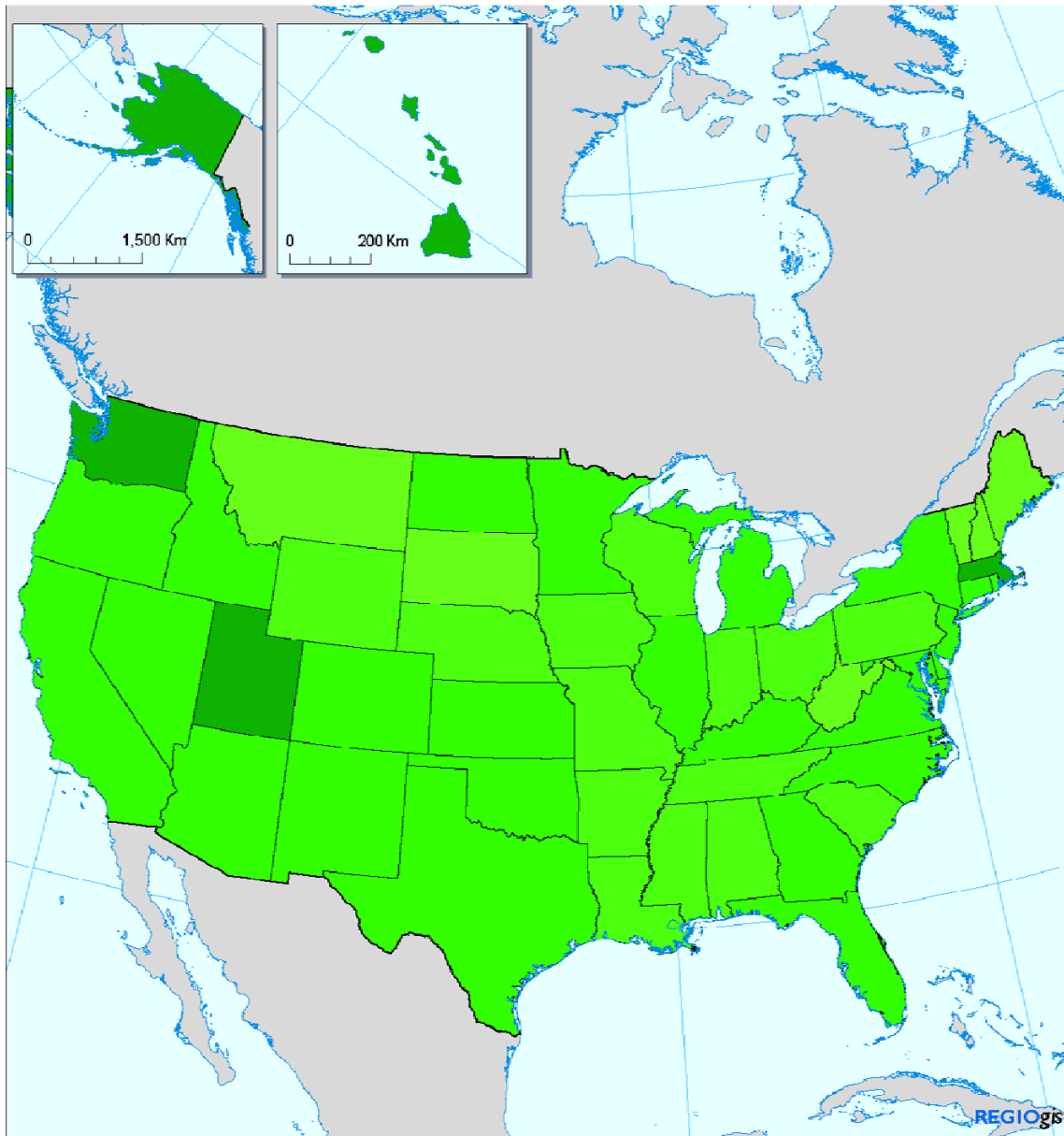
Map 4: Share of working age residents who moved from outside the EU within the last year, 2008



EU-27: 0.19
Source: Eurostat

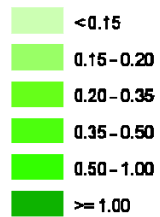
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Map 5: Share of working age residents who moved from outside the US within the last year, 2008

% of working age population



US average: 0.74

Source: US Census Bureau



