



# HUNGARY

May 2017

## 2017 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR HUNGARY

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2017 Article IV consultation with Hungary, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its May 10, 2017 consideration of the staff report that concluded the Article IV consultation with Hungary.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on May 10, 2017, following discussions that ended on March 8, 2017, with the officials of Hungary on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on April 19, 2017.
- An **Informational Annex** prepared by the IMF staff.
- A **Staff Statement** updating information on recent developments.
- A **Statement by the Executive Director** for Hungary.

The document listed below has been or will be separately released.

### Selected Issues

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### **IMF Executive Board Concludes Article IV Consultation with Hungary**

On May 10, 2017, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation<sup>1</sup> with Hungary.

Hungary has succeeded in achieving several consecutive years of high growth and debt reduction. The pick-up in growth was supported by high utilization of EU funds, a favorable external environment (low interest rates and commodity prices, and strong export growth), as well as accommodative monetary and fiscal policies. However, despite robust private sector consumption, GDP growth temporarily slowed in 2016 to an estimated 2 percent, mainly because of a decline in investment. This was mostly due to a slowdown in the disbursement of EU funds, related to the beginning of a new program period. Inflation was subdued for most of 2016, mainly due to low fuel prices, but picked up towards the end of the year, facilitated by strong consumption and increased energy prices. At the same time, unemployment continued its steady decline.

The government outperformed its 2016 fiscal target. The slowdown in EU funds disbursement coincided with an improvement in the collection of social security contributions and corporate income tax. Interest and EU funds-related outlays declined, but other expenditures increased, including on the wage bill and goods and services. Consequently, staff estimates that the general government deficit declined to about 1.7 percent of GDP in 2016<sup>2</sup>, accompanied by a worsening of the structural fiscal balance.

The Magyar Nemzeti Bank (MNB) continued to ease its monetary policy stance in 2016. The base rate was lowered in three steps from 1.35 percent in March 2016 to 0.9 percent in May and the interest rate corridor was narrowed while, the 3-month money market (BUBOR) rate declined by about 80 basis points since July 2016. In addition, the MNB continued to gradually adjust its conventional and unconventional monetary policy instruments, including the Funding for Growth Scheme, which expired at end-March 2017.

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<sup>1</sup> Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

<sup>2</sup> This preliminary figure has been revised slightly to 1.8 percent of GDP after the staff report was issued.

Going forward, output growth is projected to accelerate to about 2.9 percent this year. The recovery in EU funds disbursement and related investment, together with planned projects in the automotive industry, will be the main drivers of growth. In addition, private consumption will remain strong as the wage increases will continue to boost disposable income. Unemployment is projected to continue its downward trend, while inflation is forecast to slightly exceed its 3 percent target by early 2018 but remain below the upper boundary of the tolerance band. Over the medium term, ensuring the effective utilization of EU funds and advancing structural reforms is key to boosting the potential of the economy.

### **Executive Board Assessment<sup>3</sup>**

Executive Directors welcomed Hungary's continued strong economic performance underpinned by supportive policies, a favorable external environment, and higher utilization of EU flows. The unemployment rate has fallen and external debt has declined. However, Directors noted that the still high external and public debt levels call for rebalancing the policy mix and advancing structural reforms to boost potential growth and ensure debt sustainability.

Directors encouraged the authorities to pursue growth-friendly consolidation for faster deficit and debt reduction. They noted that priority should be given to enhancing the quality of expenditure and composition of revenue. They called for a gradual reduction in the elevated wage bill as part of a comprehensive administrative reform, and to rationalize and better target subsidies. They welcomed the successful efforts to improve tax compliance and encouraged action to further improve revenue by reducing exemptions and the number of items subject to preferential VAT rates.

Directors supported the current monetary policy stance, but highlighted the need to monitor inflationary pressures which may require a gradual removal of accommodation in the near term. They noted that in view of the improved economy and banking sector, and with new lending resuming, the usual monetary policy transmission mechanisms are likely to be restored. Therefore, Directors recommended a gradual phasing out of unconventional monetary and credit policies. They called for sustained efforts to strengthen the financial sector and reduce risks, especially monitoring of risks from higher real estate prices.

Directors emphasized that it is important to enhance the business environment by streamlining regulations and enhancing transparency and policy predictability. They called for stronger efforts to address skill-mismatches and strengthen training to improve productivity, especially of participants in the public works schemes. In this connection, they

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<sup>3</sup> At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summing ups can be found here: <http://www.imf.org/external/np/sec/misc/qualifiers.htm>.

welcomed the recent steps taken to encourage participants in these schemes to move to the primary labor market. Measures to increase female participation will also be helpful. Directors underscored that ensuring effective utilization of EU funds will be key to supporting growth.

### Hungary: Selected Economic Indicators, 2012–18

|  | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   |
|--|--------|--------|--------|--------|--------|--------|--------|
|  |        |        |        |        | Est.   | Proj.  |        |
| <b>Real economy</b>  |        |        |        |        |        |        |        |
| Real GDP (percentage change)   | -1.6   | 2.1    | 4.0    | 3.1    | 2.0    | 2.9    | 3.0    |
| Total domestic demand (contribution to growth)                             | -2.9   | 2.1    | 4.2    | 1.3    | 1.4    | 2.5    | 2.7    |
| Private consumption  | -1.4   | 0.3    | 1.3    | 1.8    | 2.5    | 2.0    | 1.9    |
| Government consumption   | 0.0    | 0.6    | 0.9    | 0.1    | 0.0    | 1.2    | 0.3    |
| Gross fixed investment   | -0.6   | 1.9    | 2.1    | 0.4    | -3.3   | 1.2    | 1.0    |
| Foreign balance (contribution to growth)                                   | 1.3    | 0.0    | -0.2   | 1.8    | 0.6    | 0.4    | 0.3    |
| CPI inflation (average)  | 5.7    | 1.7    | -0.2   | -0.1   | 0.4    | 2.5    | 3.2    |
| CPI inflation (end year)   | 5.0    | 0.4    | -0.9   | 0.9    | 1.8    | 2.8    | 3.0    |
| Unemployment rate (average, ages 15-64)                                    | 11.1   | 10.2   | 7.8    | 6.8    | 5.1    | ...    | ...    |
| Gross fixed capital formation (percent of GDP)                             | 19.4   | 20.9   | 21.8   | 21.7   | 17.8   | 18.6   | 19.0   |
| Gross national saving (percent of GDP, from BOP)                           | 21.1   | 24.8   | 23.9   | 25.0   | 22.7   | 22.9   | 22.6   |
| <b>General government 1/</b>   |        |        |        |        |        |        |        |
| Overall balance  | -2.3   | -2.6   | -2.1   | -1.6   | -1.7   | -2.6   | -2.5   |
| Primary balance  | 1.9    | 1.7    | 1.7    | 1.9    | 1.4    | 0.0    | -0.2   |
| Primary structural balance (percent of potential GDP)                      | 4.2    | 3.4    | 2.3    | 2.2    | 1.4    | -0.3   | -0.5   |
| Public debt  | 78.2   | 76.6   | 75.7   | 74.7   | 74.1   | 73.1   | 71.8   |
| <b>Money and credit (end-of-period)</b>                                    |        |        |        |        |        |        |        |
| Broad money  | -3.3   | 5.5    | 5.1    | 6.3    | 6.9    | 6.3    | 6.4    |
| Lending to the private sector, flow-based 2/                               | -7.4   | -3.3   | -0.9   | -10.9  | 2.0    | 4.0    | 6.5    |
| <b>Interest rates</b>  |        |        |        |        |        |        |        |
| T-bill (90-day, average)   | 6.8    | 4.1    | 2.1    | 1.1    | 0.7    | ...    | ...    |
| Government bond yield (5-year, average)                                    | 7.7    | 5.2    | 3.9    | 2.7    | 2.1    | ...    | ...    |
| 5-year sovereign CDS (annual average)                                      | 465    | 297    | 197    | 152    | 153    | ...    | ...    |
| <b>Balance of payments</b>   |        |        |        |        |        |        |        |
| Current account  | 1.8    | 3.8    | 2.1    | 3.4    | 4.9    | 4.2    | 3.6    |
| Reserves (billions of Euros)   | 33.9   | 33.8   | 34.6   | 30.3   | 24.4   | 25.7   | 28.3   |
| Gross external debt 3/   | 128.9  | 118.2  | 114.9  | 107.5  | 96.1   | 88.2   | 79.6   |
| Gross official reserves (percent of short-term debt at remaining maturity) | 119    | 119    | 161    | 142    | 133    | 128    | 150    |
| <i>Memorandum Items:</i>   |        |        |        |        |        |        |        |
| Nominal GDP (billions of Forints)  | 28,661 | 30,127 | 32,400 | 33,999 | 35,005 | 36,813 | 38,903 |
| Nominal GDP (billions of USD)  | 127    | 135    | 139    | 122    | 124    | 124    | 129    |
| Exchange rate, HUF per euro, period average                                | 289    | 297    | 309    | 310    | 311    | ...    | ...    |

Sources: Hungarian authorities; IMF, International Financial Statistics; Bloomberg; and Fund staff estimates.

1/ Consists of the central government budget, social security funds, extrabudgetary funds, and local governments.

2/ 2015 reflects the effects of the Settlement Act on credit stock.

3/ Excluding Special Purpose Entities. Including inter-company loans, and nonresident holdings of forint-denominated assets.



# HUNGARY

## STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION

April 19, 2017

### KEY ISSUES

**Context.** Hungary has succeeded in achieving several years of high economic growth as well as reduction of debt and other vulnerabilities. However, external and public debt remain high. Growth decelerated in 2016 partly due to slower absorption of EU funds and related investment. The output gap is closing, unemployment has declined to about 4½ percent—partly reflecting a still appreciable public employment scheme, and reflation is gaining traction.

**Policy recommendations.** The various schemes to stimulate growth and employment have run their course, increasing the need to rebalance the macroeconomic policy mix. Advancing structural reforms would further reduce vulnerabilities and boost the potential of the economy.

- **Fiscal policy.** Fiscal policy should focus on implementing growth-friendly consolidation for faster public debt and deficit reduction. This would also support a better policy mix with somewhat easier monetary settings being maintained.
- **Monetary policy.** Current monetary policy settings can be maintained, but some removal of accommodation may well be needed before the end of 2017, in light of risks from inflationary pressures, including that fiscal policy provides more stimulus than warranted. With wage growth having picked up already, it will be important to monitor the situation and be ready to remove some of the stimulus as underlying inflationary pressures picks up. Measures to support credit can be phased out.
- **Financial sector.** It is important to continue to enhance supervisory practices and guidelines, including in view of the rapid increase in real estate prices.
- **Structural reforms.** Structural reforms are needed to improve productivity and labor participation, thereby supporting growth and broadening its base. In addition, ensuring effective utilization of EU funds would maximize their immediate and medium term economic and social benefits.

Approved By  
**Jörg Decressin (EUR)**  
**and Vikram Haksar**  
**(SPR)**

Discussions took place in Budapest during February 23–March 8, 2017. The staff team comprised Messrs. Sakr (Head), Jarmuzek, and Lybek, Mses. Hassine and Mircheva (all EUR), and Douglass Kochman (SPR). Mr. Varga attended most meetings and Ms. Erbenova attended the concluding meetings (both OED). Ms. Samuel and Ms. Borisova (both EUR) assisted in the preparation of the staff report. The staff team met with the Minister for National Economy Varga, Central Bank of Hungary (MNB) Governor Matolcsy, other senior officials including from the Ministry for National Development, and, representatives from the private sector and think tanks. A workshop was held in Budapest during the mission jointly with the MNB and the Ministry for National Economy on analytical topics that informed the consultation discussions. Hungary is an Article VIII country (Informational Annex: Fund Relations). Data provision is adequate for surveillance (Informational Annex: Statistical Issues).

## CONTENTS

|   |           |
|---|-----------|
| <b>CONTEXT</b>  | <b>4</b>  |
| <b>BACKGROUND AND RECENT DEVELOPMENTS</b>                             | <b>4</b>  |
| <b>OUTLOOK AND RISKS</b>  | <b>9</b>  |
| <b>POLICY AGENDA</b>  | <b>10</b> |
| A. Fiscal Policy  | 10        |
| B. Monetary Policy  | 12        |
| C. Financial Sector   | 13        |
| D. Structural Policies  | 14        |
| <b>STAFF APPRAISAL</b>  | <b>14</b> |
| <b>FIGURES</b>  |           |
| 1. Real Sector  | 20        |
| 2. Inflation Developments and Projections, 2007–18                    | 21        |
| 3. Monetary and Exchange Rate Developments, 2007–17                   | 22        |
| 4. Banking Sector Indicators  | 23        |
| 5. Role of the State in the Economy, 2006–16                          | 24        |
| <b>TABLES</b>   |           |
| 1. Selected Economic Indicators, 2012–18                              | 25        |
| 2. Medium-Term Scenario, 2012–22                                      | 26        |
| 3a. Consolidated General Government, 2012–22 (In Billions of Forints) | 27        |

|  |    |
|--|----|
| 3b. Consolidated General Government, 2012–22 (In percent of GDP, unless otherwise indicated) | 28 |
| 4. Balance Sheet of the Central Bank, 2012–18  | 29 |
| 5. Monetary Survey, 2012–18  | 30 |
| 6. Balance of Payments, 2012–22  | 31 |
| 7. Financial Soundness Indicators for the Banking Sector, 2012–16                            | 32 |

**ANNEXES**

|  |    |
|--|----|
| I. Response to Past Fund Policy Advice | 34 |
| II. Debt Sustainability Analysis       | 35 |



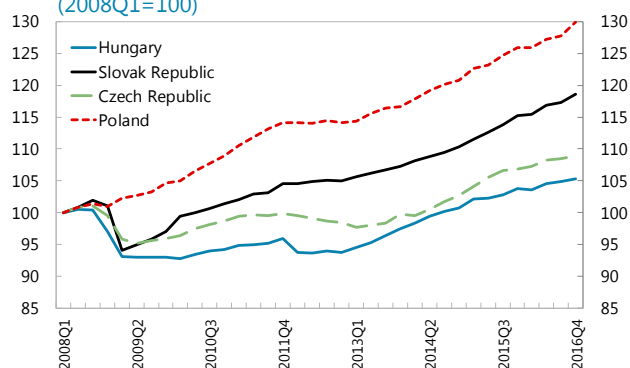
## CONTEXT

- 1. Hungary has succeeded in achieving several consecutive years of high economic growth and debt reduction, but vulnerabilities remain.** Growth has been buoyant since 2013, supported by high utilization of EU funds, a favorable external environment (low interest rates and commodity prices and strong export growth), as well as accommodative monetary and fiscal policies. However, external and public debt levels and financing needs remain sizeable despite their steady decline in recent years. At the same time, perceptions of Hungary's business environment have worsened somewhat and parliamentary elections scheduled by Spring 2018 could increase pressure for more public spending and interventions in the economy.
- 2. The authorities have taken steps to address some policy challenges.** Progress has been made in improving tax collection, including by shifting segments of the grey economy to the formal sector. Reliance on foreign financing continues to be reduced. Government and Magyar Nemzeti Bank (MNB) policies have succeeded in stimulating growth, virtually closing the output gap, and reducing unemployment to a historically low level. But they have also meant that structural fiscal adjustment has stalled. Evolving external and domestic risks bring new challenges that require a rebalancing of the macroeconomic policy mix, while placing more emphasis on structural reforms to enhance potential growth and further reduce vulnerabilities.

## BACKGROUND AND RECENT DEVELOPMENTS

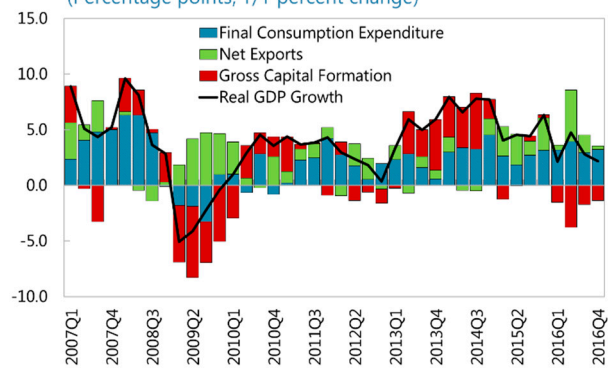
- 3. Despite robust private sector consumption, economic activity decelerated in 2016 mainly due to a sharp reduction in public investment.** This reduction was driven by a low absorption of EU funds due to the shift to a new program period. In addition, export growth decelerated somewhat as major automotive manufacturers reduced output as they upgraded their production lines. As a result, real GDP growth slowed to an estimated 2 percent. Although this growth rate was above the EU average, it was somewhat lower than growth in regional peers. The strong private sector consumption growth was supported by rapid employment growth and a falling unemployment rate, high wage growth, and tax reductions.

**Real GDP: Hungary and Peers**  
(2008Q1=100)



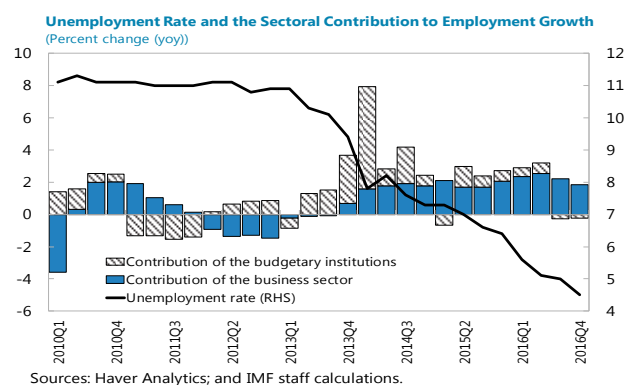
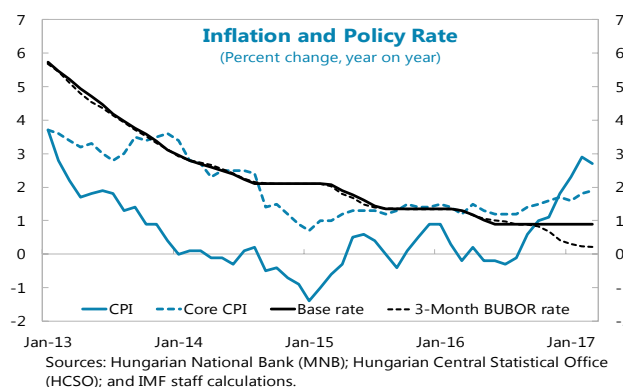
Sources: Haver Analytics; and IMF staff calculations.

**Contributions to Real Growth**  
(Percentage points, Y/Y percent change)



Sources: Haver Analytics; and IMF staff calculations.

**4. Inflation started to pick up towards the end of 2016, while unemployment continued its steady decline.** In March, core and headline inflation reached 1.9 and 2.7 percent y-o-y, respectively (MNB target is 3 +/-1 percent). At the same time, the unemployment rate has stayed below 4½ percent since November 2016. Even when excluding the Public Works Schemes (PWS), employment now exceeds its level prior to the global financial crisis, with severe shortages reported for both skilled and unskilled labor. Average earnings increased by about 10 percent at end-January 2017 (y-o-y). Asset prices also increased strongly. Real estate prices grew by 15 percent country-wide and by 22.8 percent in the Budapest area (y-o-y in September 2016). The Budapest stock market index (BUX)<sup>1</sup> increased by 19.6 percent y-o-y at end-March 2017. All this points to upside risks to inflation.

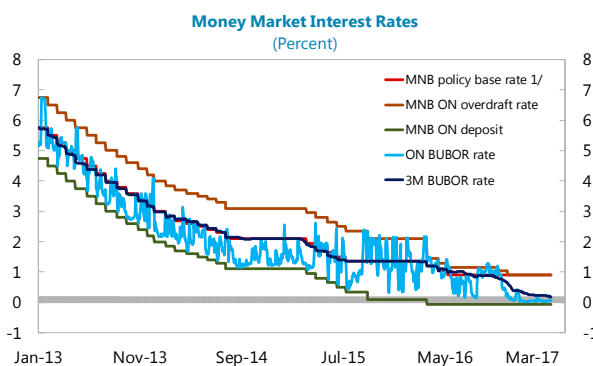


**5. The government outperformed its 2016 fiscal target.** The slowdown in EU funds disbursement coincided with improved collection of social security contributions and corporate income tax. Furthermore, interest and EU funds-related outlays declined. However, other expenditures increased, including the wage bill. Consequently, based on preliminary data, staff estimates that the general government deficit widened to about 1.7 percent of GDP, up from 1.6 percent a year earlier. However, the primary structural surplus is estimated to have declined from 2.2 to 1.4 percent of GDP.

**6. The MNB continued to ease the monetary policy stance in 2016.** The base rate was lowered in three steps from 1.35 percent in March 2016 to 0.90 percent in May and the interest rate corridor was narrowed. Furthermore, the 3-month money market (BUBOR) rate declined by about 80 basis points since July 2016. During the same month, the MNB stopped offering interest rate swaps (IRS) as part of the self-financing program, which aims at encouraging banks to place their excess liquidity in government securities. Effective Q4 2016, the MNB capped the amount of its key instrument for the base rate, hence pushing excess liquidity into both government securities and the money market. The cap was cut further in Q1 and Q2 2017. Coinciding with the introduction of the

<sup>1</sup> This blue chip index consists of 25 companies. The stock market is relatively small and highly concentrated, with the three largest companies dominating the index.

cap, the MNB began offering liquidity swaps. Moreover, in December the reserve requirement ratio was halved to 1 percent. In addition, the MNB continued to gradually adjust its unconventional monetary policy instruments. The Market-Based Lending Scheme (MLS) introduced in early 2016, continued to support similar lending, with 15 of the 17 participating banks exceeding their commitments to lend to SMEs as of February 2017.<sup>2</sup>



Sources: Hungarian National Bank (MNB); Hungarian Central Statistical Office (HCSO); and IMF staff calculations.

1/ In August 2014, the base rate was changed from 2-week MNB bills to 2-week MNB deposits (non-tradable). Since September 2015, the base rate refers to the 3-month MNB deposit rate.

**7. Since 2013, the MNB has taken numerous initiatives to mobilize excess liquidity in the banking system.** The reduction in interest rates and vulnerabilities, while maintaining price and financial sector stability, has been possible in part due to low inflation and in part due to a substantial structural liquidity surplus. Traditional measures have included lowering the policy rate. Additional initiatives have included making the underlying instrument for the key policy rate less liquid, extending its maturity, reducing the frequency of its auctions, and capping the tendered amounts, as well as changing the interest rate corridor. These gradual steps have pushed excess liquidity into government securities and the money market, and also encouraged lending to the private sector.<sup>3</sup> In addition:

- The money market rates have been reduced and given more prominence, which has strengthened the domestic interest channel. The bulk of the FX denominated household loans were converted to variable HUF rates during 2015 and are now linked to domestic money market rates.
- The self-financing program, which aims at pushing excess bank liquidity to government securities, has facilitated a reduction of FX denominated as well as externally held public debt, hence lessening vulnerabilities and lowering the financing costs of the government.
- In 2013, the MNB introduced the Funding for Growth Scheme (FGS), providing inexpensive liquidity to banks to on-lend to micro, small, and medium-sized enterprises (SMEs). There were several modifications and the FGS expired in March 2017. In early 2016, the MNB introduced the Market-Based Lending Scheme (MLS), which offers incentives to banks that commit to increase their lending to SMEs.

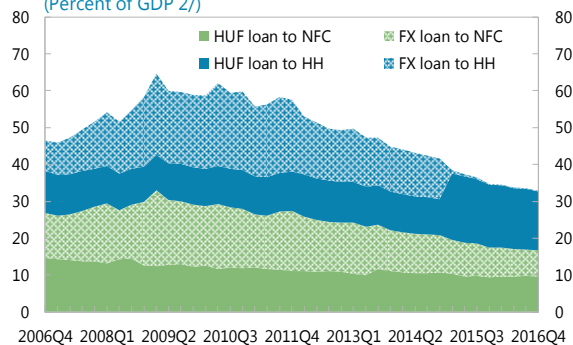
<sup>2</sup> Banks committed to lend to SMEs can place twice the committed amount on a preferential MNB deposit remunerated with the base rate. They are also able to get MNB interest rate swaps (IRS) up to four times the committed amount.

<sup>3</sup> The latter, however, has until recently been limited by subdued demand, as the traditional transmission mechanism was weakened by the global financial crisis and the accompanying deleveraging.

**8. Nonetheless, the economic recovery has remained credit-less since the global financial crisis.** The stock of gross loans to households declined by 2.5 percent during 2016.

