

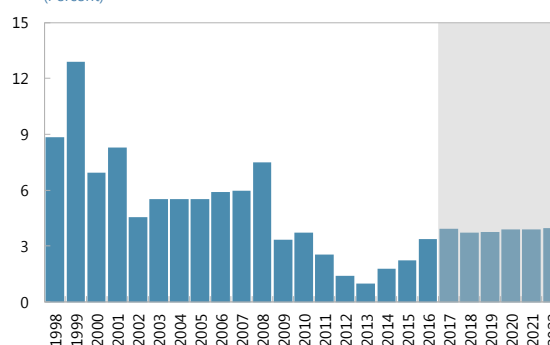
MEDIUM TERM GROWTH IN ALBANIA¹

Growth in Albania is recovering but has recently been driven by large FDI projects, raising concerns about the sustainability of the recovery and underlying growth potential. This study assesses the prospects and challenges for medium term growth. While Albania's external conditions are favorable, low savings and demographic trends are expected to weigh on investment and labor utilization. However, EU accession literature suggests that institutional reforms as an EU candidate country can catalyze productivity improvements and potential growth in Albania.

1. Real GDP is expected to continue growing rapidly over the medium term, albeit below the pre-crisis pace.

Growth has accelerated over the past three years led by large FDI projects, the regional recovery after the 2012 crisis, and increasing consumer confidence. Growth is expected to pick up further in the next few years, reaching 4 percent by 2019, compared to 3.4 percent in 2016. Nevertheless, this growth rate would be lower than the pre-crisis average of 6 percent during 2000-08.

Albania: Real GDP Growth
(Percent)



Source: IMF Staff estimates.

A. Medium Term Growth² and Potential Growth

2. To project medium-term growth, we estimate potential growth in Albania.

Measuring potential growth is a complex task in developing economies. Potential growth is unobservable and therefore it needs to be estimated. Each of the three standard approaches—univariate filters, production function, and multivariate filters—has advantages and disadvantages. The three techniques detailed in “Potential Output in Albania” IMF (2016) have been updated to understand what would be medium term growth.

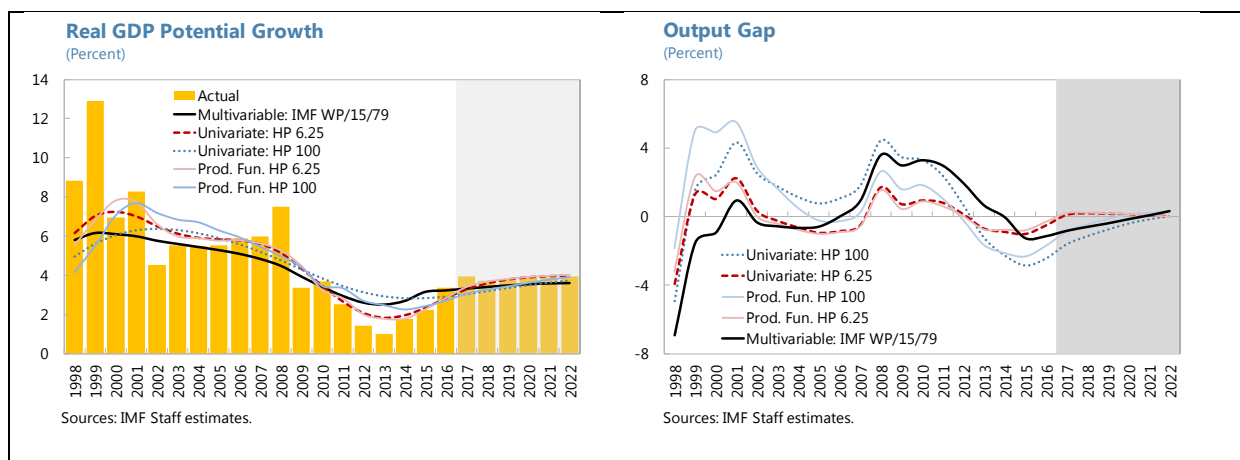
- **First, two Hodrick-Prescott (HP) filters are considered for which the smoothing parameters are set at 100 and 6.25.** These values reflect discussions in the literature—see Ravn and Uhlig (2002).
- **Second, two specifications of the production function are used to estimate potential output.** Output growth is broken down into contributions from TFP, capital, and labor. The actual capital stock is combined with the filtered labor and TFP series to

¹ Prepared by Ezequiel Cabezon (EUR).

