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Patterns of immigrants' integration in European labour markets.

What do employment rate gaps between natives and immigrants tell us?

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Abstract

This report looks at employment rates of immigrants and systematically compares them with employment rates of natives. The first finding is that employment gaps vary substantially across Member States, and that for some these gaps are persistent in the period considered (2008-2015). In addition, there is little evidence of overall convergence between Member States in the reduction of these gaps over this period. Having looked at the trends in employment rates since 2008, this report then turns to the likely reasons for the gaps. By drawing on the academic and policy literature, it singles out some of the most likely determinants of these gaps and unpacks them according to their relationships with length of residency, country of origin, education, and skills. Finally, the last section provides a brief overview of the evolution of these gaps in the context of Member States' active labour market policies. The last section outlines the main findings.

1 Introduction

Participation in labour markets is one of most widely used indicators of the effectiveness of immigrant integration policies. In this perspective, one way of measuring whether immigrants managed to effectively integrate into European societies is to look at their employment in Member State labour markets. The more immigrants have employment rates that are close to or equal to the ones of natives, the more they are considered as effectively integrated. This has been an explicit policy priority at the EU level since the Tampere European Council in 1999 when the EU undertook to *'ensure fair treatment of third country nationals who reside legally on the territory of its Member States. A more vigorous integration policy should aim at granting migrants rights and obligations comparable to those of EU citizens. It should also enhance non-discrimination in economic, social and cultural life and develop measures against racism and xenophobia'*¹. The Council of the European Union reaffirmed the importance of this indicator in its principles on 'immigrant integration policy in the European Union', stating that *'Employment is a key part of the integration process and is central to the participation of immigrants, to the contributions immigrants make to the host society, and to making such contributions visible'* (Council of the European Union 2004: 17). Trends in employment rates are now part of the European Semester coordination which, by including the EU2020 goals, now features a specific monitoring of the employment targets, namely '75% of people aged 20–64 to be in work'². Based on EU Labour Force Survey data³, this report looks at employment rates of immigrants – defined both as individuals born outside the EU or with the nationality of a non-EU country – and systematically compares them with natives' employment rates.

As non-negligible corollaries, the closer migrants' employment rates are to the ones of natives, the more significant is the socio-economic contribution that migrants can give both to destination states and to their origin countries through remittances and transfer of skills. In addition, the public perception of migrants as an active part of the social fabric, contributing to the sustainability of public finances, is important for the social acceptance of migrants in European countries (Finotelli 2009).

The main findings are the following:

- We can identify clusters of countries with similar employment gaps between natives and immigrant throughout our analysis.
- There are substantial differences in integration outcomes across regions of birth/citizenship of immigrants, even when controlling for education, and these differences persist through time.
- There are also significant differences between recent- and long-term immigrants, highlighting the importance of the length of residence for immigrant integration.
- Overall, the larger the gaps regarding the length of education between natives and immigrants, the higher the employment gap. However, there are several exceptions that need further analysis.
- Regarding skills, countries with higher gaps between natives and immigrants' skills also feature large employment gaps.

Having looked at the trends in employment rates since 2008, this report then turns to the likely reasons for the gaps based on descriptive analyses. By drawing on the academic and policy literature, this report singles out some of the most likely determinants of these gaps

¹ http://www.europarl.europa.eu/summits/tam_en.htm (accessed on 04/10/2017).

² https://ec.europa.eu/info/strategy/european-semester/framework/europe-2020-strategy_en (accessed on 04/10/2017).

³ As a general note, and unless otherwise specified, data is drawn from the EU Labour Force Surveys Data limitation issues are reported under each figure.

and unpacks them according to their relationships with length of residency (Luik *et al.* 2016; Panel on the Economic and Fiscal Consequences of Immigration *et al.* 2017; European Commission and OECD 2016; Bratsberg *et al.* 2017), country of origin (Hatton 2014; Fleischmann and Dronkers 2010; Khoudja and Platt 2017), education (Chiswick and Miller 2015; Gorodzeisky and Semyonov 2017; Algan *et al.* 2010; OECD 2017), skills (Fulop *et al.* 2016; Kerr and Kerr 2011; Lupiañez *et al.* 2015; Himmler and Jackle 2014), and policies (Levels *et al.* 2017; Migali 2017; Butschek and Walter 2014).

Migrants' employment: academic and policy view on the topic

There is an established consensus in the literature that the convergence of migrants' and natives' labour market outcomes appears to be stronger in terms of employment rates while at the same time weaker in terms of wages (Hatton 2014: 43).

Looking at employment outcomes across Europe, Chiswick and Miller (2015: 1325) found that in Central and Northern countries immigrants reported much lower probability of being employed than natives (8 to 15% percentage points lower), whereas in Mediterranean countries, Ireland, and UK, the gap was smaller, between 0 and 6 percentage points. Regarding children with foreign-born parents, the picture is fragmented across the Member States. In fact, there are studies that reported convergence of employment rates between natives and immigrants' descendants in the cases of France, Spain, and immigrant women in UK, as well as studies that have highlighted the difficulties of immigrant communities to catch up with the native counterparts (e.g. Germany, and immigrant men in UK).

In addition to the level of employment, another key factor of labour market integration of migrants lies in their *polarization* into specific occupation niches as compared to natives. Evidence shows that both EU and non-EU immigrants tend to work in jobs with lower skills requirements than natives in the majority of EU countries, and particularly so in Italy and Spain (Chiswick and Miller 2015: 1328). This finding is supported by other studies that point out that in EU-15 immigrants are more likely to be employed in low skilled, low paid and highly unstable jobs than natives (Natale and Grubanov-Boskovic 2017). Another way of capturing immigrants' employment quality is provided by the overqualification rate measured by Eurostat. In 2014, the overqualification rate was very similar for natives and the second generation of non-EU immigrants at about 22%, a bit lower for the second generation of mobile EU citizens (slightly less than 20%), and stood at approximately 35% of first generation immigrants born both within and outside the EU (Eurostat 2017: 88–89).

Differences in migrant categories also affect the mechanisms of labour market integration. Bakker *et al.* (2017) posit a 'refugee entry effect' because of the 'lack of resources, rights and security about the future' this category faces. This 'effect' would materialise in lower labour participation rates as compared to migrants entered through other categories like family or labour (Bakker *et al.* 2017). The authors find, in the case of the Netherlands, that even a decade after gaining access to the country, the refugee group displayed lower labour integration than family and labour migrants although the gap significantly decreases through time. Dustmann *et al.* (2017) also provided the evidence that refugees are by far the worst off in employment chances, as compared to natives, other EU citizens, and non-EU immigrants (Dustmann *et al.* 2017: 522). In a recent contribution focusing on Switzerland, Hainmueller *et al.* found that longer waiting times during the asylum assessment phase translate in lower employment rates for recognised refugees, in the range of 16 to 23% less than the average rates (Hainmueller *et al.* 2016). An EU study⁴ based on the 2014 LFS *ad hoc* module highlighted large disparities in employment rates between different migration categories, as well as showing that such differences are eliminated only over the medium- to long-term (more than 20 years) between those entering for 'employment or study' and the ones admitted through 'family' or as 'refugees'

⁴ For other recent analysis of refugees' labour market integration, see the 2016 Employment and Social Development in Europe 2016 (European Commission 2016a)

(European Commission 2016b: 20; European Commission and OECD 2016: 5–6, 17–18, 20–25).

2 Trends in employment rates

2.1 Evolution of the employment by country of destination

The overview of the trends in employment rate differentials⁵ between natives and immigrants⁶ is presented according to OECD classification of European countries into different categories on the basis of their migration histories, main type of migration, and education levels (OECD and EU 2015: 27–32). The underlying idea is that a one-size-fits-all approach for the entire EU might be unsuitable in integration policy, and a more tailored analysis grounded in the Member States' peculiarities is more suitable to deal with different integration challenges. The OECD identified eight groups of countries in its study, seven of which include EU countries:

- a. *Long-standing destinations* with many recent and highly educated migrants (Luxembourg, Switzerland, the United Kingdom, the United States)
- b. *Long-standing destinations* with many settled low-educated migrants (Austria, Belgium, France, Germany, the Netherlands)
- c. Destination countries with significant *recent and humanitarian migration* (Denmark, Finland, Norway, Sweden)
- d. *New destination countries* with many recent, low educated migrants (Greece, Italy, Portugal, Spain)
- e. *New destination countries* with many recent highly-educated immigrants (Cyprus, Iceland, Ireland, Malta)

⁵ We would like to point out that trends in employment rate gaps are determined by changes in the employment rates of both natives and immigrants. For a recent overview of not only trends in the performance of both natives and immigrants in European labour markets, but also how the very presence and inflows of immigrants might influence the labour market performance of natives, see D'Amuri and Peri (2014).

⁶ Unless otherwise specified, the age groups considered for this report is 15-64, thus coinciding with the cohort analysed by OECD/EU (2015).

The OECD investigated the mechanisms through which naturalisation could have a measurable direct impact on immigrants' labour market integration. The OECD hypothesised five such mechanisms: 1) a reduction in labour market barriers; 2) administrative costs borne by employers; 3) naturalisation as a signalling device to employers of observed and unobserved immigrants' skills and capacities; 4) increased investment in human capital to achieve or following the acquisition of citizenship; 5) other indirect channels (OECD 2011: 45–46).

Peters *et al.* (2017) have recently investigated the so-called 'citizenship premium' in the Netherlands. The common assumption in the literature is that immigrants who naturalise enjoy a citizenship premium as employers are keener in rewarding immigrants who go through the naturalisation process as signal of positive integration ('positive signalling'). Peters *et al.* (2017) argue that more than an *ex post* reward to the acquisition of citizenship, higher employment rates might be the result of the human capital investment occurred in the run up to the acquisition. In fact, their 'results suggest that these investments result in an accelerated integration trajectory that already bears fruit in the labour market prior to naturalisation'.

Bakker *et al.* (2017) provide evidence supporting the hypothesis that patterns of acquisition of citizenship might differ according to the channels of entry. They found that while 89% of asylum seekers entered between 1995 and 1999 eventually gained Dutch citizenship, 70% of those entered through family reunification did so (a much bigger channel), and only 20% of labour migrants acquired the citizenship of the host country. Recent studies have highlighted that immigrants who resided for 10 years or more and took up citizenship of the host country had a substantially higher employment rate, namely 67% for those entered through family reunification (as compared to 50%) and 67% for those recognised as refugees (as compared to 55%) (European Commission 2016a, 121).

In a recent case study focusing on Switzerland, Hainmueller *et al.* found 'the integration returns to naturalization are larger for more marginalized immigrant groups and when naturalization occurs earlier, rather than later in the residency period' (Hainmueller, Hangartner, and Pietrantuono 2017). In other words, 'naturalisation has important independent effects in accelerating political integration and helps turning immigrants into "citizens"' (Hainmueller, Hangartner, and Pietrantuono 2015, 12656).

- f. Countries with an immigrant population shaped by *border changes and/or by national minorities* (Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic, Slovenia)
- g. *Emerging destination countries* with small immigrant populations (Bulgaria, Chile, Japan, Korea, Mexico, Romania, Turkey)

We excluded group 'g' because of low reliability of data. We then merged group 'd' and 'e' into a distinct group 'new destination', and 'a' and 'b' into another labelled 'long-standing', to simplify comparisons. Our final sample is thus grouped into 4 categories: 'new destination countries', 'long-standing destination'; 'humanitarian migration countries'; and 'immigration shaped by border changes/minorities'. Adopting such a classification allows us to cluster countries which have similar features and hence get a simplified comparison between these subsets rather than between 28 countries.

An immediate differentiation needs to be introduced between immigrants defined as foreign nationals (country of citizenship criterion, CoC) or based on the country of birth (CoB).

- Under the CoB criterion, the category of migrants includes all individuals that are born outside EU 28, and can thus include both individuals that are third-country nationals as well as those holding EU 28 nationality.
- Under the CoC criterion, the category of migrants includes individuals that hold only a non-EU nationality – it includes mainly non-EU born but also EU-born/native persons. Therefore, under the CoC criterion, when an immigrant acquires a citizenship of a EU Member States is no longer part of the migrant category.

Comparing the trends for these two groups – natives and immigrants, – we observe larger gaps under the citizenship criteria (Figures 1 and 2). The likely reason for this is that, under the citizenship criteria, we are already excluding those who have already taken a significant integration step by acquiring the citizenship of the host country⁷. In contrast, in the case of CoB criterion, the immigrant group include

Immigrants' employment chances are more sensitive to *economic cycles* than natives' (Chiswick and Miller 2015, 1332). The lesser educated among immigrants are those who endure the harshest consequences in downturn phases, as well as immigrants from non-OECD countries. By surveying the existing literature on the relationships between economic crisis and migration, Green and Winters develop the expectations that 'migrations are likely to be affected more severely the be recession than native workers', as they 'often have less secure job contracts, they are more likely to be temporary or part-time, they are over-represented in less-skilled occupations and immigrant-owned businesses are more likely to go bankrupt' (Green and Winters 2010: 1063, 1068).

Dustman *et al.* have analysed the consequences of downturns on immigrants labour integration outcomes in Germany and the UK between the 1980s and 2000s (Dustmann, Glitz, and Vogel 2010). First, they observe that controlling for age, education, and regional location reduces only part of the gap between natives and immigrants – i.e. some of the gap is due to compositional factors. However, most of distance between the two groups is left unexplained by those factors. Second, while employment rates for immigrants show a 'somewhat more pronounced cyclical' as compared to natives, especially when coming from non-OECD countries, this does not apply to earnings, where 'there is not much evidence for cyclical differentials either in Germany or the UK' (Dustmann, Glitz, and Vogel 2010, 6, 7). When skills-related controls are introduced, the authors still observe 'larger unemployment responses to economic shocks for immigrants relative to natives within skill groups', especially for non-OECD immigrants, but the same does not apply to wages (Dustmann, Glitz, and Vogel 2010, 14).

⁷ As always in social sciences, while there is consensus that integration through naturalisation brings about better labour market integration outcomes for immigrants, such consensus is not unanimous. For instance, Fleischmann and Dronkers (2010) do not observe any significant effect of holding the citizenship of the destination countries in occupational outcomes. Drydakis (2017) also finds that an ethnic background regardless of one's nationality is the factor generating the unequal access to the labour market.

both integrated and less integrated migrants, lowering the gaps as a consequence. Such larger gaps under the CoC criterion can be consistently observed whenever a comparison is drawn between the two criteria in this report⁸. Because of the constant outflow from the TCNs group under the CoC criterion to the 'nationals of the reporting country' after a certain number of years of residence occurring through naturalisation⁹, TCNs tend to have lower length of residence in the host country. According to our calculation on LFS data, the share of migrants residing 5 years or less as compared to the total number of immigrants were, under the citizenship criterion, 20.84%, whereas under the country of birth criterion it was 13.56%. A second element to bear in mind is that not all countries provide data based on both criteria, as for instance Germany only provides data on non-EU nationals.

For each of the two figures below (1 and 2), we calculate the average gaps for each of the four groups identified in the OECD-EU study. In the Annex, we spell out in more detail the trends for all countries pertaining to each group (Annex Fig. 24-25).

Looking at each group of countries, we can notice:

- *Humanitarian migration*: first, the gap for this group of countries (3 countries) is **positive** (meaning that natives have higher employment rates than immigrants), and the **highest** among all groups of countries under both criteria. Second, there is a **relative stability of the gap**, except for a drop in 2009, largely led by a reduction of the gap in Finland and Denmark. This finding is largely consistent across the two criteria of CoB and CoC. Third, the period 2008-2010 inverted a reduction in gaps undergoing in previous years. Indeed, all the panels showing trends in averages point to the importance of 2008-2010 global financial and economic crisis¹⁰ as a watershed in employment rate gaps (OECD and EU 2015: 301).
- *Long-standing destination*: first, this set of countries (7 Member States) displays the **second highest positive** gap on average. Second, the **trend is remarkably stable** in the period considered for all Member States except Luxembourg, reflecting enduring gap at the state level (see Annex Figures 24-25). Third, again there was a downward trend occurring until 2010, reversed by the crisis.
- *Immigration shaped by border changes/minorities*: first, the most crowded group of countries (9 countries¹¹) features **negative gaps according to the CoB criterion** (meaning that natives have lower employment rates than immigrants), whereas under the **citizenship criterion there is a slight positive gap**. The positive results for the citizenship criterion is largely driven by Croatia (see Annex Figures 24-25) but several other countries also display positive gaps. Second, countries show significant fluctuations in the period considered, bearing in mind the limited sample size of immigrants for some of the countries. Third, there is **no discernible pattern related to the crisis** at group level.
- *New destination countries*: first, this group (7 countries) displays a **negative gap** for most of the period under the CoB criterion (except 2013), and negative until 2011 under the citizenship criterion. The inclusion of Ireland drives up the gap under the citizenship criterion. Second, similarly to the former group, there are **large fluctuations across time**. Third, there is evidence that the **crisis reduced and then turned slightly positive the gaps** between natives and immigrants.

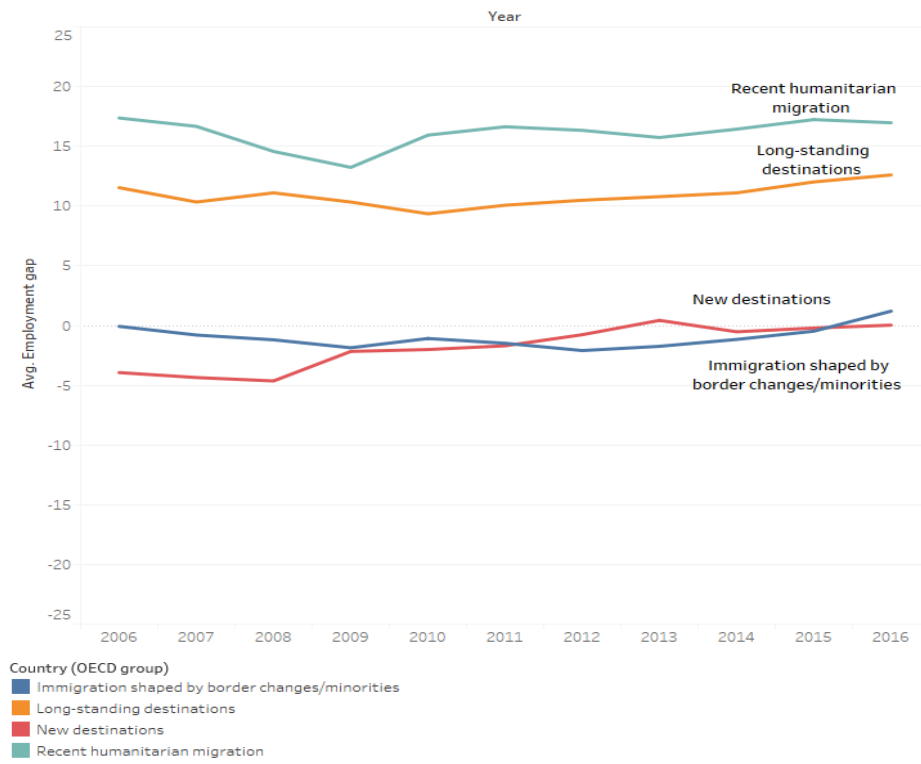
⁸ For a more extensive treatment of this topics, see OECD (2011).

⁹ Eurostat informed us that the 'naturalisation rate' was 2.6% in 2014. The naturalisation rate is the ratio between the foreign citizens who acquired the citizenship of the host country out of the total foreign population. Such rate varies widely across EU member states (Eurostat 2017: 53).

