



2004-2024:

Twenty Years after the Big Enlargement.
Integration within the Single Market



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2004-2024: Twenty Years after the Big Enlargement. Integration within the Single Market

Paolo Pasimeni¹

Abstract

The enlargement of the European Union in 2004 marked a significant milestone in the history of European integration, bringing ten new Member States into the Union. This paper provides a comprehensive analysis of the economic impact of this enlargement two decades later. Drawing from the economic literature and descriptive analysis, the paper examines both anticipated benefits and realized outcomes. Preceding the enlargement, ex-ante analyses projected substantial gains in GDP, trade integration, and welfare for both acceding and existing member countries. These expectations were largely met. At the macroeconomic level, the paper shows a significant reduction in trade costs, enhanced trade integration, and deepening participation in cross-border value chains within the Single Market. Some challenges remain in terms of social and territorial cohesion in these countries. Specific examples highlight the transformative effects of EU membership in sectors such as tourism, energy-intensive industries and professional services. The lessons learned from this enlargement underscore the continuous nature of integration, beginning with accession preparation and producing tangible effects throughout the process.

JEL codes: F15; F53; O52; O57; P33.

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1. Introduction

On May 1st 2004, ten new Member States joined the European Union (EU). The enlargement of 2004 was the most significant wave of expansion in the history of the European Union, so far. It marked the accession of ten new Member States (EU10), predominantly from Central and Eastern Europe, as well as the Mediterranean region. This enlargement was a culmination of a long process that began shortly after the fall of the Iron Curtain and the collapse of communism in Eastern Europe. It brought almost 75 million people into the European Union, new territories, and expanded its economic potential. Moreover, it symbolized the EU's commitment to promoting stability, democracy, and prosperity across the continent. The integration of these ten countries into the Single Market has generated benefits not only for them, but also for those who were already part of the Union (EU14).

This paper analyses the economic impact of the 2004 enlargement of the European Union, twenty years later. It first reviews the economic literature about the impacts that were expected ex-ante and about those that have been quantified ex-post. It then provides some descriptive evidence about the economic benefits that this enlargement brought to the 10 Member States and to the rest of the EU. It presents general evidence at the macroeconomic level along four dimensions (trade costs, overall trade integration, supply chains integration, and impact on growth and consumption). Then, it provides specific examples, highlighting different ways through which these member states have benefited from EU membership and access to the Single Market. The last section, finally, concludes.

2. Economic literature about the big enlargement

The economic literature about the EU enlargement in general, and about the one of 2004 in particular, has often discussed trade integration within the Single Market, the impact on growth and employment, the implications for the structural transformation of these economies. These aspects also relate to discussion about economic convergence and the geographical and social distribution of the benefits arising from the integration.

We first discuss those studies that were conducted before the accession and that proposed a prospective analysis of the enlargement. Then, we review those studies that provide ex-post empirical estimations of the impacts of the enlargement.

2.1. Ex-ante prospective studies

The project of expanding the EU towards the East was discussed immediately after the fall of the Iron Curtain. The promise of stability and shared long-term prosperity was arguably the main driver for the desire of Central and Eastern European nations to join and for the EU to expand. Geopolitical considerations were at the root of the EU's decision to include new Member States, in particular because of the fear that keeping them out would have endangered their economic transition, and that could in turn threaten prosperity in western Europe (Baldwin, 1995). The

enlargement was seen as an opportunity for both sides, the new entrants and the current members of the Union².

However, specific analyses of the expected economic costs and benefits too pointed to a favourable opinion towards the enlargement. Baldwin et al. (1997) estimated with a global applied general equilibrium model that the EU membership would have been "enormously beneficial" to the countries joining, but also that the others too would have gained from the accession of the new members. However, they estimated that the benefits would have been unevenly concentrated, with Germany, France, and the UK reaping two thirds of the total gain.

Lejour et al. (2001) examined the economic implications of EU enlargement with a focus on integration aspects beyond formal trade barriers, such as accession to the internal market and free movement of labour. They argued that candidate countries would have gained substantially from accession to the internal market, with GDP per capita increasing by more than 8% in the long run (9% in Hungary and 5.8% in Poland). They also suggested heterogeneous impacts across sectors, and that most EU countries would have experienced small welfare gains too.

Interestingly, Breuss (2002) suggested that the enlargement would act as an exogenous asymmetric shock for the Union. Through a world macroeconomic model, he estimated that Central and Eastern European countries would gain "around ten times more from enlargement" than the other EU countries; Hungary and Poland would increase their real GDP by around 8 to 9 percent over a 10-year period, Czechia a little bit less (5 to 6 percent). The EU on average would gain around 0.5 percent of real GDP over a 6-year period. Although, on average the enlargement was seen as a win-win game, the impact would be quite different across countries, with Austria, Germany and Italy gaining the most and with some expected net losses for Spain, Portugal and Denmark.

Maliszewska (2004) then used a computable general equilibrium model to study the accession to the Single Market, with explicit focus on the removal of border costs and of costs of producing to different national standards. The results of that study pointed to significant welfare gains for the candidate countries (with GDP expected to increase by 1.4%-2.4%) and modest gains for the rest of the EU. Poland was expected to gain 3.4% of GDP, while Hungary almost 7%. Wages of unskilled workers were also expected to rise at a faster pace than those of skilled workers.