Furthermore, the stock of gross loans to NFCs declined by 0.2 percent during 2016. Lending to SMEs, on the other hand, performed much better, partly due to the various supportive initiatives (e.g., FGS and MLS).<sup>4</sup> Bank deposits increased persistently. Thus, banks continued to increase their placements in government securities and continued to deleverage.<sup>5</sup> However, new bank lending (transaction basis) has been picking up, which suggests that deleveraging may be slowly coming to an end.

**Bank Loans to Non-Financial Companies and Households 1/**  
(Percent of GDP 2/)

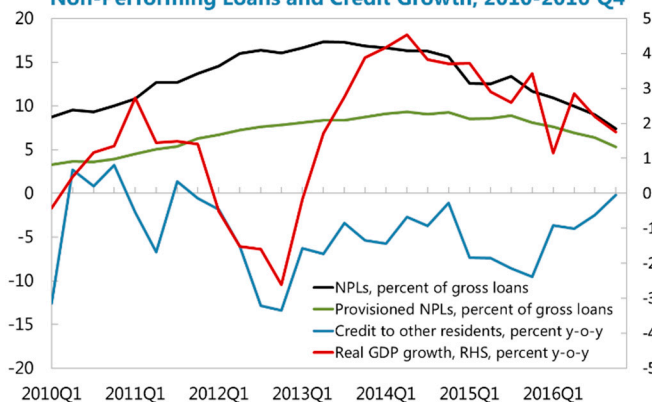


Sources: Hungarian National Bank (MNB); and IMF staff calculations.  
1/ Stock of loans (not transaction basis) of credit institutions supervised by the MNB.  
2/ Rolling annual GDP based on previous four quarters.

**9. On average, banks remained liquid and well capitalized, and achieved high profits in 2016.** The average capital ratio was 16.4 percent at end-2016. A large part of the substantial

increase in profits was due to revoked provisions as well as the sale of shares in VISA Europe. The non-performing loan (NPL) ratio declined from 11.7 percent at end-2015 to 7.4 percent at end-2016.<sup>6</sup> The role of the MNB-owned asset management company for commercial real estate (MARK) changed during 2016. In February 2016, an agreement was reached with the European Commission on the pricing methodology in order to avoid state-aid issues. Purchases would be externally financed, hence avoiding ECB concerns regarding MNB monetary financing.<sup>7</sup> In June 2016, the sound parts of the state-owned MKB bank were privatized. In 2016, the state and the EBRD each purchased 15 percent of Erste Hungary in line with a 2015 Memorandum of Understanding aimed at strengthening the financial sector and economic growth.

**Non-Performing Loans and Credit Growth, 2010-2016 Q4**



Sources: Hungarian Central Statistical Office; Hungarian National Bank (MNB); IMF's *Financial Soundness Indicators Database*; IMF Staff Reports; and IMF staff calculations.

**10. Hungary's net IIP continued to improve, but external debt and financing needs remain high.** By end-2016, the net liability position nearly halved to -65 percent of GDP from -119 percent

<sup>4</sup> Large foreign-owned companies tend to borrow from abroad and not rely on domestic banks.

<sup>5</sup> Bank's net foreign position changed from having net foreign liabilities to net foreign assets in August 2016.

<sup>6</sup> Banks with large portfolios of non-performing loans to commercial real estate will be subject to a systemic risk capital charge effective July 2017. Since the announcement of this charge in November 2014 till mid-2016, banks reduced these exposures by about HUF 500 billion (1.4 percent of GDP).

<sup>7</sup> Moreover, the governance structure of MARK has been adjusted, benefitting from MCM technical assistance.

of GDP in 2009. During the same period, gross external debt declined to around 96 percent of GDP from close to 150 percent of GDP, reflecting large and persistent current account surpluses as well as cross-border deleveraging. Gross external financing needs also declined to about 18 percent of GDP. However, reliance on non-resident funding of public debt remains sizable, with external public debt standing at about 40 percent of GDP. External risks have increased somewhat (see the RAM), while international reserves declined by end-2016 to €24.4 billion, down from €30.3 billion a year earlier. This decline largely reflected the maturing swap contracts with commercial banks related to the 2014-15 conversion of FX-denominated household loans to HUF and the repayment of part of FX-denominated external public debt in the context of the self-financing program. Nevertheless, a comfortable cushion was maintained with respect to the reserves-to-short-term debt ratio (132.7 percent) and reserves remained broadly adequate relative to the Fund's metric. Reserves are projected to increase under the baseline scenario with the phasing out of the impact of the FX-loans conversion program and expectations for sizable EU funds inflows. Additionally, a three-year bilateral currency swap agreement between the MNB and the People's Bank of China of RMB 10 billion (about €1.4 billion) was renewed in September 2016. Market sentiment towards Hungary continued to improve, and the three main rating agencies upgraded the country to investment grade in 2016.

**11. Hungary's external position is broadly in line with fundamentals, but non-price indicators suggest that Hungary continues to face broader competitiveness challenges.** The exchange rate remained market determined and fluctuated against the euro within a 5 percent range. The EBA methodology yields mixed results. Staff considers the current account regression to be most informative, but believes that its estimated current account norm—a small deficit—is too low given Hungary's still-elevated vulnerabilities and constrained policy space. As noted above, while external liabilities have declined and their profile has improved (see Box 2), they remain sizable. To tackle Hungary's vulnerability to external shocks, there is a need to maintain current account surpluses over the medium term. Taking into account these factors, the real exchange rate appears broadly in line with fundamentals, consistent with the assessment of the 2016 Article IV consultation. However, while price indicators do not point to competitiveness problems, Hungary's export market share has not kept pace with its peers. Despite recent improvements, prospects for FDI in Hungary – which is projected to remain below its pre-crisis average – could weigh on future export performance. Moreover, the external risk of retreat from cross-border integration and potential implications for trade are salient given that Hungary is a small open economy and participant in the German-Central European supply chain.

## OUTLOOK AND RISKS

**12. Growth is projected to pick up to about 2.9 percent in 2017, largely on the back of a rebound in investment.** The recovery in EU funds absorption and related investment, together with planned projects in the automotive industry, will be the main drivers of growth in the short term. Private consumption will remain strong as wage increases continue to boost disposable income. The relaxation of the fiscal stance (see below) together with the accommodative monetary policy, will also support demand. Labor market conditions are projected to remain tight, with wage growth pressures further building up. All these factors would contribute to a narrowing of the external current account surplus and a rise in inflation, which is forecast to approach the upper boundary of MNB's tolerance band by early 2018.

**13. The medium-term outlook for growth and inflation remains favorable and is subject to both downside and upside risks.** On the downside, a normalization of monetary policy in the U.S. and euro area and tighter global financing conditions could lead to an increase in capital outflows and financing cost. By the same token, a tightening of the monetary stance in Hungary could lead to large capital inflows, especially in view of the recent upgrades by rating agencies. This could harm competitiveness and growth. A significant slowdown in the still-fragile euro area recovery and/or increased trade barriers would dampen exports. Domestically, a further increase of the state's role in the economy and frequent policy changes could have adverse effects on business confidence. In addition, rising demand and the expansion of the housing scheme could inflate asset-prices.<sup>8</sup> A rise in political pressure to increase spending would also contribute to higher inflation. On the upside, U.S. and euro area growth could be higher than anticipated, and this could boost growth and enhance confidence in Hungary, reducing financing costs.

**14. The authorities' growth projections are higher than staff's.** They envisage growth in the 3.5–4.1 percent range in the short term as they expect stronger consumption in view of the positive income trends. They also anticipate higher investment related to EU funds absorption as well as in response to the cut in the corporate income tax. Regarding risks to the outlook, the authorities broadly agreed with staff but pointed to additional upside risks, including an even higher absorption of EU funds that would lead to even higher public investment and growth. They also pointed to their favorable track record in meeting or over-performing their fiscal targets during the previous election.

**15. The authorities broadly agreed with staff's assessment of the external position.** They however stressed the temporary nature of the 2016 decline in reserves, and deemed their level as adequate (Box 2). They also highlighted the ongoing reduction in external liabilities and the sizable share of inter-company lending in external debt as factors enhancing Hungary's external sustainability (Annex II). Nonetheless, they reiterated their determination to continue to strengthen

<sup>8</sup> A government subsidy and loan scheme for the construction or purchase of new or existing housing for young families with (or committed to having) children. For example, a family with 3 children would receive a grant of HUF 10 million (about \$35,000) towards a new house purchase.

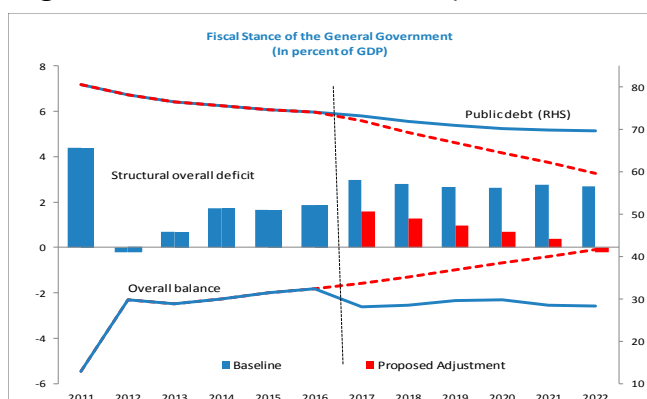
Hungary's external position. In this regard, they have established a committee chaired by the Minister for National Economy to recommend measures to boost competitiveness.

## POLICY AGENDA

### A. Fiscal Policy

**16. An expansionary fiscal stance is projected for 2017–18.** The 2017 budget targets a general government deficit of 2.4 percent of GDP. However, new measures were announced in December 2016, after the budget was adopted, with a view to boosting economic growth. Specifically, social contributions by employers will be reduced from 27 to 20 percent and the corporate income tax (CIT) rate from 19 percent (and 10 percent for SMEs) to a 9 percent flat rate, making it the lowest in the EU. With these measures, as well as previously planned reductions in the VAT rate for selected items, higher spending on compensation of employees, and ambitious public investment programs, staff projects the overall deficit to reach about 2.6 percent of GDP in 2017 and 2.5 percent in 2018. As a result, the overall and primary structural balances would worsen significantly. The debt-to-GDP ratio would barely decline over the medium term and would remain elevated at about 70 percent (DSA).

**17. A faster decline in public debt and deficit is needed and the present economic conditions provide an opportunity for achieving this.** In staff's view, it would be preferable to take advantage of Hungary's favorable economic setting and reduce the structural deficit by about 0.4 percentage points annually on average over the medium term. This would be consistent with meeting the authorities' medium term target of a 1.5 percent structural deficit by 2019 and lead to a reduction in public debt to about 60 percent of GDP by 2022, which would help reduce vulnerabilities and financing costs, guard against contingent liabilities<sup>9</sup> (see DSA), and go a long way towards achieving the authorities' strategic objective of debt at 50 percent of GDP. Given the virtual closure of the output gap, the short-term negative impact on growth would be limited, as monetary policy can then remove accommodation more slowly, with beneficial effects for investment and competitiveness (Box 2). If such a different macroeconomic policy mix was also flanked with structural reforms, the economy would benefit from both a faster reduction in external vulnerabilities and higher potential growth.



**18. It would be important to ensure that such fiscal adjustment be growth friendly.** Such adjustment should, therefore, involve a reorientation of public expenditure toward physical and

<sup>9</sup> Government guarantees amounted to around 9 percent of GDP at end-2015.

human capital development. Consolidation should focus on rationalizing less productive current expenditures, while enhancing revenue mobilization by reducing exemptions and further improving tax administration.

- **Revenue:** The tax base can be broadened by reducing exemptions and preferential regimes, including eliminating excise exemptions for fuel. This would help offset much of the revenue loss from a phasing out of remaining sectoral taxes. In addition, the authorities could consider an eventual introduction of a modern real estate tax over the medium term after careful preparation.
- **Expenditure:** It would be desirable to gradually reduce the wage bill, generalized subsidies, and spending on goods and services. The wage bill is high by international standards and has been on the rise, as wage increases have not been accompanied by the long-awaited public administration reform. The implementation of such reform is necessary. It would also have a limited social cost as any civil service retrenchment would likely be absorbed by the private sector and would in fact help address some of the labor shortages. This reform can be underpinned by a targeted/rolling expenditure review that would identify government priorities. Spending on goods and services is also high compared to peers. Generalized subsidies of fuels and transportation are regressive and should be better-targeted or eliminated, while protecting the vulnerable groups through more efficient mechanisms building on, and enhancing, the current system of providing subsidized transportation ticket to student and pensioners.

**Fiscal impact of potential measures, 2017–2022 average per year**

|  |      |
|--|------|
| Total  | 0.4  |
| Revenue  | -0.1 |
| Phasing out of sectoral taxes                                    | -0.3 |
| Streamlining VAT rates   | 0.1  |
| Elimination of excise exemptions for fuel                        | 0.1  |
| Expenditure  | 0.5  |
| Reduction in wage bill   | 0.2  |
| Rationalization of spending on non-EU-related goods and services | 0.2  |

**19. The authorities are of the view that they will meet their budget target and noted their past over-performance in this area.** They envisage that the recent reduction in taxes and social security contributions would lead to higher incomes and economic growth and thus to more tax revenue. Given the limited fiscal space, they do not plan to reduce sectoral taxes other than the bank levy. They believe that the lower VAT rates for some products are instrumental in improving tax compliance as well as supporting the poor, who disproportionately consume such products. In case of a revenue shortfall due to the tax reduction package that was announced in December, they will use the fiscal reserves to secure their deficit target. Staff pointed out that it would be better to keep budgetary reserves to their intended objective of meeting unforeseen developments and that



it is preferable to develop a contingency plan that would include elements from staff's recommended measures.

**20. The authorities emphasized their commitment to adhering to the national and European fiscal rules over the short and medium terms.** They highlighted Hungary's significant progress, compared to other EU countries, in reducing public debt. They reaffirmed their commitment to achieve further gradual reduction in debt in line with EU rules, while still providing some fiscal stimulus to support growth. With regard to considering a modern real estate tax system over the medium term, the authorities were concerned about the social impact and did not see a need for such a system as local governments already collect property taxes. Staff is of the view that a modern real estate tax system would have a large potential and that it can easily include built-in preferential treatment for the primary residence. The pre-requisite reforms such as enhancing land registration and the cadaster would also have the added benefits of strengthening property rights and thus access to finance and functioning of the real estate market, which would in turn help improve labor mobility across regions and therefore support economic growth.

## B. Monetary Policy

**21. The monetary policy stance will need to be kept under review in light of underlying inflationary pressures and the projected loosening of the structural fiscal balance.** The MNB has appropriately eased monetary policy during 2016, as inflation was subdued during most of the year and growth was less than initially projected. Going forward, inflation pressures are building up and headline inflation is getting close to the target (2.7 percent in March). It is expected to overshoot slightly but stay within the upper band in early 2018. In 2017, bank lending is expected to pick up, spurred by activities related to EU structural and investment funds as well as higher incomes and increasing real estate prices. Timely action is thus essential to influence inflation expectations and maintain credibility. The speed of withdrawal of the monetary stimulus would, among other factors, need to be dependent on the fiscal stance: a smaller-than-projected fiscal deficit would facilitate a more gradual normalization of the monetary conditions.

**22. The MNB has continued to skillfully adapt its unconventional monetary policy instruments, but the time seems ripe to phase them out.** The introduction of liquidity swaps has facilitated banks' day-to-day liquidity management. The decision to let the FGS expire by end-March 2017, is also welcome. SMEs will continue to be supported by the existing Market-Based Lending Scheme of the MNB and various EU-funded schemes. In the case of a severe balance sheet recession, as the one Hungary experienced after the global financial crisis, in addition to credit policies, policies to spur demand and boost confidence were also needed to mitigate the unavoidable deleveraging. However, as explained earlier, deleveraging now seems to be gradually coming to an end, and new lending is beginning to pick up. The usual monetary policy transmission mechanisms are thus likely to be restored and therefore unconventional monetary and credit policies should be gradually phased out.

**23. The MNB concurs with staff that monetary policy will ultimately have to be tightened, but continues to be focused also on supporting growth.** The authorities estimate the output gap to be still slightly negative. Moreover, they believe that, since potential output is to some extent endogenous, labor shortages and wage pressures will help stimulate investment in advanced technology and facilitate labor-capital substitution which would boost productivity. Furthermore, they are of the view that inflation expectations remain poised and that the wage share in the cost of production is still generally low in Hungary and can be easily absorbed by the more profitable companies. Against this background, the MNB does not see an imminent risk to not remain within its inflation tolerance band.

### C. Financial Sector

**24. On average, Hungarian banks are liquid, well capitalized, and profitable.** Improved bank profitability in 2016 has reportedly contributed to banks' increased willingness to lend. Staff welcomes the MNB's intention to continue to enhance supervisory practices and guidelines on evaluation of collateral. The macroprudential rules that were introduced and strengthened in recent years have also been useful pre-emptive measures to improve lending practices.<sup>10</sup> The MNB has developed new housing price indices and pricing models to better monitor the booming housing market in Budapest and some parts of Western Hungary, which is a commendable initiative. The decision to rely on external funding for the potential purchases of non-performing loans by MARK is also helpful. In addition, the authorities' intent to sell MARK is in line with past staff advice. In recent years, the MNB has established several foundations to support the country's economic and education objectives. These foundations have stopped buying government securities in the primary market and instead purchase such securities in the secondary market, in line with ECB recommendations.

**25. While balance sheets have strengthened with progress in reducing NPLs and FX mismatches, it is important to remain prudent to guard against other risks including those that could arise from increased real estate prices.** Staff therefore welcomes the strengthening of the macroprudential framework, which is timely as the re-leverage cycle starts to take off. In particular, debt cap rules, which the authorities noted could have helped contain the credit-fueled boom-bust cycle during the global financial crisis, were introduced. The MNB and staff agreed that macroprudential measures should focus on addressing systemic risks. Other concerns such as supply bottlenecks should be addressed directly through structural reforms. The authorities believe that the operational costs of many Hungarian banks are relatively high. Consolidation among the many cooperative credit institutions is expected to continue in 2017. The authorities agreed with staff that consolidation of the banking industry should be market determined.

<sup>10</sup> For details, see the MNB's *Macroprudential Report*, October 2016.

## D. Structural Policies

**26. Advancing structural reforms is essential to boosting productivity, thereby supporting growth and broadening its base.** Ensuring effective utilization of EU funds is key in this regard. Furthermore, an expedited implementation of reforms is needed, specifically:

- *Labor market policies.* Labor shortages have become one of the key binding constraints on growth. Therefore, it would be important to build on past efforts to continue to upgrade vocational training in order to match the skills demand in the labor market. It would also be important to modify the public works schemes to improve the skills and productivity of its participants and encourage them to gradually move to the primary labor market. The authorities share this view and have already announced their intention to reduce the number of the schemes' participants. Furthermore, boosting activity rates, particularly for women including through affordable childcare, would also help increase employment and output. In this regard, the authorities pointed out that they intend to increase the number of childcare facilities.
- *Competitiveness.* Hungary has lost ranking in competitiveness indicators. The main reported challenges are related to getting electricity, paying taxes, and starting a business. A committee, led by the Minister for National Economy, is already putting together a plan to address these challenges. Perceived corruption and frequent changes in rules and regulations have also been reported as impediments to doing business. It would, therefore, be important to address these issues through enhancing transparency and policy predictability. The authorities noted that the high frequency of introducing new rules and regulations was necessary in the past to meet EU regulatory standards and to deal with the 2008 economic crisis. They explained that compared to the crisis years, the number of laws and regulations that are introduced annually has significantly decreased.

## STAFF APPRAISAL

**27. Over the past several years, Hungary has succeeded in boosting growth and employment and in reducing vulnerabilities, although these are still relatively high.** The pick-up in growth was supported by high utilization of EU funds, a favorable external environment, as well as accommodative monetary and fiscal policies. However, despite robust private sector consumption, GDP growth temporarily slowed in 2016 to an estimated 2 percent, mainly as a result of a decline in investment. This was mostly due to subdued absorption of EU funds. Hungary's economic risks are mitigated by the improvement in the current account and international investment position over the past years and by the enhanced market sentiment. Nonetheless, a further reduction in vulnerabilities is necessary, as external and public debt levels and financing needs remain sizeable and global risks appreciable. Hungary's external position is broadly in line with macroeconomic fundamentals though non-price indicators point to some competitiveness concerns.

**28. Fiscal policy should focus on advancing growth-friendly consolidation for faster public debt and deficit reduction.** Staff is of the view that such consolidation should focus on enhancing the quality of expenditure and composition of revenue, while steadily improving the structural fiscal balance. Reforms should aim to gradually reduce the elevated wage bill as part of a comprehensive administrative reform. In addition, reducing and better targeting generalized subsidies would help decrease their cost while protecting the poor. These reforms, along with measures to enhance revenue mobilization, such as reducing sectoral taxes and streamlining multiple VAT rates and exemptions for fuel and tobacco excises, would help rebuild room for fiscal policy maneuver. Such a growth-friendly consolidation would also help achieve a much-needed faster decline in the deficit and public debt. With such a strategy, monetary policy could stay accommodative for a longer time. These elements and other measures to enhance productivity and competitiveness would help realize the authorities' dual objective of achieving sustainable growth and boosting the economy's medium term potential.

**29. Current monetary policy settings can be maintained, but some removal of accommodation may well be needed before the end of 2017 in light of risks from inflationary pressures, including that fiscal policy provides more stimulus than warranted.** The monetary stance can remain accommodative in the near term, but with underlying inflationary pressures building up, additional stimulus is unwarranted and some removal of accommodation may well be needed, in particular if fiscal policy is not tightened as recommended. The MNB has appropriately eased monetary policy during 2016, as inflation was subdued during most of the year and growth was less than initially projected. Going forward, inflation pressures are building up and low commodity prices can no longer be counted on to mitigate these pressures. It is therefore important to be ready to take timely actions to keep inflation expectations anchored and maintain credibility. With banks and the economy doing much better and new lending resuming, the usual monetary policy transmission mechanisms are likely to be restored and therefore unconventional monetary and credit policies should be gradually phased out.

**30. Advancing structural reforms would boost productivity, thereby supporting growth and broadening its base to the benefits of more sectors and segments of the population.** Ensuring effective utilization of EU funds is key in this regard. In the labor market, it would be important to address skills-mismatches, strengthen training to improve skills and productivity especially of participants in the public works schemes, and boost female labor force participation. Finally, it would be essential to enhance the business environment by addressing perceived corruption through improved transparency, enhancing policy predictability, continuing to improve the ease of paying taxes, and streamlining regulations.

**31. It is recommended to hold the next Article IV consultation on the standard 12-month cycle.**

### Box 1. The Macroeconomic Policy Mix—Implications for Growth—An Illustrative Framework 1/

The Flexible System of Global Models (FSGM) provides a useful analytical tool to assess the impact on growth associated with the implementation of fiscal, monetary, and structural policies.<sup>2</sup>

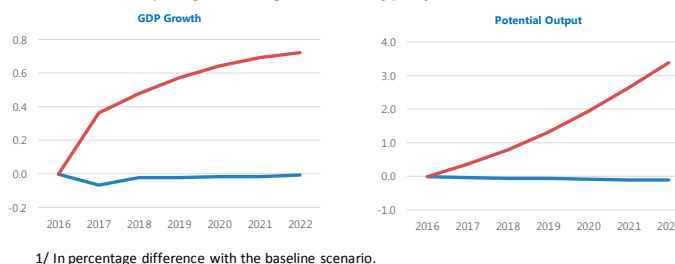
In comparison with the baseline scenario, staff recommends fiscal measures amounting to an average annual consolidation of about 0.4 percent of GDP over the medium term. The fiscal tightening would temporarily have a moderate negative impact on growth. However, such a consolidation would allow monetary policy to be more accommodative compared to the baseline scenario, which would have a partially offsetting positive impact on growth. The combined aggregate effect on growth (blue lines in Figure 1) would therefore be very small. Also, there would be substantial positive benefits in terms of reduced fiscal deficit and public debt, as well as a stronger trade balance which will lead to higher output beyond the horizon shown.

Furthermore, this simulation is conservative and does not account for the fact that part of the recommended fiscal adjustment is imbedded in measures to improve the tax system and public administration. This would help enhance efficiency, better the business environment, and ease shortages in the labor market.