¹⁰ On the impact of the 2007/08 economic and financial crisis on migration see, *inter alia*, (Green and Winters 2010; Dustmann *et al.* 2010; Chiswick and Miller 2015; Roos and Zaun 2016).

¹¹ It should be noted that these countries also have comparatively low non-nationals in their resident population (Eurostat 2017: 14).

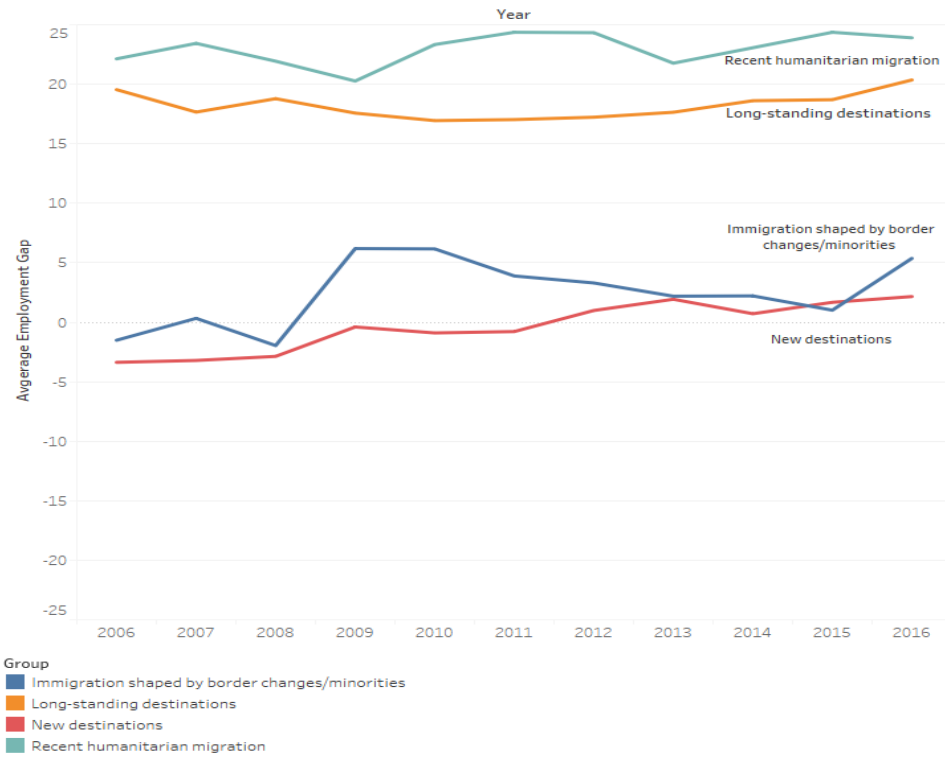
Figure 1. Trends in Employment Rate Gaps, CoB Criterion, 2006-2016



Source: KCMD elaborations of Eurostat data, 2017.

Note: The sample does not contain data on Germany and Malta under CoB criterion.

Figure 2. Trends in Employment Rate Gaps, CoC Criterion, 2006-2016



Source: KCMD elaborations of Eurostat data, 2017.

Note: The sample does not contain data on Malta under CoC criterion.

2.2 Evolution of the employment by country of birth and citizenship

To further our understanding of the employment trends of natives and immigrants, we offer an overview of employment rates broken down by groups of ***countries of birth and citizenship***.

The figure 3 reports the average employment rate by countries of birth and citizenship at the EU level. Due to EU LFS data limitations related to aggregation, it is possible to identify only the region of birth and citizenship of immigrants and not the single countries. Consequently, in the following figures we provide information on 6 groups (East and South Asia, Europe outside EU28, Latin America, North Africa and the Middle East, North America and Australia, Other Africa).

The thick dark blue bars represent the rates in 2015, while the thin pale blue bars the ones back in 2008. Currently only immigrants from North America and Australia have higher employment levels than natives. Conversely, the group which has performed worst in the labour market is formed by immigrants from the region of North Africa and the Middle East. With the exceptions of natives and Eastern and Southern Asian immigrants, all other immigrants have experienced a reduction in their employment rates between 2008 and 2015, with the steepest one being recorded for immigrants from Latin America (approximately a 10 percentage points less). The depth of such reduction shows the extent to which immigrants have not recovered yet from the 2007/09 economic crisis, contrary to the native population which does not show substantial differences in the employment rate in 2008 and 2015.

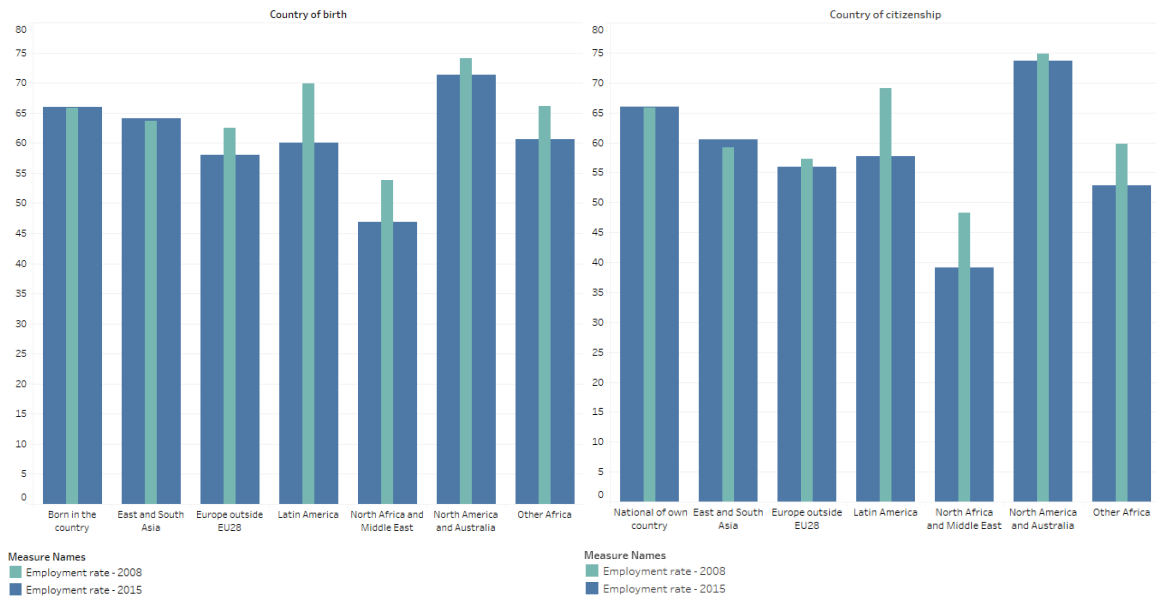
Subsequent sections¹² will explore the level of association between countries of birth/nationalities and educational levels, hence providing a more refined picture. However, we would like to immediately point out how differentiating along countries of origin provides useful and valuable information on immigrants' employment across Europe.

COUNTRIES OF ORIGIN & LABOUR MARKET INTEGRATION

A consistent finding across the literature is that the immigrants' performance in labour markets in terms of wages or employment tends to vary according to the country of origin, even when the educational level of immigrant is considered. According to Fleischmann and Dronkers (2010) the mechanism behind this relationship is linked to the level of 'visibility' and 'acceptability' of the country origin of the migrant in the destination country. Hatton (2014) adds also that specific characteristics of country of origin, such as stability, poverty and political freedom affect migrant integration outcomes. Further, cultural effects associated with countries of origin may also exercise a significant role in the determining labour market integration outcomes. This is particularly evident in the case of employment rate for women, which tends to vary significantly depending on the country of origin (for a recent case study on the UK, see Khoudja and Platt 2017)

¹² Section 3.2.

Figure 3. Employment Rates by CoB and CoC, 2008 and 2015



Source: KCMD elaborations of EU LFS data, 2017.

Note: The sample does not contain data on Germany and Malta under CoB criterion. The sample does not contain data on Malta under CoC criterion.

3 Drivers of the gap

Over the past decades, academic and policy studies have highlighted the role of several potential determinants for the gaps that we exposed in the section above. In the remainder of this paper we will briefly look at some of these determinants and describe how they enable us to better understand the relationships between employment rate gaps and length of residence, education and skills, and country of birth/citizenship. It is important to bear in mind that our analyses are purely descriptive and therefore are expressing simple relations and not effects. More advanced econometric techniques would be needed to evaluate effects while controlling for household and individual demographic and economic characteristics. References to studies providing such more advanced econometric analyses are provided in the boxes.

3.1 Length of residence

Figure 4 plots the employment rates of natives in 24 EU Member States as blue bars, and rates of immigrants in red and yellow dots for those who respectively stayed in the country less or more than 5 years, respectively¹³. We chose the 5-years benchmark because, besides being in line with other analysis of immigrants' labour market integration, is a reference to the Long Term Resident Directive¹⁴, which states '*Member States shall grant long-term resident status to third-country nationals who have resided legally and continuously within its territory for five years immediately prior to the submission of the relevant application*', and '*determines [long-term residents'] rights and the areas where they enjoy equal treatment with EU citizens*'¹⁵. On the basis of EU LFS data, the OECD calculated that, in 2012/13, 21.6% of third-country nationals immigrants aged 15-64 had resided in the host country for less than 5 years¹⁶, 25% between 5 and 9 years, while 46.8% for more than 10 years (OECD and EU 2015: 305). More recently, Eurostat has provided information according to which by the end of 2015 there were approximately 7.7 million non-EU citizens who were long-term residents (Eurostat 2017: 54).

The available literature would posit that immigrants should improve their employment status as the years of residence in the host country increase. Graphically, this would translate in yellow dots distancing themselves from red ones, and getting closer to blue bar levels – which would mean that immigrants acquire the same employment level as natives. In 2015 (Figure 4, right hand side panel), this was true for several countries: The

LENGTH OF RESIDENCE & LABOUR MARKET INTEGRATION

The academic literature suggests that the length of residence is closely associated with immigrants' employment rates. Drawing on Census data for the US, a recent study confirmed that after 'an initial period of adjustment' in which immigrants' employment lag behind that of natives, immigrants tend to gradually catch up with 'their native-born age-peers' (Panel on the Economic and Fiscal Consequences of Immigration et al. 2017, 104).

Luik *et al.* found that, in case of Sweden, 'years since migration explain at least 70 % of the employment gap among all' migrant categories (2016: 16). Indeed, wider European cross-sectional evidence confirms the reduction of the gap with the increasing number of years of residence in the hosting country (Dustmann *et al.*, 2017; European Commission and OECD 2016)

This mechanism is not, however, confirmed in the Norwegian case where longitudinal data showed that 'After five to ten years of residence, virtually all immigrant groups from low-income countries – regardless of gender and admission class – experience declining employment rates' (Bratsberg *et al.* 2017, 29)

¹³ It should be borne in mind that our sample population is 15-64, while the EU2020 is calculated on the 20-64 cohort.

¹⁴ <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32003L0109>

¹⁵ <http://eur-lex.europa.eu/legal-content/EN/LSU/?uri=CELEX:32003L0109>

¹⁶ For the sake of completeness, 6.8% were born in the country.

Netherlands, Sweden, the UK, Austria, Czech Republic, Finland, Latvia, Slovenia, France, Belgium, Portugal, Ireland, Romania, Spain, Italy, and Greece. For few countries, the opposite pattern emerged as immigrants worsened their situation the longer they stayed in the country (Estonia, Lithuania, Luxembourg, and Cyprus).

Comparing these rates between 2015 and 2008¹⁷ helps understand the impact of the crisis on Member States. What can be observed in Figure 4 is that for some countries (e.g. Italy, Spain), the reduction of employment rates for both groups of immigrants – i.e. recent immigrants (<5 years) and long-term residents (>5 years) – occurred in the context of falling rates also for natives (though to a lower extent). For other countries (e.g. Sweden, Austria, the UK), the drop in immigrant employment rates occurred in the context of relatively stable rates for natives. Missing under the CoB criterion, Germany saw a substantial improvement between 2008 and 2015 of the situation of the immigrants residing 5 years or more, from approximately 55% to 60%, in line with the strong resilience of the German labour market during the crisis (Figure 5).

Comparing the employment rates under the two criteria, we can observe that, for example, in the Netherlands in 2008 under the CoB criterion (Figure 4, left hand panel), the long-term residents had employment rates more than 10 percentage points higher than recent immigrants. On the other hand, under the citizenship criterion the difference between the two is less than three percentage points. We can suppose that what is driving up the difference between the long-term and recent immigrants under the CoB criterion as compared to the CoC criterion is those immigrants who vanished from the statistics under the latter criterion, namely those who naturalised. If this is correct, this means that long-term immigrants who did not naturalise barely saw their employment rates increase as compared to recent immigrants, as shown in Figure 5. To a varying extent, we can identify a similar trend in 2008 in Belgium, Luxembourg, France, Slovenia, and in 2015 in Finland, France, and Sweden. On the other hand, some countries see the counter-intuitive trend where recent immigrants reported higher employment rates than long-term immigrants, such as Cyprus and Hungary. To explain this latter outcome, other factors should be taken into account such as education level, country of origin, skills, structure of the labour market and economy in these destination countries (see next sections for more details on these factors).

All this is important to bear in mind when analysing Figures 6 and 7, which represent the net balance in employment rate gaps for recent immigrants versus natives and long-term immigrants versus natives, across EU Member States. Figures 6 and 7 show that only a limited number of countries have reduced the gap in employment rates between natives and immigrants (negative bars on the left) between 2008 and 2015, while in most of countries the employment gaps have increased. Again, looking at these figures one has to consider that a reduction in the gaps might be the result of both immigrants improving their employment situation, but also of natives worsening their rates.

If we then compare recent and long-term immigrants under the CoB criterion (Figure 6), the first element to be noted is the amplitude of the gaps, which is generally lower for long-term immigrants. This means that long-term migrants tended to have a more stable position in the labour market as compared to larger fluctuations for more recently arrived, especially considering that this occurred in the context of the biggest crisis since the Great Depression. This might be the result of the enhanced rights granted to long-term resident by EU legislation, but further studies need to be carried out to ascertain such relation¹⁸. This shows that improvements towards closing the gaps for these two sets of immigrants have been largely uneven across Member States.

Finally, if we further break employment rates by length of residence and region of birth/citizenship (Figures 8 and 9), we can see that, as expected, recent immigrant from

¹⁷ Depicted in the left-hand panel.

¹⁸ A conceivable way for testing this hypothesis would be to consider also MIPEX score for the 'security of permanent residency', with the expectation that the gaps either narrow or stay close to 0 the stronger is the security of permanent residence.

all regions of birth/citizenship have lower employment rates than long-term immigrants. In 2015, the lowest employment attainment was recorded for recent immigrants coming from the North Africa and the Middle East region (thick dark blue bars), who have also witnessed a significant worsening of their situation from 2008 (thin pale blue bars). Similar to the aggregate figures analysed before (Figure 3), the steepest decline in employment rates occurred for recent immigrants from Latin America. Focusing on long-term residents, Eastern and Southern Asian immigrants are the only ones who catch up with natives. Immigrants from regions which lagged behind in the aggregate such as "Middle East and North African" (MENA) and "Other African" countries, still perform considerably worse than natives even when they become long term residents.

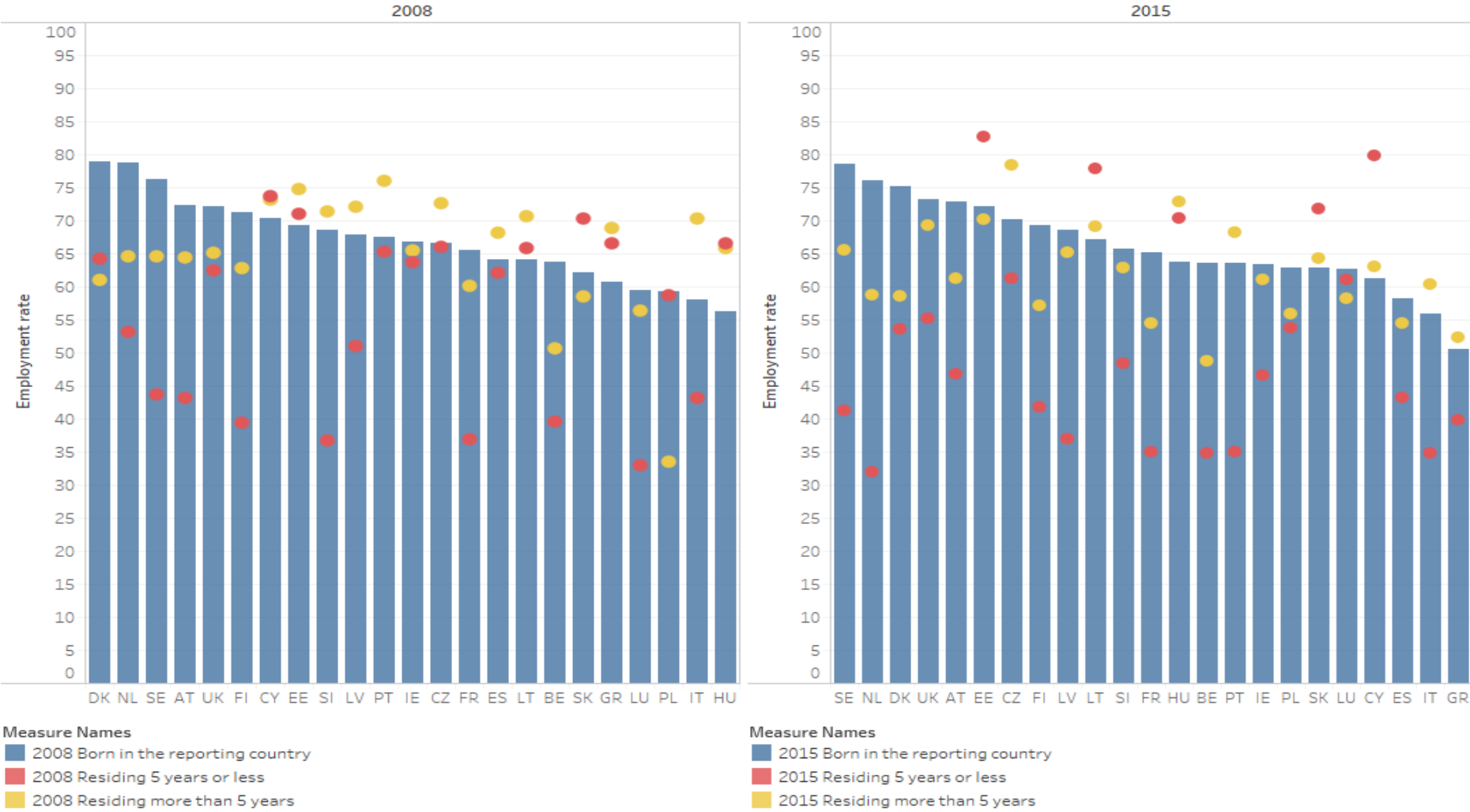
Comparing long-term immigrants under the two criteria – CoB and CoC - makes it explicit how the citizenship criteria might lead to wider employment gaps with natives by lowering the immigrants' employment rates, as compared to the same gaps measured under the CoB criterion. It is important to select long-term immigrants as, within this group, immigrants are more likely to meet the criteria for naturalisation¹⁹. Thus, we should expect gaps between criteria to be larger under the long-term than recent immigrants. Indeed, in 2015, there were approximately 10 percentage points of difference between the two criteria for long-term immigrants from the 'Other Africa' and 'North Africa and the Middle East', nearly twice as much as the difference between the two criteria for recent immigrants. On the other hand, differences between the two criteria were not as pronounced for long-term immigrants from other regions. First, this points to different citizenship rewards in terms of integration into labour markets depending on the region of citizenship. Second, and methodologically, this highlights the importance of carefully selecting the relevant criteria when studying immigrants' employment rates.

