



PUBLIC FINANCE REPORT



2016
AUGUST

“Intending to ensure the benefit of the general public ... and the good condition of the country by useful remedies...”

(from a charter of King Charles Robert - February 1318)



PUBLIC FINANCE REPORT

Analysis of the public finance
developments in 2015–2016
and the 2017 Budget Act

2016
AUGUST

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To support the fulfilment of its fundamental duties set forth in Act CXXXIX of 2013 on the Magyar Nemzeti Bank, in particular the tasks related to the definition and implementation of monetary policy, the Magyar Nemzeti Bank analyses developments in the budget deficit and debt, monitors the financing of the general government, analyses the impact of financing on monetary developments, capital markets and liquidity, and researches fiscal policy issues.

Pursuant to Act CXCV of 2011 on the Economic Stability of Hungary, the Governor of the MNB is a member of the Fiscal Council (FC), and thus the professional expertise and accumulated information available in the MNB can indirectly support the work of the FC. The MNB prepares background analyses for the tasks of the FC stipulated in the Stability Act and makes such available to the FC. The general public can learn about the most important results of these expert analyses from the publication entitled 'Public Finance Report'.

This analysis was prepared by the staff of the Directorate for Fiscal and Competitiveness Analysis. The publication was approved by Dániel Palotai, Executive Director.

Contents

1. Summary	7
2. Analysis of public finance developments in 2015	9
2.1. ESA balance of the government sector in 2015	9
2.2. Realisation of the macroeconomic projection underlying the budget	10
2.3. Budget revenues	12
2.4. Expenditures of the budget	16
2.5. Balance of local governments	20
2.6. Statistical corrections (ESA bridge)	20
2.7. Public debt	21
2.8. Legal compliance of the 2015 budget	23
3. Expected public finance developments in 2016	25
3.1. Expected ESA balance of the government sector in 2016	25
3.2. Cash revenues of the central sub-sector	28
3.3. Cash expenditures of the central sub-sector	32
3.4. Balance of local governments	36
3.5. Statistical corrections (ESA bridge)	36
3.6. Expected developments in public debt in 2016	37
3.7. Legal compliance of the 2016 budget	37
4. Expected public finance developments in 2017	39
4.1. Expected ESA balance of the government sector in 2017	39
4.2. Cash revenues of the central sub-sector	43
4.3. Cash expenditures of the central sub-sector	45
4.4. Balance of local governments	50
4.5. Statistical corrections (ESA bridge)	50
4.6. Expected developments in public debt in 2017	50
4.7. Legal compliance of the 2017 budget	51
5. 20-year projection of the public debt	53
5.1. Developments in the baseline scenario	53
5.2. Underlying assumption of the projected debt path	54
5.3. Decomposition of the long-term change in the debt ratio	55
5.4. Sensitivity analyses	55
5.5. Uncertainty of the projected debt path	57

6. Special topics	58
6.1. Debt rule of the European Union	58
6.2. Development in the assets and liabilities of the general government sector in Hungary	59
6.3. Analysis of the distribution of corporate income tax liability based on micro data	61
6.4. Out-of-pocket healthcare expenditures in Hungary	64

1. Summary

The purpose of this analysis is to present the developments in public finance in 2015 and the expected budget developments for 2016, on the basis of budget figures available for the first half of 2016 and our forecast prepared for the June Inflation Report. The analysis also intends to provide an overview of the expected realisation of the budget targets approved in June 2016 for 2017. In consideration of these factors, for 2015 we assess actual, and for 2016 and 2017, expected compliance with the national and EU rules related to the balance and debt.

According to preliminary data, in 2015 the ESA deficit of the general government was 2.0 per cent of GDP, which means that last year the budget deficit fell to its lowest level since the political transition. The deficit was 0.4 percentage point lower than the government's deficit target set in the 2015 Budget Act. The better-than-expected ESA balance is primarily attributable to the surplus in tax revenues: in addition to some one-off factors, this stemmed from the more favourable-than-anticipated performance of the economy, which supported the budget through higher consumption, a larger wage bill and better corporate results. In respect of the value added tax, this process was also supported by the measures aimed at reducing the shadow economy. In addition, the net interest expenditure and the balance of the local government sub-sector also developed more favourably than planned. At the same time, however, expenditures in cash flow terms also exceeded the budgeted level, mostly in connection with the EU transfers, but the expenditures related to state assets (typically capital injections) and the net expenditures of the pharmaceuticals budget also exceeded the appropriations.

According to our projection, the accrual-based deficit of the general government may be around 1.6-1.8 per cent of GDP in 2016, which represents room for manoeuvre of HUF 100-150 billion compared to the original deficit target. According to our forecast, even with the full absorption of free reserves, which amount to 0.2 per cent of GDP, the deficit ratio of 2.0 per cent, assumed at the time when the Budget Act was passed, may still develop more favourably. However, this fiscal room for maneuver should be used in order to maintain and speed up economic growth and the economic impulses coming from the budget should not be lower than planned. On the revenue side, the better-than-budgeted balance is primarily attributable to surplus revenues from the sale of arable land. In addition, according to our forecast the dynamic expansion of the tax and contribution bases resulting from the favourable macroeconomic developments generate higher revenue than estimated. The expenditures may also exceed the appropriations due to the anticipated overrun of the uncapped appropriations, which is offset by the fact that – compared to the government – our projection expects higher drawdown in expenditures for home construction subsidies.

According to our projection, the ESA deficit target of 2.4 per cent specified in the 2017 Budget Act can be achieved, and this represents a substantial fiscal stimulus compared to 2016. The primary balance of the general government may decrease in 2017 by 0.9 percentage point compared to 2016, but it will still show a surplus. The lower primary balance resulting from the fiscal stimulus is offset by the further decline in the general government's accrual-based net interest expenditure by 0.6 percentage point compared to 2015. The dynamic fall in interest expenditures is attributable to the historically low domestic interest environment, in which the MNB's programmes are instrumental.

Our forecast deviates from the 2017 appropriations in several points. On the revenue side, it is mainly the different estimation of the anticipated impacts of the measures aimed at improving tax collection that causes our forecast to be lower than the appropriation in respect of consumption taxes. The impacts of these, however, may be somewhat offset by excise duty revenues higher than specified in the Act. On the expenditure side, we expect higher drawdown of the home purchase subsidies (CSOK) and a lower local government balance than

the Budget Act. However, according to our forecast, payment of EU transfers will not be as high in 2017 as the appropriation. This will reduce the expenditure with the amount of the co-financing by the state. On the whole, we deem the deficit target to be attainable with partial maintenance of the Country Protection Fund.

The GDP-proportionate gross government debt fell to 75.3 per cent by the end of 2015 from 76.2 per cent measured a year ago. Based on the preliminary data, the debt ratio prescribed by the Stability Act decreased by 1.9 percentage points last year, and thus the debt rule set forth in the Fundamental Law was satisfied in 2015. **According to our projection, the debt rule of the Fundamental Law will be also met over the entire forecast horizon, i.e. both in 2016 and 2017.** Based on our forecast (calculated at the EUR/HUF exchange rate prevailing at the end of 2015), gross public debt may decrease to 74.5 per cent of GDP by the end of 2016. This decline is supported both by economic growth and the surplus of the primary general government balance. We expect gross public debt to decrease to 73.4 per cent of GDP by the end of 2017. The continued decline in yields may pose an upside risk to the debt path compared to the baseline projection, while the potential pre-financing requirements of EU transfers may represent a downside risk.

