BOSNIA AND HERZEGOVINA FEDERATION OF BOSNIA AND HERZEGOVINA FEDERATION MINISTRY OF FINANCE

2016 - 2018 DEBT MANAGEMENT STRATEGY

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ACRONYMS

ATM - Average time to maturity ATR - Average time to re-fixing

BAM - Bosnia and Herzegovina Mark

GDP - Gross domestic product
BH - Bosnia and Herzegovina

CBBH - Central Bank of Bosnia and Herzegovina
CEDB - Council of Europe Development Bank

DB - District Brcko

BFP - Budget Framework Paper

EBRD - European Bank for Reconstruction and Development

EIB - European Investment Bank

EUR - Euro

FBIH - Federation of Bosnia and Herzegovina

FMF - Federation Ministry of Finance

GBP - British Pound

IBRD - International Bank for Reconstruction and Development

IDA - International Development Association

IMF - International Monetary Fund

MTDS AT - Debt portfolio risk assessment tool

JPY - Japanese Yen

KfW - German Bank for Reconstruction and Development

KWD - Kuwait Dinar

MTDS - Medium-Term Debt StrategyPIP - Public Investment program

WC - War claims

RS - Republic of Srpska

SAR - Saudi Riyal

SASE - Sarajevo Stock Exchange SDR - Special Drawing Rights FFD - Frozen foreign deposits

USD - US Dollar WB - World Bank

SUMMARY

Management of government's debt is a process of developing and implementing government debt management strategy aimed to raise necessary amount of funding, meet risk and cost related objectives, as well as meet other debt management objectives set by government, such as development and maintenance of domestic financial market for government securities. Medium-Term Debt Management Strategy operationalizes such objectives and presents a plan the government intends to implement in order to achieve the desired composition of its debt portfolio, reflecting government's preferences in terms of balancing costs and risks.

The presented 2016-2018 Debt Management Strategy (hereinafter: the Strategy) summarizes main principles and guidelines of FBH Government debt management policies for the said period. It is prepared following the IMF and WB guidelines for developing medium-term debt management strategies and international best practices. Taking into account impact and limitations of external and domestic macroeconomic environment and other potential risks, the Strategy describes plans how to finance government's debt in the following years, as well as indicative measures and tools which would be used to achieve the defined strategic objectives.

Parts One and Two of this document present briefly legislative and institutional framework for managing debt of the Government of the Federation of BH, as well as objectives and scope of the Strategy.

Parts Three and Four describe debt portfolio composition and identify key risk factors inherent to the existing debt portfolio. Macroeconomic framework presents macroeconomic situation in FBH, BH and neighboring countries, with description of expectations and trends for the forthcoming period. The Strategy is based on assumptions presented in 2016-2018 Budget Framework Paper, 2015 FBH Budget, as well as 2015-2017 FBH Public Investment Program.

Part Six lists main sources of funding available to FBH Government in the forthcoming period, including their main characteristics, constraints and risks inherent to the specified instruments. Having that in mind, FBH Government's debt management guidelines are provided, including main strategic objectives set for the forthcoming period. Brief overview of measures to be undertaken in order to achieve the set objectives is also presented.

The last part of this document lists activities to be undertaken in order to implement the Strategy, including improved communication with market participants, as well as documents and key information on debt and borrowing which would be published on the FMF web site (http://www.fmf.gov.ba). Public disclosure of these documents and their availability for general public presents key factor in ensuring debt management transparency and further improvement of communication with creditors and investors in FBH securities. In order to ensure consistency with government policies, the Strategy would be reviewed and updated on annual basis, within budget process, and if necessary, more frequently in case of significant changes in the market and macroeconomic environment.

1. LEGAL AND INSTITUTIONAL FRAMEWORK

Complex current constitutional structure of BH resulted in establishment of multiple legislative and institutional framework for debt management at all levels of government in BH. Bosnia and Herzegovina Law on Debt, Borrowing and Guarantees ("BH Official Gazette" No. 52/05 and 103/09) authorizes Entities (Federation of Bosnia and Herzegovina, Republic of Srpska and District Brcko) to enter into agreements on borrowing with external creditors with prior approval by the BiH Parliamentary Assembly (Article 49), which is in line with BH Constitutions. New loans borrowing procedures are regulated by the Article 39 and repayment procedures for the external debt by the Article 50 of the said Law.

Pursuant to the Law on Debt, Borrowing and Guarantees of the Federation of Bosnia and Herzegovina (FBH Official Gazette" No. 86/07, 24/09 and 44/10) (hereinafter: FBH Debt Law), FBH can borrow domestically and abroad in local currency or foreign exchange. FMF is responsible of borrowing and debt management procedures in FBH. Pursuant to the Articles 51 and 52 of the same Law, FMF is the only authority responsible to prepare and sign FBH guarantees.

FBH Debt Law defines borrowing limits for total FBH public debt consolidated at FMF level pursuant to FBH Debt Law (Article 7): "Federation can borrow long-term if at the time of borrowing debt service amount, of total domestic and foreign debt and guarantees, due on each subsequent year, including service of the proposed new borrowing and all loans guaranteed by Federation, together with Cantonal debt limits referred to in the Section 2 of this Article, does not exceed 18 percent of consolidated revenues of the Federation and Cantons collected in previous fiscal year." The Law also defines that Federation Ministry of Finance is the only public entity responsible of debt management in FBH (Article 4).

FBH Debt Law prescribes clearly for which purposes FBH can borrow at international or domestic market, or issue guarantee. Pursuant to the Article 19 of this Law, FBH can borrow domestically for the following purposes:

- 1. Finance budget deficit arising from cash flow,
- 2. Finance FBH budget deficit,
- 3. Finance capital investments,
- 4. Refinance total or a portion of FBH outstanding debt.
- 5. Pay FBH guarantees, fully or partially,
- 6. Pay obligations based on internal debt.

Furthermore, the Article 38 of FBH Debt Law prescribes that FBH can borrow at international market for the following purposes:

- 1. Finance FBH budget deficit,
- 2. Refinance and restructure outstanding domestic and foreign debt,
- 3. Pay FBH guarantees, fully or partially,
- 4. Repayment of the FBiH debt servicing costs, including associated costs
- 5. Finance capital projects,
- 6. Restructure and consolidate public enterprises and support financing institutions majority owned by FBH Government.

Besides, the Article 53 of FBH Debt Law defines that FBH guarantees can be issued only for the following purposes:

1. Finance capital investments,

2. Restructure and consolidate public enterprises and support financing institutions majority owned by FBH Government.

All transactions related to debt and guarantees, shall be managed, within FMF, by Debt Management Sector, led by Assistant Minister who reports directly to the Minister of Finance. The Sector consists of three departments:

- 1. Borrowing and Development Funds Coordination (Front Office)
- 2. Analysis and Reporting (Middle Office)
- 3. Debt Service (Back Office)

Such organization structure of Debt Management Sector ensures clear segregation of duties among staff authorized to negotiate and perform borrowing transactions, staff in charge of accounting of such transactions and debt service, and staff responsible of monitoring, analysis and reporting.

2. DEBT MANAGEMENT STRATEGY OBJECTIVES AND SCOPE

2.1. Debt Management Objectives

FBH Debt Law does not define debt management objectives, nor there was earlier any official debt management strategy in FBH. However, in order to meet FBH Government financing needs, FMF was also in previous years identifying desirable debt management strategies, and tried to implement borrowing policies accordingly. Due to underdeveloped domestic debt market and many other constraints, such policy was based on maximizing external concessional debt. Implementation of external concessional borrowing polices has its upsides and downsides. Positive ones are reflected in reduced debt service requirements and ensuring its sustainability and negative ones in generating substantial foreign exchange risk and complete neglect of domestic market development. Besides, external concessional borrowing is attached to conditions and linked directly to investment projects, reducing FBH Government ability to make independent decisions on FBH development directions.

