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Twenty Years After the Big Enlargement: Integration Within the Single Market

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 realised 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, however, in terms of social and territorial cohesion in these countries. The lessons learned from this enlargement underscore the continuous nature of integration, beginning with accession preparation and producing tangible effects throughout the process.

The enlargement of 2004 was the most significant wave of expansion in the history of the European Union so far, as it brought almost 75 million people into the Union. It marked the accession of ten new member states (EU10), predominantly from Central and Eastern Europe, as well as the Mediterranean region.¹

This enlargement was the culmination of a long process that began shortly after the fall of the Iron Curtain and the collapse of communism in Eastern Europe. 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

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to include new member states, particularly the fear that keeping them out would endanger their economic transition, and, in turn, threaten the prosperity of western Europe (Baldwin, 1995).

This paper analyses the economic impact of the 2004 enlargement, 20 years on. It first reviews the economic literature about the impacts. It then provides some descriptive evidence about the economic benefits that this enlargement brought to the ten member states and to the rest of the EU. Subsequently, 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) and offers conclusions.

Economic literature about the big enlargement

The economic literature about the EU enlargement has discussed integration within the Single Market and the analysis of the benefits arising from this integration. In this section, we review the studies that were conducted before the accession and propose a prospective analysis of the enlargement. Then, we review those studies that provide *ex post* empirical estimations of the impacts of the enlargement.

The enlargement was seen as an opportunity for both the new entrants and the current members of the Union. Baldwin et al. (1997) estimated with a global applied general equilibrium model that EU membership would

¹ The ten new member states (EU10) were Cyprus, Czechia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.

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be "enormously beneficial" to the countries joining and that the others, too, would gain from the accession of the new members. However, they estimated that the benefits would be unevenly distributed, 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 gain 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 experience small welfare gains.

Interestingly, Breuss (2002) suggested that the enlargement would act as an exogenous asymmetric shock for the Union: 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%-9% percent over a 10-year period, Czechia a little bit less (5%-6%). The EU on average would gain around 0.5% of real GDP over a six-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) used a computable general equilibrium model to study the accession to the Single Market, with an 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.

Another important aspect of accession was its effect on 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 also emphasised the importance of flexibility in labour market policies to reap the potential benefits of enlargement. Some sectors were expected to benefit greatly from the accession into the EU Single Market, while others were expected to suffer significant losses. Internal flexibility, which would expedite the relocation of jobs across sectors, was considered the key to success for the EU10 economies. This is, in fact, what happened in most cases.

A few years after the enlargement, a number of studies have tried to assess the economic impacts of the accession of those ten new member states. They have highlighted both the benefits and the challenges associated with integration into the EU. Campos et al. (2014) used a synthetic counterfactual 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 average 12% gain in per capita incomes, but such gains have nevertheless been 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. Increased competitiveness was noted in all of the countries joining the EU in 2004, the largest of which was in Poland, Slovakia and Czechia. At the same time, a substantial decline in competitiveness in the old members of the EU was also observed.

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 multicountry 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 for low-skilled workers, and had smaller welfare gains for old member states. Trade policy moderated migration flows and mitigated congestion effects,² benefiting both new and old member states.

² 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".

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 in 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 affects not only firms inside, but also those outside.

Trade integration

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.

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 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: between the EU10 (countries that joined on 1 May 2004) and the EU14 (countries which were already part of the Union, without the UK); within the group EU10; and within the group EU14. Figure 1 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 in 2004 and those that were already part of the Union (green line); this points to a clear path of convergence and integration. In parallel, there has been a considerable reduction of trade costs within the EU10 group (blue 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.

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. Questions remain about whether the postpandemic world is going to be less integrated, and what sort of implications there may be for the Single Market.

Figure 1





Notes: The indicator shows the evolution of an index calculated as the average of all indices of bilateral trade costs, for each country pair within each group. The green line shows the average of the country pairs across the two groups. The EU10 are countries that joined the EU on 1 May 2004; the EU14 are countries that were already part of the EU, without the UK.

Source: Author's own elaboration on World Bank data.

Trade flows

We now look at the evolution of cross-border trade in goods between the countries that joined the Single Market in 2004 and those 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.

First of all, we find a difference in terms of levels: while the EU14 is the main trade partner of the EU10, accounting for more than half of total export and import, the opposite is not true: the EU10 represents a lower share for the EU14 (less than 10% in most recent years). However, this is driven by a size effect, as the size of the group of countries that joined the EU in 2004, in terms of GDP, is about one-tenth the size of the group that was already part of the Union.

The second, and probably more important, observation is that while the EU14 remains a relevant partner for the EU10, 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 up to 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, while the absolute value has been increasing as total trade has increased. We could argue that the preparation for acces-



Figure 2 Trade of EU10 with EU14 - Relevance by country

Note: The EU10 are countries that joined the EU on 1 May 2004; the EU14 are countries that were already part of the EU, without the UK.