In the assessment of 2015 budgetary developments, we relied on the preliminary cash-flow data and data included in the April 2016 EDP Report. In addition to the approved Budget Acts, our analysis of the budgetary processes in 2016 and 2017 was based on the macroeconomic and general government projections presented in the June Inflation Report, and in respect of 2016 we supplemented the range of the processed information with the cash-flow data of the central sub-sector for the first six months of the year.

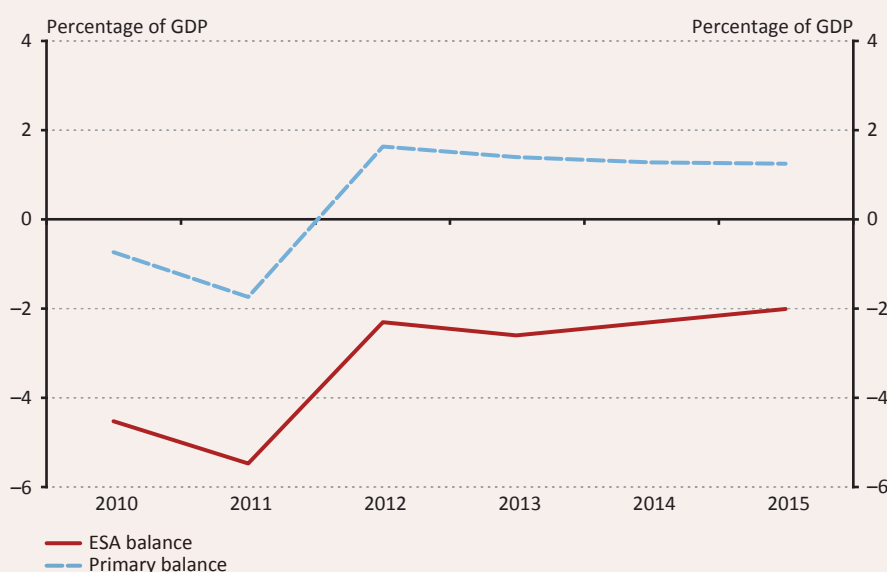
2. Analysis of public finance developments in 2015

2.1. ESA BALANCE OF THE GOVERNMENT SECTOR IN 2015

In 2015, the budget deficit in Hungary fell to its lowest level since the political transition. According to the EDP Report published by the Hungarian Central Statistical Office in April 2016, on an ESA basis, the deficit of the general government stood at 2 per cent of GDP. The primary surplus calculated without the GDP-proportionate net interest expenditure of 3.3 per cent reached 1.3 per cent of GDP.

The budgetary processes essentially followed the practices of previous years, as the GDP-proportionate deficit on an ESA basis has been persistently below the 3 per cent Maastricht criterion since 2012, while the primary surplus calculated without the net interest expenditures has been exceeding 1 per cent of GDP for several years.

Chart 1
Development of the key balance indicators in 2010-2015



Source: HCSO

The 2015 GDP-proportionate ESA balance represents a 0.4 per cent improvement compared to the deficit target approved in the original Budget Act. Within this, the deficit of the central sub-sector exceeded the plan by 1 percentage point, the budget management of the local government sector was better by 0.1 percentage point, and the GFS-ESA difference (ESA bridge) was 1.3 percentage points more favourable than expected.

The higher-than-expected cash deficit of the central sub-sector is attributable to two opposite balance developments, that is, to the substantial surplus both in revenues and expenditures. The total cash revenue exceeded the appropriation by 1.5 per cent of GDP, due to the surplus realised in the tax and contribution revenues. Compared to the preliminary plans, the budget registered higher revenues from almost all key tax types, i.e. corporate income tax, consumption tax and wage contributions. The surplus revenue is primarily attributable – in addition to some one-off cases – to the more favourable-than-anticipated performance of the

economy, which supported the budget through higher consumption, a larger wage bill and better corporate results, and – particularly in the case of the value added tax – this development was also supported by the measures aimed at reducing the shadow economy.

Table 1
Projections for the 2015 balance of the government sector

	Statutory appropriation	Actual (preliminary data)	Statutory appropriation	Actual (preliminary data)	Actual data – appropriation
	HUF Billion	HUF Billion	GDP per cent	GDP per cent	GDP per cent
1. Cash balance of the central government	–878	–1219	–2.6	–3.6	–1.0
2. Cash balance of local governments	–25	19	–0.1	0.1	0.1
3. Cash balance (GFS) of the general government (1+2)	–903	–1200	–2.7	–3.6	–0.9
4. GFS–ESA difference	90	515	0.3	1.5	1.3
5. ESA balance of the government sector (3+4)	–813	–684	–2.4	–2.0	0.4

The cash expenditure of the central sub-sector exceeded the appropriation in the Budget Act by 2.5 per cent of GDP. More than four fifths of the excess is related to EU transfers. The government disbursed subsidies in excess of the appropriation by more than 1 per cent of GDP with a view to avoiding any potential loss of funding upon future disputes. On the other hand, the actual amount of EU transfers fell short of the budgeted level by 1.6 per cent of GDP; however, this only reduces the cash balance, since it is corrected via the ESA bridge, and thus it has no impact on the ESA balance calculated on an accrual basis. In addition to EU transfers, expenditures related to state assets and the net expenditures of the pharmaceuticals budget were also higher than the budgeted amount, but the impact of this was mitigated by lower-than-planned expenses on home construction subsidies and pensions.

The General Assembly modified the Act on the Central Budget on two occasions¹ in 2015. The bill approved in May increased the expenditure appropriation by HUF 62 billion, primarily for the purpose of assuming the debt of Budapest Transport Company (BKV) and state acquisitions, while it raised the interest revenue appropriation by HUF 47 billion. On the whole, the budget deficit included in the appropriation increased by HUF 15 billion. The modification adopted in September is related to the unexpected rise in migration-related expenditures. To this end, the government increased the total expenditure figure through the reserves for extraordinary government measures by HUF 61 billion, and – in view of the favourable revenue developments – it also increased the consumption tax (VAT, excise duty) budget, thus the modification had no impact on the balance.

The cash deficit of the local governments showed an improvement of 0.1 per cent of GDP compared to the target in the Budget Act. The GFS-ESA correction relative to GDP came in at 1.5 per cent instead of the anticipated 0.3 per cent. Almost all of the difference is attributable to the fact that in 2015 the European Union suspended part of the transfers, but the missing amount can be recognised through the corrections so that it does not lower the accrual-based ESA balance.

2.2. REALISATION OF THE MACROECONOMIC PROJECTION UNDERLYING THE BUDGET

In 2015, the Hungarian economy achieved growth of 2.9 per cent, exceeding the forecast in the submitted Budget Act by 0.4 percentage point. The difference is primarily attributable to the difference between the expected and actual developments in external trade. The budget projected growth of 7.0 per cent and 6.9 per

¹ These are Acts T/4477 and T/6326 of 2015 amending Act C of 2014 on the 2015 Central Budget of Hungary.

cent in imports and exports, respectively, while actual growth came in at 7.8 and 8.4 per cent. The budget bill explained the conservative forecast with the Russian-Ukrainian crisis and the unfavourable European growth prospects.

