

# The Opening of Central and Eastern European Countries to Free Trade: A Critical Assessment

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## Abstract

Three decades after the fall of the Berlin wall and one and a half decades after the Big Bang enlargement of the European Union (2004-2007), we revisit contrasting narratives about the benefit of both free trade and the EU enlargement for Central and Eastern European (CEE) countries. We distinguish old, pre-2004 EU countries from CEE countries that joined the EU in 2004-2007, as well as from the CEE countries that have not become part of the EU, in particular Belarus, Moldova, and Ukraine. Our analysis looks at two temporal windows: one from 1991 – the demise of the Eastern European free trade zone (COMECON) – to today, and the second zooming on the period following the enlargement process of 2004-2007. Our analysis points to an unfavourable turn of events for CEE countries, which appear to have experienced significant losses in their process of rapid integration in the world and EU economies. We are comparing these events in Central and Eastern Europe with the patterns of de-industrialisation and migration that took place in Latin America after a similar free trade shock starting in the 1970s.

Keywords: de-industrialisation, EU enlargement, EU integration, migration, COMECON

JEL: F15, R11, R12, B15, B17, P33

## Introduction

The years 2004-2007 marked the EU's largest expansion ever. As far as Central and Eastern European (CEE) countries are concerned, this expansion accelerated a process of opening of the countries to free trade that had already begun with the fall of the Berlin wall.

In this paper we shall look at the consequences of this opening and expansion in terms of uneven economic development and consequent human migration, a) for the CEE countries,

b) for the European Union as a whole, and c) also for the former CEE countries that remained outside the European Union (like Belarus, Moldova and Ukraine). The available data is not of the same quality for these three groups of countries, but the salience of the analysis of data-poor countries to the present investigation has led us to retain them.

The study is broken down in two time periods. The first time-period starts from the demise of the Eastern European free trade zone (COMECON) in 1991, ending in 2004. The second period begins with the so called ‘Big Bang’ EU enlargement, i.e. the integration of a large number of former COMECON countries into the European Union on May 1, 2004 (Bulgaria and Romania followed in 2007). Both these periods created varying degrees of deindustrialisation and emigration from the CEE countries, which are the object of the present analysis.

Only 34 years before our story starts, in 1947, the Marshall Plan was announced, which would very successfully reindustrialise a war-torn Europe. In 1991, and even more so in 2004, European ideology had been subject to a remarkable shift. The premium attached to industry and manufacture had gradually disappeared, giving way to a neoliberal vision (Reinert, 2020). According to this school of thought, joining the world markets and the European Union held for CEE countries the promise of convergence to the Western European standard of living (Kijek and Matras-Bolibok, 2020). The view of international trade as it developed during the Cold War corresponds to US economist Paul Samuelson’s interpretation of David Ricardo’s 1817 trade theory (Samuelson 1948/49) that international trade would tend to create ‘factor-price equalisation’, i.e. that the prices of labour and capital would tend to equalise between nations. A 1997 statement by the secretary-general of the WTO, Renato Ruggiero, declaring that we should unleash ‘the borderless economy’s potential to equalise relations among countries and regions’ shows us that Samuelson’s theories were by then taken literally (Ruggiero, 1997). In this theory all economic activities are considered to be qualitatively alike, so – accordingly – if we just put all shoe-shine boys in one country and all high-tech engineers in another, both countries and workers would tend to become equally rich. As it had done earlier in Latin America (Reinert and Kattel, 2004) this theory caused considerable economic damage in the CEE countries.

Those expectations were accompanied by isolated concerns, related among other things to these countries’ loss of identity or independence. Other sceptical voices pointed to the excessive diversity and insufficient preparation of CEE countries. However, attitudes about accessions were generally positive. It is undeniable that before May 1, 2004, the European Union had never been so diversified. The abolition of existing geographical, socio-



economical and – in a sense – cultural borders towards a common destiny has now become one of the principles of the EU, as expressed by President Juncker when he stated that ‘the notion of convergence is at the heart of our Economic Union’ (Juncker, 2015). An early lone voice solidly against the optimistic folly of ‘factor-price equalisation’ was Harvard economic historian David Landes, who in 1999 wrote to one of the authors (Reinert, 2007, p. 294): ‘if we ever get factor-price equalisation, who says it will be upwards?’ Landes sensed what would actually happen: the integration with a low-wage area in Eastern Europe created downward pressures on wages in the old EU countries (Reinert and Kattel, 2007, 2004). Incidentally, these days it is increasingly argued that similar dynamics are at play in the relations between China and the US (Hirsh, 2020).

In retrospect, it seems that both the CEE countries and the EU itself were not entirely prepared for this enlargement (Borg and Diez, 2015; Reinert, 2006). Moreover, different chains of events that could not be foreseen in the ruling neo-classical economic framework, such as the economic crisis, the refugee crisis, and the upsurge of anti-European political forces, exposed deficiencies and inefficiencies in the foundations of integration leading to a high risk of dissatisfaction of the intended recipients of the EU policies (Czech and Krakowiak-Drzewiecka, 2019; Skare and Porada-Rochoń, 2019). Undoubtedly, the European model of overnight shock integration between two completely different economic systems is unparalleled in the world. All the same, it presents uneven and unequal territorial effects of industrial changes and globalisation, combined with different opportunities and living standards. Therefore, questions about the future of an increasingly differentiated European Union integration are arising, and several scholars have considered the need for a multi-speed Europe in various forms and guises (Badinger et al., 2004; Daly, 2019; De Vries, 2018; Emerson, 2019; European Commission, 2017, 2009; Fabbrini and Schmidt, 2019; Héritier, 2019; Hogenauer, 2018; Keereman and Szekely, 2010; Mazier and Valdecantos, 2015).

The evidence reviewed in the present work points to a more negative outcome of the CEE opening and accession, coming close to a ‘winners take it all’ situation, where the CEE countries played the role of the losers.

## Previous works

It has been argued that with the Eastern enlargement, the European Union abandoned its previous implicit strategy of symmetrical integration, emphasising the role of having a strong manufacturing industry in all member states (Reinert and Kattel, 2004). It has also



been noted that the relationship between ‘donors’ and ‘recipients’ of democracy promotion is asymmetrical (Grimm and Grimm, 2019), which means that in the context of administrative changes, ‘donor’ countries have a more significant impact than ‘recipient’ countries, which end up behaving as passive players in the international arena. It should also be noted that while Western European countries had historically developed strong national feelings, and were ready to gradually be absorbed into a larger European identity, several countries – probably Poland and Hungary in particular – had had their nationalism suppressed for a very long period under foreign regimes.

As already alluded to, the neoclassical economic theory assumes that economic integration, together with free trade and market competitiveness, tend to lead to a uniform reward to the factors of production – labour and capital – across the globe. In practice, growth rates and wage levels strongly depend on local factors and the specific structure and context of each economy – in other words, economic growth is ‘activity-specific’. An old tradition, born with the work of Antonio Serra (Serra, 2011), still very much alive in Alfred Marshall’s founding work of neo-classical economics (Marshall, 1890) and briefly resurrected by Paul Krugman in 1981 (Krugman, 1981), explains how inequalities may be exacerbated – rather than mitigated – by economic integration (Cieřlik and Hien Tran, 2019). These theories all make a simple distinction between economic activities subject to *diminishing returns to scale* (where one factor of production is limited by nature) that will cause production costs to increase after a certain point, and those subject to *increasing returns to scale*, where increased production causes increased productivity and falling costs. In his PhD dissertation of 1980, one of the authors (ER) (Reinert, 1980) showed how the main export items of three Latin American countries – Bolivia, Ecuador, Peru – were producing well into the area of diminishing returns: whenever the volume of production was reduced, production costs *fell*. A recent OECD report on Chile proved that the same mechanisms are at work in Chilean copper mining (Organisation for Economic Co-operation and Development, 2018). It is important to note that within a country or region, increasing returns create higher barriers to entry in an industry, producing imperfect competition and rents that tend to be shared as higher profits, higher wages, and higher taxable income to that country or region.

