REPUBLIC OF KOSOVO

SELECTED ISSUES

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PUBLIC INFRASTRUCTURE: CHALLENGES AND OPPORTUNITIES

In Kosovo, the pace of public infrastructure investment has been high in international comparison, but will not be enough to bridge the gap with the EU and regional peers soon. Given the very low initial stocks, largely due to the sharp depletion of capital stock during the conflicts in the 1990s, higher investment rates are needed. The resources available from international development partners, including the European Union (EU), the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD), are a unique opportunity to leverage and accelerate the implementation of priority projects. Strengthening Kosovo’s investment framework is key to achieving this objective.

A. Public Investment in the Western Balkans

1. Accelerating economic convergence with the EU is a key objective. The Stabilization and Association Agreement (SAA), which came into force in April 2016, is the first step of the EU accession process. This formal process needs to be supported by actual progress on the ground to accelerate income convergence with the European Union (EU). The lack of public capital is one of the key reasons behind the slow economic progress and recent stagnation in narrowing the income convergence. Upgrading and expanding public capital stock are essential in achieving higher and sustainable economic growth.

2. Low stock and the poor quality of public infrastructure, in both the Western Balkans and Kosovo, largely reflect the troubled regional history. In the former Yugoslavia, basic public infrastructure developed later than in Western Europe and proceeded at an uneven pace. The historical political fragmentation of the region, including the disintegration of the former Yugoslavia into a number of independent states, explains a large part of the lumpy capital accumulation, particularly in Kosovo. The regional conflicts and social unrest that followed the disintegration account for a large part of the public capital stock depletion until the end of the 1990s when the Kosovo’s conflict ended.

3. Several international initiatives, largely supported by the EU and International Financial Institutions (IFI), have helped to accelerate the rebuilding of public infrastructure with a special focus on regional projects (Box 1). International community efforts have been substantial in the last 15 years. At the same time, the limited progress on the ground in the whole region has not reflected the international community’s political will and strategy; largely due to the multiplicity and fragmentation of donors’ financial instruments, lack of coordination among them, and limited capacity/commitment/ownership of recipient countries and ongoing domestic political fragility.

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1 Prepared by Giuseppe Cipollone based on the International Monetary Fund European Department Paper “Public Infrastructure in the Western Balkans: Opportunities and Challenges” forthcoming.
Box 1. Western Balkans—Various Regional Initiatives

The Stability Pact for South-Eastern Europe (“Stability Pact”) was launched in 1999 as the first comprehensive conflict prevention strategy of the international community. The Stability Pact’s overarching objectives are fostering peace, democracy, respect for human rights and economic prosperity. The objective of a unified approach for the whole region was aimed at drawing support, including financing, from a wide coalition of IFIs, donors, and other international organizations. While a substantial progress on the ground was achieved over the years, the internationally-led approach to implementing the Stability Pact became obsolete in light of the need to have stronger recipient governments’ ownership. Therefore, the international community decided to transfer the Stability Pact expertise to a more collaborative body to ensure a greater ownership by recipient countries.

A regional Cooperation Council was established in 2008 as a successor to the Stability Pact. This Council is a more focused, streamlined, regional body with an increased role for recipient countries. In parallel, the EU adopted the Instrument for the Pre-accession Assistance (IPA), which replaced multiple pre-accession assistance instruments, to support candidate and potential candidate countries.

The Western Balkans Investment Framework (WBIF), established in 2009, coordinates support from the EU Commission, IFIs and bilateral donors. The WBIF is aimed at accelerating the implementation of priority investments that are in line with regional and national strategies by leveraging loans and grants. It is a blending financial mechanism with a grant facility and lending facility. Eligible projects are identified by country beneficiaries, based on each of their own priority project pipeline (Single Project Pipeline).

The WBIF framework will continue to play an important role in catalyzing available resources provided by donors and IFIs for the implementation of large infrastructure plans. Financial institutions, participating in the WBIF framework, would be able to leverage up to a 1.5 percent of the regional GDP per year of financing in the next 5 years (including the EU EPA II), assuming disbursements in line with the past. Even though these available amounts might look large, the actual disbursements will depend on progress made by each country in improving the overall project cycle, including preparation, selection, monitoring, execution, auditing and ex-post assessment. However, even assuming a speedy progress on all these fronts, these resources will be just enough to fund up to 50 percent of the estimated financing needs to close the estimated infrastructure gaps.

The Berlin Process is the latest regional cooperation initiative which follows the 5-year stalemate of the EU enlargement announced by the EU Commission. The Berlin Process was launched as a way to consolidate the Western Balkan countries’ integration policy dialogue. By bringing together all six Western Balkan countries and main EU member states supporting the region’s EU integration, the Berlin Process’s key objective is to strengthen each country’s accession prospects, despite the current temporary halt\(^1\). A natural focus of the integration remains regional infrastructure, in particular connectivity projects, which has been emphasized in the last four summits (Berlin, Vienna, Paris and Trieste). In the Trieste summit (July 2017), the EU committed an additional €190 million for connectivity projects and an action plan for establishing the regional economic area was adopted.

\(^1\)/ President Juncker’s opening statement to the EU Parliament, October 22, 2014.
B. Kosovo’s Infrastructure Gap

4. Kosovo is characterized by insufficient transport infrastructure, very limited connectivity to the rest of the world, and inadequate and unreliable energy supply (Figure 1). Quantitative indicators—compared to the EU—indicate the inadequate coverage of motorways and railways. Airport capacity and power generation are also very low and insufficient to meet current and prospective demands. Insufficient public infrastructure has been one of the key factors impeding private sector development, economic growth and income convergence.

5. Specifically, Kosovo’s public infrastructure situation is characterized by:

a) A weak railway and motorway density, which is well below that of peers. The railway network is limited and very obsolete compared to peers. Similarly, the motorway density is also inadequate, despite the sharp increase in new investments immediately after the independence and that are still ongoing.

b) Power capacity is particularly poor in Kosovo. The existing power plants are insufficient to meet the current demand and provide reliable power supply (see Box 2). After more than a decade of negotiation, some progress has been made recently for the construction of a new plant; however, its actual operation is not expected to commence until 2023. The lack of reliable energy supply is one of the key obstacles to domestic and foreign investments. The 400 Kw interconnection between Albania and Kosovo—which would help to mitigate temporary supply fluctuations—was completed, but has not been activated yet.

c) Air transportation/utilization remains inadequate, but it is in line with regional peers. Cell phone connectivity and broadband appear to be broadly adequate, while phone land lines are well behind the EU average and other regions.

6. Infrastructure index gaps are significant in Kosovo as well as in the entire region. An infrastructure index has been generated for each country/year by putting together indicators discussed above. The index gaps are calculated as a distance from the EU average. The Kosovo gap is close to 60 percent, while it is slightly above the average 40 percent for the entire region. It is noteworthy to highlight that there is large variance among Western Balkan countries, ranging from Albania and Bosnia and Herzegovina at close to 60 percent lower than the EU while Serbia is only about 25 percent.

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2 Route 7, which connects Pristina with the Albanian border, was the largest public infrastructure project completed after Kosovo’s independence, with the total cost of the motorway close to 20 percent of GDP. Route 6—connecting Pristina with the Macedonian border—is expected to be completed by early 2019 with an estimated total cost in the range of 10-12 percent of GDP.

3 See Appendix 1
Figure 1. Kosovo: Public Infrastructure Gaps

Railway Density Gap, 2015 1/
(In km per sq. 1000 km area)

Motorway Density Gap, 2015 1/
(In km per sq. 1000 km area)

Air Transport Gap, 2015 2/
(Passengers Carried Per Capita)

Installed Capacity for Power Generation Gap, 2014 2/
(In kW per capita)

Phone Lines and Cellular Subscriptions, 2015 2/
(Per 100 people)

Fixed Broadband Subscriptions, 2015 2/
(Per 100 people)

Sources: WDI database, International Road Federation, Eurostat, EIA, and IMF staff calculations.
1/ Gaps (indicated by a negative sign) are computed vis-a-vis EU average adjusted for population density.
2/ Gaps (indicated by a negative sign) are computed vis-a-vis EU average.
Box 2. Western Balkans’ Power Capacity—A Brief Snapshot

Solid fossil fuels dominate energy production. In Kosovo and Bosnia and Herzegovina, solid fuel production comprises more than 70 percent of the total energy production (about 90 percent in Kosovo). Domestic lignite amounts to more than 50 percent of the gross consumption of energy in Kosovo (69%), Bosnia and Herzegovina (64%), and Serbia (53%) and it is by far the most used and produced category of fuels. Despite this dominance of solid fossil fuels, there are positive developments in terms of introducing sources of renewable energy, largely hydro and biomass, even though from a low base.

In Kosovo and Albania, the current low power generation capacity is a binding constraint on the economic growth and FDI attractiveness. In Albania and Kosovo, the lack of adequate energy supply is exceptionally pronounced, with generating capacity not exceeding 0.8 Kw per inhabitant, which is less than half of that in Slovenia and about one-fourth of that in Austria. While actual consumption is particularly low, the very high energy intensity (six times higher than in the EU)—calculated as consumption over the GDP—is a clear sign of poor energy efficiency.

In Kosovo, the power sector is dominated by two lignite power plants; Kosova A (551 MW) and Kosova B (620 MW), sourced with domestic lignite reserves. The three operating units of Kosova A, which are operating at about 65 percent of installed capacity, were commissioned in the early 1970s and were expected to be decommissioned by end-2017 in line with the Energy Community Treaty obligations. After several attempts over the last decade to prepare a viable project, the government announced the selection of a preferred bidder in November 2015 to construct a 500 Mw power plant, and entered into negotiations with a private foreign company, with the International Finance Corporation (IFC) as the transaction advisor.

The completion and activation of the 400 Kw interconnection between Albania and Kosovo will help to mitigate supply fluctuations. With the completion of the interconnection of Albania and Kosovo, it will be possible to move ahead with the merging of grids of the two countries, which in turn will facilitate their participation in the regional energy market. The complementary seasonal supply of both countries provides additional energy resources to both markets, which will help to mitigate temporary demand spikes and minimize the impact of unplanned outages. Unfortunately, legal and political obstacles, which are preventing Kosovo KOSTT (a Kosovo transmission company) from becoming a member of ENTSO-E and thus having control over energy trade in Kosovo territory, are delaying the operationalization of the integrated grid.

1/ Now these power plants cannot be decommissioned before 2023, when the new power plant is expected to be fully operational.

2/ European Network of Transmission System Operators for Electricity.
7. Public infrastructure gaps are aggravated by the poor quality of the existing infrastructure. The World Economic Forum survey-based indicators\(^4\) seem to suggest that the quality is poor and that its actual condition is much lower than what has been measured by quantitative indicators. Even though there are no available data for Kosovo, we can easily assume that quality is at least comparable to that of other Western Balkan countries, which still ranks low compared to other EU regional groups.

C. Kosovo’s Development in Investment and Capital Stock

8. Since independence in 2008, the Kosovo capital budget has been large, both as a share of GDP and total spending. Since 2008, the annual capital budget has accounted for 9 percent of GDP on average, which is high compared to neighboring countries. In addition, infrastructure capital spending has accounted for roughly 35 percent of total public spending, with a rate of implementation close to 90 percent.