In a second simulation (red lines in Figure 1), structural reforms supplement the fiscal and monetary package. These reforms aim at improving the public works schemes, reforming public administration, and reducing red tape, with a view to strengthening the business environment. They would raise potential output and support growth both in the short and long terms. In particular, the short-term impact of these reforms is difficult to quantify given the uncertainty surrounding the speed by which the private sector would

respond.<sup>3</sup> The models can nonetheless give a useful gauge on the likely range of the growth dividend. They indicate that structural measures could improve the average annual growth rate by about ½ percentage point compared to the baseline. At the same time, the combination of lower deficit and higher growth would reduce the public debt-to-GDP ratio by about 12 percentage points over the medium term.

Figure 1. Hungary: Medium term impact of the Macroeconomic Policy Mix, 2017-22  
Fiscal package and endogenous monetary policy 1/  
Fiscal package and endogenous monetary policy with structural reforms 1/



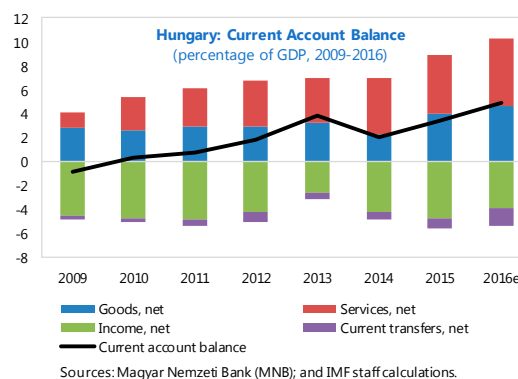
1/ Prepared by Zoltan Jakab (RES) and Michelle Hassine (EUR).

2/ The FSGM is a system of models developed by staff in the IMF Research Department. More details on this methodology can be found in "The Flexible System of Global Models—FSGM," IMF Working Paper 15/64, available at <http://www.imf.org/~media/Websites/IMF/imported-full-text-pdf/external/pubs/ft/wp/2015/wp1564.ashx>.

3/ Improving the public work scheme alone could have substantial benefits. Participants in the scheme constitute about 5 percent of the labor force. Reforms aimed at shifting even only 10 percent of these participants annually to the primary labor market, which is suffering from severe shortages at all skills levels, could have a substantial impact on productivity and growth.

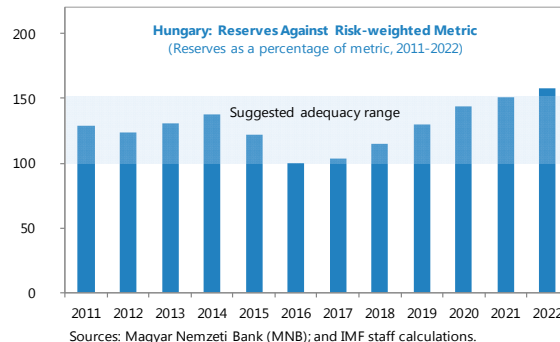
## Box 2. External Sustainability and Competitiveness 1/

**Current account:** The level and trend of Hungary's current account and trade balances do not raise major competitiveness concerns. The current account surplus continued to increase in 2016 to an estimated 4.9 percent of GDP, from 3.4 percent in 2015 and 2.1 percent in 2014, reflecting buoyant exports. The deficit on the primary income account, which includes repatriation of earnings by foreign companies, is estimated to have narrowed slightly in 2016. The current account surplus is expected to moderate over the medium term as import growth picks up due to increased consumption and investment.



**Foreign assets and liabilities:** The net International Investment position (IIP) is estimated to have been -65 percent of GDP in 2016 and is projected to improve to -27 percent by 2022. Gross foreign liabilities fell by 55 percentage points of GDP since 2009, while gross foreign assets remained relatively steady. This reduction in external exposures reflects the post-crisis deleveraging of the banking sector, as well as the FX mortgage conversion and self-financing schemes. Slightly more than half of gross foreign liabilities is related to direct investment (a 9 percentage points increase from 2009), while around one-quarter reflects portfolio investment. The maturity profile of external liabilities has improved, with the share of short-term liabilities having declined three percentage points since 2009, to 7 percent. In 2016, external debt declined to 96 percent of GDP (and it is expected to trend lower in the coming years), while gross financing needs fell to around 18 percent of GDP.

**Reserve adequacy:** Reserves, at €24.4 billion as of March 2017, remain broadly adequate according to the Fund's metric and maintain a comfortable cushion relative to the benchmark of 100 percent of short-term debt. Last year's €6 billion decline in reserves largely reflected the reduction in the government's net external borrowing, and banks' redemption of MNB swap contracts related to the household FX loan conversion scheme. Both of these programs are reducing external exposures, although they put some downward pressure on reserves at a time when external risks are elevated. With the FX conversion scheme concluding this year, reserves are expected to increase and remain in the recommended ranges.



1/ Prepared by Dora Douglass Kochman (SPR).

### Box 2. External Sustainability and Competitiveness (continued)

**Hungary's external position appears to be broadly in line with medium-term fundamentals.** EBA yields mixed results for Hungary. The two Real Effective Exchange Rate (REER) approaches suggest an overvaluation of the exchange rate of 8 to 29 percent, but these approaches leave a large residual (up to 31 percent) that is not explained by the policy variables. Also, those findings appear inconsistent with Hungary's buoyant trade and current account balances. The External Sustainability (ES) approach suggests that the exchange rate may be undervalued by 11.5 percent. However, this is based on stabilizing Hungary's net borrower position (NFA/GDP) at its recent level, which would be consistent with a medium-term current account deficit of 2.5 percent of GDP.

| External Balance Assessment Results |               |                       |                       |                         |
|-------------------------------------|---------------|-----------------------|-----------------------|-------------------------|
|                                     | CA regression | REER level regression | REER index regression | External Sustainability |
| CA norm (percent of GDP)            | -0.7          |                       |                       |                         |
| CA - stabilizing NFA at 2015 level  |               |                       |                       | -2.5                    |
| CA gap (percent of GDP)             | 5.2           |                       |                       | 5.1                     |
| Exchange rate gap (percent)         | -12.0         | 28.8                  | 8.1                   | -11.5                   |

Source: 2016 External Balance Assessment (March 2017)

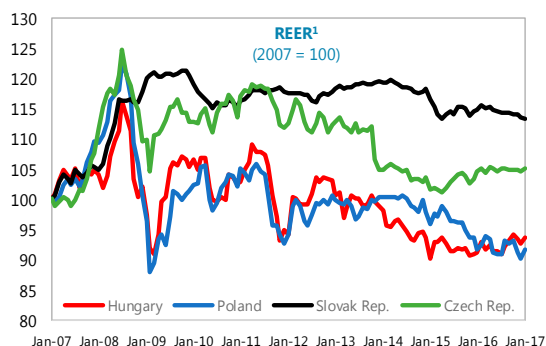
**Staff believes that the CA approach is the most informative for Hungary, although its CA norm may be too low given Hungary's still-elevated vulnerabilities, and constrained policy space amid heightened external risks.** While Hungary's trade balance remains robust, its current account balance fluctuates due to sizable negative net primary income and the EU funds cycle (also affecting the capital account). Additionally, the CA regression has had difficulty fully explaining current account swings in some countries that have gone through boom/bust episodes in credit and asset markets. This may be the case for Hungary where the model has predicted a smaller current account balance since the crisis when it moved from deficit into surplus. These country-specific factors lead staff to conclude Hungary's external position is broadly in line with medium-term fundamentals, consistent with the assessment in the 2016 Article IV.

**Non-price indicators continue to suggest that Hungary faces broader competitiveness challenges.** Unit labor costs are still attractive relative to peers, although this largely reflects the post-crisis compression in compensation, which has started to unwind. Additionally, perceptions of Hungary's investment climate (reflected in indicators like the World Bank's Doing Business report and the World Economic Forum's Global Competitive Index) are not as favorable as those for some of its neighbors. Unpredictability of policymaking has been cited as one challenge, although the authorities emphasize that this perception is largely a legacy of the crisis-fighting period. Labor shortages, particularly skilled labor, are another key challenge.

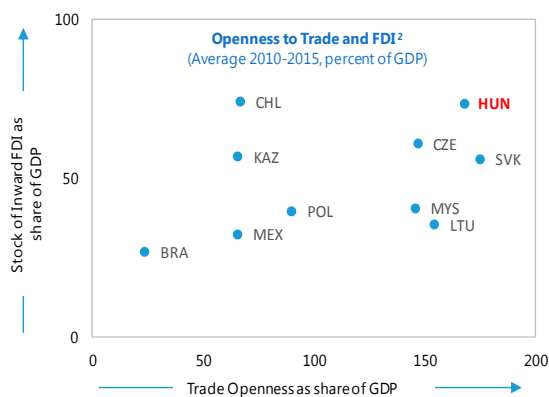
**Greater export diversification and steady and sustained FDI would be supportive of medium-term growth and efforts to reduce external vulnerabilities.** While exports continue to increase relative to GDP, their share within the EU has not grown as rapidly as that of regional competitors. FDI played an important role in promoting exports, but its contribution has gradually declined. Medium-term FDI inflows are projected to remain below their historical average despite Hungary's relatively favorable incremental capital-output ratio. Efforts to expand labor participation and the pool of skilled workers, including through better vocational training and affordable childcare, will be important to bolster competitiveness and further enhance Hungary's appeal to foreign investors.

### Box 2. External Sustainability and Competitiveness (concluded)

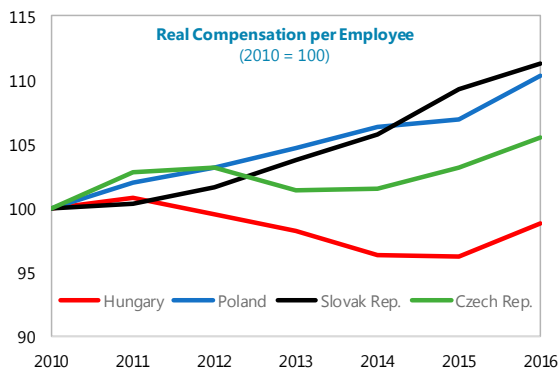
Despite limited forint volatility...



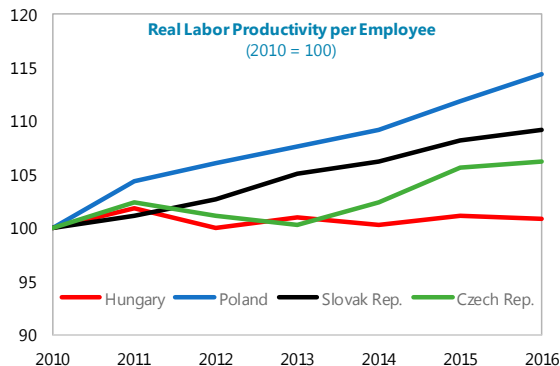
...openness to trade and foreign investment...



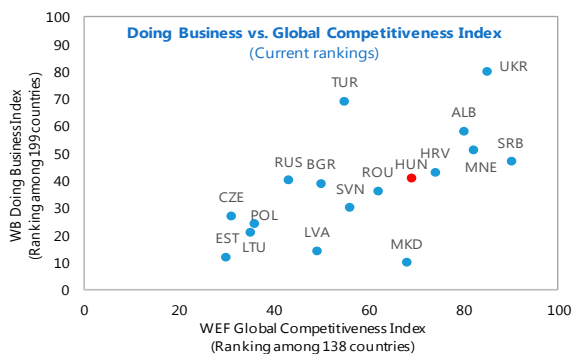
...and relatively competitive labor costs...



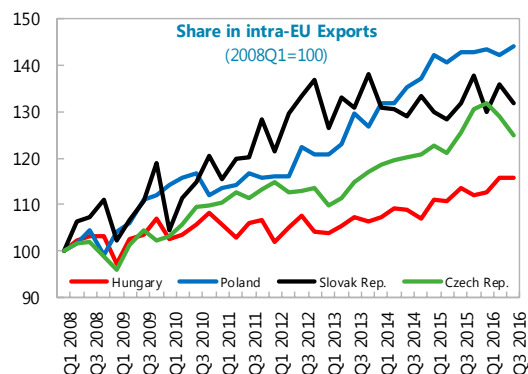
...stagnant labor productivity...



...and scope to enhance business climate perceptions...



...have coincided with lagging growth in export share relative to peers.



1) Increase indicates appreciation.

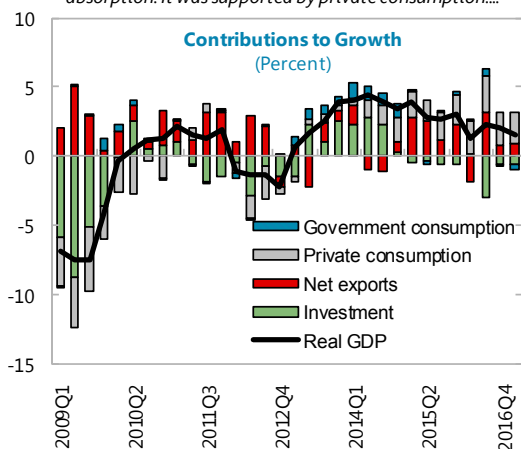
2) Trade openness defined as total exports and imports as a share of GDP.

Sources: Eurostat; European Commission; Direction of Trade; World Economic Outlook; Hungarian Statistical Office; MNB; UNCTAD; WEF Global Competitiveness Report (2016/17); World Bank; Doing Business Report (2017); and IMF staff calculations.

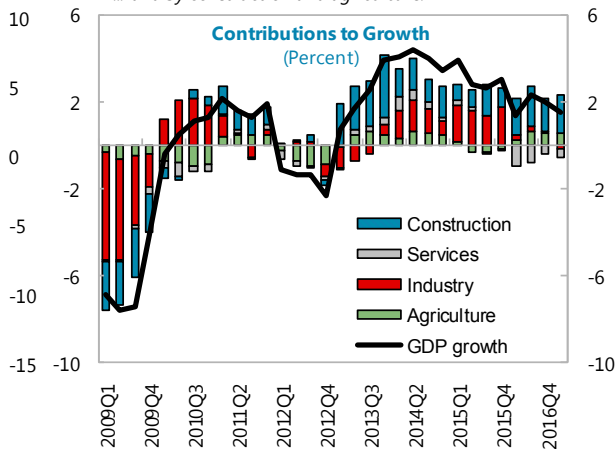


**Figure 1. Hungary: Real Sector**

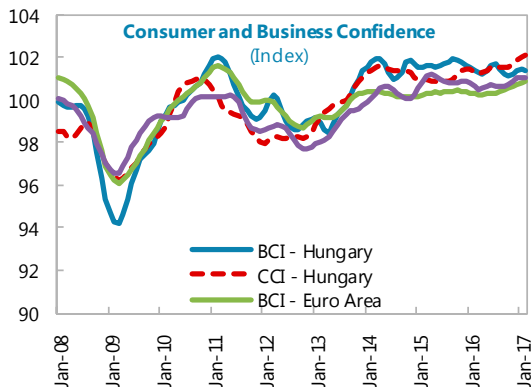
*Growth decelerated in 2016 due to slow EU funds absorption. It was supported by private consumption...*



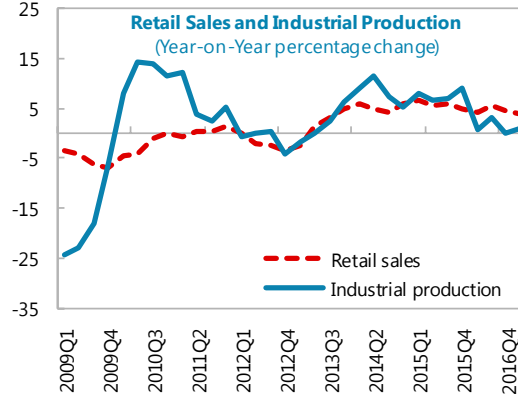
*... and by construction and agriculture.*



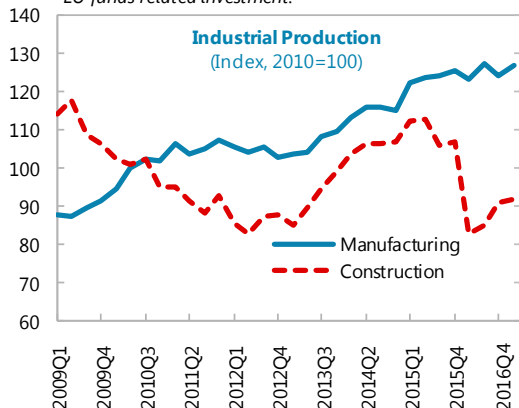
*Business confidence is improving, albeit slowly.*



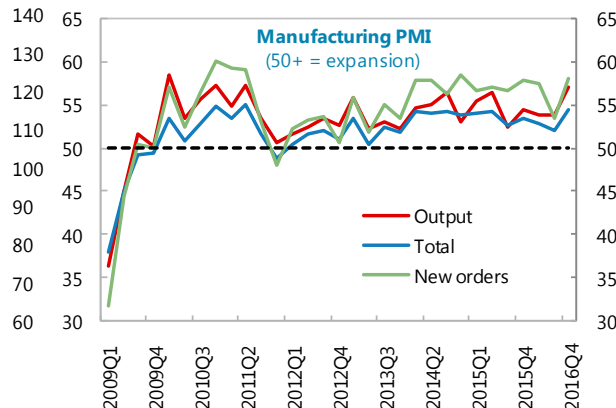
*Growth in industrial production and retail sales remains subdued...*



*... but continues to be supported by manufacturing and construction is picking up from the slowdown driven by EU funds related investment.*

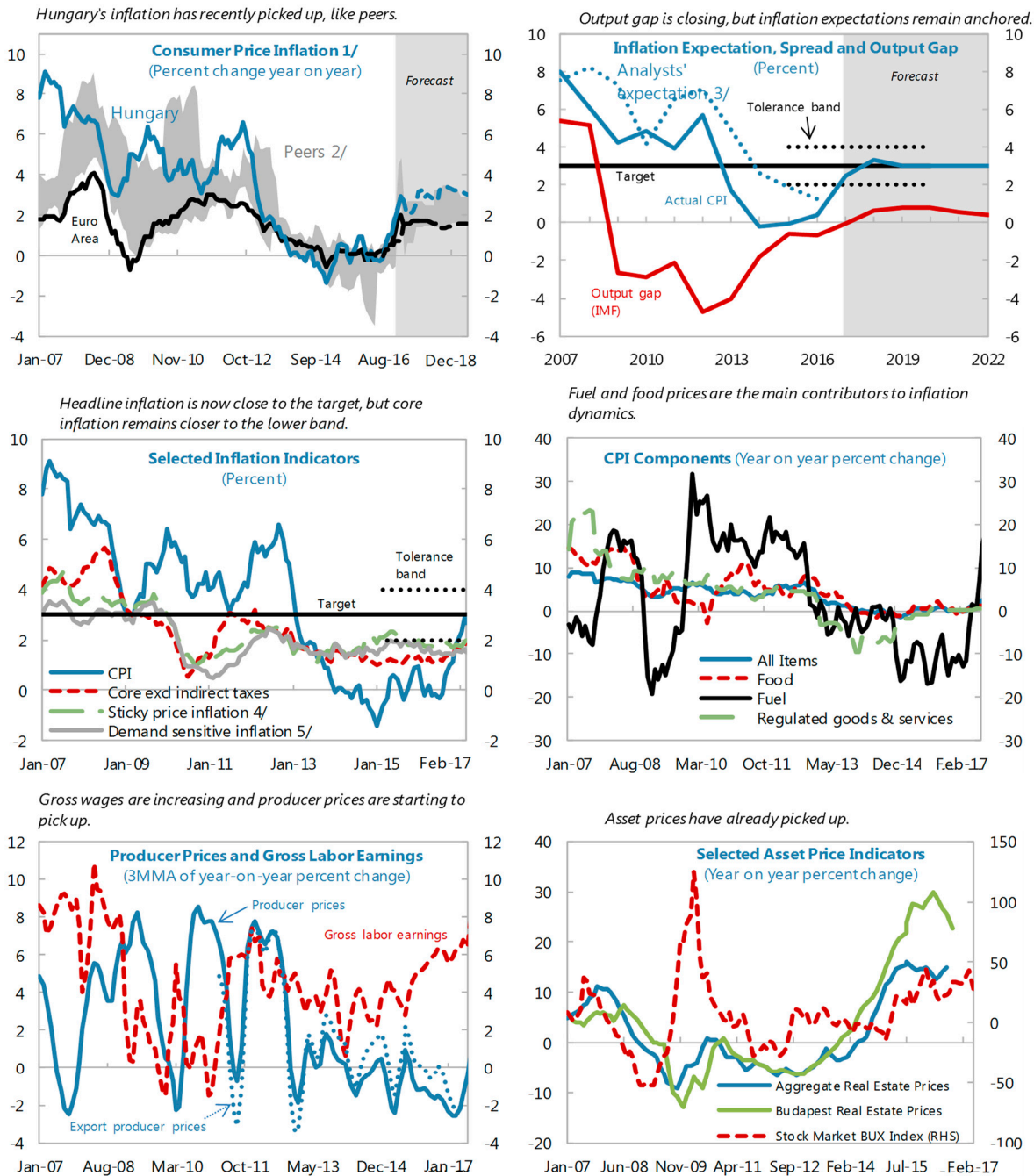


*Recent high frequency indicators pointing to a continued moderate expansion.*



Sources: Eurostat; Haver Analytics; Hungarian Statistical Office; OECD; and IMF staff calculations.

**Figure 2. Hungary: Inflation Developments and Projections, 2007–18**



Sources: Magyar Nemzeti Bank (MNB); Hungarian Central Statistical Office (HCSO); Consensus forecast; Haver; and IMF staff calculations.

1/ Dotted lines reflect WEO forecasts, and full line MNB's most recent forecast.

2/ Peers include Czech Republic, Slovakia, Poland and Romania. Shaded area represents area between max and min of peers.

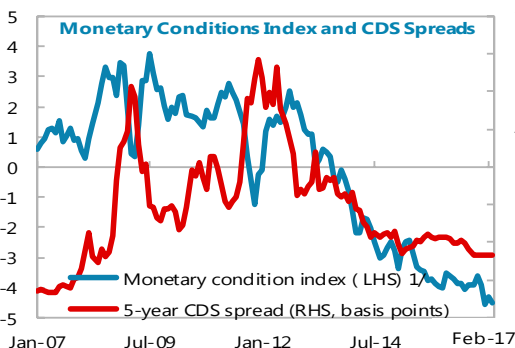
3/ Analysts' expectations according to MNB calculations based on information compiled by the EC.

4/ Prices that are slow to change.

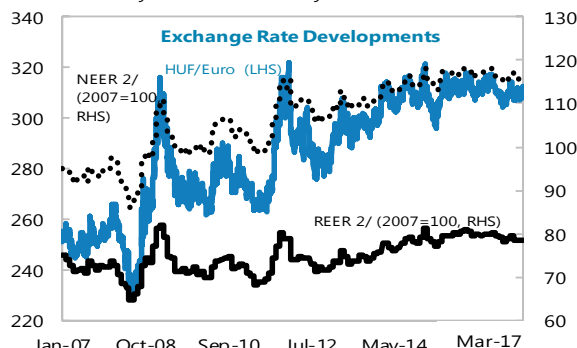
5/ Excludes processed food prices.