The EU's attractiveness and use of "soft governance" influenced the internal policies of candidate countries before formal membership; enlargement prospects led to internal reforms and strategic planning before actual accession. The enlargement negotiations then exposed divergent interests among Member States, affecting internal and external policies. Friis and Murphy (2002) highlighted these two types of governance produced by the EU: soft governance and negotiations, stressing the interplay between the EU's internal development and its external role in the rest of Europe. The importance of the accession process, then, is also proved by some ex-post analyses.

Another important aspect of the preparations for accession, highlighted by some ex-ante analyses and then corroborated by ex-post assessments, refers to the role of the labour market in the candidate countries. Nahuis (2004) expected significantly heterogeneous impacts across industries, with enlargement likely to benefit some industries while negatively affecting others; he

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² Zaborowski (2007) writes that: "Without doubt Germany has been the keenest and the most influential supporter of the Eastern enlargement of the EU. In fact, it is safe to say that without Germany's support enlargement in 2004 would not have taken place when it did, indeed, it is not clear whether it would have occurred at all within the near future".

also emphasized the importance of flexibility in labour market policies to reap the potential benefits of enlargement. If some sectors were expected to benefit disproportionately from the accession into the EU Single Market, while others were expected to suffer significant losses, then the internal flexibility allowing fast relocation of jobs across sectors would have been key to the success for these economies. This is in fact what has happened in most of the cases.

2.2. Ex-post empirical analyses

A few years after the enlargement, then, a number of studies have tried to assess the economic impacts of the accession of those ten new Member States into the EU. They have highlighted both the benefits and the challenges associated with integration into the EU.

In a review published ten years after the enlargement, Epstein and Jacoby (2014) argued that the economic effects of the EU enlargement have been more significant than the political effects, because, in their words, "the New Member States (NMS) have faced challenges with democratic consolidation". Medve-Bálint (2014) interestingly highlighted that the standard application of Single Market rules within the EU has given way to unprecedented capital and trade flows towards the new Member States.

Campos et al. (2014) used a synthetic counterfactuals method and found that EU membership had positive effects on GDP per capita and labour productivity for most countries that joined. These positive effects have led to an overall 12% gain in per capita incomes, but such gains have been nevertheless quite heterogeneous across countries and over time. Per capita GDP and labour productivity increased in particular in Estonia, Hungary, Latvia, Slovenia and Lithuania, while the effects were smaller, albeit still mostly positive, in Poland, Czechia and Slovakia.

Gilbert and Muchová (2018) studied the changes in the export shares of the Central and Eastern European economies that joined the EU in 2004 and measured the changes in export competitiveness. They found that all of these economies increased their share of world merchandise exports over the period, with the most significant changes in Poland, followed by Lithuania, Slovakia and Latvia. Changes in Slovenia and Hungary were much smaller. The average world export market share for the other EU economies, by contrast, declined substantially over the period. In all of the countries joining the EU in 2004, they find increases in competitiveness, the largest of which in Poland, Slovakia and Czechia. At the same time, they also observed a substantial decline in competitiveness in the old members of the EU.

Epstein and Jacoby (2014) too highlighted that "in all cases, the economies that joined the EU in 2004 are wealthier relative to the old EU-15 compared to ten or 25 years ago", despite the fact that, by that time, there had not been full convergence of living standards with the other Member States.

The question of the asymmetric benefits between the accessing countries and those already within the Single Market is an open one. Caliendo et al. (2021) use a multi-country dynamic general equilibrium model with trade in goods and labour mobility across countries to study and quantify the economic effects of trade and labour market integration. They found that EU enlargement primarily benefited new member states, with increasing employment rates, but for

low-skilled workers, and had smaller welfare gains for EU-15 countries. Trade policy moderated migration flows and mitigated congestion effects³, benefiting both new and old member states.

The role of wage levels and labour market institutions in the countries that joined the EU in 2004, in particular Central and Eastern Europe ones, has been the focus of an increasingly rich literature on industrial relations. Szymczak et al. (2022) have studied it in relation to their integration in supply chains, which we will analyse below. Bernaciak and Trif (2023) show that after the Global Financial Crisis of 2008 union power weakened in these countries, as in the rest of the EU, but afterwards they were revitalised (re)building statutory rights for unions and (re)establishing legal guarantees for workers. According to recent studies (Kall, 2023), this trend has been facilitated by European integration, and it is documented in country-level studies, for instance on Estonia and Slovenia (Samaluk and Kall, 2023), and on Czechia and Slovakia (Kahancová and Staroňová, 2024). The former study, in particular, finds that the export-led growth model in the two countries affected the wage setting mechanism "through a strong role of the statutory minimum wage, which serves as a wage benchmark both for the export sector".

Other studies have explained the benefits of the accession into the Single Market through the analysis of the border effect. Vermeulen (2022) found that five years after the enlargement, firms in non-EU member states near a new external EU border experienced a fall in sales of 40% and of exports of 70% relative to firms near borders that did not change. Firms on the EU side of the same border experienced no such negative effect. This suggests that establishing a common EU market does not only affect firms inside, but also those outside.