On the whole, there was no major difference in **domestic consumption**, while the individual components departed significantly from the expectations. In the case of investments, the Budget Act projected growth of 4.3 per cent, primarily relying on the inflow of EU transfers and the Funding for Growth Scheme (FGS). However, actual growth was only 1.9 per cent, which can be attributed to the completion of the former major manufacturing investments and to the lower-than-expected agricultural investments, whereas the high base of the investments implemented from FGS loans also contributed to the latter. The Budget Act projected an ongoing recovery in housing investments, but last year these developed moderately, although the increase in the number of issued construction permits promises favourable developments going forward. The budget also expected strong growth in public investments, which did materialise, particularly in the final months of the year.

Table 2
Comparison of the forecast in the 2015 Budget Act and the actual figures

	2015 – Government expectation	2015 – Actual figures
GDP	2.5	2.9
Exports	6.9	8.4
Imports	7	7.8
Domestic absorption	2.1	1.9
Gross fixed capital formation	4.3	1.9
Household consumption expenditure	2.6	3.1
Public consumption	–2	0.6
Consumer price index	1.8	–0.1

Source: Budget Act, HCSO

Due to the tight budget management, the budget projected a 2 per cent fall in public consumption in 2015. In contrast to the budget figures, the year was closed with modest growth of 0.6 per cent, which is attributable to the higher-than-expected drawdown of EU funds, as mentioned already in connection with investments and expenditures related to migration.

The Budget Act featured 2.6 per cent growth in private consumption, which was outstripped by the actual figure by 0.5 percentage point. The justification provided in the bill explained the projection with the dynamic growth in real income: low inflation, the increase in minimum wage in excess of inflation and the career path models in the public sector all pointed to increasing consumption, only the slow easing of the precautionary considerations represented a downside risk. All of these proved true, as also evidenced by rising retail sales volumes, while precautionary considerations eased somewhat, i.e. the post-crisis rise in the savings rate halted, which may explain the higher-than-expected growth in consumption.

As regards **labour market developments**, the Ministry for National Economy expected steady growth of around 2 per cent in the number of people in employment, with the increase in the number of public workers making a major contribution to this, whereas the Ministry also anticipated a 1-per cent increase in the private sector. In the end, employment rose by 2.7 per cent, mostly due to the inflow of the inactive, while the headcount in the private sector increased by 2.8 per cent. As regards wages, the government expected growth from the private sector and the teachers' career path model, also considering that the increase in the number of public workers would reduce the impact of those factors through the composition effect. On the whole, the Budget Act projected 3.4 per cent growth in gross average wages and 4.8 per cent in the gross wage bill, while these two indicators reached 4.3 and 6.7 per cent, respectively.

In the case of the **consumer price index**, the Budget Act projected growth of 1.8 per cent, but this ratio came in considerably lower than that; last year prices dropped by 0.1 per cent. Upon preparing the budget, the budget bill identified the upside factors as stronger domestic demand, at the same time expecting that the impact of this would be absorbed by the energy price developments and the low imported inflation. The latter developed in accordance with the plans, but commodity prices fell to a greater degree than expected and the falling inflation expectations also contributed to lower prices.

2.3. BUDGET REVENUES

Last year, the processes that characterised fiscal policy in the past period continued throughout the revenue side. GDP-proportionate total government revenue rose by 1.2 percentage points to 48.7 per cent, while the 39.2 per cent tax centralisation rate exceeded that of last year by 0.8 percentage point. The difference between the growth rates is attributable to the fact that the rise in EU transfers outstripped the decrease in other non-tax revenues (e.g. interest income).²

Chart 2
Total revenue of the general government and tax centralisation



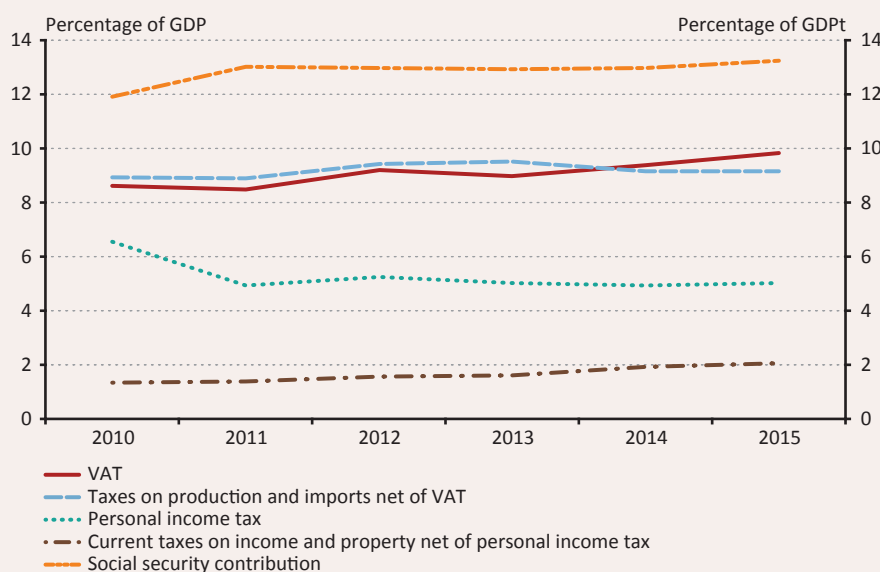
Note: The revenue indicator did not contain the private pension fund contributions before 2011.
Source: Eurostat

In 2015, the structure of tax revenue was also in line with the developments in previous years. As part of this, the volume of revenues from value added tax as a percentage of GDP increased further, which – similarly to the previous year – is primarily attributable to the measures aimed at reducing the shadow economy (introduction of online cash registers and the Electronic Trade and Transport Control System). The GDP-proportionate volume of the revenues from wage-related taxes (personal income tax, social security contribution³) increased under a steady legislative environment, as the growth in the wage bill exceeded the increase in nominal GDP. The weight of the current income and property taxes other than personal income tax is relatively low compared to other taxes, but it has been on the rise for several years. While earlier this was mostly caused by the growth in corporate special taxes, in 2015 it was attributable to the sharp rise in revenues from corporate income tax.

² It should be emphasised that these figures are already net of the transfers between the sub-sectors of the budget (this is why it is referred to as consolidated indicators); however, in addition to the EU transfers it applies to the taxes paid by the government as well that they appear on both the revenue and the expenditure side. After eliminating these items, the tax centralisation, and thereby the redistribution rate as well, would be lower.

³ This also includes the social contribution taxes.

Chart 3
Changes in different tax types



Source: HCSO, Hungarian State Treasury

In 2015, the revenues of the **central sub-sector** exceeded the appropriation stated in the approved budget by HUF 514 billion, which is primarily the result of favourable developments in tax and contribution revenues. In addition to the one-off effects (reduction of the shadow economy), the better-than-expected performance of the economy, higher consumption, the larger wage outflow and the growth in corporate profits were the main reasons that the revenue targets were outperformed in the case of corporate income tax, the key consumption taxes (VAT, excise duty) and labour taxes.

The increase of HUF 787 billion in the revenues of the central sub-sector relative to 2014 is attributable to the fact that – primarily due to the expansion of the economy – the tax and contribution revenues were up almost HUF 900 billion, the balance improving effect of which was reduced by the moderate fall in other revenues.