Goods produced under diminishing returns tend to be commodities and as such subject to perfect competition (commodity competition) where productivity increases – by definition – the benefits will tend to spread in the economy as lower prices to the consumers (Reinert, 1994). Increasing returns activities face a triple blessing: falling costs with imperfect competition and high profits. Diminishing returns activities, on the other hand, face



a triple curse: increasing costs (after a certain point) with perfect competition and low profits. When these mechanisms are at work – for example between a colonial power and its colonies – increased economic integration may lead to the rapid development of wealthier and more prosperous regions at the expense of peripheral areas. Most traditional service activities are neutral in this perspective – they tend to operate under constant returns to scale (the productivity of barbers neither decreases nor increases with the number of haircuts produced).

The literature on the EU enlargement has predominantly focused on explaining successful aspects of this integration (Crescenzi and Giua, 2018, 2016; Deichmann et al., 2017; Głodowska and Pera, 2019; Heider, 2018; Rapacki and Prochniak, 2019), with a relatively lower number of critical approaches focusing mainly on political inequality and the uncertainty related to further integration (Hodson and Puetter, 2019; Hooghe and Marks, 2019), the polarisation of policies (Kuhn, 2019; Rauh et al., 2019), defects of the European Monetary Union (EMU) (Koyama, 2016), and social dumping (Bernaciak, 2014; Ricci, 2019). Relatively few studies have tackled industrialisation in these settings (Duman and Kurekova, 2012; Medve-Balint and Scepanovic, 2019; Pavlinek, 2018), nor followed James Kenneth Galbraith's intuition of looming dangers that

*if the East Europeans fall asleep on the train to Stockholm, they may wake up as the boat docks in Buenos Aires. (Galbraith, 1991)*

Thus, the questions as to which regions have benefited most from the combination of cohesion and industrial policy and what factors are influencing the success of integration remain mostly unanswered. In the present work, we adapt some of the theses of the evolutionary (Schumpeterian) and historical schools of economic development – revived by one of the authors (ER) (Reinert, 2007) – to look at the different stages of the EU project development. To this effect, we revisit some of the theses of the 1988 Cecchini report (Cecchini et al., 1988), in relation to the expected benefits of the EU project in terms of increasing returns to scale in the manufacturing industry. Looking at the Big Bang accession of 2004, we want to verify in what respect the underlying assumptions in the prescriptions of the Cecchini report have or have not been followed. We want to explore the scope and limitations of the EU's industrial policy by focusing on CEE countries that are a classic example of dependent market economies. They not only faced rapid integration trajectories but also needed to transform uncompetitive ex-socialist industries – to the extent that they had survived the free trade shock of the 1990s – while also risking paying the price of becoming systematically dominated by foreign companies. We intend to verify whether the



rapid opening of their economies and the subsequent accession has overall deprived CEE countries of economic activities where productivity increases spread ‘collusively’ – as higher profits and higher wages – and left them with low-tech activities where the benefits from productivity improvements spread as assumed under perfect competition: that is, as lower prices to the consumers (who may be abroad). Note that, in the absence of accession, the CEE countries might have been able to keep at least some of the ‘collusive’ opportunities. Here the term ‘collusive’ refers to developing and retaining activities where increased productivity tends to raise wages rather than lower prices, and to policies bringing together state and industry as accomplices in developing an advanced increasing returns manufacturing sector (Reinert, 1994). We realise that the differences between the countries in question are enormous, and shall attempt to account for them while chasing for common trends.

## Research hypotheses

Our research questions cover a broad period ranging from the fall of the Berlin wall in 1989 to the present time, focusing on the effect of the market aperture of CEE countries and their subsequent accession to the European Union in 2004-2007.

Over the history of European integration, three different economic stages of EU development can be distinguished under the general post-war narrative and rhetoric of “free and united Europe” as advocated for in the Manifesto of Ventotene (Spinelli and Rossi, 1941). The EU started as the *European Coal and Steel Community* more or less as a German-style cartel with the purpose of orderly reducing the capacity of coal and steel production after World War II. Then, in 1957, a second stage began with the *European Economic Community (EEC)*, the ideology of which is still present in the 1988 Cecchini Report: an attempt to build a community of symmetrical trade, which meant that the most impoverished countries with the weakest industry needed support. The last example of this approach was the slow integration of the Spanish economy, gradually reducing tariffs while supporting manufacturing industry during the 1980s. With the Maastricht Treaty, *The European Union* was born in 1993 (Judt, 2006).

We contend that the EEC period of the European Community – from 1957 to 1993 – represented a continuation of the economic ideology of the extremely successful 1947 Marshall Plan: according to this perspective, the presence of manufacturing activities is needed in all countries for them to reach a satisfactory standard of living. Thus we find that Paolo Cecchini was right in his 1988 report entitled “Europe 1992, The Overall Challenge” (Cecchini et al., 1988): **the main benefits from the single market (estimated at ECU 200**



**billion or more at the time of the report) would come as a result of increasing returns to scale in the manufacturing industry.** The opportunities for ‘economies of scale’ and for ‘fixed investment costs to be covered by larger sales volume’ figure prominently in the report.

This was the ideology on which the Marshall Plan and the EEC had been built. The Maastricht Treaty, instead, was signed in the spirit of market triumphalism that followed the 1989 fall of the Berlin Wall, the spirit that started with Paul Samuelson’s 1948/49 articles building on David Ricardo’s 1817 theory of international trade. Cecchini’s very explicit assumptions on the key role of the manufacturing industry in creating benefits for participating nations were seemingly forgotten. However, the free trade shock of 1990 killed large parts of the manufacturing sectors in the former COMECON nations. The adoption of the Euro in 1999 – freezing exchange rates and eliminating the key adjustment mechanism between European nations – had the unwanted consequence that many peripheral countries lost their increasing returns (manufacturing) industry, which was at the core of Cecchini’s argument (Reinert, 2017a, 2018; Reinert and Kattel, 2007, 2019). Cecchini *did not* foresee that some countries would, to a large extent, lose their manufacturing activities. If this possibility had entered his analysis, he would no doubt have come to the conclusion that such countries would *not* benefit from more economic integration (other than as welfare recipients).

Based on this, we put to the test the theory **that countries prevented from developing export goods from increasing returns industries end up exporting people instead** (Reinert, 2007). In other words, we postulate the same relationship between economic structure and population density as Herbert Hoover did in his post-war 1947 analysis of the effect of the de-industrialising Morgenthau Plan on the population density of a de-industrialised Germany: ‘There is the illusion that the New Germany left after the annexations can be reduced to a “pastoral state”. It cannot be done unless we exterminate or move 25.000.000 out of it’ (Hoover in a letter to President Truman dated March 18, 1947). This letter to Washington was undoubtedly an important factor for establishing the Marshall Plan – the opposite of the Morgenthau Plan – a few months later (in June 1947).

