

# Convergence in the European Union: Inside and outside the euro area

# Outline of contribution for informal ECOFIN, Sofia, 27-28 April 2018

**Draft, 09 April, 2018** 

#### **Main findings**

The convergence process in Europe has bifurcated: the new member states (NMSs) from Central and Eastern Europe are catching up in terms of income per capita, as one would expect, with the initially poorer ones growing generally at a faster pace. Within the euro area, however, the North has diverged from the South since the start of the financial crisis. This pattern, reflecting East-West convergence but North-South divergence within the euro area, can be observed for a number of indicators, such as real wages, investment and consumption.

There is no indication that euro area membership has had a negative impact on convergence. On the contrary, each of the 11 new Central and Eastern European member states, which joined the euro after 2004, have been converging at a slightly faster rate than one would have expected given their starting level of income per capita. Moreover, the available projections for the next few years suggest that East-West convergence will continue, and that some North-South convergence might re-start. Moreover, several of the countries severely affected by the euro crisis are now returning to above-average growth, whereas some 'non-euro Northern' EU member states are also not growing faster than the euro area.

All in all, it appears that the lack of convergence North-South has roots other than the euro.

Our findings do not answer the question whether the East-West catch-up process will lead to 'full' convergence. It is often argued further catching up would require a change in the growth model. Catch-up growth can rely on importing foreign capital and know-how via massive amounts of foreign direct investment, but after a certain level, more domestic innovation is required to maintain growth. Reorienting the growth model towards more domestic innovation may pose the key challenge for the NMSs.

#### 1. Introduction and motivation

One of the key promises made by the European Union to its member states was, and remains, shared prosperity. The combination of the internal market (for goods, services, people and capital) with EU cohesion policies was supposed to drive convergence, by allowing the poorer member states to grow faster and catch up with the richer ones. Similarly, it was thought that the common currency would accelerate the process through lower interest rates for the peripheral countries and through capital flows towards lower-income member states exhibiting lower capital-to-output ratios.

However, these expectations have been met only partially or temporarily. Within the original EA12<sup>1</sup>, the poorest member states are the ones that are struggling with the aftermath of a devastating financial crisis. The distance between the richest and the poorest EA12 member states today is higher than when the euro was introduced, even taking into account the high growth period before the crisis.

By contrast, the new member states (NMSs) (both euro area 'ins' and 'outs') from Central and Eastern Europe seem to have performed better. Almost all of them have diminished the distance to the EU average, if one averages out the boom-bust episodes by considering the change in their position today relative to the beginning of the century. Moreover, even the countries hit hardest by the financial crisis have resumed catch-up growth after very deep, relatively short recessions, indicating greater resilience.

These developments raise some key questions. First, does the euro hinder convergence? The link between euro area membership and convergence has been extensively analysed. The most recent contributions are major studies from the ECB (Diaz del Hoyo et al., 2017) and the IMF (Franks et al., 2018), which also emphasise the distinction between nominal and real convergence. The European Commission has a regular report on convergence and has analysed convergence within the euro area more in detail in the last Quarterly Report on the Euro Area of 2017.

The key argument why euro area membership might endanger convergence is that this could lead to excessive capital inflows, which lead to boom-bust cycles and a misallocation of resources. The experience of some of the Southern European illustrates the pattern as illustrated by both of these studies. The key argument why euro area membership might foster convergence is that it should facilitate capital mobility and market integration.

Here the experience of the NMSs is instructive. Those which have joined the euro (the Baltics, Slovenia and Slovakia) are continuing to catch up, indicating that it is not the euro area membership that is an obstacle to catching up. On the contrary, there is some evidence that they are catching up somewhat quicker than the others. We show below that these countries are not different from the other NMS in terms of investment rates, education and other indicators. The only evidence we could find for the idea that euro membership leads to more instability is that the growth rates of the euro area members among the NMSs is somewhat more variable. However, given that their average growth rates are also higher, it turns out that the variability relative to the average growth rate is about the same for all NMS, across both groups: euro and non-euro area members.