3. General evidence at the macroeconomic level

This section delves into the descriptive evidence of the various dimensions of the enlargement, providing a comprehensive overview in terms of reduction in trade costs, export and import shares, and integration in cross-border supply chains.

3.1. Reduction in Trade Costs

One way to measure the process of integration is to analyse the progressive reduction of average bilateral trade costs. The World Bank publishes a database of bilateral trade costs between countries. By grouping all country pairs and calculating the averages, by each year, we can get the evolution of average trade costs within a group of countries, and between groups too. This way, we calculate the evolution of average trade costs: (i) between the EU10 (countries that joined on 1 May 2004) and the EU14 (countries which were already part of the Union, without the UK); (ii) within the group EU10; and (iii) within the group EU14. The following chart shows this trend between 1995 and 2021, the most recent year for which data is available.

There has been a considerable reduction in trade costs between the countries that joined the EU on May 1st, 2004 (EU10) and those who were already part of the Union (EU14⁴) (blue line); this

³ Caliendo et al. (2021) refer to congestion effects "associated with the strain put on local fixed factors and from a worsening of the terms of trade associated with the downward pressure on wages" (...) "that negatively impact high- and low-skilled households more than offsetting the welfare gains from trade policy in EU-15 countries".

⁴ Without the UK.

points to a clear path of convergence and integration. In parallel, there has been a considerable reduction of trade costs within the EU10 group (yellow line), pointing to clear benefits for the enlargement countries. These trends started well before the official accession of 2004, proving the importance of the accession process in driving integration within the Single Market, but it continued also after 2004, until reaching the same levels as within the EU14 group.

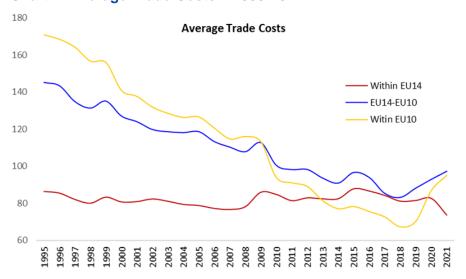


Chart 1: Average Trade Costs - 1995-2021

Source: own elaboration, on World Bank data. Note: the indicator shows the evolution of an index calculated as the average of all bilateral indices of trade costs, for each country-pair within each group. The blue line, instead, shows the average of the country-pairs across the two groups.

While average trade costs did pick up since 2019, this can be mainly attributed to two specific cases (Luxembourg and Cyprus) and hence is unlikely to constitute a sustained reversal in trend. The question remains of whether the post-pandemic world is going to be less integrated, and with which implications for the Single Market.

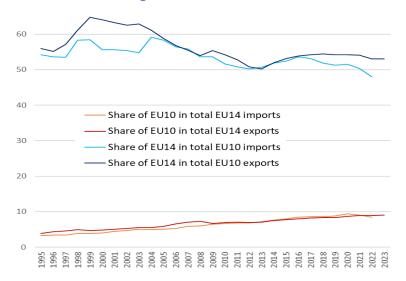
3.2. Trade Integration

We then look at the evolution of cross border trade in goods between each of the countries that joined the Single Market in 2004 and the others that were already part of it. While total trade increased in absolute terms and as a share of GDP, we adopt a more focused approach. We analyse the evolution of the value of total trade between each country pair, and aggregate the results for the two blocs, to calculate the respective import and export shares. The following chart shows these four shares over the entire period for which data are available⁵.

First of all, we observe a difference in terms of levels: while the group of EU14 represented and still represents for the group of EU10 the main trade partner, the opposite is not true, and the EU10 group represents a lower share for EU14. However, this is driven by the size effect, as the size of the group of countries that joined the EU in 2004, in terms of GDP, is about one tenth of the size of the group that was already part of the Union.

⁵ The most recent year for which data are available is 2022 for imports and 2023 for exports.

Chart 2: Trade Integration between EU10 and EU14 – 1995-2023

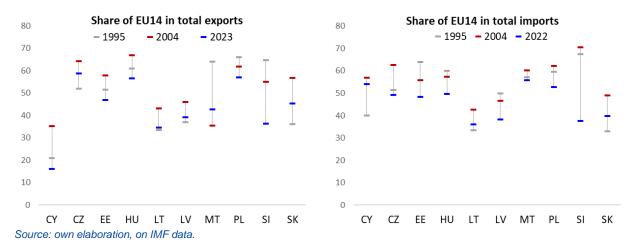


Source: own elaboration, on IMF data.

The second, and probably more important, observation is that while the EU14 group remains a relevant partner for the EU10 group, its relative importance as a trade partner has actually decreased compared to the rest of the world. This may seem counterintuitive, however, it is most likely linked to the fact that the EU10 has been increasingly opening towards the rest of the world, in particular after the accession. This is proved by the fact that the share of EU14 in total EU10 imports and exports has been declining since then, while the absolute value has been increasing, of course, as total trade has increased. We could argue that the preparation for accession has been the driver of fast trade integration with the EU, and that the accession has been a kind of gateway for global trade integration of the EU10.