Payments by enterprises exceeded the appropriation stated in the Budget Act by HUF 197 billion in total, essentially due to the surplus in corporate income tax. The surplus can be attributed, on the one hand, to the better-than-expected corporate profits and one-off payments of almost HUF 110 billion, and on the other hand, to the reallocation of the cash flows between December 2015 and January 2016 in connection with the introduction of the possibility of making a tax disposition.⁴ The shortfall in the small enterprise taxes (small taxpayers' itemised lump sum tax – KATA and small business tax – KIVA) compared to the appropriation is due to the lower-than-expected number of taxpayers who opted for these tax types. The smaller number of switchovers, however, generated extra revenues in other revenue lines (simplified business tax, social contribution tax and contributions, vocational training contribution, personal income tax), and thus the fiscal balance improved overall. In addition, the shortfall in mining royalties compared to the appropriation was HUF 14 billion, as a result of the lower-than-expected oil prices.

Compared to 2014, payments by enterprises increased by HUF 198 billion, which can be attributed to surpluses in several tax types. In the case of the corporate income tax, the rise of HUF 154 billion can be ascribed to the improvement in corporate profits, and to the aforementioned one-off payments and the introduction of the tax disposition possibility. The revenues from electronic tolls increased by HUF 17 billion compared to 2014, which was primarily caused by the five per cent increase in the toll rate. In addition, it represented surplus

⁴ According to the modified rules, in 2015 the taxpayers have the opportunity to sponsor sports, performing art or motion pictures also from the paid tax advance, which is transferred to the specified beneficiary by the tax authority.

revenue of almost HUF 50 billion on the other taxes and payments line that the prorated toll, which formerly was accounted for as the income of the Hungarian Transport Administration, was recognised here. The number of taxpayers who opted for the small taxpayers' itemised lump sum tax (KATA) increased further, and thus the revenue from this tax type exceeded last year's amount by HUF 12 billion. On the other hand, revenues from mining royalty dropped by HUF 28 billion.

Table 3
Partially consolidated cash revenues of the central sub-sector in 2014 and 2015
(HUF billion)

	2014	2015		
	Actual data	Statutory appropriation	Actual data	Actual data – appropriation
TAX AND CONTRIBUTION REVENUES OF THE CENTRAL GOVERNMENT	11 718	12 056	12 606	550
Payments by economic units	1 305	1 306	1 503	197
Corporate income tax	395	341	549	207
Special tax of financial institutions	149	144	150	5
Simplified entrepreneurial tax	97	84	89	6
Mining royalty	63	49	35	-14
Gambling tax	35	40	33	-7
Income tax of energy companies	35	45	42	-3
Lump sum tax of small entrepreneurs	42	56	54	-2
Small business tax	13	16	11	-5
E-road toll	128	149	145	-4
Utility tax	55	54	56	2
Other taxes and payments	295	327	340	13
Taxes on consumption	4 336	4 397	4 598	201
Value added tax	3 036	3 172	3 286	113
Excise duties	919	914	998	85
Registration tax	19	20	21	2
Telecom tax	56	56	55	-2
Financial transaction levy	278	206	208	2
Insurance tax	29	29	30	1
Payments by households	1 754	1 807	1 876	70
Personal income tax	1 589	1 640	1 689	49
Duties, other taxes	122	121	144	23
Motor-vehicle tax	42	46	44	-2
Tax and contribution revenues of Extrabudgetary Funds	277	283	288	5
Tax and contribution revenues of Social Security Funds	4 046	4 264	4 340	77
Social security contributions	3 790	3 983	4 055	72
Other contributions and taxes	256	281	286	5
OTHER REVENUES	482	417	381	-36
Other revenues of the central government	357	317	254	-64
Other revenues of Social Security Funds	37	37	43	6
Other revenues of Extrabudgetary Funds	88	62	84	22
TOTAL REVENUES	12 200	12 472	12 987	514

The budget registered **consumption tax** revenue which was HUF 201 billion higher than the appropriation, almost half of which is attributable to the surplus in value added tax, and the other half to that in excise duty. In the case of VAT, the surplus cannot be linked directly to the performance of the economy, as the differences between the macroeconomic projection included in the bill submitted by the line ministry and the economic developments which occurred offset each other in terms of this tax type. While the volume of household and public consumption significantly exceeded the government's expectations, the consumer price index and investments fell short of the projected level. In our view, the larger part of the surplus can be ascribed to the carry-over effect of the introduction of the online cash registers in September 2014 and to the implementation of the Electronic Trade and Transport Control System. In addition, in the final months of the year the budget realised significant revenues, compared to previous years, from VAT payments related to EU transfers, as transfers from the 2007-2013 programming period could be drawn down until the end of 2015. In the case of the excise duty, which surpassed the appropriation by almost ten per cent, half of the surplus presumably comes from the higher-than-planned fuel purchases, while the other half can be attributed to the excise duty on tobacco products. Last year, the decline in cigarette consumption came to a halt after several years, while the turnover of cut tobacco continued to rise. In addition, it also increased the revenues that the businesses that won tobacco wholesale concession started to operate in November, which encouraged shop owners to restock.

Compared to previous year, consumption tax revenues increased by HUF 262 billion. The rise can almost fully be ascribed to the fact that – in part due to the growth in domestic demand and in part as a result of the aforementioned measures to combat the shadow economy – the budget received higher VAT revenues than a year ago. The impact of the increase in the excise duty and the decrease in the financial transaction levy more or less offset each other. The first can be attributed to the increase in the excise duty on tobacco products in April 2015, the aforementioned stockbuilding and the increase in the volumes sold. The financial transaction levy decreased because from 2015 the payment transactions through the accounts managed by the Hungarian State Treasury were exempted from the financial transaction levy. Since this item appeared on both the revenue and the expenditure sides of the budget, the cancellation thereof had no impact on the general government balance.

In 2015, the central sub-sector realised HUF 1,876 billion from **payments by households**, which exceeds the appropriation by HUF 70 billion. The larger part of the surplus can be attributed to the excess from personal income tax, as the gross wages increased last year by 4.3 per cent contrary to the 3.4 per cent projected in the bill. Revenues from levies and other taxes outstripped the budgeted amount by HUF 23 billion, as upon compiling the budget no increase was anticipated in the levies compared to 2014.

Compared to the previous year, payments by households increased by HUF 123 billion. The bulk of the surplus comes from the personal income taxes, which is attributable to an increase of 6.7 per cent in the gross wage bill. The rise in the revenues from levies is the result of the higher car and home sales.

In 2015, the **tax and contribution revenues of social security funds** exceeded the appropriation by HUF 77 billion in total. The social contribution tax and other contribution revenues outperformed by HUF 84 billion, due to the higher-than-expected gross wage bill. The revenues from healthcare contributions fell short of the appropriation by HUF 7 billion, which can be attributed to the partial suspension of the Act that prescribes the healthcare contribution payment obligation of the tobacco companies in the part stipulating payment on a tiered basis. The extension of the Job Protection Action Plan to agricultural employees in the second half of last year reduced contribution revenues by HUF 2 billion. On a year-on-year basis, the tax and contribution revenues of the social security funds increased by almost HUF 300 billion, which can be ascribed to the rise in the gross wage bill.

