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CEFTA: Trade and Growth Patterns Fifteen Years since Establishment

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Abstract

This research report investigates the trade and growth benefits of the CEFTA agreement for its members. Although the countries have not reached their end goal of membership of the European Union, the report shows that CEFTA has supported their economic growth. However, there is trade heterogeneity in terms of the extent to which individual countries use CEFTA value added in their manufacturing exports. Less-developed economies seem to rely more on regional (CEFTA) supply chains, while manufacturing-based economies are increasingly coming to rely on EU supply chains. The countries have not built a strong export advantage abroad, as very little of their value added is used in EU exports.

Keywords: CEFTA, trade, supply chains, growth

JEL classification: B17, F14, F43, F63

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Introduction

The Central European Free Trade Agreement (CEFTA) was signed to ease trade and facilitate investment, while also helping with the process of European integration for its signatory parties. The original agreement dates back to 1992 Kraków, though the new multilateral agreement was signed in Bucharest in 2006 (CEFTA, 2006).[1]

CEFTA has led to significantly lower trade costs through a reduction in tariffs and non-tariff barriers, thereby facilitating the creation of value chains. Moreover, the trade agreement replaced 32 bilateral trade agreements that existed between the various parties at the time it was signed. Over time, the agreement has been enriched with new protocols, as cooperation has grown among the parties. Fairly recently, an important article on trade in services was expanded to take account of digital trade, and this will further cut trade costs via the elimination of non-trade barriers.

The purpose of this report is to show the economic effects of the new CEFTA over the 15 years since it came into force. Even though its implementation was followed by the global financial crisis of 2007-2008, CEFTA prompted a further expansion of trade and supported growth. Both the composition of trade and industry export competitiveness within CEFTA have changed over the course of these 15 years. Over the years, some parties have relied more on foreign value added from the EU than foreign value added from the CEFTA trading bloc. The most important new challenges are coupled with the COVID-19 pandemic, which has led to a significant decline in trade in CEFTA. Here, trade in services has suffered more than trade in goods. The COVID-19 crisis has also brought about further digitalisation, which will change the nature of trade in the future, especially in services.

The report is divided into six sections. Section one provides a short literature review. Section two presents the ways in which trade has evolved in CEFTA, using various trade indicators. Section three explains intra-CEFTA trade in intermediate goods, and reveals the extent to which the parties rely on intermediate goods from the EU and CEFTA. Likewise, this section looks at how much individual economies contribute to EU and CEFTA exports through their intermediate goods (value added). Section four focuses on trade in services. Section five shows the effects of CEFTA on growth, using an econometric assessment. And section six presents the effects of COVID-19 on trade. Finally some conclusions are offered.

[1] For more information see www.cefta.int

1. Literature review

There is a rich empirical literature exploring the effects of the agreement on trade. The literature suggests that the bilateral agreements that existed prior to CEFTA did not contribute much to trade, because they were enforced relatively weakly (Kaloyanchev et al., 2018) at a time when recovery from the political tensions in ex-Yugoslavia was fairly tentative (Begović, 2011). By contrast, CEFTA has boosted trade among its parties: Petreski (2018) showed that, under CEFTA, the parties had increased their trade by at least 74% – not least thanks to the better cooperation fostered by the agreement. In an earlier study (Petreski, 2013), the author found that the agreement had increased trade by a factor of seven or eight, in comparison to the 1990s. The effect of CEFTA on trade has been found to be larger than that of other agreements, including those with the EU. Dragutinović-Mitrović and Bjelić (2015) found that CEFTA had increased exports among its parties by 44%, a rise that they explain by cultural and language similarities. Klimczak and Trivić (2018) also confirmed that CEFTA had enhanced trade among its parties, but concluded that the real effects of the agreement in future would come from easing non-tariff barriers. Positive trade effects have also been found in individual studies, such as in Choi and Minondo (2019) on Albania.

Grieveson et al. (2021) found a smaller, yet still sizable, effect of CEFTA on exports. They showed that exports overall had increased by 37.7%; and this effect jumped to 70% if Serbia, CEFTA's biggest trade economy, was excluded from the sample. The different export growth effects suggest that CEFTA parties are differently positioned in CEFTA and in global value chains (GVC). Over these 15 years, Serbian exports have been diverted away from CEFTA toward the EU: in 2006, Serbia exported 25.6% of its goods to CEFTA, but by 2020 the figure was only 14.1%. Meanwhile, the corresponding figures for Serbian exports to the EU were 62% and 68%, respectively. This indicates the greater integration of Serbia into GVCs. Reiter and Stehrer (2021) also find that CEFTA has increased exports of final goods, but less so of intermediate goods.

Besides trade, CEFTA might also affect foreign direct investment (FDI), both from within CEFTA and from outside the trading bloc. Theoretically, the effect of the agreement on intra-CEFTA FDI is ambiguous. If exports and FDI are two alternative strategies (horizontal FDI) for entering a foreign market, then CEFTA parties may move away from FDI to exports, because of the reduction in trading costs (Reed et al., 2016). However, if multinational enterprises are seeking to enter a new market in order to source cheaper inputs, and thus split their production across the trading bloc (vertical FDI), then this multilateral FTA could prompt further intra-CEFTA FDI. Data on FDI inflows reveal that FDI from CEFTA economies is rather modest within the trading bloc: the share of FDI coming from CEFTA ranges from 2% to 9% (Table 1). In Kosovo* the share is particularly high, due to FDI from Albania (7% of total FDI). The same holds true for Bosnia and Herzegovina, where a large proportion of FDI comes from Serbia (7%), its close trading and historical partner. This raises a question over the extent to which FDI in CEFTA has been induced through the trade agreement.

* This designation is without prejudice to positions on status and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence.

Table 1 / Share of FDI from CEFTA, 2019

	Albania	Bosnia and Herzegovina	North Macedonia	Montenegro	Serbia	Kosovo*
FDI from CEFTA, %	2%	8%	4%	9%	2%	8%

Note: since 2020 was a year of crisis, 2019 is taken as a more representative year.
Source: wiiw Annual Database.

Grieveson et al. (2021) study this issue empirically. They find no significant effect of CEFTA on FDI among its parties. It could be argued either that the positive and negative effects of FDI cancel one another out, so that the overall effect is not significant, or else that vertical FDI is simply not a big thing in CEFTA, given that production costs are relatively similar in its economies.

CEFTA could also result in a further inflow of FDI from outside the trading bloc. Furthermore, multinational enterprises may allocate their businesses to this trading bloc, so that they can export across the CEFTA countries (export-platform FDI), and also benefit from CEFTA supply chains. In general, trade openness sends out a positive message to multinational investors about the treatment of foreign capital destined for the CEFTA market. Studies to date have not investigated these issues; and although many parties have experienced big booms in FDI (e.g. Montenegro, or in the recent past Serbia), we do not know what role CEFTA played in attracting those investors and what roles could be assigned to various specific industrial policies (Krasniqi et al., 2019).

2. Trade developments

It is difficult to gauge how the structure of trade and trade itself were initially affected by CEFTA, since the introduction of this multilateral trade agreement was followed shortly after by the global financial crisis. Furthermore, each party underwent reforms and implemented many industry-specific policies that encouraged the export competitiveness of certain industries. It is hard to disentangle all the effects.

One can gain an overall picture from the simplest measure of trade openness, which reflects a country's integration into global trade as the share of party *i*'s exports and imports of goods and services in its gross domestic product (GDP):

$$Trade\ openness_{it} = \frac{export_{it}+import_{it}}{GDPit} \quad (1)$$

where *i* denotes party and *t* denotes year.

This indicator shows that each economy experienced a sharp decline in trade openness in the year of the pandemic and especially in the year of the global financial crisis, which struck just two years after CEFTA came into force.

The figures indicate that trade has also developed quite differently across the CEFTA trading bloc. North Macedonia, Serbia and Kosovo have integrated globally: their trade as a share of GDP has risen by 46 percentage points (pp), 34pp and 19pp, respectively, in the 15 years since the introduction of CEFTA. For North Macedonia and Serbia, this period has coincided with various active policies designed to attract FDI – policies that have brought in many multinational companies, especially in the automotive industry, boosting both exports and imports.

The integration of Montenegro and Albania into other international markets has stagnated, however. Furthermore, the figures clearly show that the trade openness of Moldova was increasing until the global financial crisis, but has since decreased.

