

FDI Report

2019

Foreign Investments Mostly Robust Despite Global Downturn; Shift into Services

FDI in Central, East and Southeast Europe



The Vienna Institute for International Economic Studies Wiener Institut für Internationale Wirtschaftsvergleiche

Foreign Investments Mostly Robust Despite Global Downturn; Shift into Services

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Executive summary

Foreign direct investment (FDI) inflows to Central, East and Southeast Europe (CESEE) declined by 13% in 2018. The decline was almost exclusively on account of lower inflows into Russia, which halved compared with 2017. Inflows to the new EU Member States (EU-CEE11) were largely unchanged from the previous year, despite strong economic growth. By contrast, inflows into the Western Balkans rose by 28%, thanks in particular to rising investor interest in Serbia and North Macedonia. Turkey received a bit more FDI than in 2017, but the overall amount is still very low relative to the size of the economy.

The decline in FDI to Russia in 2018 was particularly striking. Russia is becoming more and more inward looking, due to the exchange of sanctions with the West and (related) import-substitution economic policies. Efforts to stimulate the return of capital from abroad do not seem to be working: FDI outflows were three times greater than inflows in 2018.

Most FDI in EU-CEE11 in 2018 was financed by retained profits, and not from newly transferred equity. Hungary was a particularly extreme case, although this trend was also notable in the Czech Republic, Croatia, Lithuania, Poland and Romania. These are countries with a long history of FDI inflows, and consequently most investment tends to come from established investors rather than new sources. In Hungary, significant net equity disinvestment was recorded, reflecting state acquisitions of foreign capital in telecommunications and banking. Labour shortages and rising wages have triggered investment in labour-saving technologies throughout the region.

Services accounted for the bulk of FDI in most countries in CESEE last year. In particular, producer-related business activities such as ICT, business process outsourcing and shared service centres expanded across the region. Services are not capital intensive, and thus are barely reflected in FDI data. However, the increasing share of services in announced greenfield FDI projects, and of commercial services in total exports, both point to a growing importance for foreign investors in these sectors.

Germany and the US are the most important ultimate sources of FDI in CESEE. The share of Austrian outward FDI in CESEE is shrinking, at the expense of Asia and the US. Tax havens, the Netherlands, Cyprus and Luxembourg in particular are among the largest immediate investors but not among the important ultimate investing countries. This confirms that these countries are mainly intermediaries and headquarters of holdings.

The wealthier parts of EU-CEE11 have become increasingly important outward investors. This is particularly the case of the Czech Republic, which accounts for half of the EU-CEE11 total. Estonia and Hungary have the highest outward FDI stock relative to GDP. Most of this outward investment goes to other parts of CESEE.

Several trends shaping the future of FDI that are given special attention in this study. First, we find that the link between FDI inflows and GDP growth has become less strong since the crisis. Second, FDI inflows and participation in global value chains are strongly and positively correlated. Third, using a gravity model we highlight several CESEE countries attracting FDI at a level above their potential, particularly Montenegro and Bulgaria. By contrast, Belarus and Moldova could attract more FDI if business conditions improve.

Finally, we note that business sentiment has a significant impact on greenfield investment decisions. Given that economic confidence across EU-CEE11 countries appears to be declining, we expect lower FDI inflows in 2019, which could lead to lower GDP growth. This is owing to faltering global and European economic activity, and restrictive policies in the US, Russia and China. Tax reform in the US will likely continue to have a particularly important negative impact on global FDI activity.

Keywords: foreign direct investment, balance of payments, business sentiment, FDI by form, income repatriation, ultimate investing country, statistics, new EU Member States, Central Europe, Southeast Europe, Western Balkans, Austria, China, Turkey, CIS, Russia, Ukraine

JEL classification: C82, F21, O57, P23

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Remark: Data on NACE Rev. 1 are available in the online wiiw FDI Database.

DIRECTORY

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ABBREVIATIONS

AL Albania BY Belarus

BA Bosnia and Herzegovina

BG Bulgaria

CZ Czech Republic

EΕ Estonia HR Croatia HU Hungary ΚZ Kazakhstan XK Kosovo LT Lithuania LV Latvia MD Moldova ME Montenegro MK Macedonia PLPoland RO Romania RS Serbia RU Russia SI Slovenia SK Slovakia TR Turkey

CESEE23 Central, East and Southeast Europe

CIS3+UA Commonwealth of Independent States-3 and Ukraine

EU28 European Union

Ukraine

UA

EU-CEE11 Central and East European EU members

WB6 Western Balkans

A/L asset/liability principle BOP balance of payments

BPM5 Balance of Payments Manual Fifth Edition

BPM6 Balance of Payments and International Investment Position Manual Sixth Edition

DP directional principle

EBRD European Bank for Reconstruction and Development

ECB European Central Bank

ER exchange rate

ESA 2010 European system of accounts (version 2010)

EUR euro

FDI foreign direct investment
GDP gross domestic product
GFCF gross fixed capital formation

IIP international investment positionIMF International Monetary FundM&A merges and acquisitions

NACE Nomenclature statistique des activités économiques dans la Communauté européenne

(Statistical classification of economic activities in the European Community)

NACE Rev. 2 revised classification, introduced in 2008

NB national bank

OECD Organisation for Economic Co-operation and Development

OeNB National Bank of Austria

RoW rest of the world

SNA system of national accounts

SPE special purpose entity

wiiw The Vienna Institute for International Economic Studies

. not available (in tables)

bn billion mn million

Introduction

The wiiw FDI Report is an annual publication based on the freshly updated online wiiw FDI Database. The wiiw FDI Report 2019 presents an analysis of recent developments in foreign direct investment (FDI) flows and stocks in Central, East and Southeast Europe (CESEE), which comprises 23 countries. The aim is to explain the rather erratic changes in recent years in terms of both FDI inflow and attractiveness to greenfield projects. Readers interested in longer-term trends may consult previous editions of the wiiw FDI Report. The statistical part of the wiiw FDI Report 2019 has been shortened to include just the main comparative tables. Account has been taken of the most recent updates and backward revisions of data published up to mid-May 2019. The wiiw FDI Report 2019 is available in printed format and as a PDF file.

FDI data in both the report and the database follow the OECD Benchmark Definition of Foreign Direct Investment, 4th edition, and the International Monetary Fund's (IMF) Balance of Payments and International Investment Position Manual (BPM6). A detailed methodological explanation can also be found in previous editions of the wiiw FDI Report. Data are recorded in current euros and are presented following the international standard of the directional principle. Deviations from the international standards are marked and explained in footnotes in the Appendix A. More information on countries covered, content, time series, methodology and sources can be found in the detailed description to the online wiiw FDI Database. The sources of data are the respective countries' central banks. Time series of FDI data by economic activity and by investing country are based on information from the central banks or statistical offices.

The wiiw FDI Database can be accessed online at the wiiw website, https://data.wiiw.ac.at/FDI-database.html. Since May 2019, the wiiw FDI Database has provided statistics on the shares of partners and activities, as well as time series in millions of euro. The database contains the whole updated FDI dataset from 1990 onwards (as far as data availability allows), and includes more than 18,800 time series. A user-friendly and convenient query tool allows users to download longer and additional time series (including FDI by components, countries or activities) and to save queries.

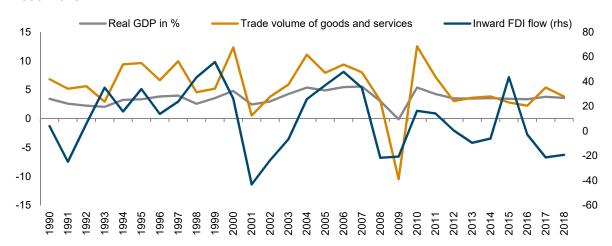
The wiiw FDI Report 2019 and the wiiw FDI Database are the joint products of several wiiw specialists: Gábor Hunya developed the concept and prepared the analysis, with contributions from Amat Adarov, Mahdi Ghodsi and Olga Pindyuk. Monika Schwarzhappel developed the database and the layout. Under her guidance, wiiw statisticians Alexandra Bykova, Nadya Heger, Beate Muck, Renate Prasch, Galina Vasaros and David Zenz took care of the data compilation. wiiw country analysts provided valuable input. The online database query tool has been developed by wiiw software specialist Goran Paunovic, with the help of the wiiw statistical department.

Foreign investments mostly robust despite global downturn; shift into services

GLOBAL FDI DECLINED IN 2018, PRELIMINARY DATA INDICATE

Global FDI has declined for the third year in a row. According to the United Nations Conference on Trade and Development (UNCTAD),¹ last year global foreign direct investment fell by 19% – from USD 1.47 trillion in 2017 to USD 1.2 trillion in 2018. Based on more recent estimates by the Organisation for Economic Co-operation and Development (OECD) released in April,² in 2018 global FDI inflows fell to USD 1.3 trillion – higher than the UNCTAD estimate. The poor global FDI performance was associated with a decline in developed countries. More specifically, FDI in developed countries fell by 40%; in developing countries, by contrast, an increase of 3% was observed in 2018, according to preliminary UNCTAD estimates. In terms of only greenfield FDI investment, however, the global dynamics look more upbeat. According to a recent fDi Intelligence report,³ the number of FDI projects in 2018 was up 7% from 2017, and pledged investment capital surged by 42% to reach USD 0.9 trillion. (See Box 1, p. 15 about the fDiMarkets database.)

Figure 1 / Global trade, FDI inflows and economic growth dynamics, annual change in %, 1990–2018



Note: FDI flows are on the right scale. 2018: OECD estimate. Sources: IMF World Economic Outlook, UNCTAD, OECD.

The causes of the 2018 slump in FDI inflows are related to both real economic growth and policy factors. Typically, FDI dynamics is in line with business cycle activity, and sharp declines in global FDI are associated with major economic downturns – as was the case, for instance, in 2009 (see Figure 1), with the Great Recession bringing about a synchronised downturn in global trade and investments.

¹ UNCTAD (2019), Investment Trends Monitor No. 31, January.

² OECD (2019), FDI in Figures, April.

³ http://report.fdiintelligence.com/

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OVERVIEW

However, the decline in FDI in developed economies last year can largely be attributed to the outcomes of economic policy in the USA, particularly tax reforms. More specifically, towards the end of 2017, the US Government passed the Tax Cuts and Jobs Act, which caused the corporate tax rate to fall from 35% to 21%, and ensured that multinational enterprises (MNEs) would face a reduced one-off 15.5% tax when repatriating accumulated overseas earnings. This led US parent firms to repatriate large amounts of (accumulated) earnings in foreign affiliates, in order to take advantage of the tax reform. In Europe, Ireland and Switzerland experienced especially strong disinvestment (negative FDI inflows) as a result of these repatriations.

The investment outflows of the major investing countries show a mixed picture. According to the OECD, US FDI in the world was negative in 2018. Declines were also registered by some EU Member States, above all the UK. Germany registered lower outflows than in the previous year, while France had higher outflows. Also, Chinese FDI was lower than in the previous year, contracting to half of the 2016 peak.

Besides policy effects, uncertainties related to the outlook for global economic growth also contribute to investors' perceptions and thereby inhibit private investments (Figure 1). According to the recent IMF World Economic Outlook (released in April 2019), after strong economic growth in 2017 and early 2018, global economic activity slowed in the second half of 2018. As of 2019, these risks are still present, along with much uncertainty regarding future developments. Global economic growth is projected to slow from 3.6% to 3.3% in 2019. Weak global growth, geopolitical issues, tensions in trade policy (particularly the trade war between the USA and China), generally rising protectionism and anti-integration sentiment all reflect negatively on investor confidence, and financial market sentiment has worsened. In addition to downside risks, the growth outlook is clouded by deeper structural challenges in advanced economies, including a productivity slowdown and the slow expansion of the labour force due to the ageing population. At the same time, there is some hope that FDI may rebound to some extent in 2019, given the increase in the greenfield investment projects already announced.

FDI INFLOWS INTO CESEE STABLE IN 2018, EXCEPT IN THE CIS

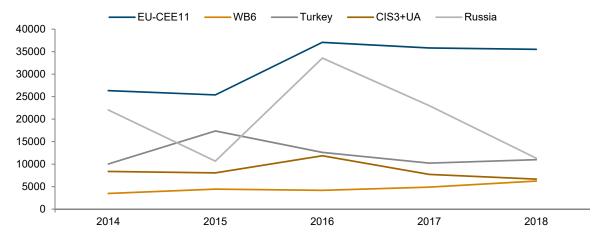
FDI inflows into CESEE (see list of countries in Appendix A, Table A1) **declined by 13% in 2018, compared with the revised 2017 data.**⁵ They amounted to only EUR 70.5 billion, far below the post2008 record of EUR 99 billion in 2016, after which date we see a continuous decline. The trends differ in the main regions of CESEE, however.

Inflows into the new EU Member States (EU-CEE11) in 2018 remained at the level of the previous year. They were boosted by 28% in the Western Balkans, but fell by 6% in the three members of the Commonwealth of Independent States (CIS) covered by the wiiw FDI Database (Belarus, Kazakhstan

- Data underlying this analysis are in euro and according to the IMF *Balance of Payments and International Investment Position Manual* Sixth Edition (BPM6), based on the directional principle wherever possible. See Table A1 for details. The 2018 data are preliminary, based on the first reporting of central banks and subject to later revisions. Inflows are in net terms constituted by gross inflows minus disinvestment. Special purpose entities (SPEs) i.e. economic entities owned by foreigners without economic activity and channelling funds between non-residents are excluded as far as reported.
- ⁵ 2017 data included in the wiiw FDI Report 2018 were revised substantially upwards for a number of countries, such as Bulgaria, the Czech Republic, Hungary and Poland. The decline against the previous year has thus been almost corrected.

and Moldova) and in Ukraine. Inflows plummeted to half in Russia, and stayed flat in Turkey (Figure 2; for a longer time series, see Table A1). It is thus fair to attribute the overall decline in FDI to CESEE to Russia.

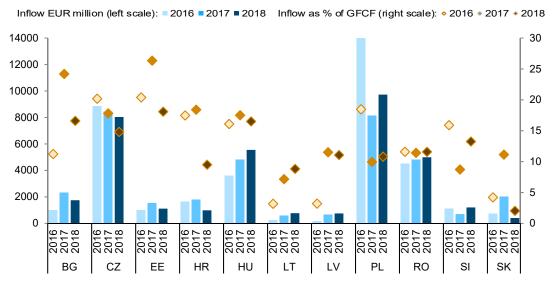
Figure 2 / FDI inflows in the main regions of CESEE, EUR million



Source: Table A1.

The 2018 data confirm that EU members and Western Balkan countries are open to investment and have remained on the radar of foreign investors. Relative to their size, some Western Balkan countries receive more FDI than other CESEE economies. The average size of FDI inflows as a percentage of gross fixed capital formation (GFCF) is about 10–12% for CESEE, but for Albania, Montenegro and Serbia the indicator exceeds 30% (Table A8 and Figures 3 and 4 right scale). The relative size of FDI in EU-CEE11 in 2018 was also below the figure for the previous year due to the strong recovery of GFCF.

Figure 3 / FDI inflow in EU-CEE11 countries



Source: wiiw FDI Database.

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As for individual EU-CEE11 countries, FDI inflows were highest in Poland, the Czech Republic, Hungary and Romania in 2018. With the exception of the Czech Republic, these countries also received higher amounts in nominal terms than in 2017. There were significant declines in countries that had received extraordinarily high amounts the previous year: namely, Bulgaria, Croatia, Estonia and Slovakia (Figure 3, Table A1).

FDI in EU-CEE11 shows some important changes regarding the components of inflows (equity, reinvestment, debt instrument) in recent years (Table A11). The main novelty in the mature FDI receivers is that most of the investments are financed from retained profits, rather than from new foreign equity. Hungary is the most extreme case, where the amounts of both equity and debt instruments were negative in both 2017 and 2018. Other countries where reinvested earnings made the largest contribution to FDI inflows include the Czech Republic, Croatia, Lithuania, Poland and Romania. These have been FDI targets for several decades, and thus attracted projects mainly from established investors, and only rarely from new companies. At first sight, the impression one gains from data on greenfield investments may not confirm this trend – the number of projects, and especially the amount of pledged investment capital, has increased in most of these countries (see Box 1, p. 15 about the fDiMarkets database). However, an increasing part of the greenfield projects can be identified as expansions or co-locations initiated by established companies.

Negative equity inflows indicate more disinvestment than new inflows; this trend is most noticeable in Hungary. Disinvestments are domestic takeovers or capital restructuring of companies. There may also be bookkeeping reasons for reducing the equity of a company, while increasing the amount of retained profits. Mergers and acquisitions have both a positive and a negative impact on equity inflows. In Hungary in 2018, new equity investments amounted to EUR 2.7 billion and disinvestments to EUR 3.6 billion.⁶ Both amounts were lower than in the previous year, but the negative balance was greater. Part of the disinvestment was accounted for by state acquisitions of foreign capital in telecommunications and banking.

Over the past five years, Romania has moved gradually from FDI financed overwhelmingly from equity to reinvestment of earnings. Surging economic growth, fuelled by domestic demand, has attracted investors in trade and construction, while the export-oriented part of the economy has also boosted its capacities. Established foreign investors in the automotive sector (including Ford and Renault) have embarked on enlarging their capacities, which has had a stimulating effect on their domestic suppliers. Bulgaria also joined the list of countries with reviving manufacturing investments in 2018.

Labour shortages and rising wages have triggered investment in labour-saving technologies throughout the region. These are typically investments in existing companies; while sometimes the amounts are not great, they are important for maintaining the locations, which were established because of abundant and cheap labour.

It is worth noting that there is also important outward FDI activity from the more advanced **EU-CEE11.** Nevertheless, FDI outflows fell back in 2018, after a two-year boom period: from EUR 14

https://www.mnb.hu/en/statistics/statistical-data-and-information/statistical-time-series/viii-balance-of-payments-foreign-direct-investment-international-investment-position/foreign-direct-investments/data-according-to-bpm6-methodology
Table 'FDI Flows excluding Capital in Transit and Restructuring of asset portfolios'.

billion to EUR 9 billion (Table A2). All major outward investors were affected by the decline, including the Czech Republic, Hungary and Poland. The Czech Republic remained the most important outward investor, with about half of the EU-CEE11 total. The electricity company CEZ and other companies (mainly mixed investment holdings) targeted the CESEE region. In the largest transaction of the year, Norwegian Telenor sold its Central and Eastern European assets to the Czech PPF Group for EUR 2.8 billion. The deal included mobile operations in Hungary, Bulgaria, Montenegro and Serbia. PPF Group is the largest private investment group in EU-CEE11, with approximately EUR 35 billion of assets under its control. It invests in various sectors, including banking, consumer finance, real estate, mining and telecommunications.⁷

The outward FDI stock of EU-CEE11 countries are still far below the inward stock (Tables A4 and A5). This is in line with their level of development. The net FDI position (difference between outward and inward stock) is largely in line with the level of development of individual countries. The picture is different for a group of countries with high outward FDI, which became owners of foreign assets after the disintegration of a previous state: this explains some of the origin of the outward FDI stock of the Czech Republic, Croatia and Slovenia. The Baltic countries did not own assets together in their common Soviet past, but investors initially treated them as one region setting up a headquarter in one of them.

The Western Balkans started hosting FDI later than EU-CEE11, but that region has received growing amounts of FDI in recent years (Figure 4). Most of it comes in the form of equity, although reinvestment also plays a role in the more established host countries of Serbia and North Macedonia.

Inflow EUR million (left scale): ■ 2016 ■ 2017 ■ 2018 Inflow as % of GFCF (right scale): • 2016 • 2017 • 2018 2017 2018 2017 2018 2017 2018 2017 2018 2017 2018 2017 2018 2017 2018 2017 2018 RU RS BA MK

Figure 4 / FDI inflow in non-EU-CEE11 countries

Source: wiiw FDI Database.

Serbia is by far the largest FDI target in the Western Balkans, receiving extraordinarily high inflows in 2018. The main reason was one single deal: Zijin Mining, one of China's largest copper producers, took over from the state the copper mining and smelting complex RTB Bor. Some of the EUR 1 billion investment will come to the country in 2019. Albania received the second-largest amount of FDI in the

https://www.telenor.com/media/press-release/telenor-agrees-to-sell-its-central-and-eastern-european-assets-to-ppf-group-for-eur-2-8bn

region, a bit more than in the previous year. The main investment project continues to be the Trans Adriatic Pipeline, but there are also energy and mining projects. Car component manufacturers have made their first inroads. Bosnia and Herzegovina received as much as in the previous year – a modest amount relative to its size. North Macedonia recovered from its setback, as suppliers of the automotive industry and electronics stepped up their investment activities.