Other revenues of the central sub-sector fell short of the appropriation in the Budget Act by HUF 36 billion in total. Since the budget realised no revenue from the sales of arable land in 2015, the value of other sales and utilisation revenue related to state property fell short of the budgeted amount. The impact of the revenue shortfall was mitigated by surplus revenue from the sales of carbon emission quotas and rents. The higher-than-

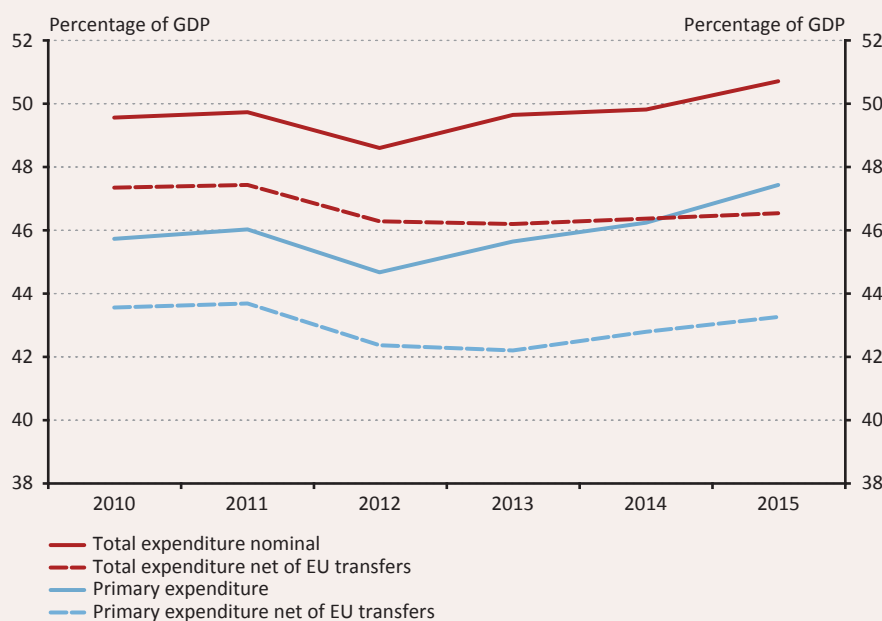
anticipated payment by the Pension Fund partially offset the minor shortfalls under several titles belonging to other revenues.⁵

Compared to 2014, the budget received HUF 101 billion less from other revenues, which is partly due to the fact that a year ago the sale of frequency licences generated revenues of HUF 130 billion for the central budget, and the surplus of the Pension Fund transferred here was also higher.

2.4. EXPENDITURES OF THE BUDGET

Last year, the processes that characterised fiscal policy since 2012 continued throughout the expenditure side. The redistribution ratio, as total expenditure relative to GDP, increased by 0.9 percentage points to 50.7 per cent, while the GDP-proportionate primary expenditures net of the interest balance were up 1.2 percentage points compared to last year and reached 47.4 per cent. If the EU transfers disbursed through the budget are eliminated from the expenditures, we obtain a slightly different picture. The total expenditure thus adjusted fell by almost one percentage point from 47.4 per cent of GDP in five years, while the level of primary expenditure net of the EU transfers was 43.3 per cent in 2015.

Chart 4
Total expenditure of the general government and changes in primary expenditure

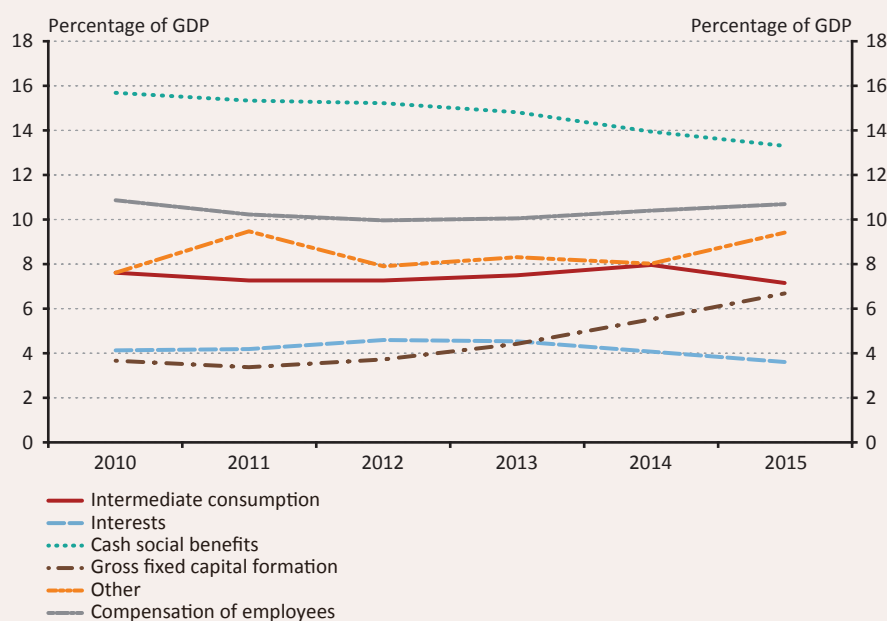


Source: Eurostat

In line with the practice of earlier years, the GDP-proportionate ratio of cash social benefits declined further on the expenditure side, which is attributable – in addition to freezing certain transfers (e.g. family allowance) in nominal value – to the fact that the increase in pensions (in excess of the inflation) fell short of the rise in nominal GDP. In addition, interest expenses continued to decrease as a result of the low interest environment. After temporary growth in 2014, GDP-proportionate intermediate consumption dropped to the average level seen in previous years. 2015 saw a major increase in two areas. On the one hand, due to the EU programmes the GDP-proportionate volume of investment expenditures continued to increase and almost doubled in three years. On the other hand, as a result of the extension of the career path programmes launched in 2013, public sector spending paid as compensation of employees continued to increase.

⁵ The payment by the Pension Fund to the central budget is a neutral transaction for the cash balance of the central sub-sector, as it only represents a cash movement between two sub-sectors.

Chart 5
Structure of public sector spending



Source: HCSO

The **total expenditure of the central sub-sector** exceeded the budgeted level by HUF 856 billion, but a large part of the surplus expenditure has no impact on the ESA deficit, as it only reduces the cash balance. The reason for this is that the excess can be almost fully attributed to the higher-than-planned absorption of EU transfers and the pre-financing of the payments from the budget. Apart from this, the spending of the budgetary institutions was in line with the budget, and the expenditures of the social security funds only exceeded the appropriations to a minimum degree. Compared to the previous year, expenditures were up HUF 1,203 billion, which is almost wholly attributable to the rise in EU transfers.

In 2015, the government spent HUF 20 billion less on **home construction subsidies** than budgeted, because due to the phase-out of foreign currency loans fewer-than-expected borrowers resorted to the exchange rate cap scheme.⁶ It is also due to this that, compared to 2014, the volume of expenditures spent on this objective decreased. The amount of **family allowances and social benefits** corresponded to the appropriation in the Budget Act, but exceeded the amount paid in previous year by HUF 62 billion. However, the rise is neutral for the budget as a whole, because the underlying reason for this is that from March 2015 the welfare system was reorganised and the payment of the benefits to the active-age persons was transferred from the local governments to district offices, for which the coverage was provided by the central budget. The volume of the expenditures spent on **benefits under retirement age** corresponded to the amount specified in the budget, but fell by HUF 37 billion in year-on-year terms, which was attributable primarily to the phase-out of the early retirement benefits and to the substantial (roughly 65 per cent)⁷ decrease in the number of beneficiaries.⁷

The **net expenditures of budgetary institutions and chapters** exceeded the appropriation in the approved Budget Act by HUF 288 billion; nevertheless, it should be emphasised that the actual expenditures already contain the spending of the central reserves as well, which are stated in a separate line in the Budget Act. Taken together, considering the utilisation of the Country Protection Fund, the special reserves and the reserves for extraordinary government measures as well, the expenditures of the central government agencies and chapters

⁶ Within the exchange rate cap scheme, the foreign currency borrower could pay the instalments at a fixed exchange rate for five years. However, due to the conversion of foreign currency loans into forint, the scheme was terminated in 2015.