However, use of the trade-over-GDP measure is limited in cross-economy comparison, due to its high correlation with an economy's income, location and size (Bacchetta et al., 2012). Instead, other trade indicators need to be applied, such as revealed comparative advantage.

Revealed comparative advantage (RCA) is calculated to identify a commodity's (or an industry's) competitiveness (Balassa, 1965) in each economy. RCA is measured as the ratio of product *p*'s share in an economy's exports to its share in world trade:

$$RCA_p^i = \frac{x_p^i/x^i}{x_p/x} \quad (2)$$

where X_p^i is economy's *i*'s exports of product *p*, X^i is the economy's total exports, X_p is the global export of product *p* and *X* denotes total global exports.[2] Indicators that take a value of over 1 suggest that an economy has comparative advantage in the respective product or sector. In this study, these indicators are calculated for one-digit NACE sectors, for the year prior to the formation of CEFTA and for the most recent available year (Table 2). Comparison of these figures – for 2006 and (2019) 2020[3] – offers an overall picture of how export competitiveness evolved after the formation of the trading bloc.

The results (Table 2) indicate that prior to CEFTA, the economies mainly had comparative advantage in primary sectors. This is also in line with the fact that primary sectors such as agriculture, fishery and forestry, as well as mining and quarrying, take up a large share of the economies' GDP. In the 15 years since CEFTA was established, these sectors have amounted to about 10% of gross value added in all the economies – apart for in Albania, where the figure is particularly high (about 22%). The primary sectors in which these economies hold comparative advantages are not prone to technological change, according to the literature (McMillan and Rodrik, 2011).

The figures on RCAs reveal a slightly different pattern evolving since the establishment of CEFTA: we witness some economies losing export comparative advantage in primary sectors, while gaining slowly in knowledge-intensive services. Back in 2006, Albania, Moldova and North Macedonia had comparative advantage in agriculture, fishery and forestry, but only Moldova maintained it until 2020. Also, for Serbia an RCA of over 1 is reported for 2020, mainly due to the continuous expansion of exports in agricultural products. Likewise, Albania, Bosnia and Herzegovina and Kosovo held a comparative advantage in mining and quarrying, but Bosnia and Herzegovina lost it over the period in question. The advantage is high in Albania – no surprise, considering that the country is rich in natural resources, and especially the mining sector has been important for economic growth. RCA also reveals that this sector gained in importance in Montenegro: this was a developed sector even in the days of Yugoslavia; its revival in Montenegro is due to better extraction of bauxite and increased coal exploitation.

Bosnia and Herzegovina and Kosovo had relative comparative advantages in electricity, gas, steam and air-conditioning supply prior to the formation of CEFTA, but by 2020 Kosovo had lost it, due to the closure of coal-fired power plants during this period. Montenegro has witnessed a massive gain in relative comparative advantage, thanks to its abundant use of hydroelectric (mini hydroelectric power plants), its wind energy potential (wind farms) and the submarine cable that has connected Montenegro with Italy since 2019, allowing the outsourcing of energy. These transformations have turned this part of the economy into one of the most important growth- contributing sectors, and Montenegro into an important electricity hub in the Balkans.

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2 For further demonstration of export competitiveness, we also provide the share of industry exports within total exports (see Table A.1 in the Appendix).

3 Some caution should be exercised when interpreting figures for 2020, since this is the year when trade was massively hit by the COVID-19 crisis. All sectors suffered – but not all evenly: industries that require a high level of technology suffered less.

Table 2 / RCA indicators for selected sectors of economic activity, 2006 and 2019/2020

Economy	Sector	Sector (product and service) description	RCA 2006	RCA 2019	RCA 2020
Albania	A	Agriculture, fishery and forestry	2.4	0.9	1.0
Bosnia and Herzegovina	A	Agriculture, fishery and forestry	0.3	0.3	0.3
Moldova	A	Agriculture, fishery and forestry	2.3	3.3	2.8
North Macedonia	A	Agriculture, fishery and forestry	1.4	0.7	0.6
Montenegro	A	Agriculture, fishery and forestry	0.3	0.1	0.2
Serbia	A	Agriculture, fishery and forestry	0.9	1.0	1.1
Kosovo	A	Agriculture, fishery and forestry	1.1	0.6	0.6
Albania	B	Mining and quarrying	10.8	5.8	4.4
Bosnia and Herzegovina	B	Mining and quarrying	1.9	0.4	0.5
Moldova	B	Mining and quarrying	0.2	0.1	0.1
North Macedonia	B	Mining and quarrying	1.0	1.8	1.6
Montenegro	B	Mining and quarrying	1.0	5.0	5.6
Serbia	B	Mining and quarrying	0.2	0.2	0.5
Kosovo	B	Mining and quarrying	5.6	3.1	2.1
Albania	C	Manufacturing	0.5	0.9	0.9
Bosnia and Herzegovina	C	Manufacturing	1.0	1.0	1.0
Moldova	C	Manufacturing	1.0	0.9	0.9
North Macedonia	C	Manufacturing	1.0	1.0	1.0
Montenegro	C	Manufacturing	1.1	0.8	0.8
Serbia	C	Manufacturing	1.0	1.0	1.0
Kosovo	C	Manufacturing	0.5	0.9	1.0
Albania	D	Electricity, gas, steam and air-conditioning supply	0.0	0.7	0.9
Bosnia and Herzegovina	D	Electricity, gas, steam and air-conditioning supply	2.7	3.6	3.3
Moldova	D	Electricity, gas steam and air-conditioning supply	0.0	0.0	0.0
North Macedonia	D	Electricity, gas, steam and air-conditioning supply	0.3	0.4	0.5
Montenegro	D	Electricity, gas, steam and air-conditioning supply	0.0	10.0	9.4
Serbia	D	Electricity, gas, steam and air-conditioning supply	0.6	0.3	0.4
Kosovo	D	Electricity, gas, steam and air-conditioning supply	5.7	2.6	0.6
Albania	E	Water supply, sewerage, waste management and remediation	9.7	1.0	1.0
Bosnia and Herzegovina	E	Water supply, sewerage, waste management and remediation	1.2	1.6	1.8
Moldova	E	Water supply, sewerage, waste management and remediation	0.4	0.5	0.8
North Macedonia	E	Water supply, sewerage, waste management and remediation	0.8	1.0	0.9
Montenegro	E	Water supply, sewerage, waste management and remediation	0.9	5.1	4.4
Serbia	E	Water supply, sewerage, waste management and remediation	0.6	0.6	0.6
Kosovo	E	Water supply, sewerage, waste management and remediation	11.6	7.4	4.8
Albania	J	Information and communication	1.0	0.4	0.3
Bosnia and Herzegovina	J	Information and communication	0.5	1.6	1.8
Moldova	J	Information and communication	0.6	0.1	0.2
North Macedonia	J	Information and communication	0.2	0.3	0.2
Montenegro	J	Information and communication	1.0	1.4	1.8
Serbia	J	Information and communication	1.7	1.3	1.3
Kosovo	J	Information and communication	0.8	0.4	0.2
Albania	M	Professional, scientific and technical activities	0.0	0.0	0.0
Bosnia and Herzegovina	M	Professional, scientific and technical activities	0.1	0.6	0.9
Moldova	M	Professional, scientific and technical activities	0.0	0.1	0.0
North Macedonia	M	Professional, scientific and technical activities	0.0	0.0	0.0
Montenegro	M	Professional, scientific and technical activities	0.0	0.0	0.0
Serbia	M	Professional, scientific and technical activities	2.2	1.9	1.7
Kosovo	M	Professional, scientific and technical activities	0.0	0.0	0.0

Note: due to missing data on sectoral export decomposition, RCAs are missing for other sectors of the economy.
Source: wiiw calculations based on internal data sources.

The CEFTA economies have performed less well in the manufacturing sector: no economy shows a comparative advantage either before or after the establishment of CEFTA (although most of the parties are on the edge of an RCA, at around 1). This is largely due to outdated capital stocks, lower technological advancement and a lower level of innovative activities, compared to economies on the technological cutting edge. The share of manufacturing's value added within gross value added has been rather low for some economies since the formation of CEFTA: for example, in the service-based economies of Montenegro and Albania, it stands at only 5% of gross value added. Although for other economies the share is above 10%, this has not changed significantly in the past ten years in Kosovo and Moldova, and it has even fallen in Serbia. The exceptions are Bosnia and Herzegovina (mainly due to large FDI in the automotive industry) and North Macedonia, which has experienced increasing shares of value added from the manufacturing sector. In addition, high-tech products are not exported: most inta-bloc manufacturing products exported (about 55%) are low- and medium-low-tech products,[4] indicating a lower level of technological sophistication.

