



# THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

## SELECTED ISSUES

September 2015

This Selected Issues paper on the Former Yugoslav Republic of Macedonia was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on August 10, 2015.

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**International Monetary Fund**  
**Washington, D.C.**



# FORMER YUGOSLAV REPUBLIC OF MACEDONIA

## SELECTED ISSUES

August 10, 2015

Approved By  
**European Department**

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## EXPORT COMPETITIVENESS IN FYR MACEDONIA<sup>1</sup>

- *Export performance in FYR Macedonia has been strong over the last decade, critically contributing to overall growth. Exports have been re-oriented towards new products with higher technological content, allowing for the build-up of revealed comparative advantages in these products. Our analysis based on Constant Market Share analysis shows that the overall competitiveness gap of FYR Macedonia with respect to other emerging European countries has narrowed.*
- *There appears to be significant room for quality improvement, including for the most successful export products. Also, while the contribution of exports to GDP growth has been significant, spillover into the domestic tradable sector from the foreign investment led export sector remains limited so far.*
- *Despite a relatively low potential due to the small size of the economy, FYR Macedonia has received significant FDI which has facilitated links with the European supply chains. Financial incentives, competitive wages and improvements in business environment, have successfully attracted FDI and contributed to FYR Macedonia's export diversification. To further deepen integration with European supply chains and foster backward linkages to the domestic economy, better infrastructure as well as additional reforms to improve skills and operating environment for the domestic private sector is needed.*

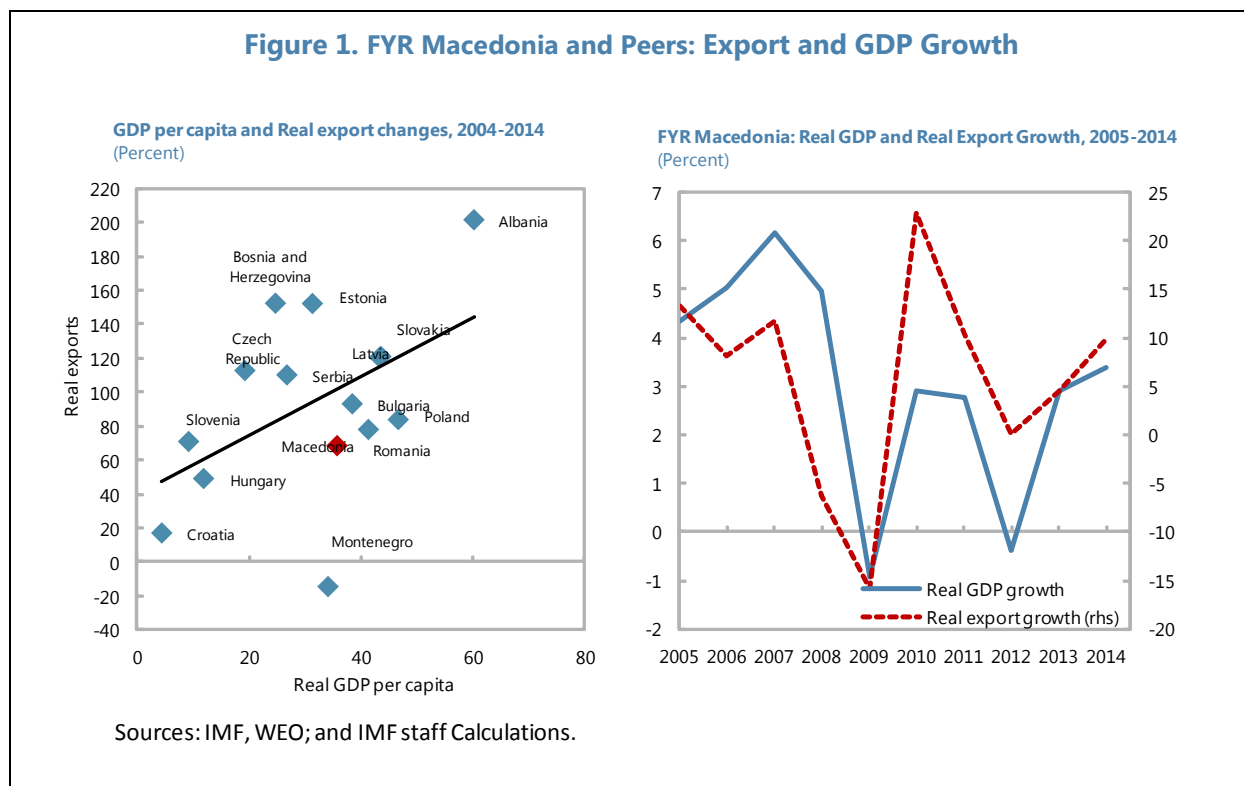
### A. Introduction

**1. For a small open economy such as FYR Macedonia, improving export competitiveness is critical to bolster economic growth and reduce unemployment.** In the short to medium run, an improved export performance is needed to strengthen the trade balance and reduce the country's dependence on remittances from migrant workers to raise national income. In the longer run, technological and managerial spillovers typically associated with the establishment of foreign exporting firms can be expected to foster backward linkages to local producers, thus promoting the integration of the domestic tradable goods sector into global supply chains and supporting sustainable growth. For these reasons, attracting foreign direct investment (FDI) and building up export capacities have been the linchpin of the authorities' economic policy over the last decade.

**2. Strong export performance and economic convergence have gone hand in hand in successful emerging European countries.** Higher exports and trade openness have been associated with better resource allocation and the development of a resilient tradable goods sectors in the literature (see, e.g., Edwards, 1993), ultimately being conducive to higher standards of living. This positive correlation between exports and real GDP per capita has held up in Central and Eastern

<sup>1</sup> Prepared by Shan Chen, Marc Gerard and Patrick Gitton.

European Countries that are members of the European Union—henceforth New Member States (NMS)—over the last decade (Figure 1). While the correlation appears weaker for some Balkan economies, for FYR Macedonia, real GDP growth has been strongly associated with export growth (Figure 1).



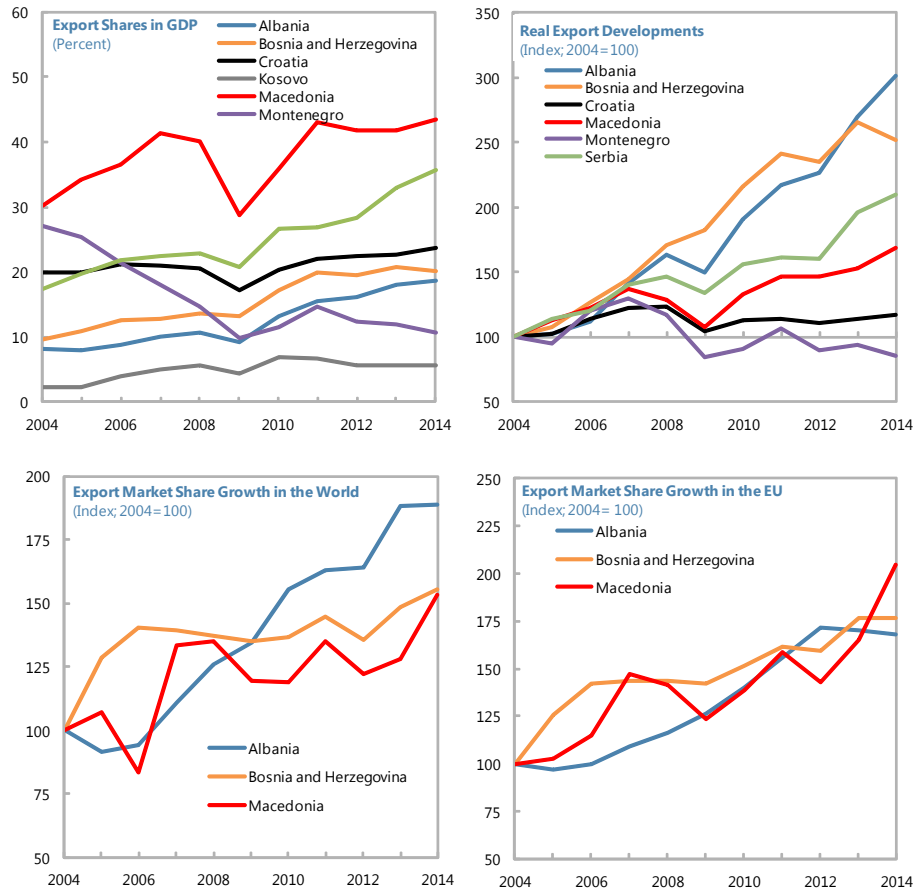
**3. Against this backdrop, this research aims at investigating FYR Macedonia's export performance relative to other Western Balkan (WB) countries and the NMS.** In Section B, we take stock of recent export performances relative to peers, by looking at export diversification, revealed comparative advantages, export product quality, and the contribution of exports to the domestic economy. Section C tries to identify contributing factors to competitiveness while Section D focuses on the contribution of FDI to greater integration into global supply chains. The concluding Section E offers policy advice to enhance the contribution of the domestic export sector to growth.

## B. Comparative Evaluation of Export Performance

**4. Since the mid-2000s, FYR Macedonia's overall export performance has been better than those observed in other Balkan countries.** Exports of goods and services have represented between 30 and 45 percent of nominal GDP, well above the shares prevailing in peer WB countries (Figure 2). Such levels are broadly in line with those observed in more advanced Central and Eastern European Countries such as the Czech Republic, the Slovak Republic and Hungary in the preceding decade. Despite this higher base, export growth in FYR Macedonia has only fallen slightly short of that in peer WB countries, and has proved resilient to the global financial crisis. The ability of

Macedonian exporters to maintain or even increase their positions during times of severe contraction in trade flows has allowed for steady market share gains within the European Union, as well as in the world.

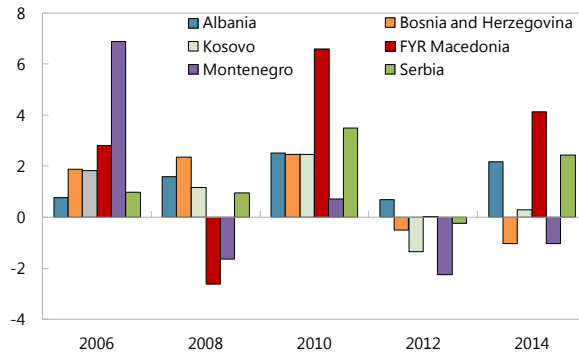
**Figure 2. FYR Macedonia and Western Balkans: Export Performance, 2004–2014**



Sources: IMF, DOTS; IMF, WEO; and IMF staff calculations.

**5. Exports have contributed more to GDP growth in FYR Macedonia than in other Balkan countries.** While net exports have been a negative contributor to growth, notably due to the high import content of new investments and the importance of low-end assembly production, exports have provided major contributions to real growth, helping to pull the economy out of the short-lived recession experienced in 2012 in the wake of the global financial crisis. Exports stemming from the Technological Industrial Development Zones

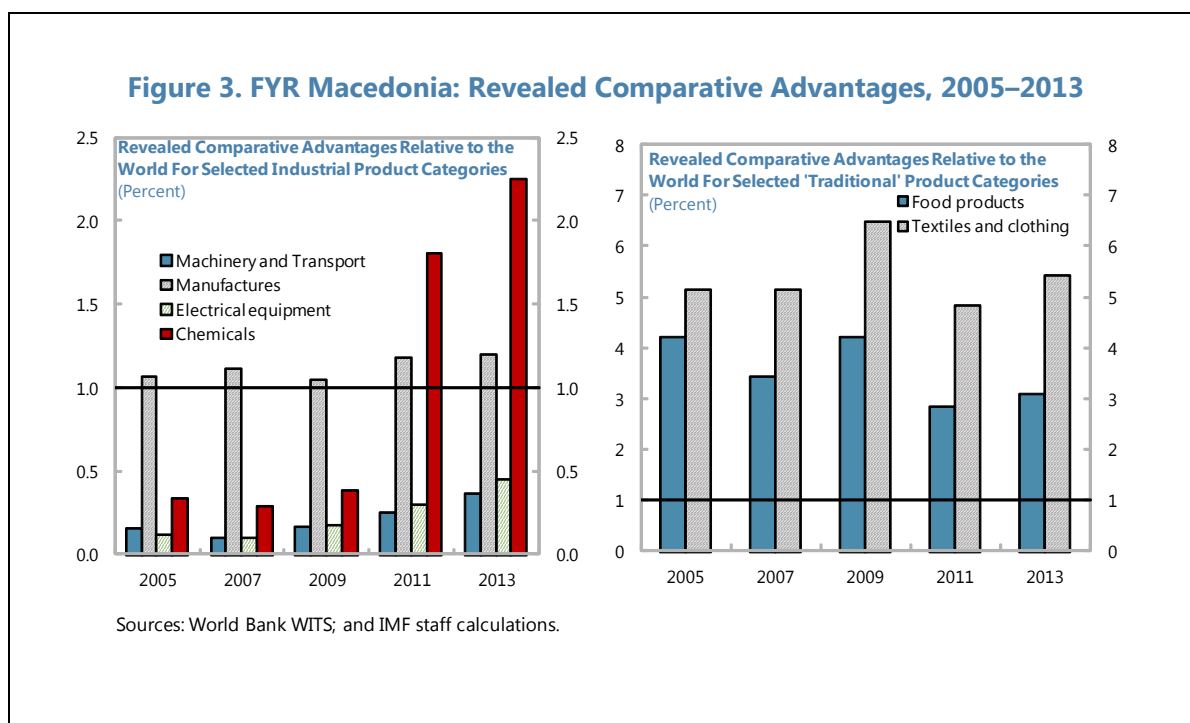
**Western Balkans: Export Contribution to Growth, 2010–2014** (Percent)



Sources: IMF, WEO; and IMF Staff Calculations.