Turkey received a little more FDI in 2018 than in the previous year, but still a very low amount given the size of the country. The dire state of the economy, coupled with political uncertainty, makes investors hesitant. In this country, almost the total amount of FDI is in the form of equity, and most FDI income is repatriated; investors only bring the money back to Turkey if it is invested in non-financial assets.

Declining FDI in the CIS3 was caused mainly by Kazakhstan, where inflows fell far below the long-term trend. FDI inflows into this country are usually in the mining sector, where the low (and stagnating) international prices did not stimulate investment in new capacities. Recoveries in FDI were reported in Moldova and Belarus. Both countries could attract some automotive component suppliers. In Belarus, most of the FDI comes from Russia, but China is becoming increasingly important. FDI inflow into Ukraine dropped again in 2018: the level is very low, considering the size of the economy. Investors continue to perceive elevated investment risks, although some smaller projects are being implemented in the western part of the country, taking advantage of the skilled, yet cheap, labour force.

FDI in Russia took a sharp downward turn in 2017, and again in 2018. This reflects the absence of large primary-sector projects similar to those that created the upsurge in 2016. Russia has faced US and Western sanctions for at least five years. New rounds of US sanctions announced in April and August 2018 increased uncertainty, as they target 'Russian oligarchs and entities in response to worldwide malign activity'. However, US sanctions on Rusal and other companies were lifted in January 2019, after Mr Deripaska reduced his share in the business to below 50%. This meant a disinvestment in Russian outward FDI. In addition, Russia is accumulating reserves, paying back foreign debts and discouraging capital outflows. Import substitution and protectionism may stimulate domestic market-oriented FDI. Producers of consumer goods and food products have appeared as investors in the wake of the sanctions and embargoes, and an increasing part of investments is coming from China and other Asian countries.

New legislation introduced in 2018 has eased monetary control on accounts abroad, but has tightened control on reporting. An amnesty encourages the return of capital to Russia by removing the threat of tax or other penalties. Investors closing their offshore companies can move assets back to Russia tax free, with a guarantee that the origin of the capital will not be investigated. Special administrative regions – a kind of offshore zone – have been set up in the Kaliningrad region for those still hesitant to bring money into Russian jurisdiction.

Russia is the only CESEE country with negative net FDI, with outflows almost three times greater than inflows. Winding up investments abroad ought to have the effect of disinvestment, thus decreasing Russian outward FDI. This is not the case, however. Data on outward FDI suggest that capital is not

https://www.bloomberg.com/news/articles/2019-01-27/u-s-treasury-lifts-sanctions-on-three-deripaska-companies

⁹ https://investforesight.com/repatriation-2-0/ and http://www.russiantaxandcustoms.com/en/new-capital-amnesty/

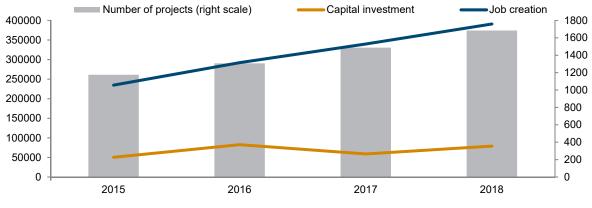
returning home: outward FDI amounted to EUR 31 billion in 2018 – slightly more than in the previous year, and far higher than in the two previous years. Also, according to a recent report by the Central Bank of Russia,¹⁰ these tendencies may be associated with a decline in the inflows of financial capital from offshore zones, while outflows have contracted only insignificantly.

CESEE countries witnessed increased greenfield FDI in terms of the number of projects for the fourth year in a row (Figure 5). The job-creation potential of the announced projects has grown uninterrupted for the last four years. The amount of capital investment pledged has recovered, so that it almost reaches the 2016 level. Also this time, single projects played a dominant role. The State Oil Company of the Azerbaijan Republic (SOCAR) is constructing an oil refinery in Turkey; this project features in the database, with a pledged investment of EUR 6.3 billion. A similar project run by the same company is recorded in Montenegro (EUR 820 million). Beyond these investments, greenfield projects have generally become less capital intensive and more labour intensive over time, which reflects the shift of new projects to skills-intensive services.

BOX 1 / DATABASE ON GREENFIELD FDI PROJECTS

Information on newly announced greenfield FDI projects reflects investors' preference for location choice more accurately than do FDI flows. It is especially important to track the number of new projects, as this provides insight into sectors with low capital intensity. (Both FDI data and the value of greenfield projects are biased towards capital-intensive sectors.) The data are taken from fDiMarkets (www.fdimarkets.com, a division of Financial Times Ltd), and are based on media and company reports on individual investment projects (excluding the financial sector). The database also includes (often estimated) data on the number and value of investment commitments and on the number of jobs that are expected to be created. Compared with the balance of payments, which records financial flows in a given period of time, fDiMarkets data refer to announced real investment projects that are to be realised over a longer period of time. The wiiw FDI Report 2019 excludes retail outlets and shops from its coverage. The investing country is the final home country of the investor; thus, tax havens do not show up. Projects have been recorded by fDiMarkets since 2003 and are continuously updated.

Figure 5 / Greenfield FDI projects 2015–2018: number of projects, announced capital investment in EUR million and number of jobs to be created

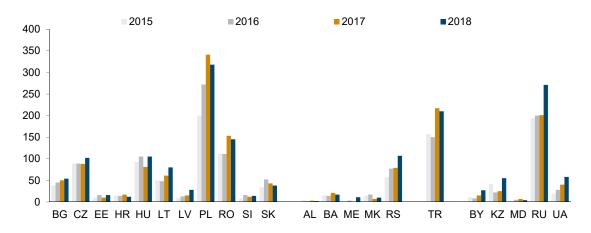


Source: fDiMarkets.com.

¹⁰ Bank of Russia, 'What the trends are saying' (О чем говорят тренды), April 2019.

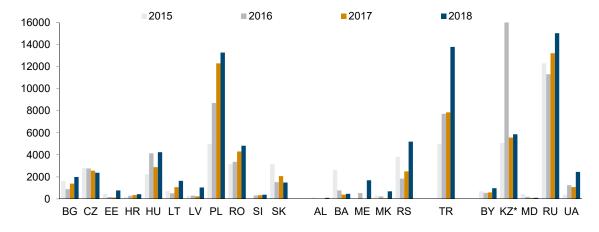
The upsurge in 2016 was due to a single project – an oil extraction investment in Kazakhstan.

Figure 6 / Number of announced greenfield projects, by country, 2015–2018



Source: fDiMarkets.com.

Figure 7 / Pledged investment capital in new greenfield projects 2015–2018, EUR million



* KZ 2016 - EUR 35,180 million

Source: fDiMarkets.com.

EU-CEE11 received fewer projects, but with a higher value than before (Figures 6 and 7). Those countries with the greatest number of projects, Poland and Romania, received fewer than in 2017, while the next group of countries (including Hungary, the Czech Republic and Lithuania) received more projects. The upswing in capital investment was hosted mainly by Poland, Romania and Hungary. Some significant greenfield locations – such as the Czech Republic and Slovakia – have seen a decline in terms of investment values. Poland and Romania are also the locations with the largest job creation, but Romania is certainly the most dynamic in this respect.

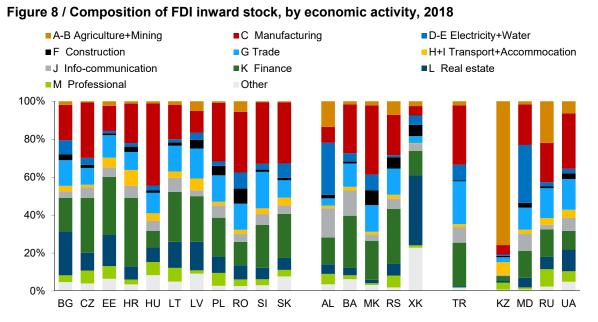
Serbia is the most important and most dynamic country in the Western Balkans, with a high share of manufacturing investments. Albania, which attracts a high amount of FDI inflows, does not show up as a successful greenfield destination. North Macedonia has emerged from the economic and political crisis and has received projects of increasing number and value.

Russia attracted a record amount of greenfield investment capital and a record number of greenfield FDI projects. The largest investors are China, Germany and the US (the latter despite sanctions and restrictions). The biggest project announced in 2018 was by Plateks (registered in Hong Kong), which will set up a company to produce fertilisers.

Investors in CESEE may face difficulties in implementing the new projects announced in 2018, due to the labour shortages in many countries. The new projects are expected to create 391,000 jobs (after the 340,000 announced the previous year). The biggest increase in labour force need is registered in Romania, a country which already has a strained labour market situation. Many of the jobs are in skills-intensive information and communication technology (ICT) services, where employees have received tax allowances to discourage them from emigrating. Foreign workforce immigration is on the rise in the region: Poland relies on immigrant workers, drawing heavily on the pool of Ukrainians. Digitalisation and automation are the way of the future not only in the EU core, but also in EU-CEE11. As a result, manufacturing subsidiaries will survive by having lower labour intensity than at present.

FDI BY ECONOMIC ACTIVITY - SHIFTS TO SERVICES

There were no major changes in the share of manufacturing in the inward FDI stock across the region in 2017 (the latest year for which data are available across the region; see Figure 8, Tables A18 and A19). Hungary, Romania, Slovakia and Slovenia from the Central European manufacturing core kept shares at above 30%. Only in the Czech Republic was there a slight decrease – of 2.4 percentage points (pp), to 29.2% in 2017; FDI inflow data for some countries show that in 2018 manufacturing accounted for only 16% of inflows, while more than half of the inflows went into financial services and real estate activities. The automotive industry, machine building and electronics are the prime industrial branches in EU-CEE11 manufacturing FDI.



Note: NACE Rev. 2. RS data refer to 2015; SK data refer to 2016; CZ, HU, PL, RO, SI, BA, MK, TR, MD, RU data refer to 2017; no data for ME.

Source: wiiw FDI Database.

North Macedonia has the second-highest share of FDI in manufacturing in the region, after Hungary (36.6% in 2017), which points to quite high integration of the country into international value chains. Turkey, Serbia and Bosnia and Herzegovina also attracted FDI in the manufacturing sector, accounting for about a quarter of the FDI stock in those countries. The rest of the CESEE countries have relatively low shares of manufacturing, in particular Albania and Kosovo, where they are measured in single digits. Kazakhstan stands out as the only country in the region where FDI is heavily concentrated in the mining sector (around 76% of total FDI).

Services account for the bulk of FDI in most countries of CESEE. Their share of economic activities is highest in the Baltic States, as well as in Croatia and Kosovo with more than 70% of FDI in these countries, and the figure even reaches 82% in Estonia. Only in Albania, Kazakhstan, Moldova, North Macedonia and Romania does the share of services in FDI dip below 50%.

One can distinguish between consumer services (mainly targeting the local market) and services that are used as intermediate inputs in production (and mostly exported). In the NACE Rev. 2 classification, professional, scientific and technical activities (M) and information and communication services (J) can be considered producer-related services; they are increasingly more traded through international value chains (either directly or embodied in the value added of manufacturing products). It is believed that specialisation in these types of services could promote technological leapfrogging by developing countries. Market-seeking appears to be the main goal of FDI in the region: financial and insurance activities (K) and wholesale and retail trade (G) remain the key sectors attracting FDI. However, in several countries, producer-related services are also quite important. Russia, Hungary, Poland, Estonia and the Czech Republic have the highest shares of professional, scientific and technical activities in FDI, in the range 7–9%.

International trade statistics allow us to get some idea of how important services – and ICT in particular – are for the economies. Export data show that in 2017, Croatia, Estonia and Albania had the highest shares of services exports in GDP – around 25% (Figure 9). However, services exports structures in these countries were dominated by more traditional services, such as travel and transport. It is Ukraine, Romania and Serbia that appear to have developed a relatively strong export-oriented ICT sector, with ICT accounting for about 17–19% of total services exports.

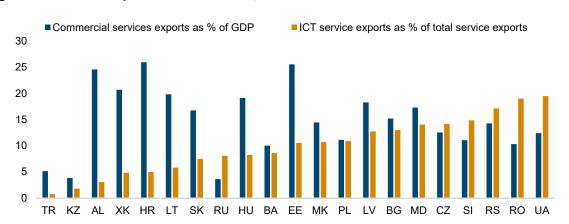


Figure 9 / Services exports characteristics, 2017

Source: World Development Indicators database.

There are indications that services sectors are becoming increasingly attractive to greenfield investors (Figures 10 and 11). Services production may be part of manufacturing value chains, and thus formally belong to the NACE category 'manufacturing'; however, from the perspective of the actual activity of the subsidiary can be attributed to the services sector. The most services-oriented economies appear to be the Baltic countries (in terms of project numbers) and Croatia (in terms of investment capital pledged). The share of services activities in the number of greenfield projects in 2018 was higher than in the previous year in all the countries of the region, apart from Latvia, Slovenia, Serbia and Turkey. The biggest relative increase occurred in Croatia (with the largest projects in software and ICT services) and Estonia (with the largest projects in communications and software and the ICT sector).

Services ■ Electricity ■ Construction ■ Logistics, Distribution & Transportation ■Sales, Marketing & Support Manufacturing 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% BG CZ EE HR HU LT LV PL RO SI SK RS TR RU

Figure 10 / Share of main activities in the number of greenfield projects, 2018

Note: excl. mining and recycling.

Source: fDiMarkets.com.

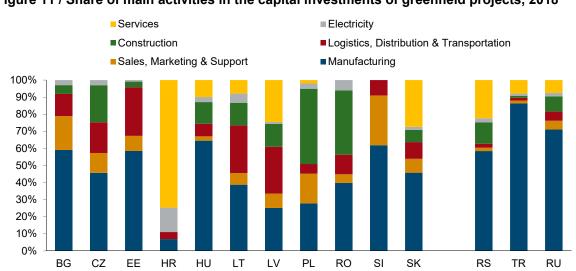
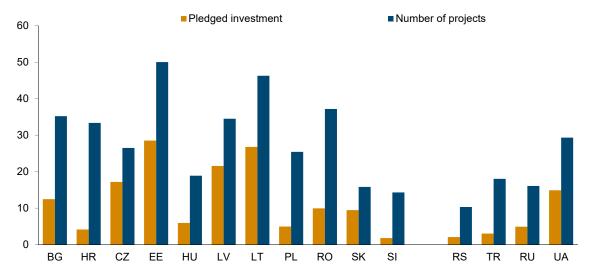


Figure 11 / Share of main activities in the capital investments of greenfield projects, 2018

Note: excl. mining and recycling. Source: fDiMarkets.com.

We identify the following business activities as producer-related services: business services, customer contact centres, design, development and testing, education and training, ICT and Internet infrastructure, research and development, shared services centres, and technical support services. Figure 12 shows that Estonia is the leader in this respect, with the share of projects in producer-related business activities reaching 50% of the total number of projects. Serbia, Slovakia and Slovenia specialise least in producer-related business activities in the sample.

Figure 12 / Share of producer related business services in the number and capital investment of greenfield projects, 2018, in %



Source: fDiMarkets.com.

In another comparison, business process outsourcing and shared service centres have been identified as important target industries for investors across the region, but mainly in EU-CEE11.

This industry covers a wide range of services activities – from call centres to software development. Such activities are skills intensive and are based on agglomeration economies, but do not necessitate large capital investments. They usually operate in rented office buildings which comprise real estate investments. Poland, Bulgaria, the Czech Republic and Romania are among the global top 20 business service locations, according to the 2017 Global Services Location Index¹². The business process outsourcing and shared service centre sectors are concentrated in Poland. 'Krakow has been Europe's largest centre for outsourcing services since 2014, and now boasts more than 170 companies and 70,000 employees.'¹³ At the same time, those jobs now seeking locations with cheap labour are at risk of being lost to automation.

¹² https://www.atkearney.com/digital-transformation/gsli

¹³ https://www.fdiintelligence.com/Locations/Europe/Poland/Poland-eyes-another-stellar-year-of-FDI

FDI STOCKS BY INVESTING COUNTRIES: SIGNIFICANT DIFFERENCE BETWEEN IMMEDIATE AND ULTIMATE INVESTING COUNTRY

In 2017, the EU-28 held about 88% of the total stocks of FDI in EU-CEE11, which is 1.9pp more than its share in 2016 (Table A16). Of the EU-28, the Netherlands has the largest share of inward FDI stocks in EU-CEE11 – a situation that remained unchanged from 2016. Germany had the second-largest stock of inward FDI in EU-CEE11: 14.3%, about 0.3pp more than in 2016. German manufacturing companies are the main players in the Central European manufacturing hub, with more than 10% of stocks in the Czech Republic, Hungary, Poland and Romania. Slovakia is an outlier, as its automotive industry is not overwhelmingly German owned (as is also the case in Hungary), but includes companies from South Korea (included as 'other countries' in Table A16). The Baltic countries received the largest part of their capital from neighbouring Sweden, and they have also invested in each other. Latvia also hosts FDI from Russia and Cyprus, amounting to 10% and 5% of stocks, respectively, with the trend increasing. Direct Russian ownership is below 1% of the FDI stocks outside the Baltics and Bulgaria, although further amounts may be present via holdings registered in the Netherlands and Cyprus.

Luxembourg has experienced the highest gain in its share of FDI stocks in EU-CEE11 and in 2017 was the third-largest owner of FDI stocks in that grouping, with a share of 9.9% (0.9pp higher than in 2016). Whereas Austria was the third-largest investor in EU-CEE11 in 2016, in 2017 it was ranked fourth, with a share of 9% (see the section below on Austrian FDI). The US share increased from 0.4% in 2016 to 1.3% in 2017 – the second-biggest gain in the region. The United Kingdom enjoyed the third-biggest gain in ownership in the region: its share increased by about 0.8pp, to 3.2% in 2017. The Netherlands, Russia, Denmark, Cyprus, Spain, Switzerland, Germany, Hungary and Sweden all saw gains in their shares of ownership in the region during the period 2016–2017.

The biggest reduction in the share of FDI stocks in EU-CEE11 was seen among the group of 'other countries', which lost about 2.5pp in ownership of stocks from 2016 to 2017. France (with a loss of 0.4pp), Belgium (0.34pp) and Italy (0.33pp) experienced the next biggest reductions in the share of inward FDI stocks in EU-CEE11. Greece, Austria, Norway, Finland and Japan all lost shares in inward FDI stocks in the region during 2016–2017.

For inward FDI stocks in the six countries of the Western Balkans (WB6), in 2017 the group of 'other countries' had the largest share - 34%, down 0.7pp on 2016. Austria had the next largest share - 22.6%, down 0.4pp on its share in 2016. However, the levels of Austrian FDI in WB6 increased by about EUR 251 million from 2016 to 2017. Austria was the second most-important investor in the Western Balkans (after the Netherlands) in 2017 (after 15% in 2016). It had the highest share in the FDI stocks of Bosnia and Herzegovina and of North Macedonia, and the second highest in Serbia. Most Austrian FDI entered the region before the global financial crisis, primarily in the financial services and the energy sectors. The biggest increase in the share of FDI stocks in WB6 was recorded by Switzerland - an increase of about 1.3pp over 2016, to reach about 6.9% in 2017. This also makes Switzerland the third-biggest owner of FDI stocks in WB6. The German presence in the region is much lower than in EU-CEE11, due to the absence of manufacturing FDI in some major parts of the region (a sector where Germany is particularly strong). Montenegro is a special case: there Italy is the first-placed investor, closely followed by Russia (which used to be first). Luxembourg, France, Hungary, Germany, Belgium, Japan, Sweden, Spain, Norway and Finland are the other countries whose share and level of FDI stocks in WB6 increased from 2016 to 2017. Italy, the United States, Denmark, the United Kingdom, Cyprus, the Netherlands and Greece all lost share of FDI stocks in WB6 in 2017.

For the rest of the non-EU CEE, the Netherlands had the largest share of inward FDI stocks – about 28.8% in 2017, or about 1pp lower than in 2016. However, the level of Dutch FDI stocks in these countries increased in 2017 by about EUR 2 billion. The share and the level of FDI stocks in these economies from the group of 'other countries' – who enjoyed the second-largest share – increased by about 2.8pp and EUR 13 billion, respectively. The United States had the third-largest share of inward FDI stocks in these countries – 9%. However, while FDI stocks from the US increased by about EUR 1 billion in 2017, its share of total FDI stocks in these countries dropped by 0.2pp. The largest increases in share and levels of FDI stocks in these countries in 2017 were seen in the United Kingdom, Germany, Spain, Switzerland, Belgium, Italy, Denmark, Sweden and Greece, in that order. By contrast, the biggest reductions in the share of inward FDI stocks in these countries in 2017 were in Austria, the Netherlands, Cyprus, France, the United States, Finland, Japan, Luxembourg, Norway and Hungary, in that order.