² Medium term growth is defined as the real GDP growth after removing cyclical variations. In practice, it is proxied with a 5-year average or a filtered series.

obtain potential output growth. The parameters of the production function are detailed in IMF (2016), and the filtering technique is HP with smoothing parameters 6.25 and 100.

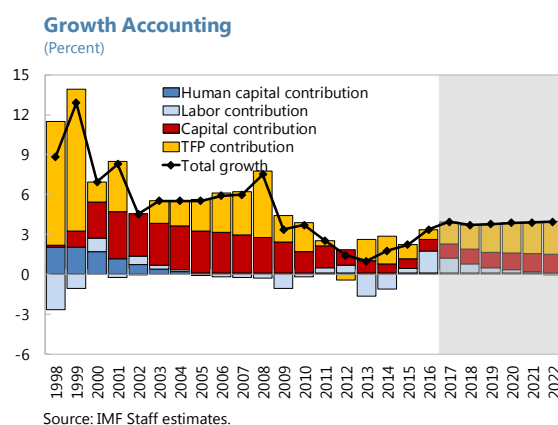
- **Third, a multivariate filter developed by Blagrove (2015) —IMF WP/15/79— is applied.** This method considers a Kalman filter augmented to considers unemployment, expectations of output growth and inflation, and relationships among variables such as the Phillips Curve and Okun’s Law. Details of the filter are provided in IMF (2016).



3. The results point that the potential growth is accelerating. The average potential growth increased between 2013 and 2016 from 2.3 to 3.2. While caution is needed to interpret the results for the period 2018-22 —as filters can be biased by the forecast— there is no issue to interpret past trends. The past upward trend of potential growth and the negative output gaps imply that medium term growth —which measures growth after removing short-term cyclical fluctuations— can increase in the next 5 years.

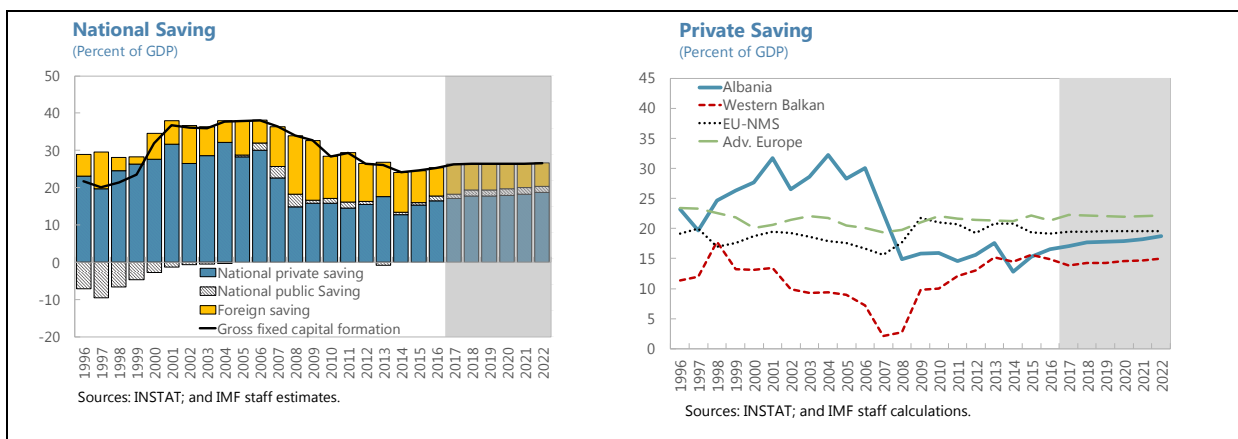
B. What are the Drivers of Growth in Albania?

4. What are the main factors contributing to growth? In 2016, growth accounting showed that capital contribution is recovering while labor contribution soared. The capital contribution is attributed to spillovers of the large FDI projects and a construction revival. The high contribution of employment resulted from a pick-up in labor intensive sectors such as textiles, constructions, and tourism.