A big move to technological change would require greater innovations, supported by better sources of finance – something these economies lack. Instead, innovative activities are based on investment in machinery and equipment, rather than research and development (R&D): that positions those economies as knowledge users, rather than knowledge creators (Cirera and Maloney, 2017). External sources of finance (banks) are expensive. Over 2015-2021 period, the average interest rate for a short-term (up to one year) corporate loan has been about 2% in the euro area; however, that rate is more than double in Albania (6.5%),[5] Moldova (5.2%) and Montenegro (5.4%). This explains in part the lack of technological progress in manufacturing in CEFTA and the fact that there has been no proper rise in export competitiveness. It should, however, be noted that the parties have not slipped any further behind in terms of export competitiveness – mainly due to FDI inflows into the manufacturing industries of some parties (e.g. North Macedonia and Serbia).

RCAs are relatively low for sectors that require a higher level of technological advancement and human capital – knowledge-intensive activities.[6] In information and communication and professional, scientific and technical activities, only Serbia has had a comparative advantage both before and after the formation of CEFTA. Serbian IT has been the fastest-growing sector of the economy, as the government has recently invested heavily in the digital transformation. Montenegro has gained comparative advantage in the information and communication sector over time. Much effort has been expended primarily in drafting legislation in the field of innovation and technological developments, including tax benefits for IT start-ups and a reduction in contributions to encourage the employment of workers involved in innovation. Both Montenegro and Serbia will also create technological parks in the near future, signalling a further potential for growth in this sector.

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4 Eurostat High-tech classification: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:High-tech_classification_of_manufacturing_industries

5 Source: central banks of corresponding economies.

6 According to Eurostat, the knowledge-intensive two-digit services are (based on the NACE Rev. 2 classification system): water transport (50), publishing activities (58), motor picture, video and television programme production, sound recording and music publishing activities (59), programming and broadcasting activities (60), telecommunications (61), computer programming, consultancy and related activities (62), information service activities (63), financial service activities, except insurance and pension funding (64), activities auxiliary to financial service and insurance activities (66), legal and accounting activities (69), activities of head offices; management consultancy activities (70), scientific research and development (72) and advertising and market research (73)

Overall, the indications are that trade openness has been increasing in all CEFTA countries, except for Moldova. Export competitiveness is most dominant in the primary sector, although it was lower in 2020 than prior to CEFTA. The manufacturing sector has not gained in competitiveness over the period in question, though there are signs of a revival in export competitiveness in IT. It is, however, difficult to disentangle the threads and decide how far CEFTA has contributed to the change in trade openness and export competitiveness, and how far domestic policies and reforms have brought about the changes. It is also evident that the global financial crisis and COVID-19 have changed (and will continue to change) the nature of trade, further impacting the sectoral export structures.[7]

[7] Comparing the RCA indicators for 2019 and 2020, we can see that some industries lost their competitiveness in 2020, such as electricity, gas, steam and air-conditioning supply in Kosovo. A decline in export competitiveness is also noticed in agriculture, fishery and forestry in Moldova, in mining and quarrying in Albania and Kosovo, etc.

3. Trade in intermediate goods: integration within CEFTA and European value chains

In this section, we try to quantify the degree of the CEFTA parties' embeddedness in CEFTA value chains (CEFTA trading bloc) and in European value chains (EU), relying on Reiter and Stehrer (2021) for the methodology and data used. The data are derived from the multi-economy Input-Output Database compiled by the Vienna Institute for International Economic Studies (wiiw MC IOD), which comprises the international trade flows of 50 economies and 38 industries over the period 2005-2018.

Integration into CEFTA and EU value chains is captured via the calculation of backward and forward linkages: forward linkages account for the total domestic value added that is contained in a country's exports to another (importing) economy; backward linkages account for the total foreign value added that forms part of that country's exports. The more integrated an economy is in the value chains (either CEFTA or EU), the greater are the forward linkages. Backward linkages are bigger if an economy uses more foreign value added in its production of goods.[8]

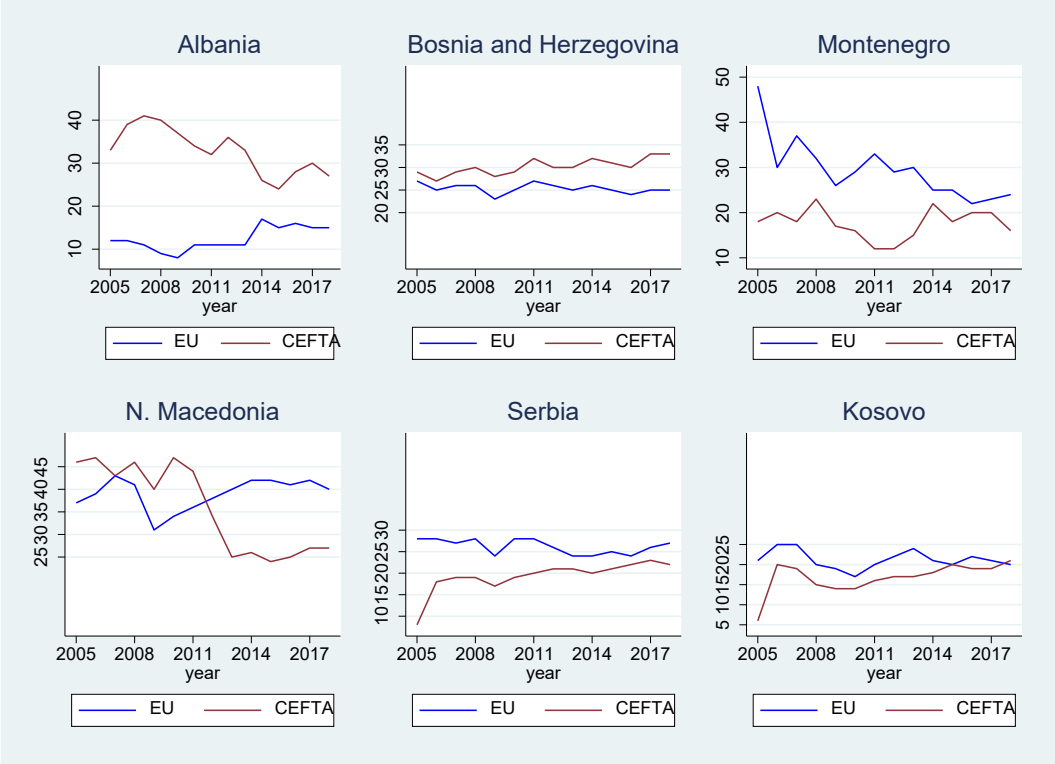
Data on Moldova are lacking, but this section calculates backward and forward linkages for the remaining economies. These linkages are calculated for the manufacturing sector, disaggregated at the NACE Rev. 2 two-digit industry level. Since there are 13 manufacturing industries[9] and 50 economies, the dataset contains 650 linkages in total.

Linkages are aggregated to the manufacturing sector in two steps. First, they are summed across the 50 economies and then across the 13 manufacturing industries. This is done separately for linkages between CEFTA and the EU economies (European value chain) and for linkages within CEFTA (CEFTA value chain). The results, showing backward and forward linkages for individual economies over the period 2005-2018, are presented in Figure 1 and Figure 2, respectively. For each individual economy, imports of value added (backward linkages) and exports of value added (forward linkages) are shown, with a blue line representing the EU and a red line CEFTA.

[8] For more details on the methodology, see Koopman et al. (2014) and Wang et al. (2013).

[9] These industries are manufacturing of food products, beverages and tobacco products; manufacturing of textiles, apparel, leather and related products; manufacturing of wood and paper products, and printing; manufacturing of coke and refined petroleum products; manufacturing of chemicals and chemical products; manufacturing of basic pharmaceutical products and pharmaceutical preparations; manufacturing of rubber and plastic products, and other non-metallic mineral products; manufacturing of basic metals; manufacturing of computer, electronic and optical products; manufacturing of electrical equipment; manufacturing of machinery and equipment not elsewhere classified; manufacturing of motor vehicles, trailers and semi-trailers; manufacturing of furniture; repair and installation of machinery and equipment.