\(^4\) https://www.weforum.org/
9. However, expenditures on motorways absorbed the largest share of the capital budget. For almost the entire period following Kosovo’s independence, public capital spending was largely dominated by the construction of Route 7, connecting Pristina with the Albanian border (at a cost of about 20 percent of GDP), and Route 6, which links Pristina to the Macedonian border. The completion of the Route 6 project will take up much of the available fiscal space until 2019 (with costs estimated to be in the range of 10-12 percent of GDP).

10. While Kosovo’s capital spending has been relatively high, the overall capital stock has remained below the EU average and neighboring countries. The public capital stock is currently 20 percent below the average of Western Balkans countries, and 60 percent below the EU average. This reflects in part a very low starting position, as Kosovo was the poorest and least developed province in the former Yugoslavia. In terms of composition, the new infrastructure projects have been dominated by Route 6 and 7 construction.

11. The National Development Strategy (NDS) 2016-2021 outlines key priority areas to address bottlenecks to development. Following the adoption of a revised investment clause\(^5\) of

\(^5\) New donor/IFI-financed capital projects will not count against the 2-percent fiscal rule deficit limit if (a) the government bank balance is at least 4.5 percent of GDP and (b) the underlying fiscal deficit is within the fiscal rule. This exemption is subject to a 10-year sunset clause and a debt limit (30 percent of GDP).
the fiscal rule, which allows capital spending financed by donors not to count towards the deficit limits, the authorities are striving to strengthen their planning framework to take advantage of the newly available resources. In March 2016, the authorities adopted for the first time a priority project list\(^6\), which forms the basis for mobilizing donors’ and developing partners’ financing. The total estimated costs are in the range of €850 million–€1 billion (15–20 percent of GDP). Of course, priority projects can be revised over time subject to political changes and domestic and external financing availability.

<table>
<thead>
<tr>
<th>Priority Projects</th>
<th>Estimated Total Cost (Millions of euro)</th>
<th>Execution Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Rehabilitation of Railway 10</td>
<td>195.3</td>
<td>2016-2021</td>
</tr>
<tr>
<td>2 Rehabilitation of regional roads</td>
<td>29</td>
<td>2017-2018</td>
</tr>
<tr>
<td>3 Modernisation of the railway Pristina-Fushe-Pristina Airport</td>
<td>40.2 1/</td>
<td>TBD</td>
</tr>
<tr>
<td>4 Water Security and Canal Protection Project</td>
<td>22</td>
<td>2017-2022</td>
</tr>
<tr>
<td>5 Construction of Road 9 Pristina-Prizren</td>
<td>60.8</td>
<td>2018-2024</td>
</tr>
<tr>
<td>6 Rehabilitation of the Eastern-Southern Railway</td>
<td>158.5 1/</td>
<td>TBD</td>
</tr>
<tr>
<td>7 Extending irrigation system of Radoniqi - Stage II</td>
<td>31.5 1/</td>
<td>2019-2022</td>
</tr>
<tr>
<td>8 Construction of the new Highway Pristina-Gjilan-Dheu I Bardhe</td>
<td>250 1/</td>
<td>TBD</td>
</tr>
<tr>
<td>9 Pristina Waste Treatment</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

1/ Preliminary estimation of total project costs.

Source: Authority’s priority project list.

12. **The public investment management framework, however, needs to be strengthened substantially to improve the efficiency of public spending on infrastructure.** Public investment can be an important catalyst for economic growth, but the benefit of additional investment depends crucially on its efficiency. The Public Investment Management Assessment (PIMA)\(^7\) reports point to significant institutional weaknesses in public investment management practices. These weaknesses are more pronounced in some areas: (i) project appraisal, selection and management; (ii) national planning and central-local coordination, (iii) multi-year budgets and their comprehensiveness; and (iv) ex-post independent auditing and assessment of large-scale projects. At the same time, the reports acknowledge some progress such as the publication of the National Development Strategy and the single project pipeline, which have become the cornerstones of the government’s strategy in prioritizing projects and facilitating discussions and negotiations with donors and IFIs.

**D. National Investment Frameworks**

13. **Kosovo’s list of priority capital projects fully recognizes the critical importance of addressing large infrastructure bottlenecks.** In line with the WBIF process (Box 1), Kosovo established a National Investment Committee (NIC), which adopts and updates the priority project list as well as monitors its implementation. In the WBIF context, all Western Balkan countries submitted their own project pipeline, where the scale and focus of the national pipelines vary significantly among them (see chart). The focus is largely on transport infrastructure (especially roads and railways) and energy generation capacity.

\(^6\) A slightly revised list was adopted in 2017.

\(^7\) Public Investment Management and Medium-Term Expenditure Framework, IMF April 2016 and June 2017.
14. Two new loan agreements were signed with the EBRD and EIB for the rehabilitation of railway 10, complemented by EU grants, connecting Kosovo with Serbia and Macedonia and one IDA loan for the water supply project. However, the actual work on the ground is moving very slowly. The total disbursement until end of June 2017 has been disappointing, despite the large fiscal room under the revised fiscal rule’s investment clause.

15. In Kosovo’s case, preliminary estimates suggest that the completion of the rail and road projects alone would close a quarter of the current infrastructure gap. The implementation of the priority projects implies an overall increase in capital spending by 12-15 percentage points of GDP over the next 6-7 years (Section F). This higher capital spending would be able to reduce Kosovo’s overall public infrastructure gap vis-à-vis EU countries from 60 to 40 percent.

E. Financing Options

16. Choosing the most appropriate financing instrument is essential to maintaining debt sustainability. Kosovo’s debt position is currently low, at around 20 percent of GDP, characterized by no foreign commercial loans, due to the lack of any access to the international market. Foreign debt consists of loans provided by IFIs and bilateral donors. Of course, the magnitude of the debt-to-GDP ratio reaction to a capital spending surge depends on the economic activity and tax revenue responses to the investment “stimulus”. This, in turn, depends on the governments’ capacity to prioritize productive investments and strengthen capacity.

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8 This includes the bilateral official debt of the former Yugoslavia, which the authorities neither recognize nor track.
absorption as well as identify the most suitable financial terms. The impact of a capital spending surge on these factors will be simulated and analyzed below.

17. **The scaling-up of infrastructure spending is constrained by limited domestic savings.** The capital budget has been largely dominated by Routes 6 and 7 construction and some fiscal space will be available when Route 6 is completed. The revised fiscal rule provides sufficient budgetary room, particularly for donor/IFI-financed investment projects.\(^9\) However, given the small size of the economy, a single large project might easily exhaust the entire fiscal space for a number of years (as in the case of Routes 6 and 7). Therefore, limited domestic saving, coupled with a shallow financial system, is not able to secure sufficient financing for large-scale infrastructure projects, without crowding out private sector investment.

18. **Revenue mobilization and expenditure rationalization could further help to finance higher capital spending, but only at the margin.** Mobilizing tax revenues and containing current spending could play a key role in creating enough budgetary room for higher capital expenditures. However, since 2015 when the Stand-by Agreement-supported program was approved, tax revenues increased by more than 2 percentage points, and current expenditures were frozen at around 20 percent of GDP, despite the need to accommodate a number of political electoral promises adopted ahead of the 2014 election cycle (e.g. introducing a war veteran pension and a 25 percent increase in public wages and pensions). The potential to increase the fiscal space through higher tax revenues and/or lower current spending exists, but it is quite limited, at least in the near future.

19. **External commercial borrowing could play an important role in financing large projects when the availability of domestic resources is tight.** External commercial borrowing, assuming Kosovo manages to get a reasonable credit rating, can provide the necessary funding for large projects, and free up domestic resources for private investments. However, new external debt also comes with refinancing, interest, and exchange rate risks. Therefore, the use of external financing should be balanced with the risk of building up unsustainable debt.

20. **IFI financing remains the most suitable financing source.** Given the lack of domestic savings and the risk to crowding out private investment, the burden of the infrastructure stimulus should be carried out by external official sources (IFI borrowing and bilateral donors). With favorable interest costs, longer maturity and grace periods, official financing is the most suitable financial instrument to fund capital projects, without crowding out private investment. In this context, IFIs could and should play an important role, by providing technical assistance in facilitating prudent project selection and preparation, streamlining internal processes, and catalyzing the involvement of private capital.

21. **Diaspora bonds could be useful for tapping into the wealth of the diaspora community to finance infrastructure.** Given the sizable and stable remittance inflows, diaspora bonds could contribute in mobilizing the wealth of relatively richer migrants, who have moved to richer EU countries. If the proceeds were to directly finance some key basic infrastructure projects, or benefit the diaspora community and/or their family, the chances of success in issuing

\(^9\) See footnote 5.
diaspora bonds could be even higher. Diaspora communities could also facilitate FDI inflows from sending countries, given their insights on Kosovar investment opportunities and ways to ensure compliance with domestic regulation and legislation. Designing and managing a diaspora bond program could be challenging. There are sizable fixed costs largely for the assessment of risks, liquidity preferences and expected return of the diaspora community. Several countries have tried, but a large number have failed to issue diaspora bonds.

22. Private financing of public infrastructure could also be an attractive option, as long as a sound PPP framework is in place that limits fiscal risks. When fiscal space is limited and public sector capabilities are low, Public and Private Partnership (PPP) initiatives can be a viable option for mobilizing private savings, increasing efficiency and providing value for money. At the same time, a PPP approach could be quite complex and involve fiscal risks at all stages of the project cycle, including budget preparation, procurement, financing, and managing performed-based contracts. PPP initiatives usually generate large explicit and implicit contingent liabilities (e.g. guarantees), and encourage off-balance operations while reducing transparency. So far, public private partnership experiences have been marginal in the region and almost absent in Kosovo. Key factors behind this poor performance are various, including inadequate legal and institutional frameworks, perceived political risk, and governments’ limited capacity to make credible long-term commitments. The opportunity for scaling up PPP investments is a call for strengthening the PPP investment management framework.

F. The Macroeconomic Impact of Scaling-up Public Capital Spending

23. Higher public investments can generate benefits in both the medium- and long-term. In the short/medium term, output is affected by the increase in the aggregate demand stemming from higher public spending. In the long term, expanded and upgraded infrastructure raises the productivity capacity of the economy by increasing the coverage and quality of the existing capital stock. Of course, the overall macroeconomic effects depend on various factors, including the stage of the economic cycle, the efficiency of public investments and the range of available financing options.

24. The model-based approach can simulate the dynamic interactions of public investment, growth and fiscal stance. The role of the public capital is the model’s “engine”. In the long run, greater public capital stock supports higher output and raises the return on private capital and labor. Public finances are subject to budget constraints to ensure debt sustainability of the model. This constraint triggers the fiscal adjustment needed for any given investment buildup. In the short/medium run, however, the model allows for any fiscal gap between taxes and capital spending to be financed with borrowing.

