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Investment in the Western Balkans: New Directions and Financial Constraints in Infrastructure Investment

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Abstract

Investment in **infrastructure is important to generating long-term productivity** gains. The **Western Balkans lack infrastructure capacity and investment – particularly in non-traditional sectors** such as water, sewerage, waste, health, social affairs and education. **Two important regional infrastructure investment initiatives** are active in the Western Balkans: the European Western Balkans Investment Framework **WBIF** and the Chinese Belt and Road Initiative **BRI**. Both are focusing on traditional infrastructure such as energy and transport and both come with a volume of about EUR 8 billion in loans. The European initiative has in addition provided for some EUR 800 million in grants and has an emphasis on Green Economy projects. Overall infrastructure investment needs in the region are huge. **Lower bound estimates of additional investment needs only in alternative infrastructure investment for the next five years are at around EUR 800 million.** The financial conditions in the region are underdeveloped but improving. Nevertheless, external debt levels have increased substantially since the outbreak of the global financial crisis and thus pose a serious threat to economic stability in a situation when the global interest rates are again on the rise. **Thus, substantially hiking up investment in traditional as well as non-traditional infrastructure in the Western Balkans without dramatically increasing the countries' indebtedness is the primary duty in order to achieve higher long-run productivity growth and provide the population a perspective for a better future without a need to migrate.** Short-run pragmatic policy recommendations include: Western Balkan governments should rebalance their **infrastructure investment mix** to support the Green Economy; the new EU **IPA III** funds should be rearranged to focus more on Western Balkan alternative infrastructure sectors; in order to create the necessary financial leeway for more public investment in non-traditional infrastructure, national governments in the Western Balkans could adopt the Austrian **ASFINAG model**; similarly, **PPP** projects might be considered but these need particularly good management; the **IFIs** should issue GDP-linked loans for crucial investment in the region in order to avoid macro-financial crises in the future. Long-run forward-thinking policy recommendations include: a **Joint Project Pipeline** of a Common Western Balkans Investment Committee with supranational overruling powers representing the infrastructure interests of the whole region; the creation of a **Western Balkans Regional Infrastructure Fund** with a much bigger volume and much stronger grant component than the current Western Balkans Investment Framework in order to curb the influence of external players in the region and reduce indebtedness; **joining the euro area** – even if only with limited rights, e.g. without voting rights – before EU accession would be a powerful tool to bring down interest rates and improve the financial conditions for both the private as well as the public sector's investment. Acknowledging that often political tensions are a barrier to greater connectivity and trade between countries, support for **infrastructure investment could be used as a bargaining chip in EU-brokered negotiations to solve long-standing political stalemates** in the Western Balkans.

Keywords: economic development, infrastructure, investment, indebtedness, finance, Western Balkans

JEL classification: O18, H54, P33, F34, H63

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ABBREVIATIONS

AL	Albania
ASFINAG	Autobahnen- und Schnellstraßen-Finanzierungs-Aktiengesellschaft
AT	Austria
BA	Bosnia and Herzegovina
BG	Bulgaria
bn	billion
BRI	Belt and Road Initiative
CEB	Council of Europe Development Bank
CEFTA	Central European Free Trade Agreement
CESEE	Central, East and Southeast Europe
CN	China
CPI	Consumer Price Index
CZ	Czech Republic
EBRD	European Bank for Reconstruction and Development
EE	Estonia
EIB	European Investment Bank
EU	European Union
EUR	euro
Eurostat	statistical office of the European Union
EWBJF	European Western Balkans Joint Fund
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
HR	Croatia
HU	Hungary
ICT	information and communications technology
IFIs	International Financial Institutions
IMF	International Monetary Fund
IPA	Instrument for Pre-accession Assistance
KfW	Kreditanstalt für Wiederaufbau
LT	Lithuania
LV	Latvia
ME	Montenegro
MK	Macedonia
mn	million
MW	Megawatt
NACE	Statistical Classification of Economic Activities in the European Community
NATO	North Atlantic Treaty Organization
NPLs	non-performing loans
PL	Poland
PPP	Public-Private Partnership
ROW	Rest of the World
RS	Serbia
RU	Russia

SI	Slovenia
SK	Slovakia
TAP	Trans Adriatic Pipeline
TR	Turkey
UNCTAD	United Nations Conference on Trade and Development
WBIF	Western Balkans Investment Framework
WEF	World Economic Forum
wiiw	The Vienna Institute for International Economic Studies
XK	Kosovo

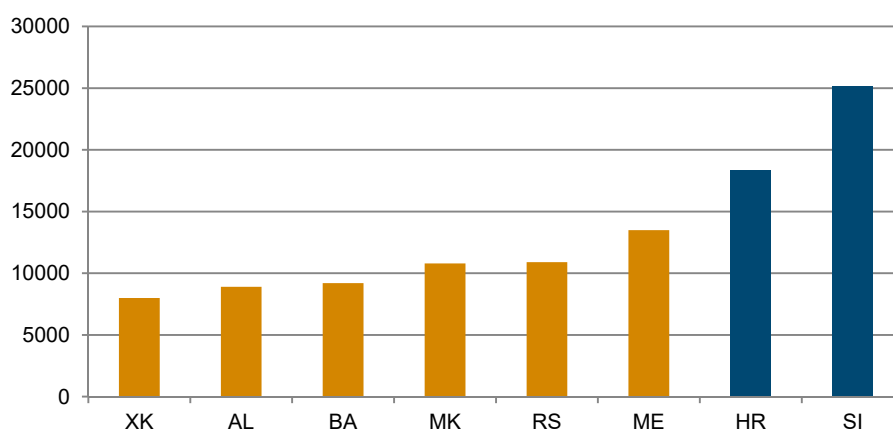
Introduction

ECONOMIC CATCH-UP POTENTIAL AND A LACK OF INFRASTRUCTURE

Historically at the fringes of large empires and far away from the core regions of the industrial revolution in the Northwest of Europe, the Balkans are still a region with a substantial economic catch-up potential (also compared to their Central European peers – Figure 1) with less developed institutions and a lack of modern infrastructure (EBRD, 2017; Atoyan et al., 2018). This goes back all the way to the Roman Empire (Milanovic, 2018), inter alia due to unfavourable geography (i.e. high mountains right at the coast disconnected with the hinterland). It is reassuring that **better infrastructure has the potential to overcome adverse geography** (Sanfey and Milatovic, 2018). More recently, initiatives such as the ‘Berlin Process’ have helped to improve infrastructure in the region. However, the infrastructure gaps are still huge and funds to improve them are limited.

Figure 1 / The Western Balkans have a large catch-up potential

GDP per capita in EUR at Purchasing Power Standards, 2017



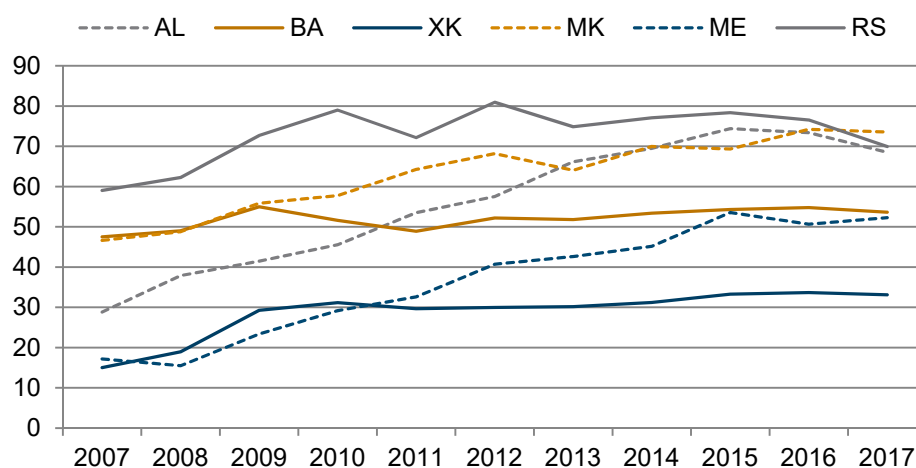
Source: wiiw Annual Database.

Infrastructure investment levels are rather low but can be very volatile and aggregate figures are often driven by a few larger projects. Sector wise, **infrastructure investment in the region is focused on transport, energy as well as information and communication**. The former two are also the sectors that are primarily supported by the Western Balkans Investment Framework with grants and loans – with the loan component being substantially larger than the grant part. The latter sector has more recently received some attention as the European Commission launched a Digital Agenda for the Western Balkans in June 2018, announcing support for investing in broadband connectivity. Other sectors, although also important, receive only little attention. In most recent years, China is active in the region with a number of infrastructure construction projects in the framework of the Belt and Road Initiative, primarily in transport and energy. Chinese financial support is exclusively based on loans.

A lack of infrastructure investment in sectors that help to protect the environment (e.g. water, sewerage, waste management), improve human health, support social activities and boost education (especially of marginalised groups) is seriously hampering the development and the European integration of the societies in the Western Balkans. It is also one of the reasons for mass emigration of large parts of the younger population. Moreover, (infrastructure) investment that is predominantly based on foreign indebtedness can have severe macroeconomic repercussions. Similar to other regions, **external debt levels in the Western Balkans have increased substantially since the outbreak of the global financial crisis (Figure 2) and pose a serious threat to economic stability in a situation when the global interest rates are again on the rise.**

Figure 2 / External debt has increased since the outbreak of the global financial crisis

Gross external debt in % of GDP, 2007-2017



Note: Public external debt data for Montenegro.

Source: wiiw Annual Database.

Thus, in this study we will answer the following questions:

- a. What is the state of infrastructure investment in the Western Balkans?
- b. What are the infrastructure needs in sectors apart from transport, energy and communication?
- c. How indebted are the economies in the Western Balkans?
- d. Which policy recommendations can support new directions for infrastructure investment and improve its financing, given the macro-financial constraints?

1. State of infrastructure investment

The following section will analyse the dynamics and structure of infrastructure investment in the Western Balkans over about the last decade. It builds upon earlier work by Holzner and Schwarzhappel (2018), which provides a first analysis of infrastructure investment in the Western Balkans. That analysis concludes that the Western Balkans are a good case study also for other regions in the EU neighbourhood that have similar development problems. It finds that (i) intensity of involvement is important; (ii) the composition of the funds matters; (iii) infrastructure funding will not automatically lead to more political cooperation; and (iv) infrastructure development funds can also be used as a sort of reward for more political cooperation.

The present chapter provides statistical definitions for proper interpretation of related data. Moreover, it examines recent regional infrastructure initiatives – notably by the EU, European financial institutions and European bilateral donors as well as China. Since 2009/2010 both initiatives have involved a loans volume for infrastructure investment of about EUR 8 billion each. In addition, the European initiative has distributed around EUR 800 million in grants. By comparison, the World Bank's commitments for investment financing (not only of infrastructure) in the Western Balkans since 2009 are in the order of EUR 3.3 billion and additionally include grants of about EUR 140 million.

1.1. ANALYSIS OF THE DEVELOPMENT OF INFRASTRUCTURE INVESTMENT OVER TIME

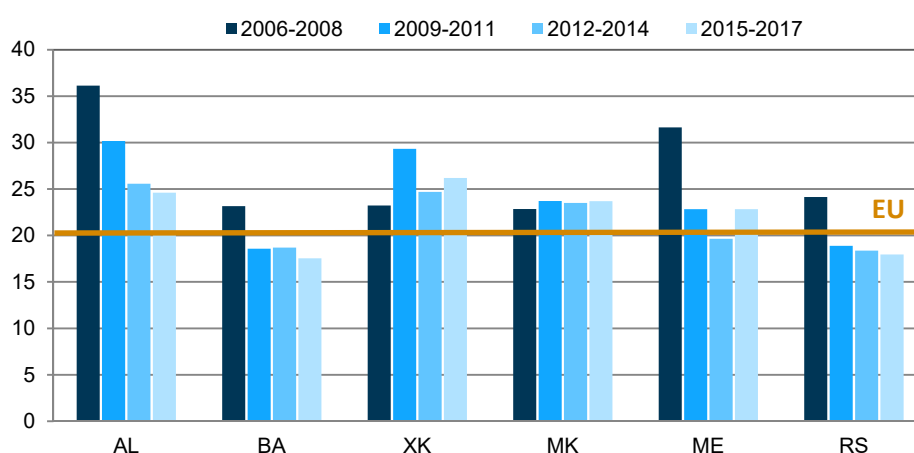
In terms of national accounts statistics, investment is called gross fixed capital formation (GFCF). It is the key to long-term economic development. It includes several different types of investment – both private as well as public. If it is, for instance, spent by firms on new production capacities or by the state on new infrastructure it adds directly or indirectly to higher productivity and improved competitiveness. **In recessions, GFCF is typically the first item to be cut** by economic agents. This is also what happened in most of the Western Balkan countries after the outbreak of the global financial crisis (Figure 3).

In many countries of the region GFCF as a share of GDP was falling continuously after the boom period 2005-2007. In some cases, the negative trend has been stabilised more recently. Only one country, Macedonia, experienced a different trend and had a stable investment share. After a long period of economic stagnation and a rather prudent fiscal policy, Macedonia had enough capacities to perform counter-cyclical policies that helped to boost investment, from rather low levels though. The country has now an investment share of close to a quarter of GDP – similar to Albania and Kosovo. This is far above e.g. average EU levels, which are at around a fifth of GDP. The population heavyweights **Serbia as well as Bosnia and Herzegovina are below the EU average and need to increase investment** if they do not want to stay behind in the catch-up process.

Unsurprisingly, **most of the GFCF is accounted for by construction activities** (Figure 4, left panel). In 2016 total construction had a share of around half of GFCF in Bosnia and Herzegovina and in Montenegro, and up to almost three quarters in Albania and Kosovo. Only in Serbia, a bigger and more diversified economy, construction had a share of less than 40% in GFCF. Other fixed assets that are not constructed can include inter alia tangible assets such as machinery and office equipment or intangible fixed assets such as computer software and patents.