Figure 1 / Backward linkages in CEFTA, 2005-2018



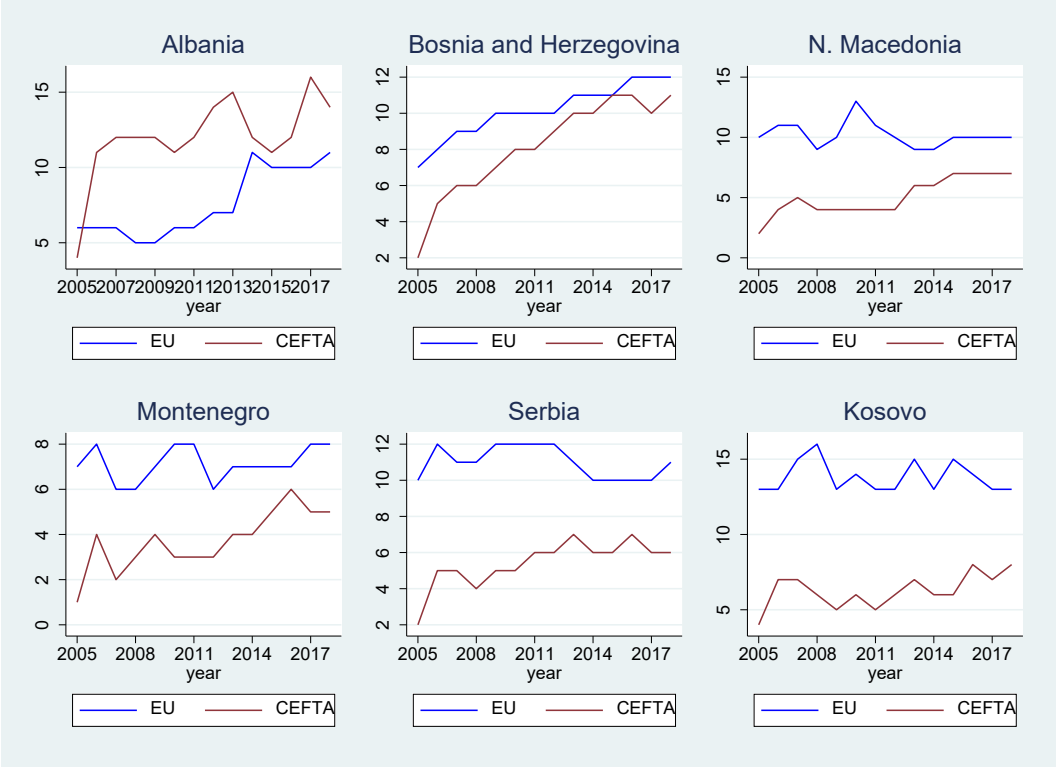
Source: WIOD (World Input Output Database), wiiw calculation

The results reveal heterogeneity with respect to foreign value added (intermediate inputs) used in the manufacture of exports of the individual economies. Only Albania and Bosnia and Herzegovina rely more on value added from CEFTA than value added from the EU when exporting manufactured goods. The opposite holds true for the rest of CEFTA, and especially for Serbia: they rely primarily on European value added in their manufacturing exports. On average over the period in question, the economies used between 13% (Albania) and 40% (North Macedonia) of EU value added in their manufacturing exports, and between 17% (Montenegro) and 33% (Albania) of CEFTA value added. These values are particularly high for North Macedonia, which uses about 40% and 35% of value added from the EU and CEFTA, respectively.

Judging by the trends, since CEFTA began to be implemented in 2007, economies such as Bosnia and Herzegovina, Serbia and Kosovo have been making greater use of intermediate inputs (value added) sourced from CEFTA. However, this trend has been declining in Albania since the start of the financial crisis, as well as in North Macedonia: meaning, they have been increasing European value added as intermediate goods in their exports. Montenegro, on the other hand, has had a relatively stable share of value added from CEFTA used in its exports.

The extent to which these economies contribute to the manufacturing exports of CEFTA and the EU (forward linkages) is presented in Figure 2.

Figure 2 / Forward linkages in CEFTA, 2005-2018



Source: WIOD (World Input Output Database), wiiw calculation

The calculation of forward linkages reveals that very little of domestic value added from individual economies is contained in EU manufacturing exports or in CEFTA manufacturing exports. Domestic value added contained in EU exports ranges from on average 7% in Albania and Montenegro to about 14% in Kosovo. The figures are even lower for the domestic value added from individual economies that is contained in CEFTA's manufacturing exports: it ranges from on average 4% (Montenegro) to 12% (Albania). This reveals that intra-CEFTA exports of intermediate goods is rather modest. However, the graph shows that in the year of CEFTA implementation (2007), there was a significant rise in value added from each individual economy used in CEFTA exporting.

The outlook is slightly more positive for value added from Albania and Bosnia and Herzegovina, which show an upward trend in the EU and CEFTA manufacturing exports over the period analysed. It is safe to conclude that the economies have not embedded much within the EU value chains over the time period, but they increasingly use intermediate goods from CEFTA in their manufacturing exports.

4. Trade in services

Services are important sources of growth for the CEFTA economies, accounting for a significant share of their GDP: from about 46% in Kosovo to about 59% in Montenegro (wiiw Annual Database). However, it seems that those services that require a high level of knowledge and skills (knowledge-intensive services) account for a far smaller share – from 7% of GDP in Kosovo to 13% in Serbia (see Table 3). This is because the most important service industries in these economies are wholesale, retail trade, repair of motor vehicles, etc., as well as real estate activities and public administration and defence – none of which require the labour force to have a higher level of qualifications.

Table 3 / Share of knowledge-intensive services and other services in 2019, % of GDP

	Albania	Bosnia and Herzegovina	North Macedonia	Moldova	Montenegro	Serbia	Kosovo
Knowledge-intensive services	9.4%	12.1%	10.5%	10.5%	12.5%	12.9%	7.3%
Other services	38.4%	42.8%	43.8%	42.9%	46.7%	38.0%	38.9%

Source: wiiw Annual Database.

Service sectors are also among the most interesting for FDI, taking up to 50% of global FDI (UNCTAD, 2021a).[10] The share is also quite significant for the CEFTA economies, ranging from 30% in North Macedonia to 79% in Kosovo (see Table 4). This is important, since multinational companies – either through trade or directly (via FDI) – can transmit knowledge and new technologies to their host economies. This means that the service sector takes a large share of the output of these economies, but it also has great potential for growth through technology diffusion.

Table 4 / Share of inward FDI in services as a percentage of total FDI, 2019[11]

	Albania	Bosnia and Herzegovina	North Macedonia	Moldova	Serbia	Kosovo
FDI in services, %	46%	64%	30%	55%	40.6%	79%

Source: wiiw Annual Database.

In the wake of digitalisation, services have become increasingly important industries (Wang et al., 2016) – a process that has been accelerated by the COVID-19 crisis. Knowledge-intensive services (such as telecommunications, scientific research and development, information and communication) gained momentum as potential drivers of future growth. This will affect the nature of trade, too. WTO (2021) notes that the increased supply of services through the digital network will have an impact on the future of trade. Digitalisation enables the remote provision of services across the globe (Freund and Weinhold, 2002), eliminating the need for direct contact between consumers and producers. Thus, it is

[10] These figures refer to greenfield FDI and mergers and acquisitions (M&A), which take up the largest shares of total FDI.

[11] The data represent the share of inward FDI stock in services, as a percentage of total FDI for Albania, Bosnia and Herzegovina, North Macedonia, Moldova and Kosovo. FDI shares in services for Serbia are approximated based on FDI inflows, while data for Montenegro are missing.

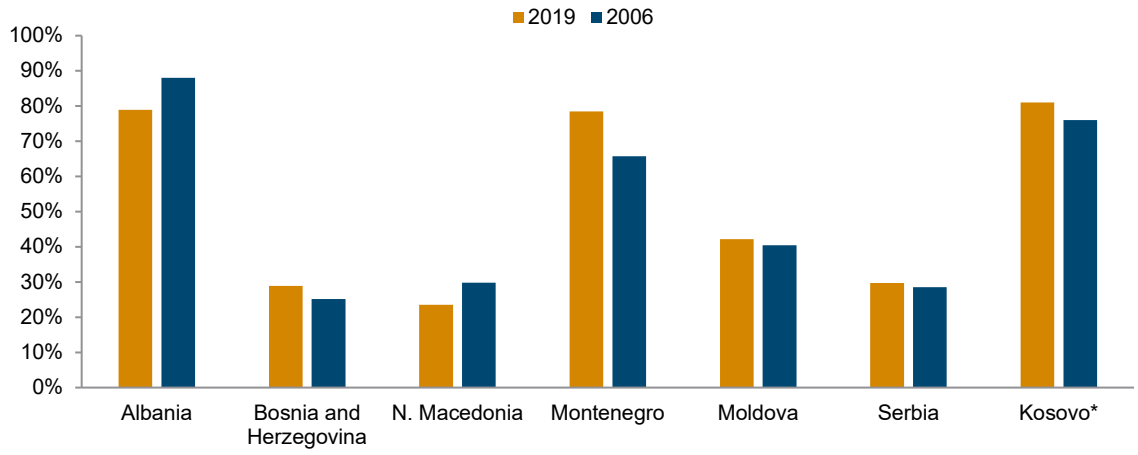
technological (rather than physical) distance that may drive the trade in services. The internet of things may be particularly beneficial to trade in business services (Prica and Bartlett, 2019).