25. Higher public infrastructure spending, together with a strengthening of the public investment management framework and concessional financing, will significantly increase potential output. The priority project list provides a useful framework for assessing the dynamics of key variables under different scenarios (Figure 3). The key assumption, which is the same under any scenario, is an exogenous increase in public investment by about 12.5 percentage points of GDP, over seven years.
a. **The domestic scenario** assumes that the capital surge is entirely financed by domestic borrowing (domestic debt issuance largely absorbed by banks). Under this scenario\(^{10}\), the growth dividend is marginal, with less than a 0.1 percentage points increase in the annual growth rate compared to the baseline. The impact of higher investment spending on the aggregate demand is largely offset by lower private investment (crowding out) and compressed consumption, due to increased tax burden (e.g. VAT) needed for debt service. The debt burden increases more rapidly (above and beyond the 30-percent ceiling), with higher debt vulnerabilities throughout the foreseeable future.

b. **Under the “improved” policy scenario,** the surge in public investment is associated with an improved efficiency in public spending (the rate at which investment is converted into productivity-enhancing capital) and a greater focus on regional connectivity projects (higher economic returns). Under this scenario, the growth dividend is somewhat higher but debt-related vulnerabilities\(^{11}\) remain high, despite the fact that the debt ratio is expected to decline.

c. **The concessional financing scenario** assumes that the increased public investment is totally financed by an equal mix of donor grants and IFI financing. This is the most favorable scenario due to the better financial conditions of IFI financing (low interest rates and longer maturity), which will substantially reduce the need for higher tax rates to service the new debt. This could generate a long-term improvement in the level of real GDP per capita in the range of 3-3.5 percentage points above the current baseline.

### G. Conclusions and Policy Implications

26. **Kosovo faces significant public infrastructure gaps, which constrain private sector development.** Scaling up public investment will raise GDP growth potential and accelerate income convergence toward the EU average level. The priority project list has helped the authorities to prioritize plans and facilitate the discussions and negotiations with donors and IFIs. However, implementation so far has been modest, despite the new investment clause of the fiscal rule exempting IFI-financed projects from the deficit ceiling.

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\(^{10}\) Model-based simulations are calibrated to reflect the Kosovo’s economic and structural features. A real GDP growth of 4 percent is assumed under the 2015 SBA arrangement, and it is not far from recent developments. The public debt to GDP ratio of 20 percent is in line with the current level, which includes the former Yugoslavia debt. The VAT is 18 percent, and the public investment to GDP ratio is set at 9 percent to match the average observed in the period 2008–2016. The real average domestic and external interest rates are assumed to be at 7 and 5 percent, respectively. The efficiency of public investment framework is related to the PIMA assessment conducted by the Fund. Finally, the productivity of capital is assumed to be at around 20 percent. This value is in the medium range of estimates by Dalgaard and Hansen (2005) and Foster and Briceno-Garmeda (2010).

\(^{11}\) This is due to the assumed domestic bank financing, which is characterized by higher financing costs and shorter maturity.
27. **The recently regained fiscal sustainability should be preserved.** Scaling up infrastructure will be better funded through donor and IFI financing, which provides better financial terms and longer maturity. This option would reduce risks of private sector crowding out, while ensuring a better selection and vetting of projects. However, a weak public investment management framework will make more challenging any efforts to mobilize higher donor and IFI financing. Therefore, the following multi-pronged approach would help mobilize external financing, increase absorption capacity, accelerate project implementation, and improve the efficiency of investment:

- Introducing a requirement for cost-benefit analysis, strengthening selection, planning, execution of priority projects, and ex-post auditing. The development of a priority project list is a step in the right direction, but the challenge is to prevent the addition of “politically” motivated projects with unclear economic impact.

- Maximizing regional coordination, particularly in the WBIF context, will help increase expected returns on investment, improve the region’s investment attractiveness and European integration, while securing concessional financing and grants from the EU and IFIs.

- Preparing multi-year budgets for investment spending to cover construction and maintenance costs, based on conservative assumptions. The medium-term expenditure framework should better reflect fiscal pressures from large scale capital projects.

- Last but not least, modernizing the public procurement process. The adoption of e-procurement is an important step forward to ensure a more transparent and levelled playing field among all suppliers, which is essential to ensure adequate returns from spending and to tackle corruption.

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**Figure 3. Kosovo: Model-based Simulations Assuming a Public Investment Shock**

Source: IMF staff calculations.
Appendix I. An Index for Infrastructure Gaps

1. **Measuring infrastructure gaps is complex.** Two key challenges are measuring the quality of infrastructure and aggregating different kinds of infrastructure. Aggregation is complex as different kinds of infrastructure can complement or substitute each other—for instance, railways can substitute highways or air transport. Country sizes and geographical features might imply various optimal infrastructure, which might differ across countries. The literature has not yet been able to reach a consensus on how to measure infrastructure gaps, with only some approximations to assess and compare some key features.

2. **Infrastructure gaps are approximated by considering six key indicators reflecting the quantity of infrastructure.** The infrastructure gap analysis focuses on a few infrastructure sectors with higher impact on growth. It includes transport infrastructure measured by the highway density, railway density, and air passengers per capita. Energy generation is measured by the installed capacity to generate electricity per capita. The telecommunication sector is estimated according to telephone and cell phone lines per capita, and broadband connections per capita. Each indicator is benchmarked relative to the EU average. A positive gap means the infrastructure of a country is above the EU average (and vice versa). Data limitation and lack of quality dimension are two shortcomings of the above approach.

Infrastructure gaps will be measured by the following:

- Telephone/cell phone lines per capita
- Broadband subscriptions per capita
- Installed capacity to generate electricity per capita
- Air passengers carried per capita
- Highways per km² after controlling for population density
- Railroad per km² after controlling for population density

\[
\text{Infrastructure gap}_{i,j,t} = \left[ \frac{\text{Indicator}_{j,i,t}}{\text{average (Indicator j)}_{EU,t}} - 1 \right] \times 100
\]

Where:  
- \( j \) = telephone/cell phone lines per capita, broadband subscriptions per capita, installed capacity to generate electricity per capita, air passengers carried per capita, highways per km² after controlling for population density, railroad per km² after controlling for population density
- \( i \) = country name

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1 See International Monetary Fund European Department Paper “Public Infrastructure in the Western Balkans: Opportunities and Challenges” forthcoming.
For example, for installed capacity to generate electricity in Albania, the gap is the following:

\[
\text{Infrastructure gap}_{\text{Elect., ALB},t} = \left( \frac{\text{Installed capacity to gen. electricity}_{\text{ALB},t}}{\text{Installed capacity to gen. electricity}_{\text{EU},t}} - 1 \right) * 100
\]

For highways and railroads, the gaps are calculated relative to the EU average, but adjusted for population density. The adjustment addresses the issue that countries with higher population densities have, on average, higher transportation infrastructure (motorway and railway) density. For example, the infrastructure gap for Albania is generated by comparing Albania motorway and railway density with the density of a theoretical Albania country in the EU. This country has the same population density as Albania, but is equipped with the average motorway and railway density characterizing the EU. The following is the infrastructure gap for highways in Albania:

\[
\text{Infrastructure gap}_{\text{highways, ALB},t} = \left( \frac{\text{Highways per km}^2_{\text{ALB},t}}{\text{Highways per km}^2_{\text{ALB}} \text{EU},t} - 1 \right) * 100
\]

Highways per square kilometer (ALB) EU, t results from a simple regression of highways per square kilometer on population density over the EU average. Then the highways per square kilometer for Albania is projected using the estimated coefficients and Albania population density.

3. **Aggregating different indicator gaps is also challenging.** Aggregate infrastructure gaps are calculated using weights inversely related to the volatility of the indicator across time. The intuition is that infrastructure indicators are a combination of actual information and noise (Moore and Moore 1985; Moore 1983, 1990). Then, series with higher volatility are likely to have a higher noise component. Consequently, the aggregate gap is constructed using weights that are inversely related to the volatility of the indicator gap.

\[
\text{Aggregate infrastructure gap}_{i,t} = \sum_{j} w_j \cdot \text{infrastructure gap}_{i,j,t}
\]

\[
w_j = \frac{\sum_{i=1}^{\text{# of countries}} \text{infrastructure gap}_{i,j}}{\text{infrastructure gap}_{i,j}}
\]

where \(w_j\) approximates the inverse of the standard deviation of each gap. When the indicator gap has high volatility, a low weight is given. When the indicator gap has a low volatility, a higher weight is given.

A robustness check of gaps using equal weights show similar results:

\[
\text{Aggregate infrastructure gap}_{i,t} = \sum_{j} \frac{\text{infrastructure gap}_{i,j}}{6}
\]
The data sources for the infrastructure indicators are:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone/cell phone lines per capita</td>
<td>World Bank, World Development Indicators (WDI); and completed with data from national statistics offices.</td>
</tr>
<tr>
<td>Broadband subscriptions per capita</td>
<td>World Bank, WDI; and completed with data from national statistics offices.</td>
</tr>
<tr>
<td>Installed capacity to generate electricity per capita</td>
<td>International Energy Agency.</td>
</tr>
<tr>
<td>Air passengers carried per capita</td>
<td>World Bank, WDI; and completed by national statistics offices</td>
</tr>
<tr>
<td>Highways per km² after controlling for population density</td>
<td>International Road Federation; and country authorities’ data.</td>
</tr>
<tr>
<td>Railroad per km² after controlling for population density</td>
<td>World Bank, WDI; and completed by national statistics offices.</td>
</tr>
</tbody>
</table>

Source: IMF staff estimates.
Appendix II. General Equilibrium Model\(^1\)

1. **A general equilibrium model—developed by Berg et al (2012)—was used to simulate a public investment surge.** The model allows analysis of the interactions between GDP growth, public investment, and public debt. The key feature is the public investment-growth nexus. The model was originally designed for low income countries (LICs) and applied by IMF staff to emerging market countries as well. Western Balkan countries share several features of LICs such as significant remittances, limited financial development, and large IFI financing.

2. **The model is a small open economy with two sectors.** In this economy, the private sector produces tradable and a non-tradable goods. Both goods are made using private capital, public infrastructure, and labor as inputs. The model includes public and private capital, then depending on the productivity of public capital, public investment can increase output by stimulating private investment, but can also crowding it out. Agents can also import goods either to consume or produce capital. Private and public capital are produced using imported inputs and nontraded goods. There are two types of consumer: saver and hand-to-mouth consumer. There is a government that collects taxes on consumption and fees on public capital. Government funds are allocated to transfers or to build public capital.

3. **The government has several alternatives to finance public investment,** such as by increasing tax revenues, collecting fees on the use of public capital, borrowing domestically, externally, and externally at concessional rates (e.g. a mix of EU grants and IFI financing). The model ensures debt sustainability by allowing the tax rates to respond to public debt increases.

4. **The model allows the assessment of the role of public investment frameworks and the productivity of the public capital.** Public investment expenditures do not always increase the stock of public capital as part of the expenditures can be wasted, meaning that the government pays “X” amount but only a fraction of it helps to expand the public capital stock. The model allows analysis of this feature by taking into account different levels of public capital productivity and consequently different impacts on growth.

5. **Simulations are calibrated to reflect the structural features of an average Western Balkan country.** Main parameters include a real GDP per capita of 3 percent, based on the growth observed in 2006-16, a public debt to GDP ratio of 51 percent (average public debt for the region in 2016), an average tax rate of 18 percent, and a public investment to GDP ratio at 5.2 percent to match the average observed in the region in 2016. The real average domestic and external interest rates are assumed to be 7 and 5 percent, respectively. The efficiency of the public investment framework is calibrated based on Dabla-Norris et al (2011) and the productivity of capital is assumed to be 20 percent. This value is in the medium range of estimates by Dalgaard and Hansen (2005) and Foster and Briceno-Garmendia (2010).