The available growth projections suggest that the asymmetry from the past is likely to persist, albeit in a more moderate form: convergence seems set remain stronger East-West than North-South. This study investigates this phenomenon more in depth by analysing the role of factors such as education, foreign direct investment (FDI), the size of manufacturing and the initial level of income.

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<sup>&</sup>lt;sup>1</sup> The original EA12 excluding Ireland and Luxembourg.

## 2. Background: Major trends in convergence

The trends in real convergence in the EU have been investigated by the EU institutions and a large number of academic studies.<sup>2</sup> If there is one general conclusion, it is that convergence has been spotty and at times has gone into reverse. Given that the last ten years have been marked by the euro crisis, we start by providing some longer-term background using the standard key indicators of convergence.

Figure 1 gives the longer-term view by showing the dispersion of income per capita at purchasing power standards (PPS) across the EU-15,<sup>3</sup> and the original euro area 12 countries,<sup>4</sup> since the 1960s. This figure shows a statistical measure called the "coefficient of variation" of GDP per capita measured in (PPS). A lower value means a lower degree of dispersion.

It is apparent that there was a long-term trend in convergence in the Europe until about the turn of the century. Convergence among this group of countries stopped during the first years of the common currency, and the financial crisis then brought divergence, i.e. a sharp increase in the dispersion, but more recently convergence seems to have resumed, albeit at rather slow pace.

The two lines, for the EA12 and the EU15 (=old Member States) move very closely together. This is not surprising since there is a great degree of overlap between the two groups. The main difference is that the UK, Sweden and Denmark are part of the EU15, but not of the EA12. The fact that the difference between these two figures remains roughly constant over a long time (and since before the start of the euro) suggests that the interruption of the convergence process around the turn of the century may have little to do with the introduction of the euro.

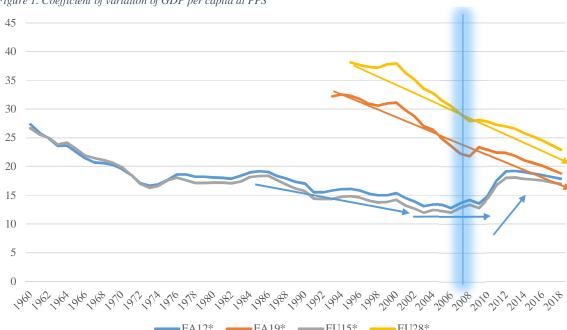


Figure 1. Coefficient of variation of GDP per capita at PPS

Note: All averages exclude the Cyprus, Ireland, Luxembourg and Malta.

Source: AMECO and authors' elaboration.

<sup>&</sup>lt;sup>2</sup> See for instance Goecke and Hüther (2016), ECB (2015), EEAG (2018) and Merler (2015).

<sup>&</sup>lt;sup>3</sup> Luxembourg, Cyprus and Ireland are not considered here because their GDP numbers are distorted by very large offshore financial centres.

<sup>&</sup>lt;sup>4</sup> Minus Luxembourg and Ireland, for the same reason they are excluded from the EU15.

<sup>&</sup>lt;sup>5</sup> This is defined as the standard deviation divided by the average.

However, if one considers the wider group of euro area member states, the EA19 (which comprises 5 new member states from CEE), convergence seems to have been little affected by the financial crisis as the catching-up process of the NMSs from Central and Eastern Europe has continued after a short interruption. Moreover, the trend of declining variability among the EU28 seems to run parallel to that of the EU19, again suggesting that the euro cannot be held responsible for a lack of convergence.