In ordered to develop yield curve and increase domestic debt maturity, by issuing longer term securities at domestic market, in early 2011, one more objective was set, related to domestic securities market development.

Having in mind current fiscal and economic policy of FBH Government, as well as results of analyses of alternative strategies, key objective of FBH Government's debt management during 2016-2018 are the following:

- Ensure funding to finance government needs (service current debt obligations and finance development needs) at acceptable costs and risks over medium and long term;
- 2. Develop domestic market for FBH Government securities.

2.2. Strategy Scope

FBH Government Medium Term Debt Management Strategy for period 2016 – 2018 covers debt portfolio managed by FBH Government and approved by FBH Parliament, namely total foreign and domestic debt of FBH, including subsidiary debt which was

on-lent to final beneficiaries (financing institutions, public companies, cantons and local communities) and total domestic debt of FBH Government.

FBH Government debt portfolio includes one domestic FBH guarantee issued in 2010 for FBH Railways and one foreign sub-guarantee issued to Tuzla Water and Sanitation Utility, they are not included in the borrowing Strategy for the period 2016-2018, as it is not expected that these would be called upon during the Strategy period.

3. GOVERNMENT'S DEBT PORTFOLIO

Composition of FBH Government's debt portfolio is in line with implicit debt management strategy which has been implemented for many years now. Due to underdeveloped domestic securities market and number of other constraints, such policy included maximizing foreign concessional borrowing, with at the same time explains low implicit interest rates of FBH Government's foreign debt portfolio at 1.4%.

Table 1. Federation of BH Total Debt as of December 31, 2014

| Description | Foreign debt | Domestic debt | Total debt |
|-----------------------|--------------|---------------|------------|
| Amount (BAM mill) | 5.143,90 | 888,13 | 6.032,03 |
| Amount (USD mill) | 3,198.12 | 552.17 | 3,750.30 |
| Nominal debt as GDP % | 29.14 | 5.00 | 34.14 |

FBH external debt was BAM 5,143.90 million (USD 3,198.12) or 85.27% of total debt portfolio, and domestic the remaining 14.73% or BAM 888.13 million (USD 552.17) amounting on end December 2014 total of BAM 6,032.03 million (USD 3,750.30) or 34.14 % of FBH GDP (Table 1).

3.1. Domestic Debt Composition

FBH domestic debt was generated in line with law, where debt generated by issuing securities amounted BAM 888.13 million (USD 552.17 million) as of December 31, 2014. Domestic debt consists of market and non-market instruments.

Market instruments are T-bills and bonds, which FBH started issuing in 2011 and 2012, respectively, by auctions. During 2011-2014 period, there were 22 T-bills auctions and 7 bonds auctions. BAM 530 million T-bills of various maturity (3, 6, 9, and 12 months) and BAM 310 million bonds of 2, 3 and 5 years maturity were issued. Non-market instruments are bonds issued directly based on verified commitments against frozen foreign deposits and war claims. Such bonds have maturity defined by law and interest rate of 2.5%.

Market securities are registered with FBH Securities Registry and listed at Sarajevo Stock Exchange. At end 2014 there was BAM 390.0 million (USD 242.47 million) outstanding debt.

Table 2. Domestic Debt Composition at end 2014

| | | 2011 | 2012 | 2013 | 2014 |
|----|---|--------|--------|--------|-------------|
| | | | | | BAM million |
| I. | Total domestic debt | 818.12 | 870.16 | 795.83 | 888.13 |
| 1. | Non-market instruments | 715.48 | 667.79 | 552.30 | 446.00 |
| | FFD bonds | 524.19 | 477.78 | 357.90 | 251.60 |
| | WC bonds | 191.29 | 190.01 | 194.40 | 194.40 |
| 2 | Market instruments | 90.00 | 190.00 | 220.00 | 390.00 |
| | T-bills | 90.00 | 60.00 | 50.00 | 100.00 |
| | Bonds | 0.00 | 130.00 | 170.00 | 290.00 |
| 3. | Obligations of former Ministry of Defense | 12.64 | 12.37 | 12.37 | 12.20 |
| | Suppliers | 7.36 | 7.36 | 7.33 | 7.28 |
| | Salaries | 5.28 | 5.01 | 5.04 | 4.92 |
| 4. | Other | 0.00 | 0.00 | 11.16 | 39.93 |

Source: Federal Ministry of Finance

3.2. Foreign Debt Composition

Foreign debt consist of loans contracted through on-lending instrument by State – BH at BAM 4,098.40 million (79.67% of total outstanding foreign debt) which was main source of foreign financing over previous years; direct foreign debt (debt contracted directly with foreign creditors) at the amount of BAM 93.40 million (1.8%) and foreign debt inherited from former Yugoslavia (Paris Club debt restructuring and commercial banks or London Club debt restructuring and other, such as IBRD debt) at the amount of BAM 952.10 million (18,51%).

FBiH mainly borrows from multilateral institutions (73% of total outstanding debt). Largest multilateral creditors are the World Bank (IDA and IBRD) accounting for 30.8% of total external debt, followed by EIB (16.3%), IMF (13.1%), and EBRD (11.0%). Among bilateral creditors Paris and London Club account for 14.4%, while the other bilateral creditors account for 14.5% of total foreign debt.

Table 3. External Debt by Creditors at end 2014

BAM millions

| | o o. Extornal Book by Ort | — , | | | |
|----|---------------------------|------------|--------|----------|----------|
| | Creditor | Total | % | Old debt | New debt |
| 1 | WB | 1,583.01 | 30.8% | 211.84 | 1.371.17 |
| 2 | EIB | 836.02 | 16.3% | 0.00 | 836.02 |
| 3 | IMF | 672.91 | 13.1% | 0.00 | 672.91 |
| 4 | EBRD | 563.51 | 11.0% | 0.00 | 563.51 |
| 5 | Paris Club | 509.20 | 9.9% | 509.20 | 0.00 |
| 6 | London Club | 231.06 | 4.5% | 231.06 | 0.00 |
| 7 | European Commission | 148.64 | 2.9% | 0.00 | 148.64 |
| 8 | Government of Spain | 138.60 | 2.7% | 0.00 | 138.60 |
| 9 | Saudi Fund | 79.18 | 1.5% | 0.00 | 79.18 |
| 10 | Gov. of Portugal | 62.57 | 1.2% | 0.00 | 62.57 |
| 11 | Other | 319.20 | 6.2% | 0.00 | 319.20 |
| 12 | TOTAL | 5,143.90 | 100.0% | 952.10 | 4,191.80 |

Source: Federal Ministry of Finance

FEDERATION OF BH CURRENT DEBT PORTFOLIO RISKS

4.1 Federation of BH Debt Portfolio Costs and Risks

Characteristics Table 4. FBH Costs and Risk Indicators as of 12/31/2014

Source: MTDS AT

| | Foreign debt | Domestic debt | Total debt | |
|--------------------|---------------------------------------|--------------------|---------------|------|
| Amount (USD mi | 3,228.5 ¹ | 519.4 ² | 3,747.8 | |
| Nominal debt as | % of GDP | 28.5 | 4.6 | 33.1 |
| Present value as | % of GDP | 23.9 | 4.6 | 28.4 |
| Debt costs | Average weighted interest (%) | 1.4 | 2.0 | 1.4 |
| Refinancing risk | ATM (years) | 7.6 | 2.6 | 6.9 |
| | Debt due in 1 year (% of total) | 5.7 | 35.0 | 9.7 |
| Interest rate risk | ATR (years) | 4.7 | 2.6 | 4.4 |
| | Debt re-fixing in 1 year (% of total) | 50.3 | 35.0 | 48.2 |
| | Debt with fixed interest (% of total) | 51.5 | 100.0 | 58.3 |
| FX risk | Forex debt (% of total) | | | 86.1 |
| LV 119K | ST Forex debt (% reserves) | | | 3.7 |

¹ Amount of foreign debt analyzed in AT is higher than data on Federation external debt on 12/31/2001 for around USD 30 million. Notification on withdrawal of Corridor Vc credit was received only after Treasury General Ledger was closed.