Figure 3 / Investment was cut after the outbreak of the global financial crisis

Gross fixed capital formation in % of GDP, 3-year averages, 2006-2017

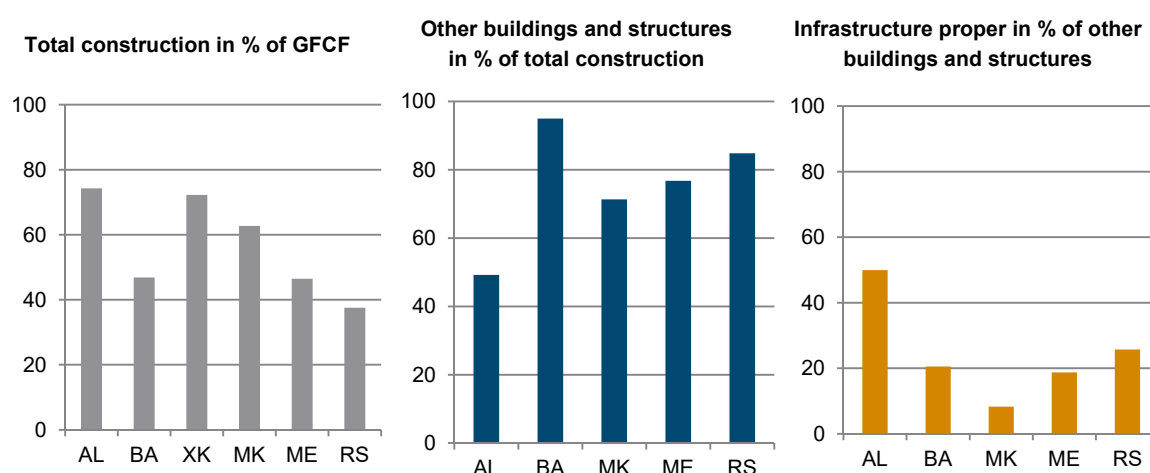


Note: National accounts data; horizontal line represents EU average for 2006-2017 at 20.5% of GDP.

Source: wiiw Annual Database, Eurostat.

Figure 4 / Only a small share of overall investment is in infrastructure

Relative proportions of investment sub-categories, 2016



Note: National accounts data; ME investment survey.

Source: wiiw and national statistical offices.

Note: National accounts data; BA & ME investment survey; XK not available.

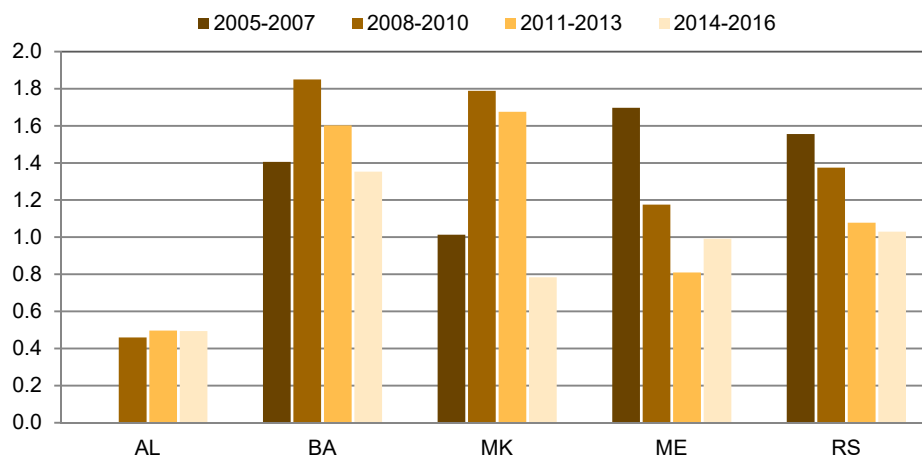
Note: Investment survey data; XK not available; MK national accounts 2014.

Within total construction, the sub-category of other buildings and structures accounts for the lion's share (Figure 4, central panel). It consists of non-residential buildings and other structures, such as civil engineering works. Hence, this includes also firms' office and factory buildings and the like. The share in total construction is indeed high and ranged from 71% in Macedonia to 95% in Bosnia and Herzegovina in 2016. Only in Albania did that sub-category account for slightly less than half of construction. There, private residential building is still an important part of construction activities.

Finally, **out of other buildings and structures only a smaller part is dedicated to investment in infrastructure proper** (Figure 4, right panel). Infrastructure proper can be defined as the sum of investment in other buildings and structures (see also Revoltella et al., 2016 and EIB, 2017 for a discussion of statistical infrastructure definitions) in the sectors of energy, water supply, transport, communication, education and health (statistical classification of economic activities in the European Community NACE categories D, E, H, J, P, Q). Recently it has made up about 20% of investment in other buildings and structures – except for Macedonia where it was below 10% and Albania where it made up half. Thus, it can be concluded that investment in infrastructure proper is only a small part of overall investment.

Figure 5 / Cyclical fluctuation of infrastructure investment

Investment in infrastructure proper in % of GDP, 3-year averages, 2005-2016



Note: Investment survey data; XK not available; MK national accounts; data missing for BA 2005-2006, AL 2005-2009, MK 2015-2016.

Source: wiiw and national statistical offices.

Expressed as a share of GDP, investment in infrastructure proper peaked around the outbreak of the global financial crisis and in several cases even a few years later. It came close to, but never reached 2% of GDP (Figure 5). Albania is an outlier with a tiny 0.5% of GDP in infrastructure investment. More recently, also other **Western Balkan economies have experienced a drop in infrastructure investment to levels of about 1% of GDP** or even below (Montenegro, Macedonia). One reason for the slightly lagged crisis-triggered reduction in infrastructure investment (as compared to overall GFCF investment) is probably the long planning periods needed before large infrastructure projects can be started. While this type of investment accounts for only a small part in overall economic activity, it is still a very important tool for the support of economic development.

Theory is very much in favour of a ‘Big Push’ in infrastructure investment (Rosenstein-Rodan, 1943). There is also a broad empirical literature (e.g. Pereira and Andraz, 2013; IMF, 2014; Donaldson and Hornbeck, 2016; EC, 2016; Holl, 2016; Revoltella et al., 2016; Galiani et al., 2017; Donaldson, 2018) which mostly finds positive economic effects of infrastructure investment, both in the historical as well as current context and for developed as well as developing countries.

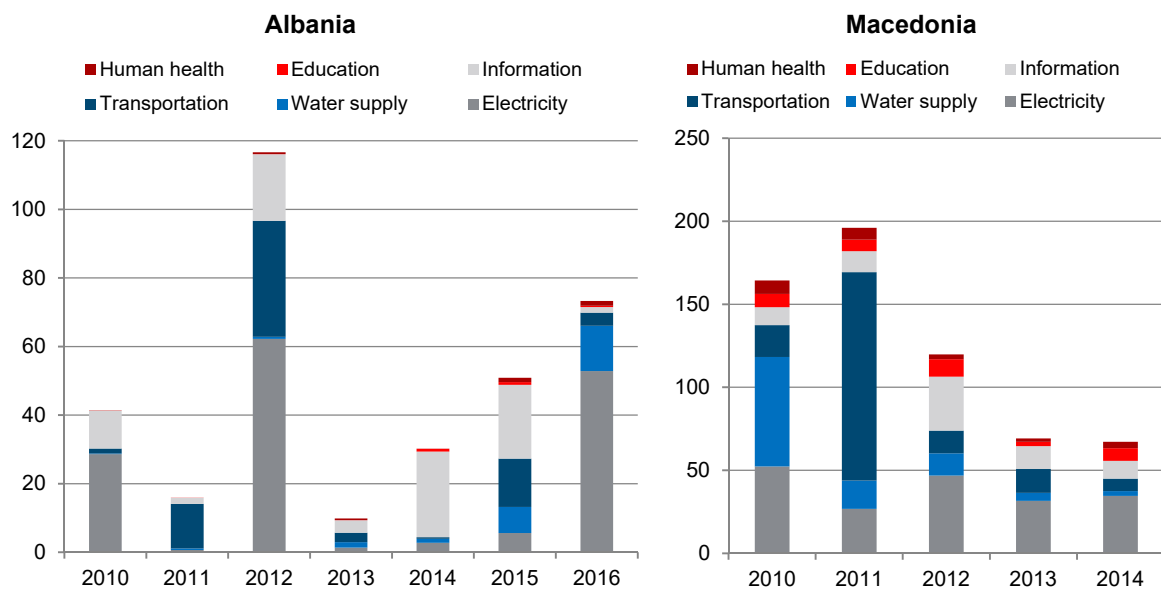
1.2. DETAILED BREAKDOWN OF INFRASTRUCTURE INVESTMENT BY ECONOMIC ACTIVITIES

Unsurprisingly, within investment in infrastructure **we find investment in transport and energy infrastructure to be dominating**. These sectors have been in the focus of national as well as EU and Chinese infrastructure initiatives of recent years. Figures 6 to 9 below present a country-specific breakdown by the respective sectors of infrastructure investment activity.

The subdued colours represent investment expenditures in EUR million in the traditional infrastructure sectors transport, electricity and information. These sectors clearly dominate infrastructure investment in the Western Balkans. **This is particularly the case in Albania** (Figure 6, left panel). The alternative infrastructure sectors health, education and water – depicted in bright colours – are negligible, maybe with the exception of the water supply and sewerage sector in more recent years. Investment in the energy sector is regularly absorbing the largest amount of funds in Albanian infrastructure. There are typically just a few projects – such as more recently Norwegian Statkraft’s Devoll hydro power project and the construction of the Trans-Adriatic-Pipeline (TAP) for natural gas from Azerbaijan.

Figure 6 / Particularly low alternative infrastructure investment in Albania and Macedonia

Infrastructure investment by NACE activities, Albania, Macedonia, EUR million



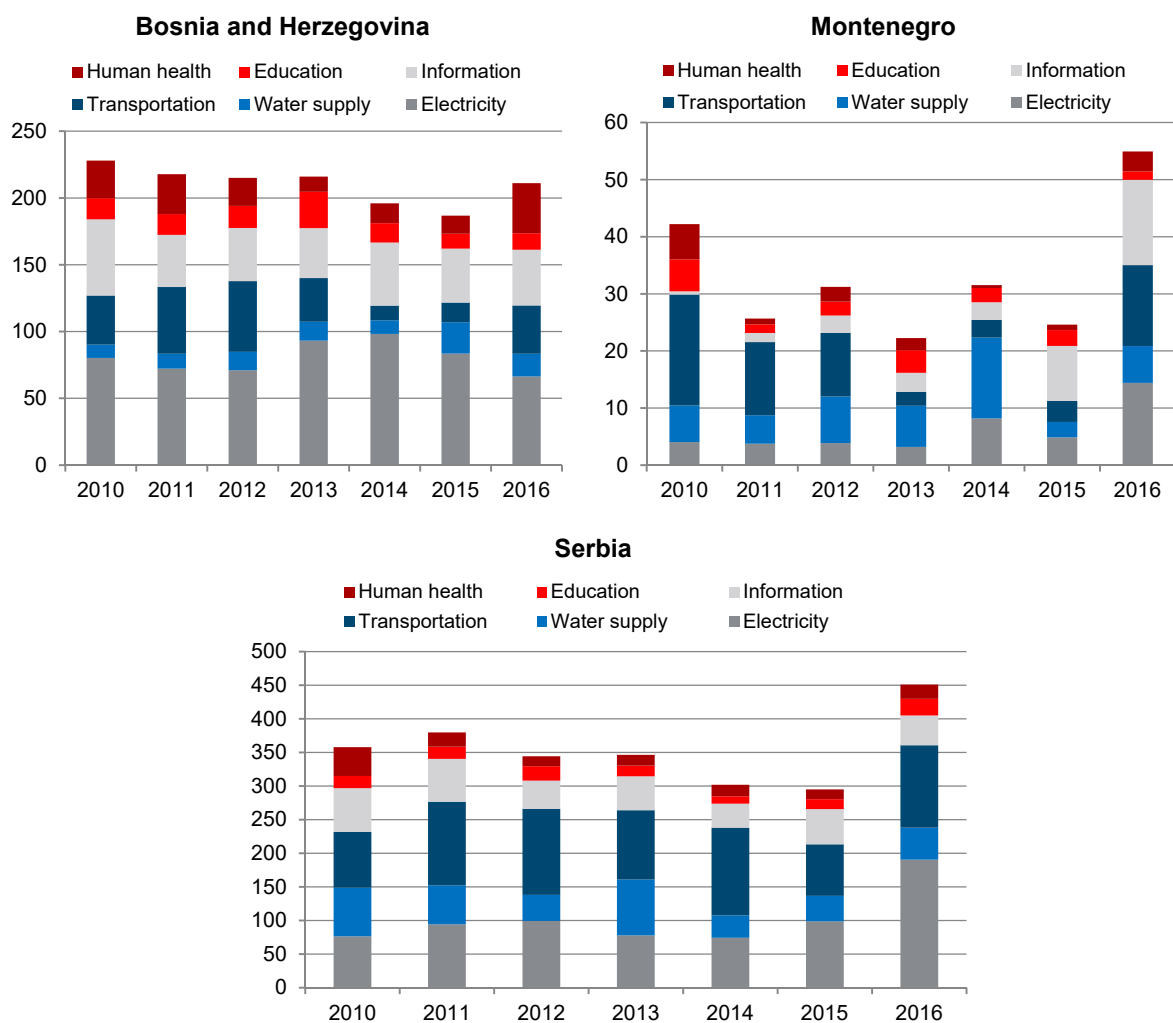
Note: AL structural business statistics; MK national accounts; MK 2013 and 2014 structure estimated using structure of total construction. The full names of the NACE sectors are: D Electricity, gas, steam, air conditioning supply; E Water supply, sewerage, waste management, remediation; H Transportation and storage; J Information and communication; P Education; Q Human health and social work activities.

Source: wiiw, national statistical offices.

The infrastructure investment situation in Macedonia is similar to the Albanian in terms of volume, fluctuation and structure (Figure 6, right panel). Again, traditional infrastructure investment plays a crucial role, with energy dominating, except for 2011. This was the year when, apart from a few rail and road projects, the Skopje 2014 project was launched to refurbish the capital city and a number of bridges across the city's river Vardar were constructed. Among the modest number of more alternative infrastructure projects we find an exceptional boost of water supply and sewerage infrastructure investment of close to EUR 70 million in 2010. This was the year when according to UNCTAD (2012) the water and sewerage systems of the country's four 'Technological Industrial Development Zones' were constructed. Overall infrastructure investments in that year barely reached EUR 170 million; nevertheless, this is more than double the volume of infrastructure investment achieved in the more recent years.

Figure 7 / Slightly more balanced investment in infrastructure sectors in BA, ME and RS

Infrastructure investment by NACE activities, Bosnia and Herzegovina, Montenegro, Serbia, EUR million



Note: Investment survey data; ME structure estimated using structure of total construction. The full names of the NACE sectors are: D Electricity, gas, steam, air conditioning supply; E Water supply, sewerage, waste management, remediation; H Transportation and storage; J Information and communication; P Education; Q Human health and social work activities. Source: wiiw, national statistical offices.