(TIDZ) have been growing at double digits in the last few years, representing about 40 percent of total exports in 2014.

**6. Reflecting developments in the TIDZ, FYR Macedonia has recently built up revealed comparative advantage (RCA) in new products.** Overall, the country's main comparative advantages remain in the production of intermediate and consumer goods (Figure 3). More recently, RCA has diversified away from traditional product lines to more capital intensive goods. While remaining highly competitive in the production of textiles, beverages, tobacco, and food products, the country managed to dramatically push its advantage in chemical products.

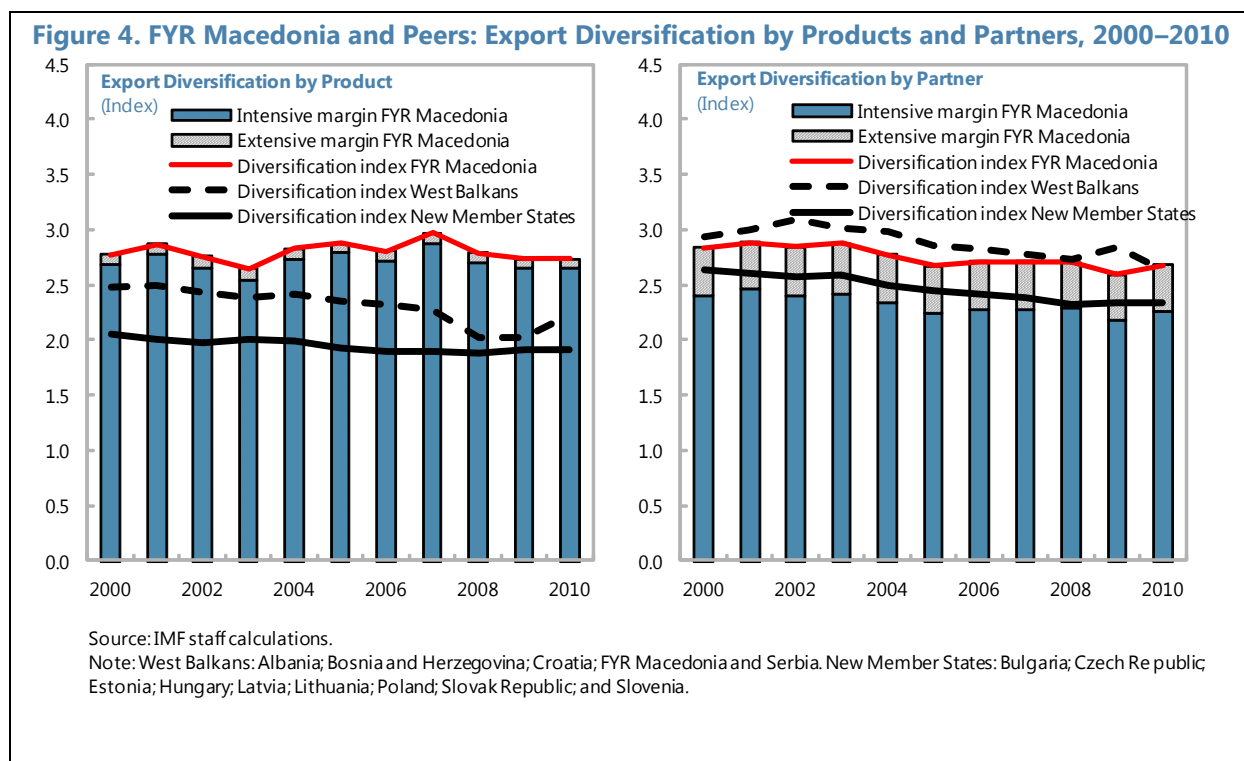


**7. However, the diversification trend is less pronounced when compared to others in the region.** An analysis of export diversification by products and partners during the 2000s reveals the following.

- The overall level of *export product diversification* (which is demonstrated by the 'intensive margin' in the concentration indicator in Figure 4)<sup>2</sup> has remained below that of other WB countries and the NMS until 2010—notwithstanding some improvement since 2008, which reflect progress regarding insertion into European supply chains.

<sup>2</sup> See the box on export performance indicators for a description of the measurement metrics used in this section. A higher value of the index indicates higher concentration of products/partners (hence less diversification). The data are available only until 2010.

- The overall level of *export partner diversification* seems to have remained stable during 2000–2010 and may have even decreased in recent years in the context of a gradual replacement of neighboring countries by a limited subset of ‘core’ euro area economies as the main trade partners. The degree of diversification by partners has been lower than in the NMS and slightly higher than the WB peers (Figure 4).

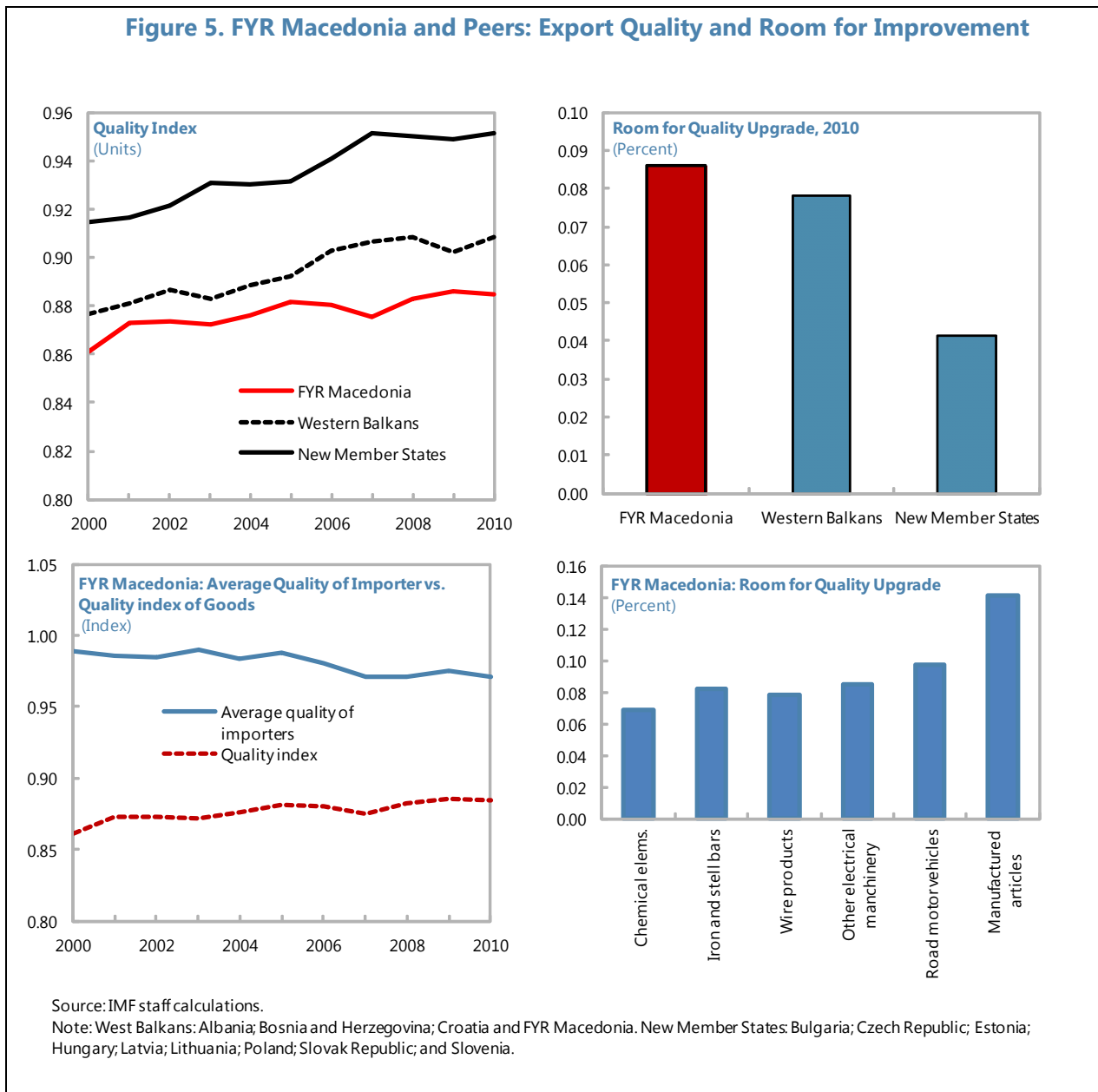


**8. There appears to be significant room for improvement in the overall quality of Macedonian export products.** Despite successful integration into European supply chains and the build-up of new RCAs, the overall improvement of export quality has been less pronounced during 2000–2010 than, and remains below the average levels observed in, the NMS as well as WBs.<sup>3</sup> While the gap between the quality provided by Macedonian exports and that demanded by importing destinations have narrowed over time, it remains significant (Figure 5). Notwithstanding the caveats attached to the construction of quality indicators, which rely on adjusted unit values to—very imperfectly—proxy the ‘intrinsic’ characteristics of exported products, these trends highlight room for improvement. At a disaggregated level, room for quality upgrade appears warranted even for the most successful export products, such as automobile components. When assessed against all other countries using percentile rankings, the quality of exports in the manufacturing and chemical sectors turns out to be just average—a situation which may be ascribed to the very elevated quality

<sup>3</sup> Data for export quality are not available beyond 2010.



standards required for specialized industrial products (such as wiring or electronic circuits) to be exported to the EU, and to the downstream nature of production performed by FYR Macedonia (Figure 5).



**9. Overall, FYR Macedonia’s competitiveness gap with respect to other emerging European economies is strongly narrowing.** A Constant Market Share Analysis (CMSA) for FYR Macedonia helps analyze whether the country’s exports growth has been due to gains in competitiveness, or driven by higher world demand, or demand from particular export markets or for particular commodities (see the Appendix for a description of the methodology). The CMSA can be used to compare FYR Macedonia’s export growth with that of a comparator group (in this case,

other emerging European economies) and sort out how much of the export growth difference is due to 'intrinsic' competitiveness rather than the composition of exports and markets. We thus assess FYR Macedonia's export performance during 2000–07 and 2008–14 based on a product disaggregation at the SITC 1-digit level, with export market disaggregation into three broad groups: the EU-28, Emerging Europe outside those in the EU, and the rest of the world.

- During 2000–07, FYR Macedonia's exports underperformed relative to the comparator group as shown by a market growth effect higher than 100 percent: if the country were to keep its relative market share constant (i.e., grown by the average rate experienced by the comparator group), exports should have been higher by 91 percent. The underperformance was driven by lower demand commodity composition, and a large competitiveness gap.
- In the more recent 2008–14 period, FYR Macedonia's exports marginally over performed those of comparator countries as shown by the market growth effect being lower than 100 percent. A positive commodity composition effect and a positive market distribution effect (though smaller than in the previous period) slightly outweighed the narrowing, but still negative, competitiveness effect.
- Overall, export performance improved dramatically since 2007 relative to the comparator group, driven by faster demand commodity composition and a much lower competitiveness gap which nonetheless remains sizeable and calls for further enhancement of export quality and efficiency.