In that context, CEFTA is an important milestone for trade in services, as article 27 of the 2006 agreement obliges the parties to cooperate further, so as to expand and broaden trade in services, while article 28 promotes trade in e-commerce between the parties. Negotiations were furthered in 2010, when mobility of the (qualified) workforce was identified as the main barrier to such trade. Additional Protocol 6 on Trade in Services was adopted in 2019, giving further importance to trade in services in a mutually beneficial manner. The parties are expected to liberalise their service markets in line with the World Trade Organization's General Agreement on Trade in Services (GATS).

Trade in services was quite large both before and after the implementation of CEFTA. In the period following the global financial crisis, trade in services more than doubled in Kosovo (323%), Serbia (140%) and Albania (121%), and rose by about 60% in Montenegro and North Macedonia. Despite the increase in levels, the share of service exports in the CEFTA economies' total exports remained quite steady between 2006 (prior to the agreement) and 2019 (the year prior to the pandemic) (Figure 3).[12]

This is particularly true of Albania, Montenegro and Kosovo: services accounted for 79%, 78% and 81%, respectively, of their total exports in 2019 (mostly through tourism), revealing a high potential for trade (Figure 3). The share of services imports is, however, a lot smaller for all CEFTA economies (Figure 4).

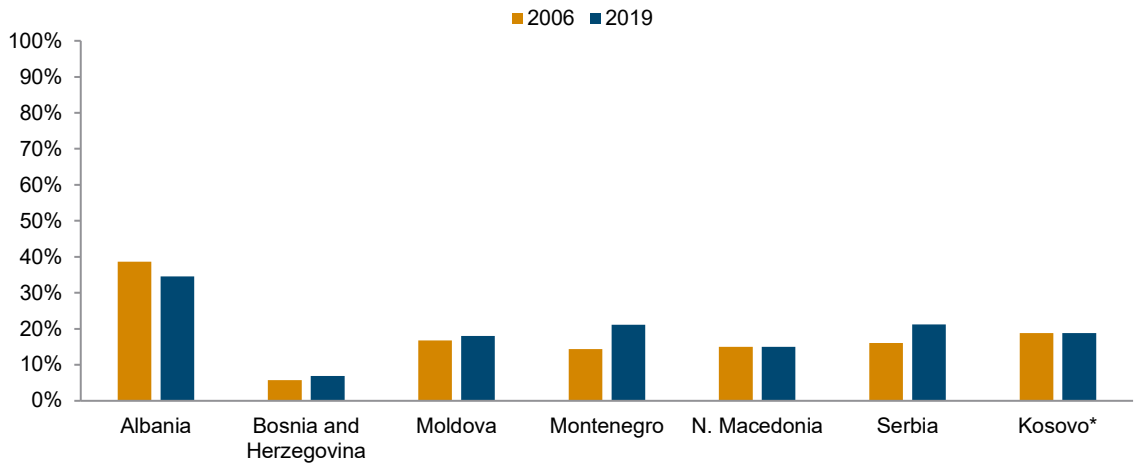
Figure 3 / Services exports as a percentage of total exports, 2006 and 2019



Source: IMF BOP data.

[12] In the year of the pandemic, 2020, trade in services was badly affected globally (see section 6), which is why 2019 is more presentable and thus included in figures.

Figure 4 / Services imports as a percentage of total imports, 2006 and 2019



Source: IMF BOP data.

Trade in services within CEFTA is also quite significant for the majority of the economies, except for Albania. About a third of total service imports by Bosnia and Herzegovina and Montenegro are sourced from CEFTA, and that is mostly driven by the strong socio-economic ties that those economies have with Serbia. The same holds true for a large share of Kosovo's imports from CEFTA (Table 5). This poses a question: to what extent is the export of services driven by CEFTA itself and to what extent is it driven by pre-existing socio-economic conditions between economies.

Table 5 / Share of service trade with CEFTA trading bloc, percentage of total 2018 service trade

	Albania	Bosnia and Herzegovina	Montenegro	Serbia	Kosovo
Share of imports from CEFTA	3.60%	26.30%	28.80%	8.4%	33.50%
Share of exports to CEFTA	1.6%	10.90%	30.50%	11.2%	5.70%

Source: CEFTA official data source, https://cefta.int/ data for North Macedonia and Moldova are missing.

Knowledge-intensive services account for less than 20% of total service exports in Albania (15.5%), Bosnia and Herzegovina (10.3%), Montenegro (10.7%) and Kosovo (13.4%). The figure is significantly higher for Serbia (44%). This is very much in line with the contribution of knowledge-intensive services to the GDP of the various economies (see Table 3), as well as with current research showing that services are lagging behind in e-commerce in CEFTA, mainly due to slow internet, low-skilled labour and an unfavourable regulatory environment (Prica and Bartlett, 2019).

Overall, it is safe to conclude that digitalisation has not yet gained momentum in these economies. Vujanović (2021) measured technological trends in services in Montenegro and found them to be rather stagnating in the period 2010-2019. The study concluded that there is a high potential for growth in services through digitalisation in the future. Considering the socio-economic context of these economies, the same can be inferred for other CEFTA economies.

5. The effects of CEFTA on growth

Current research has shown that the trade effects of free trade agreements can be quite large. And this has been the case with CEFTA (see section 1). As trade contributes substantially to growth, this section investigates the effects of CEFTA on the GDP growth of its parties. Subsection 5.1 presents different channels by which CEFTA can affect growth, as recognised in theoretical and empirical literature. Subsection 5.2 applies a panel data approach (to the Cobb–Douglas production function) to estimate the effect of CEFTA on the GDP growth of its parties.

5.1. TRADE AGREEMENTS AND GROWTH

Trade openness through free (multilateral) trade agreements can affect growth both indirectly (through increased productivity (Seghezza and Baldwin, 2008) and FDI) and directly (through imports and exports (Bond et al., 2005; Alvarez et al., 2013; Didier and Pinat, 2017)). A multilateral (free) trade agreement increases the market size and market potential, allowing firms to seize the potential growth effects of increased economies of scale and productivity. FDI is also a catalyst for growth through trade: it can be attracted by newly created trading blocs and by access to regional value chains – both of which are convenient for export-platform FDI (see section 1 on literature review). Multinational firms affect economies directly, through the expansion of capital infrastructure and employment. The FDI growth effects occur indirectly, through knowledge spillovers (Javorcik, 2004; Vujanović et al., 2021). As multinational firms possess the most sophisticated technology and engage in the largest share of global R&D, their knowledge may also spill over to local firms and can be utilised for productivity-enhancing activities.

The direct effect of trade on growth is even more obvious. Greater integration into international markets allows an economy to grow through the absorption of knowledge spillovers – acquired through both imports and exports. Imports allow firms to get in touch with best practices abroad and thereby to improve their efficiency. Exports allow firms to move up the technological ladder by serving the foreign market, and thereby expanding their knowledge of innovation and technologies (Baltagi et al., 2016). This, of course, applies more to the export of manufactured products than to the export of natural resources, the latter less likely to change (Bond et al., 2005). The same holds for exports of services that are subject to digitalisation and hence are an important catalyst for knowledge diffusion and growth (Vujanović, 2021). The process whereby exports affect growth is, however, multifaceted. Exporting firms need to be technologically advanced in the first place, if they are to grow from exporting (Ferragina and Mazzota, 2014). The position of an economy and its partners in global value chains determines the extent of the export benefits, too (Didier and Pinat, 2017). If an economy is positioned in the ‘middle’ segment of the GVCs and trades more with partners that are ‘closer’ to global networks, then it will benefit more from trade than will other economies.