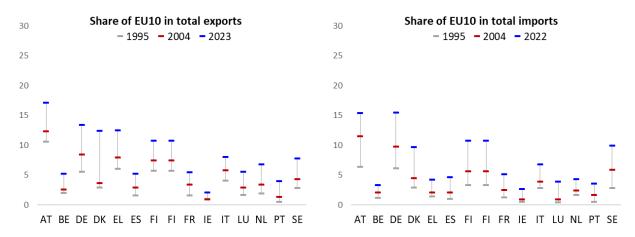
On the other side, then, we see that, despite the initial low level, the share of the EU10 in total EU14 imports and exports has been increasing steadily throughout the entire period. This tells us that the EU10 group is an increasingly relevant trade partner for the EU14 group.

Chart 3: Relevance of EU14 for EU10 - Country detail



The country detail confirms that for each country that joined the EU in 2004 the share of the EU14 in total exports and imports is lower today (or the most recent available data point) than at the moment of the accession. The overall share remains particularly high (above 40% in all cases, except for Cyprus' exports), but the trend suggests that the EU10 economies have indeed been increasingly opening towards the rest of the world.

Chart 4: Relevance of EU10 for EU14 - Country detail



Source: own elaboration, on IMF data.

On the side of the EU14 group of countries, instead, the picture is different: while the overall level remains lower, in every single case, the most recent observation is the one with the highest share of EU10 in total exports and imports. As one would expect, the EU10 group is a significant trade partner for Austria, and a significant source of imports for Germany. We will analyse this more in detail in the following subsection.

These findings are overall consistent with what other studies had found. In particular, Gilbert and Muchová (2018) highlight that the EU10 economies have for the most part been successful in increasing their export competitiveness with respect to the EU market; electrical machinery and parts, mechanical appliances, and vehicle parts are the sectors that have been most successful in gaining market shares. On the other side, there has not been a substantial increase in market share of the EU14 (EU15 in their study) in the EU10 and their relative competitiveness within the EU10 markets has in fact fallen slightly. They also claim that, given the low growth rate of the EU14 relative to the rest of the world, a strong reliance on EU markets could actually hurt the EU10 gain of market shares relative to the world average. The trend of increasing openness towards the rest of the world that we observe here might in fact be justified by this fact. In terms of business cycles synchronisation, then, Beck (2020) finds that after the global financial crisis there has been a clear decoupling, in the Central and Eastern European countries, the role of the European factor has been decreasing, while regional and country factors have been increasing.

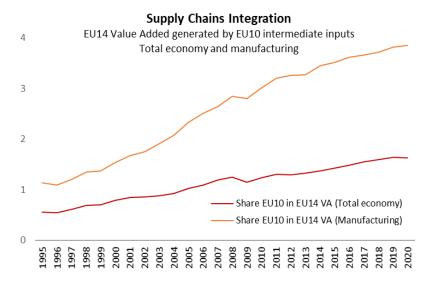
3.3. Supply Chains Integration

A third way to describe the progressive integration of the EU10 into the EU Single Market is by looking at the participation in cross-border value chains. The more these economies integrated in the Single Market, the more the companies located in these countries participated in cross-border

value chains together with the business located in the countries that were already part of the Single Market (EU14).

To test to what extent this process took place, we look at the share of value added produced in each EU14 country that was actually due to intermediate inputs originated from each EU10 country. We aggregate the figures of each country pair and calculate the overall share of value added produced by the EU14 countries that depends on intermediate inputs coming from the EU10 group. The following chart shows this share for the total economy, and then zooms into the manufacturing sector only.

Chart 5: Participation in EU Supply Chains

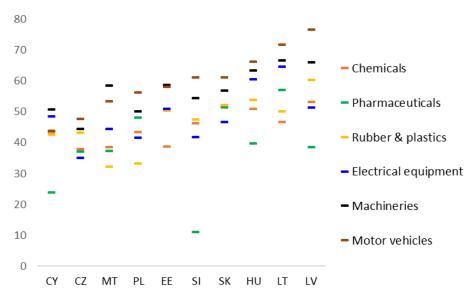


Source: own elaboration, on OECD data. Note: the indicator shows the percentage of total value added produced by the EU14 economies that depends on intermediate inputs originating from EU10 economies.

Between 1995 (the first year for which data are available) and 2020 (the latest year for which data are available) the contribution by the EU10 to EU14 supply chains has more than doubled. In the specific case of integration in manufacturing supply chains, then, this contribution is even larger and has increased by a factor of three; and between the official accession to the EU in 2004 and 2020, the contribution has almost doubled. It is interesting to note that also in the specific case of progressive integration in supply chains within the Single Market the process stared well before the official accession, and continued throughout the period.

To dig deeper into the details of integration within the EU supply chains, in particular in manufacturing, we analyse the specific sectoral detail for each country. In other words, we look at how much each country of the EU10 group relies on the Single Market for sourcing its intermediate inputs. To do so, we calculate the value added produced by each country in each sector that is due to intermediate inputs originating from other countries within the Single Market, excluding domestic intermediate inputs. This is therefore a measure of how important the Single Market is as a source of strategic inputs.