## 2.1 Longer-term trends in convergence: An EU-US comparison

Since the US always represents an interesting benchmark, we compare Europe to the US. Figure 2 shows the variability of per capita income across US states (for the US) and the variability across the 'old' 15 member states, which can be considered mature market economies over the entire period

If there were an ongoing convergence process, one would expect the cross-state variability to fall over time in the US. However, the line for the US is relatively flat, suggesting that in the US, convergence seems not to have progressed much in recent decades. Today's value of the indicator (coefficient of variation) is actually somewhat higher than in the 1970s or early 1990s. Convergence seems to have stopped, and even reversed, since the turn of this century.

As shown in Figure 2, for most of this period, the US exhibit a lower degree of cross-state income variability than Europe. Europe started out in the 1970s with much larger differences in income per capita, but the convergence process brought the EU15 for a few years (2002-06) to the point where income dispersion was even lower than in the US). However, much of this convergence was then undone in the EU by the financial crisis (which did not have as severe an impact in the US).

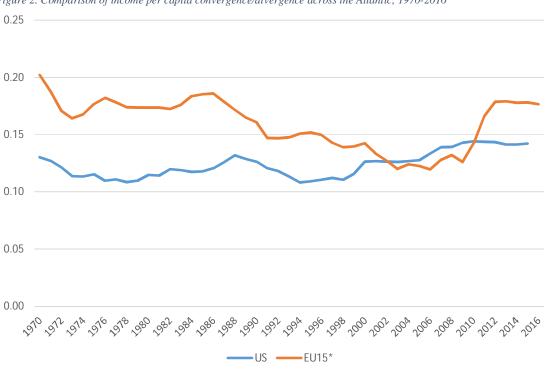


Figure 2. Comparison of income per capita convergence/divergence across the Atlantic, 1970-2016

Notes: EU15 excluding Ireland and Luxembourg. US data is based on FRED sample of 24 selected US states.

The variables pictured are the (unweighted) standard deviations of the income per capita, across states relative to the average of the EU for both samples. If one were to weigh each country/state by its GDP, the picture would not change for the US, but the EU would show a markedly stronger increase in variability (mainly because of Italy).

Source: AMECO (Annual Macro-economic database of the European Commission and FRED (Federal Reserve Economic Data)).

The comparison with the US shows that convergence has its limits even in a monetary union that is generally regarded as functioning well. Some cross-state differences in income seem physiological in any large and diverse economic area. If one were to take the US as the model for the EU or the euro area, one should only expect some degree of further narrowing in income differentials. Expectations of full convergence might be too ambitious. A recent IMF study (Franks et al. (2018)) concurs with this point of view.

Moreover, the US experience from earlier last century holds another lesson. We provide below a very long-term perspective, by showing the degree of dispersion of personal income across US states since 1929. At that time, the dispersion indicator was more than two times higher than it is today, and much higher than it is in Europe today.<sup>6</sup> It is difficult to explain why, in 1929, roughly 150 years after the formation of the United States, there should have been such a large degree of dispersion of income in an otherwise unified area. Labour mobility had been high in the US for a long time and the country has had a single currency at least since the end of the civil war, i.e. 60 years earlier.



Figure 3. Income per capita convergence in the United States

Note: US sample excludes Alaska, Hawaii and Washington DC.

Source: BEA regional statistics.

The one element that was still missing for the US in 1929 was the banking union. Key federal institutions, like the FDIC (Federal Deposit Insurance Corporation, which is responsible for both bank restructuring and deposit insurance) and the system of Federal agencies to insure mortgage securitisation, were created only in the wake of the devastating banking and financial crisis of 1933. One explanation for the strong decline in the dispersion of income per capita across US states, after 1933, might thus have been the financial stability achieved through the completion of the US banking

<sup>&</sup>lt;sup>6</sup> See also a FRED Blog on this issue (<u>https://fredblog.stlouisfed.org/2016/11/the-convergence-of-income-across-u-s-states/</u>).

union.<sup>7</sup> This would support the idea that the proposals regarding the deepening of the EMU are key not only to ensure financial stability, but would foster also convergence. See in particular the Commission's proposal on the completion of the Banking Union, Capital Markets Union and the European Stability Mechanism.