That diminishing returns cause migration had been already stated by the founder of neo-classical economics, Alfred Marshall. In 1890, he affirmed that

*This tendency to Diminishing Returns was the cause of Abraham’s parting from Lot, and of most of the migrations of which history tells* (Marshall, 1890).

In a footnote, Marshall referred to Genesis 13:6:



*And the land was not able to bear them that they might dwell together; for their substance was great so they could not dwell together.*

In his 1981 article (Krugman, 1981) – where he includes both increasing returns and their absence – Paul Krugman, a later recipient of the Nobel Prize in economics, also recognises this mechanism:

*This might mean that in addition to exporting capital, the industrial region might, in the second stage of growth, begin importing labour – a point also noted both by Hobson and Lenin.*

In this article, Krugman picks up a model from US economist Frank Graham (Graham, 1923) and – as seen in the quote above – places increasing returns and their absence in the context of what he calls ‘a Hobson-Lenin view’, based on the works on imperialism by John Hobson (Hobson, 1902) and Vladimir Lenin (Lenin, 1939).

Based on this, we will try to revisit the phenomenon of intra EU migration – customarily presented as a win-win opportunity for both the exporting and the importing countries – as a process that can potentially generate winners and losers. To this effect, we shall look at the number, gender and qualifications of the economic migrants, as well as at the entrepreneurial activities undertaken by the migrants in the host countries. If a country can be seen exporting not only its most qualified people but also its most dynamic entrepreneurs, we would consider this country as having lost as a result of increased economic integration.

Additional hypotheses put to the test in the present work concern the economic structure of CEE countries and the industrial composition of their economies. Finally, we consider what happened in the periphery of the periphery, i.e. what shocks were transmitted from CEE countries to countries beyond their own borders, including Belarus, Moldova, and Ukraine.

## Methods and data

The present work combines economic theory, and descriptive analysis of existing sources with a direct compilation of available statistical data from several sources such as the STAN Industrial analysis database, Eurostat, International Labour Organization (ILOSTAT database), World Bank national accounts data, OECD National Accounts and United Nations Population Division. Annual data on:

- manufacturing value-added as a percentage of GDP,
- labour compensation per employee in manufacturing relative to the total economy,
- R&D intensity as value-added for the manufacturing sector,



- manufacturing export in a total of goods export (%),
- the trade balance in manufacturing,
- GDP growth.
- Migration stock, and
- net migration were analysed later in the paper.

## Results

We present here two sets of findings, one related to the full period of the term of integration of CEE economies into the world trade following the demise of the COMECON (1991-today), and the second specific to the shorter period of transformation and migrations following the so-called Big Bang EU enlargement of 2004-2007.

### Integration of disintegration? The long path to a world's economy

It is essential to recognise that there are very different types of deindustrialisation. One important dimension of these differences lies in the level of income per capita at which deindustrialisation begins. In general, the effects of deindustrialisation can be expected to be the more negative the lower the level of economic development at which it commences. A second important dimension is the nature of the manufacturing activities that are in relative decline, and of the non-manufacturing activities that are relatively growing. Of particular relevance here is the scope of each of these activities for cumulative productivity increases (as well as other pro-growth characteristics, such as contribution to the balance of payments). Notwithstanding the common denominators that demarcate all sectors, there is enormous heterogeneity within sectors with respect to these characteristics. A third key aspect that distinguishes different types of deindustrialisation is the dynamic of the deindustrialisation process itself, in terms of what is happening with manufacturing output (both the share and level), manufacturing employment (both the share and level) and manufacturing productivity (see Tregenna 2009, 2011, 2013). Where the share of manufacturing in total employment declines due to productivity rising more rapidly than in the rest of the economy, while the absolute level of manufacturing employment and output as well as the share of manufacturing in GDP all rise, this is probably not pathological and would not be appropriately characterised as deindustrialisation. This is very different from a situation where the manufacturing sector as a whole collapses.

Below, we use economic indicators related to GDP, employment and trade balance to check whether after the year 1990 a process of deindustrialisation took place in Central and Eastern Europe. Defining deindustrialisation as occurring when the share of manufacturing value-added in GDP declines, we observe a substantial industrial potential decrease among almost all CEE countries and their periphery in both the short (1995-2000) and the long (1995-2019) term. Germany is included for the sake of comparison.

Table 1. Percentage change in manufacturing value-added as a percentage of GDP.

| Period    | Country ISO code <sup>1</sup> |      |       |        |        |      |       |        |        |        |       |        |
|-----------|-------------------------------|------|-------|--------|--------|------|-------|--------|--------|--------|-------|--------|
|           | BU                            | CZ   | DE    | EE     | HR     | HU   | LT    | LV     | MD     | PL     | SK    | UA     |
| 1995-2000 | -3.33                         | 9.68 | 0.04  | -9.14  | -9.47  | 5.05 | 0.21  | -22.78 | -37.53 | -17.10 | 4.95  | -47.30 |
| 1995-2019 | -23.79                        | 4.15 | -5.33 | -24.31 | -35.18 | 0.24 | -3.33 | -42.40 | -51.25 | -13.13 | -2.88 | -64.99 |

Source: World Bank national accounts data, and OECD National Accounts data files. (Bulgaria –lack of data).

Deindustrialisation is remarkably strong in Ukraine, Moldova, Latvia and Romania, where the share of manufacturing value-added in GDP drops in the range of 30 to 60% of GDP between 1995-2019 (Table 1). We observe a much slower deindustrialisation rate in the Czech Republic, Slovakia, Hungary, and Lithuania, at a level similar to that of the German economy. This is probably the result of a massive FDI inflow to these countries, which is found in the manufacturing sector in the period 1990-2015 (Cieřlik, 2019). The most negative phenomenon is a permanent decrease in the share of manufacturing value-added in all countries' GDP throughout the 2005-2019 period: the phenomenon is therefore not limited to the earlier period 1995-2000.

We also analyse the deindustrialisation process via the lens of employment. Table 2 shows labour compensation per employee relative to the total economy in CEE countries compared to Germany in 1995-2009. This index is calculated as the ratio of labour compensation for manufacturing to the number of persons engaged divided by the ratio of labour compensation for the total economy to the number of persons engaged in the total economy (labour compensation manufacturing /number of workers engaged in manufacturing)/ (labour compensation the whole economy /number of workers engaged in the whole economy).

<sup>1</sup> BU – Belarus, CZ – Czechia, DE – Germany, EE – Estonia, HR – Croatia, HU – Hungary, LT – Lithuania, LV – Latvia, MD – Moldova, PL – Poland, SK – Slovakia, UA – Ukraine. All abbreviations are explained in additional materials: Kuc-Czarnecka, Marta, 2021, "Opening of Central and Eastern European Countries to Free Trade: A Critical Assessment", <https://doi.org/10.7910/DVN/EBOIK6>, Harvard Dataverse.