Chart 6: Relevance of the Single Market for the provision of intermediate inputs – sectoral and country detail



Source: own elaboration, on OECD data.

Six sectors stand out for their highest reliance on the Single Market. First of all, we observe that manufacturing of motor vehicles, which is the most integrated sector within the Single Market, is also the one in which most of the EU10 economies rely extensively on intra-EU supply chains. Only in the case Malta, Cyprus, and Estonia, manufacturing of machineries seems to be more integrated with the rest of the Single Market than motor vehicles. Then, the third sector in which the integration of the EU10 in the Single Market has reached very high levels is manufacturing of electrical equipment, followed by manufacturing of rubber and plastics products. Finally, chemical products and pharmaceuticals are the other two most integrated sectors. This picture for the EU10 economies would not be too different in the case of the rest of the EU.

We then look at one specific case, of the largest EU economy, Germany, the one that has benefitted the most from integration with the EU10 bloc⁶. Germany has been in a process of deepening economic integration which has led to the development of a dynamic supply chain within Europe (the "Germany-Central European Supply Chain") with Czechia, Hungary, Poland, and Slovakia in particular (Elekdag et al, 2015). We analyse the extent to which the German export-led economic model has relied on the integration of the EU10 group of countries into its supply chains over time.

To this end, we study the so-called "backward participation in global value chains", a measure of the extent to which the exports of one country depend on intermediate inputs that this country sources from other countries, through integrated supply chains. In this specific case, we analyse the value added share of German exports due to inputs originating from the EU10, and compare it with the share of the other major trading partners.

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⁶ Dustmann et al. (2014) describe the German economic model, explaining how in this country "to increase the competitiveness of its own final products, the manufacturing sector has made increased use of trade integration with Eastern European countries through inputs imported from abroad, and far more so than other European countries". In particular the comparison showed a German reliance on inputs sourced from the enlargement countries that was four times higher than France and Italy.

2.5 **Backward participation in GVCs** Share of Germany's exports due to foreign value added USA 2.0 FU10 China 1.5 France 1.0 0.5 0.0 2009 2010 2005 2012 2013 2014 2011

Chart 7: Participation in Germany's Supply Chains

Source: own elaboration, on OECD data. Note: the indicator shows the percentage of total value of German exports that depends on intermediate inputs originating from other economies.

The chart shows that the relative share of the EU10 almost tripled during the whole period considered, between 1995 and 2020. During this period, the relevance of the intermediate inputs provided by the EU10 to the German economy has overcome traditional and large trade partners of Germany such as Italy, France, the Netherlands, and the UK, to reach a similar level to the United States (US). In 2020, the most recent year for which data are available, the relevance of inputs originating from the EU10 for the German exports is slightly lower than those originating from the United States and slightly higher than those originating from China.

This striking result is even more significant when we consider that the overall size of the EU10 bloc, in terms of GDP, is about one tenth of the size of each of the two largest economies of the world. This observation corroborates the previous finding that the economies that joined the EU in 2004 have deeply integrated in the Single Market.

4. Overall economic impact

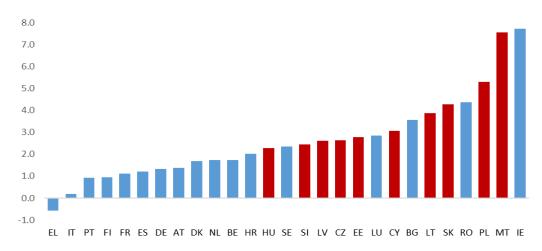
The question then arises of the overall economic impact of belonging to the EU Single Market. This section reviews the evolution of real GDP, the trends in the labour income shares, and the estimation of overall net impacts.

4.1. GDP growth

Since the accession in 2004, the EU10 countries have been among the fastest growing economies of the EU; only Ireland's economy grew at a faster rate than Malta, and only two other economies out of those that were already in the Union, Sweden and Luxembourg, grew at a

similar rate to the EU10 group (Chart 8). The bloc altogether outperformed the other Member States and moved from representing 6.5% of the total EU economy to 9% today.

Chart 8: Average annual growth rate of real GDP, since 2004

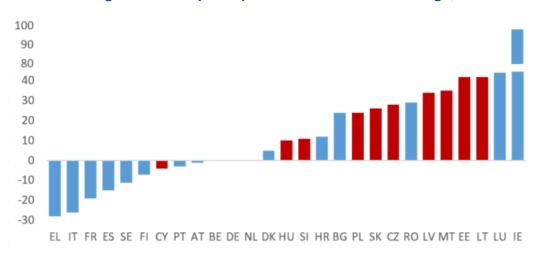


Source: own elaboration, on Eurostat data.

Even in terms of income per capita, all of the countries that joined the EU in 2004 improved their conditions, in most cases even outperforming the rest of the countries that were already part of the Union. Nine out of the ten countries of the EU10 bloc improved their position relative to the EU average, since the accession (Chart 9). All countries, except Cyprus, grew in that period faster than the rest of the EU.

The difference between growth of the overall economy and growth in relative per capita income is of course due to population changes. In particular, in some countries, the markedly positive change in relative per capita income masks the fact that they also lost a relevant part of the population, during the same period (this is the case of Latvia, for instance). In others, on the other hand, the higher net migration rate may reduce per capita income values (this is the case of Malta and Cyprus, for instance).