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\(^1\) See International Monetary Fund European Department Paper “Public Infrastructure in the Western Balkans: Opportunities and Challenges” forthcoming.
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While Kosovo spends a relatively high amount of resources on social welfare, the performance of benefits lags along nearly every metric. The shortcomings include low coverage, weak targeting of the poor, insufficient adequacy, and low poverty and inequality impacts. Benefits using categorical targeting – 93 percent of the total—contribute to the sub-optimal outcomes. Kosovo needs to reform existing programs and consider introducing new schemes focused on the bottom of the income distribution to meet its objectives of improving human capital and wellbeing. With the potential for worsening inequality in the future and among the highest poverty and unemployment rates in Europe, the reforms are made more urgent.

A. Overview

1. This paper analyses the distributional and labor supply effects of social benefits in Kosovo. The objectives of the analysis are to examine trends in social welfare spending over time, the distributional effect of such spending on poverty, inequality and employment, and the efficiency.

2. Despite Government commitments and moderate spending levels, Kosovo has among the highest poverty and unemployment rates in Europe. The National Development Strategy prioritizes economic growth by maximizing employment and welfare, and Kosovo spends above average amounts, with 5.9 percent of GDP on social benefits, and 2.9 percent on social assistance. For social assistance, this compares to 2.4 percent of GDP in the Western Balkans and 2.2 percent of GDP in Emerging Europe. Approximately one-sixth of the population, however, lives below the poverty line, and one-third of the working age population is unemployed, the highest rate in Europe.

3. Social benefit scheme outcomes underperform neighboring countries on most metrics, resulting in weak distributional outcomes for the amount spent. Low coverage and adequacy result in among the lowest inequality and poverty impacts of social benefits, despite Kosovo being one of the top spenders. Only 7 percent of benefits are targeted to the poor, while the remaining 93 percent are based on categorical targeting such as age or involvement in the war. Further, the design of existing policies with many schemes requiring beneficiaries to be unemployed lower incentives for employment, thereby constraining welfare gains and aggregate economic growth.

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1 Prepared by Brooks Evans.

2 Values for 2016. Social benefits include all benefits, while social assistance includes the basic pension, social assistance scheme, SH benefits, and benefits for the blind. Non-contributory and contributory benefits not listed are excluded in this definition of social assistance.

3 World Bank ASPIRE database, worldbank.org/aspire.
4. The analysis sub-categorizes social schemes into age, health and family pensions, war-related benefits, and poverty-targeted. Approximately 60 percent of benefits are for the first grouping, including those related to retirement, disability, and the family pension. Just over 30 percent of benefits are for war-related schemes. Less than 10 percent of benefits - one scheme - seeks to reduce poverty.

5. Based on this and other assessments, wide-ranging reforms are needed to social welfare in Kosovo. The reforms should be guided by an overarching strategy that sets the desired priorities, and well as a legal framework that ensures the durability of reforms while maintaining some flexibility where essential.

B. Socio-Economic Background

6. Despite some progress, Kosovo ranks among the bottom for socio-economic indicators, including pervasive poverty and unemployment. Median income in Kosovo is around two-thirds that of Emerging Europe and seven-tenths that of the Western Balkans averages. Kosovo has worse absolute poverty relative to the Western Balkans for all measures, including the poverty headcount, gap, and severity. This means that poverty is more pervasive, the poor are further below the poverty line, and there is more extreme poverty. Inequality is comparatively low and below both regional benchmarks. The unemployment rate is double the Emerging Europe average.4

<table>
<thead>
<tr>
<th>Poverty and Unemployment Measures, Kosovo and Comparators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Poverty measures</strong></td>
</tr>
<tr>
<td>Kosovo</td>
</tr>
<tr>
<td><img src="chart1.png" alt="Bar chart" /></td>
</tr>
<tr>
<td><strong>Unemployment rate</strong></td>
</tr>
<tr>
<td>Kosovo</td>
</tr>
<tr>
<td><img src="chart2.png" alt="Bar chart" /></td>
</tr>
</tbody>
</table>

Source: IMF staff estimates based on World Bank PovcalNet, WDI and 2015 LFS.

4 Absolute poverty measures are based on a $1.90/day PPP poverty line in each country. The poverty headcount is the share of the population below the poverty line, poverty gap the average distance of the poor from the poverty line expressed relative to the poverty line, and poverty severity the squared gap, thereby placing more weight on the poor furthest from the poverty line. Inequality is measured by the Gini coefficient, where a value of 1.0 means that one person in a country has all income, and a value of 0.0 every individual has the same income.
7. **While measures are improving, a large share of Kosovars are poor or vulnerable to poverty.** The poverty headcount rate using the national poverty line fell nearly five percentage points from 2012 to 2015 to 17.6 percent, and so more than one in six Kosovars remain poor. Further there is high vulnerability to being poor with the poverty headcount varying each year by at least 3.5 percentage points over this time period, highlighting the annual cyclicality. Additionally, many Kosovars live just above the poverty line and are very vulnerable to poverty, as an increase in the poverty line of only 10 percent would make one in four people poor. Poverty in rural areas is slightly higher at 18.9 percent of the population in 2015 compared to 15.5 percent in urban areas, and 65.7 percent of the poor reside in rural areas. There is considerable regional variation with more than 30 percent of the population poor in Peje and Ferizaj, while less than 10 percent are poor in Gjakove and Prizen. The highest shares of the poor are in Pristina and Ferizaj with shares of 23.1 and 20.5 percent respectively.

8. **Inequality is low and has declined in recent years.** The Gini coefficient was 0.26 in 2012 and fell to 0.23 in 2015. Inequality is higher in urban area by 2.4 Gini points. There is substantial regional variation in inequality, lowest in Prizren and highest in Gjilan. By quintile, more than a quarter of the richest quintile reside in urban areas. The rural population is relatively equally distributed across all but the top quintile, with only 16.4 percent of the rural population in this group.

9. **An unemployment rate that is double the EM Europe average lowers economic welfare and growth.** With 30.6 percent of the labor force unemployed in 2017, Kosovo severely lags EM Europe and the Western Balkans with rates of 16.2 and 21.1 percent respectively. Inactivity rates are also high at 61.8 percent of the population age 15-64 and close to 80 percent for females. This compares to an average of 40 percent for the Western Balkans. With nearly two-thirds of the working age population not engaged in employment, the lack of labor income increases the risk of poverty, limits revenue mobilization though PIT, VAT, and CIT, and reduces the growth potential of the economy. Among household members that have a recipient of social benefits, only 29.9 percent are employed, while 70.1 percent are not employed, suggesting social payments discourage work, and issue that will be examined in more detail later. Further there are currently no passive unemployment or active employment benefit programs.

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5 The poverty line in 2012 was €1.79 a day per adult equivalent and €1.82, €664 per year, in 2013-2015.

6 The poverty line would increase from €1.82 to €2.00 per day, or €731 per year, resulting in a poverty headcount rate of 24.3 percent.
C. Fiscal Context

10. The composition of social spending has significantly changed, pension and social assistance increasing in relative size. At the aggregate level, social spending has been an expanding component of expenditure in recent years, with its share of primary current spending increasing by 1.7 times in the period 2010-2017. However, the overall trend masks heterogeneous developments of the two main components. While pensions and social assistance expenditure as a share of GDP has nearly doubled, other transfers and subsidies have been declining.\(^7\)

![Primary Current Expenditure Composition](image)

Source: IMF staff calculations on MoF data.

11. When examining social assistance spending relative to peers, spending is higher than both the EM Europe and the Western Balkans average. Kosovo spends 2.9 percent of GDP on social assistance, above the 2.4 percent and 2.2 percent averages for the Western

\(^7\) Other transfers and subsidies includes subsidies to public enterprises.
Balkans and EM Europe respectively. Of the 10 countries in the EM Europe sample, Kosovo social assistance spending ranks the fourth highest.

Government Expenditure – Social Assistance
(Percent of GDP; 2017 or most recent year)

Source: IMF staff calculations based on MoF. IMF and World Bank data.
Notes: 1/ No data for Macedonia.

12. Spending on social benefits has more than doubled since 2010. The rate of increase for social spending has been rapid, coinciding with new schemes, expanded number of beneficiaries, and higher benefit amounts. Social benefit spending, excluding administrative costs, increased by 124 percent between 2010 and 2017.

Social Benefits
(Millions of euros)

Source: IMF staff calculations based on data from authorities.
13. **The composition of spending is heavily skewed towards categorical benefits.** Only 7 percent of benefits are allocated based on economic welfare, which explains much of the weak distributional performance. Almost two-thirds of benefits are for age, health, and family benefits, while close to 30 percent are for war-related benefits.

### Social Benefits Amounts by Categories

**Source:** IMF Staff calculations based on data from authorities.

### D. Performance of Social Benefits

### Social Assistance Spending and Gini Reduction

**Source:** IMF staff estimates based on IMF, World Bank and HBS 2015.
14. While expenditure on social assistance is high by regional standards, the
distributional effect is weak. Among the 10 countries in EM Europe, Kosovo spends the fourth
highest on social assistance as a share of GDP. The estimated impact on inequality, however,
ranks seventh lowest. The distributional efficiency of social assistance spending in Kosovo is
therefore quite weak relative to its peers. Further social benefit receipt appears to have a
negative effect on employment, likely due to some benefits requiring recipients to be
unemployed.

15. The combination of comparatively low adequacy and scarce coverage of lower
income individuals result in social protection having a limited impact on
poverty and inequality. The performance of social benefits in Kosovo lags on nearly all
metrics when comparing against EM Europe. The adequacy of benefits ranks 10th lowest of
the 24 countries, while Kosovo has the fourth lowest coverage of the poorest quintile at 58.4
percent, compared to a regional average of 75.3 percent. Kosovars are therefore receiving relatively low benefit amounts. As a result, the
poverty effect from social protection transfers Kosovo is 7 percentage points lower than the
regional average reduction of 52 percent, placing it in the bottom 30 percent of the
countries. The distributional impact is also relatively weak, reducing the Gini coefficient by
23.1 percent, 4 percentage points below the EM Europe average.\footnote{Note that part of the weak inequality effect is Kosovo can be explained by its comparatively low Gini index, which means that more fiscal effort is needed than in a country with higher inequality.}

16. There are a number of issues and reforms that could markedly increase the
impact of social benefits. While each benefit scheme attempts to improve social outcomes, the
results are mixed. Age and disability benefits respectively suffer from weak eligibility checks and
inequitable designs. A large share of benefits are allocated to war-related benefits, despite the
weak correlation with war participation and well-being. The one scheme focused on poverty –
social assistance – suffers from weak targeting and low benefit amounts. Further, there are
currently no large labor market program despite the very high unemployment. The table below,
based on international best practice, highlights some of Kosovo’s social benefit shortcomings and possible reforms options.