Figure 1 showed the strong reduction in dispersion across the EU28, which now, as shown in Figure 2 is similar to the degree of convergence achieved in the US. These figures employ the concept of the coefficient of variation, which shows that on average the differences across member countries are around 20%. Another measure would be that of the ratio of the richest to the poorest member state (or state in the US). For the EU, this ratio has fallen by almost one-half, from 1998, when the richest member state had a GDP per capita about 5 times higher than the poorest one, to a ratio of about 2.6 in 2017. In the US, by comparison, this ratio has hovered around 2 for the last few decades. But in the 1930s, one also finds that income per capita in the richest US state was over 5 times higher than that of the poorest. In this sense, one could argue that the EU has fostered a similar degree of convergence over the last two decades as that achieved in the US during the 40 years of growth following the Great Depression.

## 2.2 Upwards convergence for the initially poorer?

The indicators shown so far only measure the degree of dispersion of income per capita within a group of economies. This variability could also fall if the share of the population that is better off stagnates. This is of course less desirable than 'upwards convergence', under which the better off grow, but the poorer economies also grow more strongly. This can be measured better by the concept of 'beta convergence', which puts the initial income per capita in relation to subsequent growth.

Figure 4 illustrates the pattern of this 'beta convergence' by comparing growth rates in the EU15 and the NMSs since 1999 to the initial GDP per capita of the country concerned. The horizontal axis of this figure shows the GDP per capita at PPS as a percentage of the (then) EU average. The vertical axis shows the difference between the average growth rate of the country concerned between 1999 and 2016, and the average growth rate of the EU.<sup>8</sup>

Convergence requires a negative relationship between initial income and subsequent growth. There is some tendency in that direction in that the poorest MSs clearly grew faster (an average growth rate of 6% resulting in a cumulative increase in real income per capita in some cases of more than 200% between 1999 and 2016), versus only about 2% for the richer MS (resulting in an increase of only 50% over these years).

But it is also apparent that there are two groups: the old EU15 and the new member states from Central and Eastern Europe (NMS11). One sees strong convergence among the latter. The (initially) poorer countries grew faster than the others. Among the group of EU15 (in the blue circles), however, one finds the opposite: there seems to be a (rather weak) positive relationship between the initial level of GDP per capita and growth between 1999 and 2016. This indicates that there has been divergence as the lower income countries (Greece and Portugal) grew less than the richer ones (e.g. Germany). Italy, an initially high-income country, recorded the worst growth performance (along with Greece), hence suggesting a substantial divergence from the member states in the North. In these two cases, the euro crisis clearly played a role, but for other countries, which were also affected by the crisis, there is no evidence of underperformance (Portugal, Spain and Ireland, the latter of which however is 'off the charts'). Moreover, there is also no clear link between the starting income and growth for countries

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<sup>&</sup>lt;sup>7</sup> The completion of the US Banking Union was of course not the only factor in the rapid decline of the income disparities. The war effort, which led to a shift in industrial production from the coast towards the heartland also contributed.

<sup>&</sup>lt;sup>8</sup> Technically the average growth rate is measured as a continuously compounded rate.

not in the euro area. This is another indication that the euro cannot have been the main reason for the lack of convergence among the EU15.

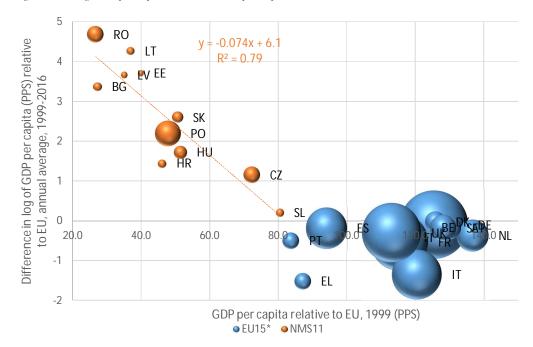


Figure 4. GDP growth per capita relative to GDP per capita in the new member states and the EU15, 1999

Note: EU15 excluding Ireland and Luxembourg.