In Bosnia and Herzegovina, the overall structure is somewhat more balanced (Figure 7, upper left panel). Also, investment in education, health and social work activities' infrastructure is higher than in the former cases. Nevertheless, traditional infrastructure investment, particularly in the energy sector, dominates also in this country. And over the coming years, more coal-fired power plants are likely to be built by Chinese companies, financed by Chinese loans.

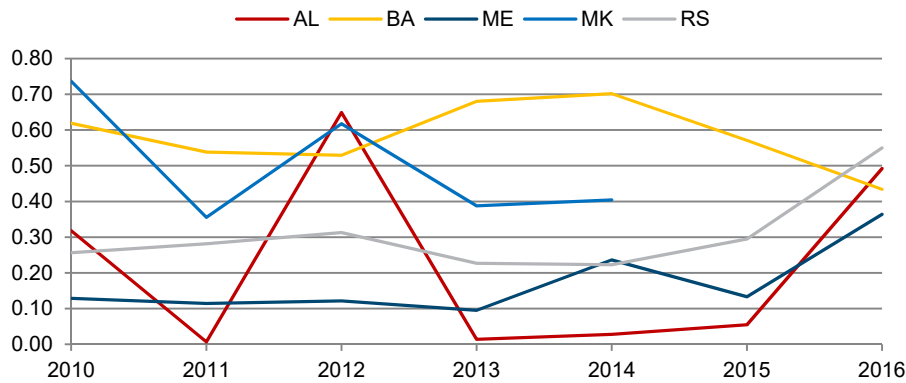
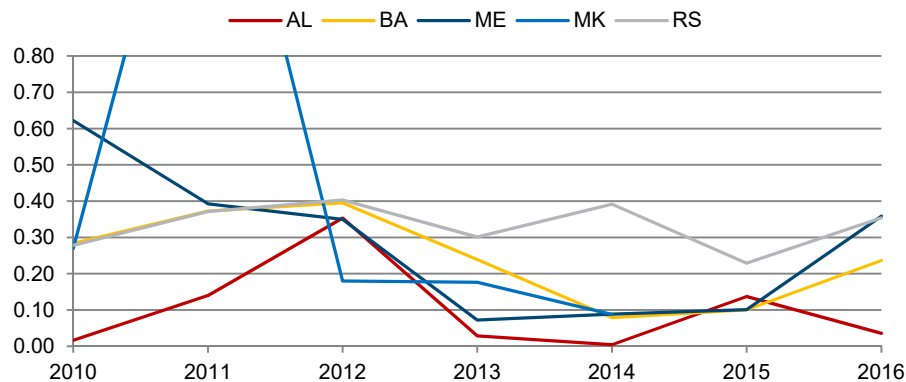
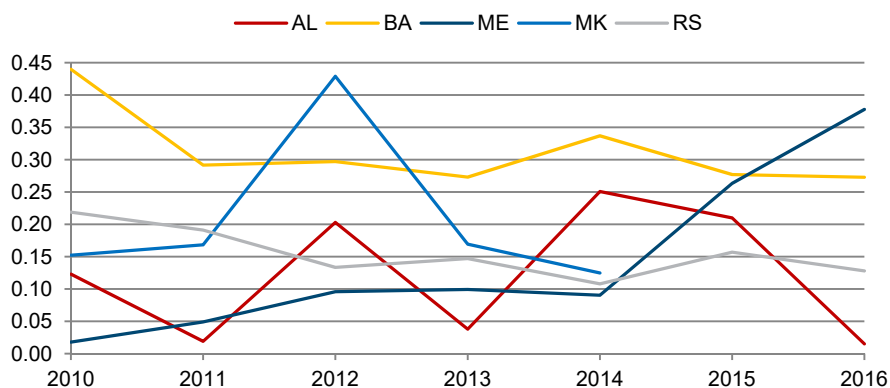
In Montenegro the infrastructure investment volumes are typically tiny – around EUR 30 million (Figure 7, upper right panel). Investment in the transport and storage sector are traditionally dominating and will become even more important in the coming years with the Chinese highway project along the route connecting the Montenegrin harbour Bar with the Serbian border. Interestingly, in Montenegro infrastructure investment in the water supply and sewerage sector is more often than not the second most important type of infrastructure investment. Given the country's strong dependence on its coastal as well as inland tourism this is reassuring.

The Serbian infrastructure investment structure is similarly balanced as that of Bosnia and Herzegovina, with investment in the transport and energy sectors dominating (Figure 7, lower panel). The latter has become increasingly important in most recent years. This trend will likely continue as a number of Chinese thermal power plant projects are in the construction pipeline.

The single investment time series expressed in per cent of GDP appear to be even more erratic than the absolute values. Figure 8 presents these for the traditional sectors electricity, transport and information. But again, the larger countries – Serbia and Bosnia and Herzegovina – register a smoother development. Generally, **more recently electricity infrastructure investment converges to about half a per cent of GDP across the region and transport to about 0.3%**, while information infrastructure investment shares record more variance across countries and levels are typically below 0.3% of GDP.

Figure 8 / In traditional infrastructure investment, electricity dominates with 0.5% of GDP

Infrastructure investment in traditional sectors, in % of GDP, 2010-2016

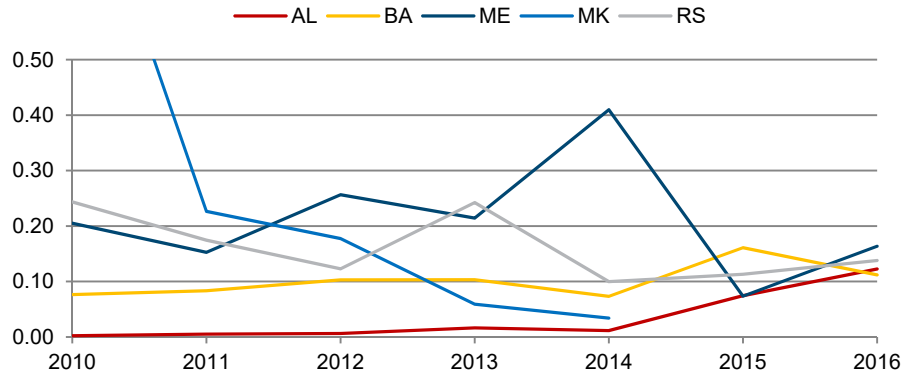
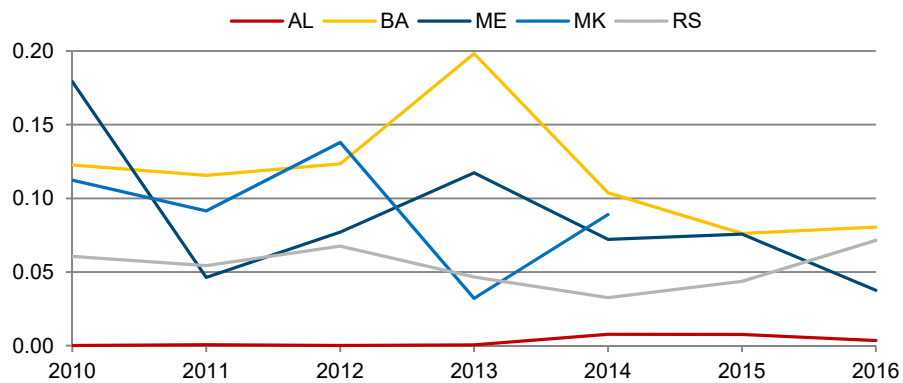
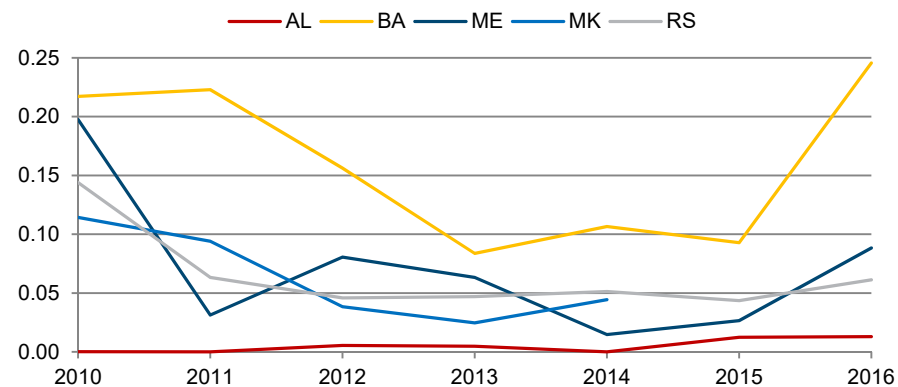
Electricity**Transportation****Information**

Note: Investment survey data; AL structural business statistics; MK national accounts; MK 2013 and 2014 structure estimated using structure of total construction; MK investment in transport infrastructure in 2011 stood at 1.66% of GDP; ME structure estimated using structure of total construction. The full names of the NACE sectors are: D Electricity, gas, steam, air conditioning supply; H Transportation and storage; J Information and communication.

Source: wiiw, national statistical offices.

Figure 9 / In alternative infrastructure investment, water supply leads with 0.15% of GDP

Infrastructure investment in alternative sectors, in % of GDP, 2010-2016

Water supply**Education****Human health**

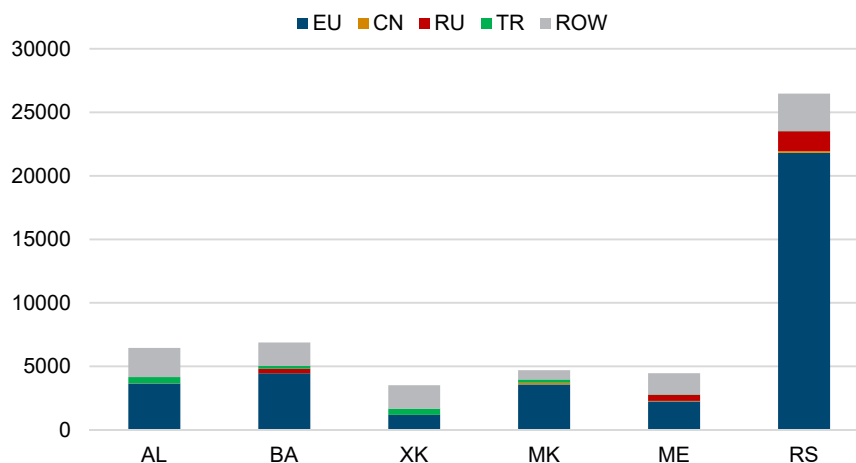
Note: Investment survey data; AL structural business statistics; MK national accounts; MK 2013 and 2014 structure estimated using structure of total construction; MK investment in water infrastructure in 2010 stood at 0.93% of GDP; ME structure estimated using structure of total construction. The full names of the NACE sectors are: E Water supply, sewerage, waste management, remediation; P Education; Q Human health and social work activities.
Source: wiiw, national statistical offices.

In the case of the alternative sectors (Figure 9) we find very low shares of infrastructure investment in per cent of GDP. **Investment in water supply converges more recently to shares of around 0.15%, while investment in education and health typically makes up less than 0.1% of GDP.** In Bosnia and Herzegovina, the shares of the latter two tend to be higher than those of the other countries.

Finally, we should clearly distinguish infrastructure investment, or for that matter any other form of gross fixed capital formation, from foreign direct investment. GFCF is based on a national accounting concept and shows how much of the new value added in the economy is invested rather than consumed. FDI, by contrast, is based on a balance of payments concept and shows foreign investment in the form of a controlling ownership in a business, such as mergers and acquisitions, building new facilities, reinvesting profits, and intra-company loans. While there might be some overlap between these concepts, FDI typically does not include a lot of infrastructure investment in the narrow sense. It often comes in the form of foreign bank, insurance and telecom business investments, retail chains or car assembly factories. In some cases, it might be infrastructure related and includes e.g. a foreign-owned power station or an airport.

Figure 10 / Investors from the EU dominate FDI to the region

FDI inward stock, 2017, EUR million



Note: Serbia 2015.

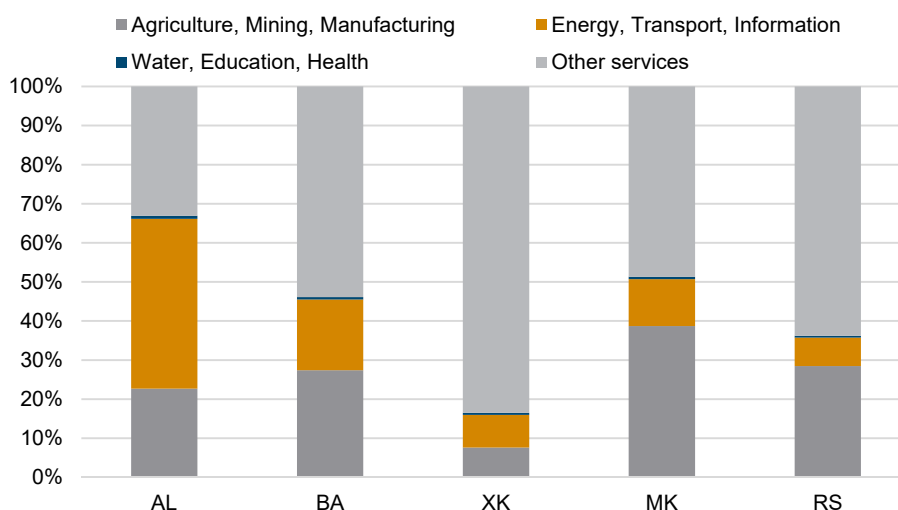
Source: wiiw FDI Database.

Also, due to its immanent ownership character, FDI can be shown not only as an annual flow, but also as a stock, while GFCF is a flow only. So far, the five smaller Western Balkan economies have received on average about EUR 5 billion in FDI each (Figure 10). In sum, these EUR 26 billion are about the FDI stock that Serbia alone received. Relative to GDP this is in most cases about half, in Serbia about three quarters and in Montenegro more than 100% of GDP. **Foreign business capital stock is predominantly owned by EU firms.** This includes in particular firms from the Netherlands, Austria and Germany. The role of foreign powers such as China, Russia and Turkey in FDI is negligible. In terms of sectors, FDI in goods production in agriculture, mining and manufacturing makes up about a quarter of total FDI stocks. FDI in businesses related to traditional network infrastructure (energy, transport and information) accounts for less than a fifth of total FDI stocks. FDI in business related to alternative

infrastructure (water, education, health) is far below 1% of total stocks. The major part of FDI stock can be found in other services sectors including in particular finance and retail (Figure 11).

Figure 11 / The share of infrastructure-related FDI is small

FDI inward stock by activity, 2017, in % of total



Note: Serbia 2015.

Source: wiiw FDI Database.