<table>
<thead>
<tr>
<th>Table 1. Social Benefit Issues and Reform Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scheme</strong></td>
</tr>
<tr>
<td><strong>Age, Disability, and Family Benefits</strong></td>
</tr>
<tr>
<td><strong>Basic pension and “Contributory pension”</strong></td>
</tr>
<tr>
<td><strong>Disability pension (civilian)</strong></td>
</tr>
<tr>
<td><strong>Trepca early pension</strong></td>
</tr>
<tr>
<td><strong>Kosovo Pension Savings Trusts (KPST)</strong></td>
</tr>
<tr>
<td><strong>Poverty-focused benefits</strong></td>
</tr>
<tr>
<td><strong>Social assistance scheme</strong></td>
</tr>
<tr>
<td><strong>War-related benefits</strong></td>
</tr>
<tr>
<td><strong>War veterans pension</strong></td>
</tr>
</tbody>
</table>
Table 1. Social Benefit Issues and Reform Options (concluded)

<table>
<thead>
<tr>
<th>Category</th>
<th>Issue Description</th>
<th>Reform Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Families of martyrs</td>
<td>Benefit level high.</td>
<td>Ensure moratorium maintained for future generations for equity and to contain cost.</td>
</tr>
<tr>
<td>Civilian and KLA war invalids</td>
<td>Inequitable as disability thresholds lower than civilian disability scheme; benefit amounts higher than civilian scheme.</td>
<td>Equalize war-related and non-war-related disability criteria; reduce benefit amounts to match non-war-related civilian scheme.</td>
</tr>
<tr>
<td>Caretaker/Families for War Invalids (6 schemes)</td>
<td>Inefficiencies of multiple similar schemes; some benefit amounts high.</td>
<td>Consider harmonizing some schemes without increasing total benefit cost.</td>
</tr>
<tr>
<td>Previously KPC pension</td>
<td>Non-contributory despite having feature of occupational scheme; benefit amount based on final years salary.</td>
<td>Consider using career average salary for benefit amount.</td>
</tr>
<tr>
<td>KSF pension</td>
<td>Early retirement incentivized; non-contributory despite having feature of occupational schemes; benefit based on final years salary.</td>
<td>Change benefit formula so that total benefits decrease commensurate to each year of early retirement; shift to defined contribution financing; use career average salary for benefit amount.</td>
</tr>
</tbody>
</table>

Source: IMF staff

17. Remittances have a large distributional effect, though these are not public transfers, and represent a high-risk form of social protection. In 2015, remittances had a higher distributional effect, as measured by the Gini reduction, than social assistance, though lower effect than social benefits since the larger effect of social insurance improve social protection overall. Private transfers reduced inequality by 3.2 Gini points, compared to 1.3 points and 5.6 points for social assistance and insurance respectively.
E. Conclusion and Policy Recommendations

18. **Social benefit spending in Kosovo has increased substantially since 2010 though the performance for the expenditure level remains weak by regional standards.** This is due to low coverage, weak targeting and insufficient adequacy of many benefits. Further the composition of spending has shifted towards war-related rather than a poverty, inequality and employment enhancing focus. Social benefit reform is macro-critical to ameliorate future increases in inequality, while addressing current widespread unemployment and low income of individuals, which should increase aggregate growth. A series of policy recommendations should be considered.
• **All schemes:**
  • Set overarching goals and parameters for social benefits, including increasing coverage and benefit levels for bottom of distribution.
  • Introduce an enforceable residency eligibility requirement, such as requiring individuals to pick-up benefits in person every month.
  • Remove disincentives to work by removing requirement of being unemployed to receive a benefit, the exception being for employment benefits.
  • Subject all benefits to personal income tax.

• **Age, disability and family benefits:**
  • Apply uniform disability criteria across schemes and equalize benefit amounts downwards towards civilian scheme.
  • Revise occupational scheme from general government financing to defined contribution and base benefit amounts on career average earnings.
  • Prevent any reforms that would allow for early retirement, unless actuarially and budget neutral.

• **Poverty focused benefits:**
  • Index benefits to inflation to avoid the erosion of value over time.
  • Reform the current social assistance scheme to improve the poverty-reduction goal by increasing the benefit amount and improving targeting criteria - to increase the share of beneficiaries and benefits allocated to the bottom of the distribution - by removing categorical requirements for age, unemployment, and that recipients are a family.

• **War-related benefits:**
  • Enforce the 0.7 percent of GDP budget cap on the veteran's pensions, and credibly complete reclassification and verification of beneficiaries.
  • Restrict benefits to the current generation.
  • Consider one-off payments in lieu of permanent benefits.

Appendix I. Assessing Social Benefit Performance—Methodological Issues

1. This appendix provides details on how household survey data are used in the report for the assessing social benefit performance. The general methods of survey analysis are first discussed, followed by an explanation of their application.

Data

2. Estimates of social assistance performance are based on data from the most recently publicly available HBS household survey. Surveys such as the HBS contain useful information on the demographic characteristics of individuals and households, as well as details on their income and expenditure. Statistical techniques allow for the survey to be used to calculate estimates of at the national level, as well as by population subgroups (e.g. region, urban/rural, and decile).¹

3. The unit of analysis and topics covered make the survey well-suited for analysis. Approximately 12,000 individuals are included in the survey, which is updated on a quarterly basis and released each year. The unit of observation is the household and individuals in each household.²

4. For the analysis expenditure is used as a proxy for income. Expenditure is widely viewed as a more accurate measure than income of economic well-being, particularly in developing countries, for reasons including the presence of large informal economies.³ As survey information is collected at the household level, household expenditure is divided by the number of per adult household members to obtain the welfare indicator (expenditure per adult equivalents). Quintiles and deciles are derived from per capita household expenditure, where the bottom decile (D1) or quintile (Q1) represent the poorest 10 and 20 percent of the population respectively, and the best off are D10 and Q5. For poverty analysis, the poverty line is set at 17.6 percent.

5. Sampling techniques allow for the estimation of statistics representative at the national level. A two-stage random sampling design was used by the Statistical Office for data collection, which first included random selection of Primary Sampling Units (PSUs) and then randomly selecting households within the PSUs.

6. As any data source, household surveys have some limitations. There is a risk of systematic errors that decrease the representativeness and precision of results. There may be low

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¹ These techniques include sampling for random selection of households and the use of survey weights.
² Servants and temporary members are excluded.
³ Accurate income measurement in the informal sector, which often includes agriculture and services, can be a challenge due to barter trading, less accurate bookkeeping, misreporting, and other factors.
response rates for certain questions, that reduces the precision of estimates. There may be intentional mis-statements by respondents, such as the level of income, more common at the top of the distribution.

Social Assistance Assessment

7. A range of performance indicators are used to assess the performance of social assistance. Coverage is defined as the share households that receive a benefit. Adequacy (or Generosity) is the benefits as a share of expenditure. For example, if expenditure is 1,000 Euros and a transfer is 100 Euros, then the generosity would be 10 percent (100/1,000). Benefit incidence describes how benefits are distributed across deciles and quintiles. Beneficiary incidence shows how benefit recipients are distributed across deciles and quintiles. The estimated poverty and inequality impact is calculated as the percentage change in the measures (poverty headcount, poverty gap, severity, and Gini coefficient) if one or all social transfers are removed. Finally, the benefit-cost ratio (BCR) is an efficiency measure, which indicates the share of benefits that reduce the poverty gap. A value of 0.0 would indicate that none of the benefits reduce the poverty gap, while a value of 1.0 means that all benefits reduce poverty.
Appendix II. Improving Targeting Performance

1. **The targeting of social assistance transfers improves distributional outcomes by more efficiently allocating resources to those most in need.** Unlike universal transfers, targeted social assistance programs seek to concentrate resources on certain population sub-groups, often low-income households. International evidence indicates that top performing programs allocate up to 60-80 percent of benefits to the bottom income quintile. The size of benefits also tends to increase by up to four times compared to if benefits were randomly allocated. As country budgets often have scarce resources, more targeted transfers can result in considerable fiscal savings while achieving more effective distributional outcomes. A list of resources and references on the issue of targeting is provided at the end of this Appendix to support the authorities internal debate on this issue.

2. **To improve accuracy, more than one targeting method should be used.** There are multiple types of targeting, though some with better accuracy, and programs that layer more than one targeting approach tend to be most effective. Methods include categorical, geographical, self-selection, community-based, proxy-means testing (PMT), and means testing (see Appendix Table 4). A program may for example combine geographic targeting, if certain regions are relatively impoverished, and then use PMT in these areas, and community-based targeting for final verification.

3. **PMT has been found to be effective in developing countries, where income is difficult to verify.** Relying on income, particularly if self-reported, leads to poor targeting with both exclusion and inclusion errors. Income often is not an accurate measure of welfare when verification is difficult. Verification difficulties arise from large agricultural sectors where accurate income reporting can be challenging, substantial informal non-agricultural employment, high reliance on remittances, and low administrative capacity to check income. Recognizing the inaccuracy of using income in these contexts, many programs use PMT, which utilizes proxies for economic welfare. These proxies tend to be easy to verify, such as housing quality, family composition, location, and education, which can be used to more accurately identify low-income households.

4. **Even with accurate targeting, program implementation that minimizes direct and indirect costs is critical to ensure the intended outcomes.** There is wide variation in the performance of targeting, largely due to implementation. Administrative costs can be high if a program is very complicated, and so a balance of the trade-off between accuracy and efficiency is

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1 Community based targeting refers to community leaders or members identifying those most in need based on program criteria.

2 Exclusion errors are benefits not received by the targeted population, while inclusion errors are benefits received by the non-target group. Exclusion errors can lead to frustration among those not receiving a benefit, while excessive inclusion errors may increase questions of the efficient use of funds and fraud.

3 Reasons include intentional misreporting and the difficulty for many individuals, such as poorly educated subsistence farmers or street vendors, to accurately determine income. Consumption expenditure is therefore often used instead of income in developing countries.
needed. Efforts should be made to minimize private costs, such as opportunity costs. Targeting can lead to perverse incentive effects, such as individuals altering their savings or labor supply behavior to qualify for a program. There may be social costs, namely stigma attached to being in a program, and political considerations may affect the efforts to mobilize public support if a large portion of the population is excluded.

Administrative costs are highest in initial years as the program is set-up and scaled. Efforts should be made to pool functions across programs.

In some cases, high opportunity costs may be desirable for self-selection, though should not disproportionately affect certain sub-groups, such as individuals living far from social assistance enrolment offices.