Hence, the benefits of trade can be very uneven and are likely to be biased towards more-developed economies, as they possess better human capital, conduct more R&D and are financially better developed. Kim and Lin (2009) found positive effects of trade on high-income economies, but negative effects on low-income economies; they concluded that the gap between the two groups may widen with

trade. Developed economies are also more likely to recover faster from negative trade shocks than are developing economies, as witnessed in the recent COVID-19 crisis, when developed economies reached their pre-pandemic level in mid-2021 (UNCTAD, 2021b). This has not been the case with smaller and less-developed economies, whose trade levels are still lagging behind those of 2019.

5.2. THE IMPACT OF CEFTA ON GROWTH

To check the effects of CEFTA on the growth of its economies, a Cobb–Douglas production function is estimated using a static panel econometric technique on the sample of 38 European economies over the period 1996-2019. Table 6 presents the dependent and independent variables used in the estimation. Data are sourced from the Penn World Tables, a database on relative levels of income, output, input and productivity.[13]

Table 6 / Variables used in the estimation

Dependent variable	Definition
Log (Y)	Log (Real GDP at constant 2017 national prices in USD millions at 2017 value)
Independent variables	
Log (K)	Log (capital stock at constant 2017 national prices in USD millions at 2017 value)
Log (L)	Log (number of persons employed, in millions)
CEFTA*	Dummy variable taking value 1 for Albania, Bosnia and Herzegovina, Croatia, Montenegro, North Macedonia, Moldova and Serbia
EU	Dummy variable taking value 1 if a country belongs to the EU
Year	Year dummies
Economy	Economy dummies

Note: Due to the absence of capital values, Kosovo is excluded from the sample.

The outcome variable is gross domestic product (in constant prices), and the explanatory variables are capital and employment (labour) in levels (both in logarithmic form), while the main variable of interest, CEFTA, is a dummy variable that takes value 1 if an economy belongs to the CEFTA trading bloc, and 0 otherwise. Unfortunately, due to lack of data on capital, Kosovo is excluded from the sample. Croatia is grouped with the CEFTA economies for the period 2007-2013, until its withdrawal. A dummy variable, EU, is also added to the model and takes the value 1 for economies that are EU members. We estimate several static panel data models (see Table 7), including a random-effects model (specification 1), an economy fixed-effects model (specification 2), a random-effects model with year dummies (specification 3) and an economy and time fixed-effects model (specification 4). Specification 4 is our preferred one, as in this model we can control for both common macroeconomic shocks (with the help of year dummies) and economy specificities (with the help of economy dummies).[14] A fifth specification includes additional control variables that account for foreign direct investment (in logarithmic form), human capital, rule of law (institutional quality) and political stability (categorical variables), at the cost of a lower number of observations (due to missing values for some economies). The results show positive and statistically significant effects of CEFTA on economic growth in all the model specifications.[15]

[13] https://www.rug.nl/ggdc/productivity/pwt/?lang=en

[14] The inclusion of time dummies accounts for serial correlation; the inclusion of economy dummies accounts for spatial correlation.

[15] For the purpose of this report, a simplified method is applied. A further in-depth exploration of the effects of CEFTA on growth requires additional model estimations.

Table 7 / The economic growth effects of CEFTA, panel data estimations

Specification:	**1**	**2**	**3**	**4**	**5**
Dependent variable:			Log (Y)		
Explanatory variables:					
Log (K)	0.625***	0.621***	0.356***	0.186*	0.378***
	(0.12)	(0.14)	(0.11)	(0.11)	(0.11)
Log (L)	0.341***	0.283	0.422***	0.157	0.603***
	(0.13)	(0.19)	(0.12)	(0.12)	(0.15)
CEFTA	0.226***	0.231***	0.156**	0.164***	0.106**
	(0.08)	(0.08)	(0.07)	(0.06)	(0.05)
EU	0.174***	0.177***	0.0983**	0.113**	0.0626**
	(0.05)	(0.05)	(0.05)	(0.05)	(0.03)
Human capital					-0.109
					-0.13
Rule of law					0.171***
					(0.05)
Political stability					0.0166
					(0.02)
Log (inward FDI)					-0.000448
					(0.00)
Intercept	2.984**	3.099*	6.424***	8.988***	6.344***
	(1.47)	(1.75)	(1.42)	(1.39)	(1.55)
Time dummies	no	no	yes	yes	yes
Economy dummies	no	yes	no	yes	yes
No. of observations	912	912	912	912	409
No. of economies	38	38	38	38	28

Note: robust standard errors are in parentheses. ***, **, * statistically significant at 1%, 5% and 10% significance level, respectively. Year and economy dummies are excluded from the table for brevity. Log (inward FDI) is time lagged to account for endogeneity (reverse causality).

The results indicate that there are positive and significant growth effects from CEFTA. Firms may seize the benefits of CEFTA, although the model results do not reveal whether these benefits are grasped directly (through trade) or indirectly (through FDI and increased economies of scale). Following recent research which found that exports increased after CEFTA came into force (Petreski, 2013; Grieveson et al., 2021; Reiter and Stehrer, 2021), but FDI did not (Grieveson et al., 2021), we can conclude that CEFTA affected GDP directly, through imports and exports. The results can be justified by the fact that these economies have similar levels of technological advancement and knowledge and can thus learn from each other easily through trade (Nooteboom et al., 2007). Likewise, the benefits of CEFTA may have been grasped indirectly, through increased economies of scale.

It is important to note that the model estimations employed in this report are rather simple in design, in terms of both the number of control variables and the methodology applied. This is also due to the fact that the number of observations – in terms of both economies and time periods – is very limited and does not allow for more sophisticated methods, such as a generalised method of moments (GMM) estimation. The inclusion of extra explanatory variables is impeded by the fact that observations are missing for several economies. A more in-depth investigation of the effects would require the employment of additional econometric techniques, such as a full-fledged gravity model, the use of which is beyond the scope of this report.

6. The effects of COVID 19

The COVID-19 pandemic affected all aspects of the world economy in 2020: from global output, which declined by 3.1% (IMF, 2021), to FDI, which contracted by 34% (UNCTAD, 2021a). Trade in goods and services globally declined by 5.6%. However, trade in goods showed greater resilience than trade in services, although disparities do exist within these two broad categories (UNCTAD, 2021b). These disparities are quite large between economies themselves. Trade in less-developed economies was harder hit than trade in more-developed economies and is taking longer to recover from the shock (Nicita et al., 2021). The majority of the CEFTA economies suffered a larger contraction in the export and import of goods and services than did the world overall. The exception is, again, Serbia (see Table 8), whose growth is less dependent on tourism than is the case for the majority of CEFTA economies.

Table 8 / Percentage change in the export and import of goods and services

	Albania	Bosnia and Herzegovina	Moldova	Montenegro	North Macedonia	Serbia	Kosovo
Goods (exports)	-10%	-6%	-7%	-10%	-7%	0%	24%
Goods (imports)	-4%	-12%	-7%	-17%	-7%	-1%	-3%
Services (exports)	-33%	-41%	-17%	-59%	-10%	-9%	-39%
Services (imports)	-44%	-33%	-25%	-26%	-19%	-12%	-17%

Source: BOP data by IMF.

Just as at the global level, trade in goods contracted more than trade in services. The exception is Kosovo, which experienced a significant rise in exports of goods (24%), mainly due to an increase in exports of food and livestock (34.7%); miscellaneous manufactured articles (55.9%); and intermediate goods (41%) – for which there was increased demand in 2020. A notable decline in services was experienced by all the economies. Serbia (the largest CEFTA economy) suffered the least, while Montenegro (the smallest) suffered the biggest decline, mostly due to the wipe-out of the tourism season, which accounts for the largest share of exports in services.