Similarly to naturalisation, the length of residency offers varying gains to immigrants in terms of labour market integration according to the region of birth/citizenship. Figures 8 and 9 show that the smallest differences between long-term and recent immigrants is for North America and Australia (7-8 percentage points change under both criteria). Performance of immigrants from other European countries, Latin America, and MENA countries feature changes in the region of 15 percentage points, while for East and South Asia and Africa gains exceed 20 percentage points under the citizenship criterion.

In policy terms, the condition of immigrants from MENA countries might pose a particular challenge for the sheer size of the foreign resident population.

¹⁹ Criteria for acquiring citizenship vary across Member States. For an overview, see <http://www.mipex.eu/access-nationality>.

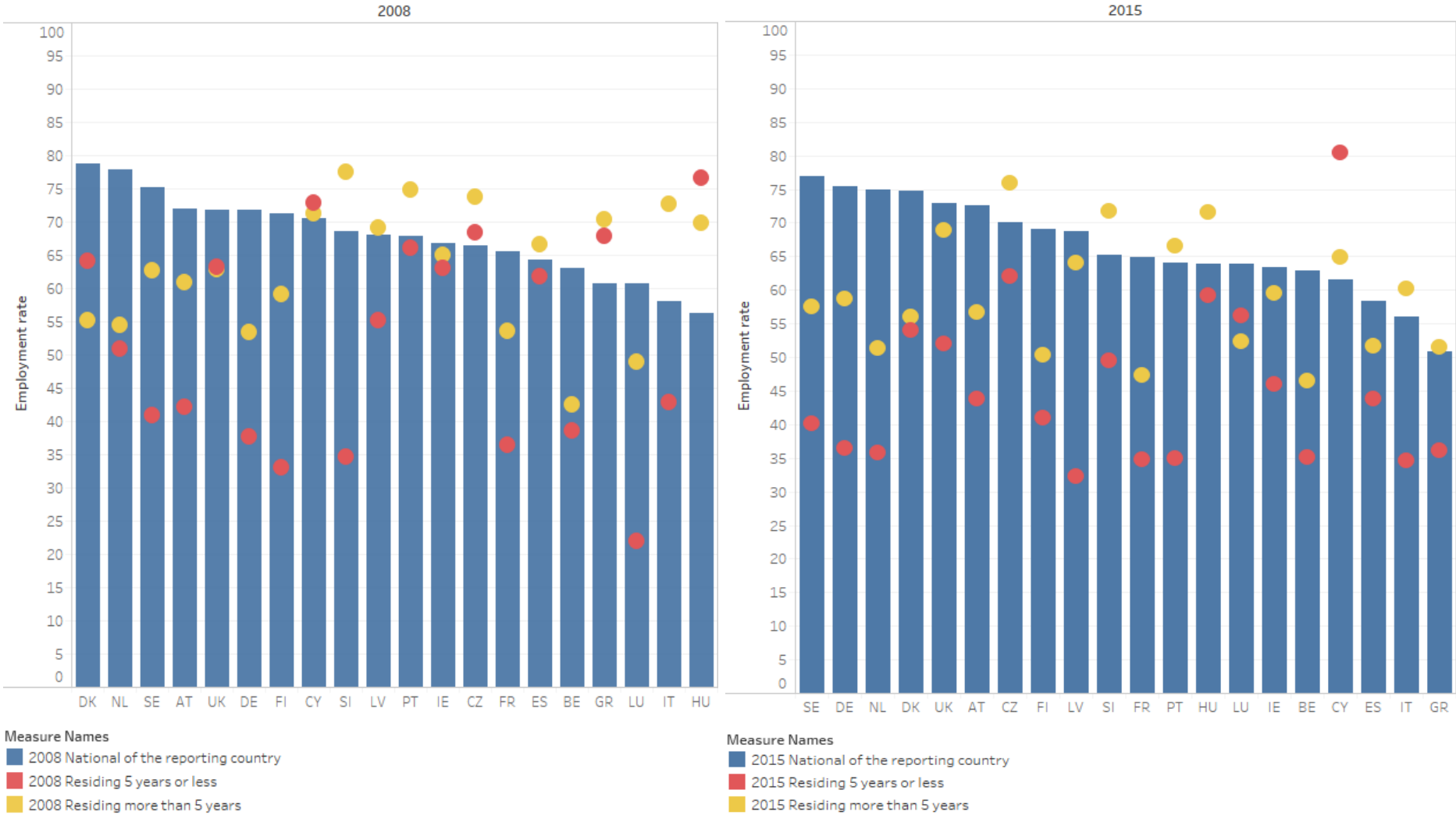
Figure 4. Employment Rates by length of residence, CoB Criterion, 2008 and 2015



Source: KCMD elaborations of EU LFS data, 2017.

Note: Figures exclude countries for which the data is missing or has low reliability

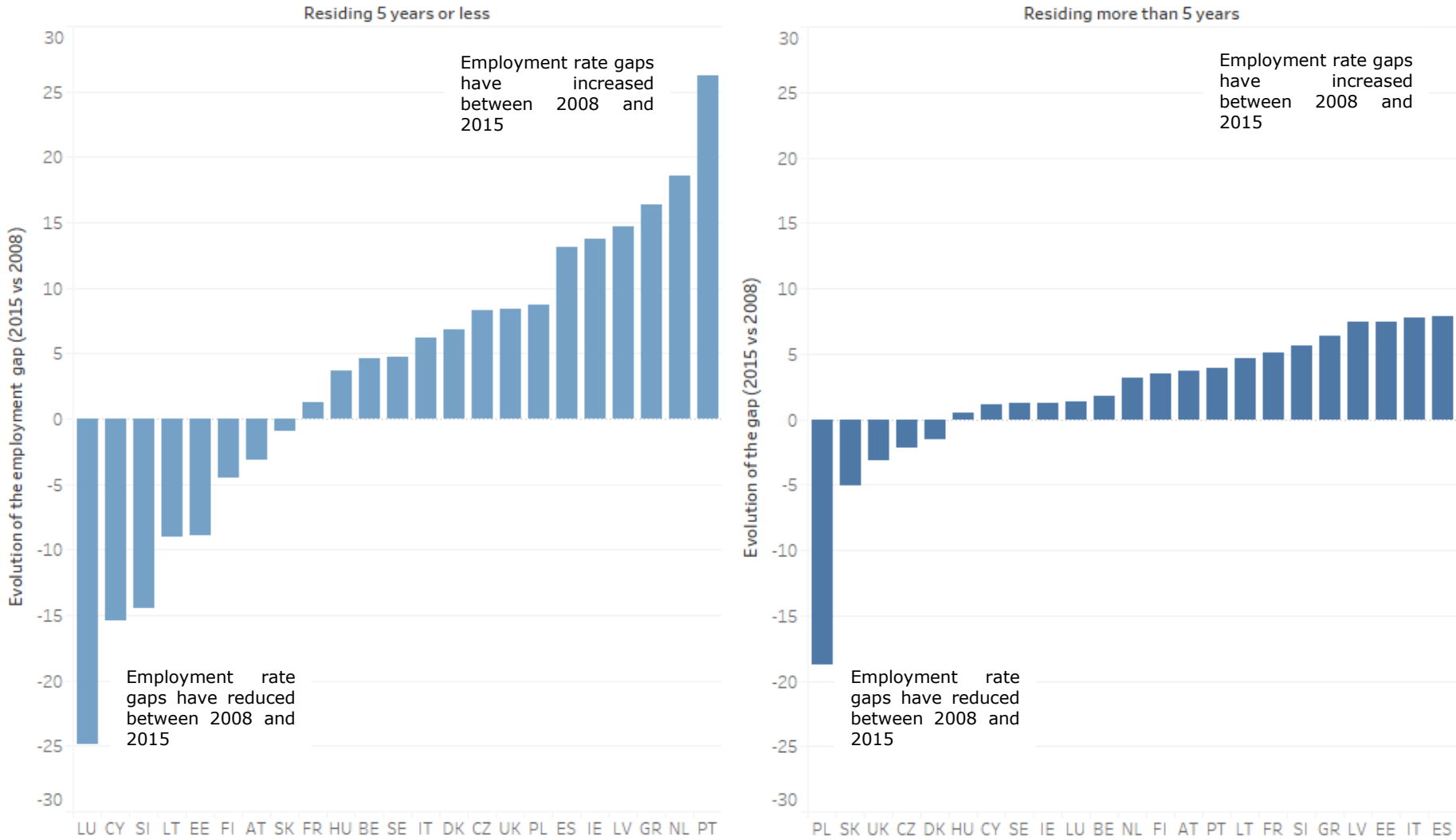
Figure 5. Employment Rates by length of residence, CoC Criterion, 2008 and 2015



Source: KCMD elaborations of EU LFS data, 2017.

Note: Figures exclude countries for which the data is missing or has low reliability.

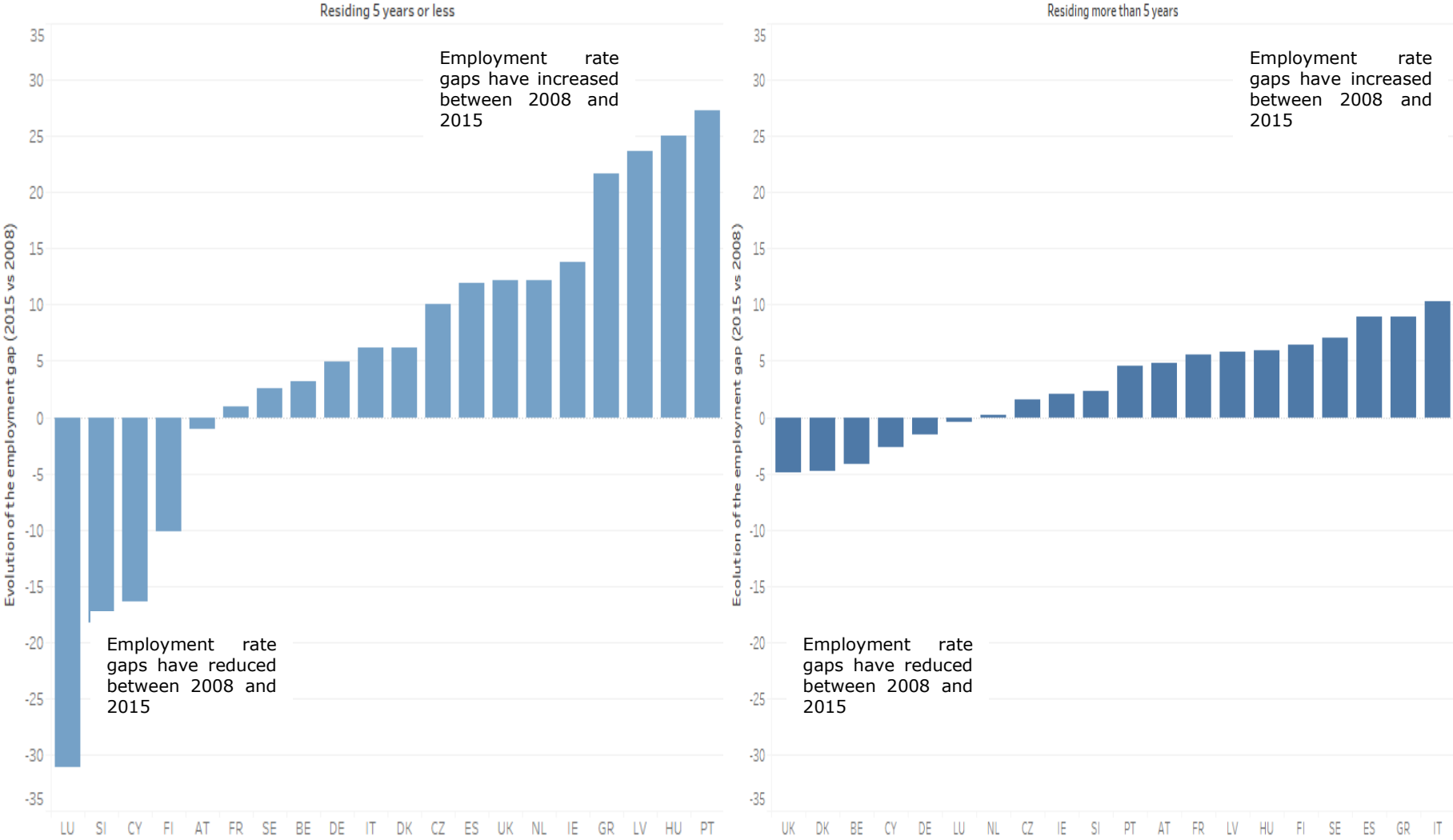
Figure 6. Differentials in employment rate gaps, CoB criterion, 2015-2008.



Source: KCMD elaborations of EU LFS data, 2017.

Note: Figures exclude countries for which the data is missing or has low reliability.

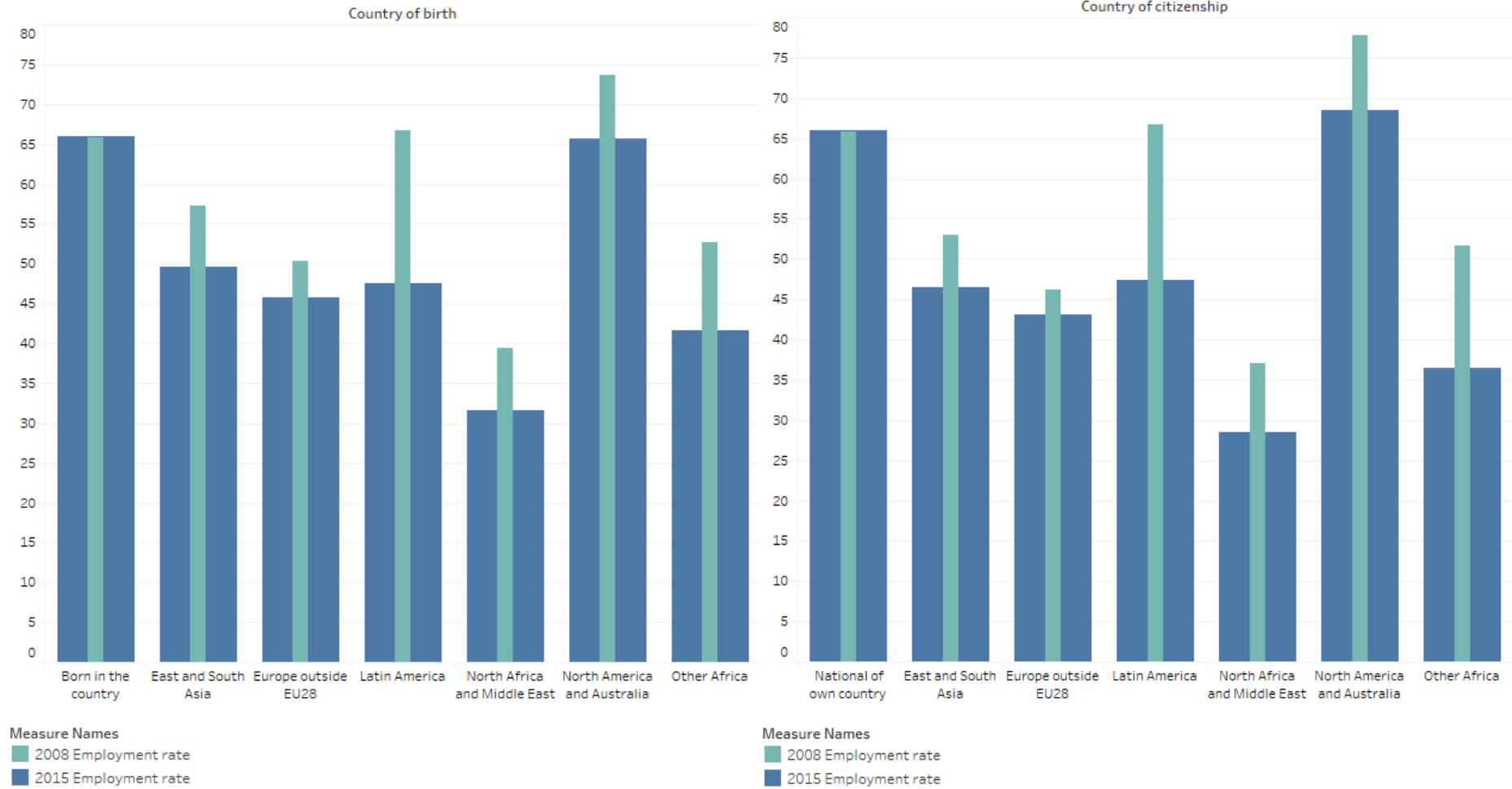
Figure 7. Differentials in employment rate gaps, CoC criterion, 2015-2008.



Source: KCMD elaborations of EU LFS data, 2017

Note: Figures exclude countries for which the data is missing or has low reliability

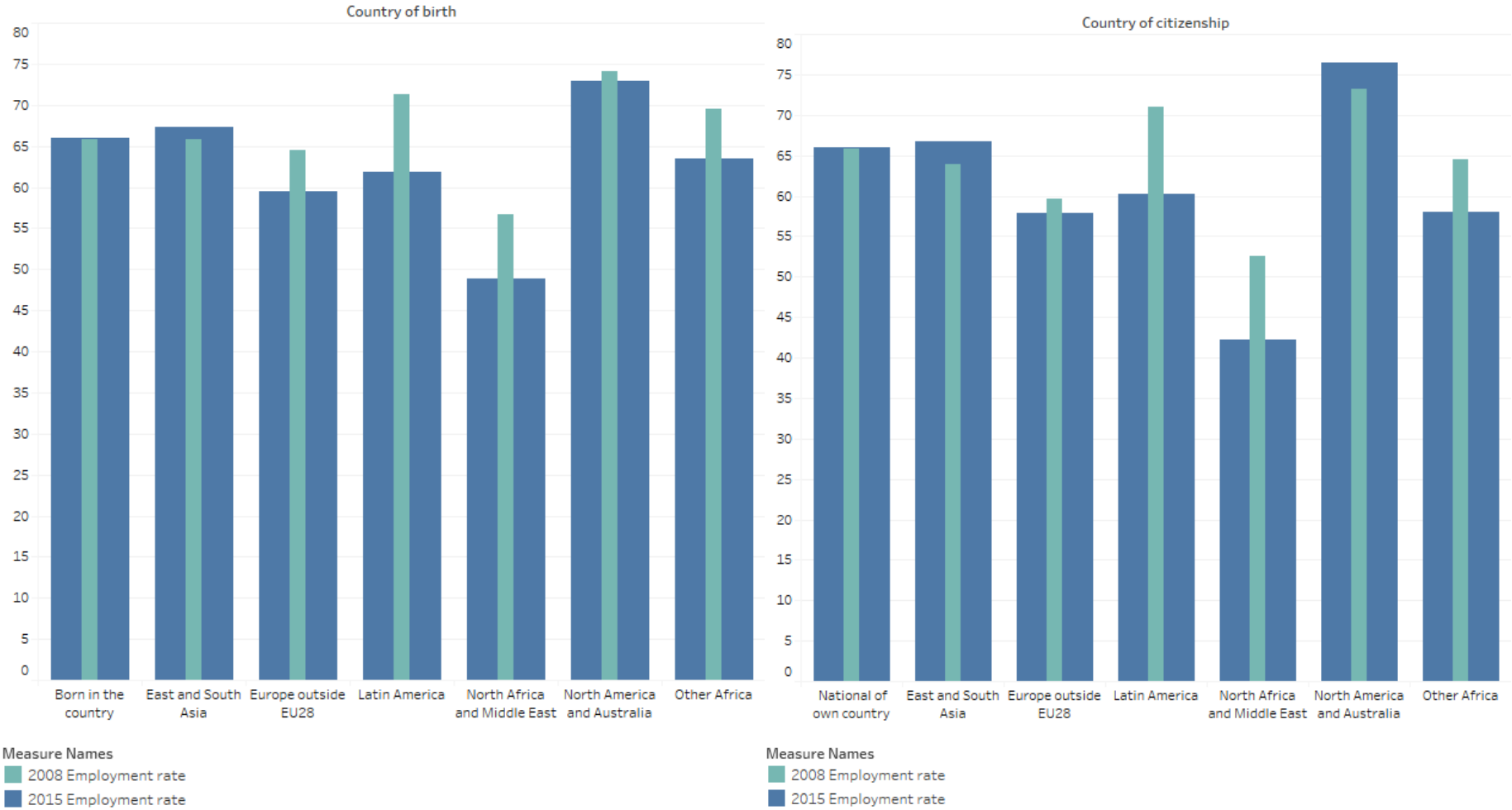
Figure 8. Recent Immigrants' Employment Rates by CoB and CoC criteria, 2008-2015.