5. The contribution of capital is expected to remain low by historical standards. During the 2000s, easy credit conditions fed a construction boom, which accelerated capital accumulation. By 2009–10, a housing glut and increased risk aversion as a result of the global financial crisis halted the credit-fueled construction boom. In the last few years, the large energy projects (Box 1) and the lift of a ban on construction permits have edged up capital

contributions. As the construction phase of large FDI projects is completed in 2018-20, their contribution to growth is expected to turn negative, limiting the potential for a more rapid pickup of investment.



6. A large part of investment in Albania has been financed with foreign savings.

Private savings is slightly above the Western Balkan peers, but has been on a declining trend since 2007, contributing to a decline in national savings. Declining interest rates, remittances, growth rate and lower income levels after a 2009 FX-depreciation have led to this trend. The gap between investment and national saving ratios thus raises concerns for investment sustainability. Since countries that sustain high growth show a strong link between corporate saving and investment, raising corporate saving will be key to financing higher investment.

Box 1. The Impact of Large FDI Projects in the Short Run

Two large FDI projects are having significant effects on economic activity. The projects include the construction of two hydropower plants and a natural gas pipeline. The aggregate cost is 14 percent of GDP. Given their capital intensity, imports account for a large share of the costs (about 60-70 percent) and the rest corresponds to wages, local contractors, and compensation for use of land. The projects have created about 3500 direct jobs (6 percent of total new jobs). The construction started in late 2013 and speeded up in 2015-17. The projects are improving road transportation as roads and bridges will be upgraded, refurbished, and built as part of their business plan.

Large FDI Projects

Project	Detail	Additional infrastructure	Period	Total cost		Employees - 2017 (Thousand employees)
				(Euro Bn)	(Percent of GDP)	
Statkraft Devoll Hydropower plants	Two hydropower plants: 256 MW (17% of the capacity of the country)	100 km of roads rehabilitated and 14 bridges rehabilitated.	2013Q3-2018Q4	0.5	4.7	1.7
Trans Adriatic Pipeline	Natural gas pipeline: 252 Km (capacity to supply 7M households)	178 km of roads rehabilitated, 2 new bridges and 40 bridges rehabilitated.	2015Q3-2019Q4	1.0	9.3	1.8
Total				1.5	14.0	3.5

Source: IMF based on Statkraft and TAP reports.

Construction Schedules

	2013	2014	2015	2016	2017	2018	2019
	H1	H2	H1	H2	H1	H2	H1
Trans Adriatic Pipeline							
Construction: Roads							
Construction: Pipeline							
Construction Schedule: Devoll Hydropower Plants							
Preparatory works: Hydropower Banja							
Preparatory works: Hydropower Moglice							
Transmission line							
Construction: Hydropower Banja (70 MW)							
Construction: Hydropower Moglice (186 MW)							

Source: Devoll Hydropower Statkraft; Trans Adriatic Pipeline AG; and IMF staff estimates.

The Trans-Adriatic Pipeline (TAP), which will transport natural gas from Azerbaijan to Italy, will bring a key energy input to Albania. Lack of a pipeline implied natural gas was scarcely used. In Albania, the construction includes 252 km of pipelines with a total cost of € 1 billion (9 percent of GDP). Also, more than 175 km of access roads will be built or upgraded. The project is expected to peak in 2017. In 2016, TAP completed upgrading 58 km of roads and bridge construction works.

Devoll hydropower plants will increase the installed generation capacity by 17 percent. Two hydropower plants valued at €535M (5 percent of GDP) will be built. The smaller plant (Banja) was already completed and started production in 2016Q3. The construction of the larger plant (Moglice) —that started in 2014— is expected to be completed in 2018. The project will ensure a more reliable electricity supply and a large part of the generation will be exported.

Devoll Hydropower Plants

Power plant	Installed capacity	Annual Generation	Construction period	Start production	Total cost
Banja	70 MW	242GWh	2013Q3-2016Q2	2016Q3	...
Moglice	186 MW	475GWh	2014-2018	2019Q2	...
Total	256 MW	717GWh	2013Q3-2018Q4		535

Source: IMF based on Statkraft reports.