² Data on domestic debt are lower than data on FBH debt stock as of 12/31/2014 for around USD 37 million. This is the amount verified based on FFD and WC, but no bonds were issued against these obligations.

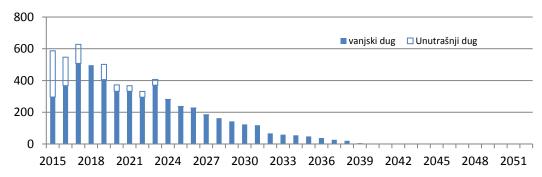
Total debt portfolio has relatively low weighted average interest rate of 1.4% (Table 4). In case of domestic debt, low weighted average interest rate is result of share of bonds issued against frozen foreign deposits and war claims with low interest rate, and T-bills. In case of external debt, average interest rate is low at 1.4% but it would probably rise in medium term, given that Bosnia and Herzegovina does not have any more access to highly concessional borrowing under IDA terms. Current low level of floating interest is expected to increase.

4.2 Refinancing Risk

Refinancing risk is higher for domestic debt and it is concentrated in the short to medium term, as evident from the skewed redemption profile (see Figure 1) is. Average time to maturity (ATM) for domestic debt is 2.6 years, compared to 7.6 years for foreign debt. Relatively shorter average maturity of domestic debt is explained by share of T-bills, short term bonds (2-3 years) and bonds with longer maturity, but with an amortizing structure. As a result, 35% of domestic debt matures in 1 year, compared to 5.7% of external debt.

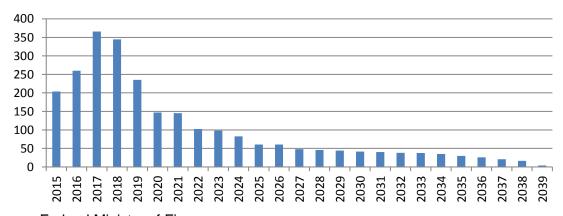
Figure 1. FBH Debt Redemption Profile as of 12/31/2014

BAM million



Source: MTDS AT

Figure 2. FBH Debt Redemption Profile with Floating Interest rate, BAM million



Source: Federal Ministry of Finance

Figure 3. FBH Debt to IMF Redemption Profile BAM million

250
200
150
100

Source: Federal Ministry of Finance

2016

2015

0

In order to mitigate this risk, it would be necessary to generate some liquidity reserves which would be used for debt service only. During 2016-2018 period FBH Government would try to extend maturity of total debt in order to reduce short term debt concentration, and make maximum use of concessional borrowing aimed to minimize refinancing risk.

2017

2018

2019

4.3 Interest Rate Risk

Interest rate risk is high for external debt. Around half of external debt and over a quarter of domestic debt have interest rates re-fixed within 1 year (Table 5). The reason for such a high percentage of external debt re-fixing is because nearly half of the external debt portfolio caries variable interest rate. Reference interest rate increase of 1 percentage point, would increase debt repayment for around USD 15 million per year. On average, it takes 4.7 years for interest rate to be re-fixed for external debt compared to 4.4 years for domestic debt.

Table 5. Federation of BH External Debt Interest Rate Structure

| Fixed interest rate level | Debt stock at end 2014 BAM mill. |
|---------------------------------|--|
| 0-1% | 1,655.44 |
| 1-2% | 571.89 |
| 2-3% | 180.99 |
| 3-4% | 125.94 |
| 5% and > | 142.33 |

| TOTAL | 2.676,59 |
|-------|----------|
| . •= | =.0,00 |

| Reference interest rate | Debt stock at end 2014 BAM mill. |
|----------------------------|-------------------------------------|
| 3M USDLIBOR | 3.91 |
| 3M EURIBOR | 3.94 |
| 6M EURIBOR | 1,671.75 |
| 6M USDLIBOR | 144.64 |
| 6M CIBOR | 0.32 |
| 6M STIBOR | 0.58 |
| 6MGBP LIBOR | 0.66 |
| KfW interest rate | 17.39 |
| IMF interest rate | 672.91 |
| TOTAL | 2,516.10 |

Table 6. Domestic Debt Interest Rate Structure

| Fixed interest rate level | Debt stock at end 2014 BAM mill. |
|---------------------------|-------------------------------------|
| 0-1% | 39.74 |
| 1-2% | 59.41 |
| 2-3% | 433.81 |
| 3-4% | 40.00 |
| 5% and > | 262.49 |
| TOTAL | 835,17 |

Source: Federal Ministry of Finance

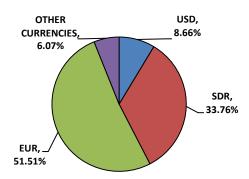
Accordingly, interest rate risk is very prominent, meaning that debt servicing cost change as market interest rates change. Measures aimed to reduce this type of risk would be to opt for credits with fixed interest rate, if creditor's terms and conditions allow so, and to increase share of fixed interest rate credits compared to credits with variable interest rate.

4.4 Foreign Exchange Risk

Currency composition of debt provides useful information on foreign exchange exposure of FBH debt profile, namely on debt portfolio foreign exchange risk. Share of foreign currency debt in debt portfolio compared to local currency debt shows that portfolio is subject to changes in case of exchange rate variations with negative implications on debt service costs.

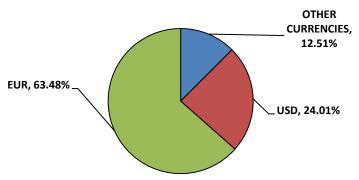
Main foreign currencies in FBH external debt structure are the following: EUR (51.51%), Special Drawing Rights - SDR (33.76%) and USD (8.66 %).

Figure 4. Debt Portfolio by Currency as of 31 December 2014



SDR³ decomposition into its component currencies shows that EUR share increases to 63.48% of total external debt, while USD in that case accounts for 24.01%. Thus, having in mind the above, as well as the fact that local currency, BAM, is pegged to Euro (via Currency Board) and that there no indications of abolishing Currency Board, it can be concluded that only around 36% of the external debt portfolio is subject to foreign exchange risk.

Figure 5. Composition of Debt By Currency after SDR Decomposition, as of 31 December 2014



Based on external debt service costs analysis, taking into account exchange rates at end 2013, as well as actual average exchange rate for debt servicing in 2014, it can be concluded that only based on USD/SDR exchange rate fluctuation in 2014, actual debt service costs were around BAM 6 million higher compared to 2013 exchange rate. If we compare exchange rate at end 2013 and end 2014, that difference would be even higher, at around Bam 10 million, as presented in the Table below.

Table 7. Debt Service Costs Difference depending on Exchange Rate BAM mill.

| Descriptio n | Debt service in 2014 (million) | Exchange rate 12/31/2013 | Amount in BAM mill. 12/31/2013 | Exchange rate 31/12/2014 | Amount in BAM mill. 31/12/2014 | Differenc e BAM mill. |
|-----------------|--------------------------------------|--------------------------------|--------------------------------------|--------------------------------|--------------------------------|-----------------------------|
| USD | 32.57 | 1.42 | 46.22 | 1.61 | 52.39 | 6.17 |
| SDR | 101.46 | 2.19 | 221.96 | 2.23 | 226.25 | 4.29 |
| TOTAL | | | 268.18 | | 278.64 | 10.46 |

³ Accounting currency of IMF and some other creditors. It includes 41.9 % USD (US Dollar), 37.4 % EUR, 9.4 JPY (JapaneseYen) i 11.3 % GBP (GB Pound).