Source: KCMD elaborations of EU LFS data, 2017

Note: The sample does not contain data on Germany and Malta under CoB criterion. The sample does not contain data on Malta under CoC criterion.

Figure 9. Long-term Immigrants' Employment Rates by CoB and CoC criteria, 2008-2015.



Source: KCMD elaborations of EU LFS data, 2017

Note: The sample does not contain data on Germany and Malta under CoB criterion. The sample does not contain data on Malta under CoC criterion.

3.2 Education and skills

Besides length of residence, most of studies focus on education as one of the main determinants of immigrants' integration outcomes in the labour markets. In this subsection, we consider both the formal level of education as well as skills such as language, numerical, literacy, and digital skills. Information on skills is drawn from various sources (EU LFS and OECD PIAAC), and the relationship is investigated only for 2015 due to data limitations.

3.2.1 Formal education

We start this overview by focusing on **mean years of schooling**²⁰, one of the most commonly used ways to express differences in education levels. Figure 10 plots the gaps in educational attainment between natives and immigrants on the x-axis against the gaps in employment rates on the y-axis.

If we expect education and employment to go hand in hand - meaning the more (less) education, the better (worse) the employment rates -, then countries would tend to cluster either in the top-right panel, or in the bottom-left one. Indeed, this is the case for the larger number of countries. However, some countries represent an exception and fall in the upper left panel (immigrants have lower employment rates than natives but higher education: e.g. in Figure 10, left-hand panel, Poland, Luxembourg, Slovakia, Ireland) and bottom right panel (immigrants have higher employment rates than natives but lower education: e.g. Figure 10, left-hand panel, Spain, Slovenia, Italy, and Greece).

The results of Ireland, Luxembourg, and the UK should be considered in light of the fact that these are the only EU countries where the EU2020 goal of reaching 40% of the 30-34 cohort with tertiary education has been attained (OECD and EU 2015: 301). In such a highly specialised labour market, immigrants with high educational level might face a higher competition in finding a job. On the other hand, in Southern countries such as Greece, Italy, Portugal, and Spain, well over half of migrants

Education is regarded as a key factor to explain not only immigrants' initial occupations, but also the chances of seeing that status changed for the better (Benton *et al.* 2014: 5; European Commission 2016b: 21). A recent study found that the probability of being unemployed or inactive was inversely related to the level of education (Gorodzeisky and Semyonov 2017, 11). Besides the baseline observation that higher level of educational achievements are associated with positive labour market outcomes (Algan *et al.* 2010, 13), there are some migration-related specificities in the relationship between education and employment. In broad terms, adult immigrants arrive in the host country after completing their education, which means that recognition of foreign diplomas becomes crucial for their chances not only of employment, but also to avoid down-skilling. For young immigrants and immigrants' offspring the main factor to be taken into account in the relationship between education and labour market integration is schooling quality (Chiswick and Miller 2015, 1336). The relationship between education and labour market integration outcomes is not necessarily linear. Recent research on Sweden has shown that having 'at least a three-year secondary education is essential for migrants' employment success'. However, advancing in education beyond this level 'does not, on average, improve migrants' employment levels' (Luik *et al.* 2016: 16).

A key element for positive labour market integration is related to acquiring an educational qualification in the host country. In a recent contribution focusing on refugees in the Netherlands (Bakker *et al.* 2017), the employment rate gap between refugees who had a Dutch diploma and those who did not was about 20 percentage points after 6 years of access and widened over time. OECD study has also emphasised that immigrants with foreign education have lower return to their education in terms of employment level but also employment quality (educational mismatch) than immigrants with domestic qualifications. Moreover, the formal recognition of migrant's foreign qualification by the host country improves migrant's employment prospect regardless of migration and educational background of the immigrant (OECD 2017)

²⁰ The correspondence between ISCED 1997 and ISCED 2011 levels was implemented following UNESCO-UIS (2012) <http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf>. The conversion of level of education into mean years of schooling was carried out using OECD (2013) http://www.keepeek.com/Digital-Asset-Management/oecd/education/pisa-2012-results-excellence-through-equity-volume-ii/pisa-2012-technical-background_9789264201132-11-en#.Wd4sPVu0MdU#page4

are 'low-educated' according to OECD classification of educational attainment (OECD and EU 2015: 319). This is connected to the fact that these countries feature large 'low-status job segments' which attracts immigrants (Fleischmann and Dronkers 2010: 350).

While we can notice several clusters of countries in 2008 (Figure 10, left-hand panel), these groups have become somehow more polarised in 2015 (Figure 10, right-hand panel). This is the case for most of countries in the top left corner, where either education or employment gaps between natives and immigrants have increased for France, Austria, Finland, Sweden, the Netherlands, and Belgium. The bottom right cluster composed by Italy, Greece, Spain, and Slovenia has moved significantly upward on the employment axis, meaning that employment gaps have shrunk. In 2015, the group split in two parts, with Italy and Greece still showing small and negative employment gaps (meaning natives with lower employment rates but higher education), while Spain and Slovenia overturned their 2008 condition to have natives with higher employment rates. In the upper left corner, immigrants in the UK in 2015 showed higher average education as compared to 2008, while in Ireland the educational gap between immigrants and natives decreased. In short, the graph neatly delineates four possible groups of countries, according to the level of employment and education. Comparing this clustering with the OECD country classification used in section 3, it is evident the extent to which immigrants in nearly 'all long-standing destination countries' display very similar features as those in 'humanitarian migration countries'. In other words, immigrants who are on average more educated than natives have lower employment rates than natives not only in 'long-standing destinations' such as the UK and Luxembourg, but in 'recent destination' ones too such as Ireland and several others Baltic countries.

Furthermore, comparing the CoB and CoC criteria we can notice that, overall, employment rate gaps become more pronounced across countries (with few exceptions such as Greece) (Figure 11). This is also true for the clusters of countries highlighted before. Again, the polarisation trend over time is accentuated – in line with expectations – if we consider these gaps under the citizenship criteria.

One way to investigate the reasons for these divergences in the relationships between education and employment rates²¹ is to look at the regions of birth/citizenship of the migrant population across EU Member States (Figures 12-13). Our results for both 2008 and 2015 show that immigrants with basic level of education from all regions, except North Africa and the Middle East, had higher employment rates than natives. However, the opposite is true when observing the 'upper-secondary' and 'post-secondary non-tertiary education'. Indeed, in 2015 natives had higher employment rates than immigrants coming from all origin regions. Such distance between natives and immigrants is further accentuated in the case of 'tertiary education'.

Breaking down employment rates by both education level and regions of birth/citizenship highlights the gains accrued by immigrants from regions featuring very low employment rates in Europe, such as from MENA and African region (see Figures 12 and 13). The gains for immigrants from MENA countries are approximately 14 percentage points, while for African immigrants and Latin America they are slightly less than 10 percentage points. Having said that, tertiary-educated immigrants from MENA region continue to face a significant gap as compared to natives with the same educational attainment (about 20 percentage points).

Figure 12 and 13 also show that having a higher education might be less conducive to higher employment rates for immigrants as compared to natives. Similarly to what the literature has recently suggested (Luik *et al.* 2016), the gap between natives with tertiary

²¹ In this case, education level was measured on a three-category scale: 1) basic education corresponding to less than primary, primary and lower secondary education (ISCED 2011 levels 0-2); 2) Upper secondary and post-secondary non-tertiary education (ISCED 2011 levels 3 and 4); Tertiary education (ISCED 2011 levels 5-8). The correspondence between ISCED 1997 and ISCED 2011 levels was implemented following UNESCO-UIS (2012) <http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf>

educational attainment and immigrants from all other countries, and from the MENA region in particular, are very high.

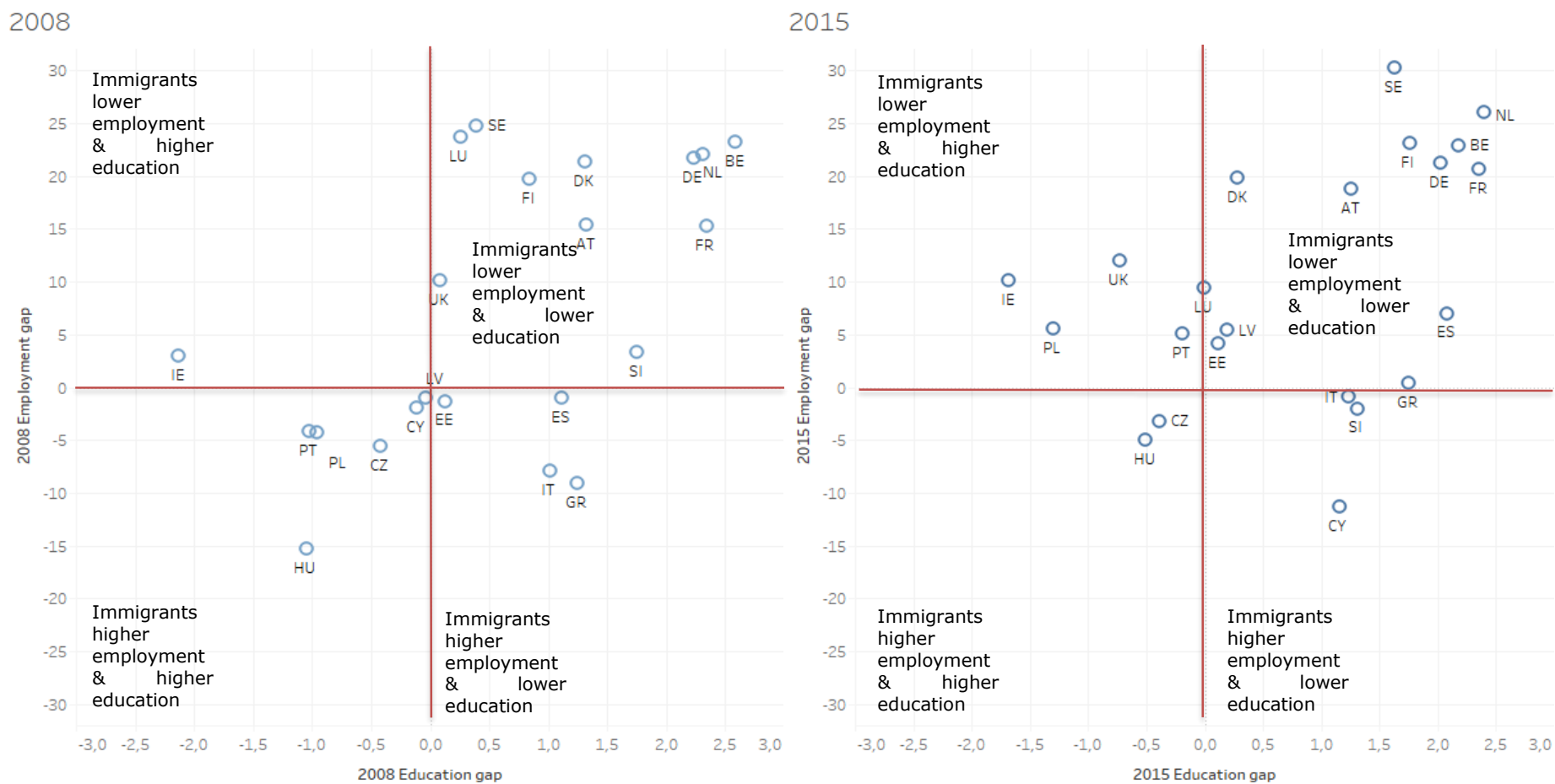
Figure 10. Years of Education and Employment Gap, CoB Criterion, 2008 and 2015



Source: KCMD elaborations of EU LFS data, 2017.

Note: Figures exclude countries for which the data is missing or has low reliability.

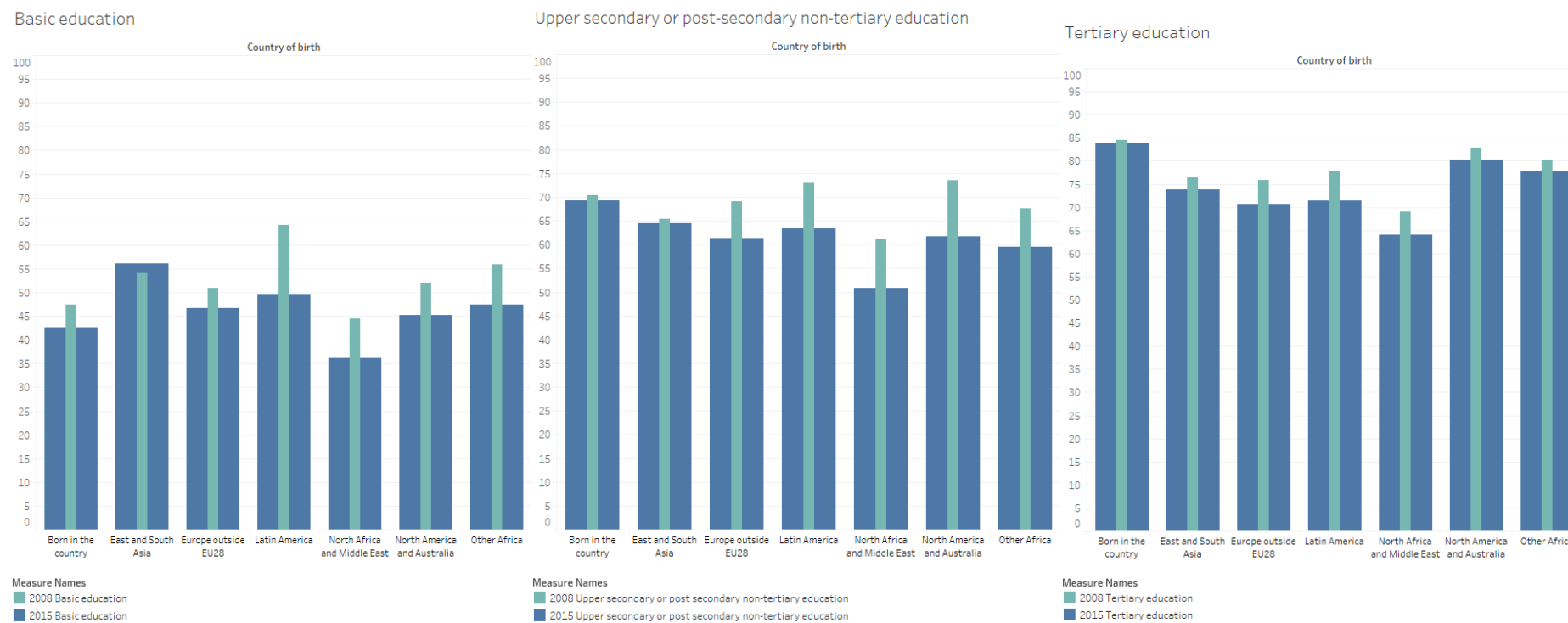
Figure 11. Years of Education and Employment Gap, CoC Criterion, 2008 and 2015



Source: KCMD elaborations of EU LFS data, 2017.

Note: Figures exclude countries for which the data is missing or has low reliability.

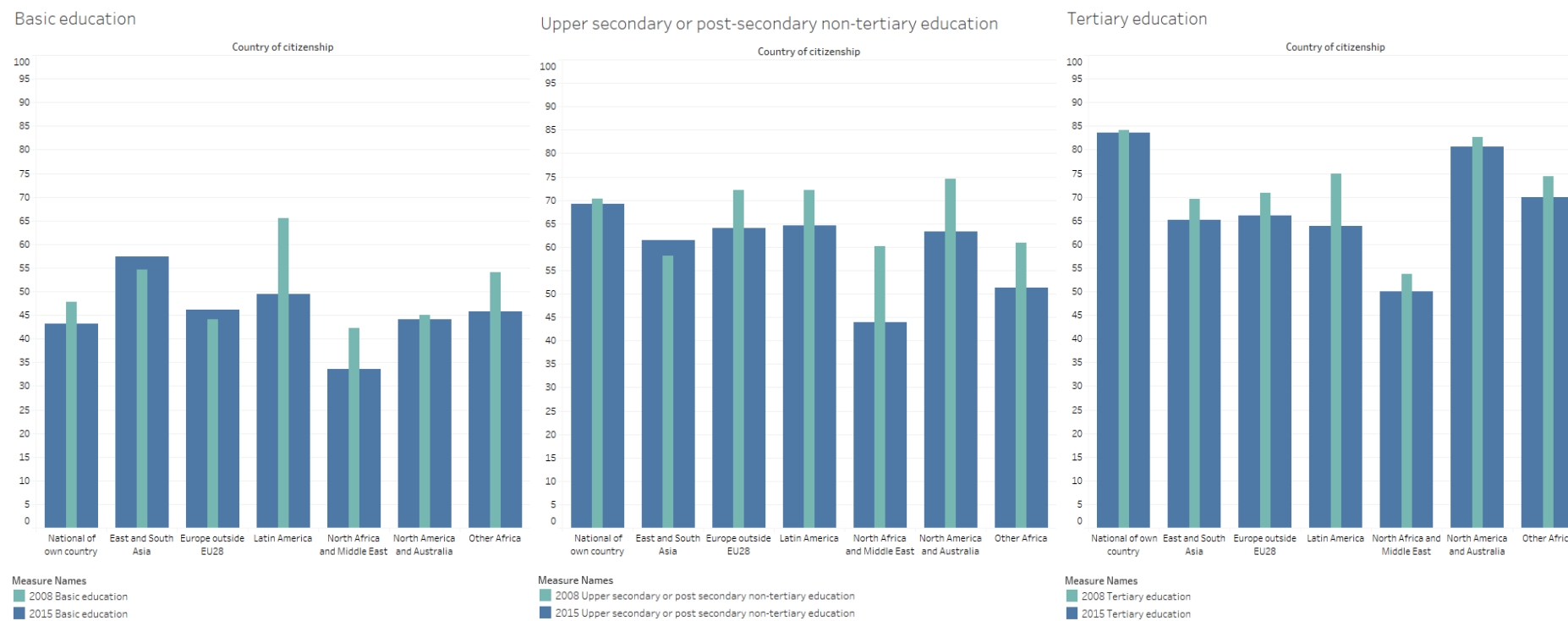
Figure 12. Employment Rates by education level and CoB, 2008 and 2015



Source: KCMD elaborations of EU LFS data, 2017.