FDI in Turkey comes from a wide variety of countries, but the EU-15 share (65%) is even higher than in the Western Balkans, though it is declining strongly. The most important home country of investors in Turkey is the Netherlands, followed by Germany; Austria comes fifth. Turkey is also an important outward investor, and the Netherlands tops the rankings in this direction, too, which may indicate the presence of round-tripping Turkish investment capital.

Russia received 27% of its FDI stocks from Cyprus in 2017, and sent a similar share of its outward FDI to that island. Other offshore centres are also strongly represented, such as Bermuda and Jersey. The importance of Cyprus and other offshore investments increased up to 2017, in terms of both inward and outward FDI, indicating the rising preference of Russian investors to keep their capital abroad, despite official policies to attract it back home. Half of the FDI in Kazakhstan originates in the Netherlands, where large multinational oil companies have their registered headquarters.

China has less than 0.5% of the FDI stock in most CESEE countries, but this figure is rising. Kazakhstan has received the largest amounts of FDI from China, whose share increased to 6.4% in 2017. Belarus and Russia are further important Chinese targets. North Macedonia has the highest share of Chinese FDI stocks in the Western Balkans (2.3% of inward stocks). Serbia had only 0.5% in 2015, the latest year for which data are available, but inflows to this country have risen significantly in recent years, reaching EUR 219 million in 2018.

The Czech Republic is the EU-CEE11's main recipient of Chinese FDI, but with only 0.5% of the total the inward FDI stocks; meanwhile the earlier favourite location, Hungary, is stagnating on 0.2%. Large investments are seen in certain years, which may be followed by capital withdrawal. This was the case in the Czech Republic, where Chinese investment inflows were positive up to 2015, only to turn negative in later years.

The Netherlands and Luxembourg are recorded as important FDI home countries because they function as hubs for holding companies set up for reasons of tax optimisation. ¹⁴ Especially US companies find it beneficial to locate their EU headquarters in the Netherlands. Those two countries, as well as Cyprus, also host companies from CESEE that invest back in their home countries (round-tripping). The statistics for these three EU members record outward FDI flows into CESEE that

¹⁴ The phenomenon of Dutch FDI was analysed in detail in the *wiiw FDI Report 2012*.

Immediate minus Ultimate

21,976.1

-5,541.4

27,315.4

-1,570.1

2,288.0

-2,108.6

1,633.3 7,615.9

-18,166.4

-10,182.6

0.0

are only 5-10% of the inward FDI reported by CESEE economies. This indicates that the final owner of the investors is not in those countries.

Table 1 / Inward FDI stock by top investing countries, immediate and ultimate investor and their difference, EUR million

Czech Repu	ublic 2017			Poland 2017	7	
	Immediate	Ultimate n	Immediate		Immediate	Ultimate r
World	124,675.1	124,675.1	0.0	World	211,628.8	211,628.8
Netherlands	25,840.2	8,978.1	16,862.1	Netherlands	40,674.4	18,698.4
Germany	21,094.2	25,848.3	-4,754.0	Germany	37,162.0	42,703.4
Luxembourg	14,163.4	1,451.6	12,711.8	Luxembourg	29,445.7	2,130.3
Austria	13,797.4	11,756.7	2,040.8	France	19,074.0	20,644.2
France	9,690.9	10,524.5	-833.6	Spain	12,810.6	10,522.7
Switzerland	5,670.5	5,171.8	498.7	UK	10,153.0	12,261.6
Cyprus	5,126.6	3,659.1	1,467.5	Austria	9,004.1	7,370.9
Italy	3,955.3	5,390.1	-1,434.7	Cyprus	7,615.9	0.0
USA	1,261.8	8,592.8	-7,330.9	USA	5,083.6	23,250.0
Czech R.	0.0	12,034.2	-12,034.2	Poland	0.0	10,182.6
Hungary 20	16			Austria 201	7	
	Immediate	Ultimate	Immediate		Immediate	Ultimate
		n	ninus Ultimate			r

nungary 20	10		
	Immediate	Ultimate	Immediate minus Ultimate
World	76,223.4	76,223.4	0
Germany	20,327.8	22,127.0	-1,799.2
Netherlands	11,902.6	2,219.7	9,682.9
Austria	7,747.7	6,006.5	1,741.2
Switzerland	4,932.5	1,662.7	3,269.8
Luxembourg	3,236.8	1,257.0	1,979.8
France	2,676.4	4,161.8	-1,485.4
Ireland	2,758.2	264.7	2,493.6
Italy	2,440.0	2,779.3	-339.3
USA	-1,571.3	11,689.5	-13,260.9
Hungary	0.0	326.0	-326.0

Source: OFCD	

JItimate Immediate minus Ultimate World 183,182.8 183,182.8 0.0 52,383.3 -956.9 Germany 53,340.2 Russia 28,777.3 29,858.2 -1,080.9 20,400.8 Netherlands 26,500.6 6,099.8 Luxembourg 14,068.9 20,877.5 6,808.6 Switzerland 11,200.5 10,896.7 303.8 Italy 10,967.3 11,440.6 -473.3 France 3,883.3 4,592.2 -708.9 Great Britain 2,698.9 6,810.9 -4,112.0 USA -1,396.1 13,414.7 -14,810.8 -2,663.6 Austria 0.0 2,663.6

There is a wide gap between inward FDI stocks by the immediate investor and by the ultimate investing country, as indicated by countries which publish data according to both principles (Table 1). In the Czech Republic, Poland, Hungary and Austria, neither the Netherlands nor Luxembourg is very important as an ultimate investor, whereas the USA and Germany are more important than is suggested by the immediate investor data (i.e. the difference between the figure for the immediate and for the ultimate investing country is negative). Austria is somewhat less important as an ultimate investor than as an immediate investor in the three EU-CEE11 countries, which means that this country also serves as a stepping stone for companies from third countries to enter the region. It is a peculiar phenomenon that it is often the case that the host country itself is an ultimate foreign investor in its own country.

AUSTRIAN FDI ACTIVITY IN CESEE – DECLINING SIGNIFICANCE

The National Bank of Austria (OeNB) reported positive inflows to Austria in 2018 – EUR 6.5 billion, down a third on the previous year. ¹⁵ German and Dutch FDI made the biggest contribution to the inflows, whereas these were negative from Russia and the USA. As for stocks, Germany predominates, but Russia lies a strong second, ahead of the Netherlands. As in other countries, the ultimate investors in Austria are quite different from the immediate ones (Table 1, based on 2017 stocks). The Netherlands and Luxembourg are insignificant as ultimate investors, and the USA comes third, after Russia.

Austrian outward FDI flows turned negative in 2018, mainly on account of disinvestments in the Netherlands, UK and Switzerland. These were single large transactions by company headquarters, which may not have been finalised by the end of the year. Amounts invested in the CESEE region were modest, with small positive and negative amounts reported in individual countries. Austrian FDI has been negative for several years in Hungary, Slovakia and Ukraine. It turned negative in Poland and Slovenia in 2018, after positive sums in previous years. There was a major Austrian disinvestment in Poland during the year: the banking branch of Raiffeisen Bank Polska was sold to Bank BGZ BNP Paribas SA for EUR 760 million. As a matter of fact, both inflows and outflows of Austrian FDI have been highly volatile in recent years. Thus, one cannot draw conclusions about regional shifts on the basis of flow data – only on the basis of stock changes.

As for Austrian outward FDI stocks, the Netherlands and Germany are the most important Austrian FDI locations, with around 15% each in 2018 and with higher shares than in 2015. The main loser was CESEE, whose share declined from 35% to 29%. Diminishing (or barely changing) shares were characteristic of all the host countries in the region, with the exception of Poland. As for other world regions, Latin America lost share to Asia, signalling that Austrian investors are following the world trend.

The CESEE host country statistics mirror the OeNB data and show diminishing inward Austrian FDI stocks (data are available only up to 2017 in most countries). Also, Austria's share fell, giving way mainly to offshore financial centres. Between 2012 and 2017, Austria's share in the inward stock of the EU-CEE11 region declined from 11% to 9%; in the Western Balkans its share fell from 15% to 11% (Table 2, host country data). Disinvestment – such as the restructuring of Bank Austria – was one of the reasons for this decline. Another was the general shift of home countries to offshore intermediaries, by which the significance of traditional investors diminished. Austria is the third-largest investor in EU-CEE11, after the Netherlands and Germany: it occupies prime positions in Slovenia and Croatia; ranks second in Bulgaria and Slovakia; and third in Hungary and Romania. In the Western Balkans, Austria is the second most-important investor after the Netherlands, with 13% of stocks. The country was among the first to enter the region after peace was established. It is the largest investor in Bosnia and Herzegovina and North Macedonia, and the second largest in Serbia; but elsewhere in the region it ranks only fifth to eighth. The Austrian presence is even more marginal in the CIS.

Preliminary data; https://www.oenb.at/en/Statistics/Standardized-Tables/external-sector/foreign-direct-investment.html

https://www.rbinternational.com/eBusiness/01_template1/826124957350877869-826099894069199559-1366744537669412832-NA-1-NA.html

		2012	2017	2012	2017	2012	2017
				as % of the FI	OI stock		
		EUR n	nillion	of the host co	untry	Rank	king
BG	Bulgaria	5,535	4,049	14.8	9.5	2	2
CZ	Czech Republic	13,321	13,454	12.9	10.3	3	4
EE	Estonia	214	317	1.5	1.6	14	15
	Croatia	7,095	5,604	31.6	20.1	1	1
HU	Hungary	9,118	8,180	11.6	10.8	4	3
LT	Lithuania	84	167	0.7	1.1	21	18
LV	Latvia	186	196	1.8	1.3	16	15
PL	Poland	6,070	8,470	3.4	4.3	10	7
RO	Romania	10,920	9,575	18.5	12.6	2	3
SI	Slovenia	3,266	3,504	35.3	25.6	1	1
SK	Slovakia	6,858	6,080	16.4	13.1	2	2
	EU-CEE11	62,666	59,595	11.0	9.0		
		- ,	,	-			
AL	Albania	387	447	11.9	6.9	4	7
ВА	Bosnia and Herzegovina	1,401	1,345	24.4	19.6	1	1
ME	Montenegro	97	135	2.7	3.0	11	10
MK	North Macedonia	397	637	10.8	13.6	3	1
RS	Serbia 1)	2,589	3,344	17.4	13.9	1	2
XK	Kosovo	113	212	4.5	6.0	6	5
	WB6	4,983	6,120	14.8	12.3		
TR	Turkey	13,759	3,791	9.9	2.5	2	14
BY	Belarus	358	518	3.3	3.1	4	3
MD	Moldova	22	69	0.8	2.5	17	9
ΚZ	Kazakhstan	1,346	103	1.7	0.1	7	25
UA	Ukraine	2,581	1,371	6.2	4.1	5	6
	CIS3+UA	4,306	2,061	3.2	1.1		-
RU	Russia	7,371	4,670	1.9	1.3	11	13

^{1) 2012:} cumulated inflows. 2015 instead of 2017.

Source: wiiw FDI Database.

Among the greenfield investors in CESEE, Austria ranked ninth, with 57 projects in 2018 (the same number as in 2017). EUR 2.6 billion investment was pledged, ranking the country sixth in the region. The amount of investment commitments soared compared with the previous year, on account of more real estate projects planned in Poland and a power station to be built in Slovakia. These two countries were also the most frequented destinations, with nine projects each, followed by Turkey with eight projects. As for the Western Balkans, Serbia and Bosnia and Herzegovina provided the focus for Austrian greenfield investors. They showed little interest in entering old targets, such as the Czech Republic and Hungary, with new projects.

wijw FDI Report 2019

OVERVIEW

The profitability of Austrian FDI is above average in the CESEE region: 36% of the Austrian FDI income is earned there on 28% of the stocks invested in the region. On the whole, Austrian investors have received diminishing income from outward FDI since the peak year of 2016 (although it is still well above the level of the five preceding years - OeNB data). Incomes have also declined in CESEE over the past two years, but profitability remains above average.

HIGH FDI PENETRATION IN EU-CEE11 – A EUROPEAN COMPARISON

FDI penetration – as measured by the FDI stock as a percentage of GDP – puts EU-CEE11 economies in the European mid-field (Figure 13). Countries with an FDI penetration rate of above 100% (Luxembourg, Ireland, the Netherlands and Belgium) host the headquarters of large holding companies and special purpose entities (SPEs), attracted by particularly advantageous regulations. These countries also have similarly high outward FDI intensities. Countries with low inward FDI penetration include highly developed Germany, as well as Greece and Italy, where most of the economy is domestically owned.

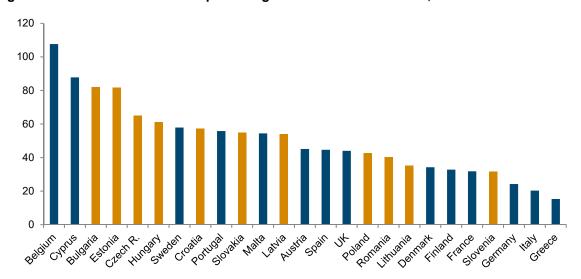


Figure 13 / FDI inward stock as a percentage of GDP in EU countries, 2017

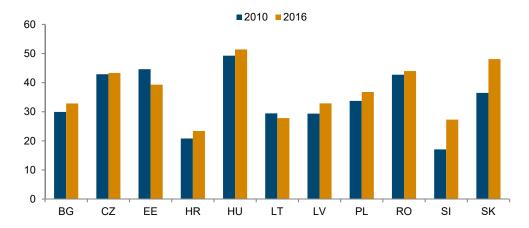
Note: FDI stock based on the directional principle, excluding SPEs; not included in the figure are Ireland: 253.1%, Luxembourg: 269.4% and the Netherlands 191.0%.

Source: Eurostat.

Figure 13 shows that EU-CEE11 countries have relatively high FDI penetration, compared to the more developed EU Member States, except for those that host holdings. Smaller EU-CEE11 economies (Estonia) or those attractive to real estate investors (Bulgaria), plus those open to FDI for a longer period of time (Czech Republic and Hungary) have higher rates of FDI penetration than larger economies (Poland and Romania) and than those with less FDI-friendly policies (Slovenia).

Another indicator for measuring the significance of FDI is the share of value added produced by foreign affiliates in the total value added of the non-financial business economy (Figure 14). The coverage of FDI and foreign affiliates statistics (FATS) differ, as the latter do not include companies with minority foreign ownership or those active in the financial sector.

Figure 14 / Value added by foreign affiliates as a share of the total value added in the business economy, excluding finance and insurance activities, in EU-CEE11, %



Note: Foreign affiliates statistics (FATS) refer to companies with at least 50% foreign ownership; total business economy based on structural business statistics (SBS).

Source: Eurostat FATS and SBS.

The contribution of foreign affiliates to non-financial business value added is highest in Hungary, with more than 50%, followed by Slovakia, Romania and the Czech Republic, with over 40%

(Figure 14). These are among the countries that are at the top also in respect of FDI penetration based on stocks. Some other countries with high FDI penetration based on stock data – namely Bulgaria and Estonia – fare more modestly in terms of the share of foreign value added, partly due to the absence of the financial sector and real estate ownership in FATS data. Poland has relatively low foreign penetration according to both indicators, due to its large and diversified economy, where domestically owned companies have preserved dominance in value creation in several sectors. The Slovenian economy is an outlier in every respect, as it is small, export oriented, but largely domestically owned in all economic sectors. But since 2010, foreign investors have gained ground in Slovenia as well, in the wake of the financial crisis that hit the state-owned banks and companies with weak corporate governance.

Foreign penetration in the manufacturing sector tends to be higher than average. International value chains organised by MNEs dominate this sector. Another sector that is typically dominated by foreign affiliates is the information and communication sector. Initially, this sector was modernised and developed mainly by foreign investors, who provided 60–70% of the sectoral value added in 2010. However, in recent years a rapid catching-up by domestic service providers, especially in software development, has led to a decline in the foreign investors' dominance of some 10 percentage points. In addition, some media providers have been taken over by domestic investors.

IMPACT OF FDI ON THE BALANCE OF PAYMENTS – THE ROLE OF FDI INCOME

FDI has multiple impacts on the balance of payments.¹⁷ First of all, FDI is a position in the financial account and plays an important role in financing the current account deficit in countries where liabilities exceed assets. The **majority of the EU-CEE11 countries run current account surpluses or very low deficits**, and thus have adapted to low or negative financial inflows (Table 3). Romania is an outlier, with rapidly expanding current account deficits, due to soaring imports. The rest of the CESEE economies have current account deficits, narrowing in most cases, while Russia has a surplus. Net FDI finances the total deficits in Albania, North Macedonia and Serbia. FDI financing is about half of the current account deficits in the other countries; other capital inflows fill the rest of the gap. Rapidly expanding current account deficits and a decreasing net FDI reveal mounting external financing problems in Moldova, Kosovo and Montenegro.

balance % of GDP	income in FDI	
	% income debit, %	relative to DI stock, %
017 2018	•	2018
2010	2011 201	2010
-2.0 -2.1	.0 88.6 72.	3.0
-6.9 -6.6	.1 63.8 64.	12.1
-4.2 -3.8	.2 44.3 62.	7.2
-2.5 -3.0	.3 55.0 43.	6.3
-6.0 -5.6	.5 36.8 36.	13.5
-3.9 -3.5	.4 53.7 44.	11.4
-3.9 -4.5	.6 83.7 84.	9.6
-3.5 -3.4	.7 53.1 66.	8.7
-3.1 -3.1	70.6 66.	7.7
-2.1 -2.2	.5 69.4 57.	8.5
-4.3 -4.1	.3 75.6 93.	8.3
-2.8 -2.8	.6	6.6
-1.4 -1.2	.6 .	1.6
-4.0 -4.1	.8 65.9 51.	8.8
-5.3 -4.5	.9 46.3 42.	5.9
-1.1 -1.0	.0 .	2.0
-0.3 -0.3	3 90.9 88.	2.3
-2.8 -3.1	.3 59.4 59.	9.3
-9.7 -11.6	.3 77.3 66.	13.3
-1.8 -1.9	.3 82.2 88.	5.3
		8.8
	-1.8 -1.9 1.6 1.7 5.3 5 -2.1 -2.7 2.3 1.8 6.0 8	-1.8 -1.9 1.6 1.7 5.3

Remark

Data refer to Balance of Payments asset/liability principle (BPM6).

FDI net is defined as net incurrence of liabilities minus net acquisition of financial assets.

Source: wiiw Annual Database incorporating national and Eurostat statistics.

¹⁷ All FDI data in this section are based on the asset/liability principle.

The income balance of foreign investors constitutes a high negative item in the current accounts of EU-CEE11, due to high profits earned by investors. It amounts to 6.6% of GDP in the Czech Republic and 5.6% in Hungary; and it hovers at between 2% and 4% in most other countries (Table 3). The negative effect of FDI-related income on the current account is compensated for by the export surplus generated by foreign subsidiaries in these countries. Some other CESEE economies experience increasingly negative balances of FDI-related earnings, which make a significant contribution to the current account imbalance.

The rate of return **earned by foreign investors on FDI capital** – FDI-related income outflow relative to inward FDI stock – exceeds 10% in some of the main FDI targets of the region (Table 3). The highest rate of return has been achieved in Russia (15%), Hungary and Kazakhstan (13%), followed by the Czech Republic with 12%. Countries with a lower level of development tend to have lower rates of return on FDI (Bulgaria, Kosovo), indicating that lower wage costs do not translate into higher profits for investors, as transaction costs are high.

The rate of return is **higher in EU-CEE11 countries than in the EU-15** (Figure 15 – note that data include SPEs). In the EU-28, the FDI-related income as a percentage of FDI stock is 5.6% on average, but there are substantial differences between countries. Countries with above-average FDI stock/GDP ratios (Finland and Ireland) tend to have higher rates of return than countries with low FDI penetration. The largest and most developed economies usually have the lowest FDI stock in relation to their GDP and a below-average rate of return on the FDI stock (Germany). In such cases, factors other than profitability (such as agglomeration or market presence) may be the main elements in the attraction of FDI. The outliers with very high FDI penetration but a low rate of return are Luxembourg and the Netherlands, which have exceptionally high FDI stocks in SPEs with no economic activity in the host economy. An acceleration of economic growth has been conducive to profit generation, and the rate of return has tended to increase over the past three years.

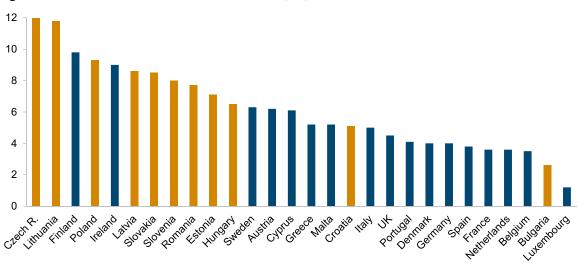


Figure 15 / Rate of return on inward FDI stock, %, 2017

Note: FDI income on inward FDI as a percentage of inward FDI stocks, including SPEs, based on the balance of payments and international investment position.