Social costs can be lowered by awareness campaigns, while political support can be bolstered by measures such as the inclusion of some middle-income households, in addition to low income households.
### Table 1. Targeting Methods, Key Characteristics and Effectiveness

<table>
<thead>
<tr>
<th>Method</th>
<th>Approach</th>
<th>Benefits</th>
<th>Weaknesses</th>
<th>Context</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categorical</td>
<td>Demographics, e.g. age, marital status, ethnicity</td>
<td>Low cost, admiratively simple</td>
<td>Low income correlation</td>
<td>When welfare correlation is high</td>
<td>Low</td>
</tr>
<tr>
<td>Geographical</td>
<td>Locations are determinant</td>
<td>Low cost, admiratively simple</td>
<td>High exclusion errors for those not in region</td>
<td>Low administrative capacity and/or combined with other method</td>
<td>Low</td>
</tr>
<tr>
<td>Self-selection</td>
<td>Individuals chose to participate, e.g. public works, queuing for benefit</td>
<td>Low cost, admiratively simple, politically popular, low exclusion errors</td>
<td>Stigmatization, some inclusion errors</td>
<td>Low administrative capacity</td>
<td>Moderate</td>
</tr>
<tr>
<td>Community-based</td>
<td>Community or leaders select based on criteria</td>
<td>Local ownership, can improve accuracy</td>
<td>Prone to elite capture, may lower social cohesion</td>
<td>Low capacity, strong communities, and/or combined with other method</td>
<td>Moderate</td>
</tr>
<tr>
<td>Proxy-means testing</td>
<td>Proxied welfare based on observable characteristics to determine eligibility</td>
<td>Effective in areas when income difficult to verify</td>
<td>Moderate technical ability needed, some exclusion and inclusion errors</td>
<td>Informality high, benefits for long period</td>
<td>Moderate/High</td>
</tr>
<tr>
<td>Means testing</td>
<td>Income or asset test</td>
<td>Good precision when data robust</td>
<td>High administrative and private cost</td>
<td>Robust information on income, assets, and/or when benefit levels high</td>
<td>Moderate/High</td>
</tr>
</tbody>
</table>

Source: IMF staff based on the World Bank and other literature.
<table>
<thead>
<tr>
<th>Scheme</th>
<th>2017 spending estimate (Euros, millions)</th>
<th>Number of beneficiaries (December 2017)</th>
<th>Average benefit amount, € per month (spending/beneficiaries)</th>
<th>Target group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age, Disability and Family Benefits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic pension</td>
<td>113.1</td>
<td>122,716</td>
<td>Flat (78)</td>
<td>All 65+; pension tested</td>
</tr>
<tr>
<td>“Contributory pension”</td>
<td>90.7</td>
<td>43,300</td>
<td>179 (range)1/</td>
<td>Beneficiaries based on law from before 1999*</td>
</tr>
<tr>
<td>Disability pension (civilian)</td>
<td>18.9</td>
<td>19,481</td>
<td>Flat (82)</td>
<td>100 percent disabled</td>
</tr>
<tr>
<td>Trepca early pension</td>
<td>4.2</td>
<td>3,232</td>
<td>Flat (105)</td>
<td>Involuntary unemployed; &gt; 50% disabled threshold</td>
</tr>
<tr>
<td>Kosovo Pension Savings Trusts (KPST)</td>
<td>Funded defined contributory scheme</td>
<td>5,207</td>
<td>Phased withdrawal (at least 150) or annuity</td>
<td>All, payout starting at the age of 65</td>
</tr>
<tr>
<td><strong>Poverty-related benefits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social assistance scheme</td>
<td>28.5</td>
<td>26,117</td>
<td>91</td>
<td></td>
</tr>
</tbody>
</table>

*Category 1* beneficiaries are families with all members being dependent and hence not capable of working. Families applying on the basis of one or more family members being permanently disabled and thus dependent will be required to have such member’s medical conditions reviewed by the Medical Commission.

*Category 2* beneficiaries are families with only one member capable of working, who is registered as unemployed at the Employment Office and is actively seeking for work (through the Employment Office), and with at least one child under the age of five or an orphan under the age of 15. An additional family member registered as unemployed will cause a family to be ineligible. In addition to these categorical criteria, families must also pass an asset test—such as no ownership of motor vehicles or land larger than 0.5 hectares.
### Pensions for the Blind

| Services / Social-School 0-18 years | 5.5 | 2,001 | 231 | Certified as blind |
| Services / Social-Family Housing within the Relationship | 3.4 | 2,777 | 102 |
| Services / Social-Family Housing outside the Relationship | 0.5 | 383 | 108 |
| Woman after childbirth | 0.1 | 28 | 317 |

### War-related benefits

| War veterans pension | 78.05 | 38,263 | 170 | Certified veteran of war and unemployed |
| Families of martyrs | 10.6 | 1,934 | 455 | Families of KLA fighters who died during the armed struggle or later, as a direct result of injuries sustained |
| War invalids of KLA | 12.1 | 3,405 | 295 | Disability of 20 percent or higher |
| Civilian invalids as result of war | 2.9 | 1,901 | 128 | Disability of 40 percent or higher |
| War civilian victims | 9.4 | 4,469 | 177 |
| Caretaker/Families for those in war (6 schemes) for War Invalids | 1.6 | 20-358 | 50-453 | Families of war invalids; after death of war invalid, missing in war, civilian invalid; civilian disappeared; civilian after death |
| Previously KPC Pensions | 2.7 | 1,001 | 228 | Served at least for 5 years in KPC (during its 10 years of existence) and reaching age 45 |
| KSF pensions | 1.2 | 288 | 364 | At least 20 years of service |

Note: 1/ Indicative amount
Source: IMF based on authorities.
References


Kosovo’s banking sector is, uniquely among the Western Balkans, healthy and growing. But, after starting from scratch in the years before independence, financial penetration remains relatively shallow. Kosovo needs more lending to support stronger economic growth and convergence with Europe. It also needs better lending that is more focused on productive industries. Credit growth has historically been driven – or constrained – by both supply and demand factors in Kosovo, with supply playing a somewhat stronger role. Healthier balance sheets have allowed supply to meet demand as the latter increased in line with improving macroeconomic conditions. Going forward, meaningful financial deepening could be constrained by funding. The authorities, in turn, should focus on maintaining healthy balance sheets, encouraging diversified loan portfolios, exploring new avenues for bank funding, and further reducing structural bottlenecks to lending.

A. Introduction and Background

1. Recent credit growth has been robust, but is it sufficient to support the stronger economic growth that Kosovo needs? Credit depth in Kosovo remains below most of its peers in the Western Balkans, CESEE more broadly, and non-European countries with similar income levels. This suggests that even the higher credit growth of recent years, in which healthier bank balance sheets allowed credit supply to meet increased demand, may not be sufficient to support the economic growth that Kosovo needs to converge with the rest of Europe.

Private Loan Growth
percent, y/y

Credit Depth
Bank credit to the private sector in CESEE (lhs) and at similar income levels (rhs) in percent of GDP, 2016 1/

Source: CBK, staff estimates.

1/ The rhs chart plots Kosovo against other countries across the world with a similar per capita income level (ranging $9,000 to $14,000 in constant 2014 PPP dollars) in 2016 or latest (2015).
2. **Kosovo’s banking sector started largely from scratch in the early 2000s.** Following the 1998-99 war, there was very little banking activity in Kosovo: The banking system held assets equivalent to 4.3 percent of GDP, largely comprised of balances with other banks. Banks’ outstanding loans at end-2000 totaled €3.3 million. This gradually began to shift, although loans did not comprise a majority of banks’ balance sheets until 2005.

3. **Foreign funding inflows and independence sustained a boom over 2005-09.** Starting at essentially zero following the war, loans comprised roughly half of bank balance sheets by 2005. At this point, credit growth settled into a 20-40 percent y/y range over through 2009 and financial depth nearly doubled from 17 to 32 percent. The boom was driven by postwar reconstruction, pent-up demand, and, later, exuberance during the run-up to and aftermath of independence in 2008. It was facilitated by the appearance of and aggressive targeting by European banking subsidiaries, in line with strong foreign funding leveraging elsewhere in the Western Balkans and Central, Eastern, and Southeastern Europe (CESEE) during this period.

4. **Kosovo did not face a post-boom bust like many of its neighbors.** Much of CESEE, including some banking systems in the Western Balkans, faced strong deleveraging pressures and a collapse in credit following the global financial crisis. Kosovo – which had experienced less pre-crisis leveraging than its peers and whose macroeconomy was largely unaffected by the global crisis given strong donor inflows and limited international trade and financial linkages – did not. Credit growth began to ease significantly in mid-2008 but still averaged 14.5 percent y/y over 2009-11.
5. **However, financial deepening stalled beginning in 2012.** This was likely driven by a combination of slowing economic growth, a more conservative stance toward the region by foreign subsidiaries (which, post-independence, have controlled 80-90 percent of banking system assets) as the euro area crisis deepened, and declining asset quality as loans made during the boom years began to season. These factors were exacerbated by structural bottlenecks to lending in Kosovo related to inefficient courts and collections processes that meant very large collateral requirements, prolonged asset recovery procedures, and high interest rates. Credit growth to the private sector began easing again in mid-2012, and averaged only 3.7 percent y/y from October 2012 to October 2014. Over this period, credit-to-GDP was correspondingly flat.

6. **Lending growth has returned since mid-2015.** Coinciding with a dramatic drop in lending rates and interest margins, a strong improvement in asset quality, a return to healthy macroeconomic growth, and structural reforms, credit growth has averaged 8.4 percent y/y since June 2015, with Kosovo’s credit-to-GDP rising by 2 percentage points of GDP to 36.8 percent in 2016.

7. **However, while a return to credit growth is welcome, the composition of new lending is not ideal.** The banking system’s loan portfolio is comprised of roughly two-thirds corporate loans and one-third household lending. The current credit upcycle has seen strong growth in lending to both sectors, especially households. However, the composition of lending within those sectors is not fully geared toward addressing the structural needs of Kosovo’s economy: Most household credit is geared toward consumer goods (new mortgage loans are growing strongly but the market is nascent). Corporate loan growth has been driven largely by lending to the wholesale/retail trade and services sectors and, to a much lesser extent, the manufacturing and mining sectors, in line with the historic trend. A more robust lending boom would entail lending toward more productive activity that would support the much-needed development of productive, export-oriented industries in Kosovo.
8. **The rest of the paper is comprised as follows:** Section II will analyze the demand- and supply-side drivers – and possible constraints – to bank lending in Kosovo. Section III will examine in more detail whether existing levels of bank lending are sufficient relative to fundamentals, or whether a credit gap exists in Kosovo. Section IV will discuss the prospects for further financial deepening going forward. Section V will present policy recommendations that follows from this analysis.

B. **Drivers of–and Constraints On–Credit Growth**

   I. **The Current Picture**

9. **The recent return of lending appears to be driven by both supply and demand.** The steady recovery in credit growth since 2015 is a welcome development given the relatively low levels of credit penetration in Kosovo. The uptick has coincided with a confluence of positive developments on both the demand and supply side:

   **Demand-side developments include:**

   - *A favorable macroeconomic environment:* GDP growth averaged 4.5 percent per year during 2005-11 but dropped to 2.5 percent per year while credit stagnated over 201Economic growth since 2015 has been slightly below that of the boom period but well above the years of stagnation.

   - *A sharp drop in lending rates:* Average lending rates hovered around 15 percent until mid-2011, when they began a gradual decline of about 200 basis points over three years (accompanied by a steady slowdown in credit growth). A much sharper decline in lending rates began at about the time that credit growth bottomed out in early 2014. Since then, the average lending rate has fallen by roughly 500 basis points. The sharpest drop, of 390 basis points, occurred between October 2014 and April 2015 and coincided with the start of the current credit upcycle.

![Lending Rate Chart](source: CBK)
Supply-side developments include:

- **Improved bank balance sheets.** Since lending began in earnest in the mid-2000s, the Kosovo banking sector has, in aggregate, been healthy relative to its Western Balkan and CESEE peers. Banks have generally been well-capitalized and liquid and, aside from some weak performance during the period of lending stagnation, profitable. Asset quality suffered as boom-era loans seasoned, with the NPL ratio doubling to a peak of 8.8 percent in early 2014. However, a combination of increased provisioning, targeted writeoffs, and strong credit growth has halved that ratio since, leaving banks more ready and able to lend. At the same time, profits have returned and funding costs have fallen for Kosovo banks.