In order to eliminate or reduce the said risk, wherever possible, and where creditors provide for choice of currency, Euro should be preferred currency. Since BH is under Stand-by arrangement with IMF, and that loan currency is SDR, it is necessary to consider carefully which creditor to choose when borrowing for public investments financing.

4.5 Contingent Liabilities

Contingent liabilities are financing obligations which FBH budget might incur based on issued guarantees or FBH Parliament decisions to take over obligations of Cantons, local communities or public companies of strategic importance for FBH.

4.5.1 Guarantees

In 2010 FBH Government issued guarantee for FBH Railways based on syndicated credit at the amount of BAM 78.9 million. As of 12/31/2014 outstanding debt under the said guarantee amounts BAM 51.9 million. Since credit under this guarantee is secured, on top of other instruments, also by regular cash flow transfer from FBH budget, which transfer is planned on regular basis in FBH budget pursuant to relevant laws, risk that this guarantee would be called is very low.

Besides the mentioned one, there is also external sub-guarantee issued to Tuzla Water and Sanitation Utility at the amount of Euro 5.8 million (external guarantee of Bosnia and Herzegovina). As of end 2014, outstanding debt under this sub-guarantee was Euro 2.32 million. It is not expected that any of the guarantees would be called during the period covered by this Strategy, therefore they are not included in the scope of the Strategy.

4.5.2 Taking Over Obligations Incurred by Final Beneficiaries

FBH Debt Law prescribed clearly that debt of cantons, cities, municipalities, and public companies shall not be a debt of FBH, and that FBH shall not be responsible for their debt. However, current financial position of some cantons, municipalities and public companies to which FBH on-lent credits, indicates potential difficulties in servicing their obligations towards FBH Government.

To that end, FBH Government will, if finds it necessary, make regulation on manner of taking over or rescheduling debts of final beneficiaries.

4. MACROECONOMIC FRAMEWORK

After nominal GDP growth of 2.6% and real GDP growth of 0.7% in 2013, nominal GDP in 2014 amounted BAM 18.1 billion with nominal growth of 0.6%, while real GDP in 2014 amounted also BAM 18.1 billion with real growth of only 0.6%. According to 2015 and 2016 projections, nominal GDP should show more intensive growth of 3.4% and 4.5%, respectively, while real GDP growth would be 2.6% and 3.2% in 2015 and

2016, respectively. Both nominal and real GDP would continue to grow in the following period resulting with 6.2% and 4.4% of nominal and real growth, respectively in 2018. In 2014, FBH reported deflation of 0.7% y/y. In the following years, stabile and moderate growth of food, oil and gas prices is expected, with estimated inflation in FBH of 1% in 2016, 1.3% in 2017, and 1.5% in 2018.

Table 8. FBH⁴ Macroeconomic Indicators for 205 – 2018

| Indicator | 2015 | 2016 | 2017 | 2018 |
|-------------------------------------|--------|--------|--------|--------|
| Public revenues (incl. grants) | 1.674 | 1.778 | 1.927 | 1.990 |
| Public sector primary expenditures | 1.940 | 2.159 | 1.722 | 1.512 |
| Public sector expenditures | 2.041 | 2.265 | 1.820 | 1.601 |
| Interest expenditures | 101 | 106 | 98 | 89 |
| FX reserves (mil. USD) ⁵ | 5.309 | 5.309 | 5.309 | 5.309 |
| GDP (nominal) | 18.712 | 19.559 | 20.665 | 21.945 |

Economic growth projected for countries in the region, BH and FBH economic partners, as well as EU countries should have positive impact on strengthening BH economic growth in 2015-1016. Taking in the account the above said, it is realistic to expect export and industrial production strengthening, which would stop and reverse the growing unemployment rate trend. Besides, it is also realistic to expect improved current and capital inflow from abroad.⁶

Expected gradual increase of number of employed people and nominal wages driven by production and export, growth of external current inflow, FDI, etc., should result in 2015 with final consumption and investments increase of 1.7% and 8.3%, respectively. In 2016, final consumption should grow by real rate of 1.8%, investment by 7.4%, followed by real export slowed down to the rate of 6%. On the other hand, high real import growth of 8.2% in 2014, which was substantially the result of increased import dependency, should be reduced in the next period. Therefore, significantly lower import growth is projected at 5.7% in 2015 and 4% in 2016. Given relatively stable growth of domestic demand, that strengthens economic growth in this period.

In 2017-2018 further gradual strengthening of BH economic growth is expected, primarily as result of better external environment. Accordingly, growth of 3.6% is projected for 2017, to be followed by further growth acceleration to 4.4% in 2018. Similarly to recent years, this growth acceleration is expected to be driven primarily by domestic demand with negligible foreign trade balance impact.

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⁴ FMF's estimates based on FBH's share in GDP based on 2013 Bosnia and Herzegovina Annual Bulletin, BH Statistic Agency, Sarajevo March 2014, and based on "2016-2018 BFP Macroeconomic Projections" Directorate for Economic Planning, Sarajevo March 2015.

⁵ Source of data: BH Central Bank Bulletin 4, 2014, March 2015

⁶ 2016-2018 Budget Framework Paper, Federation Ministry of Finance

Currency Board arrangement, established by the Law on BHCB continued to support monetary stability and maintain low inflation. International reserves remained at comfortable level during 2014. Remittances continue to be significant source of financial inflow for BH. They held up during the crisis and remained major part of foreign financing amounting 14% of GDP in 2014. Primary public expenditures, including capital expenditures, would be increased for 32% in 2015 compared to 2014, a year before they start dropping, and thereafter they would amount average 11% of GDP during the projected period. Main risks for this projections to be materialized are related to (non) materialization of assumptions related to external sector in terms of economic growth of the trading partners, raw material prices in international market, weather conditions, etc.

Table 9. Bosnia and Herzegovina: Macroeconomic Risks and Implications on Debt Management Strategies ⁷

16

⁷ World Bank Group

| Risk by Sector | Likelihood of Risk Event | Implication for Debt Management |
|---------------------------------|-----------------------------|---|
| Real Sector | | |
| -Growth | Medium | Weak external demand or higher financial volatility could inhibit potential growth, which would cause difficulties in fiscal policy and result in higher borrowing. |
| Fiscal Sector | | |
| -Debt sustainability | Medium | Pressures on increasing expenditures and capital investments would add to financing needs. Moreover, contingent liabilities from either the banking sector or SOEs could lead to higher gross financing needs and financing costs, and deterioration in the fiscal balance. May need to resort to higher domestic borrowings. |
| Balance of Payments | | |
| -External demand/Exchange rate | Medium to high | Slow global growth, especially in EU, may hinder exports and FDI, putting pressure on foreign reserves given the currency board arrangement. May need to access external borrowings |
| Inflation | | |
| -Commodity prices/Exchange rate | Medium to low | Current deflation if trend does not reverse could bring further problem in already high unemployment rate. A higher inflation rate could increase nominal debt service cost. |
| Financial System | | |
| -Overall condition | Medium | Banking agencies have performed stress tests on some of the smaller banks that did not perform well and need to increase their capital reserves. ⁸ |

5. SOURCES OF FINANCING

This section evaluates sources of funding available to FBH Government and assesses their potential over 2016-2018 period.