Source: Eurostat.

The repatriation rate of FDI-related income is about 60% on average (Table 3, last column); a higher rate occurs in countries with very low FDI inflows. In recent years, when FDI-related earnings were rising, the repatriation rate fell back. Also, corporate tax rates matter: investors repatriate more from high-tax countries, such as Slovakia, than from low-tax countries, such as Hungary. Reinvested earnings do not necessarily materialise in the form of physical investments: they may be kept on the books of subsidiaries, waiting for investment opportunities in the host or a different country.

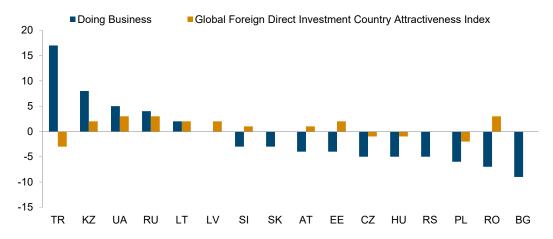
CHANGES IN THE QUALITY OF CESEE LOCATIONS

There are several international rankings dealing with the attractiveness of countries to business in general, and to FDI in particular. The results vary, mainly on the basis of the indicators taken into consideration in forming the composite index. We use two indicators and the change of a country's position, and also present the results of a German Chamber of Commerce and Industry (DIHK) survey.

The conditions for doing business are estimated by the **Doing Business indicator of the World Bank.**The indicator is the average of various areas of regulation: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency. **The Global Foreign Direct Investment Country Attractiveness Index (GFICA)** is a composite index of 60 indicators across three pillars (prerequisites, underlying factors, and differentiation and agglomeration economies). ¹⁸ Beyond investment location factors, the level of FDI attained is included among the indicators.

For several years now, North Macedonia, Lithuania and Estonia have had the best ranks among the CESEE countries on the Doing Business indicator. This indicates that small, business-friendly economies can establish a regulatory framework that is easy to handle. This does not mean, however, that these economies attract a lot of FDI. North Macedonia had similar rankings in previous years, when FDI was low due to a political crisis.

Figure 16 / Change in Doing Business ranking and Global Foreign Direct Investment Country Attractiveness Index ranking by number of places from 2017/18 to 2018/19



Source: http://www.doingbusiness.org/en/rankings, http://www.fdiattractiveness.com, wiiw calculations.

¹⁸ http://www.fdiattractiveness.com/index-methodology/

The change in the ranking (Figure 16) indicates that five economies climbed higher on the Doing Business ladder and 10 countries fell back. The big surprise is Turkey, which has advanced to 43rd place from 60th: in the Turkish country profile, the World Bank lists seven major areas that have seen legislative improvements. At the other extreme, Bulgaria fell from 50th to 59th, and Romania fell from 45th to 52nd. It is important to see that most of the countries with an improvement in the ranking did not received more FDI in 2018 than before and many of those with worse ranking received more.

CESEE countries are further behind in terms of the FDI GFICA ranking than on the Doing Business indicator. The best positions are occupied by Estonia (23rd) and the Czech Republic (24th). Hungary and Slovakia are some 10 places behind, while Romania and Russia are a further 10 places or so adrift. ¹⁹ Changes are generally small from one year to the next – at most one or two places up or down. Changes in FDI inflows do not correlate with the changes in the GFICA raking. It is also important to identify countries where the two rankings point in different directions. Turkey, for instance, has become a worse place for FDI, but a better place in terms of doing business in general; Romania has improved in terms of FDI attractiveness, but has become a worse place to do business. Such discrepancies are caused mainly by the methodology of complex indices.

The DIHK survey is based on the opinion of member companies.²⁰ According to it, the 2019 scores of the first 10 countries are quite close to each other: between 2.8 and 3.5, on a scale of 1–6, where 1 is the best. German companies consider Estonia the most attractive place to invest, closely followed by the Czech Republic (which came first the year before). The main advantage that the top two have over all the other countries is the quality of the workforce. Poland, and then Slovakia and Slovenia are all in strong positions. Investors see relatively more problems in the second half of the top-ten list – especially in Hungary and Romania, which have the worst scores. Beyond the first 10 countries, the ranking continues with a large gap to Serbia and Bulgaria. The most unattractive countries for German investors are Belarus, Bosnia and Herzegovina, Albania and Kosovo. Results are by and large in line with economic and institutional development.

It is interesting to see how German companies evaluate the major factors in Hungary (for which a detailed assessment has been published).²¹ The worst score is given for the factor 'economic policy', although scores have improved over the past five years. The share of respondents who think that the current government 'does its job well' has increased from 11% in 2015 to 24% in 2019, while the share of those who think it does its job badly has declined from 48% to 32%. The 'labour market' is somewhat better placed, but with a worsening tendency in terms of the availability of people and wage costs over several years (although this is better in 2019 than in 2018). The 'operative environment' gets the (relatively) best score, mainly due to satisfaction with the physical infrastructure.

¹⁹ See for details wiiw FDI Report 2018.

https://www.ahkungarn.hu/publikationen/konjunkturbericht/
Only outsiders' opinions were taken into consideration in the country ranking,

https://www.ahkungarn.hu/publikationen/konjunkturbericht/ Based on the survey within the country.

SOME LONG- AND SHORT-TERM TRENDS SHAPING THE FUTURE OF FDI

GROWTH ELASTICITIES AND THE ROLE OF GLOBAL VALUE CHAINS

Here we look at two important features forming global FDI flows: the relationship to economic growth and value chain development.

If we put the dynamics of FDI relative to trade and real growth into a broader historical context, we see some interesting patterns (Figure 17). In particular, the post-crisis period has been characterised by a lasting decline in the elasticity of both global trade and foreign direct investment relative to real GDP growth, compared to the booming pre-crisis period. Whether this is a permanent feature of the 'new normal' or a transitory development in light of the continued macroeconomic risks and uncertainties is not yet clear.

Real GDP in % (left scale) Elasticity of trade (left scale) Elasticity of FDI (right scale) 8 20 17.0 15.6 7 12.7 15 10.1 6 10 6.0 5 5 4 -1.7 -0.8 0 3 -5 2 2.6 -10 1 0.2 -9.6 1.3 1.0 1.1 -15 0 -17.5 -20 -1 2002 2003 2005

Figure 17 / Global economic growth and elasticities of trade and investment, 1990-2018

Note: elasticities are based on annual changes in trade volume and FDI inflows, relative to global real GDP growth rates. In 2009, global trade elasticity was 97.7; FDI elasticity was 192.6.

Source: IMF World Economic Outlook, UNCTAD, own calculations.

The nuanced interplay between trade and investment in the context of global value chains has also been shaping the dynamics of FDI. In the modern age of globalisation, production processes are increasingly organised in multiple stages of production (tasks), distributed across borders to achieve greater efficiency. A reduction in transportation and communication costs and a liberalisation of trade policies around the world have led to a rapid rise in trade in value added, thereby also stimulating cross-border direct investment flows. In general, FDI and participation in global value chains (GVC) have been strongly positively associated (Figure 18), as nowadays over two-thirds of global trade occurs via GVCs.

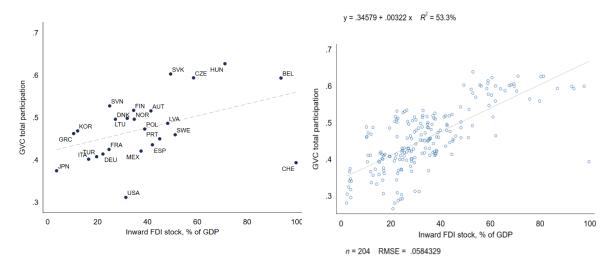


Figure 18 / Relationship between global value chain (GVC) participation and FDI

Note: The left panel shows the data for the year 2014. The right panel shows the relationship for the panel data over the period 2000-2014 with the fitted linear regression line. The outlier countries (Luxembourg and the Netherlands) are excluded. SPEs are excluded from FDI data.

Source: own computations based on OECD FDI data and WIOD data.

Recent developments in trade, however, are not especially promising. According to the World Trade Organization, in 2018 trade increased by 3%, less than expected. The slowdown is broad-based and associated with still weak demand from both advanced and developing economies, particularly in Europe and Asia. Strong headwinds to global trade persist, and it may slow further in 2019. The causality between FDI and GVC participation applies in both directions. The ability of a country to participate in global value chains is among the important factors attracting FDI inflows, and is therefore viewed as one of the key growth drivers, especially for small, open economies. In this regard, escalating trade tensions and growing protectionism amid increased economic uncertainty may reflect negatively on global value chains, and may thereby derail FDI activity.

POTENTIAL FDI IN CESEE - WHICH COUNTRIES HAVE ROOM TO ATTRACT MORE FDI?

Following the method introduced in the wiiw FDI Report 2017,²² we estimate the potential FDI of each CESEE country using the gravity model. Taking the econometric gravity model specified in Appendix B, we predict the FDI stocks in CESEE, using bilateral FDI stocks as a function of some country-level explanatory variables. The model explains the bilateral FDI stocks as determined by the size of the two partner countries, level of development, exchange rates, bilateral exports and imports as proxies for GVC and trade costs, and inflation. The difference between the actual inward FDI stocks and the predicted stock as the outcome of the model shows how well the country performed against the theoretical determinants of FDI. The relationship between the actual and the predicted FDI is called the FDI Performance Index normalised to 100. A positive score indicates the overperformance of actual FDI in relation to the predicted, and conversely a negative score indicates underperformance. The estimations were run for the period 2009–2017; however, the results are reported only for the period 2015–2017 in Figures 19 and 20.

²² Gábor Hunya and Monika Schwarzhappel (2018), Declines due to Disinvestment, wiiw FDI Report 2018, June.

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Figure 19 depicts the FDI Performance Index (the deviation of FDI stocks in each economy from the potential or model-predicted level) over the period 2015–2017. These indicators are derived from a model with time and bilateral fixed effects, which normalises the pattern of FDI for each bilateral FDI stock during the period, holding other variables constant. As the figure shows, seven of the EU-CEE11 countries underperformed in terms of their inward FDI stocks in 2017. Poland performed at about 21% below its model prediction. One can observe that Poland was gradually losing the level of inward FDI stocks that it had prior to the period of analysis. Hungary and Slovakia also observed a similar pattern, with very high overperformance prior to the period, but a gradual loss of attractiveness to FDI over the years of analysis. While Bulgaria and Romania underperformed in attracting FDI in 2017, their peak of FDI attractiveness was before the period of analysis. While the Czech Republic and Lithuania overperformed in attracting FDI in 2016, their level of actual FDI stocks in 2017 was slightly below their predicted outcome.

Croatia, which joined the EU in 2013, attracted so much FDI that its FDI stocks stood at above its model prediction in 2017. In fact, Croatia's FDI performance index has been above 100 ever since the country joined the EU and has gradually increased to 67% overperformance. While the average FDI stocks to GDP hovered around 50% for many years until 2014, it rose to 59% in 2017. This is why we observe a sudden huge overperformance in 2017. Slovenia, Latvia and Estonia are other countries that had FDI stocks at above the predictions of the gravity model in 2017.

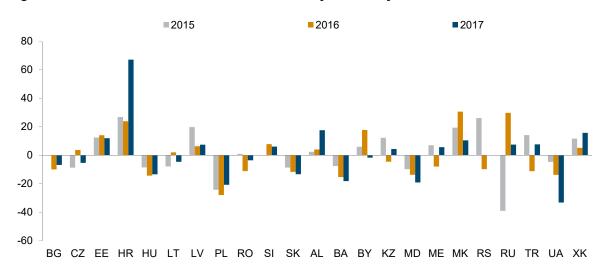
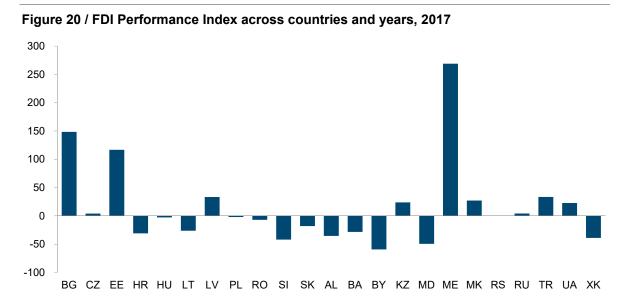


Figure 19 / FDI Performance Index of each country over the years 2015–2017

Source: Authors' estimations using World Development Indicators (WDI), CEPII, UN Comtrade, wiiw FDI Database.

As for the non-EU-CEE11 economies, only four countries performed at below their predicted levels in 2017. Ukraine's FDI stocks in 2017 were 33% below its model prediction. Moldova and Bosnia and Herzegovina had only about 81% and 82% of their predicted inward FDI stocks, respectively. And while Belarus had FDI stocks above the expected until 2016, the country underperformed slightly in 2017. In turn, Kazakhstan, Montenegro and Turkey attracted more FDI than predicted in 2017, while in 2016 they performed at below their potential. Russia and North Macedonia attracted more FDI than predicted in 2017. However, their overperformance in 2017 was slightly smaller than in 2016.



Source: Authors' estimations using World Development Indicators (WDI), CEPII, UN Comtrade, wiiw FDI Database.

Figure 20 shows the FDI Performance Index across host economies for 2015–2017. The figure is derived from a model with a fixed effect of FDI for each home economy in each year. Thus, the figure depicts the pattern of FDI for each host economy across normalised host economies in the global sample, holding other explanatory variables (such as GDP) constant.

Overperformance is highest in Montenegro and Bulgaria which have always attracted inward FDI far beyond their potential. For Montenegro the inward FDI stock is as much as 269% above its potential, while for Bulgaria it is 148% above the model-predicted level in 2017. Estonia, Latvia and the Czech Republic are other EU-CEE11 countries that are overperforming in attracting FDI above their model-predicted values. Among the non-EU-CEE11 countries, Turkey, Macedonia, Kazakhstan, Ukraine and Russia are performing at above their potential. The underperformers include countries not only Belarus and Moldova but also Croatia. Thus although this country improved its performance a lot in 2017 relative to its earlier performance the index is still below the average of the region.

ECONOMIC INDICATORS PREDICTING THE DECISION OF MULTINATIONAL ENTERPRISES TO UNDERTAKE FDI

Using the information available in the fDiMarkets database in a simple econometric exercise (see Appendix C for details) we assess how the determining factors elaborated in the literature affect the amount of pledged investment in greenfield projects. The following factors are relevant in determining the flows of FDI and initially the decision by MNEs to undertake investment abroad.

GDP: Usually the size of the host economy is an important factor for a potential investor. When the total size of the economy is measured by its GDP, the larger the GDP of the country, the more probable is the inward FDI to that country. In an econometric exercise, we find that size of the host economy matters for the amount of total capital pledged for investment and the capital pledged for expansion. When the real

GDP of an EU Member State increases by about 1%, the amount of FDI capital pledged to that state increases by about 1.44%.

Price levels: Price-level dynamics usually indicates the extent to which an economy is stable over time. If an economy is stable over time, it could attract investment. If prices in a country increase strongly, then an investor might feel there is a risk in evaluating his/her assets and also his/her expected profits in the future. Moreover, lower prices for intermediate inputs of production could reduce the cost of production, which could be reflected in higher investment. Our results show that price levels, excluding energy, have a negative relationship with pledged investment in various types of project. While the price indicator of a country has a negative impact on the decision of MNEs to invest in that country, the cost of energy in that country has a positive impact. Usually the price of crude oil has a direct relation with global market performance indicators.

Trade relations: One of the most important determining factors for FDI is trade cost. When trade cost is very high between two countries, tariff-jumping motives give rise to horizontal FDI. However, when trade costs are very low, MNEs try to vertically integrate their stages of production in different countries. The results of our analysis indicate that, while the import of goods into a host country in the sample has a positive relationship to the amount of pledged investment in that country, total goods export has a negative relationship. It could be an indication that a greater volume of imports shows low protection on imports, and generally that trade costs to a country are very low. This low import protectionism enables MNEs to send intermediate inputs (originating from any upstream sectors around the globe) to the host country, to be used in the next stages of production in the MNEs' subsidiaries in the host economy.

Economic Sentiment Indicator (ESI):²³ Another important indicator that is used in our analysis is the perception of enterprises regarding the economic performance of a given country. An interesting result is related to the relationship between ESI and the announcement of investments by MNEs. When ESI increases in a country, after six months MNEs decide to look at new greenfield investment projects. Therefore, if ESI increases by 1pp, the amount pledged for investment in new greenfield projects should increase by about 1% in the next six months. However, for the expansion of projects in the host economy, the impact of ESI is immediate. This means that when ESI increases by 1pp in a country, then in the very same quarter the announced investment on the extension of greenfield projects increases by about 1.1%. For the co-location of projects announced by MNEs, many of the determinants are statistically insignificant, but ESI also has an immediate, significant and positive impact of greater magnitude.

Using the results of the analysis and the impact of ESI in previous quarters, we can predict the possible amount of pledged investment in the first two quarters of 2019. Given that the ESI parameters are regularly published by Eurostat, we can predict the amount of pledged investment in different types of project in the first two quarters of 2019. Although we do not have any information regarding other variables, we can still assume that those variables remain unchanged; changes in the ESI in the past two quarters mean that we can predict the amount of possible investment.

The shaded area in Table 4 presents our prediction for new greenfield investment projects announced in the first and second quarters of 2019 in EU-CEE11. The results are obtained using the ESI in the first

https://ec.europa.eu/info/business-economy-euro/indicators-statistics/economic-databases/business-and-consumersurveys/latest-business-and-consumer-surveys_en_

and second quarters of 2019, while other variables are held constant, at the 2018 level. According to these results, announced investment for new projects in Bulgaria and Croatia will drop slightly in 2019, as economic confidence in these countries dropped slightly in the early months of 2019. However, in most other countries, announced FDI may increase slightly, due to changes in business confidence in these host economies.

Table 4 / Announced capital investment in new greenfield projects in EUR million, actual values for 2018 and predictions for 2019, selected EU-CEE11 countries

Time	BG	CZ	EE	HR	HU	LT	LV	PL	RO	SI
2018Q1	155.7	206.0	108.4	333.5	389.3	450.0	111.4	1,955.3	599.2	
2018Q2	687.9	207.5	497.2	30.5	302.9	33.5	14.3	876.2	136.7	59.5
2018Q3	249.1	369.3	91.0		1,567.8	359.4	463.4	2,914.7	683.4	73.0
2018Q4	269.9	187.9	45.2	61.9	416.5	159.5	350.3	3,181.5	1,148.5	73.5
2019Q1	267.3	187.0	46.5		417.5	163.0	354.6	3,248.7	1,143.8	72.8
2019Q2	258.5	190.0	46.0	60.8	416.9	161.8	360.2	3,270.1	1,156.9	73.4

Note: Country selection based on data availability.

Source: Own calculation based on fDiMarkets database.

Table 5 shows a similar prediction for the extension of greenfield investment projects. As may be observed, the pledged investment in greenfield extension projects might drop slightly in most EU-CEE11 countries, due to a current decline in ESI.

Table 5 / Announced capital investment in greenfield extension projects in EUR million, actual values for 2018 and predictions for 2019, selected EU-CEE11 countries

Time	BG	CZ	EE	HU	LT	LV	PL	RO	SI
2018Q1	382.0	323.6	3.3	923.6	492.8	1.1	1,970.8	677.2	9.7
2018Q2	26.0	198.6	25.5	20.1	22.2	-	477.8	99.1	
2018Q3	27.6	201.5		265.2	54.3	91.7	1,131.6	1,209.7	32.8
2018Q4	173.2	663.8		278.8	58.8	4.2	650.7	186.0	135.4
2019Q1	170.5	657.4		278.7	58.0	4.2	634.7	187.3	135.3
2019Q2	171.8	647.0		276.7	58.2	4.1	615.8	185.6	130.7

Note: Country selection based on data availability. Source: Own calculation based on fDiMarkets database.

Overall, since economic confidence across EU-CEE11 is declining gradually, we expect lower flows of FDI to these countries in the future. This might also indicate a slight slowdown in general investment in EU-CEE11, which may consequently lead to lower GDP, if the prospects for economic performance do not improve. As one of the most important indicators used in the calculation of ESI, the Industrial Confidence Indicator is also closely related to the pledged investments, with similar coefficients estimated by the model. Since January 2018, industrial confidence has gradually decreased, by about 13 points across the EU-28, reflecting the slide in business and production conditions. This should send a strong signal to policy makers in the EU.