Box 1. The Impact of Large FDI Projects in the Short Run (concluded)

The direct impact on growth is estimated to be around 0.4 percentage point for 2015-16. The projects demand mainly construction and transportation services. These estimates are a lower bound of the impact based on FDI planned disbursements, estimated imports, and assumes all local expenditure adds to GDP.

The value added (level effect on GDP) was 0.8-1.2 percent of GDP in 2015-16.

The growth impact is estimated at 0.3-0.5 percentage points in 2015-16. It is relevant to consider that the value added generated by the projects once they are operating will be low.

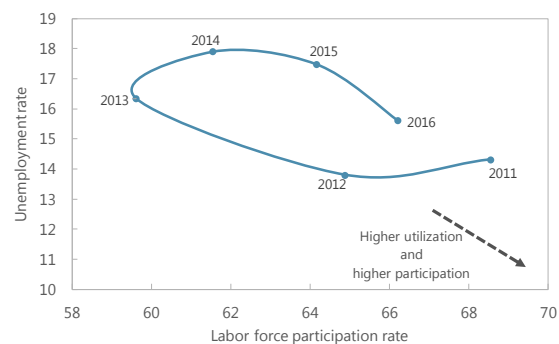
Impact of Trans Adriatic Pipeline and Statkraft - Construction							
	2014	2015	2016	2017	2018	2019	2020
Percent of GDP							
FDI related to TAP/Statkraft	0.8	2.7	3.8	3.9	2.3	0.8	0.0
of which imports	0.5	1.9	2.7	2.7	1.6	0.4	0.0
of which domestic expenditure	0.3	0.8	1.2	1.2	0.8	0.4	0.0
Percent							
Effect on GDP growth	0.3	0.5	0.3	0.1	-0.5	-0.4	-0.4

Source: IMF staff estimates.

In the medium term, the projects can bring additional benefits for Albania. First, improved infrastructure will reduce the transportation cost in zones around the projects. Second, TAP opens the door for energy diversification helping to reduce the hydropower dependence. Repairing the Vlora Thermal-power plant and linking it to TAP is key for energy diversification. TAP will increase manufacturing productivity as firms will substitute natural gas for electricity, which will reduce costs and open prospects of developing new industries.

7. An augmented labor utilization has recently supported growth. In 2015-16, unemployment and labor participation improved, but long term unemployment remained high (estimated at about 12 percent) and participation low at around 66 percent. Albania's low participation is explained by high remittances and low female participation. There is also room to expand labor supply if labor skills issues are addressed.

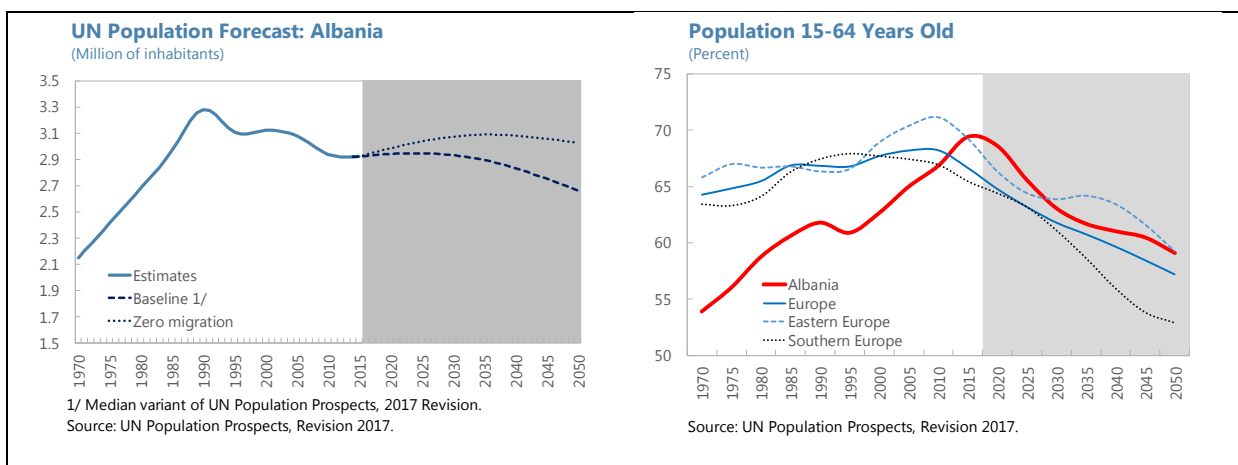
Unemployment and Labor Force Participation Rate (Percent)



Sources: INSTAT; and IMF staff estimates.