5.1. External Sources of Financing

FBH Government's external debt portfolio shows that concessional loans (with grant element larger than 35%) account for largest share of total external debt, while main sources of such financing (over 73%) are multilateral institutions. Identified sources of financing available for FBH Government and related risks are presented in Table 10.

External financing available for BH over 2016-2018 period is estimated at BAM 3.0 billion, of which 49% would come from concessional borrowing. Taking into account costs and risks of contracting such loans, FBH Government would continue policy of contracting through BH from multilateral institutions, and estimates indicate that 65% of needs could be met by financing from multilateral sources. However, since BH has

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⁸ A further review of NPLs will be undertaken jointly with the IMF and a number of measures will be implemented in coordination with IMF staff.

no more access to IDA resources, external financing portfolio would shift towards less concessional financing.

For the next 3 years, FBH Government secured contracting of financing with multilateral and bilateral creditor which would cover significant portion of development programs and project needs. At end 2014 there was BAM 889.10 million contracted but not yet disbursed, another BAM 1.9 billion is under approval procedure. Other external financing sources are likely to be quasi-concessional. They comprise of bilaterals beyond the identified creditors to finance certain infrastructure projects such as roads and motorway construction and energy facilities. In terms of budget support, IMF and World Bank remain primary sources of financing in the next period. During 2016-2018 period, FBH Government does not plan accessing international capital market through issuance of bonds.

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Table 10. FBiH: Overview of External Sources of Financing (2016- 2018)

| | Creditor | Interest rate | Grace period | Maturity | Currency | Disburs. USD mill. | % | Risks |
|-----|------------------|--|-----------------|----------|----------|--------------------------|-------|---|
| 1 | IBRD | Fixed or variable | 5-10 | 18-30 | EUR | 60.67 | 7.84 | Refixing for variable |
| 2 | EIB | Fixed or variable | 4-5 | 25 | EUR | 173.28 | 21.91 | Refixing for variable |
| 3 | MMF ⁹ | Variable | 4 | 10 | SDR | 192 | 24.28 | Refixing, refinancing and FX risk |
| 4 | EBRD | Fixed or Variable, 6-m EURIBOR+1% | 3-5 | 12-15 | EUR | 62 | 7.84 | Refixing risk |
| 5 | Kuwait Fund | Fixed, 2% | 5 | 25 | KWD | 0 | 0 | FX risk |
| 6 | Saudi Fund | Fixed, 1% - 2% | 5 | 25 | SAR | 27.3 | 3.45 | FX risk |
| 7 | OPEC Fund | Fixed, 2% | 10 | 20 | USD | 29.18 | 3.69 | FX risk |
| 8 | CEDB | Fixed or variable | 5 | 10 | EUR | 48.64 | 6.15 | Refixing for variable |
| 9 | IFAD | Fixed, 0,75% | 10 | 30 | SDR | 7.6 | 0.96 | Refixing, refinancing and FX risk |
| Õ10 | Austria | Fixed | 3 do 7.5 | 10 - 15 | EUR | 18.57 | 2.35 | |
| 11 | KfW | Fixed | 2.5 - 10 | 12 - 20 | EUR | 171.46 | 21.68 | |
| | TOTAL | | | | | 790.72 | 100 | |

Source: Federation Ministry of Finance

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⁹ This refers to Extended Fund Facility (Extended Fund Facility)

5.2. Domestic Sources of Financing

Domestic market for government debt is relatively small and underdeveloped, however there is growing trend adjusting to FBH Government financial needs.

■ Obveznice (tržišne) ■ Trezorski zapisi

Figure 6. Debts Stock based on Market Securities 2011-2014

Source: Federal Ministry of Finance

Domestic commercial banks are currently largest investors in FBH Government T-bills and bonds. However, since banks keep the securities purchased at primary market until maturity, they are not traded at secondary market. At end 2014, 100% T-bills issued by FBH Government were owned by domestic commercial banks, the ones with headquarters in FBH. Breakdown of T-bill owners at end 2014 is presented in Figure 7 below, showing well-balanced distribution of exposure to this instrument of FBH Government.

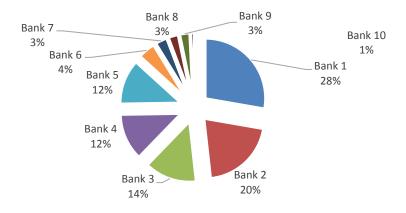
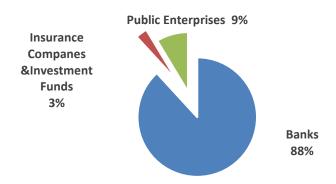


Figure 7. Breakdown of T-Bills Owners at end 2014 by Banks

Source: Federal Ministry of Finance

Although commercial banks are most important investors in bonds as well, interest for investments in long-term instruments is expressed also by non-banking sector (investment funds, insurance companies, etc.). As opposed to T-bills, breakdown of owners of FBH market bonds at end 2014, presented in Figure 8 shows unbalanced interest by banks and other investors for investment in market bonds.

Figure 8. Breakdown of FBH Bonds at end 2014 by Sectors



Source: Federal Ministry of Finance

At end 2014, banking sector held 88% of FBH Government bonds issued by auctions, public enterprises 9%, while remaining 3% was owned by investment funds and insurance companies. The said structure shows that largest investors in FH Government bonds are domestic commercial banks.

This could be also explained by the fact that FBH issued long-term bonds against frozen foreign deposits and war claims. These bonds are traded at secondary market, and original owners sold them at discount rate thus investors get significant yield (above 8%), resulting with lower interest to invest in FBH Government market bonds which bring significantly lower yield.

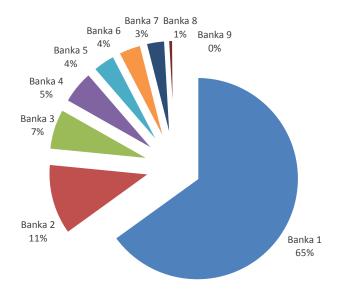
Overview of foreign frozen deposits and war claims bonds is presented in Figure 9.

Figure 9. Redemption Profile of FBH Debt based on Frozen Foreign Deposits and War Claims.



As a significant portion of frozen foreign deposits bonds matures in 2015 and 2016, that would enable development of secondary bonds market, which was for the time being hindered by presence of these instruments.

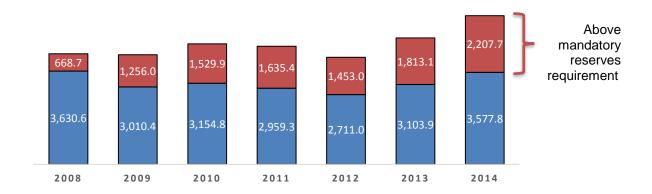
Figure 10. Breakdown of FBH Bonds Owners at End 2014 by Banks



Source: Federal Ministry of Finance

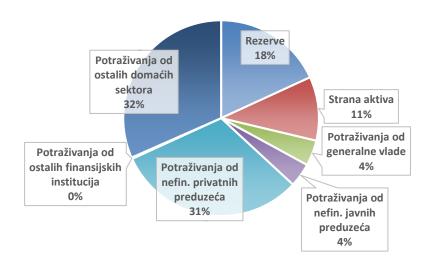
Taking into account that domestic debt market is currently bank-centric, as well as standstill in banking system reform, and other constraints affecting investor base expansion, potential sources of financing would mainly depend on banking sector liquidity, composition of deposits maturity, and banks investment policy. Currently, banks have excess liquidity, measured above reserve requirement, in BAM deposited in Central Bank. These funds earn low interest due to low interest rates in EUR to which BAM is pegged. At end 2014, excess liquidity amounted above BAM 2.2 billion, and Figure 11 shows trends of reserves deposited by commercial banks at BHCB. Reason of such high amount of commercial banks' reserves might be explained by high NPL level, amounting around 15%.