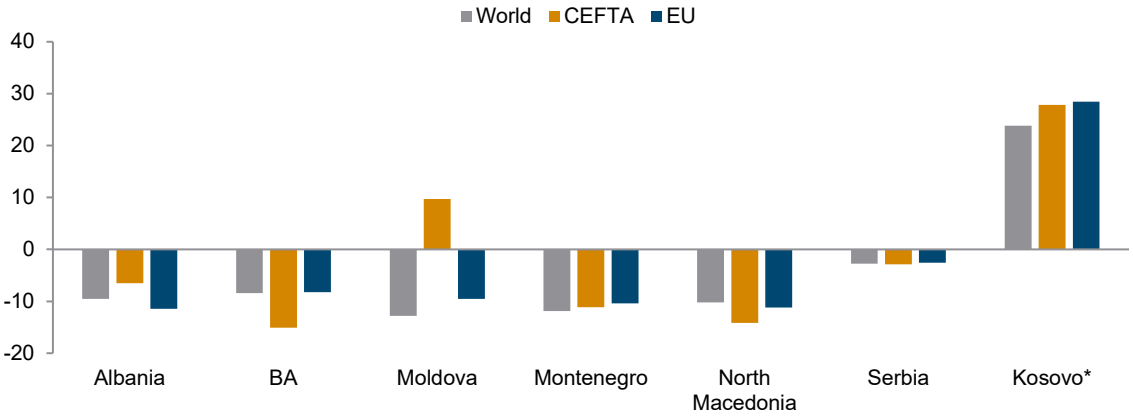
The decline in exports and imports for some CEFTA economies (those for which data are available) are presented in the Appendix (Table A.2 and Table A.3). The data reveal considerable variation with respect to the contraction of trade due to COVID-19. Primary industries, such as mining and quarrying, suffered quite a lot across CEFTA, apart from in Kosovo. Some medium-tech sectors also noted a big decline in trade – especially machinery and equipment, which saw a decline across CEFTA of between 2% and 16% (the exception being Serbia).

Imports and exports of goods[16] reacted quite differently with respect to the EU and other CEFTA economies (see Figures 5 and 6). Exports from CEFTA countries to the EU declined by just as much as intra-CEFTA exports (see Figure 5). However, there is quite some diversification in terms of how exports reacted to the COVID-19 shock within CEFTA. Moldova's exports within CEFTA increased by 10%, hinting at the greater integration of Moldova with CEFTA value chains due to the global trade shock. Yet

[16] The data on services disaggregated by trade partners is not available.

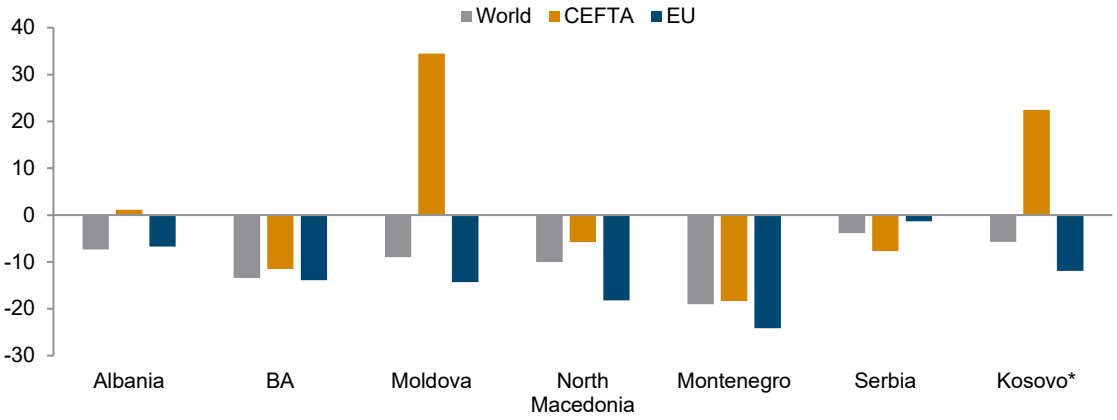
exports of goods within CEFTA contracted more in Bosnia and Herzegovina and North Macedonia than the average (see Figure 5). Kosovo, the only economy that experienced an increase in goods exports, achieved this thanks to larger exports to Albania (a rise of 63.6%) and to the EU.

Figure 5 / 2020 export decline in goods for CEFTA, %



Source: wiiw Annual Database.

Figure 6 / 2020 import decline in goods for CEFTA, %



Source: wiiw Annual Database.

When it comes to the import of goods from the EU in 2020, there was again considerable variation between the economies (Figure 6). The smaller economies witnessed a big drop in imports from the EU: Montenegro (-24%), North Macedonia (-18%), Moldova (-14%) and Kosovo (-12%). Albania and Bosnia and Herzegovina also experienced a drop in imports from the EU. However, Serbian imports from the EU contracted by less – only 2.1%, far less than the 7.7% decline in the country's imports from CEFTA. This again mirrors Serbia's greater embeddedness in European value chains, as opposed to those of CEFTA. Moldova and Kosovo are exceptions to the pattern: their imports from the EU contracted by more than the average, but their imports from other CEFTA economies increased in the year of COVID-19. This increase is likely to be in the form of agricultural goods, an important sector of the Serbian economy that saw a boom thanks to a significant increase in global demand in 2020.

Conclusion

This report shows the trade patterns of CEFTA, 15 years after its establishment. It analyses the trade and growth effects of this multilateral trade agreement, with a special focus on the service sector and the effect of COVID-19. Empirical literature shows the large effects of CEFTA on trade, which was not the case with the previous bilateral trade agreements. This is especially true for the smaller economies of CEFTA, which, unlike Serbia, are often less integrated into the European value chains.

Trade openness since the establishment of CEFTA has also been increasing for most of its member countries. Prior to the agreement, many economies had greater export competitiveness in the primary industries, and over time they have gained this to some degree in knowledge-intensive services. In manufacturing, the lower level of technological advances meant there was no revealed comparative advantage either before or after the agreement came into force. It is difficult to assess how far these changes were triggered by the CEFTA 2006 agreement and how far they depended on industry-specific policies and reforms. It can, however, be assumed that the future will be marked by greater trade in services, due to the importance of e-commerce in trade, as set out by Additional Protocol 6 of CEFTA.

Analysis of integration into the European and CEFTA value chains reveals that these economies rely heavily on the value added from both the EU and the CEFTA trading blocs in their manufacturing exports. Montenegro, Serbia and Kosovo use more intermediates (value added) from the EU; by contrast, Albania and Bosnia and Herzegovina use more value added from the CEFTA trading bloc in their exports. The EU trading bloc and the CEFTA trading bloc use very little value added from the CEFTA economies for their exports. However, it is obvious that there was a significant increase in the use of value added from the individual CEFTA economies in CEFTA exports in 2007, the year when the CEFTA 2006 agreement was implemented. This serves to highlight the gains from the agreement.

Trade has been shown to have been quite sensitive to the COVID-19 pandemic, and the trade of the CEFTA economies suffered more than global trade. This is especially true of services exports and imports, which suffered a stronger decline. However, the pandemic led to some economies increasing their embeddedness in the CEFTA value chains, as opposed to those of the EU (Moldova and Kosovo). There is considerable variation across industries in terms of export decline: the exports of primary industries (such as mining and quarrying) seem to have suffered a greater decline. And the same is true of the exports of some medium-tech manufacturing industries.

An important finding of the report is CEFTA's positive effect on economic growth, which was assessed using an estimation of a Cobb–Douglas production function, in a simple panel data setting. The CEFTA parties have thus likely benefited economically through this multilateral trade agreement – either directly (via improved knowledge and technology thanks to greater exports or imports) or indirectly (through the benefits of increased economies of scale).

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Appendix

Table A.1 / Share of industry exports in total exports of goods and services, 2019