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Appendix A: Foreign direct investment data on Central, East and Southeast European countries

Table A1 / FDI inflow

	2011	2012	2013	2014	2015	2016	2017	2018
BG Bulgaria	1,476	1,321	1,384	347	2,399	1,004	2,314	1,744
CZ Czech Republic	1,668	6,217	2,769	4,141	419	8,873	8,454	8,032
EE Estonia	723	1,218	565	503	14	1,015	1,519	1,109
HR Croatia	1,222	1,175	724	2,171	243	1,634	1,808	982
HU Hungary 1)	1,557	3,942	1,926	5,030	2,065	3,596	4,828	5,547
LT Lithuania	1,040	545	353	-18	785	239	579	767
LV Latvia	1,045	863	680	588	638	157	650	745
PL Poland	11,453	9,667	2,730	10,755	13,758	14,181	8,147	9,726
RO Romania	1,700	2,489	2,713	2,421	3,461	4,517	4,797	4,988
SI Slovenia	782	264	-114	791	1,510	1,126	694	1,201
SK Slovakia	2,512	2,321	-455	-386	96	728	2,020	403
EU-CEE11	25,179	30,022	13,273	26,342	25,387	37,070	35,810	35,244
	·							
AL Albania	630	666	953	837	852	994	1,017	1,096
BA Bosnia and Herzegovina	357	307	208	415	326	288	398	396
ME Montenegro	401	482	337	375	630	205	494	415
MK North Macedonia	344	111	252	205	217	338	182	624
RS Serbia	3,548	1,011	1,546	1,505	2,116	2,125	2,548	3,495
XK Kosovo	394	229	280	151	309	220	255	214
WB6	5,675	2,806	3,577	3,487	4,450	4,171	4,894	6,240
TR Turkey	11,576	10,341	10,212	10,039	17,372	12,603	10,220	10,994
BY Belarus	2,787	1,110	1,690	1,418	1,521	1,125	1,132	1,249
KZ Kazakhstan	10,037	10,376	7,769	6,389	3,659	7,692	4,133	3,235
	248	188	176	254	205	7,092	4,133	193
MD Moldova UA Ukraine ²⁾	5,177	6,536	3,389	310	2,670	2,966	2,306	1,993
CIS3+UA								
CISSTUA	18,250	18,210	13,024	8,372	8,055	11,864	7,716	6,670
RU Russia	26,476	23,483	40,196	22,037	10,664	33,568	22,990	11,311
CESEE23	87,157	84,863	80,282	70,277	65,927	99,275	81,630	70,459

Remarks:

Data refer to BPM6 directional principle unless otherwise stated; data exclude Special Purpose Entities (SPEs).

Vertical line: marks the year until which BPM5 is used.

Grey background: data are based on asset/liability principle (BOP).

1) Excluding capital in transit and restructuring of asset portfolios. - 2) From 2014 excluding the occupied territories of Crimea and Sevastopol.

Table A2 / FDI outflow

	2011	2012	2013	2014	2015	2016	2017	2018
BG Bulgaria	287	253	141	201	158	388	315	328
CZ Czech Republic	-236	1,394	3,055	1,221	2,243	1,973	6,712	4,472
EE Estonia	-1,046	820	387	32	139	482	660	-18
HR Croatia	102	-67	-126	1,480	10	-305	611	300
HU Hungary 1)	511	1,473	788	2,082	852	1,290	2,849	1,782
LT Lithuania	40	305	144	-22	76	98	30	710
LV Latvia	44	150	310	293	61	134	125	128
PL Poland	738	2,257	-340	2,184	4,501	10,484	2,450	732
RO Romania	-20	-89	-211	-282	507	4	-86	11
SI Slovenia	143	-201	-161	207	241	262	279	70
SK Slovakia	513	7	-236	32	5	86	310	198
EU-CEE11	1,076	6,302	3,750	7,429	8,793	14,895	14,255	8,714
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AL Albania	21	18	30	25	34	58	23	70
BA Bosnia and Herzegovina	13	48	33	14	66	32	67	15
ME Montenegro	12	21	13	21	11	-167	10	87
MK North Macedonia	0	-20	23	8	14	22	2	3
RS Serbia	228	258	248	268	312	226	130	308
XK Kosovo	16	16	30	27	37	43	43	44
WB6	290	341	377	363	474	212	276	527
TR Turkey	1,674	3,196	2,738	5,307	4,593	2,835	2,391	3,089
BY Belarus	87	94	186	30	111	103	62	30
KZ Kazakhstan	3,872	1,152	1,721	2,871	717	-4,731	808	-935
MD Moldova	16	13	17	28	17	8	12	26
UA Ukraine ²⁾	138	938	316	84	-46	14	7	-4
CIS3+UA	4,114	2,198	2,241	3,013	800	-4,605	889	-882
RU Russia	34,926	22,110	53,210	48,534	24,362	24,336	30,253	30,919
CESEE23	42,080	34,147	62,316	64,646	39,022	37,673	48,064	42,367

Remarks:

Data refer to BPM6 directional principle unless otherwise stated; data exclude Special Purpose Entities (SPEs).

Vertical line: marks the year until which BPM5 is used.

Grey background: data are based on asset/liability principle (BOP).

1) Excluding capital in transit and restructuring of asset portfolios. - 2) From 2014 excluding the occupied territories of Crimea and Sevastopol.

Table A3 / FDI net

	2011	2012	2013	2014	2015	2016	2017	2018
BG Bulgaria	1,189	1,068	1,243	146	2,241	615	1,999	1,416
CZ Czech Republic	1,904	4,823	-286	2,920	-1,823	6,901	1,742	3,560
EE Estonia	1,769	398	178	470	-126	534	860	1,128
HR Croatia	1,120	1,242	850	691	233	1,940	1,197	682
HU Hungary 1)	1,047	2,469	1,138	2,948	1,213	2,307	1,978	3,764
LT Lithuania	1,001	240	209	5	708	141	549	57
LV Latvia	1,001	713	370	295	577	23	525	617
PL Poland	10,715	7,410	3,070	8,570	9,258	3,697	5,698	8,994
RO Romania	1,720	2,578	2,924	2,702	2,954	4,513	4,883	4,977
SI Slovenia	640	466	47	584	1,269	864	415	1,132
SK Slovakia	1,998	2,314	-219	-418	90	642	1,710	204
EU-CEE11	24,103	23,720	9,523	18,913	16,594	22,175	21,555	26,531
AL Albania	609	648	923	812	818	936	994	1,026
BA Bosnia and Herzegovina	345	259	175	401	260	257	330	381
ME Montenegro	389	462	324	354	619	372	484	328
MK North Macedonia	345	131	229	197	203	317	180	622
RS Serbia	3,320	753	1,298	1,236	1,804	1,899	2,418	3,187
XK Kosovo	378	213	250	124	272	177	212	170
WB6	5,385	2,466	3,199	3,124	3,976	3,958	4,618	5,713
TR Turkey	9,903	7,145	7,475	4,732	12,779	9,768	7,829	7,905
BY Belarus	2,700	1,016	1,504	1,388	1,409	1,021	1,070	1,218
KZ Kazakhstan	6,165	9,223	6,048	3,518	2,942	12,422	3,325	4,170
MD Moldova	232	174	159	227	188	74	133	167
UA Ukraine ²⁾	5,039	5,598	3,072	226	2,716	2,951	2,299	1,997
CIS3+UA	14,136	16,012	10,783	5,359	7,255	16,469	6,826	7,552
RU Russia	-8,450	1,373	-13,014	-26,497	-13,698	9,232	-7,263	-19,608
CESEE23	45,076	50,716	17,967	5,631	26,906	61,602	33,566	28,092

Remarks:

FDI net means FDI inflow minus outflow.

Data refer to BPM6 directional principle unless otherwise stated; data exclude Special Purpose Entities (SPEs).

Vertical line: marks the year until which BPM5 is used.

Grey background: data are based on asset/liability principle (BOP).

1) Excluding capital in transit and restructuring of asset portfolios. - 2) From 2014 excluding the occupied territories of Crimea and Sevastopol.

Table A4 / Inward FDI stock

		2011	2012	2013	2014	2015	2016	2017	2018
BG	Bulgaria	35,304	36,846	36,475	37,445	39,981	40,788	42,564	43,036
CZ	Czech Republic	93,184	103,456	97,311	100,076	107,129	115,627	130,042	135,390
EE	Estonia	12,636	14,352	15,840	16,841	16,966	18,274	19,925	21,259
HR	Croatia	21,800	22,469	21,650	23,873	23,838	26,185	27,907	28,720
HU	Hungary	66,009	78,892	78,870	81,941	77,678	76,203	75,645	73,980
LT	Lithuania	11,029	12,101	12,720	12,747	13,497	13,926	14,816	15,500
LV	Latvia	9,360	10,258	11,570	12,415	13,540	13,504	14,605	15,118
PL	Poland	127,220	150,843	166,441	174,018	170,257	178,294	199,053	210,000 1)
RO	Romania	53,723	57,851	59,957	60,198	64,433	70,113	75,851	81,620
SI	Slovenia	8,880	9,249	8,897	10,202	11,612	12,971	13,675	14,680
SK	Slovakia	40,173	41,780	42,072	40,969	42,265	45,150	46,559	49,877
	EU-CEE11	479,318	538,096	551,801	570,725	581,195	611,034	660,641	689,180
AL	Albania	3,400	3,262	2,850	3,538	3,983	4,729	5,619	6,901
ВА	Bosnia and Herzegovina	5,508	5,733	5,968	5,986	6,380	6,563	6,876	7,100 1)
ME	Montenegro	3,253	3,567	3,729	3,990	4,483	4,337	4,440	4,600 1)
MK	North Macedonia	3,615	3,686	3,980	4,024	4,400	4,657	4,698	5,206
RS	Serbia	19,070	19,716	22,834	24,355	26,704	28,811	31,329	34,788
XK	Kosovo	2,326	2,524	2,816	2,961	3,254	3,405	3,526	3,598
	WB6	37,173	38,488	42,178	44,854	49,205	52,503	56,489	62,194
TR	Turkey	105,491	144,019	110,813	151,678	146,568	143,082	164,782	118,494
BY	Belarus	10,048	11,011	12,120	14,617	16,440	17,835	16,580	18,129
ΚZ	Kazakhstan	83,084	90,362	91,087	108,544	121,901	136,434	122,781	130,512
MD	Moldova	2,665	2,621	2,469	2,706	2,679	2,854	3,096	3,554
UA	Ukraine ²⁾	45,507	49,398	48,524	40,859	39,371	40,255	36,241	35,228
	CIS3+UA	141,304	153,393	154,199	166,725	180,391	197,379	178,698	187,424
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RU	Russia	316,005	330,797	343,148	238,771	240,264	374,465	368,937	356,147
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	CESEE23	1,079,290 ′	1,204,792 1	1,202,139	1,172,752	1,197,624	1,378,462	1,429,547	1,413,439

Remarks:

Data refer to BPM6 directional principle unless otherwise stated; data exclude Special Purpose Entities (SPEs).

Vertical line: marks the year until which BPM5 is used.

Grey background: data are based on asset/liability principle (IIP).

¹⁾ wiiw estimate. - 2) From 2014 excluding the occupied territories of Crimea and Sevastopol.

Table A5 / Outward FDI stock

		2011	2012	2013	2014	2015	2016	2017	2018
BG	Bulgaria	2,222	2,438	2,549	1,531	1,701	2,133	2,305	2,369
CZ	Czech Republic	10,213	13,164	15,009	15,019	17,077	18,433	26,980	30,356
EE	Estonia	3,714	4,596	4,998	4,785	5,186	5,735	6,512	6,945
HR	Croatia	3,629	3,471	3,254	4,710	5,078	4,764	5,114	5,794
HU	Hungary	20,389	28,609	27,833	33,463	32,596	23,622	25,045	23,095
LT	Lithuania	1,607	1,953	2,372	2,287	2,397	2,549	2,944	3,696
LV	Latvia	668	844	1,160	1,120	1,417	1,518	1,592	1,741
PL	Poland	14,645	19,790	20,140	22,839	25,167	26,332	24,951	25,000 ¹
RO	Romania	1,050	984	616	264	745	727	632	622
SI	Slovenia	6,049	5,710	5,179	5,335	5,508	5,741	5,909	5,894
SK	Slovakia	3,108	3,612	3,502	2,323	2,262	2,495	2,840	3,222
	EU-CEE11	67,293	85,170	86,611	93,676	99,135	94,051	104,824	108,735
AL	Albania	133	147	174	204	336	386	393	492
ВА	Bosnia and Herzegovina	157	229	267	281	348	379	446	450 ¹
ME	Montenegro ²⁾	293	314	327	347	358	191	202	289
MK	North Macedonia	94	72	112	121	104	77	67	70
RS	Serbia	1,616	1,671	2,061	2,329	2,643	2,869	2,999	3,323
XK	Kosovo	102	118	147	175	212	261	305	349
	WB6	2,395	2,551	3,088	3,457	4,000	4,164	4,411	4,973
TR	Turkey	21,393	23,472	24,407	32,891	33,295	37,437	39,557	44,617
BY	Belarus	227	344	527	522	643	739	731	751
ΚZ	Kazakhstan	17,595	17,273	16,999	20,990	24,458	22,382	17,145	14,626
MD	Moldova	69	82	88	134	165	182	187	223
UA	Ukraine 3)	5,104	5,850	5,665	6,218	6,812	7,145	6,262	5,982
	CIS3+UA	22,995	23,549	23,278	27,863	32,078	30,448	24,324	21,581
RU	Russia	243,986	251,259	280,444	271,517	258,464	317,773	317,856	300,830
	CESEE23	358,062	386,001	417,830	429,405	426,973	483,873	490,972	480,736

Remarks

Data refer to BPM6 directional principle unless otherwise stated; data exclude Special Purpose Entities (SPEs).

Vertical line: marks the year until which BPM5 is used.

Grey background: data are based on asset/liability principle (IIP).

1) wiiw estimate. - 2) Cumulated outflows. - 3) From 2014 excluding occupied territories of Crimea and Sevastopol.

Table A6 / FDI inflow per capita

EUR

		2011	2012	2013	2014	2015	2016	2017	2018
BG	Bulgaria	201	181	190	48	334	141	327	248
CZ	Czech Republic	159	591	263	393	40	840	798	756
EE	Estonia	544	921	428	382	10	772	1,153	839
	Croatia	285	275	170	512	58	392	438	240
HU	Hungary	156	397	195	510	210	366	493	568
LT	Lithuania	344	182	119	-6	270	83	205	274
LV	Latvia	508	424	338	295	323	80	335	386
PL	Poland	297	251	71	279	358	369	212	253
RO	Romania	84	124	136	122	175	229	245	256
SI	Slovenia	381	128	-55	384	732	545	336	580
	Slovakia	465	429	-84	-71	18	134	371	74
	EU-CEE11	241	288	127	253	245	358	347	342
AL	Albania	217	230	329	290	296	346	354	382
ВА	Bosnia and Herzegovina	93	80	59	118	93	82	113	113
ME	Montenegro	647	777	542	602	1,013	329	794	664
MK	North Macedonia	167	54	122	99	105	163	88	298
RS	Serbia	490	140	216	211	298	301	363	500
XK	Kosovo	219	127	154	83	173	124	143	118
	WB6	307	152	198	193	248	233	274	349
TR	Turkey	156	138	134	130	222	159	127	135
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ВΥ	Belarus	294	117	179	150	160	118	119	132
ΚZ	Kazakhstan	606	618	456	370	209	432	229	177
MD	Moldova	70	53	49	72	58	23	41	54
UA	Ukraine	113	143	74	7	62	70	54	47
	CIS3+UA	242	241	172	114	110	161	105	91
RU	Russia	185	164	280	151	73	229	157	77
	CESEE23	210	204	192	168	157	236	194	167

Remarks:

 $\label{lem:methodological} \mbox{Methodological remarks on BPM6/BPM5} \mbox{ and the applied concept are given in Table A1}.$

Source: wiiw calculations based on Table A1 and wiiw Annual Database.

Table A7 / Inward FDI stock per capita

EUR

		2011	2012	2013	2014	2015	2016	2017	2018
BG	Bulgaria	4,818	5,058	5,034	5,199	5,589	5,743	6,027	6,148
CZ	Czech Republic	8,870	9,838	9,257	9,496	10,151	10,930	12,256	12,713
EE	Estonia	9,535	10,872	12,038	12,808	12,893	13,890	15,104	16,059
HR	Croatia	5,098	5,272	5,098	5,650	5,688	6,303	6,797	7,014
HU	Hungary	6,646	7,962	7,985	8,314	7,902	7,778	7,736	7,577
LT	Lithuania	3,672	4,072	4,321	4,363	4,673	4,890	5,275	5,548
LV	Latvia	4,577	5,069	5,781	6,251	6,877	6,925	7,550	7,851
PL	Poland	3,301	3,915	4,324	4,522	4,429	4,639	5,179	5,467
RO	Romania	2,673	2,890	3,006	3,030	3,261	3,569	3,884	4,192
SI	Slovenia	4,320	4,492	4,316	4,945	5,625	6,278	6,616	7,080
SK	Slovakia	7,434	7,722	7,768	7,557	7,789	8,307	8,554	9,151
	EU-CEE11	4,586	5,159	5,303	5,494	5,611	5,914	6,408	6,694
AL	Albania	1,171	1,126	985	1,226	1,385	1,644	1,958	2,411
ВА	Bosnia and Herzegovina	1,435	1,495	1,691	1,700	1,815	1,871	1,964	2,030
ME	Montenegro	5,245	5,745	6,000	6,413	7,205	6,969	7,134	7,329
MK	North Macedonia	1,755	1,787	1,927	1,945	2,124	2,246	2,264	2,484
RS	Serbia	2,642	2,744	3,194	3,423	3,774	4,092	4,475	4,991
XK	Kosovo	1,293	1,390	1,547	1,641	1,837	1,909	1,961	1,969
	WB6	2,016	2,090	2,333	2,489	2,744	2,932	3,161	3,478
TR	Turkey	1,412	1,904	1,445	1,952	1,861	1,793	2,039	1,445
BY	Belarus	1,062	1,164	1,280	1,542	1,731	1,876	1,747	1,913
ΚZ	Kazakhstan	4,983	5,344	5,308	6,233	6,899	7,614	6,762	7,095
MD	Moldova	749	736	694	761	754	803	873	1,002
UA	Ukraine	997	1,084	1,068	952	921	945	855	836
	CIS3+UA	1,876	2,032	2,039	2,272	2,455	2,683	2,429	2,547
RU	Russia	2,209	2,308	2,388	1,632	1,640	2,551	2,512	2,426
	CESEE23	2,594	2,888	2,875	2,797	2,850	3,271	3,386	3,340

Remarks:

Methodological remarks on BPM6/BPM5 and the applied concept are given in Table A4.

Source: wiiw calculations based on Table A4 and wiiw Annual Database.

Table A8 / FDI inflow as a percentage of gross fixed capital formation

in %

		2011	2012	2013	2014	2015	2016	2017	2018
BG	Bulgaria	17.1	14.8	15.6	3.8	25.2	11.2	24.2	16.6
CZ	Czech Republic	3.8	14.9	7.0	10.5	0.9	20.2	17.8	14.8
EE	Estonia	16.5	23.8	10.7	9.8	0.3	20.4	26.3	18.1
HR	Croatia	13.5	13.6	8.4	26.0	2.8	17.5	18.4	9.5
HU	Hungary	7.8	20.6	9.1	21.5	8.3	16.1	17.5	16.5
LT	Lithuania	18.0	9.4	5.5	-0.3	10.7	3.2	7.1	8.8
LV	Latvia	23.3	15.4	12.8	11.0	11.8	3.2	11.5	11.1
PL	Poland	14.6	12.5	3.7	13.3	15.9	18.5	9.9	10.8
RO	Romania	4.7	6.8	7.6	6.6	8.7	11.6	11.4	11.6
SI	Slovenia	10.5	3.8	-1.6	10.9	20.6	15.9	8.7	13.3
	Slovakia	14.8	15.0	-3.0	-2.4	0.5	4.2	11.1	2.0
	EU-CEE11	10.7	13.0	5.8	11.1	9.8	15.3	13.6	12.0
		-							
AL	Albania	23.2	26.2	38.0	34.7	34.0	38.1	35.9	35.6
ВА	Bosnia and Herzegovina	14.4	12.3	8.5	15.2	12.5	10.9	13.8	12.4
ME	Montenegro	63.0	76.8	49.7	57.0	85.6	20.9	42.7	30.3
MK	North Macedonia	19.4	6.3	13.1	10.2	10.0	14.4	8.3	27.4
RS	Serbia	57.2	14.9	25.8	26.6	35.3	34.1	36.6	43.8
XK	Kosovo	26.7	17.4	21.2	11.7	20.6	14.2	14.8	10.9
	WB6	37.1	18.0	24.0	23.6	28.7	25.5	27.6	31.4
TR	Turkey	6.9	5.6	5.0	4.9	7.6	5.5	4.5	5.7
ВΥ	Belarus	19.4	6.5	8.0	7.0	10.5	10.2	8.9	9.5
ΚZ	Kazakhstan	33.8	28.1	19.9	17.8	9.6	27.3	13.1	9.1
MD	Moldova	17.7	11.7	10.7	13.7	12.1	5.1	7.7	8.3
UA	Ukraine	23.2	23.7	13.6	2.2	24.0	22.8	14.7	10.5
	CIS3+UA	26.9	21.9	15.0	11.6	12.3	22.0	12.5	9.5
RU	Russia	9.1	6.4	10.7	6.5	4.2	13.2	7.4	3.8
	CESEE23	11.2	9.6	8.8	8.1	8.0	12.5	9.3	8.0

Remark:

Methodological remarks on BPM6/BPM5 and the applied concept are given in Table A1.