⁷ An Act passed in 2011 almost fully terminated the possibility of early retirement from 2012, which was already tightened by a regulation in 2009, and thus the number of new beneficiaries is decreasing.

were in line with the budget. Compared to the previous year, the growth in 2015 amounted to HUF 270 billion, most of which can be attributed to the extension of the career path models, the consolidation of the hospitals' debts, the capital injections for state-owned companies (Paks, MVM) and the expenses related to migration.

Net cash expenditures related to EU transfers exceeded the appropriation by HUF 846 billion. Within that, there was an excess of HUF 284 billion in gross expenditures, while the revenues received from the EU fell short of the budget by HUF 559 billion. The spending growth is attributable to the fact that in the year of closing the 2007-2013 programming period the government spent more from its funds than the total available transfer to ensure that no funds are lost even in the case of potential disputes and the disputed projects can be substituted by other invoices. The shortfall in revenues was caused by the suspension of the payments by the European Commission in the case of several operative programmes.⁸

Table 4
Partially consolidated cash expenditures of the central sub-sector in 2014 and 2015
(HUF billion)

	2014	2015		
	Actual data	Statutory appropriation	Actual data	Actual data – appropriation
PRIMARY EXPENDITURES	11 992	12 321	13 234	912
Subsidies to economic units, support to the media	354	372	375	4
Consumer price subsidy	103	104	98	-6
Housing grants	128	129	109	-20
Family benefits, social subsidies	510	574	572	-2
Benefits under retirement age	173	134	136	2
Net expenditures of central government agencies and chapters	3 838	4 058	5 193	1 135
Net own expenditures	3 288	3 270	3 559	288
Net expenditures related to EU funds	550	788	1 634	846
Support to local governments	724	651	667	17
Contribution to the EU budget	291	296	306	10
Central reserves	0	286	0	-286
Debt assumption	69	0	0	0
Other expenditures	568	320	383	63
Expenditures of Extrabudgetary Funds	453	521	499	-22
NEF – Passive allowances	50	50	50	0
NEF – Active allowances	226	270	254	-16
Other expenditures	178	201	195	-6
Expenditures of Social Security Funds	4 783	4 877	4 895	17
PIF - Pensions	2 915	3 007	2 988	-20
HIF - Disability and rehabilitation benefits	336	336	318	-18
HIF - Cash benefits	224	229	245	16
HIF - Medical and preventive care	946	949	961	12
HIF - Net expenditures related to drug subsidies	245	240	261	21
Other expenditures	118	116	122	6
NET INTEREST EXPENDITURES	1 011	1 030	973	-56
TOTAL EXPENDITURES	13 004	13 351	14 207	856

⁸ The shortfall in revenues has no impact on the ESA balance, since this amount could be recognised as accrued revenues.

Compared to 2014, net cash expenditures related to EU transfers increased by HUF 1,000 billion. This substantial increase can be explained by the above mentioned payments in excess of the financial allocation and by the suspension of the disbursements of transfers. On the other hand, the European Commission transfers the revenues related to the last 5 per cent of the 2007-2013 programming period only a few years later, after the full audit of the programmes, which also increased last year's expenditures compared to 2014.

The **central reserves** amounted to HUF 286 billion in total (net of the general chapter reserves). In view of the favourable budgetary processes, the government spent HUF 30 billion from the Country Protection Fund in the last quarter, similarly to the reserves of HUF 100 billion, appropriated for extraordinary measures, which was increased by additional HUF 60 billion during the year. The government also used the special reserves of HUF 156 billion in full, of which HUF 60 billion served the reduction of hospitals' outstanding debts.

Other expenditures of the central sub-sector exceeded the appropriation by HUF 63 billion, primarily due to the overspending related to state property. Compared to the previous year, other expenditures fell by almost HUF 200 billion, which is mostly attributable to the acquisitions in 2014 accounted for in this line (e.g. Antenna Hungária Zrt., FŐGÁZ Zrt.). Thus, the large fall in the expenditures is dominated by the decrease in the expenses related to asset management.

The expenditures of the **extrabudgetary funds** fell short of the appropriation by HUF 22 billion, which is mostly related to the financial management of the Labour Market Fund. The saving is related to the lower-than-planned headcount of public workers. However, compared to the previous year, the headcount of the workers employed in the Start labour programme still increased by 10,000 on annual average, which contributed to the spending growth in 2015.

Expenditures of the social security funds in 2015 exceeded the appropriation by HUF 17 billion; within this, budget spending on pensions was modestly less than anticipated, while spending on the costs of the Health Fund was slightly higher. Within the latter, the underperformance of the disability and rehabilitation benefits generated savings in the amount of HUF 18 billion, which was offset by the surplus of HUF 21 billion in the net expenditures of the pharmaceuticals budget. The latter can be attributed to demographic developments and increasing costs while maintaining an unchanged service level.

Net cash interest expenditures fell short of the appropriation by HUF 56 billion. The difference is due to the fact that the gross interest expenditure exceeded the statutory value by more than HUF 90 billion, while the interest revenues outstripped the budgeted amount by HUF 150 billion. The difference was generated in both cases by the drop in the government bond market yields.

The higher interest expenditure is mainly attributable to the higher premium payable, realised at the switch and buyback auctions. The premium was the combined result of the decline in yields accompanied by a rise in the market value of the issued securities, and thus the Debt Management Agency had to pay higher price for such.

Similarly to the interest expense, the higher-than-planned interest revenue was generated by mostly by the drop in yields seen during 2015. This increased interest revenues mainly due to the premiums realised upon issue, which also appeared at the auction and switch auction sales. The repo activity of the Government Debt Management Agency also increased interest revenues slightly.

Net cash interest expenditures fell by HUF 38 billion in year-on-year terms. Gross interest expenditures dropped by HUF 140 billion, which is closely related to the fact that the positive developments in the government securities market continued last year as well. On the other hand, cash interest revenues fell by more than HUF 100 billion in 2015, which can be explained primarily by the Debt Management Agency's issuance of new government paper series on most maturities, the coupon of which was brought closer to the market yield.

2.5. BALANCE OF LOCAL GOVERNMENTS

The cash balance of local governments closed with a surplus of HUF 19 billion, instead of the originally budgeted deficit of HUF 25 billion. After statistical corrections, the preliminary accrual-based balance showed a surplus of HUF 0.4 billion, which signals that last year's budget for the sector was in balance. Due to failure of an extraordinary item to materialise, the local governments' surplus on an accruals basis fell by HUF 440 billion year on year; however, this is attributable to the fact that in 2014 the central government assumed the debt of the local governments, which appeared in the budget of the sector as a revenue increasing item. The accrual-based balance after eliminating the effect of debt assumption shows a surplus of HUF 40 billion in 2014, and thus the balance of sub-sector deteriorated by 0.1 percentage point of GDP in 2015 compared to the base year.

The **revenues of local governments**, net of the central budget subsidies and the EU funds (local taxes, institutional operational revenues, accumulation income, etc.) remained constant relative to GDP (4.7 per cent), while the weight of local business tax within revenues increased by 0.1 per cent of GDP. The direct subsidy for the local governments from the central budget fell by 0.5 per cent of GDP compared to 2014.