1.3. EXAMINATION OF THE WESTERN BALKANS INVESTMENT FRAMEWORK

The most important regional infrastructure investment initiative coordinating EU, International Financial Institutions' (IFIs) and bilateral donor funds is the Western Balkans Investment Framework (WBIF). It was created at the end of 2009 as a so-called 'blending instrument', combining grants and loans as well as technical assistance. WBIF is a cooperation between the Council of Europe Development Bank (CEB), the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB), the Kreditanstalt für Wiederaufbau (KfW) and the World Bank as well as bilateral donors. The resources are pooled in the European Western Balkans Joint Fund (EWBJF), with significant support from the European Commission. Norway, Austria, Sweden and Germany are among the biggest bilateral donor countries to the EWBJF. The governance structure of WBIF includes the National Investment Committees and is depicted in the organisation chart in Figure 12.

By early 2018, 146 WBIF projects in the infrastructure-relevant areas of energy, environment and transport were able to generate an investment volume of EUR 10.9 billion in the Western Balkans. However, **most of the funding consists of loans (EUR 7.9 billion) and only a smaller part of grants (EUR 796 million)**, the remainder is national co-financing. Up to mid-2014 only about EUR 300 million of overall grants (including also funds for social issues and private sector development) were provided. Hence, the bulk of the WBIF grants were only approved once the IPA II (the EU's Instrument for Pre-accession Assistance in the period 2014-2020) funds were made available in 2015 (WBIF, 2016). This also implies that the currently minor grant share will further increase once IPA II funds are fully utilised by the end of the disbursement period.

Figure 12 / National Investment Committees are the starting point in the WBIF

WBIF governance structure

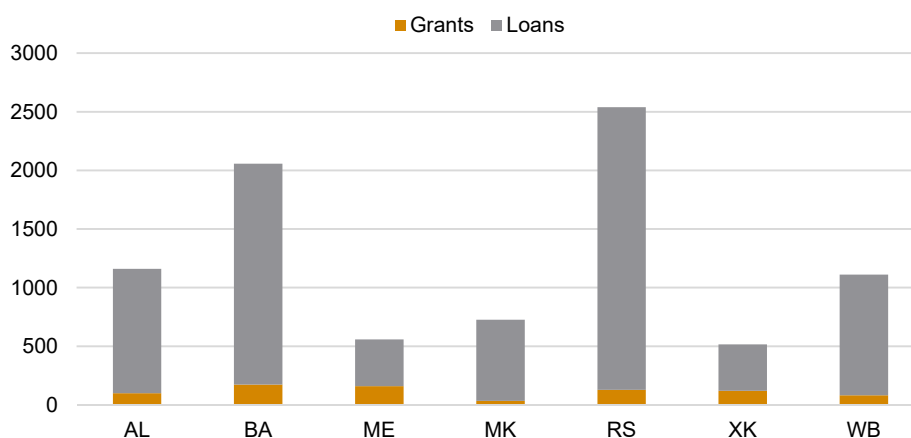


Source: Western Balkans Investment Framework (WBIF).

The smallest and poorest countries of the region have received the largest shares of the grants (especially Bosnia and Herzegovina – 22% – and Montenegro – 20%, Figure 13). Sector wise, transport (road, rail) dominates clearly with 54% of all grants (Figure 14); next comes energy (energy efficiency, transmission and distribution, sustainable hydropower); the combined funds of grants and loans for projects improving the environment (flood protection and mitigation, water supply and sanitation) make up only a bit more than one billion euro.

Figure 13 / Smallest and poorest countries have received largest shares of WBIF grants

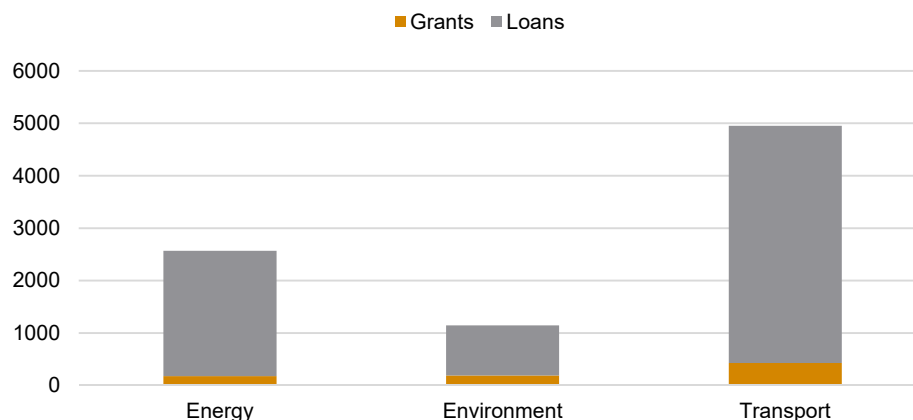
Regional Western Balkan breakdown of WBIF infrastructure projects 2009-2017, in EUR million

Note: Data accessed from <https://www.wbif.eu/wbif-projects> on 9 February 2018.

Source: Western Balkans Investment Framework (WBIF).

Figure 14 / Transport dominates WBIF infrastructure support

Sectoral Western Balkan breakdown of WBIF infrastructure projects 2009-2017, in EUR million



Note: Data accessed from <https://www.wbif.eu/wbif-projects> on 9 February 2018.

Source: Western Balkans Investment Framework (WBIF).

1.4. THE ROLE OF CHINA'S BELT AND ROAD INITIATIVE

The other important infrastructure initiative in the region is **China's Belt and Road Initiative (BRI)**, within which the Western Balkan countries play an important role (Grübler et al., 2018). The region lies between the port of Piraeus in Greece (67% of which was acquired by the Chinese state-owned company COSCO in 2016) and the big markets of Western Europe. Chinese infrastructure construction projects in the Western Balkans make up about USD 9.1 billion (EUR 7.8 billion) in loans only. The most important transport sector contractor is the predominantly state-owned China Communications Construction Company. In the energy sector, the state-owned China National Machinery Industry Corporation – known as Sinomach – is the leading contractor (Table 1). Location wise, the prime target of Chinese construction contracts is Serbia. Almost half of the projected amounts are aimed at construction in this country, strongly driven by the upgrade of the Budapest-Belgrade railway link.

There are questions about the extent to which the planned projects will actually be realised, but if they are, it would certainly help to alleviate some of the region's infrastructure gaps. Nevertheless, there are certain risks to the region as a result of Chinese involvement: i) Chinese money will exclusively arrive in the form of loans, adding to the debt burden (Hurley et al., 2018); ii) Chinese activities will not help to reduce the already existing problem of corruption (Makocki and Nechev, 2017); iii) other financiers put more emphasis on institutional, environmental and social standards; iv) there are concerns about greater dependency and political influence; v) infrastructure development is typically undertaken by Chinese contractors, suppliers and workers, and using Chinese materials, reducing the economic benefits for the region (Barisitz and Radzyner, 2017); vi) Chinese energy projects are typically related to the construction of coal-fired power plants, thereby counteracting energy-related EU projects that are mostly aiming to support the shift towards a low-carbon economy.

Table 1 / A few companies dominate Chinese infrastructure construction contracts

Chinese firms' major construction contracts in the Western Balkans, 2010-2017

Country	Year	Contractor	Sector	USD million
BA	2010	Dongfang Electric	Energy	710
BA	2013	Power Construction Corp	Energy	280
BA	2014	China Energy Engineering	Energy	1,060
BA	2015	Dongfang Electric	Energy	460
BA	2017	Shandong Gaosu	Transport	640
MK	2013	Power Construction Corp	Transport	400
ME	2014	China Communications Construction	Transport	1,120
RS	2010	China Communications Construction	Transport	260
RS	2010	Sinomach	Energy	340
RS	2013	China Communications Construction	Transport	850
RS	2013	Shandong Gaosu	Transport	330
RS	2013	Sinomach	Energy	720
RS	2016	China Communications Construction	Transport	230
RS	2016	Sinomach	Energy	230
RS	2016	Huawei	Technology	170
RS	2016	China Comm. Constr. and China Railw. Eng.	Transport	160
RS	2016	Power Construction Corp	Transport	220
RS	2017	Shanghai Electric	Energy	210
RS	2017	China Communications Construction	Transport	520
RS	2017	Power Construction Corp	Energy	230

Note: These projects are not FDI, but mostly public investment contracts financed by Chinese banks; not all the projects might be realised.

Source: China Global Investment Tracker, January 2018.

2. Infrastructure needs in sectors apart from transport, energy, information and communication

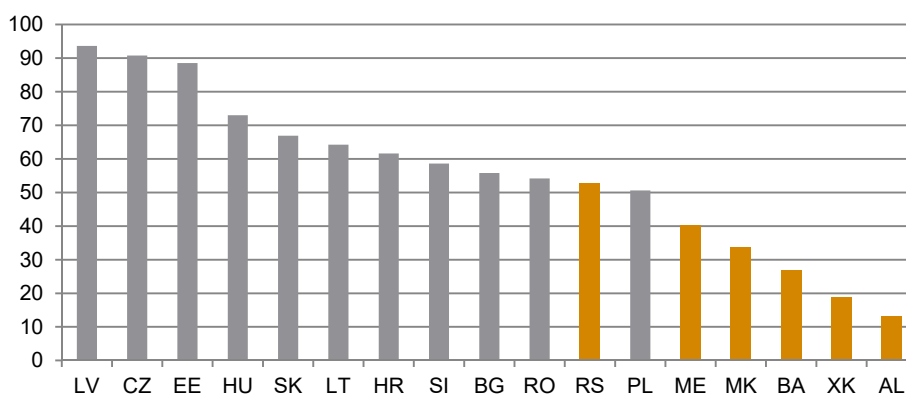
Chapter 2 deals with a regional comparison of traditional infrastructure indicators, in order to then describe infrastructure indicators in alternative sectors. Also, estimates of respective infrastructure needs are presented.

2.1. REGIONAL COMPARISON OF INFRASTRUCTURE INDICATORS IN TRADITIONAL SECTORS

The Western Balkans are lagging far behind their peers in EU-CESEE when it comes to traditional infrastructure in the transport, energy and information sectors. This is particularly true when looking at railway infrastructure. Historically, large parts of the Eastern coast of the Adriatic Sea have never seen the advent of the railway time – from Southern Croatia all the way to Western Greece investment in the railway was neglected (Holzner, 2016). Thus, the density of railway lines relative to population is extremely low (Figure 15).

Figure 15 / Hardly any railway lines on the Eastern coast of the Adriatic Sea

Railway line density in km per 100,000 persons, 2015

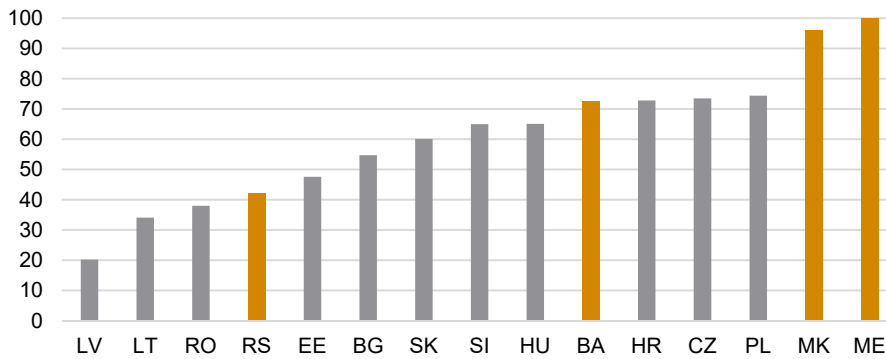


Source: Eurostat.

Consequently, **the share of road transport in overall freight transport is rather high in the region** (Figure 16). Here Serbia is an outlier, where also rail density is somewhat more pronounced. Also, the country's larger economy is more diversified and thus more bulk freight needs to be transported via inland waterways and rail. Nevertheless, more supply of railway infrastructure could help to shift transport capacities from road to environment-friendly rail.

Figure 16 / Road transport dominates the freight business

Road share of inland freight transport, in %, 2015

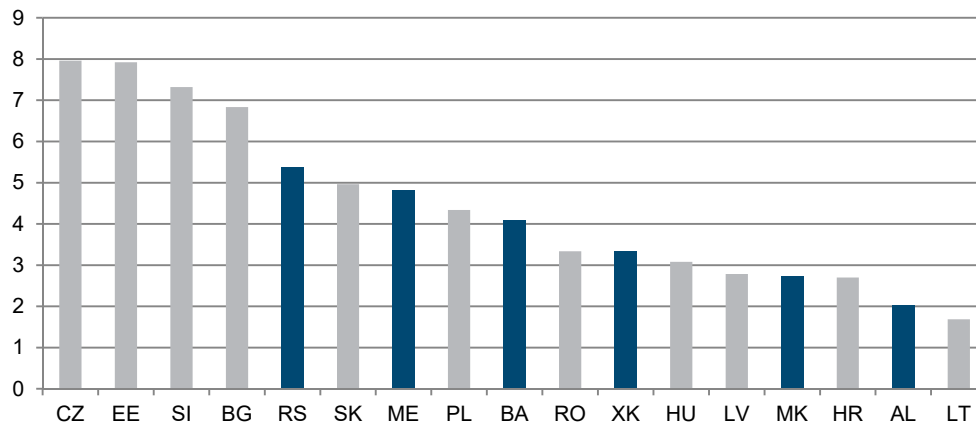


Source: Eurostat.

In the energy sector too, the Western Balkans are lagging behind other CESEE economies – but to a lesser extent than in the transport sector. **In terms of electricity production per head the region’s countries are in the middle and lower range of the distribution, with Serbia even close to the lead group of CESEE countries** (Figure 17).

Figure 17 / In energy infrastructure the region is lagging too, but less so

Gross electrical production in GW/h per 1,000 population, 2015

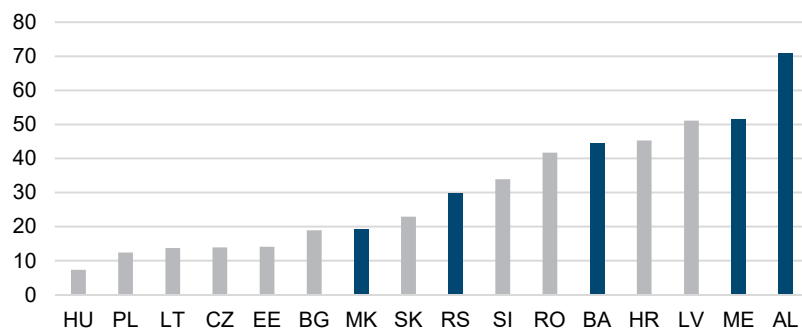


Source: Eurostat.