Chart 9: Change in income per capita relative to the EU average, since 2004



Source: own elaboration, on Eurostat data.

4.2. Cohesion

A closer look at the territorial distribution of the positive growth performance of the EU10 countries unveils significant dispersion, in those countries in which the accounts are available at NUTS2 level. In most of these countries, the drivers of growth have been concentrated in metropolitan areas, while others areas have lagged behind, with deepening interregional disparities (European Commission, 2024). Poland exhibits the greater disparity, but also the best average growth performance, after Malta. The dispersion of growth rates is also considerable in Czechia, and in particular in Lithuania, where, despite the fact of having only two NUTS2 regions, the difference between the capital region and the other one is extremely large.

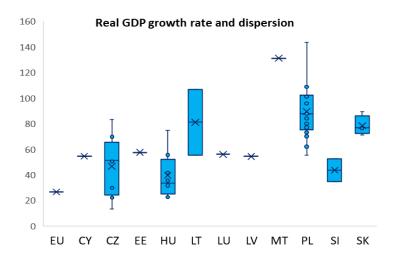


Chart 10: Real GDP growth rate between 2004 and 2022, at NUTS2 level

Source: own elaboration, on Eurostat data. Note: the indicator shows the real GDP growth rate of each country, between 2004 and 2022, in percentage points, with the indication of the regional dispersion within each one, at NUTS2 level.

The broadly positive performance in terms of GDP and income per capita has gone hand-in-hand with the progressive integration of the EU10 in the Single Market. This integration, as we have shown before, has developed over time, starting well before the official accession, and has led to these economies being central in cross-border value chains of manufacturing sectors. Some studies have linked this progressive integration to the specific labour market conditions of these economies, where more flexible and lower wages than in the rest of the EU could have improved their cost competitiveness, allowing them to reap the benefits of an integrated market, very much in line with the ex-ante expectations of Nahuis (2004).

Szymczak et al. (2022) find that wages in these countries are higher when their industry is at the beginning of the value chain or at the end than in the middle; in sectors close to final demand, greater production fragmentation is associated with lower wages. These findings point to a more nuanced picture, in which the progressive structural transformation of the economy towards higher value added sectors might lead not only to higher growth but also to better wages.

In order to disentangle this possible effect, we look at the distribution of growth over time within the EU10 countries. At macroeconomic level, the functional distribution of income captures the extent to which growth is shared between labour and capital in one country (Bowley and Stamp, 1927, in Samuelson, 1964; Johnson, 1954; Kaldor, 1957; Karabarbouinis and Neiman, 2014).

65 • Average 1995-2003 • Average 2004-2013 60 • Average 2014-2023

Chart 11: Labour share in EU10 (1995-2023)

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Source: own elaboration, on AMECO data. Note: the indicator shows the adjusted wage share, in percentage of GDP at current market prices.

We take the labour share of total GDP, which tends to be rather stable over time, but with relevant variations in case of structural changes in the economy, and calculate for each country the average over the three decades for which data are available. We therefore compute this average for the decade preceding the accession in the EU, for the first and for the second decades after the accession, and compare each country with the EU average.

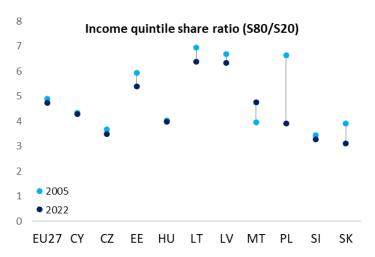
The EU10 countries joined the EU with an average share of income accruing to labour which was lower than the EU average, with the notable exception of Slovenia. Income polarisation was also higher in these countries than in the ones that were already in the EU (Wang et al, 2017). Over time, however, the structural transformation of the economies has led in most cases to an increased labour share, in particular during the most recent decade, bringing it closer to the EU average. The exceptions to this trend are Hungary, Poland, and Cyprus, where the share has actually decreased in the recent decade⁷.

In order to have a closer look at the possible effects of these trends on income inequality, we analyse the income quintile ratio (S80/S20). This indicator measures income inequality by comparing the income of the top 20% (S80) of the population to the income of the bottom 20% (S20). A decreasing income quintile ratio indicates a reduction in income inequality, meaning that the income gap between the richest and the poorest is narrowing.

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⁷ Recent forecasts, however, project a moderate increase of the labour share in 2024 and 2025, in Hungary and Poland.

Chart 12: Income quintile share ratio, 2005 and 2022



Source: own elaboration, on AMECO data. Note: the indicator shows the adjusted wage share, in percentage of GDP at current market prices.

In all countries the level of inequality, as measured by this indicator, has decreased or remained stable, between the accession into the EU and the latest year for which data are available. The only exception is Malta, where this ratio has slightly increased, but remaining in live with the EU average. The Baltic States joined the EU with levels of income inequality considerably higher than the EU average, but that have decreased since.