#### Constant Market Share Analysis of FYR Macedonia's Export Growth

(Percent)

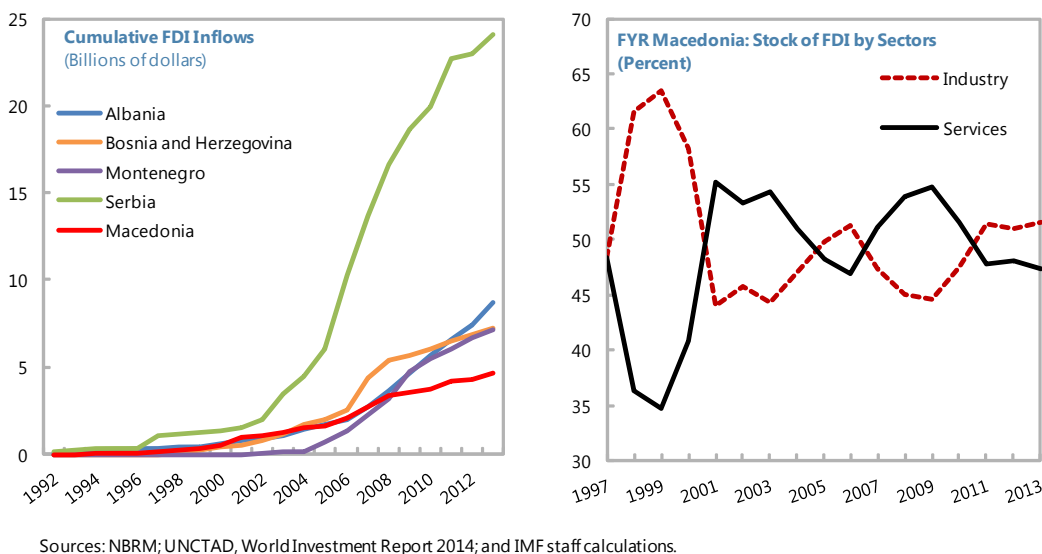
	2000-2007	2008-2014
Market Growth Effect	191	99
Commodity Composition Effect	-26	14
Market Distribution Effect	115	72
Competitiveness Effect	-180	-84

Source: World Integrated Trade Solution (WITS) Database; and IMF staff calculations.

### C. The Role of Domestic Policies for Export Success

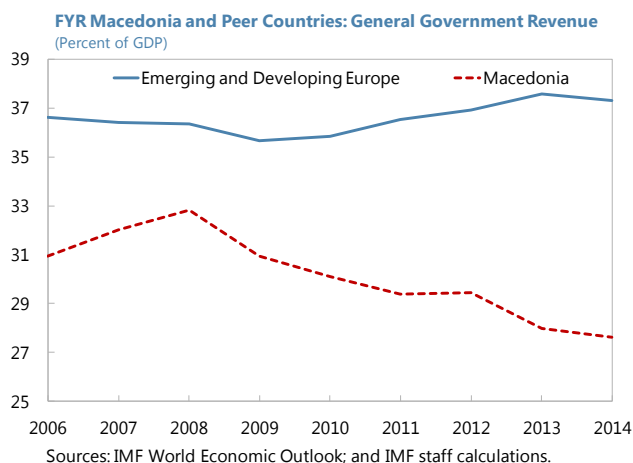
**10. FDI picked up in FYR Macedonia since the mid-2000s.** FDI inflows were negligible until 1998 and increased moderately until the global crisis, along with the privatization of SOEs and the acquisition of large domestic companies by foreign investors. The largest acquisition was that of the national telecom operator by Magyar Telekom (Deutsche Telekom group) in 2001. The majority of FDI inflows, however, took place in the tradable sector, which turned out to be a supporting factor for the country's exports. Against the background of the EU accession objective, FYR Macedonia has engaged in major policy moves since the mid-2000s to improve its business environment and provide incentives to attract FDI in tradable sectors as a major component of the country's export strategy.

**Figure 6. FYR Macedonia and Western Balkans: FDI Inflows and Composition of Stock**

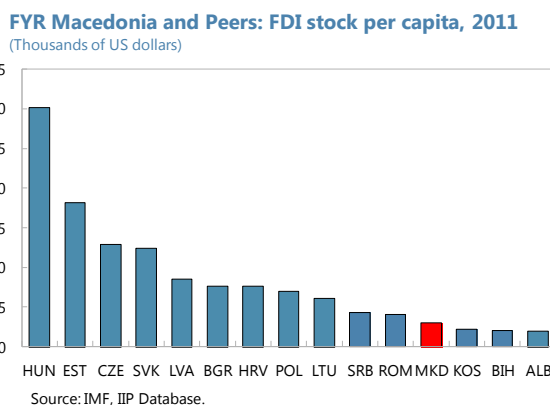


Sources: NBRM; UNCTAD, World Investment Report 2014; and IMF staff calculations.

**11. A favorable tax policy has been a critical pillar of the country’s pro-FDI strategy.** FYR Macedonia offers an attractive tax environment to investors: this includes a flat 10 percent tax on personal income and profits. Over the past few years, the implementation of these measures, combined with a relatively low revenue efficiency by regional standards, has contributed to a continuous decline in government-revenues-to- GDP ratio, in contrast to experience in other European emerging economies (text chart).



**12. Against the backdrop of a low potential, FYR Macedonia has fared reasonably well in attracting FDI compared with regional peers.** At around 50 percent of GDP, the stock of inward FDI is above that of Albania and Bosnia, but below that of Serbia. Most FDI inflows in recent years have been greenfield and concentrated in the export-oriented manufacturing sector (as opposed to the financial and transport sectors as was the case in the early 2000s). FYR Macedonia’s comparative performance must be assessed against its relatively low FDI potential. The UNCTAD’s Inward FDI Potential Index captures



four key economic determinants of the attractiveness of an economy for foreign direct investors (UNCTAD, WIR 2012). FYR Macedonia ranks as one of the lowest in the region in terms of potential mostly due to lack of natural resources market attractiveness due to its small size. While economic policies can do little to expand the size of the market and the country's natural resource endowment, they can focus on enhancing manufacturing skills and FDI-enabling infrastructure (transport and energy). The authorities' policies in recent years aimed at catching up in those areas.

**Country rankings by Inward FDI Potential Index, 2011**

	Market attractiveness	Labour cost and skills	Infrastructure	Natural resources	Overall rank
POL	15	32	26	20	18
CZE	61	26	30	38	35
ROM	67	34	47	32	39
HUN	68	35	50	43	43
BGR	91	36	40	46	49
SVK	53	44	62	61	52
HRV	103	...	23	92	63
SRB	102	...	51	68	64
LTU	33	68	57	71	65
EST	29	86	63	97	75
LVA	55	73	77	100	80
SVN	97	85	21	102	81
BiH	135	...	93	91	93
ALB	133	...	96	114	123
<b>MKD</b>	<b>114</b>	<b>87</b>	<b>84</b>	<b>130</b>	<b>130</b>

Source: UNCTAD, World Investment Report 2012.

**13. Recent FDI have rebalanced towards industrial sectors.** Since 2009, a gradual shift from services to industrial products has been observed. With respect to industry, investments have gradually branched out of traditional sectors such as food and metal processing into technology-intensive industries, in particular automotive components for which major global players have become FYR Macedonia's main exporters. The structural shift in greenfield FDI reflects low labor costs, various incentives mentioned earlier, and improved business environment but also the opportunities offered by the geographical proximity to assembly plants in Central and Western Europe and Turkey, and the duty-free access to the European market. Other sectors attracting FDI include construction materials, residential construction, glass (e.g., for the packaging of agricultural products and wine), and food processing.

## D. Spillovers into Domestic Economy

**14. Spillovers of the FDI-led export sectors to the domestic economy have been limited so far.** Anecdotal evidence suggests that the development of backward linkages between big foreign investors and potential domestic suppliers has been limited, largely owing to the inability of local producers to meet the technical and safety requirements needed to export towards the EU. Rather, small and medium-sized domestic firms of the sector mainly produce for exports to neighboring countries, with limited opportunities to integrate with the European supply chains. Overall, despite the build-up of significant export capacities, the domestic tradable sector remains insufficiently developed.

**15. There are specific factors that impede the establishment of backward linkages with the domestic private sector.** Generally, the prevalence of informality in the economy and the impediments to access finance are major constraints faced by private sector firms for doing business, by regional comparison (see also World Bank, 2013b). Domestic firms also face credit and liquidity constraints due to high collateral requirements, delays in collecting payments (on average requiring four months to collect claims), and weak private sector balance sheets. Private sector debt, fueled by both credit growth and external borrowing, has risen fast since mid-2000s. A cross-country

analysis of private sector debt shows that FYR Macedonia's private sector debt is high when compared to its fundamentals, such as interest costs and growth potential.<sup>4</sup>

**16. Examples of successful integration of domestic firms into the global supply chain suggest the need for skilled labor and availability of production network.**

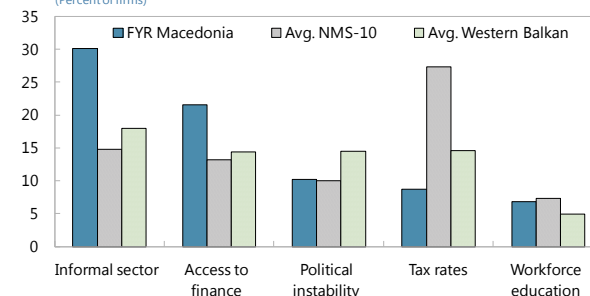
Central Eastern European countries have a qualified workforce and a long-standing tradition of machinery and transport equipment manufacturing. In these countries, the need for steel and metal products generated by car assembly plants was provided by domestic firms creating backward linkages with the economy. The industry also fostered forward linkages with the car services sector such as car repair services, fuel stations, car wash facilities, further contributing to employment growth. Furthermore, car production has favored the relocation of R&D centers from Western to Central Europe. Assembly plants have clustered in specific areas (such as West Slovakia, Eastern and Central Czech Republic, Southern Poland and Northern Hungary) connected by a network of road and railway infrastructures.

**17. Limited spillovers into domestic economy in FYR Macedonia are partly due to constraints posed by shortages of skilled labor.**

Despite a record of macroeconomic stability and an improving business environment, FYR Macedonia continues to experience an unemployment rate of nearly 28 percent, along with skills shortages across sectors. Improvements have been noticeable over the last few years, especially with regard to better learning outcomes at the primary level and the effect of compulsory enrollment in secondary education. However, automotive firms, for example, continue to have difficulty filling not only management and technical positions, but also lower-skill positions. The export-oriented apparel industry generally attributes its shortage of skilled labor force to obsolete curricula at FYR Macedonian universities.

**18. In the longer run, the innovative capacity of FYR Macedonian domestic firms needs to be strengthened.** Human and financial resources are insufficiently geared towards R&D and innovation, owing to the country's specialization in low- and medium-tech industries (World Bank, 2013a). Although R&D expenditure is almost exclusively funded by the government, public R&D expenditures in the country accounted for only 0.22 percent of GDP in 2012. Government-sponsored R&D facilities rarely invest in applied research and lack the mechanisms to transfer knowledge and

**FYR Macedonia and Peers: Top 5 Business Environment Constraints**  
(Percent of firms)



Sources: Enterprise Surveys (<http://www.enterprisesurveys.org>), The World Bank; and IMF staff calculations.  
Notes: NMS-10: Bulgaria; Czech Republic; Estonia; Hungary; Latvia; Lithuania; Poland; Romania; Slovak Republic; and Slovenia. Western Balkan: Albania; Bosnia and Herzegovina; Croatia; Kosovo; FYR Macedonia; Montenegro; and Serbia.

<sup>4</sup> See Central, Eastern and Southeastern Europe, *IMF Spring 2015 Regional Economic Issues*.

technologies to the private sector. Brain drain, particularly in technical and engineering occupations, remains a major concern for the private sector and the scientific community.