Source: Author's own elaboration on IMF data.

sion 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 is an increasingly relevant trade partner for the EU14.

The country detail visualisation presented in Figure 2 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 open towards the rest of the world.

On the side of the EU14 group of countries, the picture is different: while the overall level remains lower, the most recent data show the highest share of EU10 in total exports and imports (Figure 3). As one would expect, the EU10 group is a significant trade partner for Austria, and a significant source of imports for Germany. We analyse this in more detail in the following subsection.

Figure 3 Trade of EU14 with EU10 - Relevance by country



Note: The EU10 are countries that joined the EU on 1 May 2004; the EU14 are countries that were already part of the EU, without the UK.

Source: Author's own elaboration on IMF data.

These findings are generally 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. 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 gain of market shares of the EU10 relative to the world average. The trend of increasing openness towards the rest of the world that we observe here might be justified by this fact. In terms of business cycle synchronisation, 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.

Supply chain integration

A third element of the progressive integration of the EU10 into the EU Single Market is the participation in cross-border value chains. The more these economies integrated into the Single Market, the more the companies in these countries participated in cross-border value chains with businesses that were already part of the Single Market (EU14).

To test the extent to which this process took place, we look at the share of value added produced in each EU14 country that was actually due to intermediate inputs that 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, which depends on intermediate inputs coming from the EU10 group. 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, this contribution is even larger and has increased by a factor of three; and between 2004 and 2020, the contribution has almost doubled. It is interesting to note that in the specific case of progressive integration in supply chains within the Single Market, the process started well before the official accession and continued throughout the 2004-2020 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 in the EU10

Figure 4





Note: The figure shows the percentage of total value added produced (by country and sector) that originates from intermediate inputs coming from cross-border supply chains within the Single Market.

Source: Author's own elaboration on OECD data.

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.

Six sectors stand out for their highest reliance on the Single Market (Figure 4). 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 of Malta, Cyprus and Estonia does manufacturing of machineries seem to be more integrated with the rest of the Single Market than motor vehicles. 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 of the EU10 economies does not vary greatly from the rest of the EU.

We now look at one specific case, that of the largest EU economy, Germany, which has benefitted the most from





Note: The indicator shows the percentage of total value of German exports that depends on intermediate inputs originating from other economies.

Source: Author's own elaboration on OECD data.

integration with the EU10 bloc.³ Germany has been in the 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 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.

Figure 5 shows that the relative share of the EU10 almost tripled between 1995 and 2020. During this period, the relevance of the intermediate inputs provided by the EU10 to the German economy has overcome its traditional and large trade partners such as Italy, France, the Netherlands and the UK, to reach a level similar to that of to the United States. 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 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 into the Single Market.

Economic impact

The question then arises about the extent of the overall economic impact of belonging to the EU Single Market. 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 that of Malta, and only two other economies out of those that were already in the Union, namely Sweden and Luxembourg, grew at a similar rate to the EU10 group. The bloc altogether outperformed the other member states and grew from representing 6.5% of the total EU economy to 9% today.

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 EU10 countries improved their position relative to the EU average since the accession. 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 due to emigration during the same period (e.g. the case of Latvia). In others, the higher net migration rate may reduce per capita income values (e.g. the case of Malta and Cyprus).

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 the NUTS2 level (Figure 6). In most of these countries, the drivers of growth have been concentrated in metropolitan areas, while other areas have lagged behind, with deepening interregional disparities (European Commission, 2024). Poland exhibits

³ Dustmann et al. (2014) describe the German economic model, explaining how "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 that of France and Italy.

Figure 6

Real GDP growth rate and dispersion at NUTS2 level, 2004-2022



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 country, at NUTS2 level.

Source: Author's own elaboration on Eurostat data.

the greater disparity, as well as the best average growth performance, after Malta. The dispersion of growth rates is also considerable in Czechia and in Lithuania, where, despite having only two NUTS2 regions, the difference between the capital region and the other one is extremely large.

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 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

Figure 7

Labour share in EU10, 1995-2023



Note: The indicator shows the adjusted wage share, in percentage of GDP at current market prices.

Source: Author's own elaboration on AMECO data.

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 the macroeconomic level, the functional distribution of income captures the extent to which growth is shared between labour and capital in one country (Bowley & Stamp, 1927; Samuelson, 1964; Johnson, 1954; Kaldor, 1957).

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 the average for each country 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.

As shown in Figure 7, 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 decade.

Figure 8 Income quintile share ratio (S80/S20), 2005 and 2022



Note: The indicator shows the adjusted wage share, in percentage of GDP at current market prices.

Source: Author's own elaboration on AMECO data.

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.

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 (Figure 8). The only exception is Malta, where this ratio has slightly increased, but remaining in line with the EU average. The Baltic States joined the EU with levels of income inequality considerably higher than the EU average, but these levels have decreased since.