Industries	Albania	Bosnia and Herzegovina	North Macedonia	Montenegro	Serbia	Kosovo
Electrical machinery and apparatus n.e.c.	3.67%	6.41%	13.57%	0.80%	14.16%	1.11%
Food products and beverages	6.20%	6.20%	5.24%	11.01%	11.21%	14.83%
Basic metals	11.41%	11.04%	10.42%	24.11%	10.56%	29.47%
Rubber and plastic products	0.95%	4.26%	1.55%	0.82%	9.07%	13.43%
Machinery and equipment n.e.c.	2.17%	7.98%	13.64%	5.14%	7.36%	2.14%
Chemicals, chemical products and man-made fibres	1.48%	7.26%	23.55%	6.77%	6.94%	2.62%
Products of agriculture, hunting and related services	5.39%	1.05%	4.17%	0.64%	6.26%	2.86%
Motor vehicles, trailers and semi-trailers	0.74%	4.11%	4.94%	3.09%	5.16%	0.77%
Furniture, other manufactured goods n.e.c.	1.77%	8.79%	3.99%	1.42%	3.62%	5.12%
Fabricated metal products, except machinery and equipment	3.21%	9.17%	0.86%	2.10%	3.38%	5.90%
Textiles	2.31%	1.68%	1.91%	0.10%	2.96%	2.21%
Pulp, paper and paper products	2.48%	2.12%	0.35%	0.71%	2.72%	1.02%
Leather and leather products	19.25%	7.18%	0.66%	0.14%	2.27%	0.81%
Coke, refined petroleum products and nuclear fuel	2.75%	2.85%	1.50%	6.43%	2.16%	0.61%
Wearing apparel, furs	18.63%	4.13%	6.48%	0.38%	1.79%	0.71%
Temporary corrections due to erroneous codes	0.00%	0.00%	0.00%	0.00%	1.72%	0.01%
Tobacco products	0.07%	0.03%	0.24%	0.88%	1.58%	0.00%
Wood and products of wood and cork (except furniture), articles of straw and plaiting materials	1.03%	5.71%	0.17%	8.39%	1.48%	2.00%
Other non-metallic mineral products	3.12%	1.70%	1.09%	0.98%	1.30%	1.92%
Other transport equipment	0.14%	0.22%	0.36%	0.77%	1.05%	0.02%
Medical, precision and optical instruments, watches and clocks	0.43%	0.36%	0.31%	0.48%	0.97%	0.29%
Office machinery and computers	0.08%	0.13%	0.07%	0.11%	0.51%	0.35%
Electrical energy, gas, steam and hot water	1.00%	5.00%	0.54%	14.07%	0.44%	3.72%
Printed matter and recorded media	0.09%	0.49%	0.08%	0.41%	0.39%	0.13%
Radio, television and communication equipment and apparatus	0.26%	0.14%	0.74%	0.67%	0.35%	1.04%
Metal ores	2.96%	0.32%	2.46%	7.61%	0.32%	5.55%
Products of forestry, logging and related services	0.07%	0.89%	0.02%	0.07%	0.10%	0.89%
Other mining and quarrying products	0.52%	0.43%	0.96%	0.52%	0.08%	0.10%
Recreational, cultural and sporting services	0.01%	0.00%	0.02%	0.14%	0.03%	0.01%
Coal and lignite, peat	0.00%	0.19%	0.00%	1.23%	0.02%	0.33%
Fish and other fishing products, services incidental to fishing	0.43%	0.08%	0.04%	0.01%	0.02%	0.03%
Other business services	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%
Crude petroleum and natural gas, services incidental to oil and gas extraction excluding surveying	7.34%	0.03%	0.01%	0.00%	0.01%	0.00%
Computer and related services	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%
Sewage and refuse disposal services, sanitation and similar services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other services	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Adjustments broken down at chapter level only	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%
Articles declared as supplies or services for ships and aircrafts for which a simplified declaration applies	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%
Confidential data	0.00%	0.00%	0.07%	0.00%	0.00%	0.00%
Uranium and thorium ores	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Source: wiiw Annual Database.

Table A.2 / 2020/2019 percentage change in exports, by sector of activity

Industries	Albania	Bosnia and Herzegovina	North Macedonia	Montenegro	Serbia	Kosovo
Adjustments broken down at chapter level only	-10%	-99%				28%
Basic metals	-11%	-29%	-5%	-18%	-25%	108%
Chemicals, chemical products and man-made fibres	-5%	-13%	-13%	4%	5%	-70%
Coal and lignite, peat	51%	-4%	-47%	-14%	21%	-41%
Coke, refined petroleum products and nuclear fuel	-29%	-41%	-62%	-79%	-25%	
Electrical energy, gas, steam and hot water	13%	-14%	24%	-15%	39%	-35%
Electrical machinery and apparatus n.e.c.	17%	1%	-10%	-33%	1%	35%
Fabricated metal products, except machinery and equipment	3%	1%	2%	-58%	-1%	5%
Fish and other fishing products, services incidental to fishing	24%	-13%	-8%	178%	-40%	10%
Food products and beverages	6%	3%	-4%	-8%	4%	89%
Furniture, other manufactured goods n.e.c.	-7%	-2%	-11%	189%	-3%	-23%
Leather and leather products	-20%	-17%	-34%	15%	-23%	30%
Machinery and equipment n.e.c.	-30%	-10%	-7%	-2%	1%	-22%
Medical, precision and optical instruments, watches and clocks	19%	-8%	10%	43%	5%	-16%
Metal ores	-8%	39%	-14%	5%	156%	39%
Motor vehicles, trailers and semi-trailers	39%	-11%	-22%	-8%	-21%	-54%
Office machinery and computers	52%	-8%	2%	1%	-28%	
Other mining and quarrying products	-10%	-6%	-32%	-30%	-10%	20%
Other non-metallic mineral products	8%	-8%	11%	-39%	-100%	22%
Other transport equipment	14%	28%	9%	-42%	12%	-18%
Printed matter and recorded media	-26%	-9%	-34%	2%	-12%	36%
Products of agriculture, hunting and related services	11%	10%	-4%	51%	20%	15%
Products of forestry, logging and related services	8%	-18%	5%	13%	8%	6%
Pulp, paper and paper products	-15%	8%	-14%	-25%	-6%	75%
Radio, television and communication equipment and apparatus	-41%	-35%	-4%	18%	14%	304%
Rubber and plastic products	-2%	5%	9%	6%	-4%	
Temporary corrections due to erroneous codes			-100%		-100%	
Textiles	12%				-15%	119%
Tobacco products	-68%	28%	28%	145%	-9%	
Uranium and thorium ores		12%	-60%	3%	40%	-100%
Wearing apparel, furs	-11%	-21%	-19%	24%	-10%	71%
Wood and products of wood and cork (except furniture), articles of straw and plaiting materials	3%	-3%	-33%	-10%	-10%	36%
Total	**-10%**	**-9%**	**-10%**	**-12%**	**-3%**	**24%**

Source: wiiw Annual Database.

Table A.3 / 2020/2019 percentage change in imports, by sector of activity

Industries	Albania	Bosnia and Herzegovina	North Macedonia	Montenegro	Serbia	Kosovo
Basic metals	-3%	-11%	-17%	-30%	-15%	-9%
Chemicals, chemical products and man-made fibres	2%	-4%	10%	1%	5%	14%
Coal and lignite, peat	-13%	-40%	-39%	11%	-16%	50%
Coke, refined petroleum products and nuclear fuel	-29%	-37%	-42%	-45%	-47%	-38%
Electrical energy, gas, steam and hot water	-38%	-64%	14%	-34%	-9%	-33%
Electrical machinery and apparatus n.e.c.	-2%	7%	-14%	-1%	0%	5%
Fabricated metal products, except machinery and equipment	-3%	-5%	-2%	-16%	6%	8%
Fish and other fishing products, services incidental to fishing	-1%	66%	-4%	-67%	-12%	2%
Food products and beverages	1%	-6%	-2%	-19%	9%	0%
Furniture, other manufactured goods n.e.c.	-5%	-14%	-6%	-31%	3%	-16%
Leather and leather products	-26%	-21%	-19%	-21%	-14%	-22%
Machinery and equipment n.e.c.	-2%	-16%	-6%	-10%	17%	-2%
Medical, precision and optical instruments, watches and clocks	-21%	5%	-7%	-8%	4%	5%
Metal ores	-97%	-83%	-27%	-6%	-52%	-42%
Motor vehicles, trailers and semi-trailers	-7%	-28%	-18%	-35%	-15%	-11%
Office machinery and computers	-4%	-4%	14%	8%	-2%	6%
Other mining and quarrying products	-10%	-33%	-22%	3%	-13%	-4%
Other non-metallic mineral products	-1%	-9%	-11%	-23%	6%	2%
Other transport equipment	8%	7%	43%	-14%	-51%	28%
Printed matter and recorded media	5%	-9%	-5%	-19%	0%	-19%
Products of agriculture, hunting and related services	-3%	3%	0%	-13%	7%	6%
Products of forestry, logging and related services	31%	-17%	9%	-52%	12%	45%
Pulp, paper and paper products	-9%	-8%	-8%	-17%	-4%	-5%
Radio, television and communication equipment and apparatus	-10%	-11%	-2%	-6%	2%	-11%
Rubber and plastic products	2%	-6%	-8%	-15%	6%	-2%
Temporary corrections due to erroneous codes					514%	65%
Textiles	-7%	-6%	-13%	-5%	9%	11%
Tobacco products	-4%	-1%	-14%	-6%	17%	-8%
Wearing apparel, furs	-17%	-16%	-9%	-23%	1%	-18%
Wood and products of wood and cork (except furniture), articles of straw and plaiting materials	-6%	-9%	3%	-21%	1%	-4%
Total	**-8%**	**-14%**	**-10%**	**-19%**	**-4%**	**-6%**

Source: wiiw Annual Database.

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