Table 2. Labour compensation per employee in manufacturing relative to the total economy (1995-2009)

| ISO code | Year  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|          | 1995  | 1996  | 1997  | 1998  | 1999  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  |
| CZ       | 100.8 | 101.4 | 100.2 | 102.4 | 103.3 | 103.4 | 103.0 | 102.5 | 100.7 | 102.4 | 102.0 | 101.5 | 102.6 | 101.2 | 96.9  |
| EE       | 89.6  | 90.7  | 98.0  | 96.8  | 92.9  | 93.9  | 92.3  | 99.8  | 95.5  | 91.1  | 91.8  | 97.4  | 94.2  | 88.3  | 87.4  |
| DE       | 128.7 | 130.0 | 131.4 | 133.1 | 134.1 | 136.9 | 137.4 | 138.0 | 139.0 | 141.5 | 142.5 | 146.3 | 146.6 | 146.0 | 142.3 |
| HU       | 110.1 | 110.0 | 109.3 | 104.7 | 106.3 | 109.2 | 101.6 | 94.5  | 92.1  | 92.9  | 93.2  | 92.4  | 93.2  | 91.4  | 91.8  |
| PL       | 112.9 | 114.7 | 115.7 | 116.8 | 115.8 | 119.8 | 113.4 | 114.6 | 112.0 | 110.7 | 108.3 | 106.3 | 106.9 | 105.3 | 104.3 |
| SK       | 100.6 | 99.0  | 96.9  | 96.7  | 97.8  | 101.9 | 102.8 | 102.0 | 103.9 | 103.2 | 101.2 | 105.1 | 105.0 | 107.2 | 103.8 |

Source: OECD STAN Industrial Analysis database.

The analysis of Table 2 suggests that the average compensation in the manufacturing sector has been reduced compared to the wages in the total economy in all CEE countries during the 1995-2009 period and is in fact lower than the rest of the economy for the Czech Republic, Hungary and Estonia. This trend is opposite to that observed in the German economy, and contrary to the normal assumption that the manufacturing industry is the ‘wage leader’ in national economies. Additionally, the role of labour in the manufacturing sector (in terms of compensation) related to the entire economy worsens after the post-accession period (2004-2006). This negative trend could be explained by insufficient productivity growth in the manufacturing sector compared to other sectors or by too slow a change in the manufacturing industry structure, i.e., a still strong position of low-wage industries such as textiles and wood products. This supposition is confirmed by Table 3, which shows the technology intensity in the manufacturing sector, calculated as R&D expenditures as a percentage of value-added.

Table 3. R&amp;D intensity using value-added for the manufacturing sector

| Year | Country ISO code |      |      |      |      |      |
|------|------------------|------|------|------|------|------|
|      | CZ               | EE   | DE   | HU   | PL   | SK   |
| 1995 | 2.14             | 1.13 | 6.75 | 1.32 | 0.97 | 1.08 |
| 2009 | 2.85             | 1.06 | 8.23 | 2.48 | 0.62 | 0.75 |

Source: OECD STAN Industrial Analysis database.

We find a substantial gap in technology intensity in the years 1995 and 2009 between Germany and the CEE countries. Estonia, Poland and Slovakia have around 15% to 20% of Germany's technology intensity. Between 1995 and 2009, only the Czech Republic and Hungary register a growing tendency in R&D expenditures (as a percentage of value-added) in the manufacturing sector. According to Radosevic (Radosevic, 2017), the EU manufacturing policy shifts toward industrial upgrading based on large-scale smart specialisation investments in R&D and innovation activities. In the context of this policy, CEE countries can be labelled as peripheral.

Next, we analyse the export performance of CEE countries in the manufacturing sector. Small CEE countries focus on exports, and are categorised as strongly export-driven economies since they started a transformation process in 1990. In Estonia, Latvia, Hungary, Slovakia, and the Czech Republic, the ratios of exported goods and services to GDP are among the highest in the EU (Eurostat, n.d.). Moreover, manufacturing is the dominant sector in the export structure (Table 4). In the years 1993-2008, the share of manufacturing goods in total export exceed 80% in almost all CEE countries.

Table 4. Manufacturing export in a total of goods export (%)

| Year | Country ISO code |       |       |       |       |
|------|------------------|-------|-------|-------|-------|
|      | CZ               | DE    | HU    | PL    | SK    |
| 1993 | 88.21            | 94.58 | 91.33 | 86.24 | 97.20 |
| 2008 | 95.68            | 91.14 | 94.24 | 94.48 | 95.24 |

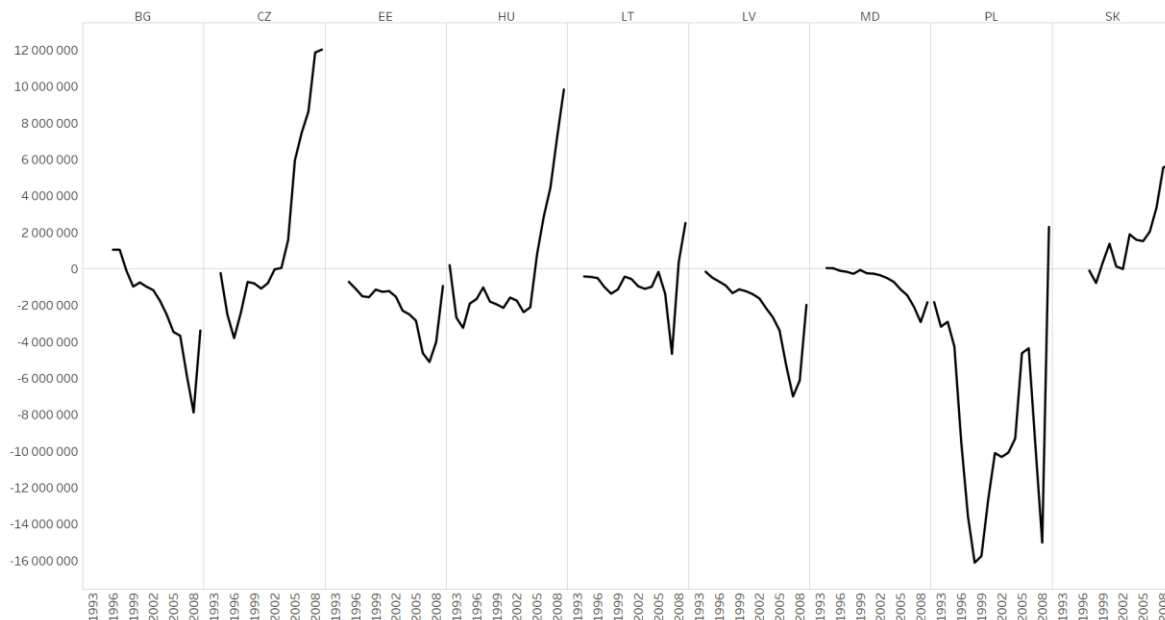
Source: OECD STAN Industrial Analysis database.

In their export activity, Hungary, the Czech Republic, Slovakia and Poland mainly focus on automotive and telecommunications as well as electrical goods, due to large investments by Skoda and Volkswagen. In Estonia, the Swedish Ericsson affiliate is responsible for the massive export of telecommunication equipment. Poland is also known as an exporter of ships and furniture, while Latvia and Lithuania export mostly raw materials and wood products.