8. Despite the recent positive labor contributions, Albania faces demographics challenges over the medium term. Population fell by more than 10 percent since the end of the communist regime in the early 1990s, mainly due to emigration. The pace of emigration has slowed significantly, but continued emigration together with the aging of the working population, due to declining birth rates and increased life expectancy, will contribute to a declining working age population. United Nations³ estimates that Albania's population can grow 0.2 percentage point faster if there is no migration between 2016-20.

³ UN Population Prospects, 2017 Revision.



9. Productivity has been low and its growth weak. Low productivity is a result of institutional obstacles that prevent diffusion and efficient use of available technologies (e.g. high risks or adverse business climate that discourage FDI). Also, structural features of Albania, such as high share of agriculture and labor intensive industries, have contributed to low productivity. During 2015-16, the slowdown in mining, and the acceleration of labor intensive sectors such as textiles, construction, and tourism resulted in downward pressures on aggregate productivity.

10. Despite structural constraints, productivity is expected to increase as Albania progresses with the EU accession process, spurring important institutional improvements. EU accession increases total factor productivity by improving institutions and as market size expands (Box 2). Also, domestic reforms such as enhanced NPL resolution framework will facilitate financial deepening and consequently allocate resources to more productive sectors. Finally, the diversification into natural gas as a source of energy will imply sizable reductions in costs (Box 3).

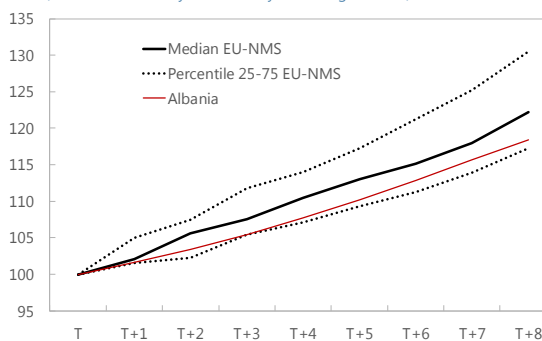
Box 2. What is the Impact of EU Accession on Growth?

EU-accession can lead to growth acceleration. EU accession episodes (1995, 2004, and 2007) have been associated with faster growth in candidate countries. The literature on growth-institutions suggests that adopting EU institutions can strengthen growth¹. Furthermore, access to EU markets increases the scale of the economy, boosting growth. Improved prospects for institutional enhancements and increased market size trigger FDI flows increasing capital stocks. Strong institutions also facilitate foreign trade and financial flows that enable technology transfers to close productivity gaps.

Empirical studies concluded that EU accessions stepped up growth, even after accounting for the favorable global context² in the 2004-07 accessions.³ Böwer and Turrini (2009) found that EU-NMS growth was higher during the EU-accession period —after controlling for standard growth drivers and dummies variables to account for the favorable context. Campos, Coricelli, and Moretti (2014) concluded that growth in EU-candidate countries soared in anticipation of the 2004 EU-enlargement. Using counterfactuals, they estimated that annual growth per capita accelerated by 1½ percentage points compared to a case where these countries would have not joined the EU.

Albania’s projected productivity path is consistent with historical productivity growth observed in previous accessions. An event study was used to assess if Albania’s productivity growth —and consequently growth— is aligned with productivity growth observed in past accessions. The study looked at the total factor productivity (TFP) growth of EU-enlargements of 2004, 2007, and 2013 including 11 countries. On average those accessions took 8 years from the year T when the country starts negotiations. The results show that Albania’s productivity is close to the lower quartile of the EU accessions.