A special case is the one of Poland. Income inequality in this country decreased the most among all countries of the group, during the seventeen years considered, bringing it below the EU average. However, Poland is also the country in which the labour income share had fallen the most, in the period considered, which may seem counterintuitive, and certainly peculiar. One reason for this result may be linked to shifts in income sources: even in the case of a falling labour income share, policies such as social welfare programs, progressive taxation, and minimum wage increases can lead to an increase in income for lower-income groups. Another reason may be linked to the progressive increase in the relevance of the financial sector in the economy and the transfer of income from the real sector to it. If large part of the population gains access to it and financial income is more equally distributed, that may explain the peculiar case of falling share of income accruing to labour and contemporaneous decreasing in inequality.

4.3. Model estimates of net impact

The positive absolute figures about economic growth, however, do not provide a precise information about the growth impact of having accessed and integrated the EU Single Market. Some ad-hoc model-based analyses, built on counterfactual simulations, can provide broad estimations of the total benefits derived from the integration of each country in the Single Market.

Felbermayr et al. (2022) use a quantitative multi-country, multi-sector trade model to estimate the welfare losses of "undoing Europe". They look at different integration layers: the Single Market, the Common Currency, the Schengen Area and free trade agreements with third countries. By estimating this cost of "undoing", they provide an estimation of the benefits of being part of the Union.

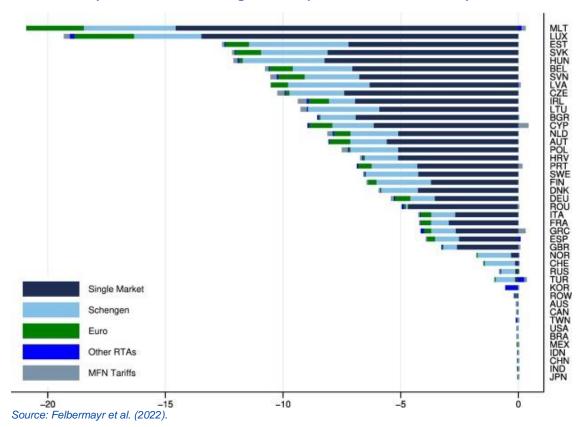


Chart 13: Impact of different integration aspects on Real Consumption

The chart shows the change in real consumption in percentage of the level in the baseline year (2014), for various scenarios of disintegration. Like in most analyses of the relevance of a common market for individual countries, the benefits are of course inversely related to the size of the economy (the smaller, the higher the reliance on external markets). Overall, the breakdown of the Single Market is clearly the most impactful scenario, for the majority of Member States: the largest effects are observed for Malta (-14.6%), Hungary (-8.2%), Slovakia (-8.1%), Czechia (-7.4%), Estonia (-7.2%), and Slovenia (-6.8%). These can be considered as measures of the benefit of being integrated in the Single Market.

Fontagne and Yotov (2024)⁸, then, use a state-of-the-art structural gravity model to quantify the effect of the EU on each Member State's real GDP. They too simulate a scenario without the EU. For the EU10, the impact ranges from 4.7% of GDP for Poland to 6.6% for Slovakia (see chart below). Since the authors looked at gains from trade integration, those gains can be viewed as a conservative measure, because other effects through capital or labour mobility or EU funding are not assessed/captured.

⁸ Fontagne, Lionel and Yoto Yotov (2024) "Reassessing the impact of the Single Market and its ability to help build strategic autonomy", (forthcoming in Single Market Economy Papers).

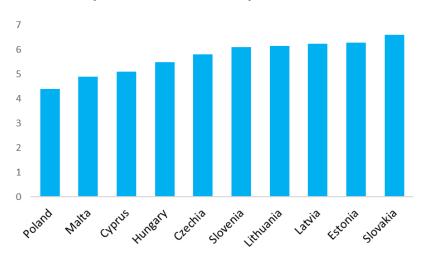


Chart 14: Impact of EU membership on a Member State's GDP

Source: Adapted, from Fontagné and Yotov (2024).

5. Specific case studies

This section explores specific examples of the positive trends that the EU10 Member States experienced following their accession in 2004. It underscores the transformative effects of EU membership on the economic landscape and industrial modernization of the EU10 economies.

5.1. Qualified professionals – access to the single market

After joining the EU in 2004, professionals from the EU10 Member States benefited from EU rules on recognition of professional qualifications. They could provide their services across the Single Market. There are almost 6 000 regulated professions in the EU, with great variation across countries. Based on an EU-wide survey, around 22% of the European labour force, or over 47 million citizens, is directly affected by professional regulation.

Therefore, enhanced recognition of professional qualifications made possible by EU membership created a significant opportunity for many professionals in these 10 Member States to benefit from the Single Market. More precisely, around 34% of qualifications recognised in the EU are for migrating professionals having as a country of qualification one of the 10 Member States joining the EU in 2004 (left chart). Moreover, Poland and Romania are among the top five Member States with the highest number of migrating professionals (right chart).

This evidence shows how a specific element of the Single Market acquis (notably rules and procedures on the recognition of professional qualifications) has created major benefits and new opportunities for businesses and professionals in the 10 Member States.