## E. Policy Lessons and Recommendations

**19. FYR Macedonia's strategic policy choices have borne fruit but not without costs.** Tax breaks and other incentives have attracted FDI, mostly in the tradable sector, leading to the re-orientation of exports towards technology-intensive products, hence allowing for significant market share gains and a strong contribution of exports to growth. This has also generated employment. While an overall cost-benefit assessment remains to be done, this low tax environment has contributed to a decline in revenues as a share of GDP and rising public sector indebtedness.

**20. The climb ahead would be more challenging.** Two issues signal the need for structural reforms going forward. First, the room for fiscal incentives appears largely exhausted in light of low revenue levels, including when compared with other emerging European countries which also provide fiscal incentives to foreign investors. Hence, attracting additional FDI in the tradable sector would require improvements in fundamentals such as labor skills and infrastructure. Second, further reforms are needed to ease the operating environment for domestic private firms so as to strengthen backward and forward linkages with foreign firms.

- *Easing access of the domestic corporate sector to formal finance remains critical.* High collateral requirement by banks is a problem for business development. Banks tend to not lend on the basis of business models and cash flow projections, but rather based on physical assets that can be pledged. Uneasy access to finance compounds the financial situation of the private sector. Policy priorities to help alleviate this problem include addressing crisis legacies of bad debts, and shortening payment delays in the economy so as to ease domestic firms' liquidity constraints.
- *Boosting higher education and skills would help lift a major constraint.* The significant emigration of highly educated citizens holds back output potential. Replenishing the pool of lost skills by ensuring attendance at, and high standards of, local schools and universities would be critical. Technical and managerial skills such as business planning are key factors of a country's integration into global supply chains. A more systematic negotiation of knowledge exchange and learning programs with incoming foreign investors would also help.
- *Improving infrastructure is needed to improve connectivity with trading partners.* The scaling-up of public infrastructure, notably in the transport sector, is a welcome development—provided it is assessed in a cost-benefit investment framework and remains consistent with sustainable levels of public debt (see the next chapter: "FYR Macedonia: Fiscal Rules To Ensure Sustainability").

### Box 1. Indicators of Export Performance—Some Definitions

**Export diversification by product or by partner is measured by the Theil index.** The Theil index is a statistics commonly used to measure inequality, which computes the ‘distance’ between some parameter values and an ‘ideal’ egalitarian state where they would be the same for each member of a given population—akin to alternative measures such as the Gini coefficient. Its formula is given by:

$$T = \frac{1}{N} \sum_{i=1}^N \frac{x_i}{\bar{x}} \cdot \ln \left( \frac{x_i}{\bar{x}} \right)$$

Where  $x$  is the parameter of interest (in this paper, the value of export lines or the relative importance of export partners) and  $N$  is the total number of population members. A further decomposition of the index allows to distinguish an *intensive margin* that reflects the degree of inequality prevailing between the shares of existing parameter values (in our case, the value of active export lines or the importance of active trade partners), and an *extensive margin* that reflects the increase in the number of parameter values (in our case, a rising number of active export lines or of trading partners). In all cases, the higher the index, the more concentrated the distribution of the parameter across the population, so that declining trends are indicative of greater diversification. Thus, an increased dispersion in the value of already exported good categories would be reflected in a decline in the intensive margin, while the addition of new categories to the exported production would be indicated by a decline in the extensive margin; both developments would result in a decrease of the overall index, pointing to increased diversification.

**Export quality indexes are calculated as unit values adjusted for differences in production costs and for the selection bias stemming from relative distance.** Relying on an enriched version of the COMTRADE database over the period 1962–2010, country-specific quality indexes are computed in three steps by Henn, Papageorgiou and Spatafora (2013). First, unit values, i.e., the average trade prices for each product category taken as a proxy for export quality, are regressed on some measure of unobservable quality, exporter income per capita taken as a proxy for production costs, and distance between importers and exporters. Second, an augmented gravity equation is estimated for each product line, where the exporter-specific quality parameter estimated above interacted with the importer’s income per capita enters as an explanatory factor of import quality, further to distance, and importer and exporter fixed effects. Third, the regression results are used to calculate quality estimates for each product line. The indicator is available at different product classification levels, with higher values indicating higher quality levels. The indicator of room for quality improvement can subsequently be computed by reference to the average quality absorbed by a country’s importers. It is important to note that the methodology improves on, but still relies on, unit values as an—imperfect—proxy for export quality, thus reflecting the price valuation of goods on export markets rather than their ‘intrinsic’ characteristics.

**Revealed comparative advantages measure the relative comparative advantages of countries for various export lines as evidenced by trade flows.** The index is constructed as the proportion of an export product line in a country’s total exports to a specific destination country (in this paper, the EU) relative to the average share of the same product line in the total exports to this destination country. A comparative advantage is revealed *ex post* by trade flows if the index is above unity.

### Box 2. FDI Incentives

**The establishment of Technological Industrial Development Zones (TIDZs) has supported the FDI policy.** TIDZs aim at attracting higher technology companies and are regulated by a specific legislation. A Directorate for Technological Industrial Development Zones has been established in 2000 and is operational since January 2002 so as to develop and supervise the zones. The first company to be operational in one of them was Johnson Controls (automotive components, USA) at the end of 2007. Since then, major German, American, British, and, more recently, Belgian firms have started outsourcing the production of components for the automobile industry in FYR Macedonia's TIDZs. Those have replaced traditional trade partners—Kosovo, Bulgaria, and Serbia—as the main export destination. This move has reflected a marked shift in the production of tradable goods, which now predominantly consists of manufacturing goods. There are currently four operational zones (Skopje 1, Skopje 2, Stip, and Kicevo) while ten others are at various stages of development.

**Incentives were put in place to encourage the establishment of firms in TIDZs.** The measures offered by the Macedonian authorities match the characterization of FDI incentives proposed by UNCTAD (1994) as they are "designed to influence the size, location or industry of a FDI investment project by affecting its relative cost or by altering the risks attached to it through inducements that are not available to comparable domestic investors".

**Incentives cover a broad range of benefits.** FYR Macedonia's free economic zones provide a 10-year corporate tax holiday, and a broad range of additional incentives, including:

- no customs duties and VAT on imported raw materials, equipment & construction materials;
- 0% personal income tax for 10 years;
- 0% property tax;
- 0% excise taxes;
- free connection to utilities;
- up to EUR 500,000 subsidies for construction costs;
- 'green' customs channel at the border for expeditious export to EU countries;
- long-term land lease for a period of up to 99 years;
- grants for training and job creation.

Such incentives are widely used across the region. Those adopted by FYR Macedonia come on top of a highly competitive wage environment and a stable currency exchange rate.

#### FDI Incentives

	BiH	BGR	HRV	CZE	EST	HUN	LVA	LTU	SVN	POL	SRB	SVK	ROU	MKD
Cash grants/incentives	x	—	x	x	x	x	x	x	x	x	x	x	x	x
Tax exemptions	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Property assistance/other fiscal	—	x	x	x	x	x	x	x	x	x	x	—	n.a.	x
Training/labor market	—	x	x	x	x	—	x	x	x	x	x	x	x	x
Guarantees/cheap finance	—	—	x	n.a.	x	x	x	x	x	—	x	x	x	—
Target sectors	x	x	n.a.	x	x	x	x	x	x	x	x	x	x	x

Sources: FDI Intelligence; FDI Atlas.com; national authorities.



### Box 3. Fostering Backward/Forward Linkages: Successes and Pitfalls

#### *Slovak Republic*

**The integration of Slovakia into the global supply chains (GSCs) has been exemplary.**<sup>1</sup> The degree of openness of the economy, as measured by the sum of exports and imports of goods as a percent of GDP, has grown steadily from around 100 percent at the end of the 1990s to more than 170 percent in 2014. This expansion was supported by significant inflows of FDI and went hand in hand with a growing participation of the Slovak economy in GSCs. The share of foreign inputs and domestically-produced inputs used in other countries' exports, which is a measure of a country's participation in GSCs, increased from 50 percent in 1995 to 63 percent before the large trade collapse of 2008. Slovakia ranks second among OECD economies in terms of being integrated into GSCs. The country's participation in GSCs significantly changed the structure of its exports, which shifted toward more knowledge-intensive sectors. For example, in the early 1990s, Slovakia showed no revealed comparative advantage (RCA) in the transportation and electronic sectors, which only started to emerge in 2007. Slovakia's business cycle (exports and GDP) has become increasingly synchronized with Germany's: foreign value added from Germany in Slovakia's exports has increased from 5 percent in 1995 to 9 percent in 2008. Moreover, about one-fourth of Slovakia's exports to Germany are re-exported to third countries.

**Strong productivity growth and wage moderation played a critical role in Slovakia's success.** Triggered by FDI, productivity growth has been generated by the migration of the workforce from agriculture to high-growth manufacturing and services. Simultaneously, wages remained relatively lower than in other UE countries, even when adjusted for differences in productivity. This advantage was combined with the proximity of export markets, a favorable tax and business environment, and a qualified workforce having expertise in the automobile industry.

#### *The Dominican Republic*

**The Dominican Republic (DR) successfully established special economic zones (SEZs), but generated weak backward linkages.** With a program ongoing for more than 40 years, the country hosts world-class special economic zones and industrial parks that attract investment in manufacturing or outsource business-processing services. DR's SEZ's initially mostly established in the textile sector fuelled economic growth during the 1990s. They were hit by the expiration of trade preferences in textiles in the 2000s, and somewhat diversified. Based on WB-IFC Enterprise Surveys, Sanchez-Martin et al. (2015) find that foreign-owned firms have traditionally developed few backward linkages with the rest of the economy.

**Lessons to better integrate FDI and domestic firms.** The authors suggest that the enabling environment that has helped develop successful SEZs should also be implemented outside the zones. They recommend to ease the business climate and to improve connectivity with the zones, including through the removal of hurdles to trade with firms established in the zones. The study also highlights the risk of a migration of domestic firms into SEZs, which entails potential high fiscal costs. It finally underlines the value of investing in human resources so as to match the needs of foreign companies, especially those that produce increasingly complex manufacturing processes beyond assembling activities. Absent such policies, domestic exporters are likely to be confined to selling low value-added traditional products, while the more sophisticated transformation processes take place in the special zones, thus reinforcing a dual economy with limited positive externalities to domestic companies.

<sup>1</sup> This country case is analyzed in Slovak Republic, *IMF Country Report No. 13/262*, Box 2. See also IMF Country Report No. 13/263 "The German-Central European Supply Chain—Cluster Report".

## Appendix I. Constant Market Share Analysis

According to the Constant Market Share Analysis (CMSA) approach, the *market growth effect* shows the increase in a country's exports assuming its exports were to grow by the same rate as a comparator group, in percent of its actual export increase. If this is below 100 percent, the country is overperforming relative to comparators. If this is higher than 100 percent, the country is underperforming. The over or underperformance can then be decomposed into three components:

- (i) *a commodity composition effect*: exports are concentrated in faster growing products;
- (ii) *a market distribution effect*: exports are concentrated in faster growing markets; and
- (iii) *a competitiveness effect*: exports growth is due to other factors (differentials in prices, taxation, productivity growth, quality, efficiency,...).

The actual increase in Macedonian exports between 2000 and 2014 ( $\Delta x$ ) can be decomposed into:

$$\begin{aligned} \Delta x &= \sum r x_i && \text{market growth effect} \\ &+ \sum r_i x_i - \sum r x_i && \text{commodity composition effect} \\ &+ \sum \sum r_{ij} x_{ij} - \sum r_i x_i && \text{market distribution effect} \\ &+ \Delta x - \sum \sum r_{ij} x_{ij} && \text{competitiveness effect} \end{aligned}$$

Where,

$r$  = percent change in the overall exports of competitor countries<sup>5</sup>,

$r_i$  = percent change in competitors' exports of SITC product  $i$ <sup>6</sup>,

$r_{ij}$  = percent change in competitors' exports of SITC product  $i$  to market  $j$ ,

$x_i$  = FYR Macedonia's exports of product  $i$  at the beginning of the period

$x_{ij}$  = FYR Macedonia's exports of product  $i$  to market  $j$  at the beginning of the period

$J_{1-3}$  = EU-28, Emerging and Developing Europe, World.