**Figure 3. Hungary: Monetary and Exchange Rate Developments, 2007–17**

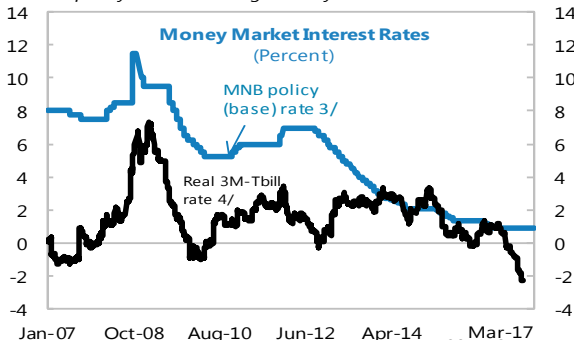
*The monetary stance has been continuously eased, using conventional and unconventional measures.*



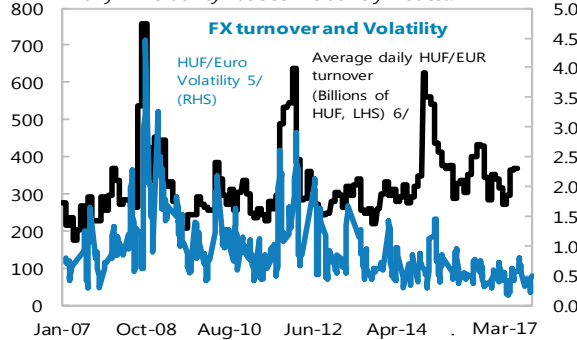
*The market determined exchange rate has been relatively stable since January 2014.*



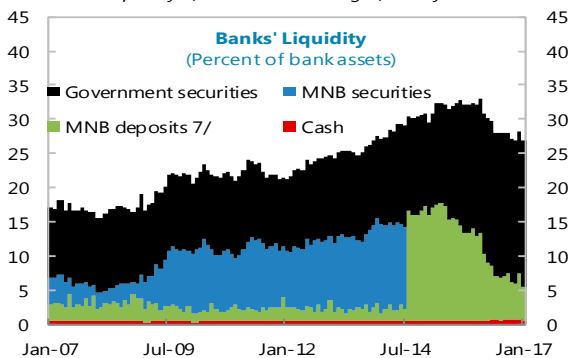
*The policy rate has been gradually lowered.*



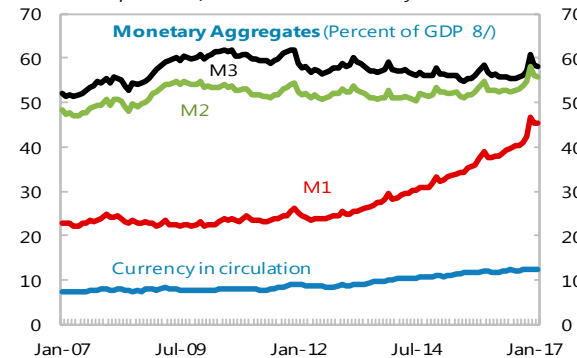
*Daily FX volatility has been relatively modest.*



*Excess liquidity of banks has been significantly reduced.*

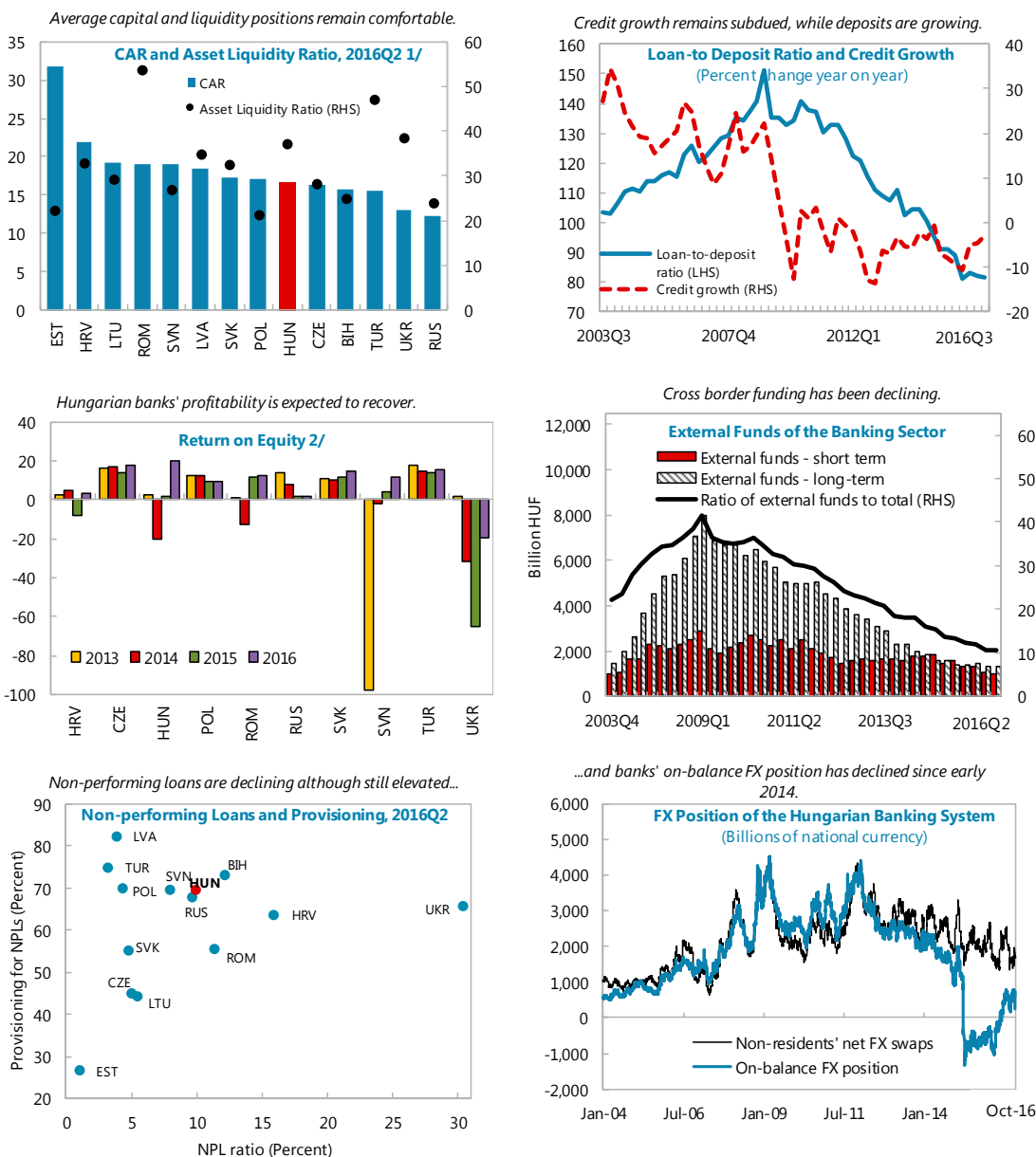


*M3 in percent of GDP has been relatively stable.*



Sources: Magyar Nemzeti Bank (MNB); Hungarian Central Statistical Office (HCSO); Bloomberg; and IMF staff calculations.  
 1/ Monetary stance compared to the period average. For instance, the percentage deviation of the real effective exchange rate (REER, deflated by CPI) compared to period average. Weight on real interest rate (BUBOR rate deflated by core inflation) is 0.75.  
 2/ As reported by the MNB. An increase means a depreciation.  
 3/ In August 2014, the base rate was changed from 2-week MNB bills to 2-week MNB deposits (non-tradable). Since September 23, 2015, the base rate refers to the 3-month MNB deposit rate.  
 4/ Real-interest rate refers to the 3-month T-bill rate deflated by the previous 12-month change in the CPI.  
 5/ Volatility measured as standard deviation in percent of average spot HUF/EUR over recent 22 observations.  
 6/ Average daily turnover in the spot, forward and swap HUF/EUR markets. Excludes options and transactions on exchanges.  
 7/ Since September 23, 2015, the amount of 2-week MNB deposits have been gradually reduced. Instead, 3-month MNB deposits were introduced and used to set the policy rate. The auctioned amounts were capped effective Q4 2016.  
 8/ Nominal GDP is the cumulative GDP over recent four quarters.

**Figure 4. Hungary: Banking Sector Indicators**



Sources: Magyar Nemzeti Bank (MNB); IMF Financial Soundness Indicators Database; IMF, World Economic Outlook; and IMF staff calculations.

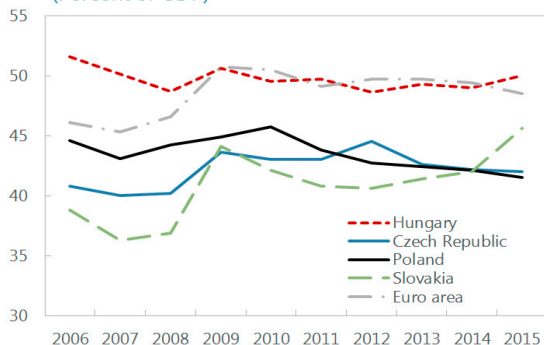
1/ Latest available data used for countries where 2016Q2 is not yet available.

2/ Used latest quarter available for each year. 2016 data not available for Russia.

**Figure 5. Hungary: Role of the State in the Economy, 2006–16**

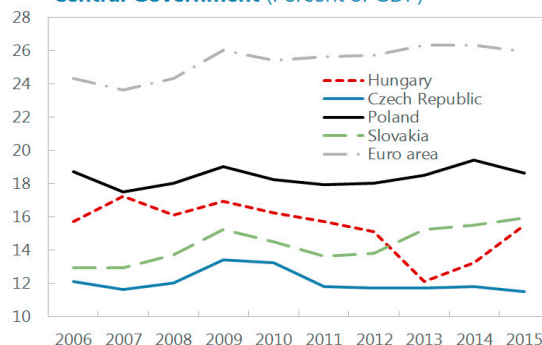
*Government expenditures are higher than peers.*

**General Government Expenditures**  
(Percent of GDP)



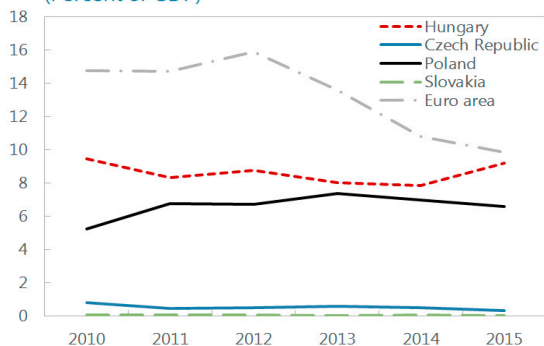
*This mainly reflects central government expenditures.*

**General Government Expenditures Excl. Central Government**  
(Percent of GDP)



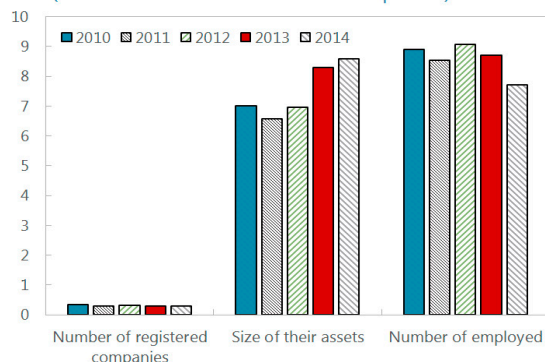
*Government guarantees have been increasing.*

**Government Guarantees**  
(Percent of GDP)



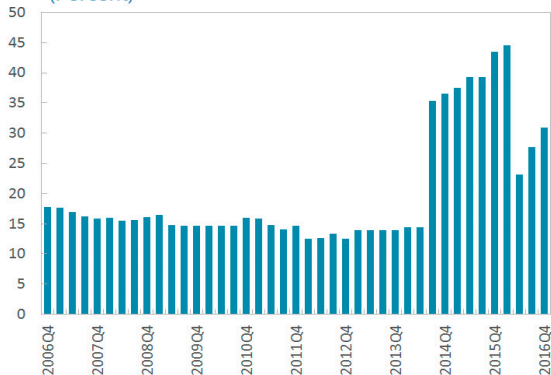
*SOEs are large, but their share of employment has been declining somewhat.*

**Majority State-Owned Non-Financial Companies**  
(Percent of total non-financial companies)



*State's share in banking system is still large.*

**State's Share of Total Subscribed Bank Capital**  
(Percent)



*The substantial sectoral taxes are being reduced.*

**Breakdown of Selected Sectoral Taxes, 2013-16**

(Percent of GDP)

|                                 | 2013       | 2014       | 2015       | 2016       |
|---------------------------------|------------|------------|------------|------------|
| Financial transaction tax (FTT) | 0.9        | 0.9        | 0.6        | 0.6        |
| Bank levy                       | 0.5        | 0.5        | 0.4        | 0.2        |
| Income tax on energy suppliers  | 0.2        | 0.1        | 0.1        | 0.1        |
| Tax on wires and pipelines      | 0.2        | 0.2        | 0.2        | 0.2        |
| Telecom tax                     | 0.2        | 0.2        | 0.2        | 0.2        |
| Tax on insurance companies      | 0.1        | 0.1        | 0.1        | 0.1        |
| <b>Total</b>                    | <b>1.9</b> | <b>1.9</b> | <b>1.6</b> | <b>1.3</b> |

Sources: Eurostat; national authorities; and IMF staff calculations.

**Table 1. Hungary: Selected Economic Indicators, 2012–18**

|  | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   |
|--|--------|--------|--------|--------|--------|--------|--------|
|  |        |        |        |        | Est.   | Proj.  |        |
| <b>Real economy</b>  |        |        |        |        |        |        |        |
| Real GDP (percentage change)   | -1.6   | 2.1    | 4.0    | 3.1    | 2.0    | 2.9    | 3.0    |
| Total domestic demand (contribution to growth)                             | -2.9   | 2.1    | 4.2    | 1.3    | 1.4    | 2.5    | 2.7    |
| Private consumption  | -1.4   | 0.3    | 1.3    | 1.8    | 2.5    | 2.0    | 1.9    |
| Government consumption   | 0.0    | 0.6    | 0.9    | 0.1    | 0.0    | 1.2    | 0.3    |
| Gross fixed investment   | -0.6   | 1.9    | 2.1    | 0.4    | -3.3   | 1.2    | 1.0    |
| Foreign balance (contribution to growth)                                   | 1.3    | 0.0    | -0.2   | 1.8    | 0.6    | 0.4    | 0.3    |
| CPI inflation (average)  | 5.7    | 1.7    | -0.2   | -0.1   | 0.4    | 2.5    | 3.2    |
| CPI inflation (end year)   | 5.0    | 0.4    | -0.9   | 0.9    | 1.8    | 2.8    | 3.0    |
| Unemployment rate (average, ages 15-64)                                    | 11.1   | 10.2   | 7.8    | 6.8    | 5.1    | ...    | ...    |
| Gross fixed capital formation (percent of GDP)                             | 19.4   | 20.9   | 21.8   | 21.7   | 17.8   | 18.6   | 19.0   |
| Gross national saving (percent of GDP, from BOP)                           | 21.1   | 24.8   | 23.9   | 25.0   | 22.7   | 22.9   | 22.6   |
| <b>General government 1/</b>   |        |        |        |        |        |        |        |
| Overall balance  | -2.3   | -2.6   | -2.1   | -1.6   | -1.7   | -2.6   | -2.5   |
| Primary balance  | 1.9    | 1.7    | 1.7    | 1.9    | 1.4    | 0.0    | -0.2   |
| Primary structural balance (percent of potential GDP)                      | 4.2    | 3.4    | 2.3    | 2.2    | 1.4    | -0.3   | -0.5   |
| Public debt  | 78.2   | 76.6   | 75.7   | 74.7   | 74.1   | 73.1   | 71.8   |
| <b>Money and credit (end-of-period)</b>                                    |        |        |        |        |        |        |        |
| Broad money  | -3.3   | 5.5    | 5.1    | 6.3    | 6.9    | 6.3    | 6.4    |
| Lending to the private sector, flow-based 2/                               | -7.4   | -3.3   | -0.9   | -10.9  | 2.0    | 4.0    | 6.5    |
| <b>Interest rates</b>  |        |        |        |        |        |        |        |
| T-bill (90-day, average)   | 6.8    | 4.1    | 2.1    | 1.1    | 0.7    | ...    | ...    |
| Government bond yield (5-year, average)                                    | 7.7    | 5.2    | 3.9    | 2.7    | 2.1    | ...    | ...    |
| 5-year sovereign CDS (annual average)                                      | 465    | 297    | 197    | 152    | 153    | ...    | ...    |
| <b>Balance of payments</b>   |        |        |        |        |        |        |        |
| Current account  | 1.8    | 3.8    | 2.1    | 3.4    | 4.9    | 4.2    | 3.6    |
| Reserves (billions of Euros)   | 33.9   | 33.8   | 34.6   | 30.3   | 24.4   | 25.7   | 28.3   |
| Gross external debt 3/   | 128.9  | 118.2  | 114.9  | 107.5  | 96.1   | 88.2   | 79.6   |
| Gross official reserves (percent of short-term debt at remaining maturity) | 119    | 119    | 161    | 142    | 133    | 128    | 150    |
| <i>Memorandum Items:</i>   |        |        |        |        |        |        |        |
| Nominal GDP (billions of Forints)  | 28,661 | 30,127 | 32,400 | 33,999 | 35,005 | 36,813 | 38,903 |
| Nominal GDP (billions of USD)  | 127    | 135    | 139    | 122    | 124    | 124    | 129    |
| Exchange rate, HUF per euro, period average                                | 289    | 297    | 309    | 310    | 311    | ...    | ...    |

Sources: Hungarian authorities; IMF, International Financial Statistics; Bloomberg; and Fund staff estimates.

1/ Consists of the central government budget, social security funds, extrabudgetary funds, and local governments.

2/ 2015 reflects the effects of the Settlement Act on credit stock.

3/ Excluding Special Purpose Entities. Including inter-company loans, and nonresident holdings of forint-denominated assets.

Table 2. Hungary: Medium-Term Scenario, 2012–22

|  | 2012  | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2021   | 2022   |
|--|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|  |   |        |        |        | Est.   |        |        |        | Proj.  |        |        |
|  | Percentage change, unless otherwise indicated |        |        |        |        |        |        |        |        |        |        |
| Real GDP growth  | -1.6  | 2.1    | 4.0    | 3.1    | 2.0    | 2.9    | 3.0    | 2.6    | 2.4    | 2.2    | 2.2    |
| Nominal GDP (billions of Forints)  | 28,661  | 30,127 | 32,400 | 33,999 | 35,005 | 36,813 | 38,903 | 40,953 | 43,026 | 45,116 | 47,307 |
| Inflation (CPI; year average basis)  | 5.7   | 1.7    | -0.2   | -0.1   | 0.4    | 2.5    | 3.2    | 2.9    | 3.0    | 3.0    | 3.0    |
| Inflation (CPI; end-year basis)  | 5.0   | 0.4    | -0.9   | 0.9    | 1.8    | 2.8    | 3.0    | 3.0    | 3.0    | 3.0    | 3.0    |
|  | Percentage Change                             |        |        |        |        |        |        |        |        |        |        |
| Consumption  | -1.9  | 1.3    | 3.0    | 2.7    | 3.6    | 4.5    | 3.1    | 3.0    | 2.8    | 2.3    | 2.9    |
| Gross fixed capital formation  | -3.0  | 9.8    | 9.9    | 1.9    | -15.5  | 6.7    | 5.2    | 4.2    | 3.3    | 3.3    | 3.3    |
| Exports of GNFS  | -1.8  | 4.2    | 9.8    | 7.7    | 5.8    | 6.1    | 6.3    | 6.3    | 6.4    | 6.1    | 5.8    |
| Imports of GNFS  | -3.5  | 4.5    | 10.9   | 6.1    | 5.7    | 6.4    | 6.6    | 6.5    | 6.4    | 6.3    | 6.2    |
| Lending to the private sector, flow-based (current prices, eop) 1/         | -7.4  | -3.3   | -0.9   | -10.9  | 2.0    | 4.0    | 6.5    | 6.2    | 6.0    | 6.0    | 6.0    |
|  | In percent of GDP                             |        |        |        |        |        |        |        |        |        |        |
| External current account balance   | 1.8   | 3.8    | 2.1    | 3.4    | 4.9    | 4.2    | 3.6    | 2.7    | 2.1    | 1.6    | 1.3    |
| Gross national saving  | 21.1  | 24.8   | 23.9   | 25.0   | 22.7   | 22.9   | 22.6   | 21.9   | 21.5   | 21.3   | 21.2   |
| Gross domestic investment  | 19.4  | 20.9   | 21.8   | 21.7   | 17.8   | 18.6   | 19.0   | 19.2   | 19.4   | 19.7   | 19.9   |
| Gross external debt 2/   | 128.9   | 118.2  | 114.9  | 107.5  | 96.1   | 88.2   | 79.6   | 72.7   | 65.9   | 61.3   | 54.0   |
| Gross official reserves (percent of short-term debt at remaining maturity) | 119   | 119    | 161    | 142    | 133    | 128    | 150    | 163    | 206    | 209    | 236    |
|  | In percent of GDP                             |        |        |        |        |        |        |        |        |        |        |
| General government   |   |        |        |        |        |        |        |        |        |        |        |
| Revenue, total   | 46.2  | 46.8   | 46.9   | 48.5   | 45.6   | 48.9   | 48.8   | 47.5   | 46.4   | 43.9   | 44.0   |
| Expenditure, total   | 48.6  | 49.3   | 49.0   | 50.0   | 47.3   | 51.5   | 51.3   | 49.8   | 48.7   | 46.4   | 46.6   |
| General government overall balance   | -2.3  | -2.6   | -2.1   | -1.6   | -1.7   | -2.6   | -2.5   | -2.3   | -2.3   | -2.5   | -2.6   |
| Structural general government balance (percent of potential GDP)           | 0.2   | -0.7   | -1.5   | -1.2   | -1.7   | -2.9   | -2.8   | -2.6   | -2.6   | -2.7   | -2.7   |
| Structural primary balance (percent of potential GDP)                      | 4.2   | 3.4    | 2.3    | 2.2    | 1.4    | -0.3   | -0.5   | -0.4   | -0.4   | -0.4   | -0.2   |
| General government debt  | 78.2  | 76.6   | 75.7   | 74.7   | 74.1   | 73.1   | 71.8   | 70.8   | 70.1   | 69.7   | 69.5   |
|  | Percentage change, unless otherwise indicated |        |        |        |        |        |        |        |        |        |        |
| Memorandum items:  |   |        |        |        |        |        |        |        |        |        |        |
| Output gap (percent of potential GDP)                                      | -4.8  | -4.1   | -1.8   | -0.6   | -0.7   | -0.1   | 0.6    | 0.8    | 0.7    | 0.5    | 0.3    |
| Potential GDP growth   | 1.1   | 1.4    | 1.6    | 1.9    | 2.1    | 2.2    | 2.3    | 2.4    | 2.4    | 2.4    | 2.4    |

Sources: Hungarian authorities; and Fund staff estimates.

1/ 2015 reflects the effects of the Settlement Act on credit stock.

2/ Excluding Special Purpose Entities. Including inter-company loans, and nonresident holdings of forint-denominated assets.