Source: wiiw calculations based on Table A1 and wiiw Annual Database.

Table A9 / FDI inflow as a percentage of GDP

in %

		2011	2012	2013	2014	2015	2016	2017	2018
BG	Bulgaria	3.6	3.1	3.3	0.8	5.3	2.1	4.5	3.2
CZ	Czech Republic	1.0	3.9	1.8	2.6	0.2	5.0	4.4	3.9
EE	Estonia	4.3	6.8	3.0	2.5	0.1	4.7	6.4	4.3
HR	Croatia	2.7	2.7	1.7	5.0	0.5	3.5	3.7	1.9
HU	Hungary	1.5	4.0	1.9	4.8	1.9	3.2	3.9	4.2
LT	Lithuania	3.3	1.6	1.0	0.0	2.1	0.6	1.4	1.7
LV	Latvia	5.2	3.9	3.0	2.5	2.6	0.6	2.4	2.5
PL	Poland	3.0	2.5	0.7	2.6	3.2	3.3	1.7	2.0
RO	Romania	1.3	1.9	1.9	1.6	2.2	2.7	2.6	2.5
SI	Slovenia	2.1	0.7	-0.3	2.1	3.9	2.8	1.6	2.6
SK	Slovakia	3.6	3.2	-0.6	-0.5	0.1	0.9	2.4	0.4
	EU-CEE11	2.4	2.9	1.2	2.4	2.2	3.1	2.8	2.6
AL	Albania	6.8	6.9	9.9	8.4	8.3	9.3	8.8	8.6
ВА	Bosnia and Herzegovina	2.7	2.3	1.5	3.0	2.2	1.9	2.5	2.4
	Montenegro	12.3	15.2	10.0	10.8	17.4	5.2	11.5	9.0
MK	North Macedonia	4.6	1.5	3.1	2.4	2.4	3.5	1.8	5.8
RS	Serbia	10.0	3.0	4.2	4.2	5.9	5.8	6.5	8.2
XK	Kosovo	8.2	4.5	5.3	2.7	5.3	3.6	4.1	3.3
	WB6	7.7	3.9	4.7	4.5	5.6	5.1	5.6	6.6
TR	Turkey	1.9	1.5	1.4	1.4	2.2	1.6	1.4	1.7
BY	Belarus	7.3	2.2	3.0	2.3	3.0	2.6	2.3	2.5
ΚZ	Kazakhstan	7.3	6.4	4.4	3.8	2.2	6.2	2.9	2.2
MD	Moldova	4.1	2.8	2.5	3.6	2.9	1.1	1.7	2.0
UA	Ukraine	4.3	4.6	2.4	0.3	3.3	3.5	2.3	1.8
	CIS3+UA	6.0	5.0	3.4	2.5	2.6	4.6	2.6	2.1
RU	Russia	1.9	1.4	2.3	1.4	0.9	2.9	1.6	0.8
	CESEE23	2.6	2.2	2.0	1.9	1.9	2.9	2.1	1.8

Remark:

Methodological remarks on BPM6/BPM5 and the applied concept are given in Table A1.

Source: wiiw calculations based on Table A1 and wiiw Annual Database.

Table A10 / Inward FDI stock as a percentage of GDP

in %

	2011	2012	2013	2014	2015	2016	2017	2018
BG Bulgaria	85.5	87.8	87.1	87.4	88.3	84.7	82.4	78.0
CZ Czech Republic	56.8	64.1	61.7	63.9	63.6	65.6	67.8	65.5
EE Estonia	75.8	80.0	83.7	84.0	82.2	84.3	84.4	82.9
HR Croatia	48.6	51.1	49.5	55.0	53.4	56.1	57.0	55.8
HU Hungary	65.2	79.3	77.4	77.6	70.0	66.9	61.0	56.1
LT Lithuania	35.3	36.3	36.4	34.9	36.1	35.8	35.1	34.3
LV Latvia	46.3	46.5	50.7	52.6	55.7	53.9	54.0	51.2
PL Poland	33.5	38.7	42.2	42.3	39.6	41.8	42.6	42.3
RO Romania	40.7	43.4	41.7	40.0	40.2	41.1	40.5	40.2
SI Slovenia	24.1	25.6	24.5	27.1	29.9	32.1	31.8	31.9
SK Slovakia	56.9	57.5	56.7	53.8	53.4	55.6	54.9	55.3
EU-CEE11	46.1	51.2	51.5	51.7	50.1	51.4	51.1	49.9
AL Albania	36.7	34.0	29.6	35.5	38.8	44.1	48.6	54.1
BA Bosnia and Herzegovina	41.1	42.8	43.6	42.8	43.6	42.9	42.9	42.4
ME Montenegro	99.6	112.1	110.9	115.4	123.7	109.7	103.3	99.6
MK North Macedonia	47.9	48.6	48.8	47.0	48.5	48.2	46.9	48.5
RS Serbia	53.8	58.5	62.7	68.7	74.8	78.5	80.0	81.3
XK Kosovo	48.3	49.9	52.9	53.2	56.0	56.1	56.1	55.1
WB6	50.4	53.1	55.1	58.2	62.2	63.7	64.6	66.0
TR Turkey	17.7	21.2	15.5	21.6	19.0	18.3	21.9	18.3
								70.0
BY Belarus	26.3	21.7	21.4	24.0	32.6	41.3	34.2	35.8
KZ Kazakhstan	60.0	55.8	51.1	65.1	73.3	110.0	85.2	90.3
MD Moldova	44.1	38.7	34.5	37.8	38.4	39.1	36.5	37.1
UA Ukraine	37.4	34.8	33.8	40.5	48.0	47.7	36.4	31.8
CIS3+UA	46.4	42.4	40.0	49.7	59.0	76.3	59.5	59.4
RU Russia	23.1	19.4	19.8	15.3	19.6	32.3	26.4	25.3
CESEE23	31.9	31.1	30.2	31.0	33.8	39.7	37.3	36.8

Remark:

 $\label{lem:methodological remarks on BPM6/BPM5} \ \ \text{and the applied concept are given in Table A4}.$

Source: wiiw calculations based on Table A4 and wiiw Annual Database.

Table A11	/ FDI	inflow by	y com	ponents
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\vdash	IJЬ	? mi	Ш	ınn

EUR million								
	2011	2012	2013	2014	2015	2016	2017	2018
Bulgaria								
FDI inflow, total	1,476	1,321	1,384	347	2,399	1,004	2,314	1,744
Equity other than reinvestment of earnings	1,128	1,087	1,229	1,035	1,586	246	-118	860
Reinvestment of earnings	-174	-367	125	-1,036	936	1,065	981	357
Debt instruments	522	601	30	349	-122	-308	1,451	527
Czech Republic								
FDI inflow, total	1,668	6,217	2,769	4,141	419	8,873	8,454	8,032
Equity other than reinvestment of earnings	-780	2,565	1,314	-198	484	3,219	1,840	267
Reinvestment of earnings	1,546	3,103	3,332	2,748	2,783	3,159	6,708	5,845
Debt instruments	902	548	-1,877	1,591	-2,848	2,495	-94	1,921
Estonia 1)								,
FDI inflow, total	723	1,218	579	516	32	991	1,519	1,109
Equity other than reinvestment of earnings	-536	310	-59	105	-1,068	25	412	-211
Reinvestment of earnings	1,209	919	802	893	547	814	809	568
Debt instruments	50	-11	-164	-482	553	152	299	752
Croatia			101	102		102		102
FDI inflow, total	1,222	1,175	724	2,171	243	1,634	1,808	982
Equity other than reinvestment of earnings	1,846	790	662	2,231	1,962	676	590	647
Reinvestment of earnings	277	255	-297	-188	-791	1,099	640	1,012
Debt instruments	-900	130	359	128	-928	-140	578	-677
Hungary ²⁾	-900	130	338	120	-920	-140	3/0	-011
FDI inflow, total	1,557	3,942	1,926	5,030	2,065	3,596	4,828	5,547
	430	1,916	2,191	357	-458	3,396	-245	-677
Equity other than reinvestment of earnings Reinvestment of earnings								
-	1,226	1,462	1,531	3,802	3,962	4,010	6,204	6,303
Debt instruments	-98	564	-1,797	870	-1,440	-560	-1,131	-79
Lithuania	4.044	E 4 E	0.50	40	705	000	F70	707
FDI inflow, total	1,041	545	353	-18	785	239	579	767
Equity other than reinvestment of earnings	175	250	130	908	169	620	-34	28
Reinvestment of earnings	734	76	303	-149	770	127	818	979
Debt instruments	131	218	-80	-776	-155	-509	-205	-240
Latvia						4=0		
FDI inflow, total	1,045	863	680	588	639	158	650	745
Equity other than reinvestment of earnings	665	264	550	459	278	-613	1,047	-252
Reinvestment of earnings	141	357	232	233	430	470	206	227
Debt instruments	239	242	-101	-104	-69	301	-603	770
Poland ³⁾								
FDI inflow, total	13,131	5,540	2,059	10,755	13,758	14,181	8,147	9,726
Equity other than reinvestment of earnings	1,483	-1,153	-5,482	3,177	5,229	1,776	-365	3,515
Reinvestment of earnings	5,236	4,362	3,510	6,198	6,966	8,549	8,948	6,112
Debt instruments	6,412	2,331	4,031	1,380	1,563	3,855	-435	99
Romania								
FDI inflow, total	1,700	2,489	2,713	2,421	3,461	4,517	4,797	4,988
Equity other than reinvestment of earnings	4,002	2,711	2,765	4,222	3,085	3,203	2,235	1,884
Reinvestment of earnings	-2,497	-1,881	-337	-1,376	510	1,138	1,733	2,100
Debt instruments	195	1,660	285	-425	-133	176	829	1,004
Slovenia								
FDI inflow, total	782	264	-114	791	1,510	1,126	694	1,202
Equity other than reinvestment of earnings	63	334	442	1,436	1,344	956	502	631
Reinvestment of earnings	-85	-340	-499	-646	441	547	340	528
Debt instruments	804	270	-57	1	-275	-377	-149	43
Slovakia								
FDI inflow, total	2,512	2,321	-455	-386	96	728	2,020	403
Equity other than reinvestment of earnings	925	126	653	139	-404	840	425	348
Reinvestment of earnings	1,680	496	-199	-297	709	843	992	276
Debt instruments	-92	1,698	-909	-228	-210	-955	603	-221
		,1						
							/Table	/ hts 11 /

(Table A11 ctd.)

(Table A11 ctd.)

	2011	2012	2013	2014	2015	2016	2017	2018
Albania								
FDI inflow, total	630	666	953	837	852	994	1,017	1,096
Equity other than reinvestment of earnings	579	535	668	669	730	904	808	842
Reinvestment of earnings	0	9	-62	37	59	42	137	237
Debt instruments	52	122	347	131	63	49	72	17
Bosnia and Herzegovina								
FDI inflow, total	357	307	208	415	326	288	398	396
Equity other than reinvestment of earnings	204	143	218	134	159	149	185	289
Reinvestment of earnings	45	-16	-54	53	79	83	215	201
Debt instruments	109	181	44	227	87	56	-3	-93
Montenegro								
FDI inflow, total	401	482	337	375	630	205	494	415
Equity other than reinvestment of earnings	315	417	248	208	419	82	340	292
Reinvestment of earnings	•		•					
Debt instruments	86	66	89	167	212	122	154	123
North Macedonia								
FDI inflow, total	344	111	252	205	217	338	182	624
Equity other than reinvestment of earnings	373	69	46	62	-82	118	75	185
Reinvestment of earnings	42	42	101	-169	160	175	143	220
Debt instruments	-70	0	104	313	139	45	-36	219
Serbia								
FDI inflow, total	3,548	1,011	1,546	1,505	2,116	2,125	2,548	3,495
Equity other than reinvestment of earnings	1,836	-268	642	986	1,064	457	275	1,473
Reinvestment of earnings	680	427	465	453	835	913	1,194	1,177
Debt instruments	1,032	852	440	66	216	755	1,079	845
Kosovo								
FDI inflow, total	394	229	280	151	309	220	255	214
Equity other than reinvestment of earnings	287	157	96	47	139	88	174	169
Reinvestment of earnings	58	46	80	70	89	95	59	48
Debt instruments	49	26	104	35	81	37	23	-4
Turkey								
FDI inflow, total	11,576	10,341	10,212	10,039	17,372	12,603	10,220	10,994
Equity other than reinvestment of earnings	11,376	9,260	9,578	9,373	13,993	9,329	8,752	9,818
Reinvestment of earnings	286	9,200	9,576	9,373 181	324	9,329	0,752	325
Nemvesiment of earthings	200	0/2	199	101	324	423	200	ა∠5

Table A11 / ctd.								
	2011	2012	2013	2014	2015	2016	2017	2018
Belarus								
FDI inflow, total	2,787	1,110	1,690	1,418	1,521	1,125	1,132	1,249
Equity other than reinvestment of earnings	2,233	517	437	504	263	345	353	487
Reinvestment of earnings	395	454	907	696	1,044	642	593	685
Debt instruments	160	139	347	219	214	138	186	78
Kazakhstan								
FDI inflow, total	10,037	10,376	7,769	6,389	3,659	7,692	4,133	3,235
Equity other than reinvestment of earnings	1,666	3,374	1,434	-226	1,854	3,311	1,763	-3,522
Reinvestment of earnings	2,420	2,109	2,077	3,820	-69	4,860	3,325	5,860
Debt instruments	5,952	4,893	4,258	2,795	1,874	-479	-955	897
Moldova								
FDI inflow, total	248	188	176	254	205	82	145	193
Equity other than reinvestment of earnings	103	112	70	96	40	40	30	91
Reinvestment of earnings	62	-9	0	33	111	82	29	21
Debt instruments	83	84	106	125	54	-40	86	81
Ukraine								
FDI inflow, total	5,177	6,536	3,389	310	2,670	2,966	2,306	1,993
Equity other than reinvestment of earnings	4,397	4,861	2,763	539	3,609	3,206	1,714	1,666
Reinvestment of earnings			-			-		
Debt instruments	780	1,675	626	-228	-939	-240	591	327
Russia								
FDI inflow, total	26,476	23,483	40,196	22,037	10,664	33,568	22,990	11,311
Equity other than reinvestment of earnings	7,017	67	15,283	822	-389	16,990	7,998	-5,404
Reinvestment of earnings	15,277	18,314	16,327	16,387	10,061	15,565	14,802	14,224
Debt instruments	4,182	5,102	8,587	4,828	992	1,012	191	2,491

Remark

Methodological remarks on BPM6/BPM5 and the applied concept are given in Table A1.

1) From 2013 including SPEs. - 2) Excluding capital in transit and restructuring of asset portfolios. - 3) Until 2013 including SPEs.

Table A12 / FDI outflow by components

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LOK HIIIIOH	2011	2012	2013	2014	2015	2016	2017	2018
Bulgaria			20.0		20.0	20.0		
FDI outflow, total	287	253	141	201	158	388	315	328
Equity other than reinvestment of earnings	142	216	110	242	140	211	125	78
Reinvestment of earnings	-38	-1	-2	-47	-17	15	30	1
Debt instruments	183	38	33	6	35	162	160	249
Czech Republic								
FDI outflow, total	-236	1,394	3,055	1,221	2,243	1,973	6,712	4,472
Equity other than reinvestment of earnings	-584	136	1,855	1,085	775	1,965	1,939	1,432
Reinvestment of earnings	522	1,387	629	917	877	1,456	3,663	1,940
Debt instruments	-174	-129	571	-781	591	-1,448	1,111	1,100
Estonia 1)								
FDI outflow, total	-1,046	820	387	32	165	487	660	-18
Equity other than reinvestment of earnings	-1,341	179	320	-97	215	361	455	-364
Reinvestment of earnings	225	46	83	169	29	186	-17	112
Debt instruments	70	595	-16	-41	-80	-60	222	234
Croatia								
FDI outflow, total	102	-67	-126	1,480	10	-305	611	300
Equity other than reinvestment of earnings	-55	106	62	1,565	383	-76	342	102
Reinvestment of earnings	-7	-71	-163	-212	-262	-91	122	161
Debt instruments	165	-102	-25	127	-110	-138	147	38
Hungary ²⁾								
FDI outflow, total	511	1,473	788	2,082	852	1,290	2,849	1,782
Equity other than reinvestment of earnings	287	1,409	238	1,764	-483	833	1,055	801
Reinvestment of earnings	-61	996	562	899	273	1,031	1,107	1,301
Debt instruments	285	-931	-12	-582	1,061	-574	688	-320
Lithuania								
FDI outflow, total	40	305	144	-22	76	98	30	710
Equity other than reinvestment of earnings	2	125	107	58	74	146	171	422
Reinvestment of earnings	-2	132	95	-38	43	24	58	55
Debt instruments	39	49	-57	-43	-41	-72	-199	233
Latvia								
FDI outflow, total	44	150	310	293	61	134	125	128
Equity other than reinvestment of earnings	22	26	232	298	-34	70	110	44
Reinvestment of earnings	17	29	43	7	53	23	42	12
Debt instruments	5	95	36	-12	42	41	-27	72
Poland ³⁾								
FDI outflow, total	2,640	-2,067	-1,014	2,184	4,501	10,484	2,450	732
Equity other than reinvestment of earnings	2,373	-2,992	286	4,177	3,936	7,554	724	820
Reinvestment of earnings	154	1,007	-160	385	5	134	765	87
Debt instruments	113	-82	-1,140	-2,377	559	2,796	961	-175
Romania								
FDI outflow, total	-20	-89	-211	-282	507	4	-86	11
Equity other than reinvestment of earnings	39	-87	124	7	13	45	431	66
Reinvestment of earnings			2	-215	-149	-37	-41	·
Debt instruments	-59	-1	-337	-74	643	-4	-476	-55
Slovenia								
FDI outflow, total	143	-201	-161	207	241	262	279	70
Equity other than reinvestment of earnings	241	384	427	134	244	256	180	227
Reinvestment of earnings	-175	-426	-507	-178	-66	16	32	54
Debt instruments	77	-159	-81	252	63	-11	67	-211
Slovakia		•						
FDI outflow, total	513	7	-318	32	5	86	310	198
Equity other than reinvestment of earnings	78	8	-90	-248	-94	9	260	21
Reinvestment of earnings	-244	32	18	160	27	108	95	72
Debt instruments	680	-34	-163	120	73	-31	-45	106

(Table A12 ctd.)

Table A12 / ctd.								
	2011	2012	2013	2014	2015	2016	2017	2018
Albania								
FDI outflow, total	21	18	30	25	34	58	23	70
Equity other than reinvestment of earnings	2	17	27	23	21	28	3	55
Reinvestment of earnings	4	-2	0	2	12	31	29	6
Debt instruments	15	3	2	0	2	-1	-9	9
Bosnia and Herzegovina								
FDI outflow, total	13	48	33	14	66	32	67	15
Equity other than reinvestment of earnings	10	7	-4	6	32	6	26	7
Reinvestment of earnings	0	0	-3	-1	0	-1	0	0
Debt instruments	2	42	41	9	33	26	42	8
Montenegro								
FDI outflow, total	12	21	13	21	11	-167	10	87
Equity other than reinvestment of earnings	24	3	4	8	11	-161	-5	34
Reinvestment of earnings				-				
Debt instruments	-12	18	10	13	0	-6	15	53
North Macedonia								
FDI outflow, total	0	-20	23	8	14	22	2	3
Equity other than reinvestment of earnings	0	-6	-1	4	11	8	9	-1
Reinvestment of earnings		-16	19	29	29	27	16	11
Debt instruments	0	2	5	-25	-26	-13	-23	-8
Serbia								
FDI outflow, total	228	258	248	268	312	226	130	308
Equity other than reinvestment of earnings	122	42	12	34	59	63	29	252
Reinvestment of earnings	78	118	132	195	212	143	46	47
Debt instruments	28	98	104	39	41	20	55	8
Kosovo								
FDI outflow, total	16	16	30	27	37	43	43	44
Equity other than reinvestment of earnings	16	16	18	27	37	44	36	38
Reinvestment of earnings	<u>-</u>		<u>.</u>			-		
Debt instruments	.		12	1	0	-2	7	7
Turkey								
FDI outflow, total	1,674	3,196	2,738	5,307	4,593	2,835	2,391	3,089
Equity other than reinvestment of earnings	1,674	3,168	2,327	3,723	4,410	2,703	2,295	2,981
Reinvestment of earnings	1,007	3,100	2,327	3,723	4,410	2,703	2,293	2,901
Debt instruments	-14	25	386	1,571	152	109	68	103

(Table A12 ctd.)