Figure 11. Commercial Banks' Reserves at BHCB



However, almost all banks are foreign-owned with strict exposure limits for Entity Governments. Out of 27 banks operating in BH, only 10, those ones with headquarters in FBH, are active participants in FBH Government T-bills and bonds auctions. However, for FBH Government these exposure limits are not hard constraints and continuing modest domestic borrowing program, based on current market debt refinancing through T-bills and bonds, can be implemented without major problems. At end 2014, FBH banks assets amounted BAM 17,382 million, and breakdown is presented in the Figure below.

Figure 12. FBH Banks' Assets at end 2014



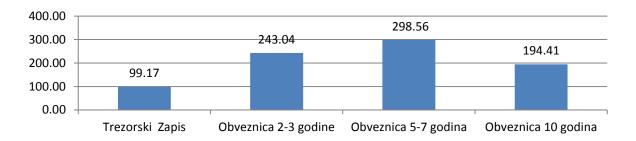
Aimed to ensure further development of domestic securities market and borrowing transparency, FBH Government would continue with regular monthly auctions of T-bills and auctions of bonds several times a year. Monthly issuance of T-bills (3, 6, 9, and 12 month maturity) would vary depending on liquidity management needs. In terms of bonds, besides existing maturity of 2, 3 and 5 years, depending on investors' interest, FBH Government would try to start issuing 7 and 10 years bonds. Costs and risks of these instruments are summarized in Table 9.

Table 11. Domestic Sources of Financing

| | T-bills | FBH Bonds | | | | |
|-----------------|---|---|--|--|--|--|
| Structure | Discount, bullet payment | Fixed or variable interest, bullet payment | | | | |
| Characteristics | Simple, high demand | Demand meets current needs, market development would affect demand | | | | |
| Costs | Low, except in liquidity crisis or larger volume issuance | Growing volume and increased maturity could have higher costs | | | | |
| Risks | Refixing and refinancing risk | Risks depend on maturity and include refinancing risk, and in case of variable rates also refixing risk | | | | |

Figure 13. Stock of Debt based on FBH securities at end 2014

BAM mill.



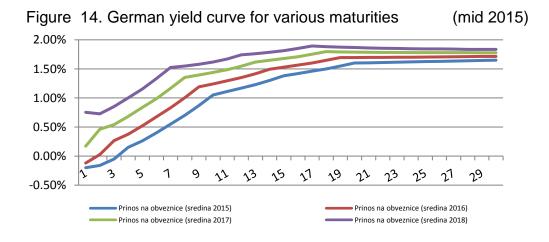
6. PRICING ASSUMPTIONS AND DESCIPTION OF SHOCK SCENARIOS

Four scenarios are produced, baseline and three shock scenarios with assumed interest rates and exchange rates during 2015/2018. Three risk scenarios are analyzed, including two stand-alone for interest rates and exchange rates, and one combined interest rate and exchange rate risk scenario.

Even though this is becoming a common practice in the region, BH has not issued any Eurobonds. Given that Federation of BH, namely Bosnia and Herzegovina on behalf of the Entity, does not intend to access international financial market during the observed period, no cost assessment is done for such an issuance.

Estimates of expected yields and forward yields on BH bonds issued in Euro (Figure 14) are made based on current yields for Eurobonds issued by Albania and Montenegro as countries with similar credit rating as BH, as well as German bonds as the lowest risk reference bonds in the Euro region. BH's credit rating is B and B3 by S&P and Moody's. In the region, Albania has ratings B and B1, respectively, while Montenegro has slightly better rating BB- and Ba3, respectively.

The said estimates, given single economic space, are accepted in consultation with RS Ministry of Finance, Brcko District Finance Directorate and BH Ministry of Finance and Treasury, and used for the analysis. The assumption is that spread for 6m EURIBOR (6m LIBOR) and German 1 year bond (US 1year bond) would be maintained the same throughout the period. For credits at fixed interest rate the same methodology is used as for LIBOR and EURIBOR rates assumptions.



12.00%
10.00%
8.00%
6.00%
4.00%

Prinos na Euro obveznice BiH sredina 2015

Prinos na Euro obveznice BiH sredina 2016

Figure 15. Estimated BH Eurobond yield curve (mid 2015)

BH currency is pegged to Euro through Currency Board arrangement, thus main exchange rate risk in the debt portfolio is volatility of Euro against other foreign currencies, mainly USD. USD/Euro exchange rate has historically been relatively volatile (Figure 16).¹⁰

Prinos na Euro obveznice BiH sredina 2018

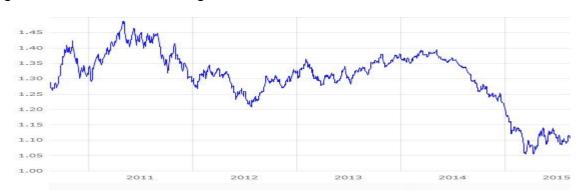


Figure 16. USD/Euro Exchange Rate

Prinos na Euro obveznice BiH sredina 2017

Forward USD/Euro rate can be mechanically calculated from yield curves through inflation differentials. This would indicate strengthening of Euro and BAM compared to USD. However, keeping in mind market view, history and IMF forecasts, conservative approach was taken for the Strategy development, assuming fixed ratio between Euro and USD for the whole period, as the Figure 14 shows that after Euro depreciation compared to USD, exchange rate of those currencies was stabilized.

7.1. Description of Shock Scenarios

This Section analyzes four strategies exposed to shocks (interest rate and exchange rate) in order to determine relation between costs and risks for each strategy.

1) Exchange rate shock: (assuming 7.2% of baseline)

¹⁰ IMF inflation forecasts for Eurozone and US implied a slight strengthening of Euro compared to USD amounting to 1,5% for the period 2015-17. However, market participants felt that Euro will weaken against USD due to reduction of monetary stimulus in US and increase of monetary stimulus in Eurozone. During the past three months Euro weakened against USD by more than 7 percent.

- Small shock: 20% depreciation compared to USD
- Big shock: 30% depreciation compared to USD

2) Interest rate shock:

- Small shock: 3.0% on short-term domestic and external instruments (1.5% on 2-3y bonds) in year 2 of the period (2016),
- Big shock: 4.0% on short-term external and domestic instruments (2% on 2-3y bonds) in year 2 of the period (2016).
- 3) Combination of two small shocks (exchange rate and interest rate)

Table 12. Stylized Instruments of FBH Debt Portfolio

| Instrument | Type of instrument | Fixed or variable | Concessional or market | Maturity (years) | Grace (years) | Type of Currency | Currenc y |
|------------|------------------------------|-------------------|------------------------|---------------------|------------------|---------------------|--------------|
| USD_1 | Concessional USD Fixed | Fix | Concessional | 20 | 5 | Foreign | USD |
| EUR_2 | Concessional EUR Fixed | Fix | Concessional | 20 | 5 | Foreign | EUR |
| USD_3 | Concessional USD Variable | Var | Concessional | 15 | 4 | Foreign | USD |
| EUR_4 | Concessional EUR Variable | Var | Concessional | 15 | 4 | Foreign | EUR |
| USD_5 | MMF SBA USD Variable | Var | Concessional | 10 | 5 | Foreign | USD |
| BAM_6 | T-bill DX Fixed | Fix | Market | 1 | 0 | Domestic | BAM |
| BAM_7 | 3y T-bond DX Fixed | Fix | Market | 3 | 2 | Domestic | BAM |
| BAM_8 | 5 T-bond DX Fixed | Fix | Market | 5 | 4 | Domestic | BAM |
| BAM_9 | 10y T-bond DX Fixed | Fix | Market | 10 | 9 | Domestic | BAM |
| BAM_10 | 2y T-bond DX Fixed | Fix | Market | 2 | 1 | Domestic | BAM |
| BAM_11 | 7y T-bond DX Fixed | Fix | Market | 7 | 6 | Domestic | BAM |
| ,BAM_12 | Commercial credit Fixed | Fix | Market | 7 | 1 | Domestic | BAM |

Based on analysis of FBH debt portfolio, macroeconomic assumptions for the observed period, as well as potential sources of financing, FMF developed several alternative scenarios and borrowing strategies and defined desirable borrowing strategy for the period 2016-18, with risk indicators of the selected portfolio (presented in Table 13).