Poland is a special case. Income inequality in Poland decreased the most among all countries of the group during the seventeen years considered, bringing it below the EU average. However, Poland's labour income share fell the most in the period considered, which may seem counterintuitive and certainly peculiar. One reason for this may be linked to shifts in income sources: even in the case of a falling labour income share, policies such as social welfare programmes, 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 a large part of the population gains access to the financial sector and financial income is more equally distributed, this may explain the peculiar case of a falling share of income accruing to labour and a contemporaneous decrease in inequality.

Model estimates of net impact

The positive absolute figures about economic growth, however, do not provide 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", in terms of the change in real consumption in percentage of the level in the baseline year. 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.

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 measures of the benefit of being integrated in the Single Market.

Fontagne and Yotov (in press) 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. 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 or captured.

Conclusion

In retrospect, the 20 years following the enlargement of the European Union in 2004 have provided ample evi-

dence 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 realised outcomes. Through a comprehensive analysis of economic literature, empirical studies and descriptive evidence, it becomes clear 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.

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 1 May 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 begins during the accession preparation and produces immediate tangible effects.

References

- Baldwin, R. (1995). The eastern enlargement of the European Union. *European Economic Review*, 39(3-4), 474–481.
- Baldwin, R., Francois, J. F., & Portes, R. (1997). The costs and benefits of eastern enlargement: the impact on the EU and central Europe. *Economic policy*, 12(24), 125–176.
- Beck, K. (2020). Decoupling after the crisis: Western and eastern business cycles in the European Union. *Eastern European Economics*, 58(1), 68–82.
- Bowley, A. L., & Stamp, J. (1927). The national income, 1924: A comparative study of the income of the United Kingdom in 1911 and 1924. Clarendon Press.
- Breuss, F. (2002). Benefits and dangers of EU enlargement. *Empirica*, 29, 245–274.
- Caliendo, L., Opromolla, L. D., Parro, F., & Sforza, A. (2021). Goods and factor market integration: A quantitative assessment of the EU enlargement. *Journal of Political Economy*, *129*(12), 3491–3545.
- Campos, N. F., Coricelli, F., & Moretti, L. (2014). Economic Growth and Political Integration: Estimating the Benefits from Membership in the European Union Using the Synthetic Counterfactuals Method. *IZA Discussion Paper*, 8162.
- Dustmann, C., Fitzenberger, B., Schönberg, U., & Spitz-Oener, A. (2014). From sick man of Europe to economic superstar: Germany's resurgent economy. *Journal of Economic Perspectives*, 28(1), 167–188.
- Elekdag, S., Muir, D., & Wu, Y. (2015). Trade linkages, balance sheets, and spillovers: The Germany-Central European supply chain. *Journal of Policy Modeling*, 37(2), 374–387.
- European Commission. (2024). *Ninth report on economic, social and territorial cohesion*. Publications Office of the European Union.
- Felbermayr, G., Gröschl, J., & Heiland, I. (2022) Complex Europe: quantifying the cost of disintegration. *Journal of International Economics*, *138*.
- Fontagne, L., & Yotov, Y. (in press). Reassessing the impact of the Single Market and its ability to help build strategic autonomy.
- Gilbert, J., & Muchová, E. (2018). Export competitiveness of Central and Eastern Europe since the enlargement of the EU. *International Review* of Economics & Finance, 55, 78–85.
- Johnson, D. G. (1954). The functional distribution of income in the United States, 1850–1952. *The Review of Economics and Statistics*, 36, 175–182.
- Kaldor, N. (1957). A Model of Economic Growth. The Economic Journal, 67(268), 591–624.
- Lejour, A. M, de Mooj, R. A., & Nahuis, R. (2001). EU Enlargement: economic implications for countries and industries, *CESifo Working Paper*, 585.
- Maliszewska, M. (2004). EU enlargement: benefits of the single market expansion for current and new member states. *CASE Network Studies* and Analyses, 273.
- Nahuis, R. (2004). One size fits all?: Accession to the internal market; an industry-level assessment of EU enlargement. *Journal of Policy Modeling*, 26(5), 571–586.
- Samuelson, P. (1964). Economics: An Introductory Textbook. McGraw-Hill.
- Szymczak, S., Parteka, A., & Wolszczak-Derlacz, J. (2022). Position in global value chains and wages in Central and Eastern European countries. *European Journal of Industrial Relations*, 28(2), 211-230.
- Vermeulen, W. N. (2022). Stuck outside the single market; Evidence from firms in central and eastern Europe. *Journal of Comparative Economics*, 50(2), 415–434.
- Wang, J., Caminada, K., & Wang, C. (2017). Measuring Income Polarization for Twenty European Countries, 2004–13: A Shapley Growth-Redistribution Decomposition. *Eastern European Economics*, 55(6), 477–499.