NMS11: Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic and Slovenia.

The statistical relationship between the initial income level and subsequent growth (both relative to the EU average) intersects the horizontal line at 80%. This suggests that catch-up growth might stop at this level for the NMS11, i.e. well before they reach the EU average.

Source: AMECO and authors' elaboration.

# 2.3 The outlook for convergence?

The past is not always a reliable guide for the future, especially if one considers the last ten years, which were dominated by exceptional circumstances. One should thus ask what the outlook is for (renewed) convergence, now that the financial crisis has ended. For this purpose, we use the growth forecasts of the IMF, which go until 2022. The IMF seems to be the only institution to provide such medium-run forecasts on a comparable basis.

Figure 4 (right panel) shows that some further convergence can be expected as the IMF predictions imply that the poorer member states will on average grow more than the richer ones. At first glance, the convergence speed between the member states is still high, but some dynamics have shifted. The new member states no longer experience convergence within the group as they did over the past 15 years (see Figure 4) – exemplified by the substantial growth gap between Latvia and Slovenia despite a similar level of GDP per capita in 2017. At the same time, the old member states show tentative signs of (re)-convergence with the southern peripheral countries, which are generating higher growth than their Northern peers (with the notable exception of Italy). This catch-up process is largely a rebounding of the contraction of these economies during the crisis years. Nevertheless, overall convergence within the EU15 remains weak.

Looking at the entire EU, convergence is still pronounced and significant, with the continued pattern of new member states catching up to the old ones. In 2017, however, half of the new member states overtook the poorest two 'old' euro area members, Portugal and Greece, in terms of GDP per capita (PPS). Nevertheless, the NMS11 continue to show stronger growth than these two. Spain is the notable exception among the EU-15, which is forecasted to grow at the same pace as the slowest growing new member state Slovenia.

6.0 3.5 Difference in log growth to EU, annual average 2017-2022) Difference in log growth to EU, annual average 3.0 5.0 LT 2.5 4.0 y = -0.074x + 6.12.0  $R^2 = 0.79$ BG **5017-2022)** 1.0 0.5 3.0 LT 2.0 ES SK NL 1.0 0.0 CZDE <sub>150</sub> 50 70 FR13 -0.5 0.0 IT BE 60 80 -1.0 -1.0 GDP per capita relative to EU, 2017 (PPS) -1.5 GDP per capita relative to EU, 2017 (PPS) - Linear (NMS11 (1999 - 2016)) NMS11 forecast EU15\* forecast
NMS11 forecast

Figure 5. GDP per capita (PPS) growth forecast

Note: EU15 excluding Ireland and Luxembourg.

Source: Eurostat and AMECO

Figure 5 (left panel) shows more in detail the orange bubbles in the right panel, referring to the NMS11, and compares them to the beta-convergence regression line based on the observations from the past period, 1999-2016, for the same group of countries. Most new points (referring to the growth between 2017 and 2022) are to the right of this line. This implies that most of the NMS11 will actually grow somewhat faster than one would expect given the past relationship between starting GDP per capita and a country's growth rate. Moreover, the intercept of the old convergence line crossed at 82% of the EU average. The data from the past thus suggest that once a member state of this group reaches the threshold of 82% of the EU average, its growth rate will no longer exceed the EU average and convergence would come to a halt. The good news, however, is that, according to the forecasts, the NMS11 will do better. The ratio of the income per capita (at PPS) of the richest to the poorest MS is forecast to fall further, from the current 2.6 to 2.3 (by 2022), which is very similar to the value for the US mentioned above.

## 3. Convergence beyond income

#### 3.1 Output convergence

Income per capita is not the only indicator of convergence. Consumption (per capita), productivity, employment and real wages constitute other important measures of good economic performance.

<sup>&</sup>lt;sup>9</sup> Technically speaking, the growth forecasts imply full convergence since for the regression line for all EU member states (see Figure 4 right panel), the intercept has shifted to around 100%, implying that the convergence process should continue beyond the previous implied threshold until the EU average is reached.