The **cash expenditures of local governments** increased from 7.9 per cent of GDP in 2014 to 8.2 per cent in 2015. The rise in expenditures was driven by the investment and accumulation expenditures realised from EU funds. Compared to the base year's 2.3 per cent GDP-proportionate expenditure level the capital expenditures increased by 0.5 percentage point (while net capital expenditures adjusted for EU funds dropped by 0.1 percentage point to 1.2 per cent). The operating expenses (wage, material) of the local governments fell by 0.1 percentage point of GDP compared to the base year, while the subsidies available from central sources fell to an increasing degree.

2.6. STATISTICAL CORRECTIONS (ESA BRIDGE)

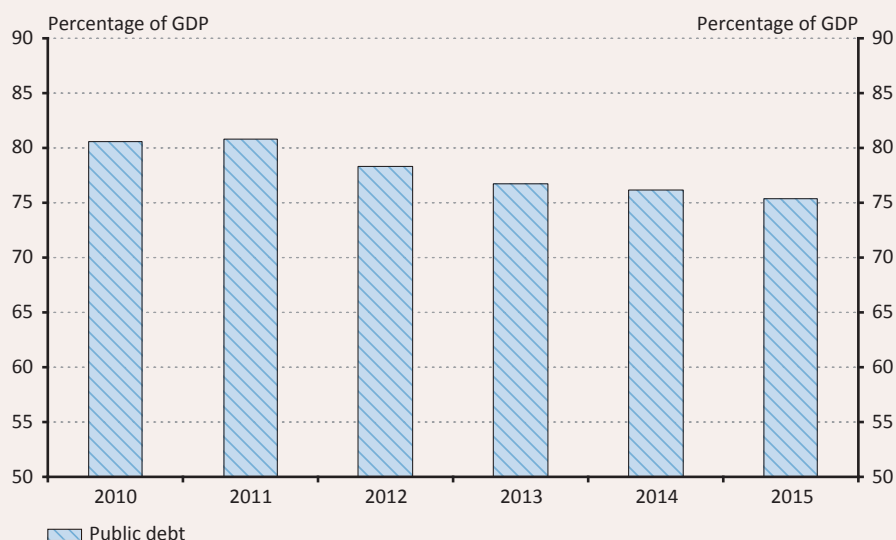
Reconciliation between the cash balance of the revenues and expenditures indicated above (GFS balance) and the ESA balance calculated in accordance with the EU methodology is ensured by statistical corrections (ESA bridge) applied to the cash accounting. The statistical corrections are necessary because some of the transactions are recorded, based on the EU settlement method, at the time of the execution (accrual accounting), contrary to the rules of Hungarian budget accounting practice, where they are recorded upon cash movement (cash accounting). Moreover, the EU regulations interpret the general government more broadly than the Hungarian regulation, as they also allocate certain non-profit institutions, state-owned companies and certain monetary transactions to the general government. Accordingly, the HCSO calculates the ESA balance obtained with the use of the EU methodology for the government sector, thus this deficit ratio differs from the cash (GFS) balance also in terms of sectors.

Upon passing the 2015 Budget Act, the submitted budget bill expected the **balance of the accrual-based statistical correction (ESA bridge)** to improve the cash-based deficit by 0.3 percentage point of GDP, while the actual figure was 1.5 per cent of GDP. The difference related primarily to the accounting of the EU transfers. The HCSO determined a correction of 2.2 percentage points for the cash settlement to the EU transfers as opposed to +0.6 percentage point of GDP, as assumed in the budget bill. The material difference is attributable to the fact that due to settlement disputes the European Union suspended or delayed the EU transfers under several EU programmes; however, the balance deteriorating effect of these transfers are offset by the statistical correction by recognising imputed revenue. Initially, the government had no intention to assume the debts of Budapest Transport Company (BKV) and the railway company (MÁV); however, the implementation thereof represented a negative statistical correction corresponding to 0.2 percentage point of GDP in 2015 and several smaller items reduced the size of the ESA bridge by a further 0.2 percentage point.

2.7. PUBLIC DEBT

According to the MNB's financial account data, last year the **gross consolidated public debt** as a per cent of GDP fell by 0.9 percentage point to 75.3 per cent, continuing the trend since 2011 when it was at its historic high (80.8 per cent). The decline in the debt ratio was also supported by the favourable domestic underlying macroeconomic processes (economic growth, low government deficit), similarly to earlier years. On the other hand, several one-off items pointed to a rise in the debt.

Chart 6
Changes in Hungary's gross public debt relative to GDP since 2010



Source: MNB

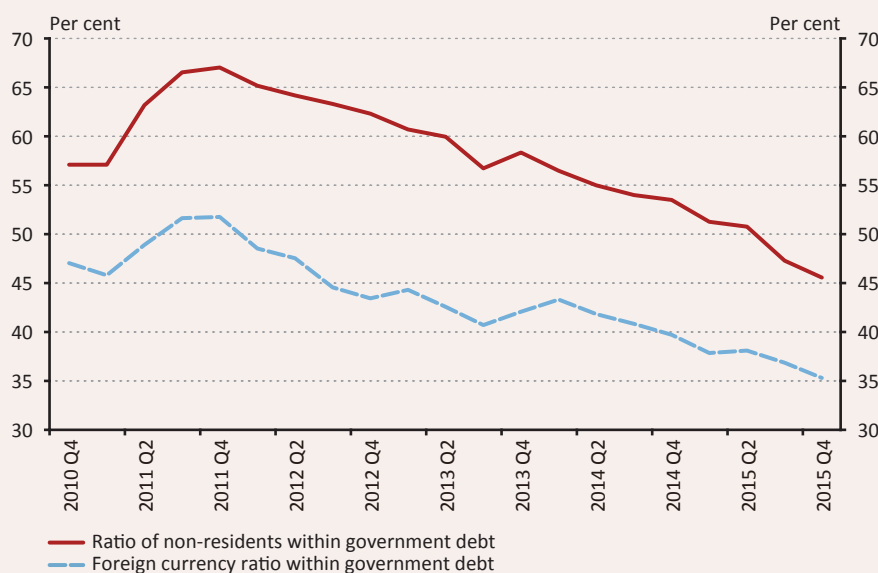
One of the most important factors that influenced the trends in the gross debt ratio is the general government net borrowing rate. Last year, the financial deficit was 2.0 per cent of GDP, which is the lowest value registered since the political transition. Economic growth is another fundamental factor with a significant impact on the debt path, which influences the value of the government debt/GDP ratio not only indirectly through the numerator, but also directly through the denominator. The 2.9 per cent growth in the real economy measured in 2015, with a historically low government deficit, also made a substantial contribution to the reduction in the debt ratio.

On the other hand, some factors aside from the baseline process had a substantial debt-increasing effect last year. The most important one of these was the funds not yet paid by the European Union to Hungary. The reason for this was that the payment of these transfers as soon as possible required pre-financing from the national budget, which – in parallel with the cash deficit – also increased the public debt by 1.5 per cent of GDP. The second most significant factor which acted against the decrease in the debt ratio was the considerable appreciation of the US dollar last year. The US currency appreciated by 10 per cent against the euro in 2015, which alone increased Hungary's public debt by more than 1.3 per cent of GDP. This is due to the fact that part of the public debt was issued in US dollar bonds and thus – although the Debt Management Agency typically swaps it to euro debt – it is also influenced indirectly by USD exchange rate movements, through the value of the market swaps, as the swaps include an agreement according to which the two parties regularly mark to market their positions against each other depending on the prevailing market (foreign exchange and securities) prices. Based on marking to market, the parties place additional margin with each other to balance the position. The received margin appears in the statistics as a receivable of the counterparty, thus until the maturity of the swap it temporarily increases the public debt. Movements in the EUR/HUF exchange rate on an annual basis had no substantial impact on public debt in 2015.