<sup>5</sup> Emerging Europe: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Kosovo, Lithuania, Montenegro, Poland, Romania, Serbia, and Turkey.

<sup>6</sup> Product disaggregation at SITC 1-digit level (9 categories).

## FYR Macedonia: Constant Market Share Analysis with Respect to EM Europe

(Millions of US dollars)

	2000-2014				2000-2007				2008-2014			
	$\Sigma r_{xi}$	$\Sigma r_{ix}$	$\Sigma \Sigma r_{ij xij}$	$\Delta x$	$\Sigma r_{xi}$	$\Sigma r_{ix}$	$\Sigma \Sigma r_{ij xij}$	$\Delta x$	$\Sigma r_{xi}$	$\Sigma r_{ix}$	$\Sigma \Sigma r_{ij xij}$	$\Delta x$
	[1]	[2]	[3]	[4]	[1]	[2]	[3]	[4]	[1]	[2]	[3]	[4]
SITC 0	313	416	690	322	193	176	320	182	115	246	382	140
SITC 1	616	852	1403	94	379	282	487	78	96	288	516	16
SITC 2	233	218	435	218	144	117	258	120	79	102	193	98
SITC 3	300	372	386	24	185	231	239	102	77	79	85	-78
SITC 4	11	32	40	10	7	9	12	0	1	5	7	10
SITC 5	281	382	545	977	173	180	265	67	58	107	163	911
SITC 6	2344	2063	3412	474	1443	1400	2452	1045	716	538	858	-571
SITC 7	396	442	814	959	244	305	579	67	70	53	84	892
SITC 8	1781	1086	1750	533	1097	610	1037	375	349	362	616	158
SITC 9	22	39	71	-1	13	38	43	-3	1	0	4	2
Total	6297	5903	9545	3610	3877	3349	5691	2033	1562	1780	2908	1577
	(Percent)											
Market Growth Effect= $[1]/[4]$				174				191				99
Commodity Composition Effect= $([2]-[1])/4$				-11				-26				14
Market Distribution Effect= $([3]-[2])/[4]$				101				115				72
Competitiveness Effect= $([4]-[3])/[4]$				-164				-180				-84

Source: WITS Database; and IMF staff calculations.

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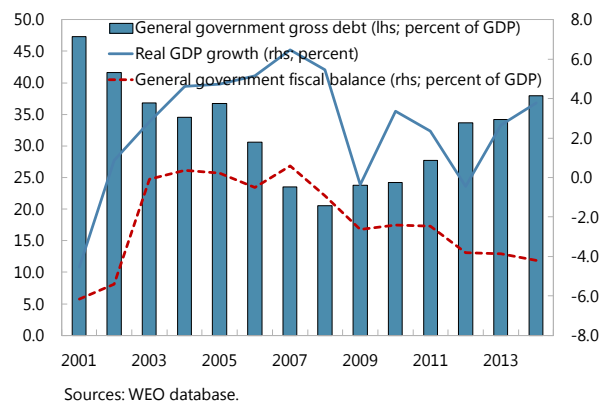
## FISCAL RULES TO ENSURE SUSTAINABILITY<sup>1</sup>

- *The public debt of FYR Macedonia has almost doubled since 2008 and is projected to reach 54 percent of GDP by 2020. While not excessively alarming, such level of public debt is elevated for a country like FYR Macedonia, where fiscal policy serves as the main macroeconomic policy tool, a significant part of public debt carries FX risks and long-term spending pressures are considerable. Against this backdrop, the authorities' intention to entrench fiscal sustainability using fiscal rules is a step in the right direction.*
- *This paper argues that the proposed debt ceiling at 60 percent of GDP is too high in the case of FYR Macedonia and recommends a lower debt ceiling of 50 percent of GDP to ensure adequate fiscal space. For this outcome, an upfront consolidation would be needed to reduce fiscal deficit to below 3 percent of GDP by 2017 in line with the authorities' Medium-term Fiscal Strategy (MTFS) and pursuing a primary balance path that would stabilize public debt by 2018.*
- *In light of FYR Macedonia's high infrastructure needs, an alternative to a lower operational threshold could be combining a higher debt cap with debt brakes mechanism. While the higher debt limit would be justified by the needed investment in infrastructure, any scaling up of public infrastructure investment should be accompanied by measures to strengthen public investment management: notably clear and transparent procedures to assess, prioritize, and monitor public investment projects.*
- *Finally, given that effective implementation of fiscal rule requires supporting institutions in public finance management, the paper recommends: (i) further development of the MTFS so that it can more effectively guide the budget preparation process; (ii) enforcement of strict expenditure controls as well as implementation of effective cash and debt management to ensure that the budget is executed as planned; (iii) increased robustness of macroeconomic projections to prevent revenue over-optimism; and (iv) strengthening both ex-ante and ex-post independent scrutiny including the eventual establishment of a fiscal council.*

### A. Context

**1. The fiscal situation in FYR Macedonia has deteriorated since the global financial crisis.** Benefiting from strong economic growth, FYR Macedonia entered the crisis with one of the lowest public debt level in emerging Europe. Since 2008, there has been a reversal. This reflects fiscal support for the economy in the aftermath of the crisis, but also policy choices and low revenue efficiency. Loosening of the fiscal policy pushed the overall fiscal balance

FYR Macedonia: Historical Fiscal Path and Growth

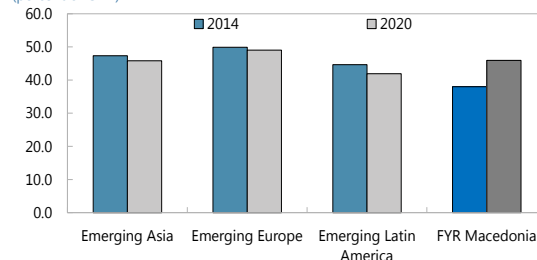


<sup>1</sup> Prepared by Hua Chai, Jubum Na and Duncan Last.

into a deficit of 0.9 percent of GDP by end-2008 and the overall deficit increased to 2.5 percent of GDP in 2011. The government's renewed stimulus beginning in 2012 steadily increased the fiscal deficit to 4.2 percent by 2014. As a result, public debt has risen from 23 percent of GDP in 2008, to 30 percent of GDP in 2011, and further to 44 percent in 2014. The projected debt path in the absence of adequate measures shows that public debt would continue trending upward and reach 54 percent of GDP by 2020.

**2. Although not alarmingly high, the projected level of public debt at 54 percent of GDP is elevated for a country like FYR Macedonia,** where fiscal policy serves as the main macroeconomic policy tool, a significant part of public debt carries FX risks, financing needs are high, and long-term pressures from pensions and health spending are considerable. Against this backdrop, the authorities' intention to entrench fiscal sustainability using fiscal rules is a step in the right direction.

**General Government Debt, FYR Macedonia and Peers**  
(percent of GDP)



Sources: WEO database.

Emerging Europe includes Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Kosovo, Latvia, Lithuania, FYR Macedonia, Montenegro, Poland, Romania, Serbia, Slovak Republic and Slovenia. Emerging Asia includes China, India, Indonesia, Malaysia, Philippines, Thailand and Vietnam. Emerging Latin America includes Argentina, Brazil, Colombia, Mexico, Peru and Venezuela.

**3. This paper aims to help the authorities' efforts regarding the design and implementation of fiscal rules.** Section B and C review the objectives and types of fiscal rules as well as the necessary underlying institutions. Section D discusses key considerations of fiscal rules in the context of FYR Macedonia. Section E lays out the supporting Public Finance Management (PFM) measures to ensure successful adoption and implementation of fiscal rules.

## B. Fiscal Rules: Objectives and Types

**4. A fiscal rule is a type of institutional setting under which fiscal variables are allowed to develop sustainably in the medium to long run.** It imposes a long-lasting constraint on fiscal policy through numerical limits on budgetary aggregates. Providing a credible medium-term anchor has been the pervasive motive for adopting fiscal rules or strengthening fiscal policy after the experience of the global financial crisis.

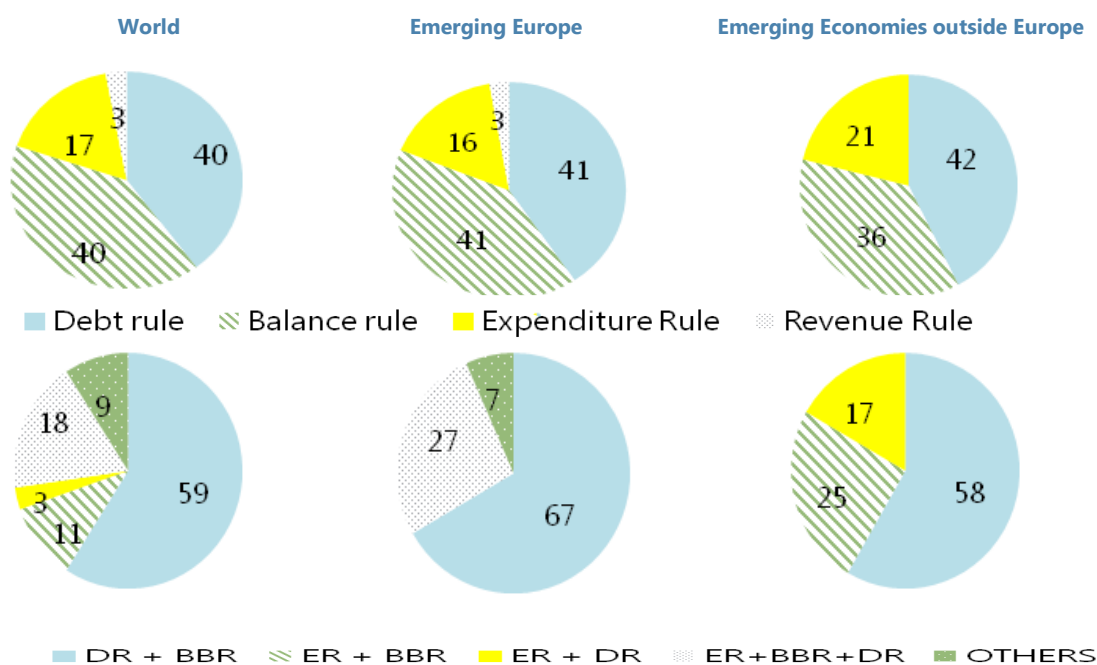
**5. There are four main types of fiscal rules with most countries using a combination of two or more rules** (Box 1). The four types of rules set targets on debt, budget balance, expenditure and revenue respectively, and these rules have different properties with regard to the objectives, operational guidance, and transparency. While the choice of fiscal rules depends on a country's economic circumstances, public debt and budget balance rules seem to dominate the choice often used in combination. About 80 percent of all fiscal rules in the world constrain the public debt or the budget balance (Figure 1). Expenditure rules are also prevalent, however mostly in advanced economies. In contrast, revenue rules are much less common. About 80 percent of the countries using fiscal rules use a combination of two or more rules. About 59 percent of countries that use a combination of rules adopt a debt rule that caps the overall public debt level and a fiscal balance rule that provides guidance to ensure this outcome.

### Box 1. Four Types of Fiscal Rules

- **Debt Rule (DR).** The debt rule sets an explicit limit or target for the public debt in percent of GDP. This rule is effective in ensuring convergence to a debt target and is relatively easy to communicate. However, debt levels take time to be impacted by budgetary measures and therefore, do not provide a clear short-term guidance for policy makers. Moreover, fiscal policy may become pro-cyclical when the economy is hit by shocks and the debt target is binding.
- **Budget Balance Rule (BBR).** The budget balance rule constrains the various budgetary balances that primarily influence the debt ratio and are largely under the control of policy makers. Budget balance rule can be specified as the overall balance, the structural balance, the cyclically adjusted balance or the balance over the cycle. While the first type of rule does not have any economic stabilization features, the other three types explicitly account for economic shocks. However, estimating the adjustment, typically through the output gap, is very challenging and makes the rule more difficult to communicate and monitor.
- **Expenditure Rule (ER).** The expenditure rule sets limits on total, primary, or current spending. Such limits are typically set in absolute terms or growth rates, and occasionally in percent of GDP with the time horizon ranging often between three to five years. These rules are not linked directly to the debt sustainability objective since they do not constrain the revenue side. They can provide, however, an operational tool to trigger the required fiscal consolidation consistent with sustainability when they are accompanied by debt or budget balance rules. These rules also do not restrict economic stabilization features of fiscal policy and are in general easy to communicate and monitor.
- **Revenue Rule (RR).** The revenue rule sets ceilings or floors on revenues and aims at boosting revenue collection and/or preventing an excessive tax burden. Most of these rules are not directly linked to public debt, as they do not constrain spending. These rules alone could result in a pro-cyclical fiscal policy but like the expenditure rules, they can directly affect the size of the government by adjusting the scale of revenue.