TFP During EU-Accessions
(Index = 100 in the year a country starts negotiations)



Sources: European Commission, AMECO; and IMF staff estimates.

1/ Acemoglu and Johnson (2005).

2/ Several global factors that supported growth during the 2004-07 accession episodes have slowed down. In particular, (i) the information and technology advances in the 2000s that increased productivity; (ii) privatization and FDI that reduced the productivity gaps; and (iii) the global accommodative monetary policy are reversing and challenging the idea that current EU candidate countries will be able to speed up growth.

3/ Several studies documented the positive impact of EU-accession on growth, but few considered the impact of the favorable context. Rapacki and Próchniak (2009) showed that EU enlargement contributed to economic growth of the CEE. Lenain and Rawdanowicz (2004) documented large productivity growth in the CEE4 in the pre-accession periods. Dobrinsky and Havlik, (2014) state that convergence of EU-NMS takes place but at slower speed after the crisis. Experience of Spain, Portugal, and Ireland point that productivity increases accelerated growth (Martin, Velazquez and Funck, 2001)

Box 3. How can Natural Gas from TAP increase Productivity?

Natural gas will have significant implications on Albania in the medium term. Substituting natural gas for electricity will reduce business costs and households' expenses. The cost reductions for firms and households will not be minor considering the cost of heating can be reduced to 1/3 by substituting natural gas for electricity. The challenge is that the existing pipelines and distribution networks are almost obsolete.

Construction of new pipelines and distributions networks will be needed. The government is already analyzing the cost and potential tariffs.

The economically feasible infrastructure has an approximated cost of €0.5 billion for the distribution network and about €0.2-0.3 billion for the main pipelines. A key component of this new infrastructure will be Ionian Adriatic Pipeline (IAP) to bring natural gas from Trans Adriatic Pipeline (TAP) to the main urban centers (including Tirana).

The development of this infrastructure will require significant efforts to attract private sector investment. Building a sound regulatory framework is a key priority.



C. What are the Growth Prospects in Albania?

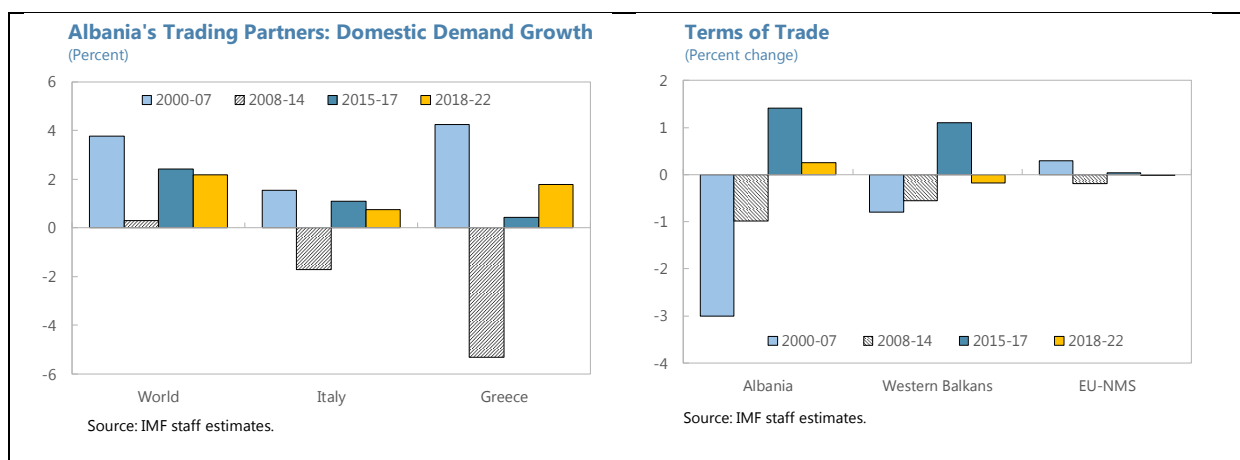
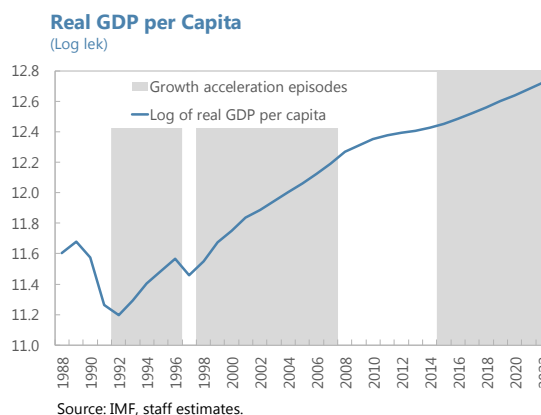
11. This study uses two approaches to understand the dynamics of medium-term growth. A first approach is based on the growth episode literature that argues countries face different growth speeds depending on external conditions and structural reforms. A second approach is the traditional growth-convergence literature that argues that low income countries grow faster. Both approaches suggest that Albania's medium term growth can accelerate.