Note: The sample does not contain data on Germany and Malta.

Figure 13. Employment Rates by level of education and CoC, 2008 and 2015



Source: KCMD elaborations of EU LFS data, 2017.

Note: The sample does not contain data on Malta.

3.2.2 Language skills

We measured **language skills** based on the 2014 EU LFS *ad hoc* module on the Labour market situation of migrants and their immediate descendants. In this *ad hoc* module, migrants self-assessed the degree of command of the main host country language on a four-point scale ranging from 'Beginner or less skills' up to 'Language is mother tongue'.

Here, to capture language skills, we took the share of immigrants who reported having basic knowledge of the host country language. The expected relationship between language proficiency and labour market integration should graphically translate in a cluster of countries (dots) located far away from the *y*-line and with positive employment gaps (i.e. natives have higher employment rates than immigrants), and another cluster very close to the *y*-axis and with negative gaps. This is exactly what the scatterplot in Figure 14 shows. The higher the share of non-EU born or non-EU citizens with basic language skills (e.g. Belgium, Finland, Sweden), the more difficult the access to the labour market as compared to natives, thus the wider the gap in employment rates. This is a trend that will consistently emerge in all graphs related to skills.

Finally, the language skills-employment relationship offers only a partial support to the OECD country classification discussed in section 3. Indeed, in the top-right corner we can see countries belonging to the humanitarian migration (Finland, Sweden) as well as long-standing destination such as Austria, Belgium, and France (and Germany under the citizenship criterion).

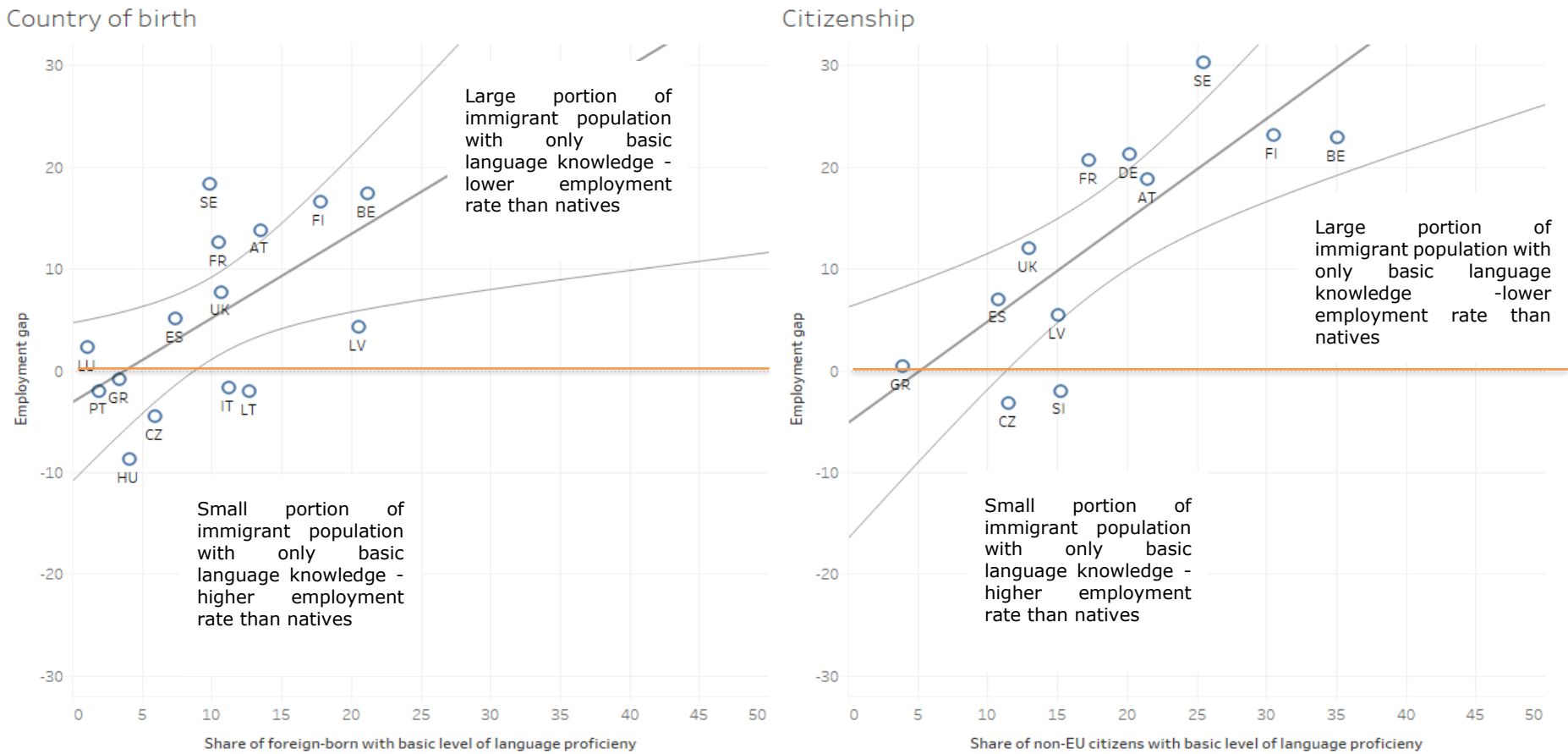
SKILLS & LABOUR MARKET INTEGRATION

There is a wide consensus in the scientific literature that equipping all workers – natives or migrants – with right skills positively affects workers' productivity as well as worker's employment outcomes (Kierzenkowski, Paciorek and G. Fulop, 2016).

Focusing on migrant's skills in specific, a wealth of studies indicate *language* proficiency as key to integration, with sizable effects on immigrants' earnings (Chiswick and Miller 2015, 1331–32; Hatton 2014, 44). In this sense, language proficiency is regarded as a crucial human capital asset which 'fosters social and economic integration', leading to higher employment chances and earnings potential (Chiswick and Miller 2015, 1331). Here, the bulk of evidence is consistent across several studies focusing on countries as diverse as, *inter alia*, the UK, Germany, and Spain (Chiswick and Miller 2015, 1332).

Himmler and Jaeckle (2014) also find that differences in gaps in *literacy skills* between migrants and natives impact migrant-native wage gaps. In addition, Lupiañez, Codagnone and Dalet (2015) find that *ICT skills* positively affect the employability of migrants.

Figure 14. Language skills (2014) and Employment gap, CoB and CoC (2015)



Source: KCMD elaborations of EU LFS, 2017.

Note: Figures excludes countries for which the data is missing or has low reliability²².

²² In the Annex, we replicated with all Member States for which data was available (Figure 25). Figure 14 does not contain two outliers (Cyprus and Estonia) which significantly enlarge the scale and consequently obfuscates the general relationship between the two variables.

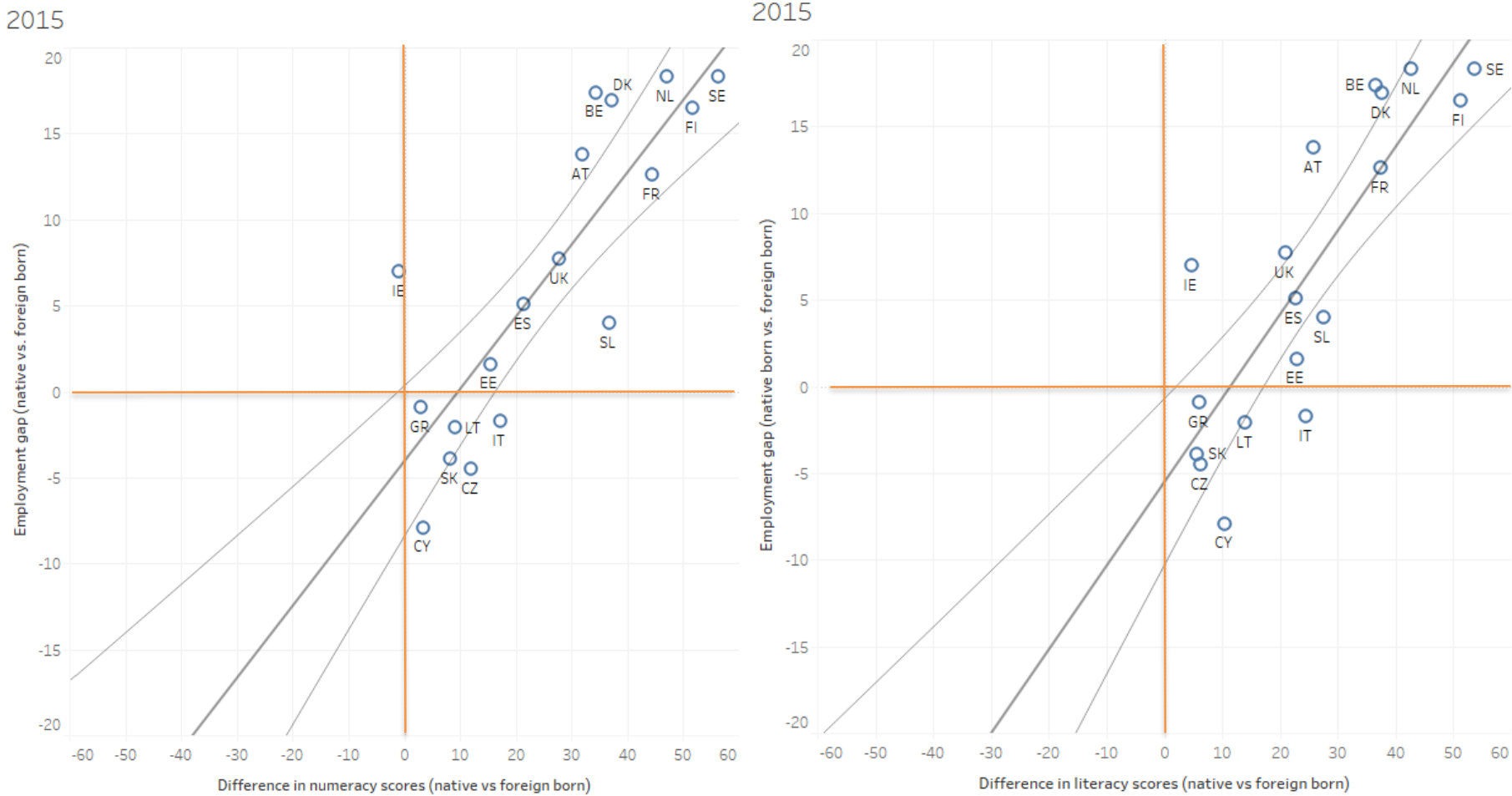
3.2.3 Numerical and literacy skills

This section considers the relationship between employment gaps and gaps in numeracy and literacy skills, the latter measured using the OECD Survey of Adult Skills (PIAAC) data.

The relationships between employment gap and numerical and literacy skills is evident from Figure 15, and it becomes neater under the citizenship criteria. Three clusters of countries can be detected:

- Greece, Lithuania, Italy, Slovakia, Czech Republic, and Cyprus, where the difference between immigrants and natives is minimal if not negative (meaning that immigrants have better numeracy and literacy skills than natives), leading to better employment outcomes for immigrants as compared to natives.
- Estonia, Ireland, Slovakia, Spain, and the UK, which have an intermediate position (particularly in the case of numerical skills), where relatively small gaps result in employment rates gaps ranging between 2 to 8 percentage points.
- Austria, Belgium, Denmark, Finland, France, the Netherlands, and Sweden, where large gaps in skills translate in large employment gaps. This group of Member States exactly coincides with the upper left group of countries in Figure 10, whereas there is no exact matching with the other two groups above. Within this group, it is useful to single out the 'destination countries with significant recent and humanitarian migration (Denmark, Finland, Norway, Sweden)', to highlight a possible policy implication of access policies. As the OECD highlighted, the main channel of entries for these countries have been family reunification and humanitarian channels.

Figure 15. Numerical and literacy skills and employment gap, CoB criterion, 2015



Source: KCMD elaborations of EU LFS and PIAAC, 2017.

Note: Figures excludes countries for which the data is missing or has low reliability

3.2.4 Digital skills

Finally, in the overview of the relationship between migrant's skills and employment we have considered the *Digital skills indicator*²³ developed by DG CONNECT and Eurostat. This indicator comprises 4 digital skills' domains - namely information skills, communication skills, problem solving skills and software skills for content manipulation - and provides a 4 point-scale of the level of overall digital skills. According to this scale, individuals are classified into *a*) individuals with "above basic" level of skills ("above basic" in all 4 domains), *b*) individuals with a "basic" level of skills (at least "basic" in all 4 domains), *c*) individuals with "low" level of skills (missing some type of basic skills) and *d*) individuals with "no skills" (one or more "none" in one to three domains).

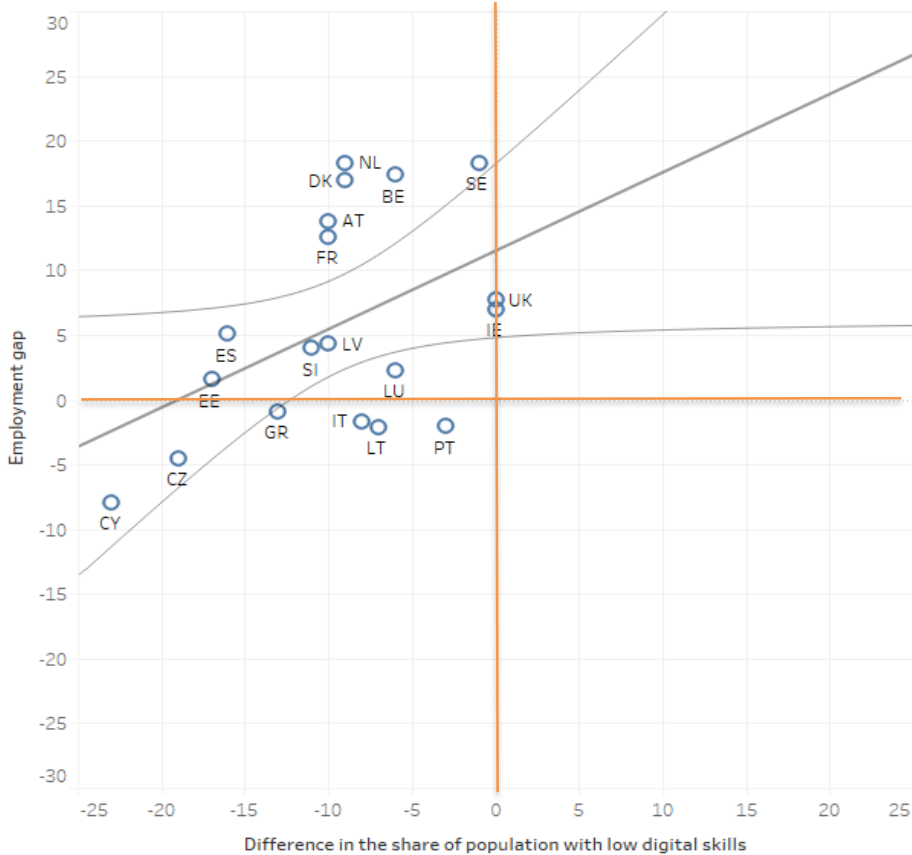
In this report we have compared the share of migrant population having "low level of digital skills" to the share of native population with same skills. It should be considered however that, differently from language and numeracy and literacy skills which are general skills applied to all occupation, the extent of use of digital skills is linked to certain types of occupation.

Figure 16 shows that when there is a larger proportion of immigrants with low digital skills as compared to the share of natives with same skills, immigrants tend to have better labour market integration as compared to natives (as measured by employment rates). A future hypothesis that can be tested is whether immigrants in this latter group of countries are carrying out tasks which do not entail an elevated level of competence in digital skills.

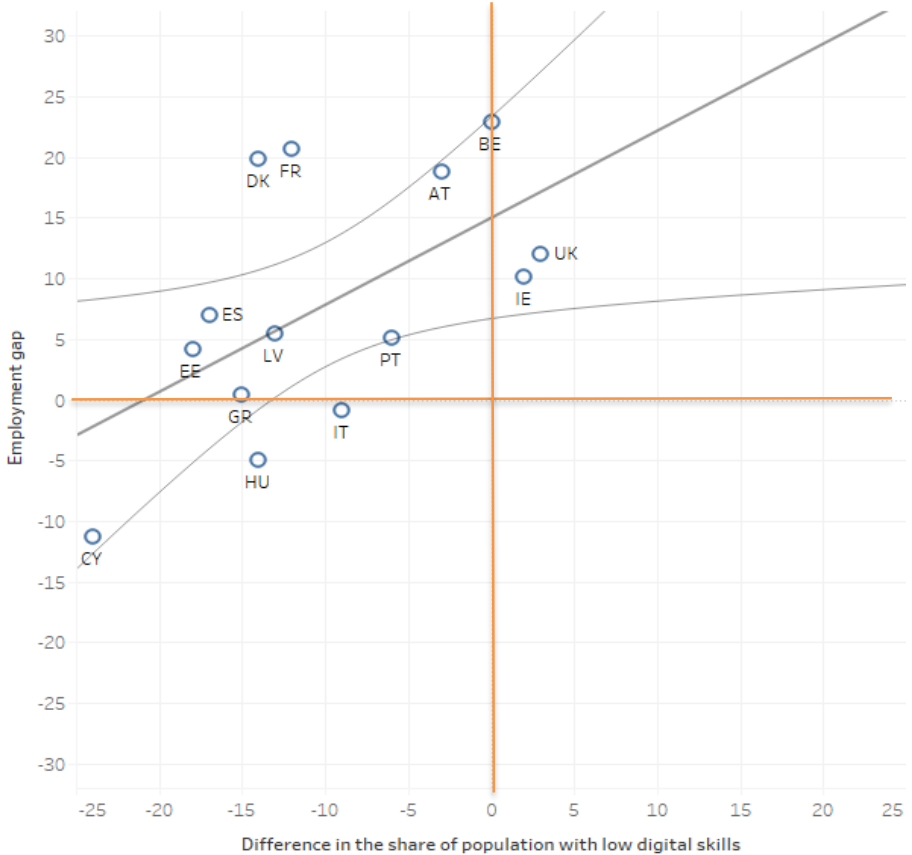
²³ <https://ec.europa.eu/digital-single-market/en/news/new-comprehensive-digital-skills-indicator>

Figure 16. Digital skills and Employment gaps, CoB and CoC criteria, 2015

Country of birth



Country of citizenship



Source: KCMD elaborations of Eurostat [isoc_sk_dskl_i] Last update: 26-04-2017.

Note: Figures exclude countries for which the data is missing or has low reliability.

4 Active labour market policies

4.1.1 Policies

This section examines the extent to which active labour market policies are associated with immigrants' employment rates. Even though long-term unemployment is usually used as the main indicator of the efficacy of active labour market policies, and particularly so after the 2007/08 crisis, here we would like to show how investing on these policies might be related to labour market integration overall, as measured by employment rates. The objective of active labour market policies 'is to increase the employment opportunities for job seekers and to improve matching between jobs (vacancies) and workers (i.e. the unemployed)'²⁴.