**6. This broad pattern, i.e., most countries using a combination of budget balance and debt rule, is true for advanced and emerging Europe as well.** Almost two-thirds of fiscal rules in emerging Europe are a combination of debt and budget balance rules, which partly reflects the supranational rules imposed by the EU's SGP framework (Box 2). The upper limit for the numerical target for debt rule ranges from 40 percent of GDP in Kosovo to 60 percent of GDP in Poland (Table 1). The scope of public debt rule mostly encompasses general government debt where the general government consists of the central government, the local government as well as entities where central government is the source of 50 percent of revenues. However, countries with debt limits at 60 percent of GDP typically start putting in debt brakes at 50 percent which constitutes an automatic correction mechanism (Table 2). The numerical target for the budget balance rule ranges from 1 percent of GDP in Serbia to 3 percent of GDP in emerging European countries.



**Figure 1. Types of Fiscal Rules in Use, 2014**

Sources: FAD database, IMF.

Emerging Europe includes 15 countries: Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Kosovo, Latvia, Lithuania, Montenegro, Poland, Romania, Russia, Serbia, the Slovak Republic, and Slovenia. Emerging Economies outside Europe includes 23 countries: Antigua and Barbuda, Argentina, Botswana, Brazil, Chile, Colombia, Costa Rica, Ecuador, Equatorial Guinea, India, Indonesia, Jamaica, Malaysia, Mauritius, Mexico, Namibia, Pakistan, Panama, Peru, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadine. The numbers indicate shares in total.

**Table 1. Types of Numerical Targets in Emerging Economies**

Country	Balance rule (in percent of GDP)	Debt rule (in percent of GDP)
<b>Inside Europe</b>		
Kosovo	2	40
Serbia	1	45
Hungary	3	50
Poland, the Slovak Republic, Romania	1	60
Bulgaria	0.5 percent of GDP for structural deficit	60
<b>Outside Europe</b>		
Namibia		25-30
Panama	2	40
Pakistan	Balance or surplus of basic balance	60
Costa Rica	Golden rule	70

Sources: Fiscal Rules at a Glance, April 2015, IMF.

Table 2. Debt Brakes in Emerging Europe	
Country	Types of Debt Brake
The Slovak Republic	When the debt to GDP ratio reaches 50 percent, the Minister of Finance is obliged to clarify the increase to parliament and suggest measures to reverse the growth. At 53 percent of GDP, the cabinet shall pass a package of measures to trim the debt and freeze wages. At 55 percent, expenditures would be cut automatically by 3 percent and next year's budgetary expenditures would be frozen, except for co-financing of EU funds. At 57 percent of GDP, the cabinet shall submit a balanced budget.
Poland	Corrective actions are triggered when debt ratio reaches the thresholds of 50, 55 and 60 percent of GDP. When debt ratio exceeds 55 percent of GDP, measures to improve budgetary situation – such as increasing VAT—are triggered automatically.
Hungary	Parliament may not adopt a State Budget Act which allows state debt to exceed 50 percent of GDP. As long as state debt exceeds 50 percent of GDP, Parliament may only adopt a State Budget Act which contains state debt reduction in proportion to the GDP.
Sources: Implementation of the Fiscal Compact in the Euro Area Member States, German Council of Economic Experts, and FAD database, IMF.	

### Box 2. Stability and Growth Framework

#### Budget Balance Rule:

- The Maastricht criteria include a limit of 3 percent of GDP for the fiscal deficit. If the deficit exceeds that limit, an excessive deficit procedure (EDP) is normally opened. (corrective arm)
- In addition to the ceiling for the headline deficit, medium term budgetary objectives (MTO) are set for the structural budget balance. (Preventive arm) MTOs are defined as a budgetary position “close to balance or in surplus.”

#### Debt Rule:

- The Maastricht criteria include a limit of 60 percent of GDP for general government debt. With the November 2011 governance reform, a required annual pace of debt reduction was introduced (based on a benchmark of 1/20<sup>th</sup> of the distance between the actual debt ratio and the 60 percent threshold on average over three years), starting three years after a country has left the current EDP procedure.

If progress is insufficient during the transition period, an excessive deficit procedure can be opened, with sanctions and fines for euro area members.

**7. Several econometric studies covering both EU and non-EU countries find that fiscal rules are associated with stronger fiscal performance** (Debrun *et al*, 2008; European Commission, 2006; Deroose, Moulin, and Wierts, 2006; Debrun and Kumar 2007, Kopits, 2004; and Corbacho and Schwartz, 2007). The main findings of these empirical studies are that: (i) tighter and more encompassing fiscal rules are correlated with stronger cyclically-adjusted primary balances in EU countries; (ii) the budget balance and debt rules have contributed to better budgetary outcomes than expenditure and revenue rules; and (iii) the rules covering a wider level of government have been

associated with more fiscal discipline. Schaechter et al (2013) find that countries in the top quartile of fiscal performance have at least two numerical rules in place and share many supporting institutional features, such as an independent monitoring mechanism to ensure compliance and a broad coverage encompassing the general government.

## C. Fiscal Rules: Underlying Institutions

**8. The success of fiscal rules largely depends on institutional settings and checks and balances underpinning these rules.** Typically, a number of institutional settings are put in place to ensure proper implementation:

- **Legal basis:** Rules enshrined in a higher level of legislation are more difficult to reverse and therefore tend to be longer lasting since they are more difficult to modify even with a change of government.
- **Top-down process:** A top-down budgeting process, where the aggregate expenditure limit is decided before the distribution of expenditures, and medium-term budget frameworks (MTBFs) are useful to exercise a better control over public expenditure, thereby ensuring adherence to the rule.
- **Fiscal Responsibility Law (FRL):** Fiscal rules can be supported by FRLs, which typically set out procedural and transparency responsibilities of the government towards the parliament.
- **Independent Body:** Establishing independent bodies, such as independent fiscal councils, could further enhance the credibility of fiscal rules. These bodies can provide an independent assessment of the implementation of fiscal rules.
- **Enforcement:** Enforcement and automatic correction mechanisms are critical to the success of the fiscal rule. The use of automatic mechanisms to correct past deviations from the rule is a tool that seeks to prevent deviations leading to a systematic debt buildup.
- **Escape clause:** Escape clauses can provide the flexibility to deal with unforeseen and severe events. These should clearly specify the circumstances where rules-based fiscal framework can be temporarily suspended and include a limited range of factors that allow such escape clauses to be triggered into legislation. There should also be clear guidelines on the interpretation and determination of events, and the regime that applies in the interim, including specification on the time path back to the rule.
- **Data availability:** Reliable data availability and technical forecasting capacity is of importance to ensure credibility, while budget reporting system and timely release of fiscal data are needed to allow internal and external monitoring of the rule, thereby securing accountability.

**9. Over the last decade, fiscal rules have become more comprehensive with a convergence of design features between advanced and emerging economies.** Supporting procedures such as the monitoring of budget implementation by an independent body have become more widespread in advanced and emerging economies, particularly after the recent global crisis. Other characteristics

such as a strong legal basis and formal enforcement procedures have also become more common across country groups.

#### D. What Type of Fiscal Rules Makes Sense for FYR Macedonia?

**10. The authorities intend to introduce a fiscal rule by 2017.** The envisaged fiscal rule intends to cap the overall budget deficit at 3 percent of GDP and the public debt at 60 percent of GDP as of 2017. The authorities appear to have used the Maastricht criteria as a benchmark for the sustainable level of debt for this economy. The authorities are currently looking also at possible options to secure compliance of fiscal rule, which include debt brakes.

	2014	2015	2016	2017	2018	2019	2020
Fiscal balance (% of GDP)	-4.2	-3.8	-3.4	-3.0	-3.0	-3.0	-3.0
Primary balance (% of GDP)	-3.2	-2.9	-2.5	-2.1	-2.1	-2.1	-2.1
Debt to GDP ratio	43.4	43.9	47.6	49.8	51.4	51.9	52.0

Note: The illustrative path assumes fiscal deficit decreases steadily to 3 percent of GDP by 2017 per the fiscal rule objectives, and stays at this level thereafter.

**11. The debt ceiling at 60 percent of GDP would be non-binding under the baseline projections and create inadequate fiscal policy space.** Even with fiscal deficits at 3 percent of GDP, public debt would be below the 60 percent threshold for some time limiting the operational guidance for fiscal prudence. In addition, the following would argue that *the proposed debt ceiling of 60 percent of GDP* is too high in FYR Macedonia's circumstances.

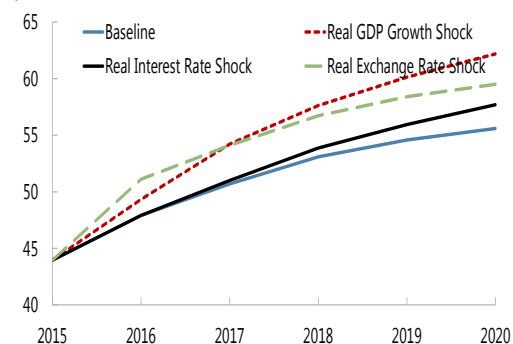
- **Empirical studies point to lower long-term debt thresholds for emerging economies.**

Historical experience shows that many economies with rapid growth of public debt in the midst of economic crisis have faced great difficulties to restore the public debt level to their pre-crisis level, while being exposed to higher fiscal vulnerabilities. The long run debt level for emerging markets (EMs) also tends to be lower than advanced economies (AEs) (IMF, 2011). Cross country median estimates for the period 1985–2002 range from 50 to 75 percent of GDP for AEs, while for EMs, the ratio is 25 percent of GDP. A re-estimation of public debt thresholds for a sample of EMs for the period 1993–2009 gives a range of 49–58 percent for the long run debt level, reflecting improved fiscal performance over the past decade.

- **At elevated debt levels, there are fiscal risks from lower growth, exchange rate changes and high financing needs.** Public sector

borrowing has pushed up gross external debt already to around 70 percent of GDP and gross fiscal financing needs, currently at 15 percent of GDP, is projected to rise to 18 percent by 2020. Foreign currency-denominated debt accounted for 84 percent of public debt at end-2014. Large increases in debt level given current debt profile would increase risks of debt distress if the exchange rate comes under pressure. Furthermore, the Debt Sustainability Analysis shows that adverse shocks to growth, real interest and real exchange rate could significantly push up the debt level (text chart).

**FYR Macedonia: Public Debt Trajectory under Shock Scenarios**  
(percent of GDP)



Sources: IMF staff estimates.

Note: The real GDP growth shock reduces growth by 1.5 percentage points throughout the projection period; the real interest rate shock assumes a 200 bps increase in real interest rates each year; and the real exchange rate shock assumes REER depreciation of 10 percent.