- **Lower risk aversion and search for yield:** EU-based banks, which account for 64 percent of system assets in Kosovo, pulled back from CESEE and the Western Balkans following the euro area crisis, partially driving the 2012-14 credit slowdown in Kosovo. These banks are once again lending in Kosovo. While they still appear to be taking a relatively more conservative stance than their non-EU and domestic peers, a somewhat reduced level of risk aversion and a search for yield in the context of a low-interest rate environment in Europe has meant a move back toward lending and increased competition among banks in Kosovo.

- **Financial sector reforms:** The authorities have reduced a number of structural bottlenecks and made improvements to the CBK’s supervisory/regulatory infrastructure in recent years, making banks more confident and willing to lend. These include:
  - judicial reforms that make collateral recovery more reliable, such as a dramatic reduction in the backlog of cases in the court system; the introduction of a system of private
enforcement agents to collect on seized assets; and a unique account registry to facilitate the garnishment of accounts (see Box 1 for further detail);

- the adoption and refinement of risk-based supervision at the central bank;

- the adoption of a best-practice emergency liquidity assistance framework, critical in a unilaterally euroized country without a lender of last resort function;

- the establishment of a deposit insurance fund and subsequent steps to ensure adequate funding to cover the banking sector’s deposit base;

- and the adoption of a macroprudential policy framework, also important for a unilaterally euroized country without a monetary policy.
Box 1. Improving Court Enforcement Procedures in Kosovo

Kosovo’s inefficient court system historically hindered bank lending and growth. Kosovo’s courts have historically suffered from large case backlogs due to low institutional capacity, weak processes and management, and poor alignment of incentives in handling and resolving caseloads. As recently as July 2014, Kosovo’s courts had an outstanding backlog of over 145,000 open cases (of a population of 1.8 million). In turn, as creditors could not efficiently obtain and enforce judgments against debts, they required more collateral and higher lending rates, which deterred bank lending. Lending rates had hovered well over 10 percent and financial depth, at 35 percent of GDP, is still below what Kosovo needs to support stronger economic growth. While other factors were also at play, weak contract enforcement was clearly a major one.

The authorities finally decided to confront the problem. Their efforts, with strong operational help from USAID, have focused on reducing the courts’ backlog of unenforced judgments and improving enforcement procedures. Specifically, they have:

- Introduced in 2014 a system of Private Enforcement Agents (PEAs) that offer creditors a more effective route toward enforcing court judgments, recovering assets, and reducing the burden on courts. The new PEAs are certified by the Ministry of Justice (MoJ) through a rigorous examination process.
- Made enforcement actions more effective by establishing a unique and centralized registry of bank account holders at the Central Bank of Kosovo (CBK). The registry, which is accessible by PEAs, enables the garnishment of banks accounts, a faster and more reliable way for creditors to collect after a judgment.
- Introduced new resources and more efficient methods for case resolution procedures at the courts, including the embedding of CLE backlog reduction officers.

These efforts were met with some resistance from some quarters – for instance, a public initially skeptical of the new PEA system and entrenched elements of the judicial bureaucracy. But the authorities’ commitment has meant that these efforts have maintained momentum through the process. Steps to improve case resolution at the courts have resulted in the closure of over 91,000 court-based enforcement cases since May 2013. In parallel, PEAs have resolved, between May 2014 and December 2015, 4,809 cases and recovered €51.5 million (equivalent to 0.9 percent of GDP); unofficial estimates suggest that the amount recovered has doubled since then. Relatively, the banking community sees progress in contract enforcement as an important factor behind the sharp recent decline in lending rates.

Source: USAID/CLE
II. Empirical Analysis

10. The analysis seeks to identify the role of supply and demand in credit growth in Kosovo. To do so, we use a disequilibrium model based on Everaert et al (2015) that assumes that credit demand and supply are influenced by factors in addition to prices (interest rates). Credit demand and credit supply are estimated separately and actual credit growth is assumed to be the lower of the two. This allows us to view the evolution of credit supply and demand growth over the sample period and provides insight into what was driving or constraining credit growth. The model is summarized as:

\[
C_t^D = B_1 X_1 t + u_t^D
\]

\[
C_t^S = B_2 X_2 t + u_t^S
\]

\[
C_t = \min(C_t^D, C_t^S)
\]

Estimations for \(C_t^D\) and \(C_t^S\) are performed separately using OLS regressions.\(^1\) The vectors \(X_1 t\) and \(X_2 t\) contain explanatory variables of credit demand and credit supply, respectively. The model uses monthly data from December 2006 through April 2017. The dependent variable in both regressions is year-on-year growth of bank credit to the private sector. Explanatory variables for credit demand are goods import growth (used as a proxy for economic growth given data limitations; import growth is generally highly correlated with GDP growth in Kosovo); NPLs as a share of total loans (as a proxy for borrower debt overhang), lagged to account for decision-making by borrowers; and cost of credit as represented by interest rate margin (lending rate less deposit rate). Explanatory variables for credit supply are the NPL ratio, bank equity per assets, return on assets – all used as indicators of bank balance sheet health, and all lagged to account for decision-making by banks – and interest rate margin.

11. All variables are statistically significant and have the expected signs, with the exception of interest rate margin on the demand side, which is positive – this could be due to the supply effect dominating this variable. The model fits the historical data trend fairly well, with the exception of the outlying variability of the 2007-10 credit boom. The model captures the directional change but, given this large variability, not the magnitude of credit supply and demand during the boom. The model successfully accounts for the magnitude of credit supply and demand from 2011 onward. As a robustness check, when re-running the regressions on a smaller sample of data that begins in June 2009, after the credit boom, some explanatory variables lose their significance but the fit of the model from mid-2009 onward is as good or better. (See Appendix I for regression results and fitted charts.)

12. The model suggests a fairly even contribution of supply and demand to credit growth from mid-2009 onward, with supply factors moderately more important during both the 2011-13 slowdown and the recovery after 2014. Credit demand has increased over the past three

\(^1\) Estimates via maximum likelihood estimation were also tested and did not qualitatively change the results.
years, and banks were healthy enough such that supply did not constrain this surge in demand. Credit growth, in turn, has surged.

13. **Following the end of the credit boom, the model helps to explain the factors behind the two distinct periods of post-boom credit growth in Kosovo:**

- **Slowdown, 2011-13:** A gradual slowdown of supply began in 2011, with demand subsequently slowing in 2012, and both bottoming out in late 2013/early 2014 (in line with actual credit growth over this period). The supply slowdown appears to have been driven by a sharp decline in asset quality and interest rate margins that began in late 2010/early 2011 and a sharp drop in profitability beginning in 2012. Economic growth and private debt also deteriorated during this period, although the model suggests that credit demand, while declining, exceeded supply and so supply was the dominant factor in the credit growth slowdown.

- **Recovery, 2014-present:** After bottoming out at nearly zero growth in early 2014, lending has gradually but steadily picked up since. Both credit supply and demand have recovered, although supply earlier than demand: While credit supply benefited from significantly improved balance sheets from mid-to-late 2014 onward (which outweighed a sharp decline in margins starting in mid-2014), full recovery in credit demand came later as the macroeconomic environment remained weak through 2014 and a strong reduction in private debt did not begin until early 2015. Given the strong balance sheet cleanup that occurred leading up to this, banks have been able to meet the recovery in demand with ample supply.

![Credit Supply and Demand](chart.png)

**Source:** CBK, staff estimates
C. Does Kosovo Need More Lending/Financial Deepening to Converge?

14. **Low levels of financial intermediation may hamper growth and convergence.** By efficiently channeling savings to productive investment and by improving the distribution of capital and risks across the economy, finance positively contributes to growth (for a literature review, see Levine, 2004). Many studies confirm this positive effect (e.g., King and Levine, 1993; Levine and Zervos, 1998; Beck and others, 2000; Cecchetti and others, 2011), even though its magnitude varies across regions, countries and income levels (Barajas and others, 2013). Recent studies find that the relationship between financial depth and growth is nonlinear: beyond a certain threshold, further financial deepening actually harms growth (e.g., Arcand and others, 2012; Cecchetti and Kharroubi, 2012; Aizenman and others, 2015; Sahay and others, 2015). However, at low levels of financial development, the growth dividend of financial deepening can be substantial. In a similar vein, a low level of financial intermediation may constrain growth through a low allocative efficiency.

15. **Private credit in Kosovo is low compared to its peers in the region.** At about 37 percent of GDP, domestic bank credit to the private sector in Kosovo is 8 percentage points below the Western Balkan countries’ average, which itself is already low compared to other regions in emerging Europe (Figure 1). When looking at a broader measure of private credit that includes cross-border lending and non-bank credit, Kosovo’s private credit depth of 56 percent of GDP is still 10 percentage points below the regional average. While in part reflecting its low per capita income level, Kosovo’s credit depth is also low compared to other countries with a similar per capita income level.

16. **Private credit is also below the level predicted by fundamentals.** Following IMF (2015), per capita private credit is estimated as a reduced form function of supply and demand components. The fundamental determinants of private credit include per capita GDP and the interest rate on private debt, while country-specific effects control for cross-country differences in initial conditions such as institutional quality, governance, etc. (see Appendix II). The results show that private credit is some 5-6 percentage points of GDP below the level predicted by fundamentals (Figure 1). This finding is robust for different specifications and sample sizes.2

17. **These findings point to significant scope for further credit growth that may raise output growth and accelerate convergence, without the risk of financial sector instability.** Closing the credit gap in the medium-term would require credit growth to significantly outpace nominal GDP growth for a sustained period of time: baseline projections for nominal GDP imply that it would have to average 9 percent per year to close the gap in the next five years. While rapid credit growth is often associated with a build-up of financial imbalances, Kosovo’s low level of private credit relative to its fundamental determinants, coupled with ample liquidity in the banking sector,

---

2 It should be noted that the data for Kosovo do not span a full credit cycle, implying that the estimated “equilibrium” level of private credit may be overestimated. When using a more balanced sample that has an equal number of observations before and after the peak in private credit (2002-2016), the credit gap for Kosovo in fact widens somewhat (while narrowing for the other countries plotted in Figure 1, bottom right chart).
provides room for such an expansion in lending that can unlock higher output growth and accelerate convergence to income levels seen in Western Europe.

**Figure 1. Kosovo: Credit Depth Compared to Peers and Fundamentals**

Bank credit to the private sector in percent of GDP, 2016 1/

*Bank credit to the private sector is low relative to peers...*

*... even when including cross-border and non-bank credit.*

*It is also low for Kosovo’s per capita income level...*

*... and below the level consistent with fundamentals.*

Source: IFS, Conference Board TED, WEO, BIS, WB WDI, and Staff calculations.

1/ The data plotted in the top right chart uses a wider measure of private credit that includes non-bank and cross-border credit. The bottom left chart plots Kosovo and other Western Balkan countries (WBS) against other countries across the world with a similar per capita income level (ranging from $9,000 to $14,000 in constant 2014 PPP dollars). The bottom right chart plots the deviation of private credit from its fundamentals-implied level in percent of GDP. For the estimation of the fundamentals-implied level and related credit gap, see the Appendix.
D. Can Banks Provide the Additional Funding/Deepening that Kosovo Needs While Maintaining Financial Stability?

18. **Banks are fairly well-positioned to continue lending.** As discussed in section II, from a supply perspective, balance sheets are healthy and improving, funding liquidity is ample, and deposit growth remains healthy. While some structural bottlenecks remain, the authorities have made and are continuing to make strong progress in minimizing these and further bolstering Kosovo’s financial safety net. From a demand perspective, Kosovo enjoys macroeconomic stability, economic growth is stronger than Western Balkan peers, and a similar level of growth is projected to continue into the medium-term.