**Table 3a. Hungary: Consolidated General Government, 2012–22**  
(In Billions of Forints)

|  | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2021   | 2022   |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|  |        |        |        |        | Est    |        |        | Proj.  |        |        |        |
| Revenue                                    | 13,254 | 14,094 | 15,209 | 16,483 | 15,971 | 18,013 | 18,976 | 19,459 | 19,958 | 19,819 | 20,827 |
| Tax revenue                                | 7,278  | 7,546  | 8,170  | 8,784  | 9,045  | 9,512  | 10,066 | 10,598 | 11,140 | 11,668 | 12,242 |
| Taxes on goods and services                | 5,324  | 5,548  | 5,957  | 6,385  | 6,396  | 6,794  | 7,188  | 7,562  | 7,946  | 8,326  | 8,738  |
| VAT  | 2,628  | 2,694  | 3,011  | 3,307  | 3,297  | 3,538  | 3,753  | 3,951  | 4,147  | 4,352  | 4,562  |
| Excises and other 1/ 2/                    | 2,696  | 2,854  | 2,946  | 3,078  | 3,099  | 3,256  | 3,435  | 3,612  | 3,798  | 3,973  | 4,177  |
| Taxes on income, profits and capital gains | 1,947  | 1,991  | 2,204  | 2,388  | 2,633  | 2,701  | 2,861  | 3,017  | 3,175  | 3,322  | 3,482  |
| Personal income tax                        | 1,513  | 1,501  | 1,596  | 1,699  | 1,720  | 1,836  | 1,977  | 2,101  | 2,212  | 2,313  | 2,424  |
| Corporate taxes                            | 368    | 416    | 474    | 550    | 762    | 706    | 716    | 739    | 776    | 814    | 854    |
| Other                                      | 66     | 73     | 134    | 139    | 151    | 159    | 168    | 177    | 186    | 195    | 204    |
| Capital gains taxes                        | 8      | 7      | 10     | 11     | 16     | 16     | 17     | 18     | 19     | 20     | 21     |
| Social contributions                       | 3,734  | 3,907  | 4,204  | 4,489  | 4,832  | 4,763  | 4,841  | 5,120  | 5,415  | 5,728  | 6,058  |
| Current non-tax revenue                    | 1,196  | 1,254  | 1,283  | 1,312  | 1,355  | 1,505  | 1,541  | 1,622  | 1,704  | 1,787  | 1,873  |
| Current grants                             | 460    | 607    | 601    | 547    | 476    | 913    | 935    | 893    | 816    | 406    | 420    |
| Capital revenues and grants                | 586    | 779    | 951    | 1,351  | 262    | 1,321  | 1,594  | 1,227  | 883    | 231    | 233    |
| Expenditure                                | 13,916 | 14,864 | 15,881 | 17,010 | 16,562 | 18,974 | 19,966 | 20,402 | 20,945 | 20,939 | 22,056 |
| Compensation of employees 3/               | 2,850  | 3,028  | 3,339  | 3,601  | 3,860  | 4,136  | 4,377  | 4,640  | 4,895  | 5,179  | 5,479  |
| Goods and services                         | 2,080  | 2,197  | 2,434  | 2,498  | 2,445  | 3,017  | 3,085  | 3,184  | 3,268  | 3,101  | 3,258  |
| Interest                                   | 1,314  | 1,363  | 1,299  | 1,199  | 1,117  | 1,005  | 947    | 943    | 992    | 1,082  | 1,221  |
| Subsidies                                  | 397    | 398    | 438    | 449    | 498    | 524    | 553    | 583    | 612    | 642    | 673    |
| Current transfers to households            | 4,995  | 5,126  | 5,142  | 5,169  | 5,264  | 5,478  | 5,654  | 5,884  | 6,095  | 6,309  | 6,560  |
| Social security                            | 3,722  | 3,936  | 4,007  | 4,131  | 4,245  | 4,377  | 4,489  | 4,653  | 4,795  | 4,936  | 5,133  |
| Other                                      | 1,273  | 1,190  | 1,135  | 1,038  | 1,020  | 1,101  | 1,165  | 1,231  | 1,301  | 1,373  | 1,427  |
| Other current transfers                    | 750    | 977    | 1,017  | 999    | 1,330  | 1,260  | 1,332  | 1,402  | 1,473  | 1,544  | 1,629  |
| Capital expenditures                       | 1,043  | 1,287  | 1,605  | 2,264  | 987    | 2,266  | 2,551  | 2,353  | 2,244  | 1,836  | 1,950  |
| Capital transfers                          | 467    | 468    | 588    | 812    | 1,059  | 1,290  | 1,468  | 1,413  | 1,366  | 1,248  | 1,284  |
| Other                                      | 20     | 20     | 20     | 18     | 0      | 0      | 0      | 0      | 0      | 0      | 1      |
| General government balance                 | -662   | -770   | -673   | -527   | -592   | -960   | -989   | -943   | -987   | -1,120 | -1,229 |
| Primary balance                            | 548    | 519    | 562    | 635    | 504    | 15     | -73    | -31    | -27    | -71    | -41    |
| <i>Memorandum items:</i>                   |        |        |        |        |        |        |        |        |        |        |        |
| Gross public debt                          | 22,414 | 23,076 | 24,514 | 25,394 | 25,925 | 26,924 | 27,914 | 28,993 | 30,149 | 31,466 | 32,892 |
| GDP  | 28,661 | 30,127 | 32,400 | 33,999 | 35,005 | 36,813 | 38,903 | 40,953 | 43,026 | 45,116 | 47,307 |

Sources: Hungarian authorities and Fund staff estimates.

1/ Includes sectoral levies. Also, starting 2013 includes revenues from the financial transaction levy.

2/ Includes the levy on financial institutions.

3/ Includes social security contributions.



**Table 3b. Hungary: Consolidated General Government, 2012–22**  
(In percent of GDP, unless otherwise indicated)

|   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   |        | 2018   |        | 2019   |        | 2020 |       | 2021 |       | 2022 |  |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|-------|------|-------|------|--|
|   |        |        |        |        |        | Est.   | Proj.  | Est.   | Proj.  | Est.   | Proj.  | Est. | Proj. | Est. | Proj. |      |  |
| Revenue   | 46.2   | 46.8   | 46.9   | 48.5   | 45.6   | 48.9   | 48.8   | 47.5   | 46.4   | 43.9   | 44.0   |      |       |      |       |      |  |
| Tax revenue   | 25.4   | 25.0   | 25.2   | 25.8   | 25.8   | 25.8   | 25.9   | 25.9   | 25.9   | 25.9   | 25.9   |      |       |      |       |      |  |
| Taxes on goods and services                           | 18.6   | 18.4   | 18.4   | 18.8   | 18.3   | 18.5   | 18.5   | 18.5   | 18.5   | 18.5   | 18.5   |      |       |      |       |      |  |
| VAT   | 9.2    | 8.9    | 9.3    | 9.7    | 9.4    | 9.6    | 9.6    | 9.6    | 9.6    | 9.6    | 9.6    |      |       |      |       |      |  |
| Excises and other 1/ 2/                               | 9.4    | 9.5    | 9.1    | 9.1    | 8.9    | 8.8    | 8.8    | 8.8    | 8.8    | 8.8    | 8.8    |      |       |      |       |      |  |
| Taxes on income, profits and capital gains            | 6.8    | 6.6    | 6.8    | 7.0    | 7.5    | 7.3    | 7.4    | 7.4    | 7.4    | 7.4    | 7.4    |      |       |      |       |      |  |
| Personal income tax                                   | 5.3    | 5.0    | 4.9    | 5.0    | 4.9    | 5.0    | 5.1    | 5.1    | 5.1    | 5.1    | 5.1    |      |       |      |       |      |  |
| Corporate taxes                                       | 1.3    | 1.4    | 1.5    | 1.6    | 2.2    | 1.9    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    |      |       |      |       |      |  |
| Other   | 0.2    | 0.2    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    |      |       |      |       |      |  |
| Social contributions                                  | 13.0   | 13.0   | 13.0   | 13.2   | 13.8   | 12.9   | 12.4   | 12.5   | 12.6   | 12.7   | 12.8   |      |       |      |       |      |  |
| Current non-tax revenue                               | 4.2    | 4.2    | 4.0    | 3.9    | 3.9    | 4.1    | 4.0    | 4.0    | 4.0    | 4.0    | 4.0    |      |       |      |       |      |  |
| Current grants  | 1.6    | 2.0    | 1.9    | 1.6    | 1.4    | 2.5    | 2.4    | 2.2    | 1.9    | 0.9    | 0.9    |      |       |      |       |      |  |
| Capital revenues and grants                           | 2.0    | 2.6    | 2.9    | 4.0    | 0.7    | 3.6    | 4.1    | 3.0    | 2.1    | 0.5    | 0.5    |      |       |      |       |      |  |
| Expenditure   | 48.6   | 49.3   | 49.0   | 50.0   | 47.3   | 51.5   | 51.3   | 49.8   | 48.7   | 46.4   | 46.6   |      |       |      |       |      |  |
| Compensation of employees 3/                          | 9.9    | 10.1   | 10.3   | 10.6   | 11.0   | 11.2   | 11.3   | 11.3   | 11.4   | 11.5   | 11.6   |      |       |      |       |      |  |
| Goods and services                                    | 7.3    | 7.3    | 7.5    | 7.3    | 7.0    | 8.2    | 7.9    | 7.8    | 7.6    | 6.9    | 6.9    |      |       |      |       |      |  |
| Interest  | 4.6    | 4.5    | 4.0    | 3.5    | 3.2    | 2.7    | 2.4    | 2.3    | 2.3    | 2.4    | 2.6    |      |       |      |       |      |  |
| Subsidies   | 1.4    | 1.3    | 1.4    | 1.3    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    |      |       |      |       |      |  |
| Current transfers to households                       | 17.4   | 17.0   | 15.9   | 15.2   | 15.0   | 14.9   | 14.5   | 14.4   | 14.2   | 14.0   | 13.9   |      |       |      |       |      |  |
| Social security                                       | 13.0   | 13.1   | 12.4   | 12.2   | 12.1   | 11.9   | 11.5   | 11.4   | 11.1   | 10.9   | 10.8   |      |       |      |       |      |  |
| Other   | 4.4    | 4.0    | 3.5    | 3.1    | 2.9    | 3.0    | 3.0    | 3.0    | 3.0    | 3.0    | 3.0    |      |       |      |       |      |  |
| Other current transfers                               | 2.6    | 3.2    | 3.1    | 2.9    | 3.8    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    |      |       |      |       |      |  |
| Capital expenditures                                  | 3.6    | 4.3    | 5.0    | 6.7    | 2.8    | 6.2    | 6.6    | 5.7    | 5.2    | 4.1    | 4.1    |      |       |      |       |      |  |
| Capital transfers                                     | 1.6    | 1.6    | 1.8    | 2.4    | 3.0    | 3.5    | 3.8    | 3.5    | 3.2    | 2.8    | 2.7    |      |       |      |       |      |  |
| Other   | 0.1    | 0.1    | 0.1    | 0.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |      |       |      |       |      |  |
| General government balance                            | -2.3   | -2.6   | -2.1   | -1.6   | -1.7   | -2.6   | -2.5   | -2.3   | -2.3   | -2.5   | -2.6   |      |       |      |       |      |  |
| Primary balance                                       | 1.9    | 1.7    | 1.7    | 1.9    | 1.4    | 0.0    | -0.2   | -0.1   | -0.1   | -0.2   | -0.1   |      |       |      |       |      |  |
| <i>Memorandum items:</i>                              |        |        |        |        |        |        |        |        |        |        |        |      |       |      |       |      |  |
| Structural balance (percent of potential GDP)         | 0.2    | -0.7   | -1.5   | -1.2   | -1.7   | -2.9   | -2.8   | -2.6   | -2.6   | -2.7   | -2.7   |      |       |      |       |      |  |
| Structural primary balance (percent of potential GDP) | 4.2    | 3.4    | 2.3    | 2.2    | 1.4    | -0.3   | -0.5   | -0.4   | -0.4   | -0.4   | -0.2   |      |       |      |       |      |  |
| Gross Public debt (Maastricht definition)             | 78     | 77     | 76     | 75     | 74     | 73     | 72     | 71     | 70     | 70     | 70     |      |       |      |       |      |  |
| GDP (billions of Forints)                             | 28,661 | 30,127 | 32,400 | 33,999 | 35,005 | 36,813 | 38,903 | 40,953 | 43,026 | 45,116 | 47,307 |      |       |      |       |      |  |

Sources: Hungarian authorities and Fund staff estimates.

1/ Includes sectoral levies. Also, starting 2013 includes revenues from the financial transaction levy.

2/ Includes the levy on financial institutions.

3/ Includes social security contributions.

**Table 4. Hungary: Balance Sheet of the Central Bank, 2012–18**  
(In Billions of Forints, unless otherwise indicated)

|   | 2012   | 2013     | 2014   | 2015   | 2016   | 2017   | 2018   |
|---|--------|----------|--------|--------|--------|--------|--------|
|   |        |          |        |        |        | Proj.  |        |
| Net foreign assets  | 9,025  | 9,360    | 10,501 | 9,294  | 7,376  | 7,275  | 8,215  |
| Foreign Assets  | 10,092 | 10,262   | 11,186 | 9,846  | 8,213  | 8,112  | 9,051  |
| Foreign Liabilities                                       | 1,068  | 902      | 685    | 552    | 837    | 837    | 836    |
| Net domestic assets                                       | -5,613 | -5,564   | -5,984 | -4,512 | -1,943 | -1,423 | -2,172 |
| Net claims on government                                  | -1,236 | -614     | -849   | -620   | -1,101 | -762   | -812   |
| Assets  | 142    | 138      | 139    | 39     | 39     | 39     | 39     |
| Liabilities (Govt Deposits at MNB)                        | 1,378  | 752      | 988    | 660    | 1,140  | 802    | 851    |
| HUF   | 443    | 242      | 525    | 404    | 786    | ...    | ...    |
| FX  | 935    | 510      | 463    | 256    | 354    | ...    | ...    |
| Net claims on banks                                       | -3,402 | -3,779   | -4,247 | -2,982 | -166   | 61     | -725   |
| Assets  | 184    | 821      | 1,037  | 1,401  | 1,546  | 1,430  | 1,214  |
| Liabilities   | 3,586  | 4,600    | 5,284  | 4,383  | 1,712  | 1,369  | 1,939  |
| Deposits & CDs excl. current & overnight deposits         | 337    | 319      | 5,281  | 4,383  | 1,702  | 1,369  | 1,939  |
| Securities Issued by MNB                                  | 3,249  | 4,281    | 3      | 0      | 10     | 0      | 0      |
| Net claims on the economy                                 | -274   | -598     | 6      | 13     | 21     | 18     | 15     |
| Other items, net  | -701   | -574     | -894   | -923   | -696   | -740   | -650   |
| Base money (M0)   | 3,412  | 3,796    | 4,517  | 4,781  | 5,433  | 5,852  | 6,043  |
| Currency in Circulation                                   | 2,740  | 3,251    | 3,785  | 4,357  | 4,655  | 5,014  | 5,177  |
| Banks' Reserves   | 673    | 545      | 732    | 424    | 778    | 838    | 865    |
| Current Account Balances                                  | 477    | 435      | 499    | 363    | 180    | 194    | 200    |
| Overnight Deposits  | 195    | 110      | 233    | 61     | 598    | 644    | 666    |
| <i>Memorandum items:</i>                                  |        |          |        |        |        |        |        |
| International Reserves (billions of Euros)                | 33.9   | 33.8     | 34.6   | 30.3   | 24.4   | 25.7   | 28.3   |
| Base Money (yoy percent change)                           | -11.9  | 11.2     | 19.0   | 5.9    | 13.6   | 7.7    | 3.3    |
| NFA (contribution to change)                              | -17.7  | 9.8      | 30.1   | -26.7  | -40.1  | -1.8   | 16.1   |
| NDA (contribution to change)                              | 5.8    | 1.4      | -11.1  | 32.6   | 53.7   | 9.6    | -12.8  |
| Government Deposits at Central Bank (percent of GDP)      | 4.8    | 2.5      | 3.1    | 1.9    | 3.3    | 2.2    | 2.2    |
| HUF   | 1.5    | 0.8      | 1.6    | 1.2    | 2.2    | ...    | ...    |
| FX  | 3.3    | 1.7      | 1.4    | 0.8    | 1.0    | ...    | ...    |
| Reserve Requirement Ratio (percent of select liabilities) |        | 2% to 5% |        | 2.0    | 1.0    | 1.0    | 1.0    |

Sources: Hungarian National Bank (MNB) and Fund staff estimates.

**Table 5. Hungary: Monetary Survey, 2012–18**  
(In Billions of Forints, unless otherwise indicated)

|  | 2012                                       | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   |
|--|--|--------|--------|--------|--------|--------|--------|
|  |  |        |        |        |        | Proj.  |        |
| Net foreign assets                                 | 5,064                                      | 6,175  | 7,505  | 7,762  | 8,436  | 9,225  | 11,402 |
| Central Bank                                       | 9,025                                      | 9,360  | 10,501 | 9,294  | 7,376  | 7,275  | 8,215  |
| Commercial Banks                                   | -3,961                                     | -3,185 | -2,996 | -1,531 | 1,061  | 1,949  | 3,188  |
| Net domestic assets                                | 11,774                                     | 11,597 | 11,181 | 12,100 | 12,793 | 13,341 | 12,599 |
| Domestic credit                                    | 18,611                                     | 18,257 | 18,821 | 19,166 | 19,476 | 20,991 | 22,299 |
| Net claims on government                           | 3,356                                      | 4,163  | 4,284  | 6,006  | 6,336  | 7,330  | 7,753  |
| From Central Bank                                  | -1,236                                     | -614   | -849   | -620   | -1,101 | -762   | -812   |
| From Commercial Banks                              | 4,592                                      | 4,777  | 5,132  | 6,626  | 7,437  | 8,092  | 8,566  |
| Gross Credit to the economy                        | 15,255                                     | 14,094 | 14,537 | 13,160 | 13,140 | 13,661 | 14,545 |
| From Commercial Banks                              | 15,528                                     | 14,692 | 14,531 | 13,147 | 13,119 | 13,643 | 14,530 |
| Other items, net                                   | -6,837                                     | -6,659 | -7,640 | -7,066 | -6,683 | -7,650 | -9,700 |
| Broad money (M3)                                   | 16,838                                     | 17,772 | 18,686 | 19,862 | 21,229 | 22,566 | 24,001 |
| M2   | 15,179                                     | 15,845 | 17,264 | 18,557 | 20,354 | 21,636 | 23,012 |
| M1   | 7,297                                      | 8,896  | 10,738 | 13,226 | 16,339 | 17,368 | 18,472 |
| Currency in circulation                            | 2,554                                      | 3,001  | 3,548  | 4,109  | 4,363  | 4,638  | 4,933  |
| Overnight Deposits                                 | 4,743                                      | 5,895  | 7,190  | 9,117  | 11,975 | 12,729 | 13,539 |
| Deposits with Maturities up to 2 years             | 7,882                                      | 6,949  | 6,526  | 5,331  | 4,015  | 4,268  | 4,540  |
| Repos  | 22   | 30     | 53     | 43     | 31     | 33     | 35     |
| Money Market Fund Shares/Units                     | 1,179                                      | 1,399  | 1,228  | 1,151  | 781    | 830    | 883    |
| Debt Securities                                    | 458  | 499    | 140    | 111    | 63     | 66     | 71     |
| <i>Memorandum items:</i>                           |  |        |        |        |        |        |        |
|  | (Percentage change by contribution, y-o-y) |        |        |        |        |        |        |
| Broad Money  | -3.3                                       | 5.5    | 5.1    | 6.3    | 6.9    | 6.3    | 6.4    |
| NFA  | 5.3  | 6.6    | 7.5    | 1.4    | 3.4    | 3.7    | 9.7    |
| NDA  | -8.6                                       | -1.0   | -2.3   | 4.9    | 3.5    | 2.6    | -3.3   |
|  | (Percentage change, y-o-y)                 |        |        |        |        |        |        |
| Credit to Private Sector 1/ 2/                     | -7.4                                       | -3.3   | -0.9   | -10.9  | 2.0    | 4.0    | 6.5    |
| HUF  | 5.7  | 5.6    | 6.0    | 41.1   | 3.4    | ...    | ...    |
| FX   | -15.3                                      | -10.4  | -7.4   | -61.3  | -2.3   | ...    | ...    |
| Bank Deposits                                      | 0.1  | 2.5    | 6.6    | 4.9    | 10.1   | 5.7    | 7.4    |
| Bank Holdings of Government Paper (percent of GDP) | 14.3                                       | 13.7   | 15.0   | 19.1   | 21.5   | 22.3   | 22.3   |

Sources: Hungarian National Bank (MNB) and Fund staff estimates.

1/ Only credit to households and firms.

2/ Based on transaction data, i.e., adjusted for exchange rate changes.

**Table 6. Hungary: Balance of Payments, 2012–22**  
(In Millions of Euros, unless otherwise indicated)

|  | 2012         | 2013          | 2014          | 2015          | 2016          | 2017          | 2018          | 2019          | 2020          | 2021          | 2022          |
|--|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|  |              |               |               |               | Est.          |               |               | Proj.         |               |               |               |
| <b>Current Account</b>                                 | <b>1,752</b> | <b>3,892</b>  | <b>2,175</b>  | <b>3,693</b>  | <b>5,524</b>  | <b>4,944</b>  | <b>4,359</b>  | <b>3,426</b>  | <b>2,814</b>  | <b>2,165</b>  | <b>1,823</b>  |
| Goods and service, net                                 | 6,730        | 7,091         | 7,279         | 9,806         | 11,603        | 10,349        | 9,864         | 9,418         | 9,352         | 8,774         | 8,003         |
| Exports  | 86,021       | 87,235        | 93,062        | 99,927        | 103,996       | 113,511       | 121,693       | 130,271       | 139,765       | 149,796       | 159,856       |
| Imports  | -79,291      | -80,144       | -85,783       | -90,121       | -92,393       | -103,162      | -111,828      | -120,853      | -130,414      | -141,022      | -151,853      |
| Primary Income, net                                    | -4,226       | -2,685        | -4,409        | -5,186        | -4,435        | -4,824        | -5,160        | -5,436        | -5,377        | -5,208        | -4,735        |
| Secondary Income/Current transfers, net                | -752         | -514          | -695          | -927          | -1,644        | -580          | -345          | -556          | -1,160        | -1,400        | -1,445        |
| <b>Capital Account</b>                                 | <b>2,523</b> | <b>3,625</b>  | <b>3,953</b>  | <b>5,144</b>  | <b>569</b>    | <b>2,666</b>  | <b>3,593</b>  | <b>3,467</b>  | <b>2,498</b>  | <b>2,100</b>  | <b>2,040</b>  |
| Net capital transfers                                  | 2,496        | 3,606         | 3,976         | 5,273         | 1,058         | 2,666         | 3,593         | 3,467         | 2,498         | 2,100         | 2,040         |
| <b>Financial Account</b>                               | <b>4,180</b> | <b>148</b>    | <b>1,811</b>  | <b>11,834</b> | <b>8,502</b>  | <b>6,271</b>  | <b>5,331</b>  | <b>3,112</b>  | <b>2,075</b>  | <b>1,369</b>  | <b>1,085</b>  |
| Direct investment, net                                 | -2,095       | -1,138        | -2,973        | -1,076        | -3,171        | -555          | -599          | -693          | -739          | -762          | -769          |
| Portfolio investment, net 1/                           | -1,813       | -3,692        | 3,419         | 4,962         | 4,878         | 1,148         | 484           | -250          | -670          | -1,181        | -1,397        |
| Other investment                                       | 8,088        | 4,978         | 1,365         | 7,948         | 6,795         | 5,678         | 5,446         | 4,056         | 3,484         | 3,312         | 3,252         |
| <b>Net errors and omissions</b>                        | <b>391</b>   | <b>-1,106</b> | <b>-1,577</b> | <b>-1,917</b> | <b>-2,190</b> | <b>0</b>      | <b>0</b>      | <b>0</b>      | <b>0</b>      | <b>0</b>      | <b>0</b>      |
| <b>Overall Balance</b>                                 | <b>486</b>   | <b>6,263</b>  | <b>2,740</b>  | <b>-4,913</b> | <b>-4,600</b> | <b>1,339</b>  | <b>2,622</b>  | <b>3,781</b>  | <b>3,237</b>  | <b>2,896</b>  | <b>2,778</b>  |
| <b>Financing</b>                                       | <b>-485</b>  | <b>-6,263</b> | <b>-2,740</b> | <b>4,913</b>  | <b>4,600</b>  | <b>-1,339</b> | <b>-2,622</b> | <b>-3,781</b> | <b>-3,237</b> | <b>-2,896</b> | <b>-2,778</b> |
| Gross Reserves ("–": increase)                         | 3,351        | -1,210        | -740          | 4,913         | 6,100         | -1,339        | -2,622        | -3,781        | -3,237        | -2,896        | -2,778        |
| IMF (net)  | -3,837       | -5,053        | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 0             |
| Purchases  | 0            | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 0             |
| Repurchases  | -3,837       | -5,053        | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 0             |
| Other Official Financing (EU) (net)                    | 0            | 0             | -2,000        | 0             | -1,500        | 0             | 0             | 0             | 0             | 0             | 0             |
| Disbursements  | 0            | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 0             |
| Repayments   | 0            | 0             | -2,000        | 0             | -1,500        | 0             | 0             | 0             | 0             | 0             | 0             |
| <i>Memorandum Items:</i>                               |              |               |               |               |               |               |               |               |               |               |               |
| Current account (percent of GDP)                       | 1.8          | 3.8           | 2.1           | 3.4           | 4.9           | 4.2           | 3.6           | 2.7           | 2.1           | 1.6           | 1.3           |
| Exports volume (percentage change)                     | -1.8         | 4.2           | 9.8           | 7.7           | 5.8           | 6.1           | 6.3           | 6.3           | 6.4           | 6.1           | 5.8           |
| Imports volume (percentage change)                     | -3.5         | 4.5           | 10.9          | 6.1           | 5.7           | 6.4           | 6.6           | 6.5           | 6.4           | 6.3           | 6.2           |
| Gross external debt (percent of GDP) 2/                | 128.9        | 118.2         | 114.9         | 107.5         | 96.1          | 88.2          | 79.6          | 72.7          | 65.9          | 61.3          | 54.0          |
| Gross official reserves                                | 33,881       | 33,782        | 34,578        | 30,322        | 24,384        | 25,723        | 28,345        | 32,126        | 35,363        | 38,259        | 41,037        |
| In percent of short-term debt at remaining maturity 3/ | 119          | 119           | 161           | 142           | 133           | 128           | 150           | 163           | 206           | 209           | 236           |
| In months of next year's imports of good and services  | 5.1          | 4.7           | 4.6           | 3.9           | 2.8           | 2.8           | 2.8           | 3.0           | 3.0           | 3.0           | 3.0           |

Sources: Hungarian authorities and Fund staff estimates.