Eurostat stores data on three distinct types of labour market policy interventions, namely services, measures, and supports. The following definitions are taken from Eurostat explanatory notes (metadata²⁵) on these interventions:

- a) **LMP services** cover all services and activities of the Public Employment Services (PES) together with any other publicly funded services for jobseekers.
 - i. Labour market services
- b) **LMP measures** cover interventions that provide temporary support for groups that are disadvantaged in the labour market and which aim at activating the unemployed, helping people move from involuntary inactivity into employment, or maintaining the jobs of persons threatened by unemployment.
 - ii. Training
 - iii. Employment incentives
 - iv. Supported employment and rehabilitation
 - v. Direct job creation
 - vi. Start-up incentives
- c) **LMP supports** cover financial assistance that aims to compensate individuals for loss of wage or salary and support them during job-search (i.e. mostly unemployment benefits) or which facilitates early retirement.
 - vii. Out-of-work income maintenance and support
 - viii. Early retirement

LABOUR MARKET REGULATIONS AND POLICIES & LABOUR MARKET INTEGRATION

The role of labour market institutions and (active and passive) policies on general labour market dynamics has been widely debated in recent times (OECD 2015: 105–166), and some of these discussions have also touched upon the issue of labour market integration of migrants.

In the domain of labour market policies, Butschek and Walter have recently reviewed the effect of active labour market policies on immigrants' employment rates drawing on a survey of 33 evaluation studies. Focusing mainly on short-term effects of these policies, they found that among four main typologies of such policies in place in Europe – i.e. training, job search assistance, subsidised public sector employment, wage subsidies – only the latter was consistently effective across all studies surveyed (Butschek and Walter 2014).

Regarding the Employment protection legislation (EPL), the academic literature has provided mixed evidence in relation to the hypothesis that the more stringent the EPL, the highest the 'effect of statistical discrimination and the penalty of an outsider status [e.g. immigrants] in the labour market that immigrants are likely to experience' (Fleischmann and Dronkers 2010, 350; Migali 2017). Benton *et al.*, on other side, concluded that short-term contracts and low regulatory barriers in EU countries favours early entry of immigrants into the labour market (Benton, Fratzke and Sumpton 2014, 16)

A recent contribution points also to the importance of the level of labour market protection for acquisition of skills, which are in turn so relevant for immigrants' employment outcomes (as shown in the previous subsection). Levels *et al.* have noticed that 'protective labour markets' are associated with literacy and numeracy gaps (Levels, Dronkers, and Jencks 2017, 18–19).

²⁴https://ec.europa.eu/info/sites/info/files/european-semester_thematic-factsheet_active-labour-market-policies_en.pdf (accessed on 09/10/2017).

²⁵ http://ec.europa.eu/eurostat/cache/metadata/en/lmp_esms.htm (accessed on 09/10/2017).

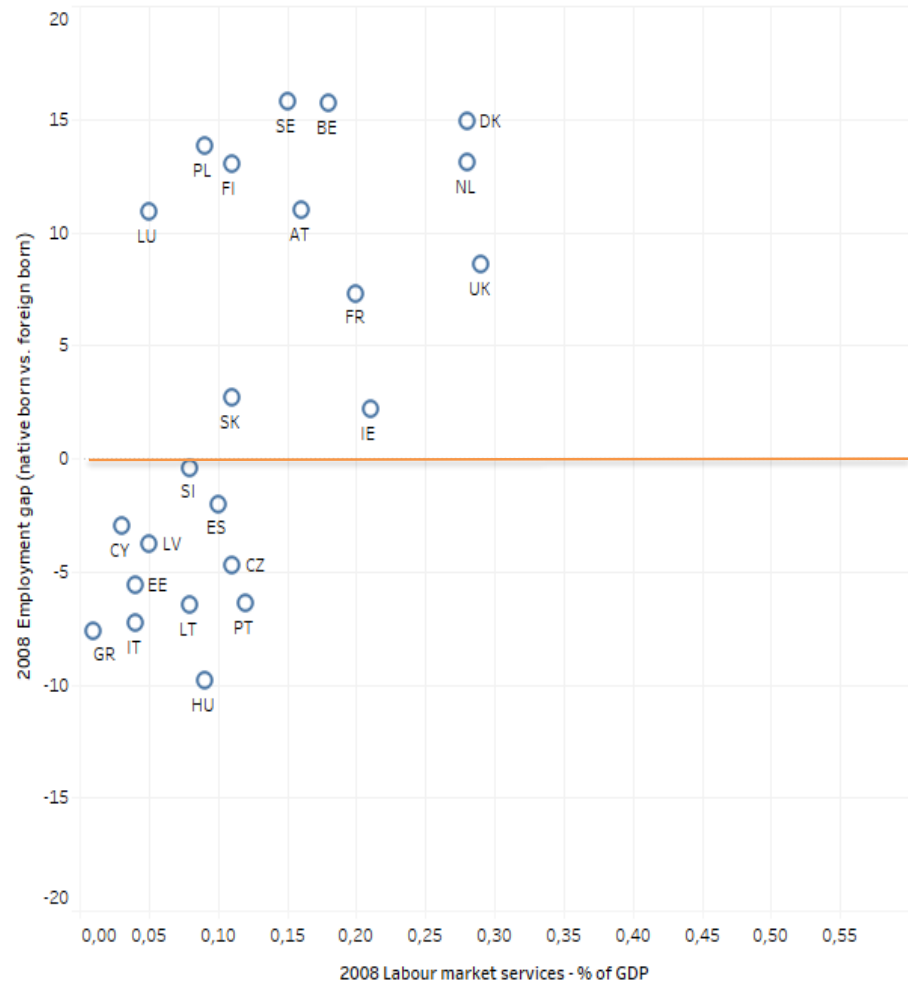
It should be borne in mind that these labour market policy interventions usually do not target in specific the foreign-born or foreign citizens group as such, but are primarily directed at the entire working-age population and in specific those 'to whom it is possible to apply the principle of mutual obligation, while groups not entitled to benefits (e.g. due to contribution conditions or means tests) are entitled to basic services' (OECD 2015: 115). Nevertheless, there are some exceptions such as Denmark which has a mandatory integration programme specifically targeting recent migrants receiving social benefits (OECD 2015: 115).

The general impression emerging from Figures 18-23 is that countries that feature high positive employment gaps have been devoting at the same time relatively higher shares of their GDPs to active labour market policies. Although it is not possible to distinguish the part of the ALMPs that immigrants benefit from, it is also true that to the extent to which these policies embrace both natives and immigrants, they could help in reducing the employment gaps that have been highlighted in this report. At the same time, this relationship could be interpreted also in the opposite direction: the immigrant's residential choice is not random as they tend to locate in more rich destinations, that is those with a higher wage differential with the receiving countries. In specific, in the European case these destinations tend to correspond to countries dedicating larger shares of their GDP for ALMPs.

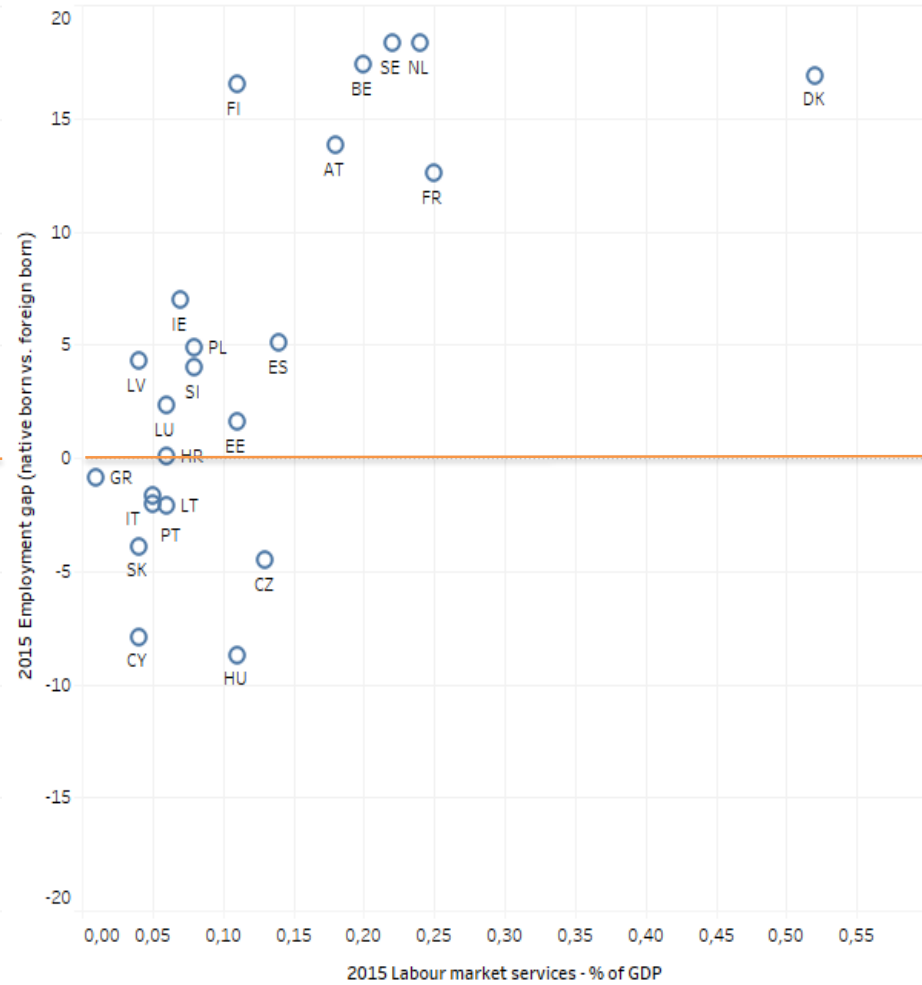
As a note of caution, it is important to emphasise that these graphs aim at tentatively investigate, through descriptive statistics, whether any preliminary and meaningful relationships could be traced between these two variables. Only more complex inferential statistical techniques that aim at testing the causality entailed in this relationship while controlling for other intervening variables could offer a more comprehensive picture on the underlying mechanisms connecting active labour market policies and employment gaps.

Figure 17. LMP «services» and Employment gap, CoB criterion, 2008-2015

LMP "services" 2008



LMP "services" 2015

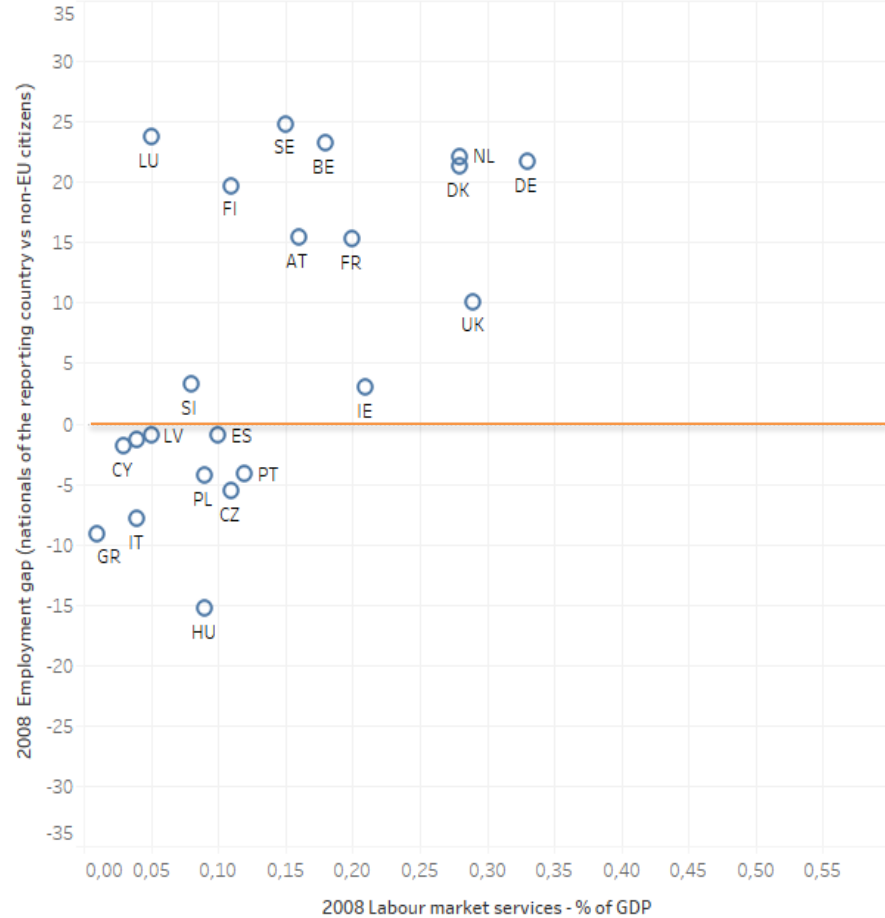


Source: KCMD elaborations of EU LFS and Eurostat (DG EMPL), 2017.

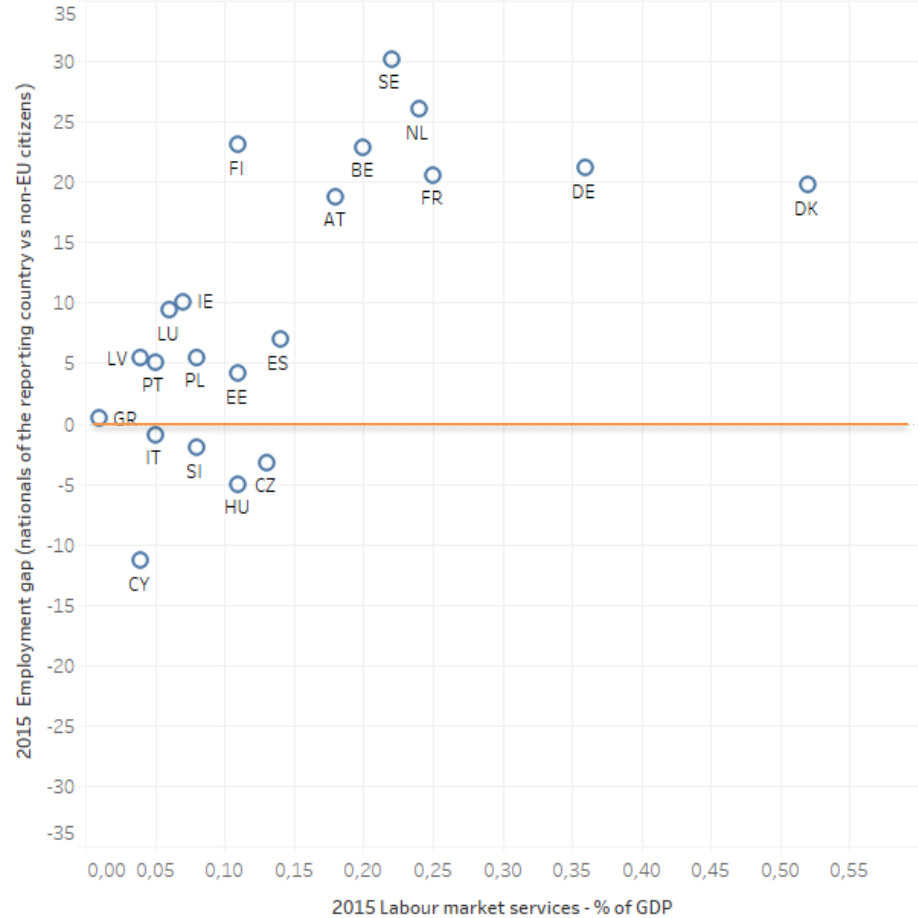
Note: Figures exclude countries for which the data is missing or has low reliability.

Figure 18. LMP «services» and Employment gap, CoC criterion, 2008-2015

LMP "services" 2008



LMP "services" 2015

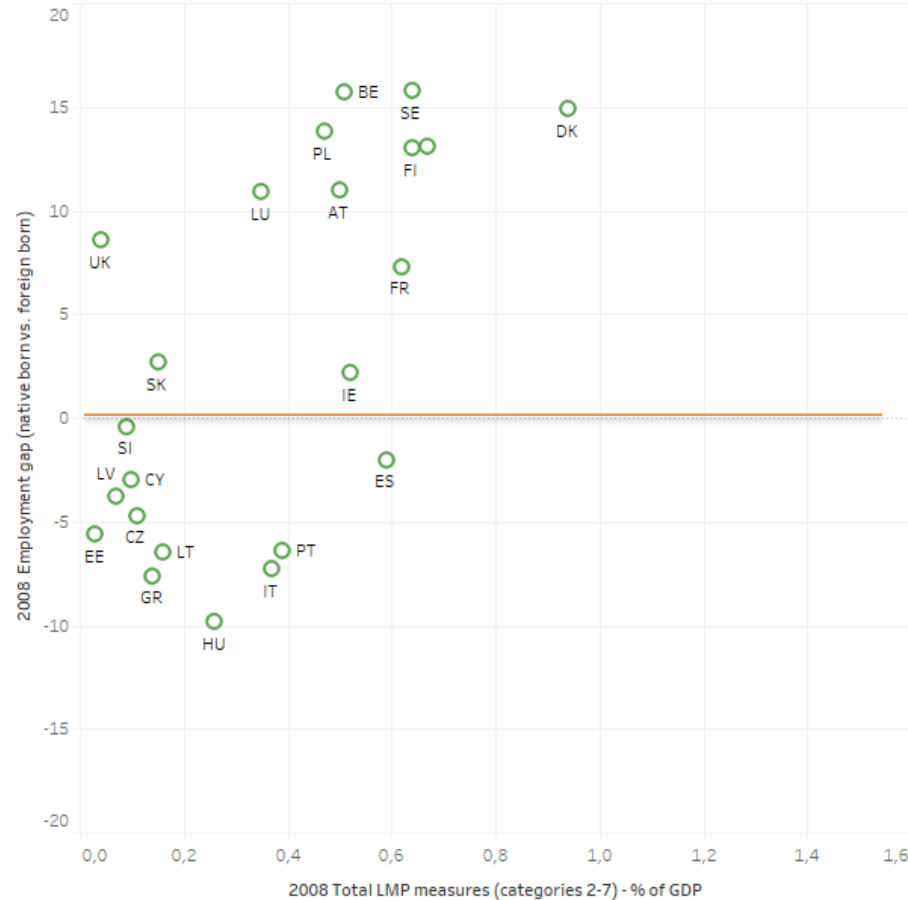


Source: KCMD elaborations of EU LFS and Eurostat (DG EMPL), 2017.

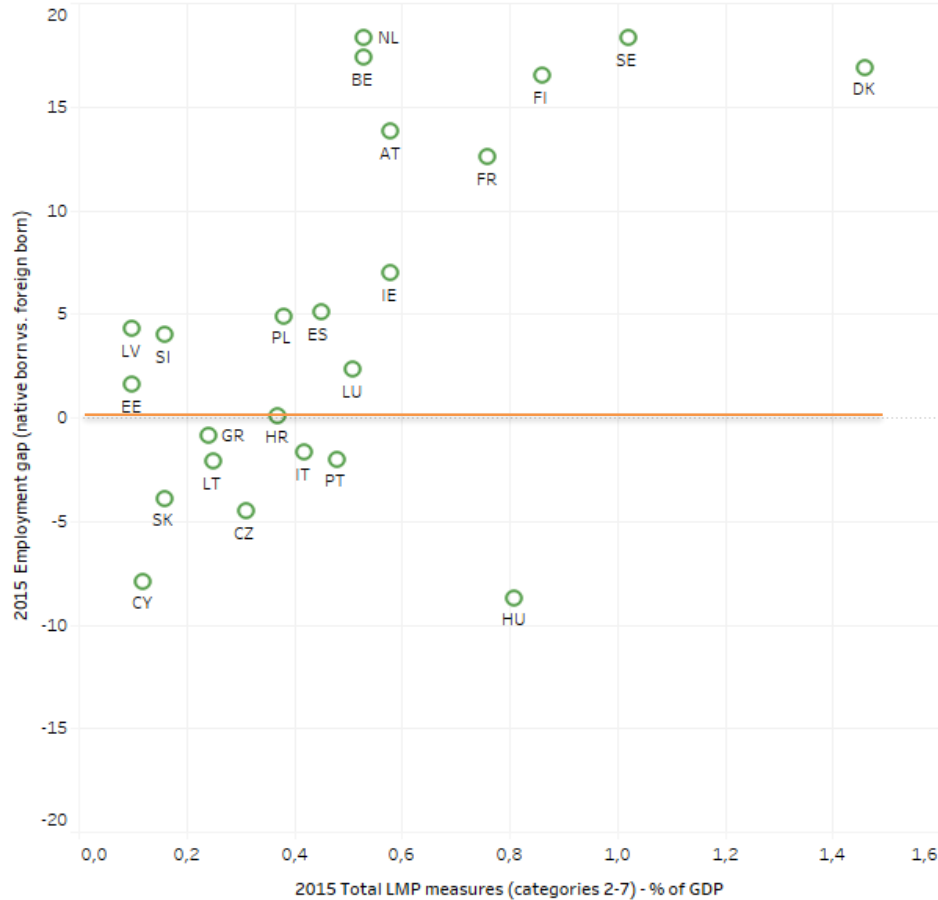
Note: Figures exclude countries for which the data is missing or has low reliability.