It is interesting to note, however, that the region has a high share of renewable energy consumption (Figure 18). This is due to a lot of hydro power generation capacities. Albania is leading in these statistics by far. Its generation capacities are almost exclusively based on hydro power. In rainy years the country is a net exporter of energy. A drought makes it a net importer. Though not included in these data, Kosovo is the other extreme case. Lignite constitutes the almost sole source of electricity production. The country is one of the most polluted ones due to outdated thermal power production without proper filter systems.

Figure 18 / Western Balkans are leading in renewable energy in CESEE

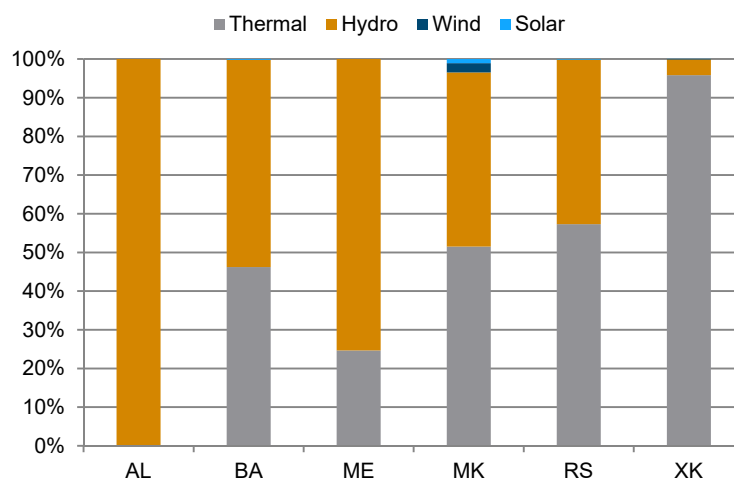
Share of renewable energy in gross final electricity consumption, in %, 2014



Source: Eurostat.

Figure 19 / Wind and solar electricity generation capacities are undeveloped

Active electricity generation capacities by source, in % of total, 2015



Source: Energy Community Secretariat.

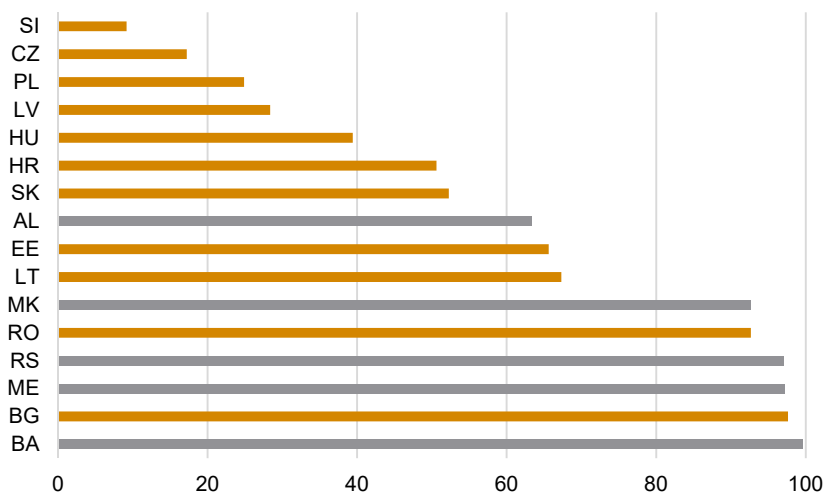
Macedonia is the only country in the region that has developed first wind and solar electricity generation capacities (Figure 19). However, these shares are still very small and the absolute values low as well (37 MW in wind and 17 MW in solar capacities in 2015). However, the reason why Macedonia has started to experiment with additional renewable energy sources is the fact that the country lacks substantial natural resources for electricity production that the others have in abundance – i.e. hydropower and lignite.

2.2. REGIONAL COMPARISON OF INFRASTRUCTURE INDICATORS IN ENVIRONMENT PROTECTION, HEALTH, SOCIAL ACTIVITIES AND EDUCATION

While infrastructure data for the Western Balkans in general are rather scarce, indicators of physical **infrastructure in alternative sectors, such as environment protection, health and education, are even more difficult to find**. Often, outcome indicators need to be examined in order to arrive at conclusions about the relevant infrastructures.

Figure 20 / Outdated waste management dominates in the Western Balkans

Share of landfilled municipal waste, in % of total, 2014

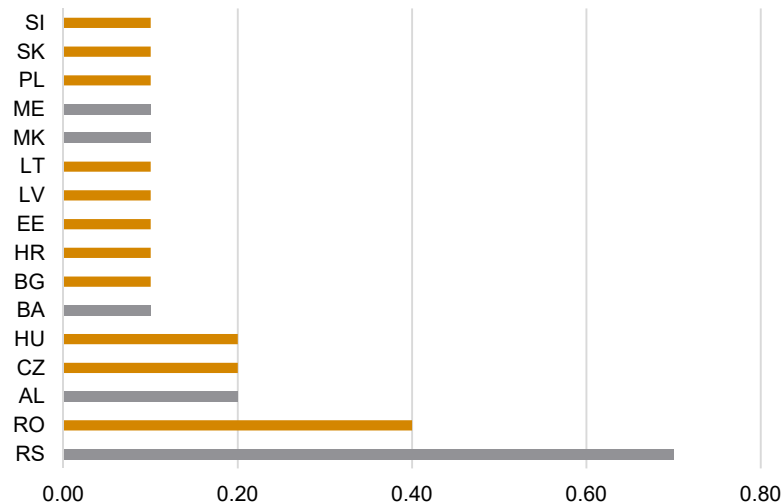


Source: Eurostat.

In waste management we find the Western Balkans to predominantly rely upon outdated waste landfill sites (Figure 20). By contrast, Slovenia has a share of less than 10% of landfilled municipal waste. The Albanian figures look better than the regional average but might miss a lot of illegal waste landfill sites. The quality of water and sanitation infrastructure appears to be by and large satisfactory – at least if the mortality rate attributed to unsafe water (Figure 21) is taken as a proxy. Here Albania and particularly Serbia stick out as exceptions with a multiple of the average CESEE rate.

Figure 21 / Unsafe water and sanitation is a risk to health in Serbia

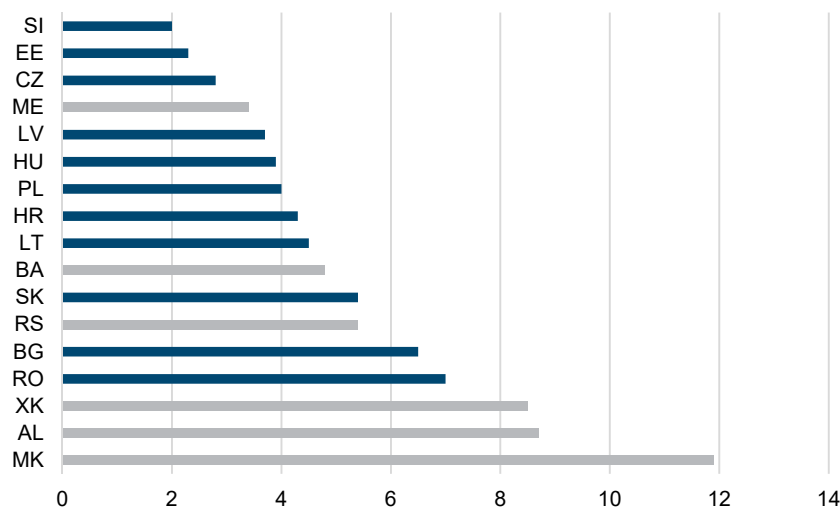
Mortality rate due to unsafe water, unsafe sanitation and lack of hygiene (per 100,000 population), 2016



Source: World Development Indicators.

Figure 22 / Infant mortality in Western Balkans is up to 6 times higher as compared to Slovenia

Infant mortality rate, in %, 2016



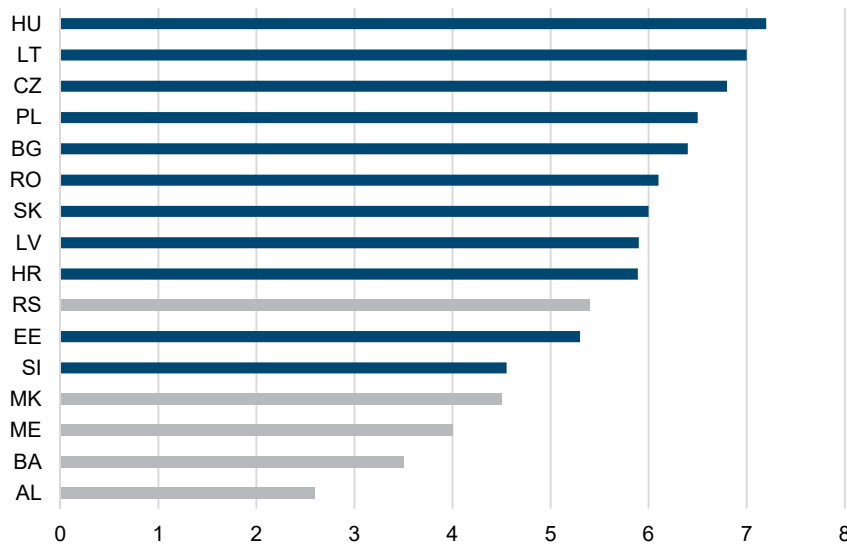
Note: BA 2014.

Source: Eurostat.

In health indicators, the Western Balkans perform poorly. The infant mortality rate is high, only comparable with the more backward EU Member States Bulgaria and Romania, with values of around 7% (Figure 22). The figures might hint at a lack of health infrastructure, both in terms of quality and quantity. This is confirmed by the number of hospital beds per head (Figure 23). Here the Western Balkan countries have about half of the capacities of the more advanced CESEE economies. However, the low Slovenian figures in both statistics show that hospital size is not the only factor relevant.

Figure 23 / Lack of hospital infrastructure capacities in the region

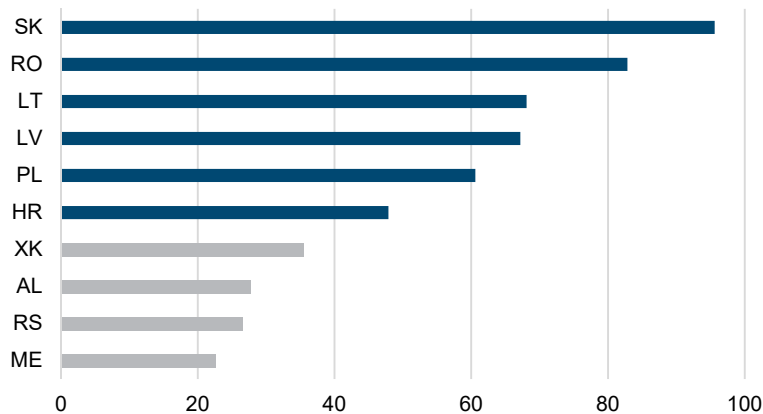
Hospital beds per 1,000 people, 2014 or latest available year



Source: World Development Indicators.

Figure 24 / Weak safety net programmes do not target the poorest adequately

Coverage of social safety net programmes in poorest quintile, % of population, 2014 or latest available year

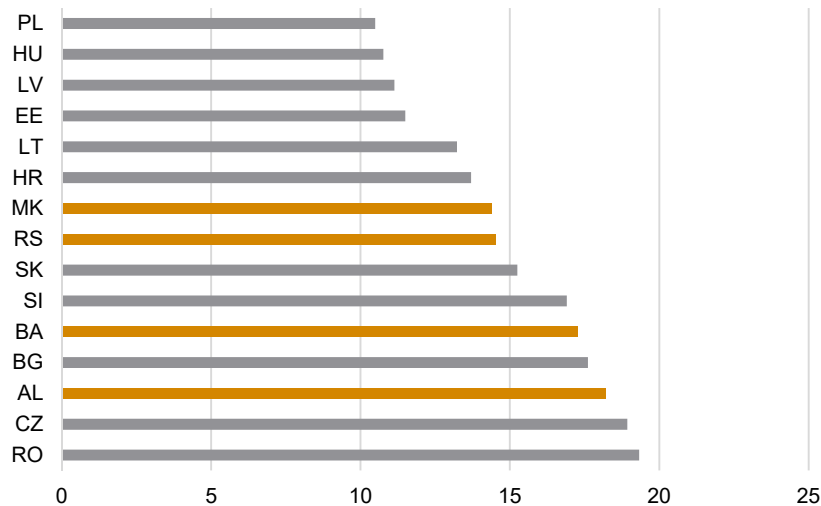


Source: World Development Indicators.

To our best knowledge there are no comparable data available for social activities infrastructure. As a proxy indicator we look at the share of population in the poorest quintile covered by social safety net programmes (Figure 24). Once again, the Western Balkans are at the bottom of the statistic. **Only about a quarter of those in need are actually covered by social programmes. It is fair to assume that related social activities infrastructure is similarly poor.**

Figure 25 / Average to higher levels of pupil-teacher ratios in the region

Pupil-teacher ratio in primary schooling

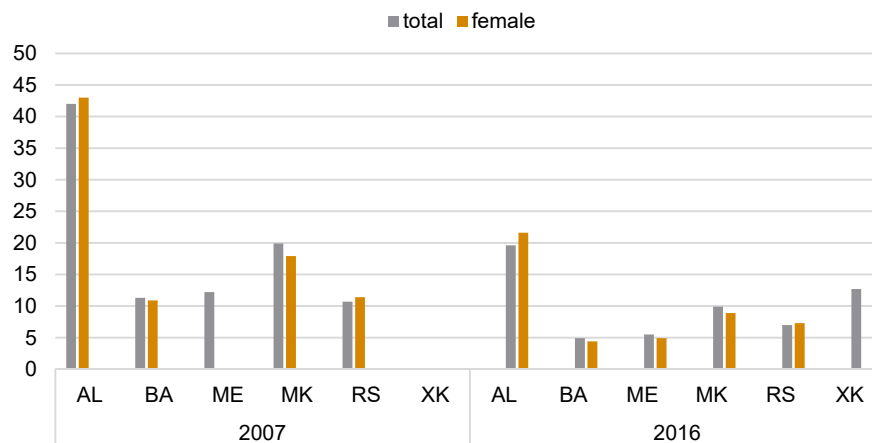


Source: World Development Indicators.

In education indicators, the Western Balkans are doing somewhat better. However, most countries of the region are in the lower half (i.e. larger ratios) of the distribution of the pupil-teacher ratio in primary schooling in CESEE (Figure 25). It is likely that funds lack for both teachers as well as modern school infrastructure. However, the situation is improving. Looking at the percentage of early school leavers (Figure 26) we observe a marked decrease over about the last decade. Nevertheless, for some countries such as Albania, Kosovo and Macedonia these rates are still quite high. No systematic disadvantage of female versus male children seems to be observable.