Table A12 / ctd.								
	2011	2012	2013	2014	2015	2016	2017	2018
Belarus								
FDI outflow, total	87	94	186	30	111	103	62	30
Equity other than reinvestment of earnings	35	85	132	55	87	41	35	12
Reinvestment of earnings	9	16	1	5	3	12	5	28
Debt instruments	43	-7	53	-30	21	51	22	-9
Kazakhstan								
FDI outflow, total	3,872	1,152	1,721	2,871	717	-4,731	808	-935
Equity other than reinvestment of earnings	3,088	1,848	1,473	287	1,662	1,168	809	-783
Reinvestment of earnings	-11	-75	-1	88	-85	-75	83	41
Debt instruments	794	-621	249	2,497	-859	-5,824	-83	-192
Moldova								
FDI outflow, total	16	13	17	28	17	8	12	26
Equity other than reinvestment of earnings	14	14	8	28	14	8	10	28
Reinvestment of earnings	-	-			-			
Debt instruments	2	-1	8	-1	3	0	3	-1
Ukraine								
FDI outflow, total	138	938	316	84	-46	14	7	-4
Equity other than reinvestment of earnings	138	938	316	79	-46	14	7	-4
Reinvestment of earnings								
Debt instruments				5				
Russia								
FDI outflow, total	34,926	22,110	53,210	48,534	24,362	24,336	30,253	30,919
Equity other than reinvestment of earnings	15,365	24,352	67,097	16,879	7,621	8,165	19,153	9,560
Reinvestment of earnings	11,174	12,103	8,593	10,927	5,308	9,787	10,344	12,014
Debt instruments	8,387	-14,345	-22,481	20,727	11,433	6,384	755	9,346

Remark:

Methodological remarks on BPM6/BPM5 and the applied concept are given in Table A2.

1) From 2015 including SPEs. - 2) Excluding capital in transit and restructuring of asset portfolios. - 3) Until 2013 including SPEs.

Table A13 / FDI income debit

	2011	2012	2013	2014	2015	2016	2017	2018
Bulgaria								
Total	1,483	1,103	1,786	1,129	2,306	2,676	1,135	1,276
Repatriated income	1,656	1,470	1,661	2,165	1,371	1,610	1,006	919
Reinvestment of earnings	-174	-367	125	-1,036	936	1,065	129	357
Czech Republic								
Total	11,187	11,930	11,778	12,267	13,160	14,001	15,144	16,374
Repatriated income	9,641	8,827	8,447	9,517	10,377	10,842	9,664	10,531
Reinvestment of earnings	1,546	3,102	3,332	2,751	2,783	3,159	5,480	5,843
Estonia 1)								
Total	1,498	1,443	1,386	1,468	1,277	1,478	1,453	1,522
Repatriated income	289	524	584	575	730	664	644	953
Reinvestment of earnings	1,209	920	802	893	547	814	809	568
Croatia								
Total	1,013	987	475	304	-155	1,504	1,421	1,806
Repatriated income	736	732	772	492	636	405	781	793
Reinvestment of earnings	277	255	-297	-188	-791	1,099	640	1,012
Hungary								
Total	6,044	6,179	5,406	7,409	8,198	7,596	9,813	9,963
Repatriated income	4,818	4,717	3,875	3,607	4,236	3,586	3,609	3,661
Reinvestment of earnings	1,226	1,462	1,531	3,802	3,962	4,010	6,204	6,303
Lithuania								
Total	1,199	944	929	430	1,527	1,574	1,769	1,770
Repatriated income	464	867	626	580	756	2,102	951	791
Reinvestment of earnings	734	76	303	-149	770	-528	818	979
Latvia								
Total	464	795	824	801	1,054	1,076	1,261	1,457
Repatriated income	323	438	592	568	624	606	1,055	1,230
Reinvestment of earnings	141	357	232	233	430	470	206	227
Poland 1)								
Total	14,311	14,154	14,505	16,700	16,856	19,411	19,012	18,202
Repatriated income	9,192	9,770	11,031	9,801	9,829	10,769	10,103	12,097
Reinvestment of earnings	5,118	4,385	3,474	6,899	7,027	8,642	8,909	6,104
Romania								
Total	495	1,322	2,867	1,757	3,782	5,163	5,936	6,292
Repatriated income	2,993	3,194	3,207	3,139	3,271	4,022	4,192	4,191
Reinvestment of earnings	-2,498	-1,872	-339	-1,382	512	1,141	1,744	2,101
Slovenia								
Total	326	222	14	-18	987	1,152	1,111	1,252
Repatriated income	410	562	513	627	546	605	770	724
Reinvestment of earnings	-84	-340	-499	-646	441	547	340	528
Slovakia								
Total	4,513	3,313	2,582	3,072	4,061	4,098	4,071	4,161
Repatriated income	2,834	2,816	2,781	3,369	3,352	3,254	3,079	3,886
Reinvestment of earnings	1,680	496	-199	-297	709	843	992	276
							(Table	A13 ctd.)

Table A13 / ctd.								
	2011	2012	2013	2014	2015	2016	2017	2018
North Macedonia								
Total	192	206	273	234	334	408	420	456
Repatriated income	150	164	172	404	174	233	277	236
Reinvestment of earnings	42	42	101	-169	160	175	143	220
Serbia								
Total	1,133	979	1,185	1,118	1,381	1,666	2,222	2,053
Repatriated income	453	552	720	665	546	752	1,028	876
Reinvestment of earnings	680	427	465	453	835	913	1,194	1,177
Turkey								
Total	2,110	2,056	2,784	1,762	3,201	2,801	2,866	2,744
Repatriated income	1,823	1,395	2,582	1,584	2,873	2,376	2,606	2,421
Reinvestment of earnings	287	661	202	178	328	425	261	324
Belarus								
Total	826	977	1,799	1,586	1,631	1,430	1,462	1,678
Repatriated income	431	522	892	890	587	788	868	994
Reinvestment of earnings	395	454	907	696	1,044	642	593	685
Kazakhstan								
Total	18,112	19,257	16,946	14,937	8,480	10,767	14,632	17,336
Repatriated income	15,692	17,148	14,868	11,117	8,548	5,907	11,308	11,476
Reinvestment of earnings	2,420	2,109	2,077	3,820	-69	4,860	3,325	5,860
Moldova	·	·	·			·		
Total	184	92	105	100	199	138	163	189
Repatriated income	122	100	105	68	88	56	134	168
Reinvestment of earnings	62	-9	0	33	111	82	29	21
Ukraine								
Total	2,934	3,715	3,770	1,318	425	1,019	2,166	3,090
Repatriated income							1,812	2,669
Reinvestment of earnings	-	-	-	-	-	-	354	421
Russia								
Total	44,237	52,255	52,214	51,861	36,848	43,454	50,577	51,849
Repatriated income	28,960	33,942	35,887	35,474	26,787	27,888	35,775	37,625
Reinvestment of earnings	15,277	18,314	16,327	16,387	10,061	15,565	14,802	14,224

Remarks:

Repatriated income comprises dividends and income on debt. Based on Balance of Payments asset/liability principle (BPM6).

Source: wiiw Annual Database based on Balance of Payments statistics of the respective National Banks.

¹⁾ Including SPEs (Estonia from 2013).

Table A14 / FDI income credit

	2011	2012	2013	2014	2015	2016	2017	2018
Bulgaria								
Total	18	61	50	20	34	91	105	103
Repatriated income	56	62	51	66	51	76	83	102
Reinvestment of earnings	-38	-1	-2	-47	-17	15	23	1
Czech Republic								
Total	1,041	1,933	1,142	1,327	1,785	1,950	1,957	2,753
Repatriated income	518	546	514	410	906	495	535	816
Reinvestment of earnings	522	1,387	629	917	879	1,456	1,423	1,937
Estonia 1)								
Total	407	371	508	472	358	493	450	542
Repatriated income	182	325	425	302	329	308	467	430
Reinvestment of earnings	225	46	83	170	29	186	-17	112
Croatia								
Total	60	-22	-113	-155	-201	-17	215	276
Repatriated income	67	49	50	57	61	74	94	115
Reinvestment of earnings	-7	-71	-163	-212	-262	-91	122	161
Hungary								
Total	1,330	1,762	1,445	1,590	1,157	2,333	2,379	2,554
Repatriated income	1,392	767	883	691	884	1,301	1,272	1,252
Reinvestment of earnings	-61	996	562	899	273	1,031	1,107	1,301
Lithuania								
Total	27	163	142	90	96	115	130	174
Repatriated income	29	31	47	128	53	100	72	119
Reinvestment of earnings	-2	132	95	-38	43	14	58	55
Latvia								
Total	61	81	85	54	155	117	201	128
Repatriated income	44	51	42	47	102	94	159	116
Reinvestment of earnings	17	30	43	7	53	23	42	12
Poland 1)								
Total	1,103	1,577	900	1,767	1,303	1,357	2,442	1,232
Repatriated income	982	1,271	1,127	1,327	1,188	1,233	1,686	1,147
Reinvestment of earnings	121	306	-227	440	114	125	755	85
Romania								
Total	49	47	69	-85	-68	119	62	54
Repatriated income	104	70	67	131	80	156	103	54
Reinvestment of earnings	-55	-23	2	-215	-149	-37	-41	0
Slovenia								
Total	-16	-286	-401	-47	65	179	199	222
Repatriated income	160	141	107	131	131	163	167	169
Reinvestment of earnings	-176	-426	-507	-178	-66	16	32	54
Slovakia								
Total	317	238	303	707	392	294	413	431
Repatriated income	561	206	286	548	364	187	318	359

	2011	2012	2013	2014	2015	2016	2017	2018
North Macedonia	2011	2012	2010	2017	2010	2010	2017	2010
Total	6	-9	28	37	36	32	23	16
Repatriated income		7	9	9	7	5	7	5
Reinvestment of earnings	·	-16	19	29	29	27	16	11
Serbia	•							•
Total	172	254	266	323	346	250	152	143
Repatriated income	94	136	134	128	134	107	106	96
Reinvestment of earnings	78	118	132	195	212	143	46	47
Turkey								
Total	161	75	204	239	201	183	267	822
Repatriated income	161	72	180	225	170	160	241	817
Reinvestment of earnings	1	3	25	14	31	23	26	5
Belarus								
Total	66	111	56	21	45	78	94	84
Repatriated income	57	95	55	16	41	67	89	56
Reinvestment of earnings	9	16	1	5	3	12	5	28
Kazakhstan								
Total	112	152	262	233	528	540	704	551
Repatriated income	123	227	262	145	613	615	621	510
Reinvestment of earnings	-11	-75	-1	88	-85	-75	83	41
Moldova								
Total	5	5	5	6	7	8	11	11
Repatriated income	·····							
Reinvestment of earnings								
Ukraine								
Total	35	811	444	61	38	26	28	76
Repatriated income			-					
Reinvestment of earnings								
Russia								
Total	15,850	19,879	15,431	18,646	15,543	19,559	24,211	29,935
Repatriated income	4,676	7,777	6,837	7,719	10,234	9,773	13,866	17,921
Reinvestment of earnings	11,174	12,103	8,593	10,927	5,308	9,787	10,344	12,014

Remarks:

Repatriated income comprises dividends and income on debt. Based on Balance of Payments asset/liability principle (BPM6).

Source: wiiw Annual Database based on Balance of Payments statistics of the respective National Banks.

¹⁾ Including SPEs (Estonia from 2013).

Table A15 / FDI income net

EUR million

		2011	2012	2013	2014	2015	2016	2017	2018
BG	Bulgaria	-1,464	-1,042	-1,736	-1,110	-2,272	-2,585	-1,030	-1,174
HR	Croatia	-953	-1,009	-588	-459	-46	-1,521	-1,205	-1,530
CZ	Czech Republic	-10,147	-9,996	-10,636	-10,940	-11,375	-12,050	-13,187	-13,621
EE	Estonia 1)	-1,090	-1,073	-878	-996	-920	-984	-1,003	-980
HU	Hungary	-4,714	-4,416	-3,961	-5,818	-7,041	-5,263	-7,434	-7,410
LV	Latvia	-403	-714	-739	-747	-899	-959	-1,060	-1,329
LT	Lithuania	-1,172	-781	-788	-340	-1,430	-1,459	-1,639	-1,597
PL	Poland 1)	-13,208	-12,578	-13,605	-14,933	-15,553	-18,054	-16,571	-16,970
RO	Romania	-446	-1,276	-2,799	-1,841	-3,851	-5,045	-5,874	-6,238
SK	Slovakia	-4,196	-3,074	-2,279	-2,365	-3,670	-3,803	-3,658	-3,731
SI	Slovenia	-342	-508	-415	-29	-922	-973	-912	-1,030
	EU-CEE11	-38,135	-36,466	-38,423	-39,578	-47,979	-52,696	-53,572	-55,608
AL	Albania								
BA	Bosnia and Herzegovina	-197	-175	-142	-254	-277	-339	-456	-462
XK	Kosovo	-95	-51	-73	-74	-101	-112	-72	-68
MK	North Macedonia	-186	-216	-246	-197	-299	-376	-397	-439
ME	Montenegro	-30	-25	-21	-52	-39	-98	-60	-55
RS	Serbia	-960	-725	-919	-795	-1,035	-1,416	-2,070	-1,910
	WB6	-1,468	-1,191	-1,400	-1,372	-1,752	-2,341	-3,055	-2,934
TR	Turkey	-1,949	-1,981	-2,580	-1,524	-3,000	-2,619	-2,600	-1,923
BY	Belarus	-759	-865	-1,743	-1,565	-1,586	-1,351	-1,368	-1,594
ΚZ	Kazakhstan	-18,000	-19,105	-16,684	-14,704	-7,952	-10,227	-13,928	-16,785
MD	Moldova	-180	-87	-100	-95	-191	-130	-152	-178
UA	Ukraine	-2,898	-2,904	-3,325	-1,257	-387	-993	-2,137	-3,013
	CIS3+UA	-21,837	-22,961	-21,853	-17,621	-10,116	-12,701	-17,585	-21,571
RU	Russia	-28,387	-32,376	-36,784	-33,214	-21,306	-23,894	-26,366	-21,914
	CESEE23	-91,776	-94,975	-101,039	-93,308	-84,153	-94,252	-103,178	-103,949

Remarks:

FDI income net means FDI income credit minus FDI income debit. Based on Balance of payments asset/liability principle (BPM6).

Source: wiiw Annual Database based on Balance of Payments statistics of the respective National Banks.

¹⁾ Including SPEs (Estonia from 2013).

Table A16 / Inward FDI stock in EU-CEE11 by major home countries, 2017

Share in per cent

												EU-
	BG	CZ	EE	HR	HU	LT	LV	PL	RO	SI	SK	CEE11
Austria	9.5	10.3	1.6	20.1	10.8	1.1	1.3	4.3	12.6	25.6	13.1	9.0
Belgium	3.2	0.4	0.5	0.8	2.6	0.8	0.2	3.2	2.1	1.3	5.2	2.3
Cyprus	5.1	4.3	2.8	0.6	2.0	7.4	8.4	3.6	6.1	1.7	3.5	3.9
Denmark	0.7	0.6	2.4	0.4	1.1	4.2	4.0	1.7	0.8	0.4	0.8	1.2
Finland	0.1	0.2	22.4	0.0	0.1	3.8	2.3	0.7	0.1	0.1	0.3	1.1
France	2.6	7.5	1.8	0.7	3.7	3.4	0.7	9.0	6.2	4.2	2.0	5.9
Germany	7.0	16.3	1.7	7.6	23.3	7.3	4.5	17.6	12.8	8.4	6.4	14.3
Greece	5.3	0.0		0.0	0.0	0.0	0.0	0.0	2.3	0.1	0.0	0.6
Hungary	2.2	0.5	0.1	11.0	·	0.1	0.1	0.7	1.3	0.2	5.7	1.5
Italy	6.0	2.9	0.6	9.0	3.4	0.2	0.5	2.6	6.2	8.3	4.7	3.8
Japan	0.1	1.2	0.1	0.1	1.3	<u>.</u>	·····	0.4	0.4	0.3	0.2	0.6
Luxembourg	3.5	15.4	3.4	8.1	4.5	1.3	5.4	13.9	4.7	11.4	7.4	9.9
Netherlands	17.7	19.9	7.8	18.1	18.7	13.2	8.3	19.2	25.9	7.8	25.6	19.4
Norway	0.6	0.2	2.0	0.5	0.6	3.0	3.7	0.7	0.4	·	0.3	0.7
Russia	4.9	0.5	3.7	1.2	0.1	1.8	10.5	0.2	0.1	1.3	-0.4	0.9
Spain	2.6	0.9	0.3	0.4	1.1	0.1	0.1	6.1	2.1	0.1	1.6	2.7
Sweden	0.7	1.1	27.7	1.3	0.4	23.6	17.2	2.1	0.7	2.5	2.0	3.0
Switzerland	3.6	4.7	1.6	3.5	6.0	3.0	1.8	3.0	4.1	10.4	1.3	3.8
United Kingdom	5.5	2.5	2.2	2.2	2.1	1.4	3.0	4.8	1.9	2.1	2.3	3.2
United States	2.0	0.9	1.4	0.8	-1.2	2.1	1.0	2.4	1.5	0.1	0.6	1.3
Other countries	17.2	9.6	15.7	13.4	19.3	22.2	27.1	4.0	7.7	13.5	17.5	10.9
EU15	66.1	78.2	72.2	69.2	75.4	60.8	47.7	86.7	79.1	72.7	72.1	77.6
EU28	78.8	88.3	83.5	86.8	80.1	84.1	75.7	92.3	89.8	84.3	92.7	87.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Total, EUR mn 42,564 130,042 19,925 27,907 75,645 14,816 14,605 199,053 75,851 13,675 46,559 660,641

Remark:

For methodological remarks and sources as well as data for 2018 (BG, HR, EE, LV, LT) see wiiw FDI Database online.

Source: wiiw FDI Database incorporating national bank statistics.

Table A17 / Inward FDI stock in Western Balkans, Turkey, CIS3, Ukraine and Russia by major home countries, 2017

Share in per cent

													CIS-3	
	AL	ВА	ME	MK	RS	XK	WB6	TR	BY	KZ	MD	UA	+UA	RU
					2015									
Austria	6.9	19.6	3.0	13.6	13.9	6.0	12.3	2.5	3.1	0.1	2.5	4.1	1.2	1.3
Belgium	0.0	0.0	0.4	1.6	0.4	0.7	0.4	2.2	0.0	0.3	0.7	···········	0.2	0.2
Croatia	0.2	17.2	4.4	1.4	2.4	0.2	4.0	······	0.0	0.0	0.1	0.0	0.0	0.0
Cyprus	2.2	1.1	6.1	3.5	10.5	0.2	6.5	······································	17.2	0.3	9.7	32.5	8.1	36.7
France	2.8	0.2	1.5	0.9	3.3	0.7	2.3	3.7	0.0	9.0	7.9	2.2	6.9	3.4
Germany	1.7	4.6	2.2	5.8	4.6	10.6	4.6	10.1	1.6	0.4	5.8	5.4	1.5	4.1
Greece	18.9		0.0	10.1	4.3	0.2	5.4	0.1	0.0	0.0	0.6	0.1	0.0	0.0
Hungary	0.0	0.3	1.8	4.5	1.6	0.1	1.4	0.0	0.0	0.0	0.5	1.3	0.3	0.1
Italy	9.5	4.5	14.9	2.2	3.8	0.9	5.2	3.1	0.3	0.1	5.9	0.7	0.3	1.1
Liechtenstein		0.0		1.2	0.1		0.2	· · · · · · · · · · · · · · · · · · ·	0.3	0.1	1.4	0.1	0.2	0.1
Luxembourg	0.1	2.2	2.8	1.2	4.1	0.2	2.7	4.9	0.3	1.7	0.0	1.7	1.6	4.4
Netherlands	12.8	5.2	1.9	8.0	21.4	2.3	14.1	22.5	2.5	42.7	12.5	17.5	33.7	9.2
Russia		5.0	10.7	0.6	5.9	0.0	4.6	7.0	55.4	3.0	23.8	2.4	8.1	
Serbia	0.3	15.1	5.2	1.7		0.4	2.6		0.0	0.0	0.0	0.1	0.0	0.0
Slovenia	0.4	7.7	4.0	6.9	4.3	6.2	4.6	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Sweden		0.5	0.2	0.5	0.3	1.3	0.4	0.3	0.2	0.3	0.1	0.9	0.4	1.2
Switzerland	13.8	4.1	3.3	3.9	2.9	10.0	5.0	4.4	1.6	1.0	1.7	5.8	1.9	2.9
Turkey	7.8	3.1	0.7	5.4	0.0	13.0	2.8		0.3	0.4	1.3	1.0	0.5	0.3
United Kingdom	0.8	3.4	3.4	11.3	2.4	2.5	3.2	4.9	1.4	2.9	2.2	5.3	3.2	4.2
United States	1.2	0.7	1.9	1.2	0.9	4.1	1.2	3.8	0.6	18.5	2.1	1.5	13.3	0.7
Other countries	20.6	5.7	31.5	14.5	12.8	40.4	16.4	30.6	15.1	19.2	21.3	17.3	18.5	30.0
EU15	53.4	40.5	32.6	55.3	61.5	26.0	52.4	63.6	10.2	57.7	47.1	39.7	49.6	31.4
EU28	56.7	64.9	50.4	76.3	82.4	34.8	70.5	64.0	31.7	58.4	66.0	39.1 77.7	59.7	68.8
EU20	30.7	04.9	50.4	10.3	02.4	34.8	70.3	04.0	31.7	50.4	00.0	11.1	59. <i>1</i>	00.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Remarks:

For methodological remarks and sources as well as data for 2018 (AL, XK, KZ, UA) see wiiw FDI Database online. Data for Serbia are unrevised.