We perform a convergence test for all these four output indicators below and find very similar patterns, which fit with the general results found for income per capita:

- 1. Looking at all EU member states, a catching-up process is clearly visible.
- 2. However, this convergence rests solely on the NMS11.
- 3. The euro area members among the NMS11 tend to do slightly better than expected.
- 4. Most of the old member states show little growth with no clear tendency for the poorer ones to catch up.
- 5. The convergence process among the NMS11 has not yet allowed them to reach the EU average.

The convergence process has thus been strong for the NMS11 not only in terms of GDP per capita or productivity, but also in concrete terms of jobs, consumption and wages. This is not surprising since, in the long run, GDP, productivity, jobs and wages all tend to evolve together.

# 3.2 Input convergence

Convergence should not be measured only in terms of the results or output of the economy, but also in terms of the inputs. One of the key indicators is performance of the educational system and investment in R&D to create the foundation for economic growth.

There has been much discussion about the importance of the manufacturing sector for growth (see Figure 6 below). However, there is little evidence of a direct link. In the NMS11, manufacturing is a larger part of the economy and employment than for the old member states. But within these groups there is little evidence that those countries with more important manufacturing sectors also have stronger growth.

Moreover, there is no convergence trend in terms of the share of manufacturing in employment. This is largely due to continued dominance of manufacturing in Germany and Austria in the case of the old member states, and the services-sector orientation of Hungary and Slovenia in the case of the new member states. There remain thus large differences in the importance of manufacturing across MSs, but they are not systematically related to economic performance.

Likewise, one must be careful in drawing a link between growth and FDI. For catching-up countries, large inflows of FDI can accelerate the absorption of state-of-the-art technology. But for countries aspiring to be close to the technological frontier, large outflows of FDI can be taken as a sign of success. One thus observes a link between income and the net FDI position: the higher the income per capita, the more likely the country is to have a positive FDI balance. This regularity can also be observed in Europe.

The NMS11 have been engaged mainly in catch-up growth over the last two decades and thus were natural recipients of FDI flows. This is indeed what happened on a large scale. Each of the NMS11 has a 'negative' FDI balance position, with the net inward stock of FDI now amounting to around 40% of GDP for most of them and reaching a peak of 75% of GDP for Bulgaria.

One observes some convergence among the NMS11 in terms of the accumulated stock of FDI in relation to GDP; those which had received relatively little FDI in 1998 have generally experienced a stronger increase over the last two decades. This is consistent with the income convergence among that group. By contrast, among the older MSs, there is little convergence, only a tendency of the richer ones to have a positive FDI balance.

R&D constitutes a key input into what the European Commission has called 'smart growth'. Expenditure on R&D as a percentage of GDP is one of the indicators of the EU2020 strategy. One

finds that in terms of R&D expenditure there is a large gap between the old and the new MSs, which is closing only very slowly. Moreover, among the NMS11, the difference seems to be increasing as those closer to the EU average at the start of the period also expanded their R&D expenditure the most relative to the EU average.

Domestic R&D, of course, requires the availability of enough highly qualified scientists. This explains why the share of the population with a university degree is one of the Europe 2020 growth indicators. <sup>10</sup> Great variance exists across member states for this indicator. Most countries have improved considerably, but there is no strong tendency towards convergence. However, on the other end of the spectrum, the rate of early school leavers has witnessed some degree of convergence over the past decade.

Beyond the education and research sector, the regulatory framework can play an important role in fostering economic growth. At the turn of the century, differences in product market regulation had been marked, with many member states being tightly regulated, at least as measured by the OECD's 'Product Market Regulation' (PMR) indicator. Although this indicator is not available for all MS, for the ones where it is available, one observes considerable convergence over the past 15 years with most MS becoming less regulated, especially those which initially showed the tightest regulations (see Figure 6). There has much less change, however, and much less convergence in labour market regulations. The OECD provides an indicator for this as well, <sup>11</sup> but it has shown little change over time.