Figure 26 / Share of early school leavers halved over the last decade

Early school leavers, total and female, in %, 2007, 2016



Note: Early school leavers are people aged 18-24 who have only lower secondary education or less and are no longer in education or training.

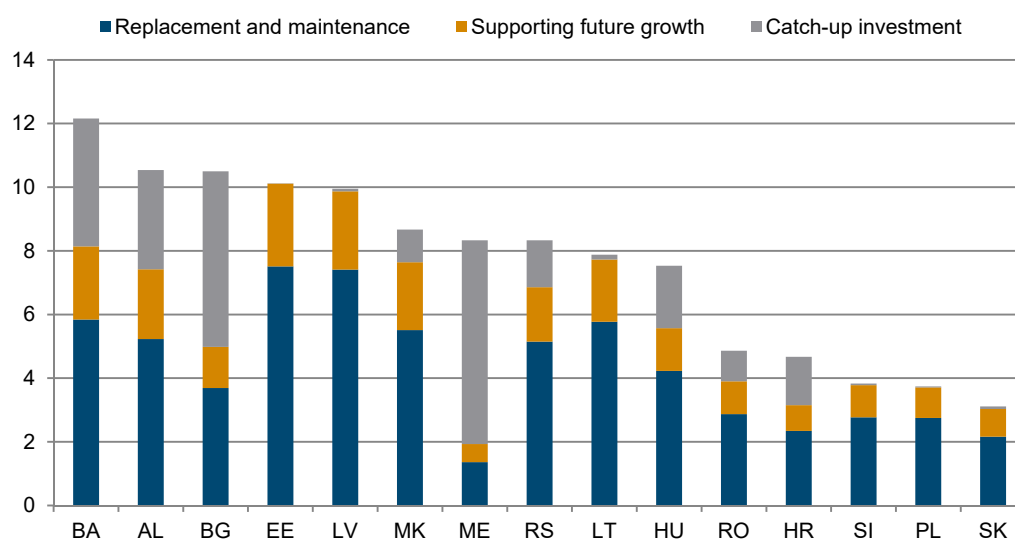
Source: Eurostat.

2.3. EVALUATION OF INFRASTRUCTURE NEEDS

Due to the lack of comparable data in many relevant fields it is rather difficult to evaluate the broad infrastructure needs for the Western Balkan economies. However, recently the EBRD (2017) has tried to estimate current investment costs in some of the infrastructure sectors for which more data can be found. The methodology used applies for each infrastructure sector separately a panel data regression model to estimate the respective needs. The sample includes advanced comparator countries. Unsurprisingly, the estimates suggest that the annual infrastructure needs for the period 2018-2022 are particularly high in the Western Balkans, with Bosnia and Herzegovina and Albania leading in the CESEE comparator group (Figure 27). There, as well as in Montenegro, catch-up investment to infrastructure levels found in the more advanced comparator countries is quite substantial but also replacement and maintenance investment is important. **For our countries of interest the annual investment need in infrastructure is estimated to be in the range of 8% to 12% of GDP. Given the current infrastructure investment in the order of about 1% of GDP in the region, this represents a massive need.**

Figure 27 / Massive infrastructure investment needs in the Western Balkans

Estimated infrastructure investment needs for the period 2018-2022 as a percentage of GDP per year, by investment type



Note: Catch-up infrastructure investment needs refer to the cost of catching up with the levels expected on the basis of the experiences of more advanced comparator economies. Supporting future growth infrastructure investment needs refer to the cost of improving infrastructure to support future growth in GDP and population.

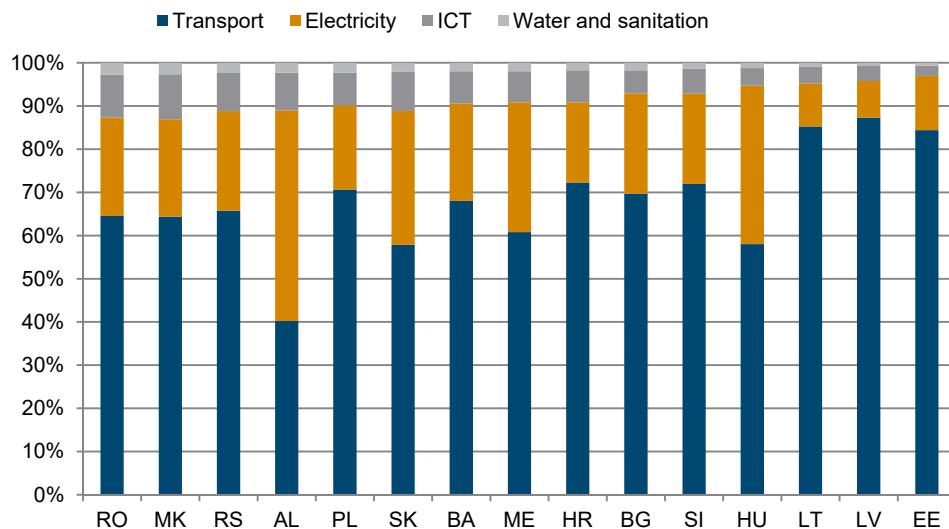
Source: EBRD Transition Report 2017-18.

Moreover, an attempt was made to estimate the sectoral breakdown of these infrastructure investment needs over the next couple of years (Figure 28). Here four sectors were identified: transport, electricity, information and communications technology (ICT) as well as water and sanitation. **Throughout CESEE, transport and electricity sector investment needs are dominating by far.** In ICT and water and sanitation only a small share of the estimated needs was identified. Nevertheless, in Figure 28 the countries are ranked according to the size of the share of infrastructure needs in water and sanitation, the only alternative infrastructure sector in this estimation exercise. Here the Western Balkans are in the

upper part of the CESEE distribution. Investment needs in water and sanitation infrastructure range from 2.7% of total needs in Macedonia to 1.9% in Montenegro. Given the overall investment needs this translates into water and sanitation infrastructure investment needs of 0.16% of GDP annually in Montenegro up to 0.24% in Albania.

Figure 28 / Infrastructure investment needs in water and sanitation are overall small but relatively larger in the Western Balkans

Estimated infrastructure investment needs for the period 2018-2022, breakdown by sector



Note: Ranked by Water and sanitation sector size.

Source: EBRD Transition Report 2017-18.

Compared with the actual current investment in this sector shown in Figure 9, we observe for all the Western Balkan countries (except Montenegro where the estimate is identical with the current spending) the need to step up investment substantially – typically by close to 0.1% of GDP, which would correspond to an increase by more than half. If we assume that other non-traditional infrastructure sectors are similarly neglected, then approximately another 0.08% of GDP in additional investment outlays must be invested. **Thus, the likely additional annual investment needs in alternative infrastructure investment in the Western Balkans could be close to 0.18% of GDP. In terms of 2017 GDP this translates to about EUR 160 million on an annual basis or some cumulative EUR 800 million for the following five years.** If, on the other hand, investment needs in alternative infrastructure are much higher, we should employ a factor of about 10, comparable to the difference between overall infrastructure investment and overall needs. This would imply additional annual investment in alternative infrastructure of some 2.5% of GDP or EUR 2.2 billion per year (i.e. EUR 11 billion for five years).

3. Indebtedness of the Western Balkan economies

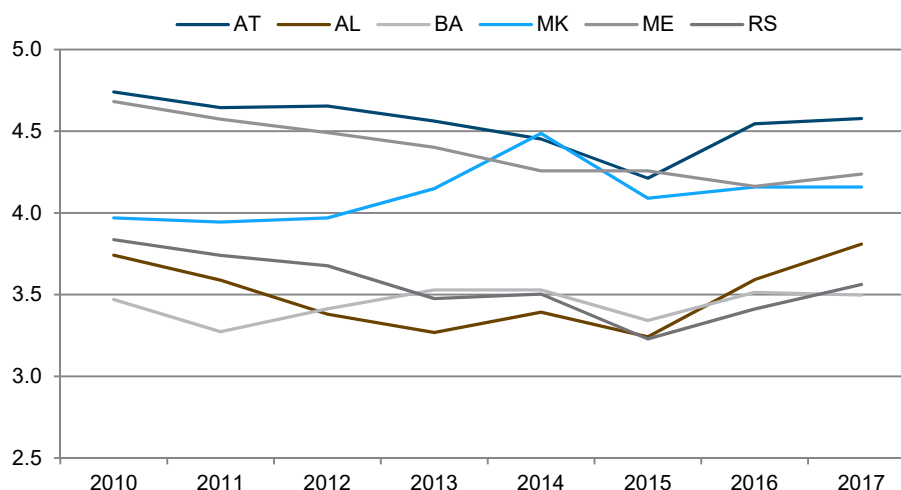
This chapter looks into the financing conditions of both government and the private sector in the Western Balkans, evaluates their debt dynamics and, finally, discusses macro-financial imbalances that threaten the region. Given the debt-creating financing structure of most of the regional investment initiatives, these issues are highly relevant for an overall assessment and subsequent policy recommendations.

3.1. ANALYSIS OF PUBLIC AND PRIVATE FINANCING CONDITIONS

According to the World Economic Forum's Global Competitiveness Report 2017-2018 (WEF, 2017) the **financial markets in the Western Balkans are underdeveloped** (Figure 29). An appropriate comparator country in this respect is Austria, given that the countries' banking system is to a large extent dominated by Austrian banks. Macedonia and Montenegro achieve ranking scores which come close to those of Austria. The others have much lower scores, indicating a substantial financial market development gap. However, since 2015 the development is mostly pointing upward.

Figure 29 / Recent improvements (from low levels) in the quality of financial markets

Financial market development (1 minimum – 7 maximum)



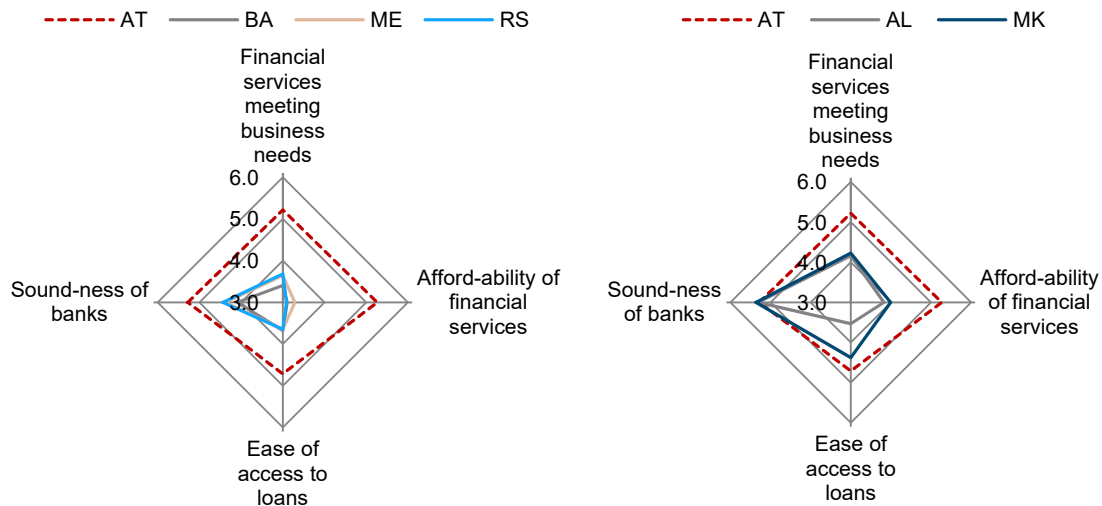
Note: BA 2014 = 2013, MK 2017 = 2016.

Source: WEF (2017).

Observing some of the more detailed sub-categories (Figure 30) yields **particularly bad scores in the category 'Affordability of financial services'**. Average scores can be found in the categories 'Ease of access to loans' as well as 'Financial services meeting business needs'. It is reassuring that in the category 'Soundness of banks' Austrian score values are approached. Again, this is not that surprising given the fact that large parts of the Western Balkan banking sector is owned by Austrian banks.

Figure 30 / Soundness of banks is satisfactory

Details of financial market development (1 minimum – 7 maximum), 2017



Note: MK 2016.

Source: WEF (2017).

Table 2 / Declining interest rates for businesses

Interest rates – new loans to non-financial corporations in local currency, in % p.a.

	4Q2015	1Q2016	2Q2016	3Q2016	4Q2016	1Q2017	2Q2017	3Q2017	4Q2017	1Q2018
AL	8.17	7.35	7.58	7.28	5.32	6.80	7.61	6.03	7.28	6.83
BA	6.41	6.37	6.06	5.88	5.42	5.40	5.22	5.39	4.82	5.14
XK	7.39	7.01	6.75	6.90	6.84	6.76	6.56	5.98	6.47	6.51
MK	6.19	6.41	6.26	5.96	5.68	5.50	5.22	4.88	4.93	4.84
ME	6.44	6.43	5.54	5.36	5.35	5.50	5.24	5.25	4.73	5.00
RS	4.73	4.63	4.06	4.12	3.50	3.57	3.68	3.49	3.18	3.20
AT	2.02	1.99	1.87	1.90	1.85	1.83	1.71	1.77	1.75	1.83

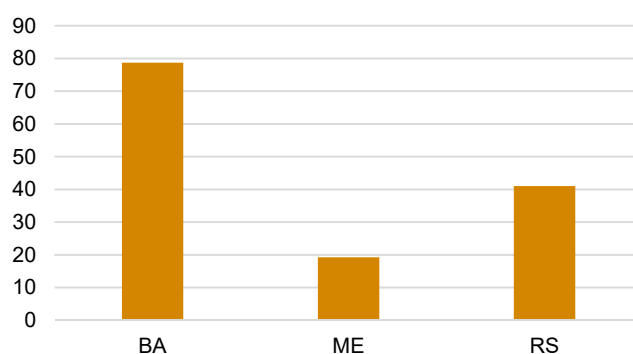
Source: wiiw Database.

Interest rate data for new loans to businesses (Table 2) confirm that costs of financing are quite high in the Western Balkans, compared for instance to Austria. However, interest rates have come down quite substantially over the last couple of years. Only most recently and given the global turnaround in interest rate policy we find also a trend reversal in the Western Balkans. **Over the last quarters nominal interest rates are higher than nominal GDP growth rates in Macedonia (by about 4 pp), Kosovo (3 pp), Bosnia and Herzegovina (2 pp) and Albania (1 pp), and lower in Montenegro and Serbia (in both countries by approximately 2.5 pp).** Thus, there is still room for further reductions in interest rates, especially in the former four economies, where currently only the most productive economic agents can afford a credit.