Table 13. Risk Indicators of Current Portfolio and Selected Strategy

| | Risk indicators | 2014 | 2018 | |
|------------------------------------|--|----------------------|-------------------|--|
| | | Current portfolio | Selected strategy | |
| Nominal debt (| % of GDP) | 33.3 | 30.8 | |
| Present value | (% of GDP) | 27.0 | 25.8 | |
| Weighted average interest rate (%) | | 1.33 | 2.1 | |
| D. ('' | ATM External debt (years) | 7.6 | 7.3 | |
| Refinancing risk | ATM Internal debt (years) | 2.6 | 3.1 | |
| | ATM Total debt (years) | 6.9 | 6.7 | |
| Interest rate risk | ATR (years) | 4.4 | 4.2 | |
| | Debt refixing in1 year (% of total) | 48.2 | 44.0 | |
| | Debt at fixed interest rate (% of total) | 58.3 | 61.4 | |
| FX risk | FX debt (% of total) | 86.1 | 88.8 | |
| | ST FX debt (% of reserves) | 3.7 | 4.9 | |

7.2. Description of Alternative Borrowing Strategies

FBH's external borrowing is mostly undertaken to finance its development programs and –budget support. In most cases, these projects come with already identified creditors with known terms, thereby limiting the ability to negotiate the financial conditions of the loans. These constraints combined with the ones described for domestic financing will need to be managed in order to mitigate risks previously identified. Within this context, four strategies have been elaborated, as follows:

Strategy 1 (S1) Increase Euro variable instrument with development of domestic capital market: Borrowing requirements are driven by the need to finance the expected development programs and budget support. Development project financing until 2018 is estimated at BAM 1.723 million. Certain external sources of financing have tentatively been identified. Development project should be financed under terms which mainly include variable interest rate in Euro. Budget support would be financed from current resources, IMF and T-bills, as well as issuing 3-year, 5-year and 7-year T-bonds at the volume which would ensure further development of domestic market.

Strategy 2 (S2) Increase Euro fixed instrument, maintain domestic market development and increase IMF maturity: This Strategy envisages borrowing from external creditors at fixed interest rate, wherever possible in Euro. Budget support would be financed from current resources, IMF starting in 2016, with softer terms – longer grace period and principle maturity, through T-bills issuing, as well as issuing 3-year, 5-year and 7-year market bonds.

Strategy 3 (S3) Intensive development of domestic capital market: Since one of FBH Government debt management objectives is development of domestic capital market, this Strategy envisages to increase share of domestic financing and to stop financing budget support from external sources. This strategy is expected, over time, to increase

share of domestic borrowing through existing instruments, and issuing 10-year market bonds.

Strategy 4 (S4) *Status quo*: The last Strategy is continuation of borrowing undertaken in 2014. It implies larger share of sources with variable interest rate in Euro and USD. Remaining deficit would be financed by issuing securities at domestic capital market (T-bills, 3-year and 5-year bonds), and continuing practice of Stand-by Arrangement with IMF.

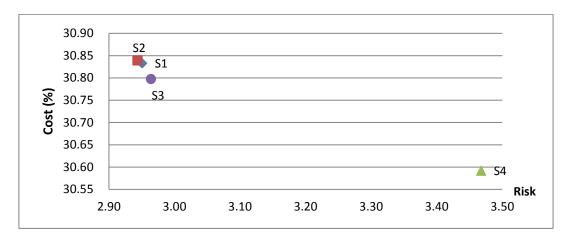
7.3. Cost and Risk Analysis of Alternative Borrowing Strategies

The performance of the selected four strategies was assessed under both baseline and shock scenarios. Two key cost indicators, debt/GDP and interest payments/GDP were computed to determine relations between cost and risk in various strategies. The debt/GDP ratio is important when analyzing the changes in the size of the outstanding debt due to exchange rate changes as it takes into account the valuation effects. Interest payments/GDP assesses each strategy's potential impact on the government's budget. Risk for a given strategy is the difference between its cost outcome under a risk scenario i.e., under shock scenario and under the baseline. The maximum risk outcome across the three stress scenarios described above is used to compare the risk associated with each of the strategies.

Regarding Debt/GDP, debt service cost is most sensitive on interest rate change. Debt with high interest rates generates over time higher debt costs, namely increases refinancing needs. S4 is least costly (Figure 18) because of debt structure with dominant external borrowing at variable rate, compared to the other three strategies which have significantly higher percentage of fixed borrowing and domestic borrowing, therefore they are more costly due to higher interest rates. S3 is more costly as it envisages intensive borrowing at domestic capital market, increasing share of domestic debt in total debt. S2 has lowest risk compared to the other strategies and has slightly higher costs compared to S2 and S3. Although S1 and S2 have same ratio of external and domestic debt, S2 has higher share of borrowing at fixed interest rate, therefore it is somewhat more costly.

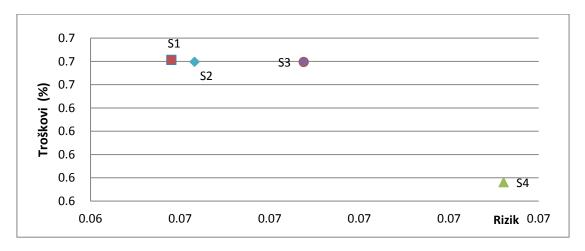
Within all four strategies, highest portfolio risk is currency risk, which is most sensitive to potential appreciation of foreign currencies (30% shock). Therefore, the portfolio with highest share of external debt with highest percentage of non-Euro currency is most risky. S2 is least risky strategy due to high share of domestic borrowing and Euro in external debt. S4 is most risky as it has low level of domestic debt and high share of non-Euro currencies in external debt. S1 and S2 have approximately the same level of risk as they have the same share of domestic and external debt, as well as the same share of Euro and non-Euro currencies in external debt.

Figure 17. Debt as Share of GDP



Regarding interest/GDP, costs and risks are defined by interest rate composition in the portfolio and credit terms of new borrowing in the observed period. S4 has lowest interest costs (Figure 18), since it has highest share of external borrowing at variable interest rate. S1 and S2 are most costly due to high percentage of domestic borrowing and higher interest rates on domestic borrowing. S1 has slightly higher costs than S2 due to higher volume of borrowing in bonds, but it is less risky due to fixed interest rates. S4 is the most risky one, as it has highest volume of borrowing at variable interest rate and it is subject to higher re-fixing risk. S2 carries lower risk, due to higher share of fixed interest rates in Euro and domestic debt, therefore it is least exposed to interest rate risk and increase in interest costs.

Figure 18. Interest Costs as Share of GDP



7.4. Risk Indicators of Alternative Strategies

Given that Debt/GDP and Interest/GDP ratios are not sufficient to evaluate risks, other indicators such as refinancing risk, interest rate risk and currency risk were analyzed (Table 14).