Is Albania Facing a Growth Acceleration Episode?

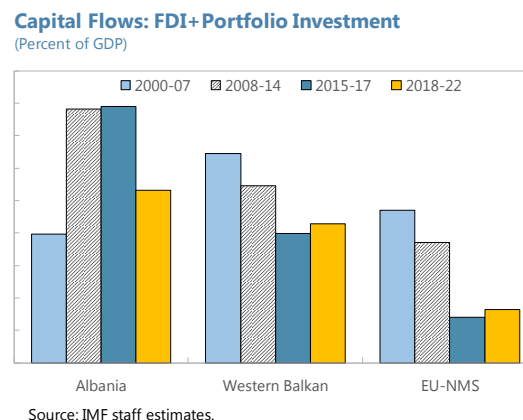
12. Emerging economies' growth has exhibited episodes of acceleration and reversals over time. These cycles are associated with external conditions, domestic structural features, and domestic policy settings⁴. IMF WEO (April 2017) estimates that a 1 percent shock on trading partners' domestic absorption increases growth by 0.4 percentage point in the medium term. Similarly, a 1 percentage point of GDP shock in capital inflows increases growth by 0.2 percentage points.

⁴ IMF WEO (April 2017). Hausmann, Pritchett, and Rodrik (2005) documented that growth acceleration periods are correlated with openness, hikes in investment, and real exchange rate depreciation.

13. In Albania, growth episodes point to a growth slowdown in 2008-14. External demand conditions weakened considerably in this period. In the main trading partner and source of remittances (Italy), domestic demand growth decelerated from 1.5 to -1.7 percent between 2000-07 and 2008-14. Furthermore, terms of trade were unfavorable until 2014. On the other hand, capital flows rose over this period, driven by FDI related to mining and oil. Given its large import content, the impact on GDP growth was however more limited. Overall, external conditions were a drag on growth during 2008-14.



14. Since 2015, the country is entering an acceleration growth period supported by external factors. Trading partners' domestic demand are recovering and subdued oil prices are stimulating domestic consumption. Capital inflows have remained stable owing to large FDI projects. The risk from capital reversals is low given limited reliance on more volatile portfolio flows. Although FDI is expected to decline in 2018-22, it will be still higher than pre-crisis levels and higher than in regional peers. This drop will adversely affect growth, but its impact is limited given the large projects' high import content (Box 2). Furthermore, the indirect spillover effects of these projects can also mitigate the direct impact by fostering investment in non-energy sectors.



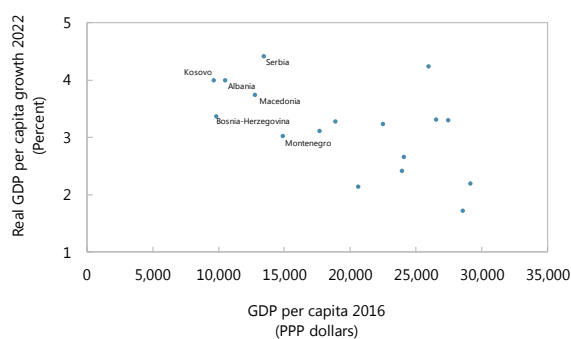
15. A key assumption behind the positive growth prospects for Albania is that the global growth continues. Global growth is critical for external drivers such as terms of trade and investment flows (WEO April 2017). Similarly, a large part of TFP fluctuations can be explained by global growth (IMF, REI May 2016). The current assessment presumes global growth continues -without a global crisis or recessions- as discussed in WEO October 2017. A global crisis or recession can delay and reduce the prospects of growth potential for Albania.