To evaluate the trade performance of CEE countries, we use their trade balance. In the literature, trade balance is generally treated as a strong indicator and measure of broadly defined international economic competitiveness. It shows a country's ability to succeed in international markets (Deardorff, 1980; Greenhalgh et al., 1994; Soete, 1981). The negative trade balance in manufacturing indicates a lack of competitiveness of domestic industries, which cannot meet the domestic demand, and consequently leads to increasing imports. Such a negative trade balance can become permanent if the export structure is not adapted to the changing needs of international markets. Figure 1 shows that in the 1992-2008 period, a negative trade balance was a persistent phenomenon for the CEE countries in question. Starting from the years 2003/2004, only three countries - the Czech Republic, Slovakia, and Hungary - strengthened their GDP growth through a positive trade balance. We observe the worst situation in Polish international trade, where import exceeds export for almost 28 years after the transformation starts. According to Mandel and Tomšik (Mandel and Tomšik, 2008), foreign direct investments in CEE countries also negatively affected the manufacturing

sector. These investments usually need to import inputs, which increases the total volume of imports and makes the import intensity of Poland's export very high.

Figure 1. The trade balance in manufacturing (years 1992-2009)

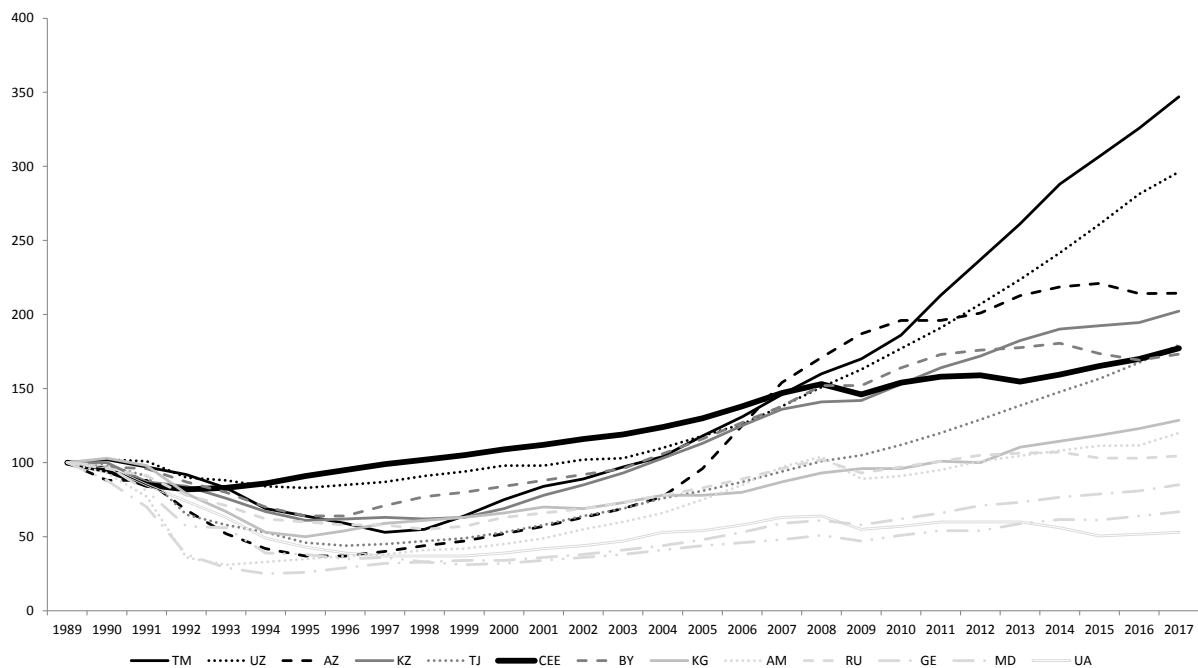


Source: OECD STAN Industrial Analysis database.

Figures 2 and 3 present GDP growth in the former Soviet Union and the Central and Eastern European Union. In order to allow direct comparisons, the scale in both graphs is fixed. It can, therefore, be seen that the GDP growth curves in the EU member states were flatter than those in former Soviet Union countries that do not belong to the European Union. Moreover, Figure 2 clearly shows that in the case of 5 countries, the pace of changes in GDP was similar to, or higher than, the average for the CEE countries. The situation is different in the case of the CEE countries, where only two of them (Poland and Slovakia) managed to record an above-average GDP growth rate.

Figure 2. GDP growth in the Former Soviet Union<sup>2</sup> (1987 – 2017)

<sup>2</sup> TM – Turkmenistan, UZ – Uzbekistan, AZ – Azerbaijan, KZ – Kazakhstan, TJ – Tajikistan, KG – Kyrgyzstan, AM – Armenia, RU – Russia, GE – Georgia.

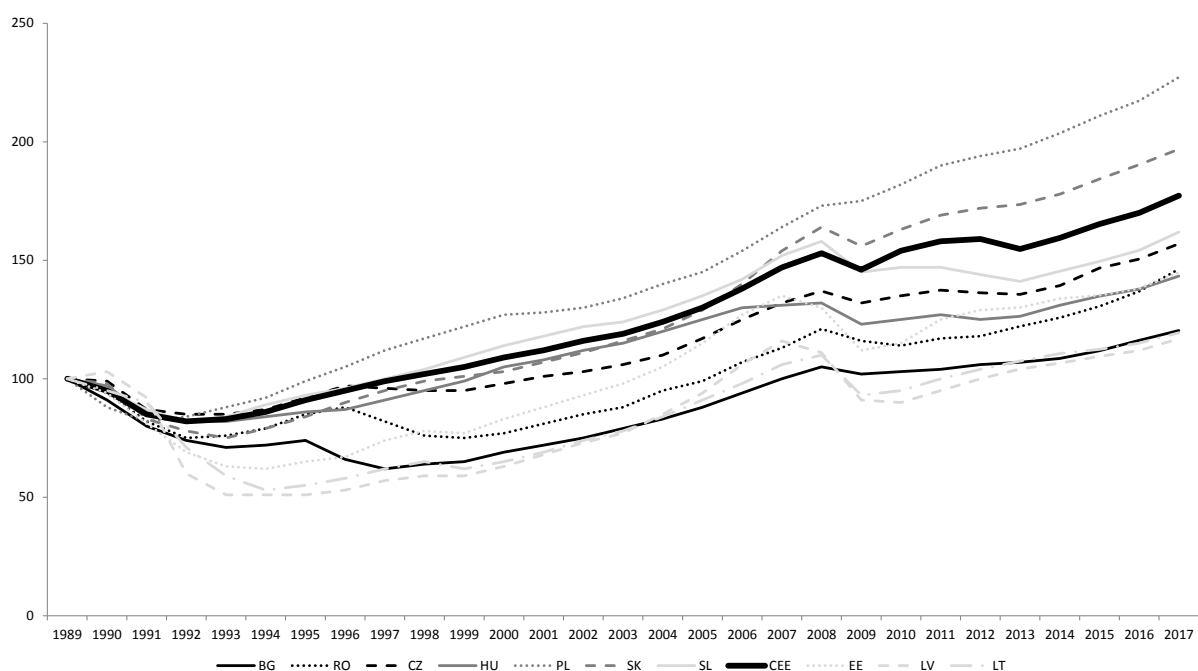


Source: Popov, V. (2019) (Popov, 2019).

The really remarkable country in this dataset is Uzbekistan, which – as was observed in situ by one of the authors (ER) – seems to have successfully carried through an old-fashioned Latin American import substitution strategy (but more successfully than in Latin America). This kind of policy keeps competition pressure alive by allowing imports, but favours national industry by allowing heavy tariffs on the imported goods. The country has also – in cooperation with Japanese companies – managed to achieve local production of buses and trucks. For the many generations that have not studied the history of economic policy (as opposed to the history of economic theory), this policy is similar to the trade policy adopted in the United States for most of the 19th century. The US policy allowed free import of raw materials, and tariffs were applied with the principle that ‘the higher the value added, the higher the import duty’.