Public financing conditions are likely better than the private ones as a large part of public debt in the region is held by International Financial Institutions (Figure 31), such as the World Bank. These loans have typically very favourable long-term maturities which allows for a better planning and less risk stemming from financial markets turbulences.

Figure 31 / Large parts of public debt held by IFIs with favourable conditions

Share of International Financial Institutions' stock of loans in central government external debt, 2017



Source: National statistics.

3.2. EVALUATION OF THE ECONOMIES' DEBT DEVELOPMENT AND SUSTAINABILITY

Over the recent quarters most of the Western Balkan countries have exited post-crisis deleveraging mode (Table 3) and growth of loans to corporations has picked up again markedly (red cells). Even in Albania and Serbia negative growth (blue cells) of business loans has at least slowed down. This indicates that the negative effects of the global financial crisis and subsequent instabilities on the financial markets have persisted in parts of the region.

Table 3 / Growth of business loans has picked up again

Growth of loans to non-financial corporations, in % year on year

	4Q2015	1Q2016	2Q2016	3Q2016	4Q2016	1Q2017	2Q2017	3Q2017	4Q2017	1Q2018
AL	-6.5	-5.1	-3.0	-2.7	-1.0	-1.5	-4.0	-1.0	-1.5	-1.9
BA	-0.6	2.4	1.5	1.9	3.3	4.9	6.4	7.9	8.0	7.6
XK	6.0	6.2	5.0	5.8	7.3	9.3	8.9	9.2	11.1	9.4
MK	7.1	5.1	-0.5	-1.2	-3.8	-5.2	0.0	-0.5	2.8	2.5
ME	2.8	1.8	3.0	-0.1	1.9	3.0	0.2	1.0	2.4	4.0
RS	1.9	-0.1	2.8	3.0	-3.0	-0.5	-3.4	-4.6	-2.1	-1.5
AT	0.4	0.4	0.6	-0.4	-1.2	-0.5	0.8	2.1	5.5	6.9

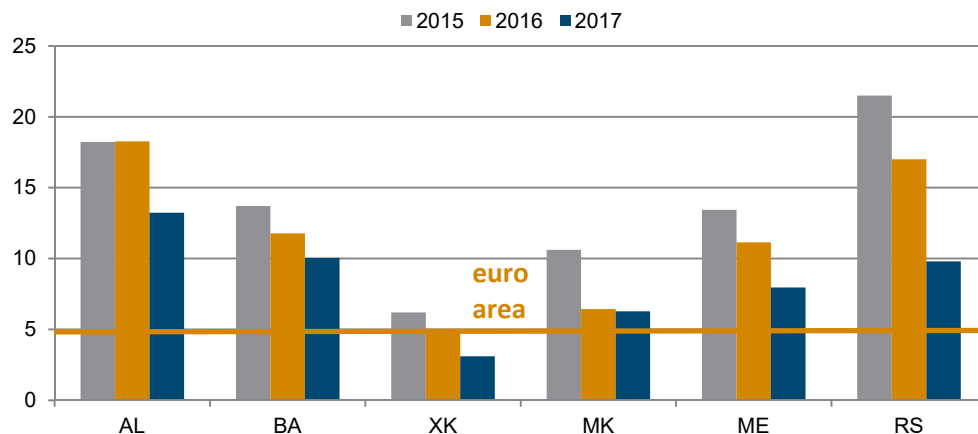
Note: Red cells indicate strong growth, white cells weak growth and blue cells stagnation or decline.

Source: wiiw Database.

This is also confirmed by the non-performing loans (NPLs) statistics (Figure 32). **The level of loans that are more than 90 days overdue is quite high in the region**, with the notable exception of Kosovo, which also had a healthy growth of business loans for quite some time already (the country experienced a postponed financialisation process). Nevertheless, it is reassuring that the NPLs' share in total loans has been falling substantially over the last years, throughout the region.

Figure 32 / Falling shares of NPLs in the Western Balkans

Non-performing loans in % of total loans, end of period, 2015-2017

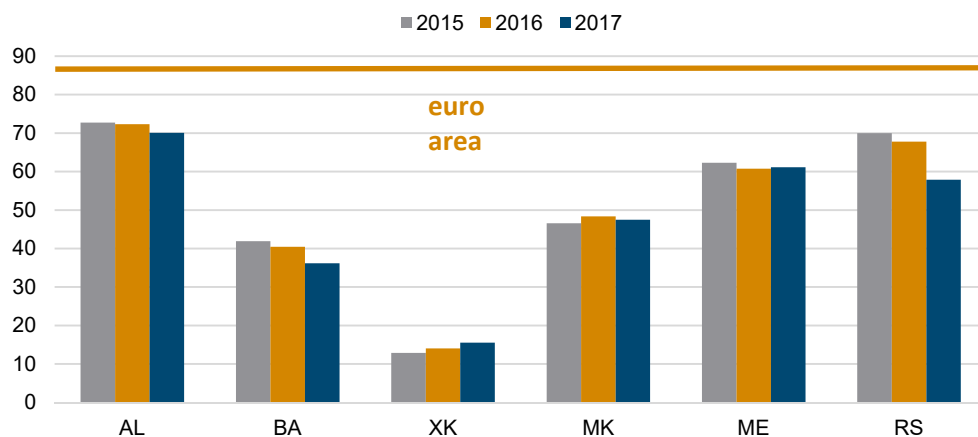


Note: Euro area Q4 2017 value is at 4.93%.

Source: wiiw Annual Database, ECB.

Figure 33 / Acceptable levels of public debt

General government gross debt in % of GDP, 2015-2017



Note: Euro area 2017 value is at 86.8%.

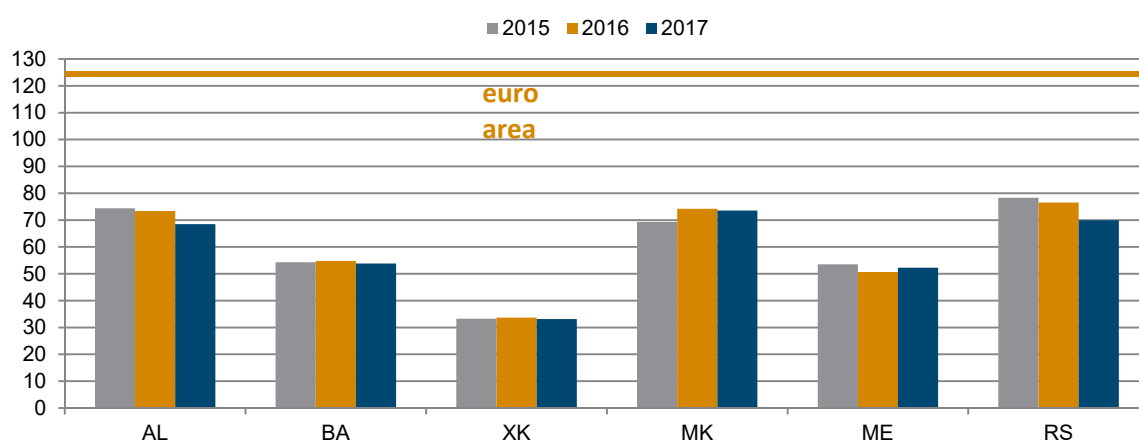
Source: wiiw Annual Database, ECB.

Also, public debt went either down or has stabilised in the last few years. Only in Kosovo has government debt increase, however at extremely low levels (Figure 33). Applying the euro convergence criteria's government debt-to-GDP ratio of 60%, only Albania is still far above, while Montenegro and Serbia are at around 60% and the others far below.

The underdeveloped financial systems in the Western Balkans are also reflected in relatively low levels of overall external debt. More developed countries have typically ratios of gross external debt to GDP of 100% and above. In the Western Balkans levels of around 60% can be found (Figure 34). However, **despite economic growth picking up in the region we do not find substantial reductions in external debt to GDP**, maybe with the exception of Albania and Serbia. In Macedonia external debt even increased slightly over the last few years.

Figure 34 / Low and stagnant levels of external debt to GDP

Gross external debt in % of GDP, 2015-2017



Note: ME gross external public debt; euro area 2017 value is at 124%.

Source: wiiw Annual Database, ECB.

3.3. DISCUSSION OF MACRO-FINANCIAL IMBALANCES

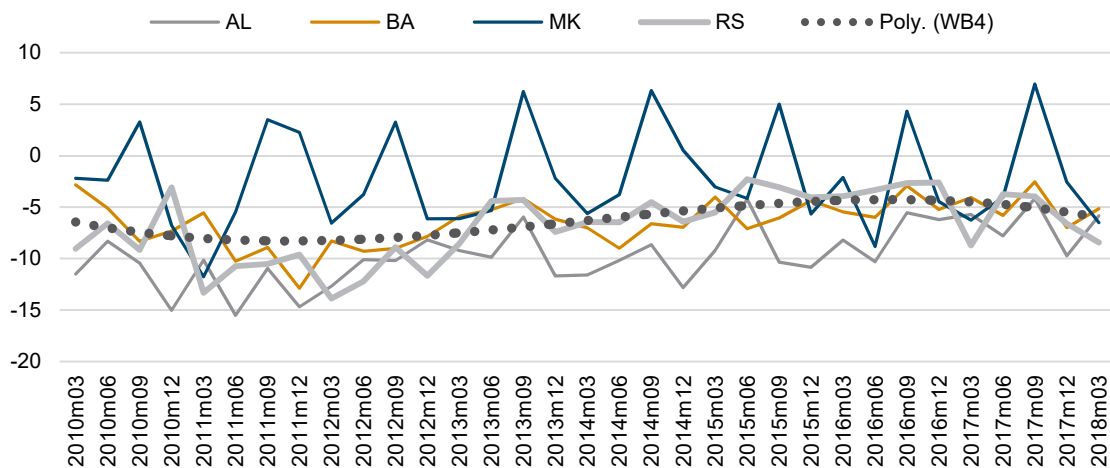
External indebtedness is closely related to the development of the current account. **During the deleveraging process in the wake of the global financial crisis huge current account deficits in the Western Balkans have almost halved** (Figure 35). In the beginning sluggish household consumption was a major driver for reduced imports. With time and the attraction of some manufacturing FDI the regional export sector has improved and thus also contributed to lower current account deficits. Most recently, with improving household consumption dynamics the average current account deficits for the four major Western Balkan economies are slightly deteriorating. We deliberately do not show here the current account developments of the smallest economies – Montenegro and Kosovo – as they have much more volatile current account developments that would explode the frame of the figures. Also, they are quite special cases, as Montenegro's current account mainly mirrors the country's tourist seasons and that of Kosovo is very much related to the country's large workforce abroad sending home remittances.

In parallel to an improving long-run trend of the Western Balkans external imbalances we also find some improvement in its internal imbalances. **Unemployment rates are constantly falling. However, the level of the unemployment rates is still in the double-digit range** (Figure 36). In Bosnia and Herzegovina even more than a third of the labour force cannot find a job. Probably both, lower current account deficits and lower unemployment rates are also due to the ongoing mass-emigration of the

Western Balkan youth. Decades of emigration have already a substantial effect on the size of the working-age population. Forecasts of the UN population division assume that by the end of the century the Western Balkans will lose about half of their working-age population, with dramatic consequences for the local societies.

Figure 35 / Substantial external imbalances remain a weak spot in the Western Balkans

Quarterly current account balance in % of GDP

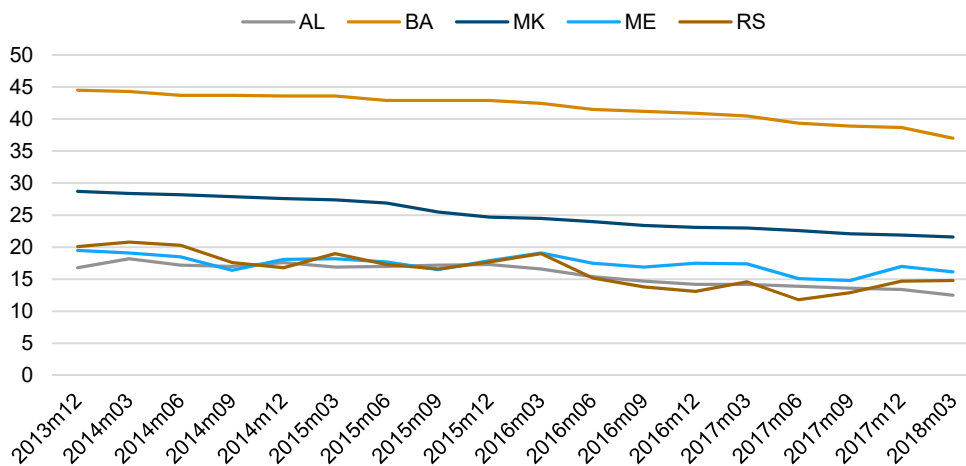


Note: Poly. (WB4) is the order 3 polynomial trend line for the average of the AL, BA, MK, RS values.

Source: wiiw Monthly Database.

Figure 36 / Internal imbalances improve only slowly

Quarterly LFS unemployment rate in %, period average



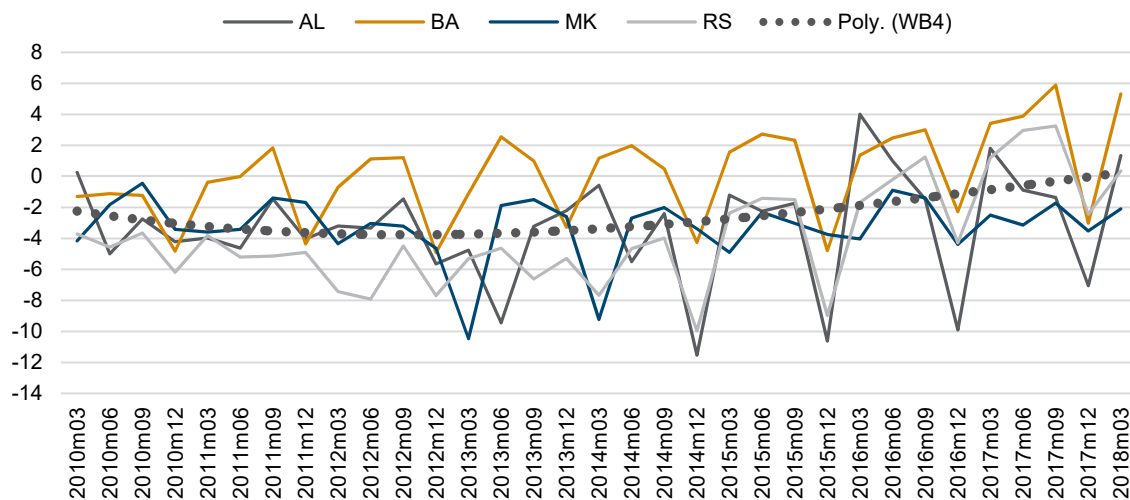
Note: BA registered unemployment rate, end of period.