Total, EUR mn 6,453 6,876 4,440 4,698 26,467 3,526 52,461 151,181 16,580 123,261 2,785 33,535 176,161 368,937

Source: wiiw FDI Database incorporating national bank statistics.

Table A18 / Inward FDI stock in EU-CEE11 by economic activities, 2017

Share in per cent

	BG	CZ	EE	HR	HU	LT	LV	PL	RO	SI	SK	EU- CEE11
NACE Rev. 2 classification:											2016	
A Agriculture, forestry and fishing	0.4	0.2	1.7	0.7	0.7	1.6	4.1	0.5	3.0	0.2	0.3	0.9
B Mining and quarrying	1.5	0.4	0.3	0.6	0.4	0.4	0.8	0.2	2.6	0.4	0.2	0.7
C Manufacturing	18.3	29.2	13.2	21.7	43.3	18.8	11.2	31.0	32.0	32.9	32.3	29.8
D Electricity, gas, steam, air conditioning supply	7.1	3.0	0.8	0.9	2.5	2.1	3.9	2.1	7.9	2.6	7.3	3.6
E Water supply, sewerage, waste manag., remediation	0.5	0.7	0.6	0.8	0.1	0.1	0.0	0.2	0.6	0.4	0.3	0.4
F Construction	3.4	1.6	1.3	3.0	1.2	2.3	4.0	5.0	7.9	1.6	1.3	3.5
G Wholesale, retail trade, repair of motor vehicles etc.	13.6	8.8	12.6	9.3	10.8	13.6	14.3	13.9	13.8	17.6	9.1	12.0
H Transportation and storage	1.3	1.0	4.4	1.4	2.9	2.4	6.0	1.3	1.6	1.9	3.9	1.9
I Accommodation and food service activities	1.6	0.5	0.6	6.1	1.0	0.7	0.9	0.6	0.6	0.7	0.3	0.9
J Information and communication	3.7	5.6	4.0	6.4	5.5	7.3	3.4	6.6	4.2	5.7	4.5	5.5
K Financial and insurance activities	16.6	28.8	28.7	36.3	8.7	26.4	24.1	20.5	12.4	22.3	23.2	21.0
L Real estate activities	23.8	9.4	17.8	7.2	7.6	13.8	14.4	8.6	7.4	6.5	6.3	9.8
M Professional, scientific and technical activities	3.6	6.7	7.5	2.0	6.9	6.0	3.6	6.8	3.5	4.2	3.4	5.7
N Administrative and support service activities	0.9	1.2	3.7	0.4		1.5	1.1	1.2	1.9	0.6	6.6	1.5
O Public administration, defence, compuls.soc.security	0.0	·············			···········	···········	<u>.</u>	<u>:</u>	······································	······	······························	······································
P Education	0.1	0.0	0.0			0.0	0.0	0.0	0.1	<u>.</u>		0.0
Q Human health and social work activities	0.0	0.2	0.1	0.0		0.2	0.0	0.4	0.4	0.1	0.3	0.2
R Arts, entertainment and recreation	0.3	0.1	0.1	1.0	·	0.1	0.8	0.1	0.2	0.2	0.5	0.2
S Other service activities	0.0	0.1	0.1	0.1		0.0	0.0	0.1	0.0	0.1	0.2	0.1
T Activities of househ.as employers and for own use	· · · · · · · · · · · · · · · · · · ·											······································
Other not elsewhere classified activities (A-U)	3.2	0.0	2.7	2.0	6.1		7.1	1.0	0.0	2.1	0.0	1.6
Private purchase & sales of real estate	<u>.</u>	2.3			2.2	2.7	<u>.</u>	······································	··········	·	······································	0.8
Total by activities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Total by activities, EUR mn 42,564 130,042 19,925 27,907 75,645 14,816 14,605 199,053 75,851 13,675 45,150 659,233

	BG	CZ	EE	HR	HU	LT	LV	PL	RO	SI	sĸ
NACE Rev. 2 classification:							2014				2016
CA Food products, beverages and tobacco products	11.8	11.1	21.6	12.1	6.9	19.2	12.4	19.2	10.4	13.4	4.2
CB Textiles, apparel, leather, related products	3.7	1.7	1.9	5.2	1.2	5.3	2.3	1.1	4.4	1.3	0.8
CC Wood and paper products and printing	4.1	5.4	24.3	2.8	5.1	10.8	25.9	8.5	6.6	8.9	3.6
CD Coke and refined petroleum products	22.5	· · · · · · · · · · · · · · · · · · ·	0.0	35.1	0.2	33.6	0.3	0.2	4.9		10.3
CE Chemicals and chemical products	8.2		5.8	4.6	4.4	· · · · · · · · · · · · · · · · · · ·	1.6	5.3	4.5	7.8	5.0
CF Pharmaceuticals, medicinal chem.& botan.products	0.4		0.8	14.3	9.9	· · · · · · · · · · · · · · · · · · ·	1.9	3.8	2.7	18.4	0.2
CG Rubber, plastics, other non-metall.mineral products	13.2		15.3	10.8	12.0	8.7		7.5	13.8	15.2	7.8
CH Basic metals, fabricated met.prod.,ex mach.& equip.	16.8	10.7	5.3	5.7	5.9	3.0	6.2	12.4	13.0	7.0	18.1
CI Computer, electronic, optical products	1.7	5.2	4.9	2.0	10.5	8.0	1.2	1.9	2.9	3.0	5.1
CJ Electrical equipment	5.8		7.0	1.8	3.6	6.5			4.7	8.4	
CK Machinery and equipment n.e.c.	5.0	10.2	2.6	2.6	3.2	· · · · · · · · · · · · · · · · · · ·	1.1	4.3	7.1	5.8	8.2
CL Transport equipment	5.0	23.1	7.2	1.3	34.2	4.2	4.6	20.1	23.2	8.2	22.0
CM Other manufacturing, repair, install.of mach.& equip.	1.7		3.3	1.7	3.0	7.9		15.7	1.7	2.6	14.6
Other not elsewhere classified industries (CA-CM)		32.6	0.0		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	42.5		0.1		·
Manufacturing industry (CA-CM)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Manufacturing industry (CA-CM), EUR mn	7,785	37,935	2,628	6,050	32,743	2,779	1,555	61,635	24,248	4,493	14,570

Remark

For methodological remarks and sources as well as data for 2018 (BG, HR, EE, LV, LT) see wiiw FDI Database online. Lithuania: CD = CD+CE+CF; CJ = CJ+CK.

Source: wiiw FDI Database incorporating national bank statistics.

Table A19 / Inward FDI stock in Western Balkans, Turkey, Kazakhstan, Moldova, Ukraine and Russia by economic activities, 2017

Share in per cent

	AL	ВА	MK	RS	XK	WB5	TR	ΚZ	MD	UA	RU
NACE Rev. 2 classification:				2015							
A Agriculture, forestry and fishing	0.2	0.4	0.5	1.1	0.2	0.8	0.8	0.1	1.6	2.1	0.2
B Mining and quarrying	13.4	1.3	1.6	6.0	2.5	5.6	2.5	72.2	0.0	4.6	21.7
C Manufacturing	9.2	25.7	36.6	21.3	4.9	20.6	32.1	4.7	21.4	28.2	20.8
D Electricity, gas, steam, air conditioning supply	23.4	4.2	8.1	0.6	4.2	5.2	8.5	0.5	30.5	2.5	2.2
E Water supply, sewerage, waste manag., remediation	0.0	0.2	0.1	0.4	0.3	0.3	0.0	0.0	0.0	0.2	0.0
F Construction	1.8	1.0	7.9	6.0	7.9	5.0	0.4	2.9	2.5	3.3	0.9
G Wholesale, retail trade, repair of motor vehicles etc.	4.1	12.3	14.0	13.8	3.3	11.5	22.0	2.6	11.7	15.7	15.8
H Transportation and storage	2.0	0.6	0.6	1.3	0.2	1.1	2.6	6.6	1.5	3.4	3.4
I Accommodation and food service activities		1.3	0.9	0.8	0.1	0.7	0.3	0.3	0.8	1.0	0.2
J Information and communication	18.1	13.3	3.3	5.4	4.0	7.9	8.2	1.2	8.8	6.8	2.4
K Financial and insurance activities	15.6	27.5	20.5	29.0	12.7	25.0	20.2	3.1	14.2	10.2	14.5
L Real estate activities	3.9	3.8	1.9	6.1	31.9	7.0	0.5	0.9	5.1	11.1	6.4
M Professional, scientific and technical activities	5.0	2.1	0.9	6.2	1.2	4.6	0.1	4.3	1.1	5.8	9.2
N Administrative and support service activities	1.0	0.4	1.2	0.9	4.7	1.2	0.7	0.1	0.2	4.6	
O Public administration, defence, compuls.soc.security	·	············		· · · · · · · · · · · · · · · · · · ·	0.3	0.0					0.0
P Education	0.2		0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0
Q Human health and social work activities	0.5	0.4	0.4	0.0	0.2	0.2	0.3		0.4	0.2	0.1
R Arts, entertainment and recreation	0.6	0.3	1.3	0.4	0.0	0.4	0.1		0.0	0.3	0.1
S Other service activities	0.0		0.0	0.0	0.3	0.0	0.5	0.3	0.0	0.0	0.0
T Activities of househ.as employers and for own use											
U Activities of extra-territorial organisations & bodies	1.2					0.2					
Other not elsewhere classified activities (A-U)		5.2	0.0	0.6	21.1	2.6				0.0	2.1
Total by activities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total by activities EUD ma	6 452	6 076	4 600	26 467	2 526	49 024	151 101	122 261	2 705	22 525	442 072

Total by activities, EUR mn 6,453 6,876 4,698 26,467 3,526 48,021 151,181 123,261 2,785 33,535 442,972

	AL	ВА	MK	RS	XK	TR	KZ	MD	UA	RU
NACE Rev. 2 classification:				2015						
CA Food products, beverages and tobacco products		27.5	14.5	25.9		20.0	10.5	······	29.1	
CB Textiles, apparel, leather, related products	·	3.9	8.8	5.1		0.9	0.3		1.7	
CC Wood and paper products and printing		9.7	0.7	3.0		0.0	0.4	· · · · · ·	7.0	
CD Coke and refined petroleum products		18.3	3.9	0.6		0.6	8.0	· · · · · · · · · ·	1.6	
CE Chemicals and chemical products		9.0	1.4	7.4		0.9	4.8		9.8	
CF Pharmaceuticals, medicinal chem.& botan.products			0.7	5.1		12.4	1.1		0.3	
CG Rubber, plastics, other non-metall.mineral products		12.7	1.0	12.0		12.4	8.3		11.6	
CH Basic metals, fabricated met.prod.,ex mach.& equip.		8.0	15.2	6.7		6.0	60.8		21.9	
CI Computer, electronic, optical products		1.8	2.3	0.5		3.4	0.9			
CJ Electrical equipment		1.2		· · · · · ·		7.9	0.2			
CK Machinery and equipment n.e.c.		1.5	0.8	2.0		0.1	1.0		9.7	
CL Transport equipment		5.5	42.9	10.8		11.8	1.2			
CM Other manufacturing, repair, install.of mach.& equip.		0.9	7.9	1.1		20.5	2.6		2.4	
Other not elsewhere classified industries (CA-CM)				19.9		3.2			4.8	
Manufacturing industry (CA-CM)	······························	100.0	100.0	100.0	······································	100.0	100.0	······•	100.0	
Manufacturing industry (CA-CM), EUR mn		1,769	1,718	5,642		48,569	5,850		9,458	

Remarks:

For methodological remarks and sources as well as for data 2018 (AL, XK, KZ, UA) see wiiw FDI Database online. Data for Serbia are unrevised.

Source: wiiw FDI Database incorporating national bank statistics.

Appendix B: FDI Performance Index Methodology

Assuming that FDI stocks are determined by some specific country and bilateral variables, we can analyse them in a gravity setting,²⁴ arguing that FDI stocks are functions of country-specific variables. Economic size (GDP), a country's development (GDP per capita), economic stability (e.g. inflation and exchange rate) are the main variables. Besides, FDI size can be a function of country-pair-specific variables, such as imports and exports between two countries (as measures on global values chains and trade protectionism). The gravity equation is formulated as follows:

$$fdi_{ijt} = \alpha_0 + \alpha_1 X_{it} + \alpha_2 X_{jt} + \alpha_3 Z_{ijt} + \Psi_{ijt} + \varepsilon_{ijt}$$
(1)

where fdi_{ijt} is the FDI stocks in host country i from home country j at time t, X_{it} and X_{jt} are aforementioned country-specific variables for the host and home countries, respectively. Z_{ijt} is a set of country-pair variables, such as bilateral imports and bilateral exports, trade costs such as distance, colonial history, contiguity and language. Ψ_{ijt} includes a set of country-, country-pair- and time-specific effects that are included stepwise as fixed effects in the regressions; and ε_{ijt} is a robust country-pair clustered standard error. All count variables (non-dummies) are in logarithmic forms.

After running the estimation over equation (1), in the second stage we have the explained part of the model $\widehat{fd\iota_{ijt}}$ based on the observed independent variables. This is the potential level of FDI. Then, comparing the actual value of FDI with the potential value hints at the deviation of FDI stocks from the theoretical benchmark. Since the variable was transformed into logarithmic form, one can get the performance index as follows:

$$\varphi_{ijt} = \left[exp^{(fdi_{ijt} - \widehat{fdt_{ijt}})} \times 100 \right] - 100 \tag{2}$$

where index above (below) zero indicates the overperformance (underperformance) of a given *ijt* bilateral stock in a year. In order to measure the index for a given host country, the average over the partner countries in a given year is calculated as follows:

$$\widetilde{\varphi_{ht}} = \left[exp^{\left[\frac{\sum_{h}(fdi_{ijt} - fd\overline{\iota_{ijt}})}{N_{ht}}\right]} \times 100 \right] - 100, \ h \in \{i, j\}$$
(3)

where $\widetilde{\varphi_{ht}}$ refers to the performance index of FDI stock to host country h at time t and N_{ht} is the number of its partner countries. In order to make the flows comparable across host or home countries, or across each period, the necessary fixed-effects should be included in the first stage estimations. For instance, by construction the country-pair and time fixed effects separately will demean the variables to their country-pair averages and time averages in the sample before estimation. Consequently, the calculated index could give the within-economy deviations from its averaged potential performance over the years (see Figure 19).

J.E. Anderson, 'A theoretical foundation for the gravity equation', *American Economic Review*, 69:1 (1979), pp. 106–116; J. Kleinert and F. Toubal, 'Gravity for FDI', *Review of International Economics*, 18:1 (2010), pp. 1–13.

Appendix C: Estimating greenfield investment decisions

In order to find out how and why MNEs decide to invest abroad and set up a plant or subsidiary in a foreign country, one needs to reach out to the basic definition and the ownership–location—internalisation (OLI) conceptual framework first established by Dunning, ²⁵ and then extensively studied in the literature of international economics. In this framework, firms decide to invest abroad as their market power will increase by ownership of products or the production process. Therefore, by choosing a new location and by internalising the externalities associated with this new location, the firm's profit will increase by serving the new market. These externalities are also related in the literature, as efficiency improves due to trade cost reductions, having access to a larger market that improves the economies of scale, and having access to relatively cheaper factors of production. Using the information available in the fDiMarket database, and employing a simple econometric exercise, we assess how the determining factors elaborated in the literature affect the amount of pledged investment in the European Union. Using the results of the analysis, we predict the possible amount of pledged investment in the near future.

The equation to be estimated takes the following form:

$$K_{it} = e^{\left[\beta_1 \ln GDP_{it}^r + \beta_2 \ln P_{it}^e + \beta_3 \ln P_{it}^{a-e} + \beta_4 \ln M_{it}^n + \beta_5 \ln X_{it}^n + \beta_6 s_{it}^{ec} + \beta_7 s_{it-2}^{ec} + \beta_8 s_{it-4}^{ec} + \mu_i + \mu_{ty} + \mu_{tq} + \varepsilon_{it}\right]}$$
(4)

where K_{it} is the amount of capital pledged to be invested in country i at time t; where t is quarterly periods from the first quarter of 2003 to the last quarter of 2018; GDP_{it}^r is the real quarterly GDP of the host economy; P_{it}^e is the price level of energy (monthly data averaged over each quarter); P_{it}^{a-e} is the price level of the economy, excluding energy (monthly data averaged over each quarter); M_{it}^n is the nominal imports to the country; X_{it}^n is the nominal exports from the host country; s_{it}^{ec} is the Economic Sentiment Indicator (ESI), i0 which is a weighted indicator of five other indicators derived from regular monthly surveys conducted by the Directorate General for Economic and Financial Affairs (DG ECFIN) for different sectors of the economies in the EU. We use the sentiment indicator in three forms: the contemporaneous, the two-quarter lagged, and a four-quarter lagged version. We also use country, year and quarter fixed effects in the estimations. We include pledged capital investment as the dependent variable in four forms: new projects, expansions, co-locations and total capital. The sample of estimation includes all EU countries. The regressions are run by Poisson Pseudo Maximum Likelihood (PPML) to take into account zero values in the dependent variable, as for some countries in some periods no investment was announced.

Dunning, J.H. (1977), Trade, location of economic activity and the MNE: A search for an eclectic approach. In B. Ohlin et al. (eds), *The International Allocation of Economic Activity* (pp. 395–418). Palgrave Macmillan; Dunning, J.H. (1981), *International Production and the Multinational Enterprise*. Routledge.

https://ec.europa.eu/info/business-economy-euro/indicators-statistics/economic-databases/business-and-consumer-surveys/latest-business-and-consumer-surveys_en

Table C1 / Regression results on the determining factors behind the decision of MNEs to invest in the EU-28, quarterly data during 2003-2018

	Total capital	New greenfield	Expansions	Co-location
Real GDP	1.44**	1.54	0.77*	0.95
	(0.73)	(0.94)	(0.42)	(1.43)
Energy Price	1.45**	1.62**	1.59***	-3.80
	(0.58)	(0.65)	(0.55)	(2.73)
Price level ex. energy	-1.50***	-1.68***	-1.16*	5.75
	(0.56)	(0.59)	(0.69)	(4.54)
Goods imports	1.18**	1.17*	1.46***	-1.62
	(0.58)	(0.61)	(0.56)	(1.75)
Goods exports	-1.42***	-1.51***	-1.06***	0.43
	(0.38)	(0.41)	(0.40)	(0.78)
ESI (economic)	-0.0029	-0.0075	0.011**	0.019*
	(0.0059)	(0.0078)	(0.0043)	(0.012)
L2.ESI (economic)	0.0079*	0.010**	-0.0011	0.0075
	(0.0043)	(0.0046)	(0.0055)	(0.031)
L4.ESI (economic)	-0.0055	-0.0047	-0.0093**	-0.0034
	(0.0042)	(0.0055)	(0.0037)	(0.028)
Observations	1513	1513	1513	1477
Akaike information criterion (AIC)	542731.7	491043.2	269355.5	95844.1
Bayesian information criterion (BIC)	542864.7	491176.3	269488.6	95976.5

Standard errors in parentheses

^{*} p < 0.1, ** p < 0.05, *** p < 0.01.

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