Figure 3. GDP growth in the Central and Eastern European countries belonging to the EU (1987 – 2017)





Source: Popov, V. (2019) (Popov, 2019)

## Migration

The economic situation in the CEE countries, as well as the free movement of people resulting from the 2004 membership in the European Union, was reflected in the migratory movements of the population, thus shaping the labour markets and the demographic situation in the newly associated countries. A significant intensification of population movements is shown in Tables 5 and 6.

Table 5. The percentage of the CEE population living in a given foreign country in 2004\*

| Destination <sup>3</sup> | Country of origin |      |      |      |      |      |      |      |      |
|--------------------------|-------------------|------|------|------|------|------|------|------|------|
|                          | BG                | EE   | HR   | HU   | LT   | LV   | PL   | RO   | SK   |
| DK                       | ---               | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| FI                       | ---               | 0.12 | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| IE                       | ---               | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| SE                       | ---               | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| UK                       | ---               | ---  | ---  | ---  | 0.32 | 0.18 | ---  | ---  | 0.11 |
| GR                       | 0.17              | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| IT                       | ---               | ---  | ---  | ---  | ---  | ---  | ---  | 0.31 | ---  |
| PT                       | ---               | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| ES                       | 0.27              | ---  | ---  | ---  | ---  | ---  | ---  | 0.48 | ---  |
| AT                       | ---               | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| BE                       | ---               | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| FR                       | ---               | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| DE                       | 0.15              | ---  | 0.24 | 0.17 | 0.14 | 0.10 | 0.33 | 0.11 | 0.22 |
| LU                       | ---               | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| NL                       | ---               | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  |

\*only values higher than 0.1% are displayed.

<sup>3</sup> DK – Denmark, FI – Finland, IE – Ireland, SE – Sweden, UK – United Kingdom, GR – Greece, IT – Italy, PT – Portugal, ES – Spain, AT – Austria, BE – Belgium, FR – France, LU – Luxemburg, NL – the Netherladns.

Source: Authors' study based on data taken from the United Nations Population Division.

Tables 5 and 6 contain information showing differences in the distribution of CEE migrants in mid-2004 and mid-2019. A comparison of those two tables indicates that in 2004 migrations were relatively marginal phenomena. CEE residents usually migrated to 1-2 selected countries (mostly Germany and the United Kingdom), while their presence in the remaining EU15 countries was negligible.

Table 6. The percentage of the CEE population living in a given foreign country in 2019\*

| Destination | Country of origin |             |             |      |             |      |             |             |      |
|-------------|-------------------|-------------|-------------|------|-------------|------|-------------|-------------|------|
|             | BG                | EE          | HR          | HU   | LT          | LV   | PL          | RO          | SK   |
| DK          | 0.15              | 0.12        | ---         | ---  | 0.47        | 0.28 | 0.11        | 0.14        | ---  |
| FI          | 0.54              | <b>4.63</b> | ---         | ---  | ---         | 0.13 | ---         | ---         | ---  |
| IE          | 1.01              | 0.23        | ---         | ---  | 1.52        | 1.27 | 0.37        | 0.11        | 0.24 |
| SE          | 0.89              | 0.76        | 0.30        | 0.17 | 0.59        | 0.47 | 0.26        | 0.17        | ---  |
| UK          | ---               | 0.57        | 0.27        | 0.47 | <b>5.67</b> | 2.41 | 2.41        | 1.01        | 0.88 |
| GR          | 1.73              | ---         | ---         | ---  | ---         | ---  | ---         | 0.23        | ---  |
| IT          | 0.27              | 0.12        | 0.60        | 0.14 | 0.22        | 0.19 | 0.31        | <b>5.53</b> | 0.21 |
| PT          | 0.50              | ---         | ---         | ---  | ---         | ---  | ---         | 0.12        | ---  |
| ES          | 0.40              | 0.15        | ---         | 0.10 | 0.57        | 0.22 | 0.17        | 3.21        | 0.14 |
| AT          | <b>3.75</b>       | ---         | 1.16        | 0.54 | ---         | ---  | 0.21        | 0.43        | 0.59 |
| BE          | ---               | ---         | ---         | ---  | ---         | ---  | 0.21        | 0.42        | ---  |
| FR          | 0.36              | 0.10        | 0.24        | 0.12 | 0.13        | 0.19 | 0.28        | 0.64        | 0.11 |
| DE          | 0.15              | 0.82        | <b>7.89</b> | 1.88 | 1.65        | 1.68 | <b>4.70</b> | 2.81        | 0.93 |
| LU          | 0.54              | ---         | ---         | ---  | ---         | ---  | ---         | ---         | ---  |
| NL          | 1.01              | ---         | ---         | 0.16 | 0.21        | 0.21 | 0.36        | 0.11        | ---  |

\*only values higher than 0.1% are displayed.

Source: Authors' study based on data taken from the United Nations Population Division.

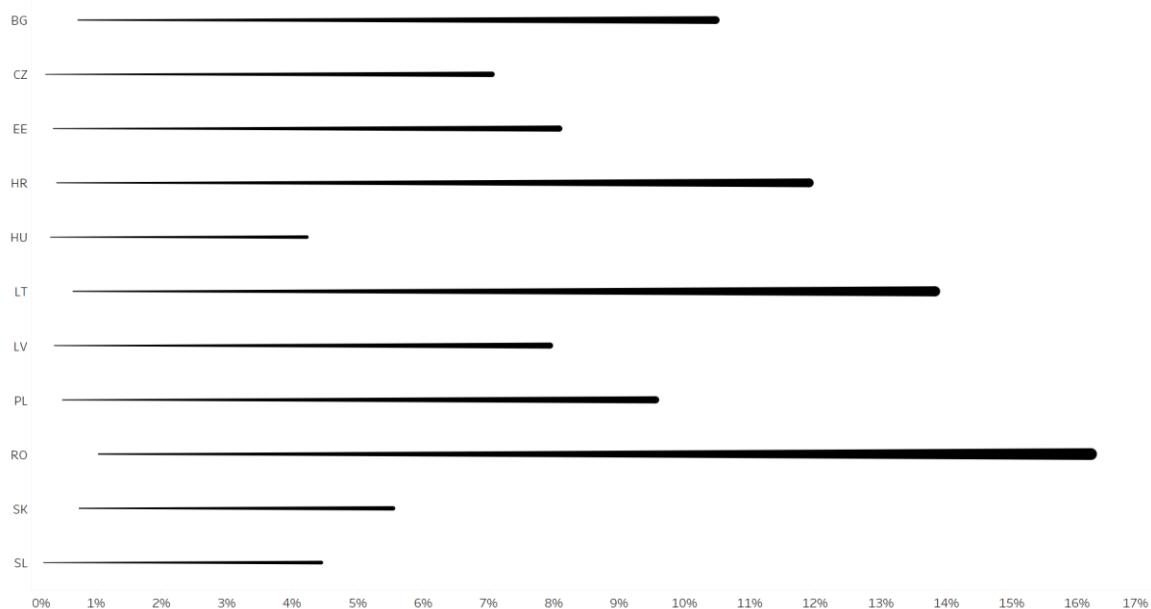
Comparing Tables 5 and 6, it can be seen how the migration processes have intensified over the analysed 15-year period. The stock of Bulgarians living in EU15 in 2004 was 0.71%, and it was the highest observed score (0.27% residing in Spain, 0.17% in Greece, 0.15% in Germany). In 2004, 0.33% of all Poles lived in Germany, which was almost 70% of total Polish emigrants. Among the CEE countries, in 2004 Czechia had the lowest percentage of emigrants, with 0.05% of its inhabitants living in EU15 countries, mainly in Germany.