Figure 19. LMP «measures» and employment gap, CoB criterion, 2008-2015

LMP "measures" 2008



LMP "measures" 2015

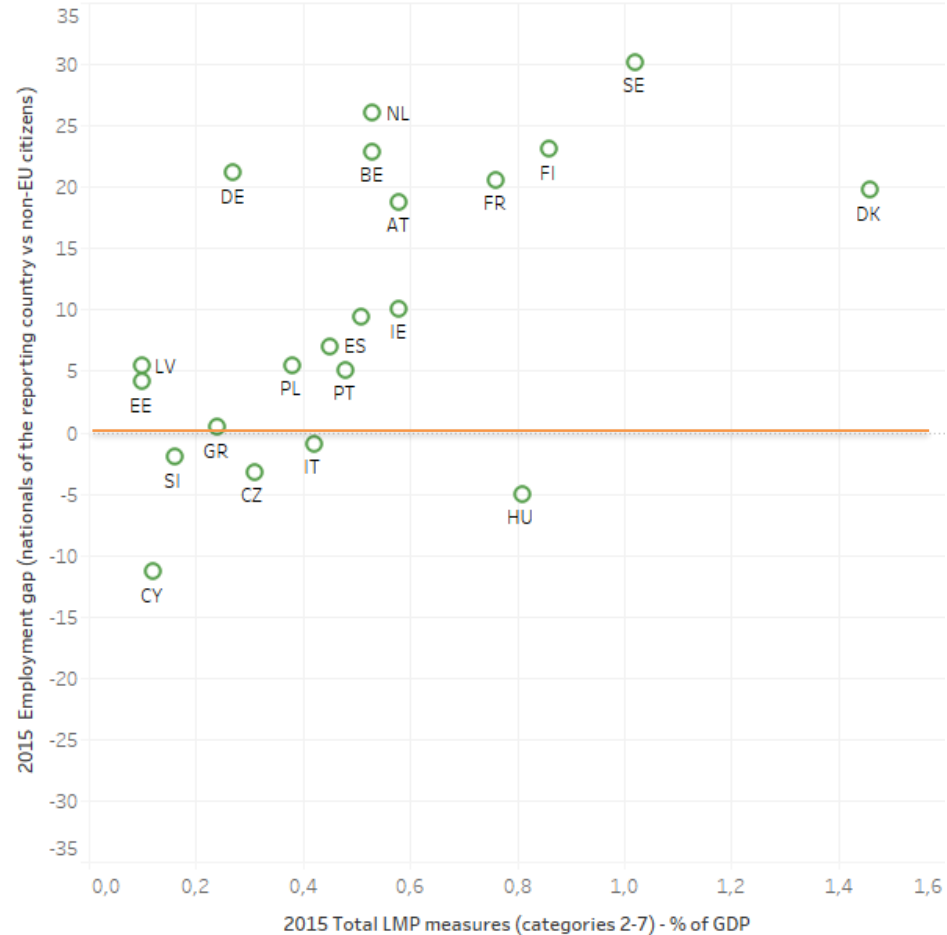


Source: KCMD elaborations of EU LFS and Eurostat (DG EMPL), 2017.

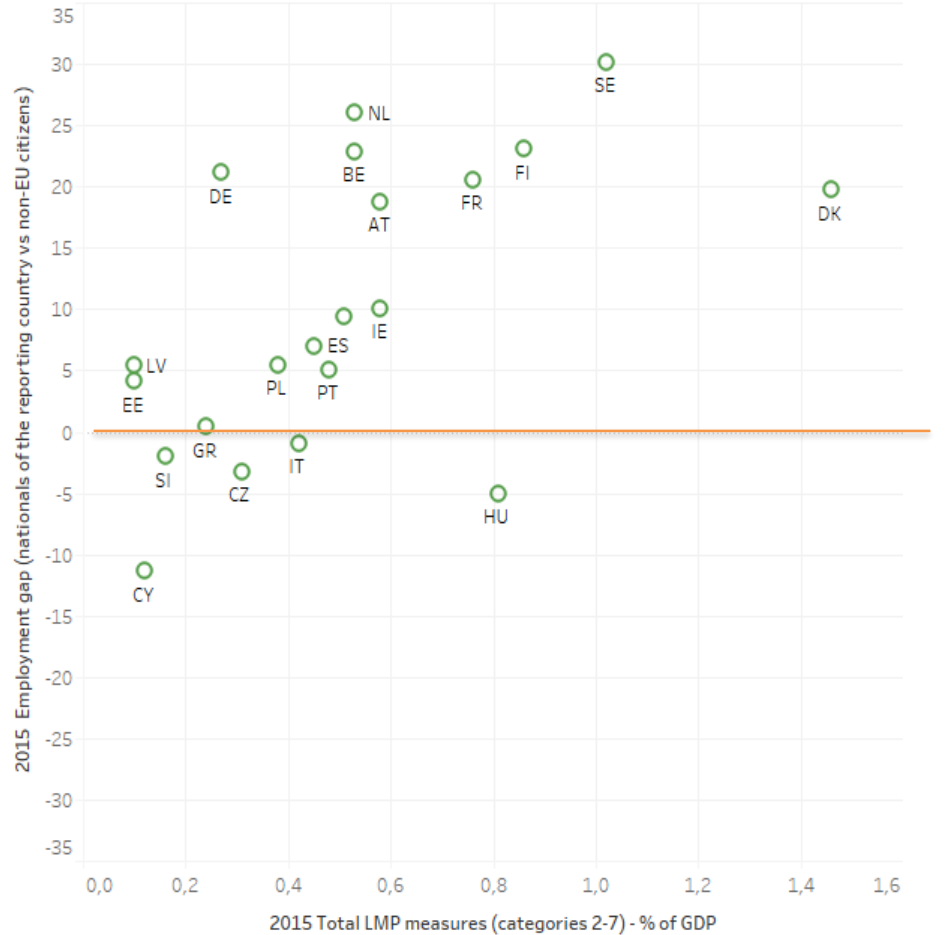
Note: Figures exclude countries for which the data is missing or has low reliability.

Figure 20. LMP «measures» and employment gap, CoC criterion, 2008-2015

LMP "measures" 2015



LMP "measures" 2015

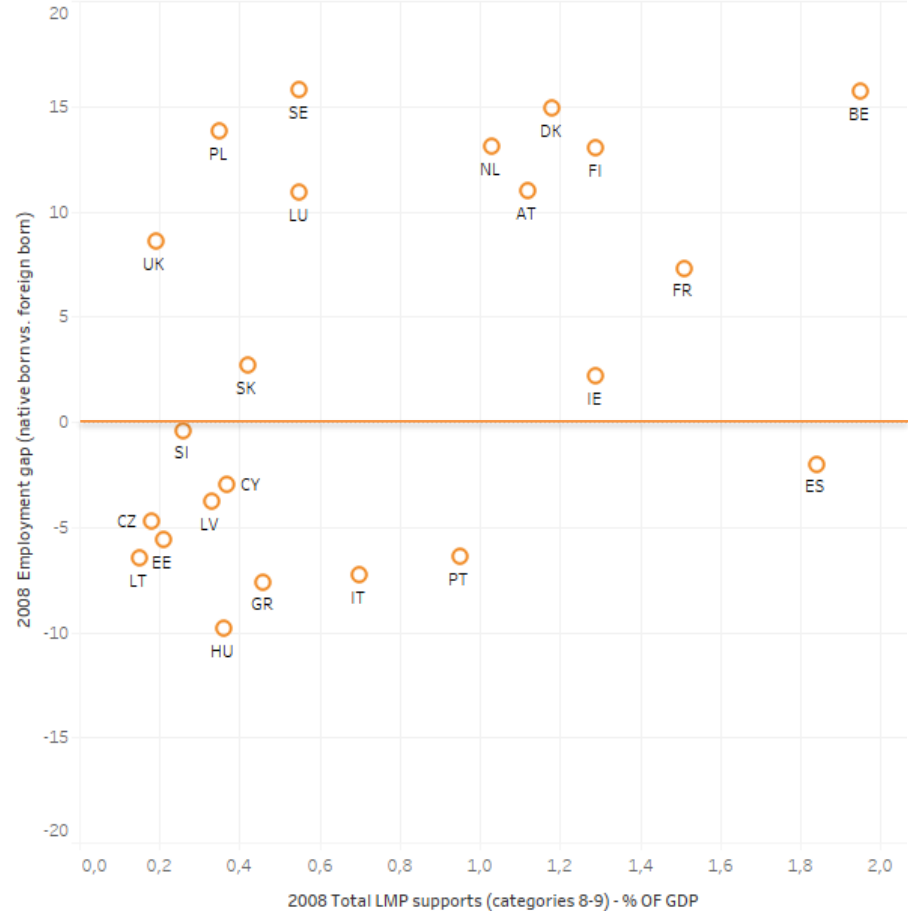


Source: KCMD elaborations of EU LFS and Eurostat (DG EMPL), 2017.

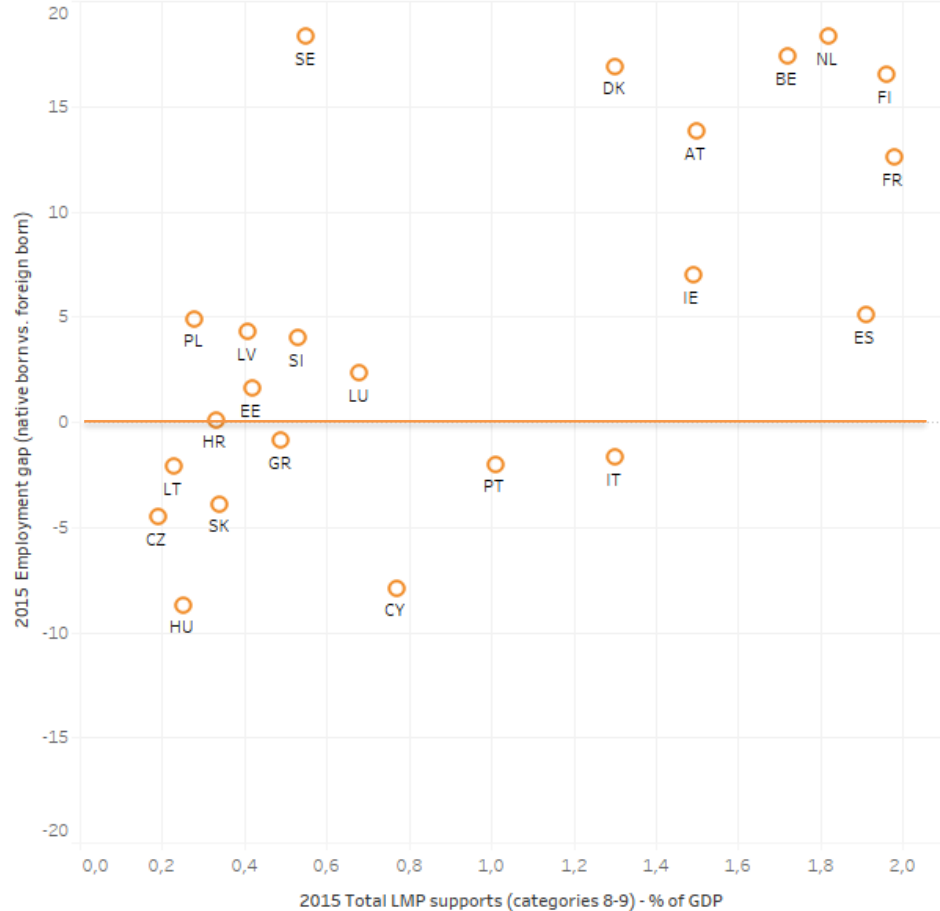
Note: Figures exclude countries for which the data is missing or has low reliability.

Figure 21. LMP «supports» and employment gap, CoB criterion, 2008-2015

LMP "supports" 2008



LMP "supports" 2015

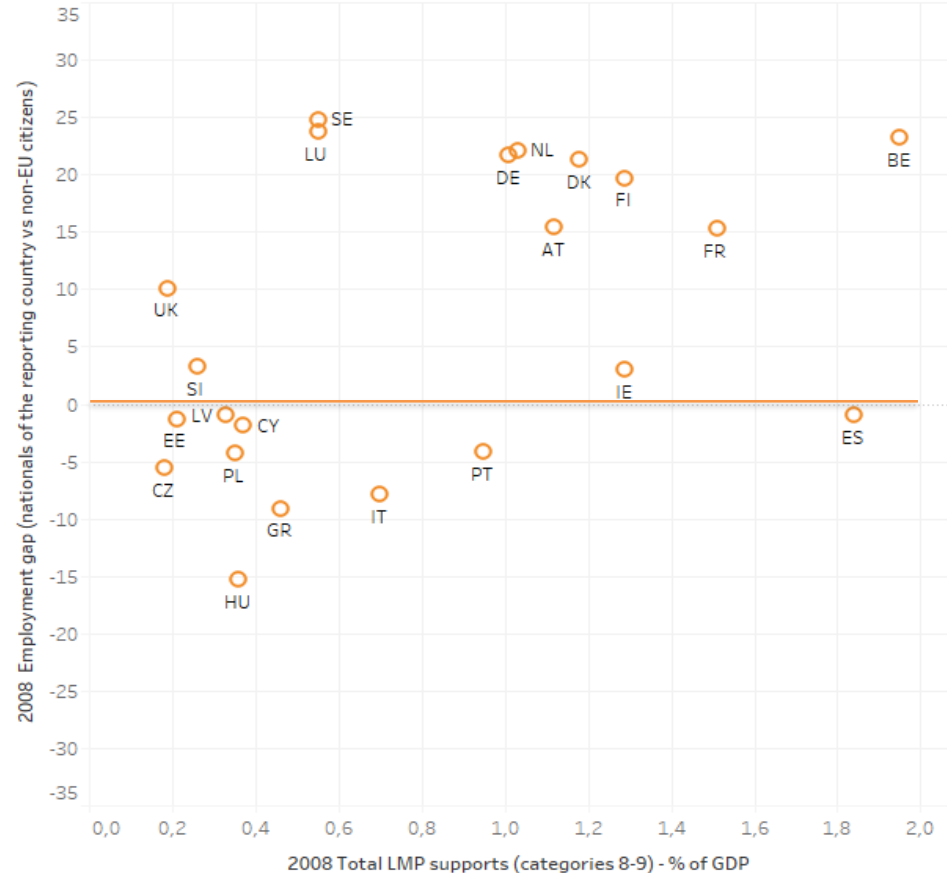


Source: KCMD elaborations of EU LFS and Eurostat (DG EMPL), 2017.

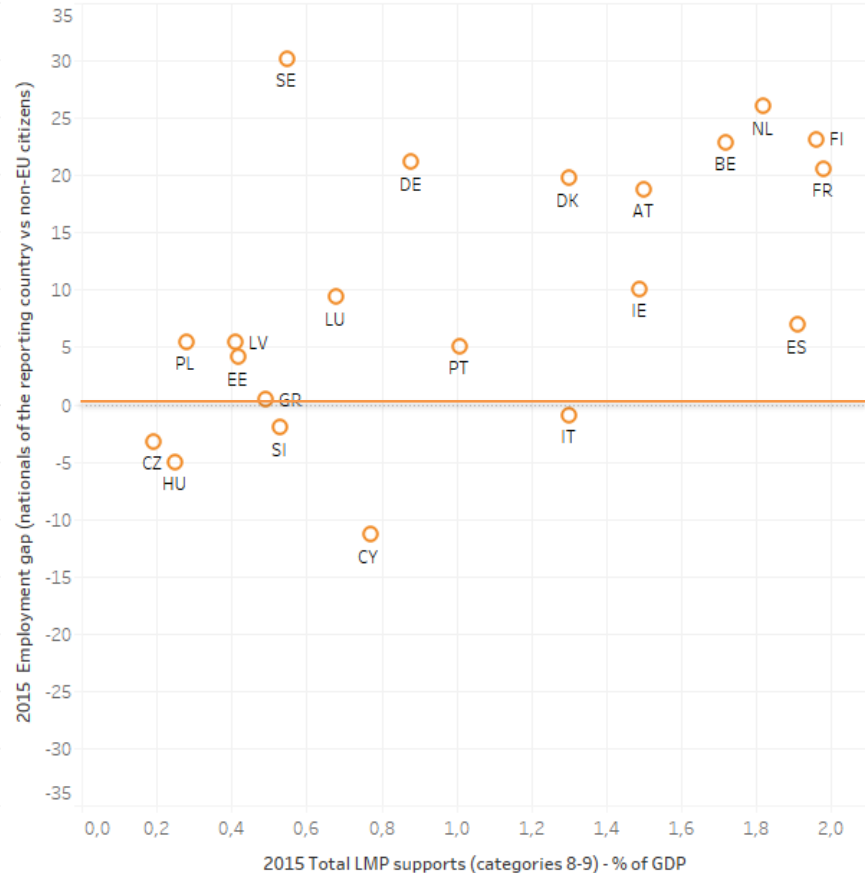
Note: Figures exclude countries for which the data is missing or has low reliability.

Figure 22. LMP «supports» and employment gap, CoC criterion, 2008-2015

LMP "supports" 2008



LMP "supports" 2015



Source: KCMD elaborations of EU LFS and Eurostat (DG EMPL), 2017.

Note: Figures exclude countries for which the data is missing or has low reliability.

5 Conclusions

This report has looked at the intensity and variation of employment rate gaps between natives and immigrants in EU28 between 2008 and 2015. The main findings are:

- Employment gaps **vary widely in intensity** in the period considered, ranging from 30.9 percentage points in Sweden in 2012 (immigrants having lower employment rates than natives), to -16.1 in Slovakia in 2015 (immigrants having higher employment rates). For several countries (Austria, Belgium, Denmark, Finland, France, Germany, and Sweden), these **gaps are remarkably stable**. Consequently, there is little evidence that the large gaps recorded in this report for this set of Member States are closing.
- We can identify **clusters of countries** across all our analysis (albeit not exactly overlapping with OECD country clusters). This confirms that the EU approach to integration, which has historically eschewed a one-size-fits-all approach in favour of more tailor-made policy solutions, is correct.
- There are substantial differences in integration outcomes across **regions of birth/citizenship**, even when breaking down the data by education, and these differences persist through time.
- There are also significant differences between recent- and long-term immigrants, highlighting the **importance of the length of residence** for immigrants' integration. Again, the length of residence is associated with varying results in terms of immigrants' integration outcomes depending on the regions of birth/citizenship and education.
- Regarding education and skills, the findings largely confirm the expectations of a positive association between these factors and labour market integration. In other words, countries with higher gaps between natives and immigrants' skills also feature large employment gaps.
- Comparing employment rates by educational levels also reveals that, particularly for some regions of origin, the economic return in terms of employment rates of achieving tertiary education for immigrants is lower than natives.