19. **However, prospects for sound financial deepening based on recent credit trends are mixed.** Assuming that the rapid pace of credit growth seen since early 2016 continues into the long term and taking into account current GDP projections, Kosovo would experience an increase of its credit-to-GDP ratio by 16 percentage points, to 52 percent, by 2026. This would represent a significant increase that would more than close the credit gap discussed in section III (although this ratio would still be below the New Member States average and several Western Balkans peers in 2016, much less 2026). As noted above, the existing credit gap and ample liquidity in the banking system suggests that the banking sector could maintain this rapid pace of credit growth (averaging 9.5 percent y/y since January 2016) for some time, even with medium-term nominal GDP growth projected to be only 6.0 percent y/y. However, if credit growth were to ease to a more moderate pace that is roughly in line with projected medium-term nominal GDP growth – for instance, the 2012-16 average annual growth rate of 5.6 percent y/y – there would not be any financial deepening at all. Moreover, even if banks were able to maintain the recent higher rate of credit growth over the long term, they could eventually run into funding issues: Assuming recent rates of deposit growth in parallel with recent rates of credit growth, the higher-credit growth scenario would see the banking sector’s loan-to-deposit ratio reach 100 percent by 2024, a level of funding liquidity that may raise financial stability concerns.

![Projected Credit/GDP](chart1.png)

**Projected Credit/GDP**

percent, based on avg annual credit growth per scenario 1/

![Projected Loan/Deposit](chart2.png)

**Projected Loan/Deposit**

percent, based on avg annual credit and deposit growth

Source: CBK, IFS, staff estimates

1/ GDP based on staff projections through 2022; 2023-26 GDP based on projected 2022 GDP growth.
20. **While funding liquidity indicators in Kosovo are healthy, current funding levels and trends could still limit meaningful long-term financial deepening.** If we assume that recent rates of deposit growth continue and that all deposits are allocated to lending (such that the loan-to-deposit ratio rises to 100 percent by 2026), then credit/GDP would rise by 12 to 15 percentage points, to 49 to 52 percent, by 2026.³ However, as noted above, reaching this level of credit depth would require credit growth of about 9 percent per year over the next 10 years. As such, reaching this level of depth with a perhaps more sustainable rate of credit growth would require Kosovo banks to raise funding to a greater degree than they have in recent years. Taking a more conservative assumption – in which credit grows at the same rate as deposits, rather than growing at a rate fast enough to reach a 100 percent loan-to-deposit ratio in 2026 – financial deepening would be much more limited, with credit-to-GDP increasing by only 1 to 3 percentage points by 2026.

![Graph: Change in Credit/GDP and Avg Ann Credit Grth percent, 2016-26 1/](image)

![Graph: Projected Credit/GDP percent, credit = avg annual deposit growth per scenario 1/](image)

E. **Conclusions and Policy Recommendations**

21. **The return of bank lending in recent years is encouraging, but Kosovo requires further financial deepening to support growth.** Following several years of very weak bank lending, credit growth since 2015 has been far more robust than most of Kosovo’s Western Balkans peers. This has been bolstered by improved bank balance sheets, which have allowed supply to meet rising demand as macroeconomic conditions improved. However, financial depth remains relatively shallow – too shallow to support the level of economic growth that Kosovo needs to meaningfully raise incomes to a level closer to that of the rest of Europe.

³ In reality the final credit-to-GDP ratio would likely be even lower than this as some funding raised by banks would be allocated to investing in government securities rather than loans.
22. **Lending patterns in Kosovo appear to be fairly evenly driven by both demand and supply factors.** Our empirical analysis suggests that credit supply and demand track each other fairly closely, with both important factors in credit growth. Most recently, credit growth has increased in line with demand as macroeconomic conditions have improved but, importantly, with healthy balance sheets and ample liquidity, supply has been able to respond to meet that demand. This is an importance difference between Kosovo and most of its Western Balkans peers, who face both less favorable macroeconomic environments and weaker bank balance sheets.

23. **Policies, in turn, should focus on both improving the conditions for the demand and supply of credit.**

- On the demand side, the government should maintain the momentum of the past two years with regard to managing macroeconomic stability, including by continuing to manage sustainable budgets that contain unproductive current spending and create space for growth- and productivity-friendly capital investments. It should also continue to take measures to improve Kosovo’s business environment – for instance, by reducing the administrative burden for businesses by simplifying the legislative and regulatory system; reducing informality by simplifying and improving revenue collection; and further improving infrastructure creating an environment for more productive lending opportunities, thus improving not just the amount of lending but also the quality and composition of bank loans.

- On the supply side, the central bank should continue its strong supervisory oversight to ensure healthy bank balance sheets, and also seek ways to further improve its supervisory and regulatory framework, for instance by continuing to develop its macroprudential policy framework. The authorities should also seek to further reduce remaining structural bottlenecks to bank lending, for instance via remaining inefficiencies in the court and collection system and in fully establishing a best-practice cadastre system that can effectively identify and protect property rights.

24. **The authorities should also explore ways to help diversify banking funding sources in the long term.** Kosovo banks currently have ample levels of funding liquidity. However, current rates of deposit growth may not be sufficient to fund more meaningful financial deepening. A local capital market in which banks could issue bonds would help to diversify bank funding sources, although with capital markets still nascent in Kosovo this would be a longer-term policy goal.
Appendix I. Results and Fit of Disequilibrium Model

<table>
<thead>
<tr>
<th>Summary of Empirical Results</th>
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<tbody>
<tr>
<td>Dependent variable: Private sector credit growth, y/y</td>
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<tr>
<td>Lending Margin</td>
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<td>Import growth</td>
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<td>NPL ratio (t-1)</td>
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<td>ROA (t-1)</td>
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<td>Adj R2</td>
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<td>Observations</td>
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***p<0.01, **p<0.05, *p<0.1

Fit of Model
full sample, credit growth, y/y

Fit of Model
post-boom sample, credit growth, y/y
Appendix II. Estimating Fundamentals—Consistent Levels of Credit

1. The long-run relationship between private sector credit and its main determinants is estimated for 34 European countries during 1995–2016. In a stylized, reduced-form model, private sector credit is driven by per capita income that positively affects both credit demand and supply, and the nominal interest rate on private debt, which has a negative effect on demand and a positive effect on supply. The model also includes country-specific constants:

$$\ln \frac{d_{it}}{P_{it}} = \alpha_i + \sum_{j=1}^{2} \beta_j \ln \frac{d_{it-j}}{P_{it-j}} + \sum_{j=0}^{1} \gamma_j \ln \frac{y_{it-j}}{P_{it-j}} + \sum_{j=0}^{1} \delta_j R_{it-j} + \epsilon_{i,t} \quad (1)$$

$\frac{d_{it}}{P_{it}}$ – Per capita private sector debt stock in thousands of 2005 PPP U.S. dollars;

$\frac{y_{it}}{P_{it}}$ – Per capita GDP in thousands of 2005 PPP U.S. dollars;

$R_{t}$ – nominal interest rate on private sector debt;\(^1\)

$i$ – country index, $t$ – time index.

Private sector debt is composed of domestic bank credit to the non-financial private sector (IFS) and private external debt liabilities (WEO). Unless otherwise mentioned, the data source of the other series is WEO. All series are time demeaned by subtracting the mean across all countries in a given period from the individual country values.\(^2\) Regression results are presented in Table 1. The preferred specification is the Arellano-Bond dynamic-panel system GMM (GMM-SYS). The coefficients of real per capita income and nominal interest rate are sizable, and their signs are consistent with theoretical priors.

2. To arrive at fundamentals-consistent private sector credit estimates, country- and time-specific effects are incorporated. Based on GMM-SYS regression results, the long-run relationship between private sector debt and its fundamentals is:

$$d_{it}^* = 1.62 y_{it}^* - 2.58 R_{it}^*$$

\(^2\) This removes nuisance cross-sectional dependency that creates size distortions and makes inference based on two-stage generalized method of moments (GMM) estimates unreliable (Roodman, 2009).

\(^1\) For EU countries, the implicit interest rate is calculated using sectoral accounts data as the ratio of interest payments (including financial intermediation services indirectly measured) over the average of the beginning and end-period combined stock of debt of firms and households. For other countries, data are mostly for the lending rate, published in the IMF’s IFS database, with gaps in country coverage filled with data for the short-term interest rate published in the OECD’s Economic Outlook database and from national data sources.
same means for each country in the sample, and reflects the assumption that CESEE countries may not converge to a common equilibrium path for private sector credit from different starting points. Common time effects are included, reflecting the assumption that the dynamics of fundamentals have the same impact on the "equilibrium" debt burdens, whether or not they are driven by common time effects or country idiosyncratic factors. Credit gaps are then calculated as the deviation of actual private sector credit from its fundamentals-consistent level.

**Table 1. Determinants of Real per Capita Private Sector Debt in Europe**

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Log of per capita private sector debt in thousand 2005 PPP USD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Estimator</td>
<td>OLS</td>
</tr>
<tr>
<td>Lagged dependent variable</td>
<td>...</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Log of per capita GDP in thousand 2005 PPP USD</td>
<td>1.57</td>
</tr>
<tr>
<td></td>
<td>(0.035)**</td>
</tr>
<tr>
<td>Interest rate (fraction)</td>
<td>-2.21</td>
</tr>
<tr>
<td></td>
<td>(0.225)**</td>
</tr>
<tr>
<td>Common intercept</td>
<td>-0.05</td>
</tr>
<tr>
<td></td>
<td>(0.017)**</td>
</tr>
<tr>
<td>Country-specific effects</td>
<td>No</td>
</tr>
<tr>
<td>Observations</td>
<td>619</td>
</tr>
<tr>
<td>Number of countries</td>
<td>34</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.90</td>
</tr>
<tr>
<td>Within adjusted R-squared</td>
<td>...</td>
</tr>
<tr>
<td>Chi² (54)</td>
<td></td>
</tr>
<tr>
<td>F(2,33)</td>
<td></td>
</tr>
<tr>
<td>AR(1)²</td>
<td></td>
</tr>
<tr>
<td>AR(2)³</td>
<td></td>
</tr>
</tbody>
</table>

Source: IMF Staff estimations.

Note: All variables are time demeaned. Standard errors are in parentheses. GMM = generalized method of moments; OLS = ordinary least squares; PPP = purchasing power parity; USD = U.S. dollars.

¹ coefficient significant at 10%; ² significant at 5%; ³ significant at 1%.

¹ Hansen test of overidentifying restrictions (whether the instruments, as a group, appear exogenous).
² Wooldridge test for autocorrelation in panel data (H0: no first-order autocorrelation).
³ Test of (n-th) order serial correlation in regression residuals in first differences, N(0,1). Null hypothesis is no autocorrelation.

⁴ F-test that all fixed effects are jointly zero.

⁵ Instruments for (1) first differences equation: L(2/3).l_crdprs_ppp_r_pc_dt l_gdp_ppp_r_pc_dt int_rat_dt; and (2) levels equation: DL(l_crdprs_ppp_r_pc_dt l_gdp_ppp_r_pc_dt int_rat_dt), using the first 50 principal components of the GMM-style instruments.
References