16. Completing some key reforms to improve investment climate can secure the growth acceleration. Key growth obstacles are rule of law, land property rights, and infrastructure gaps. The authorities have started to address the energy issues by rehabilitating the existing electricity infrastructure and improving corporate governance of the electricity-SOEs, and by ensuring a more diverse energy supply from the gas pipeline and hydropower projects (Box 2). These reform needs to be completed. To address the rule of law issues, the authorities are implementing judicial reform and tackling problems with property rights. Legal issues that may accompany land property ownership have been a key deterrent to investment —property ownership can be challenged in court following claims of uncompensated expropriation by the communist regime.

What does Convergence Imply for Albania's Growth?

17. The sizable income gap with EU-15 economies provides an opportunity to accelerate growth for Albania. The convergence hypothesis states that economies with lower per capita GDP should converge to higher income levels due to decreasing returns on capital —assuming similar technologies, saving, demographics features, and human capital. Saving and human capital accumulation rates are lower in Albania than in the EU-NMS and can explain part of the income gap. Albania's medium term growth is aligned with Western Balkan regional peers who are at similar income levels.

Selected CESEE: Expected Convergence



18. Adoption of new technologies and enhanced institutions can help to close income gaps. Albanian legal, judiciary, and regulatory institutions are still catching up with EU institutions. EU accessions are associated with higher productivity due to improved institutions and higher FDI that brings the most updated production techniques (Box 3). Currently, technology gaps are sizable in key sectors such as telecommunications, digitalization, and agriculture. Addressing these issues offer Albania an important avenue to accelerate growth.

19. Estimates of convergence imply that the growth rate should be about 4 percent. Following IMF 2015 Western Balkan report, the convergence hypothesis was tested using a panel

of CESEE economies for the period 1990-2014⁵. The test checks if the initial income gap — measured with GDP per capita relative to the EU15— is positively related to growth. A random effects estimate was performed, where limited heterogeneity is allowed implying absolute convergence. Projections based on these equations imply that Albania's growth should be above 4 percent.

Dependent variable: Real GDP growth per capita			
	Random effects		
	1990-2014	2000-2014	2008-2014
Income gap t-5 1/	0.004 [0.00]**	0.006 [0.00]**	0.006 [0.00]**
WB x Income gap t-5	0.009 [0.00]**	-0.006 [0.11]+	0.002 [0.80]
NMS x Income gap t-5	0.016 [0.00]**	0.014 [0.01]**	0.008 [0.44]
WB (Dummy)	-0.021 [0.02]**	0.022 [0.19]	-0.001 [0.98]
NMS (Dummy)	-0.012 [0.21]	-0.008 [0.41]	0.004 [0.77]
Constant	0.025 [0.00]**	0.022 [0.00]**	0.009 [0.03]**
Obs.	769	579	273
Countries	39	39	39
R ²	0.2	0.12	0.11
P-values in square brackets + p<0.15; * p<0.1; ** p<0.05			
1/ Income gap = 100*[(EU15 avg./country "x") - 1].			
Projecton Albania (2015)	4.6	4.4	3.4
Average 3 specifications		4.1	

Policy Recommendations

20. To achieve higher medium term growth, it will be crucial to implement policies to address Albania's challenges. In particular, policies should:

- **consider the implication of population aging in the labor market policy design.** Increasing labor force participation among the youth and female groups will be important.
- **ensure investment sustainability by promoting national private saving and addressing land property issues.** It is key to stimulate corporate saving. To foster

⁵ Real GDP growth and income gaps are based on Penn Tables 9.0.

investment and investment diversification it is necessary to address land property rights issues.

- **improve institutions, by implementing the Stabilization Association Agreement recommendations to continue the EU accession process.** Progress in judicial system procedures and regulatory frameworks will be critical.

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