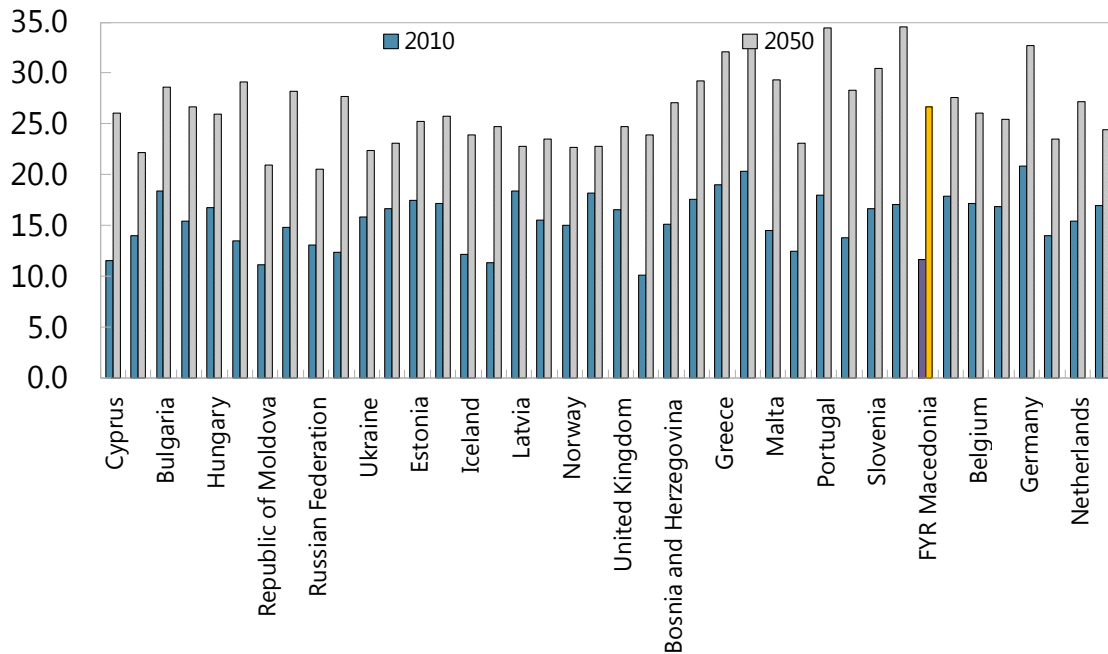
Public debt includes debt of the general government and non-financial SOEs.

- **Fiscal policy becomes less effective at higher level of debt.** A growing literature finds that fiscal policy becomes ineffective when the debt-to-GDP ratio is high (Perotti 1999, Sutherland 1997, Chung and Leeper 2007, Favero and Giavazzi 2007, Corsetti et al 2012, etc). Nickel and Tudyka 2013 estimates for a group of European countries that responses of real GDP and private investment to fiscal stimulus become negative when public debt surpasses 50 to 60 percent of GDP. Similar results are reported in Ilzetki, 2010 for 44 countries including 24 developing countries, and in Kirchner et al 2010 for the euro area.
- **Fiscal space to absorb long-term spending pressures from pensions and health services would be inadequate at higher level of debt.** The consolidated general government budget shows that pension deficits 2.9 percent of GDP with spending on pensions amounting to 9.1 percent of GDP or 28.7 percent of total spending in 2014. Pension spending is expected to steadily climb due to rapid ageing. According to the UN population projections, the share of people aged 65+ in the population would more than double by 2050 from 12 percent in 2010 to 26 percent in 2050 (text chart). Public health spending, amounting to 4.2 percent of GDP in 2014, would also face significant upward pressures due to ageing.

## 12. FYR Macedonia's particular circumstances would warrant the following considerations while designing numerical fiscal rules.

- (i) There is a need for fiscal rule to be simple and easy to communicate to the public as FYR Macedonia is still in the very early stage of adopting a fiscal rule.
- (ii) Since FYR Macedonia has long-standing ambitions to join the EU, a combination of debt and budget balance rules would be in line with other EU members.
- (iii) Given the rapid rise in public debt, a debt ceiling would need to be complemented by a budget balance rule to provide clear guidance to reverse the debt trajectory.

### Percentage of 65+ in Total Population: FYR Macedonia and European Peers



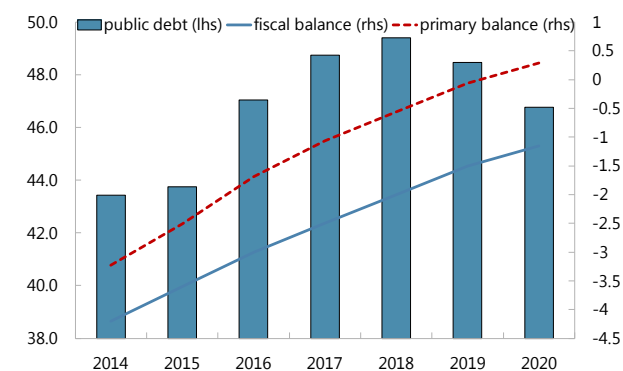
Sources: United Nations World Population Prospects, 2012 Revision.

**13. Reflecting the discussion in paragraphs 11–12, a lower debt ceiling would be more suitable for FYR Macedonia.** Accordingly, the overall fiscal deficit needs to be reduced to well below 3 percent of GDP by 2017, and further consolidation will be needed to reverse the debt build-up and keep the debt level comfortably below 50 percent of GDP in the medium term. This will create sufficient fiscal space to accommodate counter-cyclical policies in bad times and spending pressures from population ageing as well as to reduce risks of debt distress.

**14. Given the high infrastructure needs for the small and landlocked economy, a somewhat higher debt limit may be justified accompanied by a debt brake mechanism.**

Public infrastructure spending, notably in the transport sector, is expected to grow significantly in the medium term. The planned expenditure in road construction represents more than 2.2 percent of GDP from 2015 onwards, contributing to the PESR’s projected debt buildup from 2.3 percent of GDP in 2014 to 6.6 percent by 2017. Debt brake could be triggered starting at 50 percent of GDP and pre-planned fiscal consolidation measures could then be introduced to arrest a rapid rise.

FYR Macedonia: Recommended Path for Public Debt and Deficits (Percent of GDP)



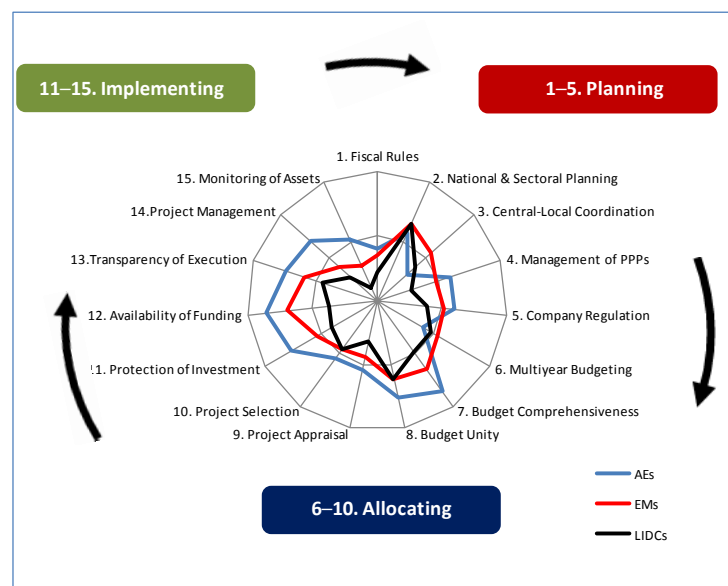
Sources: IMF staff estimates.

**15. The growth potential from scaled up infrastructure investment will only be realized if the current weaknesses in public investment management are addressed.** Historically, weaknesses in public investment management have resulted in inadequate returns in many countries. Low returns to public investment arise from poor selection and implementation of projects due to limited information, waste and leakage of resources, and weak technical expertise. A substantial scaling-up of public investment, as envisaged by the authorities, in a relatively weak institutional setting runs the risk of potentially undermining its growth benefits as well as fiscal and debt unsustainability.

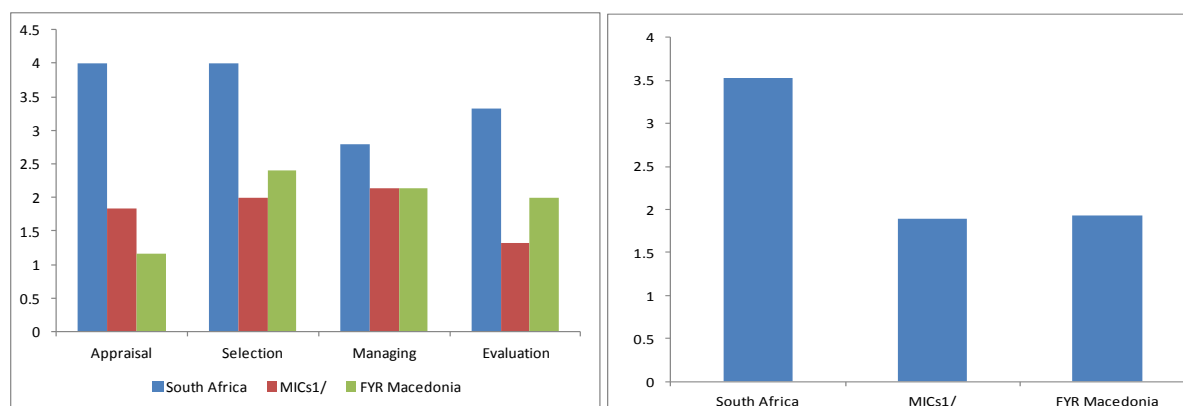
**16. Recent IMF report finds the economic and social impact of public investment to critically depend on its efficiency (IMF, 2015).** The overall strength of Public Investment Management (PIM) is the weakest in Low-Income Developing Countries (LIDCs) and the strongest in AEs during all three investment cycles: planning, allocation, and implementation (Figure 2). The economic dividends from closing this efficiency gap are substantial: the most efficient public investors get twice the growth bang for their public investment buck than the least efficient ones. Strengthening PIM practices can thus reduce the public investment efficiency gap by around two-thirds, with the largest payoffs in EMs and LIDCs.

Priorities for strengthening PIM institutions vary across country groups with EMs needing more rigorous and transparent arrangements for the appraisal, selection, and approval of investment projects. A study by Era Dabla-Norris et al. in 2011 shows FYR Macedonia ranks somewhere in the middle among 31 middle income countries in public investment efficiency. A close look at sub indices of public investment efficiency—notably project appraisal, selection, management, and evaluation—shows that the project appraisal stage in FYR Macedonia lags the most in comparison to middle income peers (Figure 3).

**Figure 2. Public Investment Institutional Overall Score by Country Group**



Source: *Making Public Investment More Efficient*, June 2015, IMF.

**Figure 3. Public Investment Efficiency Index**

Sources: IMF staff calculations based on IMF Working Paper No. 11/37.

1/ Thirty one countries are included in Middle Income Countries: South Africa, Brazil, Colombia, Tunisia, Thailand, Peru, Kazakhstan, Botswana, Jordan, Belarus, Serbia, Ukraine, FYR Macedonia, Turkey, Philippines, Namibia, El Salvador, Kosovo, Jamaica, Montenegro, Albania, Pakistan, Indonesia, Azerbaijan, Egypt, Barbados, Trinidad and Tobago, Swaziland, Gabon, West Bank and Gaza, and Belize.

Public Investment Efficiency Index is composed of 17 indicators grouped into four stages of cycle: (i) Strategic Guidance and Project Appraisal; (ii) Project Selection; (iii) Project Implementation; and (iv) Project Evaluation.

**17. The legal framework for the fiscal rule should include independent monitoring and oversight, as well as other enforcement mechanisms, such as corrective measures to restore deviations over a certain period of time.** All of these would be beneficial in maximizing the contribution of fiscal rules to improving fiscal soundness. Many emerging European economies, such as Romania, Poland, The Slovak Republic, Kosovo and Lithuania, have introduced these systems along with establishing independent bodies that effectively oversee implementation of fiscal rules. The Macedonian authorities are doing research on practices in other countries and considering which design features to include in their new fiscal responsibility law once the Constitution has been amended. International experience also shows that fiscal rules cannot substitute a strong commitment to fiscal discipline as these rules can be circumvented, ignored, or simply abandoned over time.

## E. Supporting Public Finance Management Measures

**18. A country's ability to implement fiscal rules is directly linked to the strengths and weaknesses of the institutional arrangements for preparing and executing budgets.** In particular, fiscal rules would need to put greater attention on the quality of the government's medium-term fiscal and budgetary framework as well as on the mechanisms to ensure budgetary discipline during execution. Enhanced transparency and accountability arrangements to publicly review the government's fiscal proposals and evaluate their performance are also needed.