This report has provided an exploration of employment rate gaps between natives and immigrants. There are at least two main research avenues ahead. First, the analysis could be further developed from descriptive to inferential, developing models to quantitatively estimate the relationships between the determinants analysed here and employment rates. Second, employment rates provide only some pieces of the larger and more complex puzzle of immigrants' integration in the labour markets. The natural step forward would be to move from the quantity of work to the quality of work carried out by immigrants. To do that, this report should be coupled with, at least, other analysis of immigrants' earning and occupational status.

References

- Algan, Yann, Christian Dustmann, Albrecht Glitz, and Alan Manning (2010). 'The Economic Situation of First and Second-Generation Immigrants in France, Germany and the United Kingdom', *The Economic Journal*, 120:542, F4–F30.
- Bakker, Linda, Jaco Dagevos, and Godfried Engbersen (2017). 'Explaining the refugee gap: a longitudinal study on labour market participation of refugees in the Netherlands', *Journal of Ethnic and Migration Studies*, 43:11, 1775–1791.
- Bratsberg, Bernt, Oddbjørn Raaum, and Knut Røed (2017). 'Immigrant labor market integration across admission classes', *CREAM*, CPD 02/17.
- Butschek, Sebastian, and Thomas Walter (2014). 'What active labour market programmes work for immigrants in Europe? A meta-analysis of the evaluation literature', *IZA Journal of Migration*, 3:1 <http://www.izajom.com/content/3/1/48> (Accessed October 9, 2017).
- Chiswick, Barry R, and Paul W Miller, eds. (2015). *The impact and regional studies*. Amsterdam: North-Holland.
- Council of the European Union (2004). 'Press Release. 2618th Council Meeting Justice and Home Affairs. 14615/04 (Presse 321)', http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/jha/82745.pdf.
- D'Amuri, Francesco, and Giovanni Peri (2014). 'IMMIGRATION, JOBS, AND EMPLOYMENT PROTECTION: EVIDENCE FROM EUROPE BEFORE AND DURING THE GREAT RECESSION: Immigration, Jobs, and Employment Protection', *Journal of the European Economic Association*, 12:2, 432–464.
- Drydakis, Nick (2017). 'Measuring Labour Differences between Natives, Non-Natives, and Natives with an Ethnic-Minority Background', *IZA*, DP No. 10981.
- Dustmann, Christian, Francesco Fasani, Tommaso Frattini, Luigi Minale, and Uta Schönberg (2017). 'On the economics and politics of refugee migration', *Economic Policy*, 32:91.
- Dustmann, Christian, Albrecht Glitz, and Thorsten Vogel (2010). 'Employment, wages, and the economic cycle: Differences between immigrants and natives', *European Economic Review*, 54:1, 1–17.
- European Commission (2016a). *Employment and social developments in Europe 2016*. Luxembourg: Publications Office of the European Union.
- European Commission (2016b). *An economic take on the refugee crisis: a macroeconomic assessment for the EU*. Luxembourg: Publications Office <http://bookshop.europa.eu/uri?target=EUB:NOTICE:KCBC16033:EN:HTML> (Accessed October 23, 2017).
- European Commission, and OECD (2016). 'How are refugees faring on the labour market in Europe?', Working Paper 1/2016 <http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=7921&visible=1> (Accessed October 23, 2017).

- Eurostat (2017). *Migrant integration*. 2017 edition. Luxembourg: Publications Office of the European Union.
- Finotelli, Claudia (2009). 'The North–South Myth Revised: A Comparison of the Italian and German Migration Regimes', *West European Politics*, 32:5, 886–903.
- Fleischmann, Fenella, and Jaap Dronkers (2010). 'Unemployment among immigrants in European labour markets: an analysis of origin and destination effects', *Work, employment and society*, 24:2, 337–354.
- Fulop, Gabor, Aleksandra Paciorek, and Rafal Kierzenkowski (2016). 'Boosting skills for all in the Netherlands', http://www.oecd-ilibrary.org/economics/boosting-skills-for-all-in-the-netherlands_5j1wjg6j6lr1-en (Accessed October 13, 2017).
- Gorodzeisky, Anastasia, and Moshe Semyonov (2017). 'Labor force participation, unemployment and occupational attainment among immigrants in West European countries' Ignacio Correa-Velez (ed.), *PLOS ONE*, 12:5, e0176856.
- Green, Tim, and L Alan Winters (2010). 'Economic Crises and Migration: Learning from the Past and the Present', *The World Economy*, 33:9, 1053–1072.
- Hainmueller, J, D Hangartner, and D Lawrence (2016). 'When lives are put on hold: Lengthy asylum processes decrease employment among refugees', *Science Advances*, 2:8, e1600432–e1600432.
- Hatton, Timothy J (2014). 'The economics of international migration: A short history of the debate', *Labour Economics*, 30, 43–50.
- Himmler, Oliver, and Robert Jackle (2014). 'Literacy and the Migrant-Native Wage Gap', MPRA Paper No. 58812, posted 25 <http://mpra.ub.uni-muenchen.de/58812/>.
- Kerr, Sari Pekkala, and William Kerr (2011). 'Economic Impacts of Immigration: A Survey', Cambridge, MA: National Bureau of Economic Research <http://www.nber.org/papers/w16736.pdf> (Accessed October 23, 2017).
- Khoudja, Yassine, and Lucinda Platt (2017). 'Labour market entries and exits of women from different origin countries in the UK', *Social Science Research*, <http://linkinghub.elsevier.com/retrieve/pii/S0049089X17304714> (Accessed November 6, 2017).
- Levels, Mark, Jaap Dronkers, and Christopher Jencks (2017). 'Contextual explanations for numeracy and literacy skill disparities between native and foreign-born adults in western countries' Jelte M Wicherts (ed.), *PLOS ONE*, 12:3, e0172087.
- Luik, Marc-André, Henrik Emilsson, and Pieter Bevelander (2016). 'Explaining the Male Native-Immigrant Employment Gap in Sweden: The Role of Human Capital and Migrant Categories', Discussion Paper No. 9943.
- Lupiañez, Francisco, Cristiano Codagnone, and Rosa Dalet (2015). 'ICT for the Employability and Integration of Immigrants in the European Union', JRC Technical Report, JRC.
- Migali, Silvia (2017). 'Migration and institutions: Evidence from internal EU mobility', *The World Economy*, <http://doi.wiley.com/10.1111/twec.12525> (Accessed October 10, 2017).

- Natale, Fabrizio, and Sara Grubanov-Boskovic (2017). 'Migration in a segmented labour market', JRC Technical Report, JRC.
- OECD, ed. (2011). *Naturalisation: a passport for the better integration of immigrants?* Paris: OECD.
- OECD (2015). *OECD Employment Outlook 2015*. OECD Publishing <http://public.eblib.com/choice/publicfullrecord.aspx?p=3564493> (Accessed November 6, 2017).
- OECD (2017). *Making integration work: assessment and recognition of foreign qualifications*. Paris: OECD.
- OECD, and EU, eds. (2015). *Indicators of immigrant integration 2015: settling in*. Paris: OECD.
- Panel on the Economic and Fiscal Consequences of Immigration, Committee on National Statistics, Division of Behavioral and Social Sciences and Education, and National Academies of Sciences, Engineering, and Medicine (2017). *The Economic and Fiscal Consequences of Immigration*. Francine D Blau and Christopher Mackie (eds.). Washington, D.C.: National Academies Press <https://www.nap.edu/catalog/23550> (Accessed September 27, 2017).
- Roos, Christof, and Natascha Zaun (2016). 'The global economic crisis as a critical juncture? The crisis's impact on migration movements and policies in Europe and the U.S.', *Journal of Ethnic and Migration Studies*, 42:10, 1579–1589.

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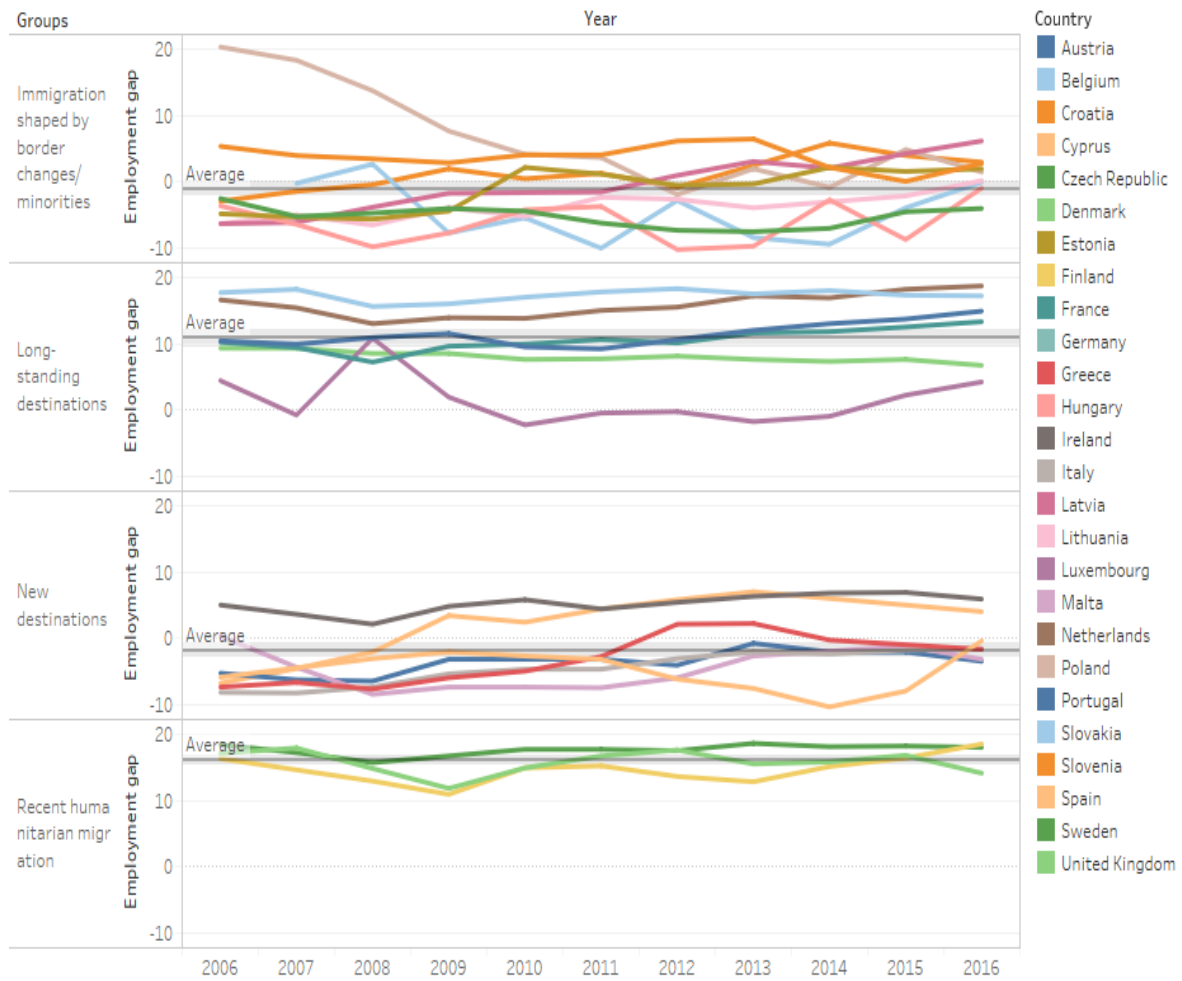
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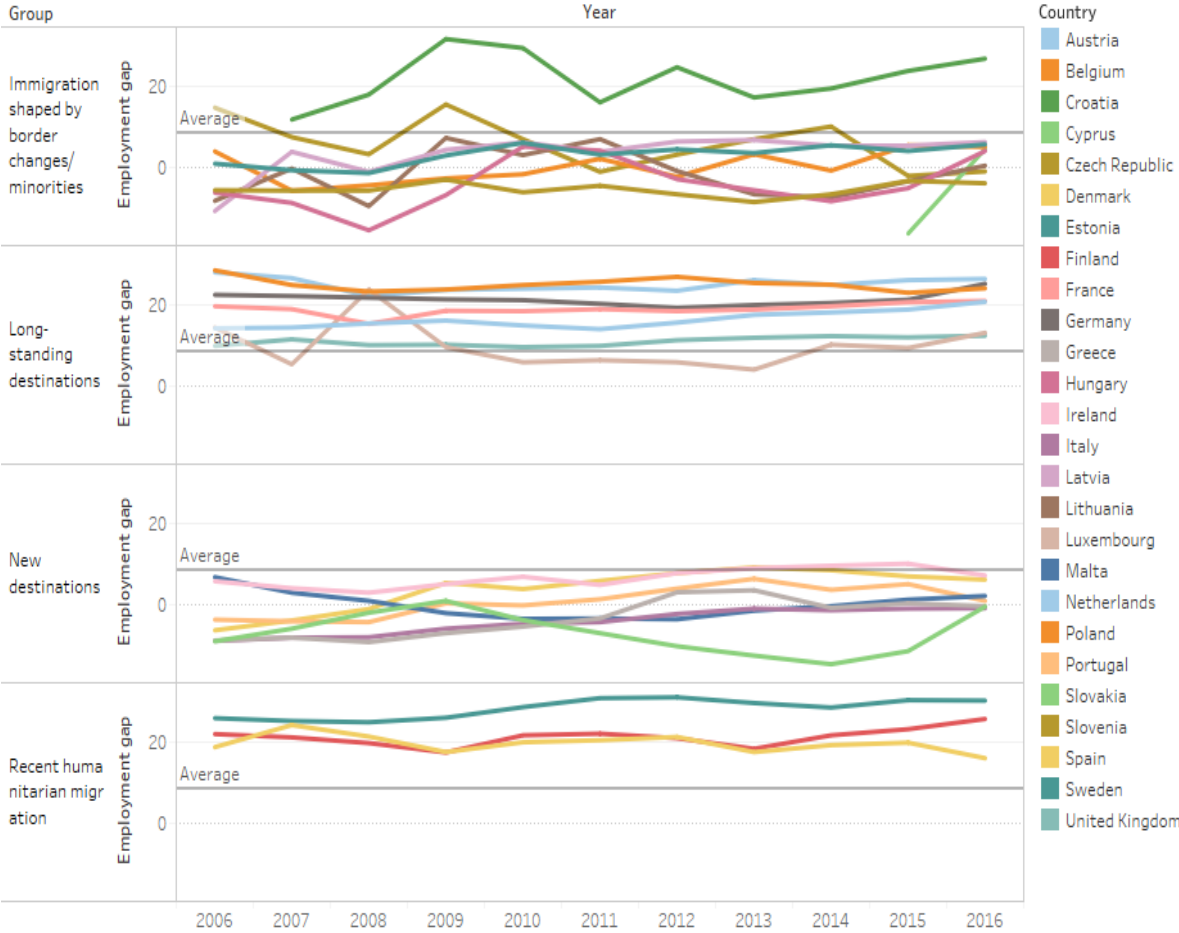
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Note: Figures excludes countries for which the data is missing or has low reliability

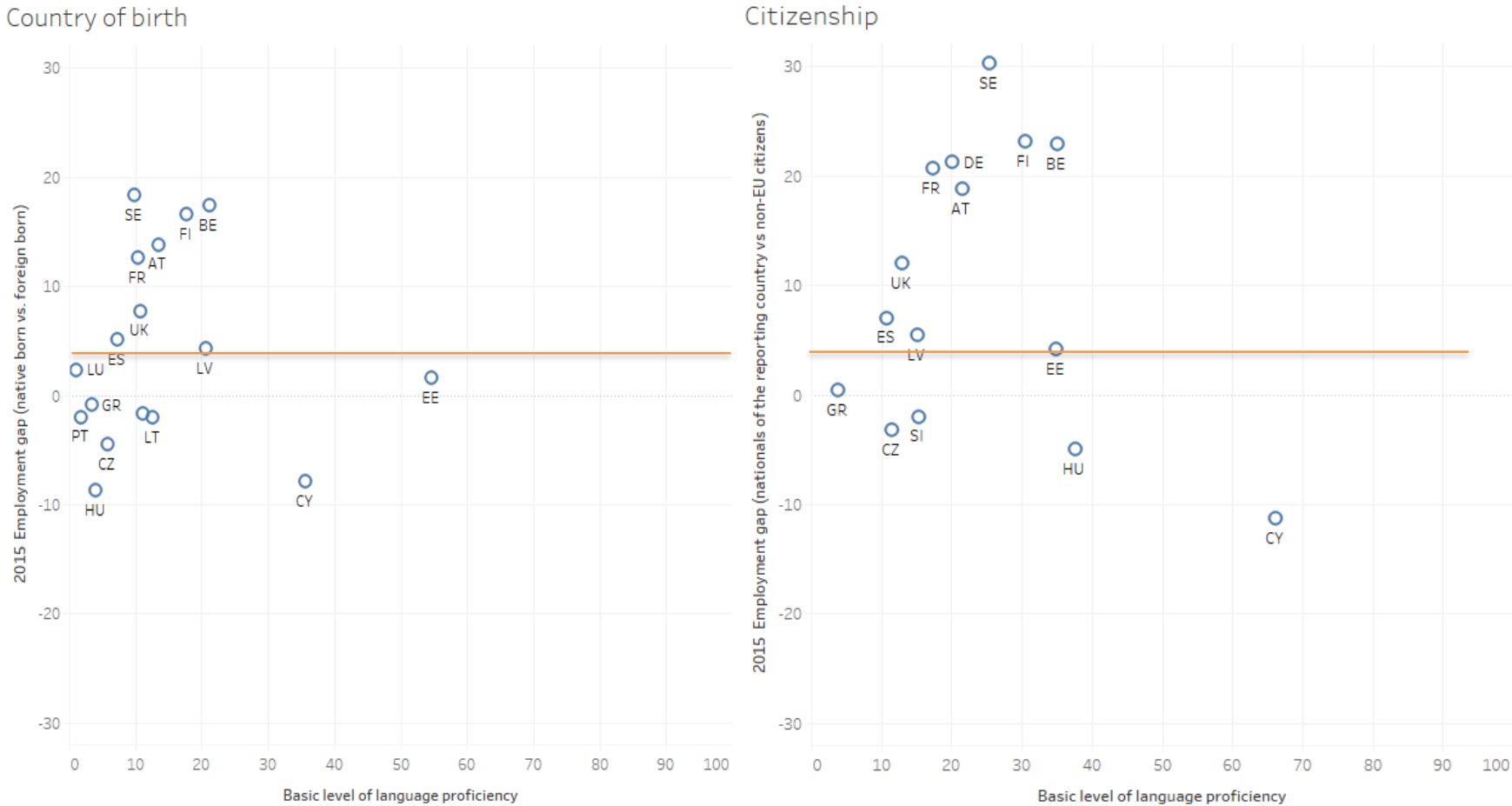
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Source: KCMD elaborations of Eurostat data, 2017.

Note: Figures excludes countries for which the data is missing or has low reliability

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Source: KCMD elaborations of Eurostat data, 2017.

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