A key input in growth is the accumulation of capital. Physical capital is of course not the only input in growth, but convergence in income levels would not be possible without some convergence in the capital stock.

On this front there has already been considerable convergence. Figure 6 below shows that there has been a strong convergence among the NMS11 in terms of the amount of capital available per worker (indicated by the variable K/L). But nothing similar can be observed among the EU15. But one should keep in mind that convergence is still far from being achieved. In 1999 the value of the capital stock (at current exchange rates) in the richest MS was 14 times larger than in the poorest MS. Today (2017 data) this ratio has fallen to 'only' 6 times larger. Moreover, the gap is likely to be reduced further as the investment ratios remain higher in the NMS11, while it might widen among the EU-15. There is, again, little difference between the euro and non-euro area participants among the NMS11.

The speed of convergence has been falling, especially since the Great Financial Crisis, which led to a permanent reduction in investment ratios of almost 2 percentage points of GDP. It is encouraging, however, that most of this decline in overall investment was due to a fall in construction activity, rather than investment in equipment. Construction investment accounts now for almost exactly the same percentage of GD, around 10%, as in the EU15 (AMECO data). This means that during the boom years a large part of the capital flows into the NMS11 (and some peripheral euro area countries, such as Ireland, Spain and Portugal) had gone into the construction of new houses. These flows have stopped.

Investment in equipment has been less affected by the crisis. In the NMS11 it is, at over 9 % of GDP, much higher than in the EU15 (6.6 % of GDP) and 'only' 20% lower than during the boom years.

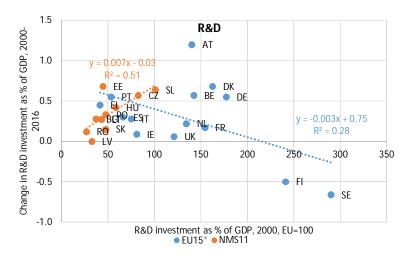
All this indicates that capital labour ratios are continuing to converge, especially in terms of the machines and other productive capital needed to produce industrial goods. In all these variables we find few systematic differences between the euro and the non-euro states among the NMS11.

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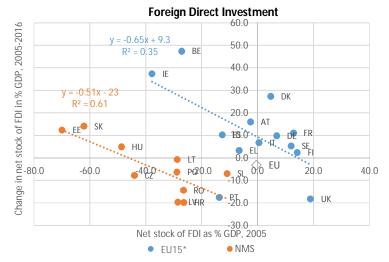
<sup>&</sup>lt;sup>10</sup> See http://ec.europa.eu/eurostat/web/europe-2020-indicators/europe-2020-strategy/headline-indicators-scoreboard

<sup>&</sup>lt;sup>11</sup> See http://www.oecd.org/eco/growth/indicatorsofproductmarketregulationhomepage.htm

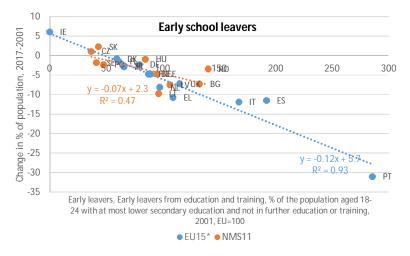
Figure 6. Input convergence



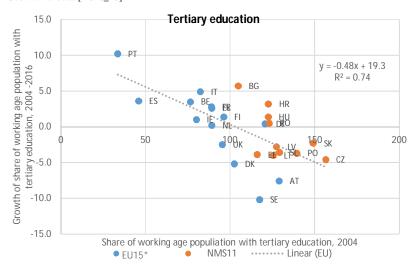
Source: Eurostat [t2020\_hr]