**19. The government of the FYR of Macedonia first introduced a medium-term Fiscal Strategy (MTFS) in 2005.** It provides projections of macroeconomic and fiscal aggregates at the general government level, broken down by major budget users—central government, funds, and local government. While the MTFS provides a snapshot of the government's overall fiscal policy intentions for a given budget year, there is no reconciliation with the previous years' projections nor with actual

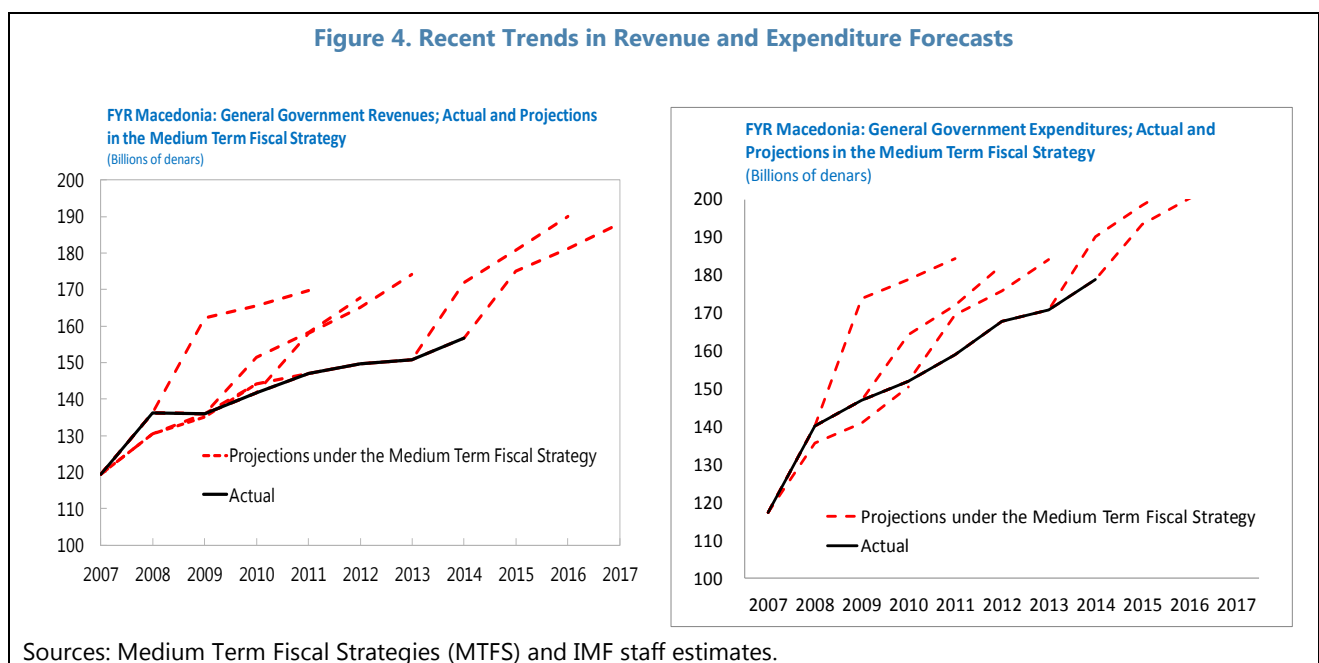


outturns. This lack of reconciliation undermines the credibility of the medium-term fiscal planning process, and would need to be addressed as part of the action plan to implement the fiscal rules.

**20. While the MTFS includes fiscal policy changes over the medium-term, these are not costed.** Furthermore, the fiscal implications of policy initiatives are not systematically provided by the Ministry of Finance (MoF) prior to their adoption by the government, and it is unclear whether the MoF's capacity to evaluate such costs is sufficient. Inadequately costed policy initiatives often have unplanned consequences on future year's budgets and can undermine the government's ability to keep the budget on track. The authorities are encouraged to review its arrangements and capacities for evaluating the costs of all policy initiatives as part of the preparatory actions for the implementation of fiscal rules.

**21. The MTFS should be based on realistic macro-economic forecasts.** The quality of the forecasts depends on the availability, quality and timeliness of underlying data on the economy. It also depends on the models used to prepare the forecasts, and the availability of alternative scenarios. The credibility of fiscal projections, revenues in particular, will partly depend on the robustness of the process of preparing macro-economic forecasts. The implementation of fiscal rules will require a closer look at the institutional arrangements for collecting and forecasting macroeconomic data, including the arrangements for independently reviewing the forecasts (see paragraph 25 below).

**22. Analysis of recent macroeconomic and fiscal data shows mixed performance.** The analysis shown in Figure 4, based on the 2008–10 to 2015–17 MTFS documents, shows generally overoptimistic revenues and expenditures projections when compared with actual outturn, resulting in significant difference between deficit projections and actuals during the same period. This optimism bias also shows up in the analysis of GDP forecasts as well, particularly in the outer years.



**23. The MTFS does not include detailed medium-term budgetary estimates for central government institution.** Furthermore, the MTFS is often issued late in the year (September) and therefore cannot effectively guide the budget preparation process. Despite this, the government does issue spending limits along with its annual budget circular, although it is unclear to what degree line ministries respect these limits in their budget submissions. The MTFS needs to be further developed to qualify as a medium-term budgetary framework which effectively guides the budget preparation process. In addition to the reconciliation mentioned above, these improvements include a more detailed analysis of sectoral/ministerial budgets, separated between on-going policy and new initiatives, identification of fiscal risks, and adoption of the MTFS by the government by midyear as well as submission to the parliament at least for information. These improvements are also required under the EU convergence program.

**24. The current wording in the draft Constitutional amendment suggests that the deficit rules will only apply to the central government,** while the debt rules will apply to public debt, defined as general government plus guaranteed debt of non-financial SOEs. Under the EU fiscal framework, both rules apply to the general government, as defined in ESA2010. If possible the draft Constitutional amendment should be changed to reflect this coverage, the alternative being to review the regulatory arrangements for funds and local governments to ensure that they also adhere to the fiscal rules. This is one of several aspects that will need to be included in the revisions to the public financial management (PFM) legislation once the Constitution is amended.

**25. Ensuring that budgets are executed as planned is essential to the effective implementation of fiscal rules.** This means strict expenditure controls, effective cash and debt management, and timely and comprehensive reporting. The government's recent record on arrears raises questions as to the effectiveness of its expenditure controls. Addressing the underlying causes of arrears and changing institutional behavior regarding arrears will be important measures to be implemented prior to the adoption of the fiscal rules. In this regard, the recent improvements in multiyear commitment controls would appear to have addressed the central government arrears issues. Establishing proactive cash management that ensures that budget institutions are able to spend according to their approved plans will be an important complement to the measures on arrears.

**26. Finally, the credibility of medium-term budgeting based on fiscal rules depends on effective external scrutiny.** The ex-post scrutiny undertaken by the supreme audit institution is in general focused on compliance issues, not on the evaluation of fiscal policies. For this new institutional arrangements are required, equipped with macro economic capacities rather than accounting ones. More and more countries are now establishing fiscal councils to perform the fiscal policy evaluation task, both ex-ante and ex-post and consideration should be given to which model is appropriate for FYR Macedonia. The establishment of a fiscal council will require new legislation, which will need to be prepared and enacted prior to the implementation of the fiscal rules. However, since the authorities are not convinced that a fiscal council would become beneficial at this time, they could, instead consider strengthening their macroeconomic forecasting capacity by establishing an autonomous professional institute to do the macroeconomic forecasts, following the example of other countries in the region, notably Slovenia.

**27. The implementation of fiscal rules requires careful attention to PFM reform actions that will ensure success.** A number of other countries in the region have also introduced fiscal rules and accompanying fiscal responsibility legislation. Two of these, Slovakia and Serbia, could be of specific interest to the authorities in FYR Macedonia. The reform actions they undertook in the context of fiscal rules are summarized in Box 3. The authorities have started preparing a new fiscal responsibility law to implement the fiscal rules. The key actions that may be relevant to FYR Macedonia are identified in Table 4, along with a timeline linked to the year in which the rules are expected to come into force. The authorities are already planning to include some of these actions in their PFM reform strategy which will be prepared once the PEFA is completed.

**Table 4. Priority PFM Measures for Implementing Fiscal Rules in Year T (currently 2017)**

Measure	Detailed actions	Timing
1. Improve the credibility of the MTFS	<ul style="list-style-type: none"> <li>- include a reconciliation table highlighting changes from previous MTFS</li> <li>- systematically evaluate the cost of all new policy measures, including investments, and include these costs in the medium-term projections of the MTFS</li> <li>- expand the detail of medium-term projections to main budget institutions</li> <li>- adopt the MTFS, with binding ministerial ceilings for the budget year, prior to the start of budget preparation</li> </ul>	T-1 July
2. Strengthen the budget preparation process	<ul style="list-style-type: none"> <li>- strengthen the capacities of line ministries to prepare costed strategic plans and to design and manage public investment projects</li> <li>- strengthen the analytical capacity in the Ministry of Finance to review line ministry budget proposals and to manage the public investment program</li> <li>- develop the methodology to separate on-going policies from new initiatives in budget proposals</li> </ul>	T-1 & T T-1 & T T
3. Strengthen the capacity to monitor fiscal risks	<ul style="list-style-type: none"> <li>- identify key fiscal risks, including from SOEs</li> <li>- establish/strengthen institutional arrangements to routinely monitor and analyze fiscal risks</li> <li>- include fiscal risk reporting in the MTFS</li> </ul>	T-1 & T
4. Strengthen the capacity to prepare realistic macro-economic forecasts and revenue projections	<ul style="list-style-type: none"> <li>- review and broaden the institutional participation in the preparation of macro-economic forecasts</li> <li>- include alternative scenarios in the macro-economic forecasts</li> <li>- strengthen the capacity to prepare realistic revenue forecasts</li> </ul>	T-1 1 <sup>st</sup> half T-1 July T-1 1st half
5. Establish an independent scrutiny of fiscal projections	<ul style="list-style-type: none"> <li>- agree on the design choices and institutional anchor for a fiscal council</li> <li>- implement an independent scrutiny of the government's macro-economic and fiscal projections</li> </ul>	T-2 Dec T-1 July

**Table 4. Priority PFM Measures for Implementing Fiscal Rules in Year T (currently 2017) (concluded)**

6. Strengthen expenditure controls, accounting and reporting, and cash management	- review and strengthen expenditure control arrangements and their associated sanction provisions	T-2 Dec
	- strengthen the requirements and coverage for fiscal reporting that meet ESA2010 standards	T-1 Dec
	- improve the monitoring of assets and liabilities through a gradual adoption of IPSAS standards in accounting	T to T+3
	- improve in-year cash flow planning and its coordination with debt management	T-1
7. Amend the PFM legal framework to support fiscal rules	- design and implement supporting enhancements to the PFM IT systems to support improved budget execution	T-1
	- prepare revisions to existing provisions aimed at strengthening the MTFs, improving the budget preparation process, and enhancing expenditure controls	T-2 Dec
	- prepare new provisions (or a separate law with qualified majority) to operationalize fiscal rules and to establish the independent oversight (e.g., fiscal council) essential for their effective monitoring and oversight	

### Box 3. PFM Reforms and Implementation of Fiscal Rules—Two Experiences from the Region

**The Slovak Republic:** Prior to the introduction of its debt brake rule in 2012, the Slovak Republic's debt was rising rapidly and fast approaching the EU's 60 percent debt limit. The authorities recognized the need for consolidation efforts, underpinned by a series of PFM reform measures, aimed at: (a) identifying savings through improved costing and monitoring of spending; (b) setting fiscal objectives in a more transparent and systematic manner; (c) improving the quality and reliability of macro-economic forecasts through independent scrutiny (Council for Budget Responsibility); (d) rigorously assessing the impact of all new policy measures; and (e) strengthening fiscal risk identification and management. The fiscal rules and accompanying measures have had a high degree of consensus, which encouraged effective enforcement of early warning measures under the debt break provisions in 2013 and 2014

**Serbia:** The adoption in 2009 of new fiscal responsibility provisions in the Law on Budgets was accompanied by a number of measures aimed at strengthening the credibility and management of the budget. These included:

(a) adoption of a two-stage budget process; (b) addition of sections on fiscal risks and medium-term budget forecasts to the annual Fiscal Strategy Document; (c) launch of program budgeting; and (d) strengthening of expenditure controls to address the arrears problem. Some of these measures have taken time to implement (e.g., program budgeting which was completed in 2015). Serbia's recent EU ambitions have given a renewed impetus to these reforms.

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