1/ Includes financial derivatives.

2/ Excludes Special Purpose Entities.

3/ Excludes Special Purpose Entities and direct investment (inter-company) debt liabilities.

**Table 7. Hungary: Financial Soundness Indicators for the Banking Sector, 2012–16**  
(In percent, unless otherwise indicated, end of period)

|   | 2012 | 2013 | 2014  | 2015 | Mar-16 | Jun-16 | Sep-16 | Dec-16 |
|---|------|------|-------|------|--------|--------|--------|--------|
| <b>Capital</b>                                    |      |      |       |      |        |        |        |        |
| Regulatory capital to risk-weighted assets        | 16.3 | 17.4 | 16.9  | 16.9 | 17.1   | 16.8   | 16.4   | 16.4   |
| Regulatory Tier 1 capital to risk-weighted assets | 13.3 | 14.6 | 13.7  | 13.9 | 14.3   | 14.0   | 14.3   | 14.3   |
| <b>Asset Quality 1/</b>                           |      |      |       |      |        |        |        |        |
| NPLs net of provisions to capital                 | 53.9 | 46.7 | 39.1  | 19.5 | 16.7   | 14.6   | 12.3   | 9.7    |
| NPLs to gross loans 2/                            | 16.0 | 16.8 | 15.6  | 11.7 | 10.9   | 10.0   | 9.0    | 7.4    |
| <b>Distribution of Loans (Percent of Total)</b>   |      |      |       |      |        |        |        |        |
| Firms   | 37.1 | 37.7 | 38.4  | 38.0 | 37.4   | 36.8   | 35.5   | 35.7   |
| Households and Non-Profits                        | 39.7 | 39.7 | 40.5  | 40.3 | 38.4   | 38.3   | 37.3   | 37.6   |
| Non-Residents                                     | 8.4  | 7.2  | 6.7   | 6.9  | 8.1    | 9.0    | 9.3    | 10.2   |
| Other   | 14.8 | 15.4 | 14.4  | 14.8 | 16.1   | 15.9   | 17.9   | 16.5   |
| FX loans  | 55.6 | 51.9 | 50.7  | 23.5 | 23.2   | 22.7   | 21.4   | 22.0   |
| <b>Profitability</b>                              |      |      |       |      |        |        |        |        |
| ROA   | -0.1 | 0.2  | -2.2  | 0.2  | 1.3    | 1.9    | 1.9    | 1.7    |
| ROE   | -1.4 | 2.3  | -20.6 | 1.9  | 13.2   | 19.8   | 19.6   | 17.4   |
| Net interest income to gross income               | 54.0 | 46.6 | 53.6  | 49.5 | 50.4   | 49.7   | 49.7   | 48.5   |
| Noninterest expenses to gross income              | 86.9 | 80.6 | 73.7  | 88.1 | 80.9   | 75.7   | 74.6   | 73.9   |
| <b>Liquidity</b>                                  |      |      |       |      |        |        |        |        |
| Liquid assets to total assets                     | 30.8 | 32.8 | 38.0  | 41.9 | 39.1   | 37.3   | 35.2   | 35.9   |
| Liquid assets to short term liabilities           | 55.2 | 57.5 | 63.6  | 68.8 | 65.1   | 63.3   | 58.3   | 59.5   |
| <b>Sensitivity to Market risk</b>                 |      |      |       |      |        |        |        |        |
| Net open FX position to Regulatory capital        | 20.5 | 15.5 | 21.9  | 17.1 | 15.4   | 17.4   | 19.3   | 17.1   |

Sources: Magyar Nemzeti Bank (MNB); and IMF's *Financial Soundness Indicators Database*.

1/ The decline in NPLs in 2015 is due to the settlement of unilateral interest hikes and exchange rate margins deemed unfair by the Supreme Court. The oldest unpaid interest, fees and penalties were paid first. NPLs can thus temporarily become performing without any actual debt servicing.

2/ At end-June 2016, total overdue loans—not just those exceeding 90 days—amounted to 12.3 percent of total loans. At end-December, this figure had declined to 9.8 percent.

## Risk Assessment Matrix (RAM)<sup>1</sup>

| Source of Risks |   | Relative Likelihood  | Impact if Realized  | Policy response   |
|-----------------|---|--|---|---|
| <b>Global</b>   | <i>Significant further strengthening of the US dollar and/or higher rates (short-term).</i>                                   | <b>High</b><br>A possible change in risk perception could lead to non-residents selling off HUF securities. In addition, normalization of monetary policy in the US and EU could lead to capital outflows. | <b>High/Medium</b><br>A reversal of capital flows would raise borrowing costs and put pressure on reserves. A stronger US dollar would, on the other hand, enhance competitiveness.   | Use FX intervention to smooth excessive exchange rate volatility. Monetary policy may have to be tightened depending on market conditions. Implement fiscal reforms to reduce the deficit and debt. Public debt strategy might have to be revisited if stresses surface in the bond market. |
|                 | <i>Retreat from cross-border integration (short to medium term).</i>  | <b>High</b><br>Skepticism about regional and global cooperation could lead to rising trade barriers and a decline in regional and global policy coordination.  | <b>High/Medium</b><br>Could slow down, or even reverse, policy coordination and collaboration, and weigh on economic activity through trade and confidence channels.  | If near-term growth slows sharply, automatic stabilizers should be allowed to operate, and monetary policy should remain accommodative or be eased further. Advance structural reforms to accelerate the transition towards a higher, sustainable growth path.                              |
|                 | <i>Structurally weak growth in key advanced and emerging economies (medium-term).</i>   | <b>High/Medium</b><br>External demand would wane, weighing on Hungary's exports and growth.  | <b>Medium</b><br>Weaker export performance would weigh on economic growth and perpetuate macroeconomic vulnerabilities.   | Advance structural reforms to accelerate the transition towards a higher, sustainable growth path.  |
| <b>Domestic</b> | <i>Continued expansion of the state's role in the economy (short/medium term).</i>  | <b>Medium</b><br>Increased policy uncertainty would erode confidence.  | <b>Medium</b><br>Resource misallocation, leading to TFP slowdown and lower potential growth. Limit availability of financing, foster sharper cross-border deleveraging, and lower FDI flows. Credit and investment growth would slow. | Accelerate the implementation of structural reforms, limit the state's involvement in the economy, and increase policy predictability.  |
|                 | <i>Slower absorption of EU funds.</i>   | <b>Low</b><br>A slower absorption of EU funds would lead to lower public investment.   | <b>High</b><br>A lower level of investment would affect growth negatively.  | Accelerate absorption and allow structural reforms to promote private sector led growth.  |
|                 | <i>Further fiscal relaxation, in response to elections' process, and expansion of the housing scheme (short/medium term).</i> | <b>Medium</b><br>A worsening of debt sustainability and an increase in the risk of a real estate bubble, especially in the Budapest area.  | <b>Medium</b><br>Worsening debt sustainability would increase financing costs and raise vulnerabilities. A real estate bubble would impact financial sector stability.  | Adopt a growth-friendly fiscal adjustment strategy. Update macroprudential tools accordingly and roll back the housing support scheme.  |

<sup>1</sup>The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. "Short term" and "medium term" are meant to indicate that the risk could materialize within 1 year and 3 years, respectively.

## Annex I. Response to Past Fund Policy Advice

The authorities have actively engaged in a policy dialogue with the Fund and implemented a number of its recommendations, but some policies deviated from previous IMF advice.

| Key recommendations   | Implemented policies   |
|---|--|
| Implement a growth-friendly fiscal consolidation to help build policy space, reduce fiscal risks, and firmly place public debt on a declining path.   | The general government balance performed above its 2016 target and the public debt ratio declined moderately. However, the 2017 budget would result in a deterioration in the underlying structural balance rather than an improvement as recommended by staff.  |
| Adopt a cautious monetary easing if downside risks to inflation and growth materialize, unless external financing conditions worsen unexpectedly.   | The MNB continued to ease monetary policy in 2016 and adjust its unconventional monetary policy instruments.   |
| Strengthen the governance structure of the asset management company for commercial real estate and keep its operations fully transparent.   | The authorities have improved the governance structure of the asset management company for commercial real estate, broadly in line with past staff advice as well as technical assistance recommendations.   |
| Limit state involvement in the economy.   | The number of new regulations and laws has declined substantially since 2013. However, the changes are still frequent and the role of the state in the economy remains high.   |
| Reduce the regulatory burden, enhance policy predictability. Address weaknesses in the labor market, promote innovation and entrepreneurship, and increase the efficiency of EU funds utilization to boost competitiveness. | The government is putting in place plans to increase child-care facilities to boost female labor force participation. In addition, the government announced plans to enhance vocational training and encourage participants in the public works scheme to move to the primary labor market. A committee led by the Minister for National Economy has been established to recommend reforms to boost competitiveness. |

## Annex II. Debt Sustainability Analysis<sup>1</sup>

*Hungary's high public debt and financing needs, albeit declining remain important sources of vulnerability. Under the baseline scenario, public debt is projected to slowly decline over the medium term to about 70 percent of GDP, while financing needs are forecast to be around 20 percent of GDP. Public debt sustainability is subject to considerable risks, particularly stemming from a combined macro-fiscal set of shocks, especially a lower GDP growth.*

### A. Public Debt Sustainability Analysis

**The baseline scenario assumes no material fiscal adjustment after the significant projected easing in 2017.** It is underpinned by the following assumptions:

- *Real GDP growth* is projected to be around 3 percent through 2017–18, mainly as a result of an assumed acceleration of EU funds absorption. It is then projected to decrease to around 2 percent over the medium term as public investment associated with deceleration of EU funds slows down. This is broadly consistent with the medium-term growth potential.
- *Inflation* is projected to pick up slightly over the medium term, reflecting the increase in oil prices, wage pressures, and the positive output gap. It, however, remains broadly consistent with the central bank's inflation target.
- *The primary balance* is projected to record only very small surpluses. With previously planned reductions in the VAT rate for selected items, higher spending on compensation of employees, and planned investment programs, the primary balance is projected to be around zero in 2017 and 2018, which is significantly lower than in previous years. Beyond 2018, the fiscal position will be largely driven by smaller EU funding and the likely declining spending pressure after the 2018 elections.

**The baseline projections are underpinned by realistic assumptions.** Past staff forecasts of the primary balance and inflation tended to be conservative (for 2007–2015, see Figure 2, first row). Projection errors were small compared to the benchmark surveillance advanced and emerging market countries. Forecasts of the primary balance were even more conservative. Growth forecasts had some optimistic projection bias between 2007 and 2012. However, this bias disappears in later years reflecting more conservative projections. The low percentile rank

<sup>1</sup> Prepared by Dora Douglass Kochman (SPR) and Mariusz Jarmuzek (EUR).



indicates a relatively large median forecast error compared to the benchmark surveillance countries (Figure 2, first row).

**The moderate decline in public debt reflects the modest fiscal adjustment and the still favorable interest rate growth differential.** The public debt-to-GDP ratio is forecast to stay at an elevated level above 70 percent, and projected to decline by around 4 percentage point by 2021. Under the baseline scenario, the primary balance will contribute only very mildly to the debt dynamics over time (Figure 3). The contribution of the interest rate-growth differential will be more favorable, reflecting modest growth and still relatively low effective interest rates, especially in 2017–19. The gross financing needs-to-GDP ratio is forecast to decline to less than 20 percent of GDP by the end of the projection period.

**The debt and financing needs projections are particularly sensitive to combined macro-fiscal, growth, and contingent liabilities shocks (Figure 5):**

- *Macro-fiscal shock.* If shocks to growth, interest rate, and primary balance occurred simultaneously, the debt-to-GDP ratio would exceed 90 percent at the end of the projection horizon. Financing needs would in this case reach about 25 percent of GDP.
- *Growth shock.* Slower growth remains the principal risk to debt sustainability. Assuming a decline in growth by one standard deviation for 2016 and 2017, the debt-to-GDP ratio is forecast to reach around 85 percent, and financing needs around 25 percent of GDP by the end of the projection period.
- *Contingent liabilities shock.* In the absence of concrete estimates of contingent liabilities, a standardized shock of 10 percent of financial sector assets is used to represent a hypothetical realization of contingent liabilities. In such a scenario, the debt-to-GDP ratio would exceed 80 percent at the end of the projection horizon and financing needs would exceed 20 percent of GDP.

**The fan charts show significant uncertainty around the baseline.** The width of the symmetric fan chart, estimated at around 25 percent of GDP, illustrates the degree of uncertainty for equal-probability upside and downside shocks (Figure 1, second row). But in light of the downside risks associated with the Eurozone slowdown and political calendar, upside shocks to growth and primary balance are constrained to zero in the asymmetric fan chart, resulting in an upward-sloping debt path (Figure 1, second row). This reflects a balance of risks skewed to the downside.

**Hungary's debt profile reveals some weaknesses.** While external financing needs are above the upper risk-assessment early warning benchmark for emerging market countries, the risk is to a certain extent mitigated by the fact that a sizeable share of foreign liabilities accounts for intra-company loans (Figure 1, third row). Although public debt in foreign currency and public debt held by non-residents have declined considerably in recent years, they are still above the lower risk assessment early warning benchmark, which suggests some non-negligible risks in case of pressures on the exchange rate and foreign exchange reserves (Figure 1, third row). On the other hand, spreads and the change in short-term debt are below the lower-risk assessment early warning benchmarks (Figure 1, third row).

**Risks to debt sustainability can however be weighed against a number of mitigating factors.**

- *Investor base.* Debt is now held predominantly by domestic financial institutions, with the non-resident component decreasing and estimated at around 20 percent of total debt. This factor, coupled with relatively low demand for private sector credit, has resulted in an incentivized investor base.
- *Buffers.* There are also some cash cushions in the form of deposits accumulated by the public sector, which are estimated around 5 percent of GDP. This implies a lower public debt-to-GDP ratio on a net basis and some liquidity cushion that could help cover financing needs for a few months.

## B. External Debt Sustainability Analysis

**Hungary's external debt has declined in recent years but remains high.** Gross external debt has declined from its peak of 149 percent of GDP in 2009 to about 96 percent by end-2016. The improvement continues to reflect bank deleveraging that began during the global financial crisis, and the FX household loan conversion. Inter-company loans related to FDI remain broadly stable, and amount to about 28 percent of gross external debt. Going forward, external debt is expected to continue to decline, reflecting ongoing implementation of the MNB's self-financing program, as well as continued current account surpluses and non-debt creating capital inflows over the medium term.

**External debt remains sustainable under a range of shocks.** Staff analysis shows that external debt is particularly vulnerable to a current account shock or a real depreciation and, to a lesser extent, a growth shock. An adverse permanent current account (growth) shock of ½ standard deviation of their historical variation would add about 13 (7) percentage points of GDP to

external debt; while a one-time real depreciation of 30 percent would add 12 percentage points of GDP to external debt.

**The authorities pointed to the importance of mitigating factors to debt sustainability risks.**

They noted an increasing role of retail investors as public debt holders, which in their view, provides a stable and reliable source of financing and reduces the risk of capital outflows. In addition, they observed that Hungary's long-term public debt sustainability is ensured by recent pension reforms, which is not captured by the framework. They also downplayed implications of overall external financing needs, highlighting the share related to inter-company loans and the relative stability of that financing source. In their view, excluding the inter-company component could possibly lower external financing needs below the upper risk-assessment benchmark.

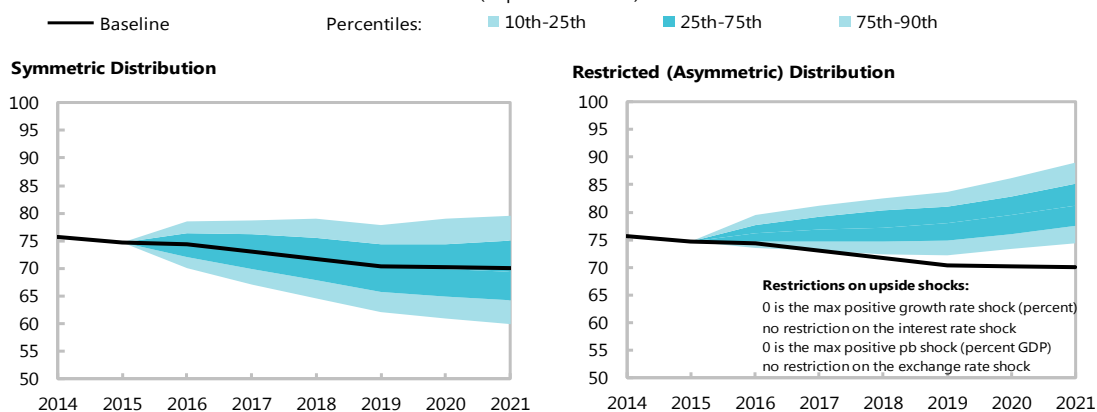
**Figure 1. Hungary Public DSA Risk Assessment**

**Heat Map**

|                                     |                       |                                 |  |                                   |                            |
|-------------------------------------|-----------------------|---------------------------------|--|-----------------------------------|----------------------------|
| Debt level <sup>1/</sup>            | Real GDP Growth Shock | Primary Balance Shock           | Real Interest Rate Shock               | Exchange Rate Shock               | Contingent Liability shock |
| Gross financing needs <sup>2/</sup> | Real GDP Growth Shock | Primary Balance Shock           | Real Interest Rate Shock               | Exchange Rate Shock               | Contingent Liability Shock |
| Debt profile <sup>3/</sup>          | Market Perception     | External Financing Requirements | Change in the Share of Short-Term Debt | Public Debt Held by Non-Residents | Foreign Currency Debt      |

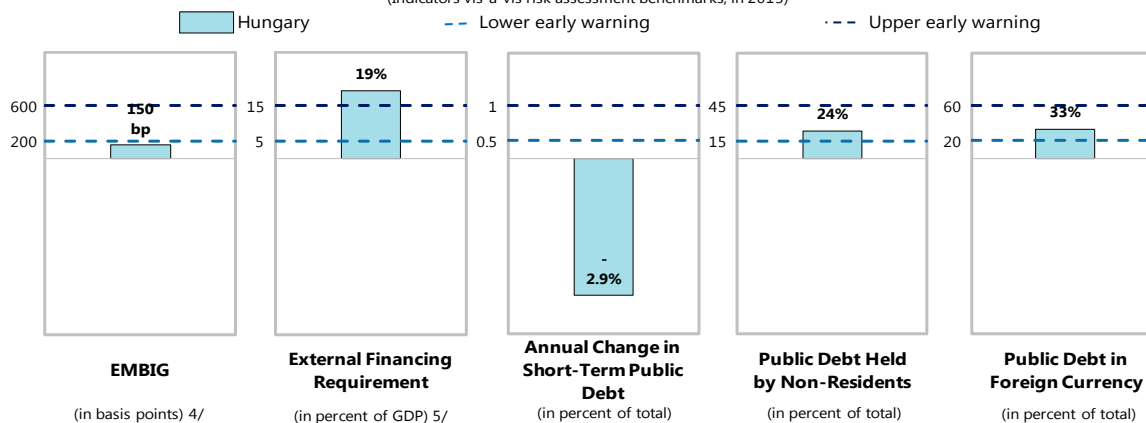
**Evolution of Predictive Densities of Gross Nominal Public Debt**

(in percent of GDP)



**Debt Profile Vulnerabilities**

(Indicators vis-à-vis risk assessment benchmarks, in 2015)



Source: IMF staff.

1/ The cell is highlighted in green if debt burden benchmark of 70% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 15% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

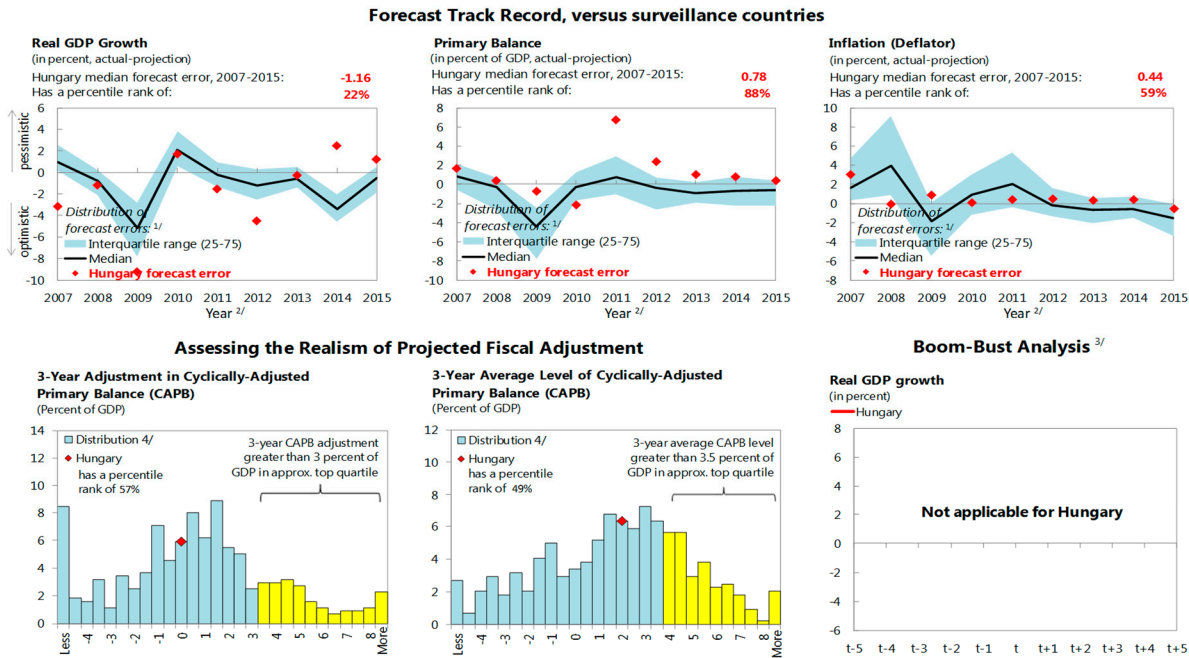
3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white. Lower and upper risk-assessment benchmarks are:

200 and 600 basis points for bond spreads; 5 and 15 percent of GDP for external financing requirement; 0.5 and 1 percent for change in the share of short-term debt; 15 and 45 percent for the public debt held by non-residents; and 20 and 60 percent for the share of foreign-currency denominated debt.

4/ EMBIG, an average over the last 3 months, 01-Oct-16 through 30-Dec-16.

5/ External financing requirement is defined as the sum of current account deficit, amortization of medium and long-term total external debt, and short-term total external debt at the end of previous period.

**Figure 2. Hungary Public DSA – Realism of Baseline Assumptions**

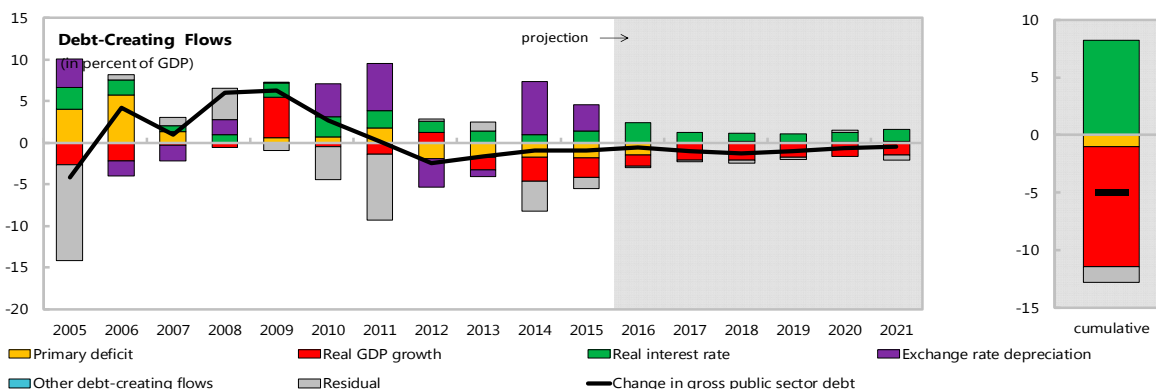


Source : IMF Staff.  
 1/ Plotted distribution includes surveillance countries, percentile rank refers to all countries.  
 2/ Projections made in the spring WEO vintage of the preceding year.  
 3/ Not applicable for Hungary, as it meets neither the positive output gap criterion nor the private credit growth criterion.  
 4/ Data cover annual observations from 1990 to 2011 for advanced and emerging economies with debt greater than 60 percent of GDP. Percent of sample on vertical axis.