In 2019, the situation is dramatically different for all analysed Central and Eastern European countries (Table 6). Compared to 2004, in 2019 the number of emigrants residing in the EU15 rocketed. Czech emigration, which was negligible in 2004, amounts to almost 6% in 2019, with nearly 80% of Czech emigrants living in Germany, 10% in Austria, 5% in the United Kingdom. At present, the largest outflow from CEE countries is from previously static Romania, 15% of whose population now lives in the EU15 countries, most of them in

Italy, Spain and Germany. The most common migration destinations are still Germany and Great Britain. The leading destination for Estonians was Finland and for Romanians, Italy. This shows an interesting linguistic pattern where people tend to move within linguistic families. Estonian and Finnish belong to the same linguistic family; Romanian, Italian, and Spanish to another.

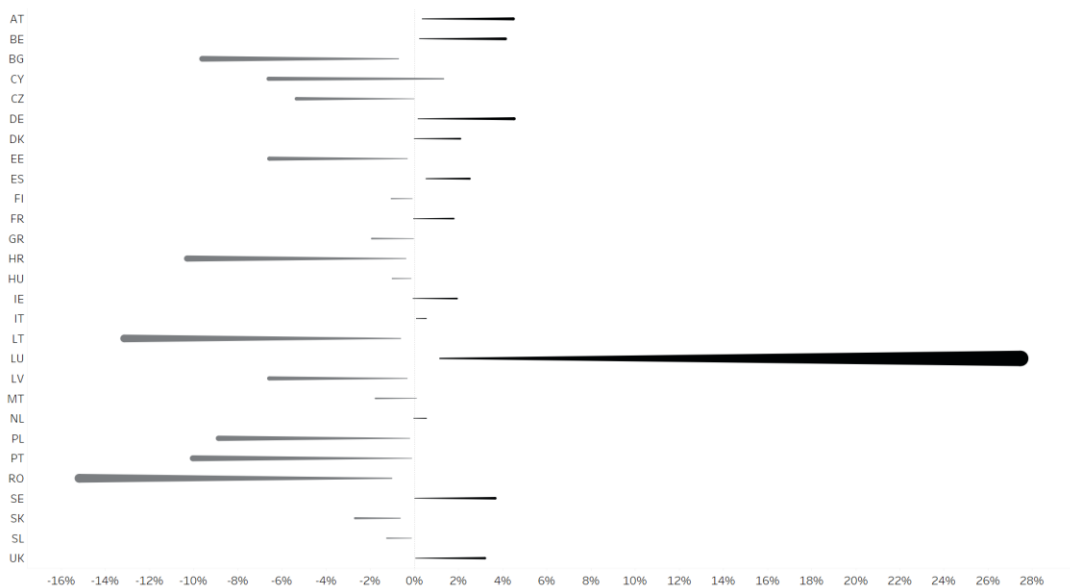
Figure 4 (comet chart) clearly shows that the stock of migrants from CEE countries in 2004 did not exceed 1% of the inhabitants of the country of origin (comet tail - dark grey colour). In fact, the highest one was observed in Romania (0.9% of the population), Bulgaria (0.7%) and Lithuania (0.6%). Fifteen years after the largest European enlargement, a significant intensification and dispersion of migration processes can be noted. In almost half of the CEE countries, there has been a population outflow of over 9% (comet's head - black colour): for example, 1% of Romanians live abroad, and the same can be said for Lithuania (13.83%), Croatia (10.63%), Bulgaria (9.91%) and for Poland (9.45%). The size of the comet's head also refers to the value - the larger the head, the more inhabitants of a given country reside outside its borders.

Figure 4. Percentage of CEE's population living in the "old" European Union countries in 2004 and 2019



Source: Authors' study based on data taken from the United Nations Population Division.

Figure 5. Net migration rate among EU countries as a percentage of the population\*



\*migration to and from non-EU countries was not taken into consideration

Source: Authors' study based on data taken from the United Nations Population Division.

In 2004, a positive net migration (comet tail) ratio among EU countries was recorded in 11 countries, and none of these countries was CEE (Figure 5). The highest net migration ratio in 2004 was 1.32% in Cyprus and 1.14% in Luxemburg. These trends were maintained in 2019, where out of 12 countries with positive net migration, no CEE was recorded. However, this time the net migration ratio is much higher: 27% in Luxembourg, 4.5% in Austria and Germany, 4% in Belgium, and over 3% in the United Kingdom and Sweden (comet head). On the other hand, the outflow of people from CEE countries significantly deepened. In 2004 the lowest net migration in percentage terms, amounting to -1.03%, was recorded in Romania. In 2019, however, Romania recorded a negative net migration of over 15%. In Lithuania, the net migration was -13%, in Bulgaria -9.5%, and in Poland nearly -9%. Countries where the net migration in the EU was negative in 2019 were marked in black, whereas those showing positive net migration that year were marked in dark grey. The average decrease in the negative migration balance in CEE countries over the last 15 years was almost 7 percentage points. Looking at differences between countries in terms of the gender of emigrants, we find that in all cases, women constituted a greater proportion (up to 6% difference in 2019). This number did not increase significantly over the analysed period (see Table 7).

Table 7. Women as a percentage of total migrants in 2004 and 2019.

| Year | Country ISO code |    |    |    |    |    |    |    |    |    |    |    |
|------|------------------|----|----|----|----|----|----|----|----|----|----|----|
|      | BG               | CZ | EE | HR | HU | LT | LV | MD | PL | RO | SK | SL |
| 2004 |                  |    |    |    |    |    |    |    |    |    |    |    |
| 2019 |                  |    |    |    |    |    |    |    |    |    |    |    |

|      |       |       |       |       |       |       |       |       |       |       |       |       |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2004 | 53.00 | 55.52 | 54.81 | 52.41 | 50.98 | 56.41 | 55.03 | 52.16 | 54.64 | 53.12 | 52.72 | 55.76 |
| 2019 | 56.77 | 55.40 | 54.96 | 51.67 | 50.04 | 55.14 | 55.16 | 53.24 | 51.52 | 53.14 | 53.55 | 53.89 |

Source: Authors' study based on data taken from the United Nations Population Division.

Interestingly, in Italy, it turns out that 67% of migrants from Moldova are women. As for the migration behaviour of the outer periphery, i.e. the CEE countries which have not joined the European Union, we now move to investigate changes in Belarus, Moldova, and Ukraine.