Table 14. Risk Indicators by Strategies

| Risk indicators | | 2014 Er | | End | d 2018 | | |
|------------------------------------|--|-------------------|------|------|--------|------|--|
| | | Current portfolio | S1 | S2 | S3 | S4 | |
| Nominal debt (% of GDP) | | 33.3 | 30.8 | 30.8 | 30.8 | 30.6 | |
| Present value (% | % of GDP) | 27.0 | 25.8 | 25.8 | 26.1 | 26.2 | |
| Weighted average interest rate (%) | | 1.33 | 2.1 | 2.1 | 2.1 | 1.8 | |
| Definencia | ATM External debt (years) | 7.6 | 7.3 | 7.3 | 7.2 | 6.9 | |
| Refinancing risk | ATM Internal debt (years) | 2.6 | 3.1 | 3.1 | 3.4 | 2.4 | |
| | ATM Total debt (years) | 6.9 | 6.7 | 6.7 | 6.7 | 6.6 | |
| | ATR (years) | 4.4 | 4.1 | 4.2 | 3.8 | 3.2 | |
| Interest rate | Debt refixing in1 year (% of total) | 48.2 | 44.6 | 44.0 | 50.3 | 61.3 | |
| | Debt at fixed interest rate (% of total) | 58.3 | 60.8 | 61.4 | 55.2 | 43.8 | |
| 5 77 | FX debt (% of total) | 86.1 | 88.8 | 88.8 | 88.0 | 94.1 | |
| FX risk | ST FX debt (% of reserves) | 3.7 | 4.9 | 4.9 | 4.9 | 4.9 | |

Source: MTDS AT

Comparing risk indicator of the presented strategies with risks of current debt portfolio, we see decrease of debt share in GDP, although county is graduating from IDA, which is supposed to increase that share, rather than reduce it. Average interest rate in all the strategies is higher than current for the said reasons (not eligible to borrow at IDA terms any more), but for the preferred strategy it is lower compared to the other alternative strategies. When we compare the strategies with each other, we can see that S2 has longest Average Time to Maturity (ATM) for external debt, because IMF terms have been extended. S2 has highest volume of borrowing at fixed rates, therefore reduces refixing risk compared to the other strategies, resulting in ATR higher than ATR for other strategies. S2 also reduced percentage of debt to be refixed in 1 year (from 48.25 to 44.0%), while it is significantly higher for the other strategies. Level of debt with fixed rate would be increased to 61.4% in S2, which is more favorable compared to the other strategies. Although S2 has highest share of external borrowing, currency risk exposure is not high, due to high share of Euro in portfolio, which would be increased from 51% in 2014 to 60% in 2018.

Figure 19. Interest Rate/GDP in the Proposed Strategies (Shock Scenarios)

Interest costs as share of GDP

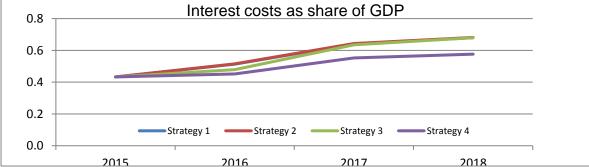


Table 15. Financing Needs under <u>Strategy 2</u> in BAM mill by Instruments

| Total disbursement by instruments | | 2015 | 2016 | 2017 | 2018 |
|-----------------------------------|----------|------|------|------|------|
| Concessional USD Fixed | External | 159 | 150 | 54 | 17 |
| Concessional EUR Fixed | External | 134 | 313 | 157 | 82 |
| Concessional USD Variable | External | 26 | 0 | 0 | 0 |
| Concessional EUR Variable | External | 296 | 317 | 118 | 114 |
| IMF SBA USD Variable | External | 0 | 115 | 112 | 103 |
| T bill DX Fixed | Domestic | 80 | 102 | 108 | 40 |
| 3y T bond DX Fixed | Domestic | 80 | 41 | 32 | 27 |
| 5y T bond DX Fixed | Domestic | 96 | 70 | 75 | 0 |
| 10y T bond DX Fixed | Domestic | 0 | 0 | 0 | 50 |
| 2y T bond DX Fixed | Domestic | 0 | 0 | 0 | 0 |
| 7y T bond DX Fixed | Domestic | 72 | 0 | 0 | 0 |

8. DEBT MANAGEMENT GUIDELINES

This Chapter describes guidelines for proactive management of FBH Government debt portfolio over medium-term. Aimed to secure budget liquidity financing, meet demand and increase liquidity of government securities, in the next period FBH Government would continue issuing T-bill and bonds in volume and timing in line with this MTDS. In 2015 it is planned to issue domestic securities at total volume of BAM 630 million, of which: BAM 320 mill. T-bills; BAM 100 mill 3y bonds; BAM 120 mill. 5y bonds; and BAM 90 mill. 7y bonds.

8.1 Overall Debt Portfolio Composition

Debt portfolio composition would seek to minimize overall risks and continue developing domestic market of government debt.

Guidelines for overall debt portfolio composition are the following:

- Maintain BAM and Euro debt above 60% of total debt portfolio
- Maintain share of fixed debt above 50% of total debt portfolio
- Maintain average time to maturity of total debt above 6.5 years.

8.2 Borrowing Guidelines

Main debt portfolio guidelines are the following:

- When planning borrowing take care to maintain balanced repayment per year in order to minimize liquidity risk;
- In order to reduce currency risk maximize borrowing in Euro and BAM;
- Debt refinancing percentage: debt maturing within 12 month/one year should amount maximum 20% of total outstanding debt;
- Maintain debt portfolio average weighted maturity above 6.5 years.

8.3 Quantitative Strategic Targets

Based on current macroeconomic framework (2016-2018 BFP), if such borrowing strategy is followed, at end 2018 FBH debt portfolio and risk indicators could be expected to be as follows:

- Average time to maturity (ATM) should not be below 6.5 years
- Average time to re-fixing (ATR) should not be less than 4 years
- Share of interest rate service should be less than 8% of revenues

Targets defined by this FBH Debt Management Strategy are sensitive to change of assumptions on growth, fiscal deficit and availability of the envisaged sources of financing, primarily concessional ones.

9. COMMUNICATION WITH MARKET

FMF would improve communication with market stakeholders through regular meetings and publishing key information on debt and government policies.

9.1. Medium-Term Debt Management Strategy

FMF would continue preparing Medium-Term Debt Management Strategy which follows timeframe of Budget Framework Paper and Public Investments Program. MTDS would be reviewed and updated on annual basis.

9.2. Annual Borrowing Plan

Upon Budget adoption, FMF would prepare and disclose Annual Borrowing Plan which would include general data on borrowing plan for the following fiscal year, as well as data on capital investment and budget support credits disbursement and securities issuing plan.

9.3. Quarterly Auctions Calendar

At the end of each quarter, FMF would publish at its web site FBH Government securities auctions calendar for the following quarter. Auctions calendar would include details on T-bills and bonds issuance, auction date, settlement date, instrument maturity and tentative volume of issuance.

9.4. Notification on Auctions

Public call to participate in FBH Government securities auctions would be published at FMF web site minimum 7 days ahead of the scheduled auction. Auction result would be published at FMF, SASE, and agent's web sites immediately after the auction.

9.5. Publications

FMF would publish at its web site quarterly information on government's debt and guarantees, including information on government debt and guarantees servicing plan for the following quarter and debt repayment made in the previous quarter. FMF web site would also include any other relevant information, including:

- Relevant legislation on debt and borrowing
- Medium-Term Debt Management Strategy
- DSA (Debt Sustainability Analysis)
- Reports on debt
- Annual borrowing plan
- Quarterly auction calendar
- Notification on auctions and auction results
- Quarterly report on FBH debt stock

Information on BH credit rating and financial sector in BH could be found at Bosnia and Herzegovina Central Bank web site: http://www.cbbh.ba, and additional information and data on BH debt at BH Ministry of Finance and Treasury's web site: http://www.mft.gov.ba.