**Figure 3. Hungary Public Sector Debt Sustainability Analysis (DSA) – Baseline Scenario**  
(In percent of GDP, unless otherwise indicated)

|  | Debt, Economic and Market Indicators <sup>1/</sup> |      |      |             |      |      |      |      |      |  | As of December 30, 2016  |               |  |
|--|--|------|------|-------------|------|------|------|------|------|--|--------------------------|---------------|--|
|  | Actual   |      |      | Projections |      |      |      |      |      |  |                          |               |  |
|  | 2005-2013 <sup>2/</sup>                            | 2014 | 2015 | 2016        | 2017 | 2018 | 2019 | 2020 | 2021 |  |                          |               |  |
| Nominal gross public debt                          | 72.9   | 75.7 | 74.7 | 74          | 73   | 72   | 71   | 70   | 70   |  | Sovereign Spreads        |               |  |
|  |  |      |      |             |      |      |      |      |      |  | EMBIG (bp) <sup>3/</sup> | 150           |  |
| Public gross financing needs                       | 22.7   | 21.3 | 20.9 | 17          | 13   | 20   | 20   | 22   | 19   |  | 5Y CDS (bp)              | 160           |  |
| Real GDP growth (in percent)                       | 0.7  | 4.0  | 3.1  | 2.0         | 2.9  | 3.0  | 2.6  | 2.4  | 2.2  |  | Ratings                  | Foreign Local |  |
| Inflation (GDP deflator, in percent)               | 3.5  | 3.4  | 1.7  | 1.0         | 2.2  | 2.6  | 2.6  | 2.6  | 2.6  |  | Moody's                  | Baa3 Baa2     |  |
| Nominal GDP growth (in percent)                    | 4.1  | 7.5  | 4.9  | 3.0         | 5.2  | 5.7  | 5.3  | 5.1  | 4.9  |  | S&P's                    | BBB- BBB      |  |
| Effective interest rate (in percent) <sup>4/</sup> | 6.2  | 5.6  | 4.9  | 4.3         | 4.1  | 4.0  | 4.1  | 4.5  | 4.9  |  | Fitch                    | BBB- BBB+     |  |

|  | Contribution to Changes in Public Debt |      |      |             |      |      |      |      |      |       | cumulative | debt-stabilizing primary balance <sup>9/</sup> |
|--|--|------|------|-------------|------|------|------|------|------|-------|------------|--|
|  | Actual                                 |      |      | Projections |      |      |      |      |      |       |            |  |
|  | 2005-2013 <sup>2/</sup>                | 2014 | 2015 | 2016        | 2017 | 2018 | 2019 | 2020 | 2021 |       |            |  |
| Change in gross public sector debt                         | 1.3                                    | -0.9 | -1.0 | -0.6        | -1.0 | -1.3 | -1.0 | -0.7 | -0.4 | -5.0  |            |  |
| Identified debt-creating flows                             | 3.3                                    | 2.7  | 0.4  | -0.5        | -0.8 | -1.0 | -0.7 | -0.3 | 0.2  | -3.2  |            |  |
| Primary deficit  | 1.2                                    | -1.7 | -1.9 | -1.4        | 0.0  | 0.2  | 0.1  | 0.1  | 0.2  | -1.0  | 0.0        |  |
| Primary (noninterest) revenue and grants                   | 44.3                                   | 46.7 | 48.4 | 45.6        | 48.9 | 48.7 | 47.4 | 46.3 | 43.9 | 280.7 |            |  |
| Primary (noninterest) expenditure                          | 45.5                                   | 45.0 | 46.5 | 44.1        | 48.8 | 48.9 | 47.5 | 46.4 | 44.0 | 279.7 |            |  |
| Automatic debt dynamics <sup>5/</sup>                      | 2.1                                    | 4.4  | 2.3  | 1.0         | -0.8 | -1.1 | -0.8 | -0.4 | 0.0  | -2.2  |            |  |
| Interest rate/growth differential <sup>6/</sup>            | 1.3                                    | -2.0 | -0.8 | 1.0         | -0.8 | -1.1 | -0.8 | -0.4 | 0.0  | -2.2  |            |  |
| Of which: real interest rate                               | 1.7                                    | 0.9  | 1.4  | 2.4         | 1.3  | 0.9  | 1.0  | 1.2  | 1.5  | 8.2   |            |  |
| Of which: real GDP growth                                  | -0.3                                   | -2.9 | -2.3 | -1.4        | -2.0 | -2.1 | -1.8 | -1.6 | -1.5 | -10.4 |            |  |
| Exchange rate depreciation <sup>7/</sup>                   | 0.8                                    | 6.4  | 3.1  | ...         | ...  | ...  | ...  | ...  | ...  | ...   |            |  |
| Other identified debt-creating flows                       | 0.0                                    | 0.0  | 0.0  | 0.0         | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   |            |  |
| Please specify (1) (e.g., drawdown of deposits) (negative) | 0.0                                    | 0.0  | 0.0  | 0.0         | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   |            |  |
| Contingent liabilities                                     | 0.0                                    | 0.0  | 0.0  | 0.0         | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   |            |  |
| Please specify (2) (e.g., ESM and Euroarea loans)          | 0.0                                    | 0.0  | 0.0  | 0.0         | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   |            |  |
| Residual, including asset changes <sup>8/</sup>            | -2.0                                   | -3.6 | -1.4 | -0.1        | -0.2 | -0.4 | -0.2 | 0.2  | -0.6 | -1.3  |            |  |



Source: IMF staff.

1/ Public sector is defined as general government.

2/ Based on available data.

3/ EMBIG.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as  $[(r - \pi(1+g) - g + ae(1+r)] / (1+g+\pi+g\pi)$  times previous period debt ratio, with  $r$  = interest rate;  $\pi$  = growth rate of GDP deflator;  $g$  = real GDP growth rate;

$a$  = share of foreign-currency denominated debt; and  $e$  = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

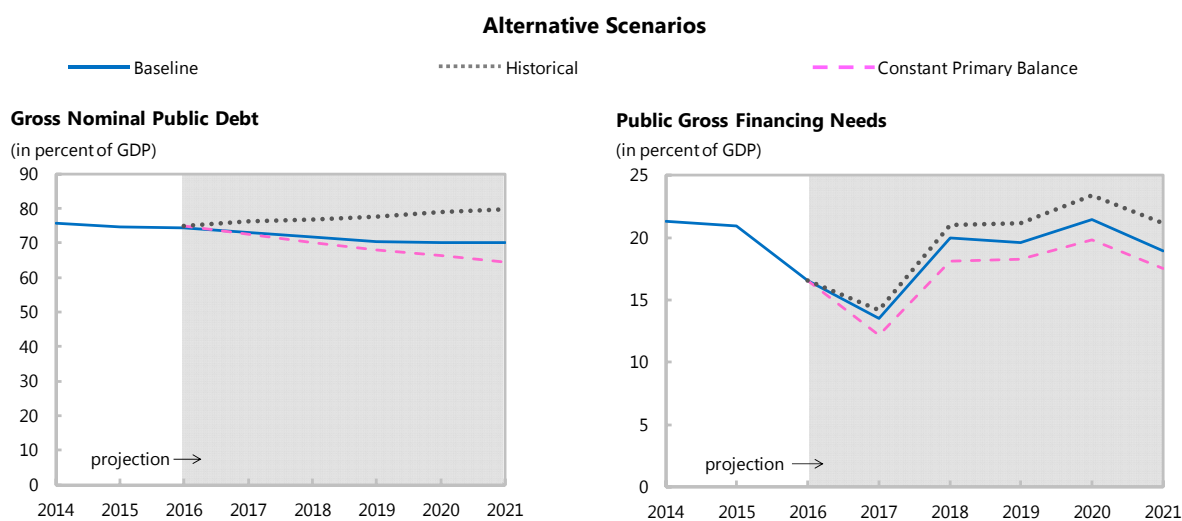
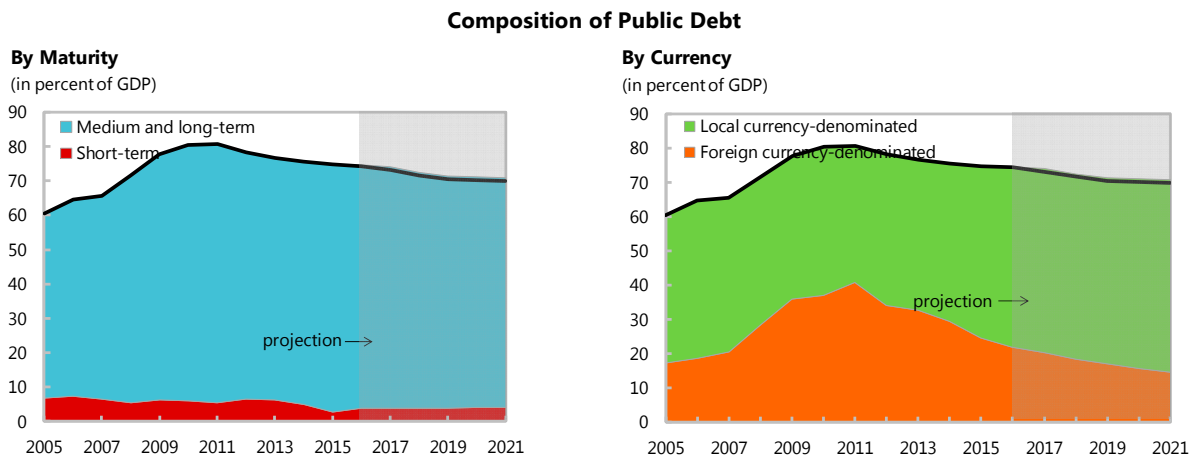
6/ The real interest rate contribution is derived from the numerator in footnote 5 as  $r - \pi(1+g)$  and the real growth contribution as  $-g$ .

7/ The exchange rate contribution is derived from the numerator in footnote 5 as  $ae(1+r)$ .

8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

**Figure 4. Hungary Public DSA – Composition of Public Debt and Alternative Scenarios**

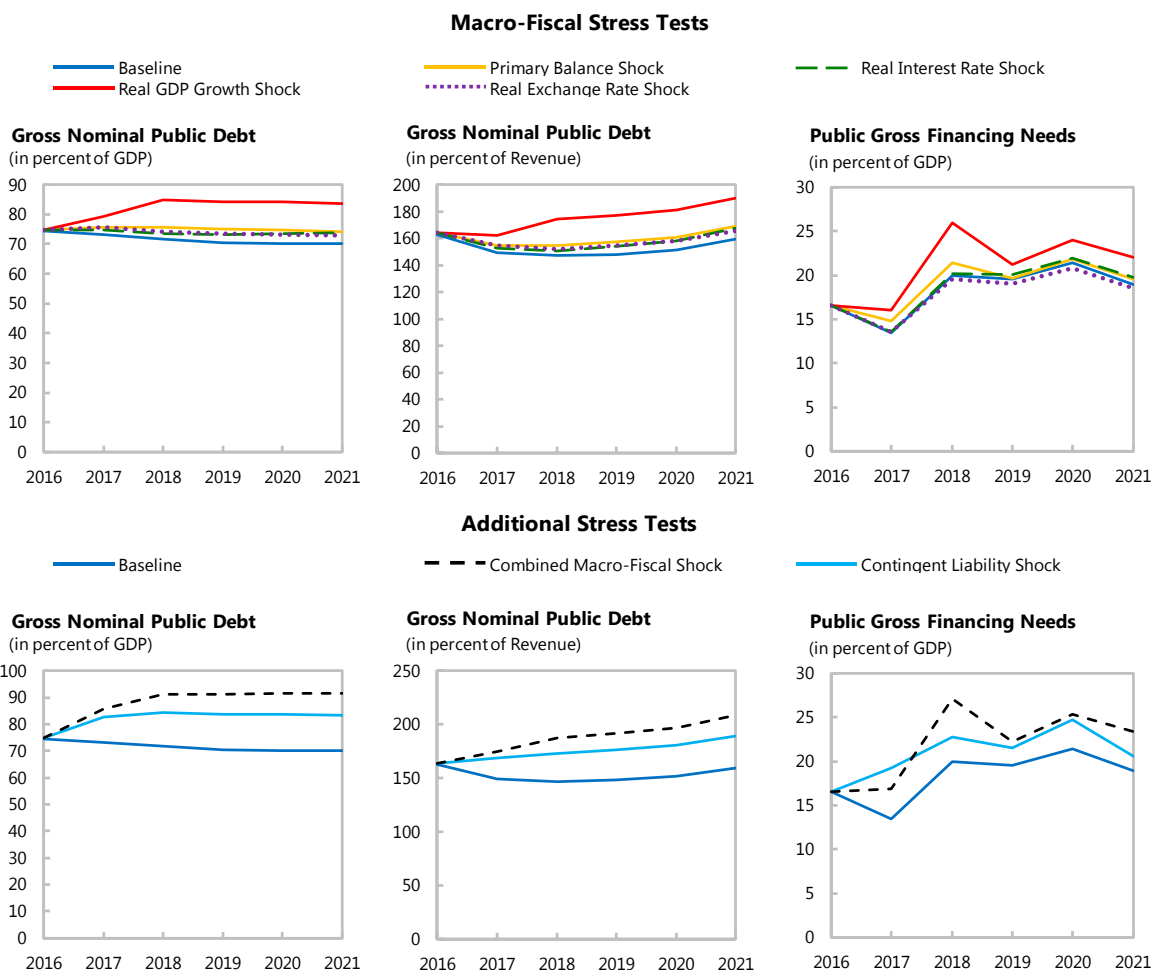


### Underlying Assumptions (in percent)

| Baseline Scenario                        | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Historical Scenario     | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|--|------|------|------|------|------|------|-------------------------|------|------|------|------|------|------|
| Real GDP growth                          | 2.0  | 2.9  | 3.0  | 2.6  | 2.4  | 2.2  | Real GDP growth         | 2.0  | 0.9  | 0.9  | 0.9  | 0.9  | 0.9  |
| Inflation                                | 1.0  | 2.2  | 2.6  | 2.6  | 2.6  | 2.6  | Inflation               | 1.0  | 2.2  | 2.6  | 2.6  | 2.6  | 2.6  |
| Primary Balance                          | 1.4  | 0.0  | -0.2 | -0.1 | -0.1 | -0.2 | Primary Balance         | 1.4  | -0.3 | -0.3 | -0.3 | -0.3 | -0.3 |
| Effective interest rate                  | 4.3  | 4.1  | 4.0  | 4.1  | 4.5  | 4.9  | Effective interest rate | 4.3  | 4.0  | 4.0  | 4.2  | 4.6  | 5.0  |
| <b>Constant Primary Balance Scenario</b> |      |      |      |      |      |      |                         |      |      |      |      |      |      |
| Real GDP growth                          | 2.0  | 2.9  | 3.0  | 2.6  | 2.4  | 2.2  |                         |      |      |      |      |      |      |
| Inflation                                | 1.0  | 2.2  | 2.6  | 2.6  | 2.6  | 2.6  |                         |      |      |      |      |      |      |
| Primary Balance                          | 1.4  | 1.4  | 1.4  | 1.4  | 1.4  | 1.4  |                         |      |      |      |      |      |      |
| Effective interest rate                  | 4.3  | 4.0  | 4.0  | 4.1  | 4.4  | 4.8  |                         |      |      |      |      |      |      |

Source: IMF staff.

Figure 5. Hungary Public DSA – Stress Tests



**Underlying Assumptions**  
(in percent)

|                                   | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|-----------------------------------|------|------|------|------|------|------|
| <b>Primary Balance Shock</b>      |      |      |      |      |      |      |
| Real GDP growth                   | 2.0  | 2.9  | 3.0  | 2.6  | 2.4  | 2.2  |
| Inflation                         | 1.0  | 2.2  | 2.6  | 2.6  | 2.6  | 2.6  |
| Primary balance                   | 1.4  | -1.1 | -1.4 | -0.1 | -0.1 | -0.2 |
| Effective interest rate           | 4.3  | 4.0  | 4.0  | 4.1  | 4.4  | 4.8  |
| <b>Real Interest Rate Shock</b>   |      |      |      |      |      |      |
| Real GDP growth                   | 2.0  | 2.9  | 3.0  | 2.6  | 2.4  | 2.2  |
| Inflation                         | 1.0  | 2.2  | 2.6  | 2.6  | 2.6  | 2.6  |
| Primary balance                   | 1.4  | 0.0  | -0.2 | -0.1 | -0.1 | -0.2 |
| Effective interest rate           | 4.3  | 4.0  | 4.3  | 4.6  | 5.2  | 5.9  |
| <b>Combined Shock</b>             |      |      |      |      |      |      |
| Real GDP growth                   | 2.0  | -0.2 | -0.1 | 2.6  | 2.4  | 2.2  |
| Inflation                         | 1.0  | 1.4  | 1.8  | 2.6  | 2.6  | 2.6  |
| Primary balance                   | 1.4  | -1.9 | -4.1 | -0.1 | -0.1 | -0.2 |
| Effective interest rate           | 4.3  | 4.4  | 4.3  | 4.6  | 5.2  | 5.8  |
| <b>Real GDP Growth Shock</b>      |      |      |      |      |      |      |
| Real GDP growth                   | 2.0  | -0.2 | -0.1 | 2.6  | 2.4  | 2.2  |
| Inflation                         | 1.0  | 1.4  | 1.8  | 2.6  | 2.6  | 2.6  |
| Primary balance                   | 1.4  | -1.9 | -4.1 | -0.1 | -0.1 | -0.2 |
| Effective interest rate           | 4.3  | 4.0  | 4.0  | 4.2  | 4.6  | 4.9  |
| <b>Real Exchange Rate Shock</b>   |      |      |      |      |      |      |
| Real GDP growth                   | 2.0  | 2.9  | 3.0  | 2.6  | 2.4  | 2.2  |
| Inflation                         | 1.0  | 8.9  | 2.6  | 2.6  | 2.6  | 2.6  |
| Primary balance                   | 1.4  | 0.0  | -0.2 | -0.1 | -0.1 | -0.2 |
| Effective interest rate           | 4.3  | 4.4  | 4.0  | 4.0  | 4.3  | 4.7  |
| <b>Contingent Liability Shock</b> |      |      |      |      |      |      |
| Real GDP growth                   | 2.0  | -0.2 | -0.1 | 2.6  | 2.4  | 2.2  |
| Inflation                         | 1.0  | 1.4  | 1.8  | 2.6  | 2.6  | 2.6  |
| Primary balance                   | 1.4  | -4.9 | -0.2 | -0.1 | -0.1 | -0.2 |
| Effective interest rate           | 4.3  | 4.3  | 4.1  | 4.2  | 4.5  | 4.9  |

Source: IMF staff.



**Table 1. Hungary: External Debt Sustainability Framework, 2010–2022**  
(In percent of GDP, unless otherwise indicated)

|  | Actual |       |       |       |       | Projections           |                       |             |             |             |             |             |             | Debt-stabilizing<br>non-interest<br>current account 6/ |
|--|--------|-------|-------|-------|-------|-----------------------|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|--|
|  | 2011   | 2012  | 2013  | 2014  | 2015  | 2016                  | 2017                  | 2018        | 2019        | 2020        | 2021        | 2022        |             |  |
| <b>1 Baseline: External debt</b>                                   | 134.2  | 128.9 | 118.2 | 114.9 | 107.5 | <b>96.1</b>           | <b>88.2</b>           | <b>79.6</b> | <b>72.7</b> | <b>65.9</b> | <b>61.3</b> | <b>54.0</b> | <b>-2.6</b> |  |
| 2 Change in external debt  | -8.7   | -5.3  | -10.7 | -3.3  | -7.4  | -11.4                 | -7.9                  | -8.6        | -6.9        | -6.7        | -4.6        | -7.3        |             |  |
| 3 Identified external debt-creating flows (4+8+9)                  | -5.8   | -3.2  | -9.0  | -9.9  | -10.1 | -9.7                  | -7.6                  | -7.5        | -6.0        | -5.9        | -4.9        | -4.6        |             |  |
| 4 Current account deficit, excluding interest payments             | -6.1   | -7.3  | -8.2  | -5.8  | -6.6  | -7.5                  | -7.0                  | -6.2        | -5.1        | -4.2        | -3.4        | -3.0        |             |  |
| 5 Deficit in balance of goods and services                         | -6.2   | -6.8  | -7.0  | -6.9  | -8.9  | -10.3                 | -8.9                  | -8.1        | -7.4        | -7.1        | -6.4        | -5.7        |             |  |
| 6 Exports  | 87.1   | 86.8  | 86.0  | 88.7  | 91.1  | 92.5                  | 97.2                  | 99.9        | 102.8       | 106.3       | 110.0       | 113.4       |             |  |
| 7 Imports  | 80.9   | 80.0  | 79.0  | 81.7  | 82.1  | 82.2                  | 88.4                  | 91.8        | 95.4        | 99.2        | 103.6       | 107.7       |             |  |
| 8 Net non-debt creating capital inflows (negative)                 | -1.1   | -2.7  | -1.1  | -2.6  | -1.6  | -2.7                  | -0.7                  | -1.4        | -1.3        | -2.0        | -1.9        | -2.0        |             |  |
| 9 Automatic debt dynamics 1/                                       | 1.4    | 6.8   | 0.4   | -1.5  | -1.9  | 0.5                   | 0.1                   | 0.1         | 0.4         | 0.3         | 0.4         | 0.4         |             |  |
| 10 Contribution from nominal interest rate                         | 5.4    | 5.5   | 4.4   | 3.8   | 3.2   | 2.6                   | 2.8                   | 2.7         | 2.4         | 2.0         | 1.8         | 1.7         |             |  |
| 11 Contribution from real GDP growth                               | -2.4   | 2.2   | -2.7  | -4.6  | -3.5  | -2.1                  | -2.7                  | -2.5        | -2.0        | -1.7        | -1.4        | -1.3        |             |  |
| 12 Contribution from price and exchange rate changes 2/            | -1.5   | -0.9  | -1.3  | -0.7  | -1.6  | ...                   | ...                   | ...         | ...         | ...         | ...         | ...         |             |  |
| 13 Residual, incl. change in gross foreign assets (2-3) 3/         | -2.9   | -2.1  | -1.7  | 6.6   | 2.7   | -1.6                  | -0.3                  | -1.1        | -0.9        | -0.9        | 0.4         | -2.7        |             |  |
| External debt-to-exports ratio (in percent)                        | 154.1  | 148.4 | 137.5 | 129.6 | 118.0 | 103.9                 | 90.7                  | 79.7        | 70.6        | 62.0        | 55.7        | 47.6        |             |  |
| <b>Gross external financing need (in billions of euros) 4/</b>     | 44.2   | 40.6  | 33.5  | 32.2  | 27.6  | 18.1                  | 14.6                  | 14.3        | 14.8        | 14.9        | 16.2        | 16.8        |             |  |
| in percent of GDP  | 43.8   | 41.0  | 33.0  | 30.7  | 25.1  | 10-Year               | 10-Year               | 16.1        | 12.5        | 11.7        | 11.7        | 11.3        | 11.9        | 11.9   |
| <b>Scenario with key variables at their historical averages 5/</b> |        |       |       |       |       | <b>96.1</b>           | <b>93.8</b>           | <b>90.9</b> | <b>88.0</b> | <b>85.0</b> | <b>83.2</b> | <b>77.9</b> | <b>0.0</b>  |  |
| <b>Key Macroeconomic Assumptions Underlying Baseline</b>           |        |       |       |       |       | Historical<br>Average | Standard<br>Deviation |             |             |             |             |             |             |  |
| Real GDP growth (in percent)                                       | 1.7    | -1.6  | 2.1   | 4.0   | 3.1   | 0.9                   | 3.1                   | 2.0         | 2.9         | 3.0         | 2.6         | 2.4         | 2.2         | 2.2  |
| GDP deflator in euros (change in percent)                          | 0.8    | -0.2  | 0.3   | -0.6  | 1.3   | 1.2                   | 4.8                   | 0.5         | 0.9         | 1.3         | 1.3         | 1.3         | 1.3         | 1.3  |
| Nominal external interest rate (in percent)                        | 3.9    | 4.0   | 3.5   | 3.3   | 2.9   | 3.9                   | 0.7                   | 2.5         | 3.0         | 3.2         | 3.1         | 2.9         | 2.9         | 2.9  |
| Growth of exports (euro terms, in percent)                         | 8.7    | -2.1  | 1.4   | 6.7   | 7.4   | 6.2                   | 10.6                  | 4.1         | 9.1         | 7.2         | 7.0         | 7.3         | 7.2         | 6.7  |
| Growth of imports (euro terms, in percent)                         | 8.1    | -2.9  | 1.1   | 7.0   | 5.1   | 5.0                   | 11.3                  | 2.5         | 11.7        | 8.4         | 8.1         | 7.9         | 8.1         | 7.7  |
| Current account balance, excluding interest payments               | 6.1    | 7.3   | 8.2   | 5.8   | 6.6   | 3.5                   | 4.6                   | 7.5         | 7.0         | 6.2         | 5.1         | 4.2         | 3.4         | 3.0  |
| Net non-debt creating capital inflows                              | 1.1    | 2.7   | 1.1   | 2.6   | 1.6   | 1.1                   | 1.9                   | 2.7         | 0.7         | 1.4         | 1.3         | 2.0         | 1.9         | 2.0  |

1/ Derived as  $[r - g - r(1+g) + ea(1+r)] / (1+g+r+gr)$  times previous period debt stock, with  $r$  = nominal effective interest rate on external debt;  $r$  = change in domestic GDP deflator in euro terms,  $g$  = real GDP growth rate,

$e$  = nominal appreciation (increase in euro value of domestic currency), and  $a$  = share of domestic-currency denominated debt in total external debt.