COUNTRY OF QUALIFICATION

All EU Countries HOST COUNTRY ⊗All EU Countries **Country of Qualification Host Country** Qualifications recognised in the EU (incl. UK until 2021) ■ Romania [12.5%] ■ Spain [10.4%] ■ Poland [8.5%] United Kingdom [24.8%]Germany [11.6%] Germany [8.1%] United Kingdom [7.9%] Belgium [8.9%]
 Italy [7.5%]
 France [6.3%] All Other Countries [52.6%] All Other Countries [40.9%] 12.5% 24.8% 10.4% 40.9% 264269, 34% 52.6% 11.6% 512973, 66% 8.9% 7.9% ■ Total EU 10 MS recognitions Rest of EU recognitions The graph on the right presents the top five countries where migrating professionals had their qualifications recognized.

Chart 15: Recognition of professional qualifications

Source: Regulated Professions Database.

5.2. Energy intensive industries

There are several examples of the sizeable and positive development of energy intensive industries in the EU10 after the accession. In the construction sector, for instance, during the years 2009-2019, the value of the Polish construction market increased by 48%. In the glass industry, there was a very fast growth in glass production in Poland, Czechia and Slovakia since the accession, with an increase in tonnage of around 140% for float glass and 90% for glass packaging. The paper industry, in Czechia, has more than doubled its production of paper products between 2004 and 2022, from 490.8M€ to 1,295.3M€ value added, a 164% increase. In the case of basic metals, then, Slovakia has more than doubled its production between 2004 and 2022, from 908.8M€ to 2,069.3M€ value added, amounting to a 128% increase.

Overall, this data suggests that the accession of the EU10 countries has had a positive impact on their energy-intensive industries, leading to significant growth, increased production capacity, and enhanced competitiveness within the EU market. These developments are indicative of the broader economic transformation and industrial modernization experienced by these countries following their integration into the European Union.

5.3. Tourism sector

In addition, the tourism sector in the 10 new Member States has benefited greatly from EU accession. Joining the EU enabled these economies to leverage their tourism market potential effectively. The data indicates that these countries quickly capitalized on their newfound status within the EU to develop and expand their tourism infrastructure to accommodate the growing

number of visitors. The important observation is that the expansion of supply matched the increasing demand.

There was a rapid expansion of supply, with the number of bed places increasing by 34% from 2003 to 2022. This rapid expansion of capacity, measured in terms of bed places, outpaced the growth rate in the EU14 countries by 2.7 times. This suggests that the EU10 countries made substantial investments in expanding their tourism infrastructure to meet the growing demand from visitors.

On the demand side, in fact, the data shows a remarkable growth in tourism demand, as evidenced by the substantial increase in the number of nights spent in EU10 countries from 2003 to 2023. This growth represents a long-term increase of 69%, outpacing the growth rate in the EU14 countries by 1.4 times. This indicates that the EU10 countries experienced a faster rate of growth in tourism demand compared to their EU counterparts.

Overall, these data underscores the positive impact of EU accession on the tourism sector in the EU10 countries. The rapid expansion of tourism infrastructure and capacity indicates the successful leveraging of EU membership to enhance the competitiveness and attractiveness of these countries as tourist destinations.

6. Conclusion

In retrospect, the twenty years following the enlargement of the European Union in 2004 have provided ample evidence of the transformative power of integration within the Single Market. This paper has examined the economic impact of the EU10 Member States' accession, shedding light on both the anticipated benefits and the realized outcomes. Through a comprehensive analysis of economic literature, empirical studies, and descriptive evidence, it becomes evident that the accession has yielded significant benefits for both the new entrants and the existing members of the Union.

The economic literature reviewed paints a picture of optimistic prospects preceding the enlargement, with ex-ante analyses projecting substantial gains in GDP, trade integration, growth, and employment opportunities, for both the acceding countries and the existing members. These expectations were largely met, as evidenced by ex-post empirical analyses, which highlight positive effects on GDP per capita, labour productivity, export competitiveness, and trade integration. Moreover, the findings suggest that the enlargement facilitated deeper integration into global supply chains, enhancing the EU's overall competitiveness in key industries.

At the macroeconomic level, the evidence presented in this paper reveals a significant reduction in trade costs, enhanced trade integration, and deepening participation in cross-border value chains within the Single Market, leading to positive structural transformations of these economies. It also shows significant gains in terms of GDP growth and income per capita among the EU10 countries, outpacing many of the other EU countries. Model-based estimations further underscore the net benefits of EU membership, revealing substantial welfare gains from trade integration and the preservation of the Single Market.

The positive impact extends beyond economic indicators, with specific case studies highlighting benefits such as enhanced mobility for professionals and robust growth in energy-intensive industries and the tourism sector. A few remaining challenges for EU10 countries refer to interregional disparities, with better living standards concentrated in metropolitan areas, and to socioeconomic disparities, with the need to ensure inclusive economic growth and a more equitable distribution of income.

In conclusion, we can say that the countries that joined the EU on May 1st 2004 have integrated progressively and steadily into the Single Market and today make a significant contribution to the value added produced in the EU. This has generated economic benefits for both new and old Member States. As we look to the future, the important lesson that can inform the next waves of enlargement is that integration in the Single Market is a continuous process, that starts already during the accession preparation and produces tangible effects already then.

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