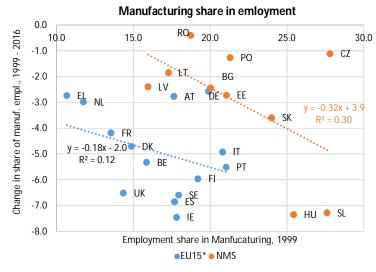
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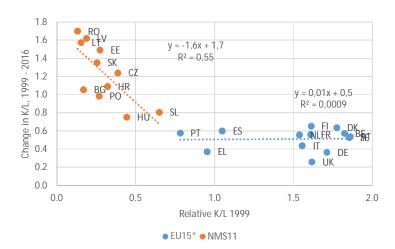
Source: Eurostat [t2020\_40]



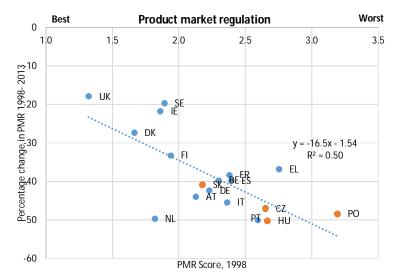
Source: Eurostat [edat\_lfs\_9903]



Source: AMECO [NETM]



Source: Own calculations based on AMECO data.



Source: OECD

Note: A reduction in the PMR signifies futher flexibilisation.

The data mentioned so far refer to overall investment, 80-90% of which is usually private and thus not directly determined by policy, which can only indirectly affect the key drivers of investment, namely growth expectations, financial market conditions and the regulatory framework. The persistence of higher private investment rates in the NMSs is not surprising given that their capital-to-labour ratios remain much lower, which implies that, *ceteris paribus*, the marginal productivity of capital should be much higher.

We do not wish to enter into the discussion about the effectiveness of the Structural Funds (for a brief recent survey see EEAG (2018)). But one aspect is clear: the net transfers from the EU budget allow the NMS11 to have a higher investment ratio without incurring more foreign debt (or having to support higher domestic savings ratios). This implies that EU transfer have financed, indirectly, at least part of the convergence in capital income ratios observed so far. This resource transfers is substantial since many of the NMS have a 'net balance' of about 3-4 % of GDP, which should be compared to national investment rates of around 20 %.

## 4. Concluding remarks

Convergence and growth are two very complex phenomena, which cannot be fully treated in one short contribution. We thus concentrated only on one question, namely whether there is an association between euro area membership and convergence. We find that this is not the case. The key dividing line in terms of growth and convergence in the EU is between the NMS11 and the rest. The euro crisis, of course, had a strong and lasting impact on growth in some countries. But the new euro entrants from the NMS11 did not experience these problems. The two general trends of East-West convergence and lack of convergence among the older MSs, are thus independent of euro area membership.

The general argument why premature euro area membership might endanger convergence is its potential to trigger boom-bust cycles. Such cycles have occurred over the last two decades and have proven to be very destructive. However, these cycles have also occurred in countries which were not in the eurozone, with Iceland possibly being the extreme example. Here again it is not clear that euro area membership was a key element in creating the problem.

Moreover, the future might be different from the recent past. The euro area has now given itself a set of institutions, which should mitigate the fall-out from financial excess; and make their recurrence less likely. Completing the Banking Union and strengthening the Capital Markets Union would further contribute to financial market stability and thus convergence.

The available forecasts suggest that over the next few years the NMS11 are set to remain somewhat more dynamic than the 'old' Member States. The East-West convergence process is thus continuing, but also slowing down somewhat, while it might start again among the old Member States.

The example of the US suggests that a considerable level of income differences is likely to remain in an economically diversified continental sized economic area. But the EU has still some way to go before reaching the US benchmark.

There is still a considerable distance between the NMS11 and the EU15 in terms of achieving the Europe 2020 indicators, but it is narrowing. Nevertheless, there is little evidence of overall convergence across all MSs in their attainment of the goals set under the Europe 2020 strategy. Any new overarching growth strategy for the EU should consider how to set more ambitious benchmarks beyond Cohesion policies.

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