2/ The contribution from price and exchange rate changes is defined as  $[-r(1+g) + ea(1+r)] / (1+g+r+gr)$  times previous period debt stock.  $r$  increases with an appreciating domestic currency ( $e > 0$ ) and rising inflation (based on GDP deflator).

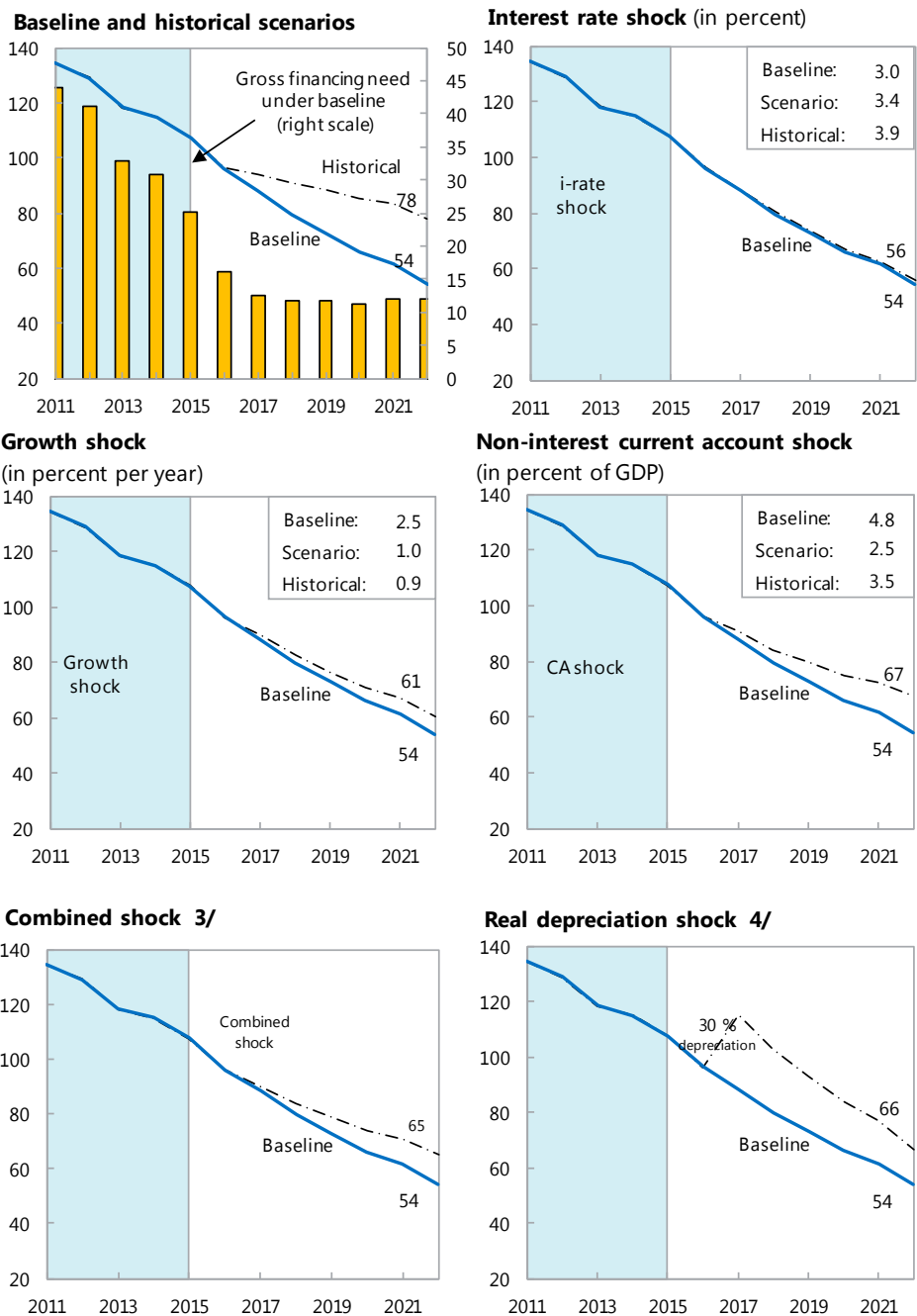
3/ For projection, line includes the impact of price and exchange rate changes.

4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.

5/ The key variables include real GDP growth; nominal interest rate; euro deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, euro deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

**Figure 1. Hungary: External Debt Sustainability: Bound Tests 1/ 2/**  
(External debt in percent of GDP)



Sources: International Monetary Fund, Country desk data, and staff estimates.  
 1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.  
 2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.  
 3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.  
 4/ One-time real depreciation of 30 percent occurs in 2017.



# HUNGARY

## STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

April 19, 2017

Prepared By

European Department  
In Consultation with Other Departments

### CONTENTS

|                           |          |
|---------------------------|----------|
| <b>FUND RELATIONS</b>     | <b>2</b> |
| <b>STATISTICAL ISSUES</b> | <b>4</b> |

## FUND RELATIONS

(As of March 31, 2017)

**Membership Status:** Joined on May 6, 1982; Article VIII.

### General Resources Account:

|   | SDR Million | Percent Quota |
|---|-------------|---------------|
| Quota                                     | 1940.00     | 100.00        |
| Fund holdings of currency (Holdings Rate) | 1640.76     | 84.58         |
| Reserve tranche position                  | 299.24      | 15.42         |

### SDR Department:

|                           | SDR Million | Percent Allocation |
|---------------------------|-------------|--------------------|
| Net cumulative allocation | 991.05      | 100.00             |
| Holdings                  | 11.43       | 1.15               |

**Outstanding Purchases and Loans:** None

### Latest Financial Arrangements:

| Type     | Date of Arrangement | Expiration Date | Amount Approved (SDR Million) | Amount Drawn (SDR Million) |
|----------|---------------------|-----------------|-------------------------------|----------------------------|
| Stand-By | Nov 6, 2008         | Oct 5, 2010     | 10,537.50                     | 7,637.00                   |
| Stand-By | Mar 15, 1996        | Feb 14, 1998    | 264.18                        | 0.00                       |
| Stand-By | Sep 15, 1993        | Dec 14, 1994    | 340.00                        | 56.70                      |

### Projected Payments to Fund:

(SDR million; based on existing use of resources and present holdings of SDRs)

|                  | <i>Forthcoming</i> |      |      |      |      |
|------------------|--------------------|------|------|------|------|
|                  | 2017               | 2018 | 2019 | 2020 | 2021 |
| Principal        |                    |      |      |      |      |
| Charges/Interest | 2.92               | 4.05 | 4.05 | 4.05 | 4.05 |
| Total            | 2.92               | 4.05 | 4.05 | 4.05 | 4.05 |

### Current Status of Safeguards Assessment:

The safeguards assessment of the Magyar Nemzeti Bank (MNB) was finalized on January 28, 2009. The assessment found that the central bank had a relatively strong safeguards framework in place. The MNB's control environment was well established, and the audit and financial reporting practices adhered to international standards. The assessment recommended measures to improve the process of program data reporting to the Fund and to strengthen audit oversight, especially over the central bank's basic tasks. In recent years, the central bank law was subject to numerous changes. Going

forward, it is critical to avoid undue changes to the MNB's legal framework and to ensure that the law continues to support MNB's operational and legal independence.

#### **Exchange Rate Arrangements:**

The Hungarian forint is classified as floating, effective November 1, 2008. Hungary has accepted the obligations of Article VIII and maintains an exchange rate system free of restrictions on the making of payments and transfers on current international transactions except for those maintained solely for the preservation of national or international security and that have been notified to the Fund pursuant to Executive Board Decision No. 144-(52/51). Effective February 27, 2012, the MNB discontinued the program of foreign exchange sale tenders, which involved multiple exchange rates for spot transactions.

#### **Article IV Consultation:**

Hungary is on a 12-month consultation cycle. The last Article IV Board discussion took place on April 22, 2016. The associated Executive Board assessment is available at <http://www.imf.org/external/np/sec/pr/2016/pr16189.htm> and the staff report at <http://www.imf.org/external/pubs/cat/longres.aspx?sk=43878.0>

#### **Technical Assistance:**

The table below summarizes the technical assistance missions provided by the Fund to Hungary.

| <b>HUNGARY: TECHNICAL ASSISTANCE FROM THE FUND, FY2010–2016</b> |   |                            |
|---|---|----------------------------|
| Department  | Purpose   | Date                       |
| MCM   | Banking Supervision   | June 2009                  |
| LEG   | Bank Resolution Framework                                       | September 2009             |
| FAD   | Expenditure policy  | October 2009               |
| MCM   | Monetary Policy   | February 2010              |
| FAD   | Expenditure Policy  | June 2010                  |
| MCM   | Financial Stability   | July 2010                  |
| FAD   | Tax Policy  | September 2010             |
| MCM   | Financial Stability   | November 2010              |
| MCM   | Monetary and Foreign Exchange Policy                            | June 2011                  |
| FAD   | Fiscal Federalism   | October 2011               |
| MCM   | Monetary and Foreign Exchange Policy                            | November 2011              |
| LEG   | VAT Fraud and Anti-Money Laundering Activities                  | January 2013               |
| LEG   | Bank Resolution and Crisis Management                           | November 2013              |
| MCM   | Operational Aspects of Establishing an Asset Management Company | January 2015 and June 2015 |
| FAD   | Workshop on Revenue Forecasting and Micro-simulation Analysis   | January 2016               |

#### **Resident Representative:**

The resident representative office closed on December 31, 2013.

## STATISTICAL ISSUES

### Assessment of Data Adequacy for Surveillance

- **General:** Data provision is adequate for surveillance.
- **Government Finance Statistics:** The statistical authorities compile and disseminate comprehensive general government annual and quarterly accrual based data according to the ESA 2010 methodology. The data include non-financial accounts, financial accounts, and financial balance sheet. These data are bridged into the GFSM 2014 framework and provided to the Fund through Eurostat for the IFS and GFS yearbooks. However, data provided to the Fund for surveillance needs to be improved further. The monthly cash-basis accounts of the central government prepared by the Ministry of National Economy do not reflect the GFS presentation and provide no information on financing. This complicates staff's ability to analyze trends and to appropriately anticipate the impact on general government accounts. Data on revenue and expenditure arrears as well as that on local government revenues and expenditures, and financial statements of state-owned enterprises has been readily provided by the authorities upon request, but provision of this data on an automatic basis would facilitate the monitoring of obligations on an accrual basis and allow for closer regular monitoring of the general government.

### Data Standards and Quality

- Subscriber to the Fund's Special Data Dissemination Standard (SDDS) since May, 1996.
- Hungary published its original ROSC Data Module in 2001 and updates are available on the IMF internet web site. The latest update is Hungary: Report on the Observance of Standards and Codes—Data Module, 2004 Update (July 2004).

**Hungary: Table of Common Indicators Required for Surveillance  
as of March 31, 2017**

|   | Date of latest observation | Date received           | Frequency of Data <sup>7</sup> | Frequency of Reporting <sup>7</sup> | Frequency of publication <sup>7</sup> | Memo Items:  |  |
|---|----------------------------|-------------------------|--------------------------------|-------------------------------------|---------------------------------------|--|--|
|   |                            |                         |                                |                                     |                                       | Data Quality – Methodological soundness <sup>8</sup> | Data Quality Accuracy and reliability <sup>9</sup> |
| Exchange Rates  | 3/31/2017                  | 4/3/2017                | D and M                        | D and M                             | D and M                               |  |  |
| International Reserve Assets and Reserve Liabilities of the Monetary Authorities <sup>1</sup>             | February 2017              | 3/7/2017 (Preliminary)  | M                              | M                                   | M                                     |  |  |
| Reserve/Base Money  | February 2017              | 3/13/2017 (Preliminary) | M                              | M                                   | M                                     | O,O,LO,LO  | O,O,O,O,LO   |
| Broad Money   | February 2017              | 3/31/2017               | M                              | M                                   | M                                     |  |  |
| Central Bank Balance Sheet  | February 2017              | 3/13/2017 (Preliminary) | M                              | M                                   | M                                     |  |  |
| Consolidated Balance Sheet of the Banking System  | February 2017              | 3/31/2017               | M                              | M                                   | M                                     |  |  |
| Interest Rates <sup>2</sup>   | February 2017              | 3/31/2017               | M                              | M                                   | M                                     |  |  |
| Consumer Price Index  | February 2017              | 3/8/2017                | M                              | M                                   | M                                     | O,O,O,O  | O,O,O,O,NA   |
| Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> – General Government <sup>4</sup> | Q3 2016                    | 1/7/2017                | Q                              | Q                                   | Q                                     | O,LNO,LO,O   | LO,O,O,O,NA  |
| Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> – Central Government              | February 2017              | 3/3/2017                | M                              | M                                   | M                                     |  |  |
| Stocks of Central Government and Central Government-Guaranteed Debt <sup>5</sup>                          | January 2016               | 2/19/2016               | M                              | M                                   | M                                     |  |  |
| External Current Account Balance  | Q4 2016                    | 3/23/2017               | Q                              | Q                                   | Q                                     | O,LO,LO,LO   | O,O,O,O,NA   |
| Exports and Imports of Goods and Services   | Q4 2016                    | 3/23/2017               | Q                              | Q                                   | Q                                     |  |  |
| GDP/GNP   | Q4 2016                    | 3/7/2017                | Q                              | Q                                   | Q                                     | O,O,O,LO   | O,LO,O,O,NA  |
| Gross External Debt   | Q4 2016                    | 3/23/2017               | Q                              | Q                                   | Q                                     |  |  |
| International investment Position <sup>6</sup>  | Q4 2016                    | 3/23/2017               | Q                              | Q                                   | Q                                     |  |  |

<sup>1</sup>Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.

<sup>2</sup>Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.

<sup>3</sup>Foreign, domestic bank, and domestic nonbank financing.

<sup>4</sup>The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

<sup>5</sup>Including currency and maturity composition.

<sup>6</sup>Includes external gross financial asset and liability positions vis-à-vis nonresidents.

<sup>7</sup>Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Irregular (I); Not Available (NA).

<sup>8</sup>Reflects the assessment provided in the data ROSC and Substantive Update published in May 2001 and July 2004, respectively, and based on the findings of the respective missions that took place during January 2001 and January 2004 for the dataset corresponding to the variable in each row. The assessment indicates whether international standards concerning (respectively) concepts and definitions, scope, classification/sectorization, and basis for recording are fully observed (O), largely not observed (LO), largely not observed (LNO), or not observed (NO).

<sup>9</sup>Same as footnote 8, except referring to international standards concerning (respectively) source data, statistical techniques, assessment and validation of source data, assessment and validation of intermediate data and statistical outputs, and revision studies.

**Statement by the Staff Representative on Hungary**  
**Executive Board Meeting**  
**May 10, 2017**

This statement provides information that has become available since the issuance of the staff report on April 21, 2017. The thrust of the staff appraisal remains unchanged.

1. The preliminary 2016 general government deficit has been revised slightly from 1.7 percent of GDP to 1.8 percent of GDP. Unemployment has continued to decline and is now reported at 4.5 percent for end-March 2017. The Ministry for National Economy is projecting it to decline further to 3.6 percent in 2018, and is projecting real GDP growth at 4.1 percent for 2017 and 4.3 percent for 2018.
2. The authorities have submitted the draft 2018 budget to parliament. The draft budget envisages a general government deficit of 2.4 percent of GDP, which is slightly narrower than staff's projection of 2.5 percent of GDP.



**Statement by Michaela Erbenova, Executive Director for Hungary  
and Bertalan Varga, Senior Advisor to Executive Director  
May 10, 2017**

The Hungarian authorities would like to thank staff for the open and constructive consultations and their report, which presents the economic developments and policy challenges in a very balanced way. The authorities broadly agree with staff's assessment of Hungary's economic and financial position and appreciate the thorough and constructive policy dialogue and policy recommendations.

**When the global financial crisis hit, Hungary had already been in a weak macroeconomic position.** The long-lasting twin deficit since the mid-2000s, the high public debt and the enormous amount of mortgage loans denominated in foreign currencies weighed heavy on the Hungarian economy, which relied on international assistance to get back on a sustainable path. Since then, the Hungarian authorities implemented bold and in some cases unconventional measures, which were effective in restoring macroeconomic stability, relaunching growth and increasing employment while also preserving political stability. Major macroeconomic balances, including fiscal and balance of payments, have been restored, and public debt has continuously declined. This achievement had been confirmed by the upgrade of Hungary's sovereign debt rating to investment grade by all three major credit rating agencies in 2016.

**The economy has stabilized and growth has returned.** In 2016, growth was slightly above the EU average at 2 percent of GDP, and is estimated to rise to between 3.6 and 4.3 percent in 2017 owing to a higher EU funds inflow and absorption as well as the continuing recovery of consumption. The current low unemployment rate of 4.5 percent was accompanied by a dynamic wage growth. This will increase households' disposable income and should also stimulate productivity increasing investments by corporates, which are in turn expected to boost import dynamics. As growth picks up, the current account surplus is expected to decline by 1.8 percentage points to around 3.7 percent of GDP in 2017, according to the authorities' projections. The Hungarian authorities thus concur with staff that some unconventional measures should be phased out gradually and structural reforms should be implemented to foster potential growth. Moreover, the authorities already took some steps in this direction: the extra levy on the banking sector, which was already halved, is on a downward path, the Central Bank of Hungary (MNB) is selling its asset management company (MARK) and stopped providing conditional financing to banks for SME lending under the Funding for Growth Scheme, while improving competitiveness is high on the government's agenda.

**The government is strongly committed to implement prudent fiscal policy to achieve fiscal consolidation and comply with EU fiscal rules.** Public debt remains relatively high at 74 percent of GDP, having decreased from 81 percent in 2011. The Hungarian Fiscal Council has approved the 2018 budget on April 27. It has been submitted to the Parliament on May 2, 2017, and foresees a further decline in public debt in the near term, reaching 61.2 percent of GDP at the

end of 2021. The government is committed to achieve its 2.4 deficit target for 2018 notwithstanding the general elections in 2018.

**Inflation has returned in 2017, but the central bank keeps monetary conditions loose until the underlying inflation becomes stable.** Headline inflation retreated to 2.7 percent in March, from the 4-year high of 2.9 percent in February, while core inflation remained stable. The MNB forecasts inflation to 2.4 - 2.5 in mid-2017, but any impact of the recent dynamic wage increases on inflation will be carefully monitored. Also, the cost effect of these wage increases will be partially offset by the reduction in the social contribution tax and the lower corporate income tax. Overall, consumption is still subdued and expected to rebound only gradually, supporting the MNB's projection of reaching its inflation target of 3 percent sustainably by the first half of 2018. The authorities are of the view that maintaining the current loose monetary conditions for an extended period is consistent with achieving the inflation target.

**The MNB's Funding for Growth Scheme (FGS) achieved its objectives and will be phased out.** The MNB introduced the FGS in 2013 to boost the subdued credit growth by providing refinancing to banks for SME lending. The program facilitated financing for almost 40,000 micro, small- and medium-sized enterprises, and contributed substantially to the 12 percent SME credit growth in 2016. While the FGS has been phased out at the end of March, the transition to lending under market-based conditions will be supported by the existing MNB's Market-Based Lending Scheme (MLS). This program provides favorable interest rate swaps (IRS) for banks, which lend to SMEs a net amount corresponding to one quarter of the allocated IRS. Thus, market-based new lending in Q4 2016 for non-financial corporates turned into positive territory after almost 8 years.

**The level of the corporate non-performing loans (NPL) significantly dropped in the last two years, and the MNB is finalizing the sale of its asset management company for commercial real estate (MARK).** When the MARK started to operate in 2015, more than one fifth of the outstanding corporate loans were non-performing, while almost half of the commercial real estate loans were in default. At the end of 2016, these ratios came down to 11 and 24 percent respectively. From the outset, it was envisaged that in the medium term MARK would operate entirely through private market participants. Its success in addressing the NPL overhang in the initial period accompanied by the pre-emptive introduction of the systemic risk buffer allowed for a significant drop in the problem portfolio already after 2 years. MARK was set up with the support of IMF technical assistance and did get the European Commission's approval for its pricing methodology in 2016. It played a crucial role in jump starting the market for non-performing commercial assets by improving the quality of information on assets and creating asset management services. It is envisaged that the company will be operated by the new private owner after the closing of the ongoing sale at end-June.

**The MNB has deployed a number of macro-prudential tools<sup>1</sup> aimed at addressing the maturity mismatch of banks' assets and liabilities and at limiting a possible credit boom.**

The MNB announced a systemic risk buffer requirement for banks to incentivize them to reduce their non-performing commercial real estate portfolio. This buffer will be determined on an individual bank-by-bank basis and is set between zero and two percent of the total domestic risk-weighted exposure value. After the conversion of the foreign currency mortgage loans into forint in 2015, the maturity mismatch was also targeted by the introduction of a new regulation, which instructs banks to finance at least 15 percent of their long-term household mortgage portfolio by long-term mortgage-backed securities. Debt-to-income (DTI) and loan-to-value (LTV) cap rules have been applied since the beginning of 2015, at 80 and 50 percent respectively in case of a HUF denominated mortgage loan for an average income household, with calibration dependent on the household income level. The MNB has the authority and stands ready to adjust the calibration based on credit growth developments.

**Against the backdrop of macroeconomic stabilization, implementing structural reforms aimed at enhancing potential growth is high on the authorities' agenda.** As a first step, a National Competitiveness Board has been set up in March, whose main task is to identify the impediments to economic growth and their quick resolution. The Committee is chaired by the Minister for National Economy and its members include high-level representatives from the private sector, chamber of commerce and academia. Several regulatory reforms to improve Hungary's Doing Business (DB) indicators have been formulated and some of them are already underway, such as reducing the number of days to get connected to the electricity network. The authorities have also reached out to the World Bank for guidance and better understanding of the DB indicators and their underlying drivers. In the course of this year, the Committee will also start working on further reforms to support long-term growth, which might include inter alia education, raising female labor participation and increasing R&D.

**The government is working to ease labor shortages, including through reforms of public work program.** At 4.5 percent, the unemployment is historically low, and recent managerial surveys indicate that labor shortages represent a major obstacle for businesses. In 2016, the participation rate has reached a historically high level of 70.1 percent, approaching the EU average. Most of the 200,000 participants in the public work scheme (PWS) are very low-skilled workers, but according to the government's estimates, around 30 percent have sufficient skills to get employment in the private sector. To support this transition, a limit has been set to the number of participants in the PWS and workers with certain skills are not eligible to participate in the program any longer. The government also seeks to incentivize the transition into the private sector. The general minimum wage and the guaranteed minimum wage for vocational professions increased by 15 and 25 percent respectively last year, while remuneration for those participating in the PWS has been increased only by 3 percent, with the expectation that workers will undertake more challenging jobs or commute longer distances. Furthermore, HUF 50 billion

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<sup>1</sup> Macroprudential report of the MNB, <http://www.mnb.hu/en/publications/reports/macroprudential-report>

have been allocated for vocational training and other cash disbursements for those, who seek jobs in the private market. Hungarian companies are in the meanwhile trying to recruit workforce from the region and the sharp increase in wages could attract some of the approximately 300,000 Hungarians, who work in other EU countries.

**Final remarks**

The Hungarian authorities are grateful for the meaningful discussions and the IMF's progressive approach to Hungary. They appreciate the staff's recommendations which they are planning to accommodate to the extent possible.