Table 8. The percentage of BY, UA and MD population living abroad in 2005.

| Destination <sup>4</sup> | Country of origin (2005) |      |      | Country of origin (2019) |      |      |
|--------------------------|--------------------------|------|------|--------------------------|------|------|
|                          | BY                       | MD   | UA   | BY                       | MD   | UA   |
| CA                       | ---                      | 0.20 | 0.12 | ---                      | 0.53 | 0.14 |
| CZ                       | ---                      | 0.15 | 0.16 | ---                      | 0.23 | 0.18 |
| DE                       | 0.21                     | 0.49 | 0.40 | 0.21                     | 0.60 | 0.44 |
| EE                       | 0.14                     | ---  | ---  | 0.15                     | ---  | ---  |
| ES                       | ---                      | 0.24 | 0.13 | ---                      | 0.54 | 0.15 |
| FR                       | ---                      | 0.11 | ---  | ---                      | 0.2  | ---  |
| GR                       | ---                      | 0.23 | ---  | ---                      | 0.28 | ---  |
| IE                       | ---                      | ---  | ---  | ---                      | 0.12 | ---  |
| IL                       | 0.27                     | 0.47 | 0.31 | 0.28                     | 0.3  | 0.35 |
| IT                       | 0.17                     | 2.41 | 0.25 | 0.18                     | 5.32 | 0.28 |
| KG                       | 0.15                     | 0.11 | ---  | 0.16                     | ---  | 0.1  |
| KZ                       | 0.59                     | 0.28 | 0.60 | 0.61                     | 0.35 | 0.67 |
| LT                       | 0.53                     | ---  | ---  | 0.55                     | ---  | ---  |
| LV                       | 0.68                     | ---  | 0.10 | 0.71                     | ---  | 0.11 |
| PL                       | 0.94                     | ---  | 0.56 | 0.97                     | ---  | 0.63 |
| PT                       | ---                      | 0.31 | ---  | ---                      | 0.57 | ---  |
| RO                       | ---                      | 1.13 | ---  | ---                      | 5.00 | ---  |
| RU                       | 8.67                     | 7.93 | 6.99 | 8.96                     | 8.29 | 7.85 |
| US                       | 0.48                     | 0.71 | 0.63 | 0.50                     | 1.34 | 0.71 |
| UZ                       | 0.29                     | ---  | 0.28 | 0.30                     | ---  | 0.32 |

\*only values higher than 0.1% are displayed.

Source: Authors' study based on data taken from the United Nations Population Division.

Table 8 shows differences in the distribution of Belarusian, Ukrainian and Moldovan migrants in mid-2005 and mid-2019. A comparison of those data indicates that migration patterns in 2005 and 2019 were very similar. A clear difference can be seen in the increased popularity of Romania among Moldovan emigrants (an increase from 1.13% to 5%). In other cases, the difference was not greater than 0.5 percentage point. It can be seen that for all investigated countries, the leading target is Russia, in which around 7.5% of the citizens of each country are living. The pattern in the level and distribution of emigrants is constant over time. In fact, apart from the increase in the number of Moldovan immigrants in Romania, no significant changes have been seen for almost a decade and a half. In the case of Belarus, the

<sup>4</sup> CA – Canada, US – the United States of America.

number of emigrants increased by 0.1 percentage points, whereas in Moldova it increased by less than 1 percentage point. In Ukraine, the number of emigrants increased by 0.2 percentage points in relation to the population size. In other words, the outflow of CEE countries to old EU countries has not been compensated for by a similar inflow from the CEE periphery.

## Discussion and Conclusions

According to an article in *Foreign Policy* (Hirsh, 2020) economists are now “on the run” after their analysis seriously misfired, with Paul Krugman reciting the most explicit *mea culpa* after realising the damage done to US wages by competition with China. At this moment, when US economists are grasping that their prevailing economic model has privileged Americans as consumers (of cheap imports) against Americans as producers (experiencing falling standards of living), what lesson can be drawn for Europe? Unlike the US, part of Europe – the old one – still managed to extract profit from the asymmetric trade balance at the expense of the new one, mostly used as a source of cheap labour. This process has been defined by one of the authors (ER) as an ‘assumption-based rent’, where the assumptions of Ricardian economics have allowed the extraction of rent from Europe’s periphery, not unlike the rent extracted by the imperial UK from its colonies in the 19th and beginning of the 20th centuries.

While the flow of refugee and economic migrants from Africa and the near East captures the headlines and provide ammunition for EU populists, less attention is devoted to the relevant displacement of people within the EU. But clearly, the import of cheap labour has hurt wages in the wealthier Western European countries. Wage levels in the UK construction work-have been considerably reduced and, in Norway, the lower wages have led to ‘technological retrogression’. On Oslo building sites lower than six floors, lifts are no longer installed. It is less expensive to have imported cheap labour carry sacks of cement on their shoulders up old-fashioned ladders. There also appear to be *migration hierarchies*, or ‘trickle-down’ effects, which are not all positive. Ironically, in Western Ukraine, the good news is that construction workers migrate to Poland to replace workers who have migrated, while when asking about the situation in Moldova one is told that the good news is that there are so many construction jobs to be found in Ukraine. The official EU narrative of the enlargement as a path to prosperity for all clearly produced many losers.

One of the problematic aspects of migration that are not specifically treated in the present work is the resulting loss of important professions and skills. For example, the loss of physicians and nurses may render the source country more vulnerable, as we are witnessing



today in the case of CEE countries against COVID-19 (Szpakowski et al., 2019; Żuk et al., 2019). Furthermore, deindustrialisation always leads to increased migration, sometimes as an unstoppable sequence of de-industrialisation, de-agriculturalisation, and de-population (Reinert, 2017b, 2013). An extreme case is Chiapas, in Mexico; another case in Europe is Moldova, where children tend to grow up with their grandparents because both father and mother are working abroad. So, it may be argued that these lower wages produce winners and losers also in old Europe, just as they did in the US, and that some of the displaced CEE citizens would like to remain in their countries of origin, if these were not so devoid of opportunities in the existing quasi-colonial arrangement.

While we do not dispose of a valid counter-factual, the comparison of Figures 6 and 7 suggests that it is licit to wonder if the CEE countries would have fared better, economically, by not joining the EU. The introduction of the Euro has clearly made things worse for the periphery, where the inertia of inflation continued in countries like Italy and Greece, but stopped immediately in Germany. Whereas such imbalances within the European Union were previously solved by devaluations of the local currencies (be they liras, drachmas or escudos), the only adjustment mechanism now left is moving people, often against the will both of the country exporting and the country importing migrants. The Euro has worsened the migration problem, and one can assume that the relative success of a country like Poland has been to avoid pressures to drop the zloty in favour of the Euro.

It should be noted that, at the time, experienced economists argued vehemently against the ‘shock therapy’ that was generally unanimously recommended by Western economists. Kregel, Matzner, and Grabher (Kregel et al., 1992) advocated a gradual approach, avoiding the shock therapy that in effect happened in 2004. Opening up for free trade inside the old COMECON countries at the time of the 1989 collapse would have eased the transition considerably by letting countries at similar levels of technological level ‘learn’ to compete inside a market economy. Seemingly, however, regrets are few. Will Europe’s CEE – and particularly their ideological masters in Brussels – eventually emerge from the stupors of the ‘Samuelsonian/Ricardian Dream’ (Reinert, 2020; Reinert et al., 2021) of factor-price equalisation?

## Compliance with ethical standards

**Author Contributions:** Conceptualisation: All authors; Formal analysis Marta Kuc-Czarnecka and Magdalena Olczyk; Methodology All authors; Supervision Erik Reinert; Visualisation Marta Kuc-Czarnecka; Writing – original draft: All authors; Editing Marta Kuc

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