Source: wiiw Monthly Database.

The end of the deleveraging process has also helped to improve public finances. **General government budget balances in the region have recently left negative territory** (Figure 37). This is on the one hand good as it has the potential to counter the recently slightly widening current account deficit. On the other hand, it would be now time to invest into public infrastructure that improves the living conditions of the local population and tries to counteract the dramatic demographic challenges. Apart from traditional infrastructure investment in road and rail, power plants and high-voltage lines, alternative infrastructure investment in sewage plants, hospitals and schools could have the potential to improve living conditions but also to increase long-run productivity. Further challenges for the economies of the Western Balkans that need improvements in productivity comprise the inclusion into global value-added chains, the transformation away from a pure factory economy (Stöllinger, 2018) and the ongoing processes of digitalisation as well as robotisation. At the same time the countries of the region have to avoid too strong external indebtedness, especially in a surrounding of increasing global interest rates. Historically, in such circumstances the countries of the Southeastern European periphery were regularly hit hard by current account crises.

Figure 37 / Budget balance is turning from deficit to surplus

Quarterly general government balance in % of GDP



Note: Poly. (WB4) is the order 3 polynomial trend line for the average of the AL, BA, MK, RS values.

Source: wiiw Monthly Database.

4. Summary and policy recommendations for new directions of infrastructure investment and financing

LOW INVESTMENT IN NON-TRADITIONAL INFRASTRUCTURE

Overall investment shares (including public, business and household, domestic and foreign financed) in GDP in the Western Balkans are above EU average (with the notable exception of Serbia and Bosnia and Herzegovina). A high investment share is crucial for the long economic catch-up process that these economies need to follow. Investment in infrastructure makes up only a small proportion of overall investment. However, there are good (theoretical and empirical) reasons to believe that **investment in infrastructure is imperative to generating long-term productivity gains**. Within investment in infrastructure we find investment in traditional sectors such as transport, energy and communication to be dominating. The investment in alternative infrastructure sectors such as health, education and water is negligible, maybe with the exception of the latter sector (i.e. water supply, sewerage, waste management, remediation) in more recent years. Currently, these three **alternative infrastructure sectors receive average annual investment in the order of only about 0.3% of GDP in the Western Balkan countries**.

CHINA CHALLENGES EUROPEAN REGIONAL INFRASTRUCTURE INITIATIVES

There are two important regional infrastructure investment initiatives in the Western Balkans. The most important one, coordinating EU, International Financial Institutions' and bilateral donor funds, is the Western Balkans Investment Framework. By early 2018, **146 WBIF projects in the infrastructure-relevant areas of energy, environment and transport were supported by EUR 7.9 billion in loans and EUR 796 million in grants**. The other important infrastructure initiative in the region is China's Belt and Road Initiative. **Announced Chinese BRI infrastructure construction projects in the Western Balkans make up about EUR 7.8 billion in loans only**. The prime target of Chinese construction contracts is Serbia. Almost half of the projected amounts are earmarked for construction in this country, strongly driven by the upgrade of the Budapest-Belgrade railway link. Most Chinese energy projects in the region are related to the construction of coal-fired power plants, thereby counteracting energy-related EU projects that are mostly aiming to support the shift towards a low-carbon economy.

ADDITIONAL NEEDS OF EUR 800 MILLION IN ALTERNATIVE INFRASTRUCTURE

The Western Balkans are lagging far behind their peers in EU-CESEE when it comes to traditional infrastructure in the transport, energy and information sectors. This is particularly true when looking at railway infrastructure. Regarding alternative infrastructure we find the Western Balkans to predominantly rely upon outdated waste landfill sites. Unfavourable health outcome figures hint at a lack of health

infrastructure, both in terms of quality and quantity. This is confirmed by the low number of hospital beds per head, compared to more advanced CESEE economies. Education indicators suggest that funds lack for both teachers as well as modern school infrastructure. **Recent estimates suggest that investment in alternative infrastructure needs to increase by more than half. Additional annual investment needs in alternative infrastructure in the Western Balkans could thus be close to 0.18% of GDP.** In terms of 2017 GDP this translates to about EUR 160 million on an annual basis or some cumulative EUR 800 million for the following five years.

FINANCIAL CONDITIONS ARE UNDERDEVELOPED BUT IMPROVING

Financial markets in the Western Balkans are underdeveloped. But they are improving and interest rates are coming down gradually. Still, in most of the countries nominal interest rates for business loans are substantially higher than nominal GDP growth rates, which makes it difficult for the average productive firm to borrow. Public financing conditions are likely better than the private ones as a large part of public debt in the region is held by International Financial Institutions. These loans have typically rather favourable long-term maturities which allows for a better planning and less risk stemming from financial markets turbulences. **Over the recent quarters most of the Western Balkan countries have exited post-crisis deleveraging mode and growth of loans has picked up again. Also, public debt went either down or has stabilised in the last few years and is typically relatively low in the Western Balkans.** External debt to GDP is relatively low in the region as well, however, despite economic growth picking up we do not find substantial reductions in this ratio more recently. Also, **external debt levels have increased substantially since the outbreak of the global financial crisis and thus pose a serious threat to economic stability in a situation when the global interest rates are again on the rise.**

IMPROVING MACRO (IM)BALANCES AND A FISCAL BALANCING ACT

Despite some slight deterioration of the current account deficits in the most recent period, we find an improving long-run trend of the Western Balkans external imbalances. In parallel, we also find some improvement in internal imbalances as unemployment rates, though still at very high levels, are constantly falling. Both phenomena are also due to the ongoing mass-emigration from the region, with dramatic consequences for the current and future demographic trends of the working-age population. Government budget balances in the region have recently left negative territory. This is to a certain degree desirable as it has the potential to counter the recently slightly widening current account deficits and thereby prevent potential crises in the future. On the other hand, it would be now time to invest into (alternative) public infrastructure that improves the living conditions of the local population and tries to counteract the dramatic demographic (and technological) challenges. **Thus, to substantially hike investment in traditional as well as non-traditional infrastructure in the Western Balkans without dramatically increasing the countries' indebtedness is the primary duty in order to achieve higher long-run productivity growth and provide the population a perspective for a better future without a need to migrate.** In the following we discuss pragmatic as well as forward-thinking policy options and, finally, embed the issue of infrastructure investment in the bigger political picture of the Western Balkans.

4.1. SHORT-RUN PRAGMATIC POLICY RECOMMENDATIONS

In the short run it is difficult to change policies more substantially and often only fine-tuning is possible.

Our pragmatic policy recommendations are the following:

- › Western Balkan governments should make an effort to reconsider their public **infrastructure investment mix**. Within traditional infrastructure investment, e.g. investment in polluting¹ lignite-sourced thermal power plants should be reconsidered. Also, some of the coal-fired power plant projects are not in accordance with the energy community treaty with the EU². Funds should be shifted towards more investment in environmental, social, health and education infrastructure. Here, the concept of the **Green Economy** (EEA, 2011) should be followed that results in ‘improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities’.
- › In the process of the negotiations related to the new Multiannual Financial Framework for 2021-2027, the EU Commission has made a proposal to increase the new Instrument for Pre-Accession Assistance – **IPA III** – from currently EUR 12 billion to EUR 14.5 billion (EC, 2018b). Moreover, among the candidate and potential candidate countries the focus should shift more to the Western Balkans. These plans are important for the Western Balkans and EU Member States’ governments should support the Commission’s proposal. Moreover, the negotiations should aim at reshuffling funds away from traditional infrastructure investment towards alternative sectors such as water and sanitation, health and social activities as well as education, which have so far been neglected.
- › In order to create the necessary financial leeway for more public investment in non-traditional infrastructure, national governments in the Western Balkans could adopt the Austrian **ASFINAG model** of a publicly owned corporation which plans, finances, builds, maintains and collects tolls for the Austrian motorways, without being part of public finances and thus public debt accounting but still benefiting from state-guaranteed cheap financing. The ASFINAG model cannot only be used for roads, but also for other infrastructure networks, e.g. energy and telecom, or housing, where the costs can be covered by user fees (Nauschnigg, 2015).
- › Another way to relieve limited fiscal capacities for more investment in alternative infrastructure is to consider Public-Private Partnership (**PPP**) projects for traditional infrastructure with a viable commercial character, such as for instance the Tirana and Prishtina airport projects. Nevertheless, it has to be noted that PPP projects tend to be costly in the long run and that many projects fail as the management of these projects in the Western Balkans could be improved (Atoyan et al., 2018). Potential PPP projects should thus follow the recommendations as put forward by the European PPP Expertise Centre (EPEC, 2018).
- › Also the International Financial Institutions could support the greening of the Western Balkan economies in a way that makes the countries less vulnerable to macroeconomic shocks related to public debt. The **IFIs** should issue **growth loans** that are similar to the concept of GDP- (or CPI-) linked bonds: ‘when growth is weak, the debt servicing cost and repayment amount automatically declines; and when growth is strong, the return on the bond increases. This helps to stabilise a

¹ <https://www.euractiv.com/section/air-pollution/opinion/balkan-coal-power-costing-lives-urgent-action-is-needed/>

² <http://www.intellinews.com/energy-community-warns-bosnia-over-guarantee-for-tuzla-power-plant-expansion-149501/>

sovereign's debt to GDP ratio and makes it less likely that a deep recession will trigger a debt crisis and cause a default' (Barr et al., 2014).

4.2. LONG-RUN FORWARD-THINKING RECOMMENDATIONS

The next set of policy recommendations covers options which might only be realised in the longer run, but which would potentially have a strong impact.

- › The current governance structure of the Western Balkans Investment Framework foresees as a starting point of the infrastructure investment process the National Investment Committees to produce and endorse the so-called Single Project Pipeline. Its output is later on in the process prioritised and assessed and eventually supported with financial means. However, it is in the essence of infrastructure that its (positive) externalities are not confined to a certain region or country and that often (especially in the case of network infrastructure) it only yields full benefits if it is built across borders. A **Joint Project Pipeline** of a **Common Western Balkans Investment Committee** with supranational overruling powers could be an additional starting point in the WBIF governance structure, representing the interests of the whole region.
- › Following the 'Big Push' theory of Rosenstein-Rodan and his suggestion of the creation of an 'Eastern European Industrial Trust' for infrastructure funding, we want to propose the creation of a **Western Balkans Regional Infrastructure Fund** with a much bigger volume and much stronger grant component than the current Western Balkans Investment Framework. European governments throughout the continent together with the EU and the International Financial Institutions should substantially increase their current levels of financial support for the region's infrastructure. Overall, the sums implied in the Western Balkans are miniscule given the small size and low level of economic activity of these countries (and the potential political risks emanating from this region). Such a bigger and more grant-oriented support should help to curb the influence of external players in the region and reduce indebtedness.
- › Joining the **euro area** – even if only with limited rights, e.g. without voting rights – before EU accession would be a powerful tool to bring down interest rates and improve the financial conditions for both the private as well as the public sector's investment. Moreover, it would formalise the de facto situation of massive euroisation or unilateral euro adoption in the region. The potential bailout risks for the euro area would be very limited, as the combined GDP of the Western Balkan economies accounts for less than half of the GDP of Greece. Apart from euro area accession, also other partial accessions to EU institutions could be considered, such as accession to the **Schengen treaty**. This would inter alia have the potential to attract more tourists to the region, which in turn would also make investment in alternative infrastructure such as water and sanitation and health facilities more cost efficient. These measures would also support the successful implementation of the planned Regional Economic Area in the Western Balkans (RCC, 2017) in all the four policy areas: trade, investment, mobility and digital integration.

4.3. THE BIGGER PICTURE: POLITICAL RECONCILIATION IN THE BALKANS AND THE ROLE OF INFRASTRUCTURE INVESTMENT

As put forward in Grieveson et al. (2018), in 2014, European Commission President Jean-Claude Juncker said that no country would join the EU during the current Parliament. However, this was accompanied not long after by a greater attention devoted to the region by some bigger EU Member States, emphasised most clearly by the Berlin Process. This was followed in 2018 by an ambitious new strategy for the region adopted by the European Commission (EC, 2018a), which set a target date of accession of 2025 for Serbia and Montenegro (with a note that others could also catch up).

The approach of the European Commission and EU Member States reflects the acknowledgement that a lot is at stake. We see four reasons for the renewed focus on the Western Balkans now:

- › First, the 2015 migration crisis drew attention to the importance of the Western Balkans for the EU in terms of security. From the perspective of governments in countries like Germany, such an inflow of people in such a short space of time, and the perception that the national governments were not in control of their own borders, must not happen again. Migration has risen up the agenda since then in much of Western Europe.
- › Second, there has been a concern that some of the intra-regional conflicts are heating up. Recent high-profile incidents involving Kosovo and Serbia represent a key example of this. The threat of instability in Bosnia has also risen.
- › Third, there are growing concerns – loudly and regularly expressed in the media in Western Europe – about the growing influence of outside powers in the region. This has included (but is not limited to) worries about the ambitions of Russia, Turkey and China.
- › Fourth, there is a clear feeling in Brussels that ultimately the Western Balkans belong in the EU. Geographically, the region is surrounded by EU Member States. This sense of the EU being the Western Balkans' ultimate destination appears to be both stronger and more widespread than in the case of, say, Ukraine. The fact that Albania and Montenegro are NATO members, while not directly connected to EU membership, also matters in further reinforcing the region's tilt towards euro-Atlantic institutions.

The new Commission strategy notably puts a much bigger focus on taking a hands-on approach to solving political conflicts in the region. For two decades, the EU strategy for the Western Balkans has been characterised by a focus on economic connectivity as a way of driving political conciliation. In short: countries that trade with each other and that are well connected will not fight each other, and may eventually become friends. In addition, the EU has sought to open its markets to the Western Balkan countries to help develop the external sectors of the region. Western Balkan countries have enjoyed free trade with the EU since 2000. Regional trade integration was cemented by the Central European Free Trade Agreement (CEFTA) in 2007. **The new Commission strategy, by contrast, acknowledges that often political tensions are themselves a barrier to greater connectivity and trade between countries. Consequently, support for infrastructure investment could be used as a reward for solving long-standing political stalemates in the Western Balkans.**

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