In addition to the foregoing, the acquisition of Budapest Bank, the partial assumption of the railway company's (MÁV) debt and the full assumption of the Budapest Transport Company's (BKV) debt also increased public debt last year. The acquisition and the debt assumptions raised the debt ratio by roughly 0.6 per cent and more than 0.2 per cent of GDP, respectively. On the other hand, the decrease in the government's liquid financial reserves contributed to the reduction of the debt ratio by almost 1 per cent of GDP. However, the level of the liquid forint and fiscal foreign currency reserves, which fell to HUF 660 billion, still significantly exceeded the level seen before the global financial crisis.

On the whole, last year the debt-reducing effect of economic growth reached 2.1 per cent of GDP, while the primary surplus of the general government reduced the debt ratio by 1.3 percentage points. In addition to these two fundamental factors, the change in the real exchange rate also had a positive impact on the 2015 debt ratio, reducing it by 0.7 percentage point. However, the positive effect of these factors was substantially offset by the impact of the real interest payment, which alone increased last year's debt ratio by 2.5 per cent of GDP, supplemented by the effect of other factors resulting in a further increase of 0.7 percentage point.⁹

Chart 7
Share of foreign currency in government debt and non-residents' ownership share
(as a percentage of the total debt)



Source: Government Debt Management Agency, MNB

In addition to reducing the debt ratio, the declining **share of foreign currency** in the public debt and the strengthening of the domestic financing base are also priority objectives. As a result of this, after 2011 annual net debt issuances were characterised every year by negative net foreign currency issuance and substantial growth in households' HUF-denominated securities holding. Due to this, the debt profile indicators steadily improved and by end of 2015 they reached their pre-crisis levels. The share of foreign currency in public debt fell from 51.8 per cent at the end of 2011 to 35.3 per cent by the end of 2015, while the ratio of non-resident holdings within the debt fell from 67.0 per cent to 45.6 per cent (Chart 7). The latter figure is the lowest value measured in more than ten years, and thus the weight of domestic financing within the debt already exceeded the non-resident financing ratio.

⁹ For the calculation of the real indices we used the GDP deflator.

2.8. LEGAL COMPLIANCE OF THE 2015 BUDGET

Last year, the Hungarian laws contained three budgetary requirements which applied to the government's financial management in 2015. According to the available information, the budget complied with the debt rule laid down in the Fundamental Law and the 3-per cent deficit criterion specified in the Act on the Economic Stability of Hungary (hereinafter: Stability Act). On the other hand, the structural deficit calculated by the European Commission's methodology was higher than the medium-term budgetary objective; however, the Hungarian rule containing equivalent requirements does not specify the calculations of which institutions should be taken into consideration for the purpose of determining the structural balance. The ratio published by the government in the latest Convergence Programme is better than the medium-term budgetary objective.

According to the **debt rule** specified in the Fundamental Law¹⁰ adopted in 2011, until such time as the government debt exceeds half of the total gross domestic product, the National Assembly may only adopt such Act on the central budget – save extraordinary situations – that contains the reduction of the government debt ratio to the total gross domestic product, and no such borrowing is permitted as a result of which the debt ratio increases compared to the previous year. The Stability Act¹¹ supplements this with the provision that upon the calculation of the government debt the effect of exchange rate movements, together with the part of the debt growth that serves the fulfilment of obligations expiring next year, must be taken into consideration. The government must review the enforcement of the debt rule based on the semi-annual data, and inform the Fiscal Council and the competent committee of the National Assembly on the result thereof; however, the Act contains no provisions on the ex-post verification of compliance with the rule.

According to the information provided by the Ministry for National Economy, on 31 December 2014 the government debt adjusted in accordance with the Stability Act¹² was HUF 24,625 billion, which equals to 76.5 per cent of GDP. Based on the preliminary data of the line ministry, by end of 2015 the nominal government debt, calculated in accordance with the Stability Act, increased to HUF 25,135 billion. Since GDP increased to a greater degree than that, the debt ratio fell to 74.6 per cent, representing a decrease of 1.9 percentage points. Thus, according to the available information the 2015 budget complied with rule laid down in the Fundamental Law.

The requirement related to the **Maastricht deficit target** is also included in the Hungarian laws,¹³ according to which the budget deficit must not exceed 3 per cent of the gross domestic product. The deficit in 2015 was 2 per cent of GDP, thus the budget complied with this rule.

According to the rule¹⁴ specified in the Stability Act, the budget balance defined during the budgeting process must be in line with the attainment of the **medium-term budgetary objective**, which in the case of Hungary represents a 1.7 per cent GDP-proportionate structural deficit ratio. Calculation of the structural deficit is rather uncertain and depends to a great degree on the selected method and the assumptions related to the cyclical position of the economy; thus, the various calculations may return different results. The Hungarian rule does not specify the calculations of which institution is to be taken into consideration upon assessing compliance with the rule. According to the Convergence Programme published by the government in April 2016, Hungary's structural balance in 2015 was 1.4 per cent of GDP, which is lower than the medium-term budgetary objective.

Hungary fulfilled the rules of the corrective arm of the Stability and Growth Pact (Maastricht deficit target, transitional debt rule), and thereby avoided the launch of an Excessive Deficit Procedure (EDP). The budget did not comply with the rules belonging to the preventive arm (medium-term budget deficit, expenditure

¹⁰ Fundamental Law, Article 36 (4)-(5).

¹¹ Act CXCV of 2011 on the Economic Stability of Hungary, Article 6 (1)-(2b).

¹² Target exchange rate in the 2015 Budget Act.

¹³ Act CXCV of 2011 on the Economic Stability of Hungary, Article 3/A (2b).

¹⁴ Act CXCV of 2011 on the Economic Stability of Hungary, Article 3/A (2a).

benchmark) in 2015; however, the breach of these does not give rise to an EDP, but the European Commission prepares recommendations for the adjustment of the deviations.

According to the **Maastricht deficit target**, belonging to the corrective arm of the Stability and Growth Pact, the accrual-based ESA budget deficit must not exceed three per cent of GDP. The deficit in 2015 was 2 per cent of GDP, and thus the budget complied with this criterion.

A transitional debt rule (minimum linear structural adjustment – MLSA) is applicable to countries subject to the excessive deficit procedure for a period of 3 years after the termination of the procedure, before they are subject to a general debt reduction rule. The European Union lifted the excessive deficit procedure against Hungary in 2013 and accordingly, Hungary was subject to the transitional debt rule between 2013 and 2015. The MLSA rule can be derived from the general debt rule of the European Union, and it essentially prescribes a fiscal path for Member States which allows them to comply with the general debt rule at the end of the transition period. In its May assessment, the European Commission stated that based on the MLSA rule, in 2015 the value of the structural balance criterion was -2.6 per cent of GDP. Based on the European Commission's calculations, in 2015 the structural balance was -2 per cent of GDP, i.e. it outperformed the criterion value by 0.6 percentage point, and thus the budget complied with rule.

The **medium-term budgetary objective** specified for Hungary for 2015 was a structural deficit equivalent to 1.7 per cent of GDP. Last year, the accrual-based budget deficit was 2 per cent of GDP, which should be supplemented – for the purpose of calculating the structural balance – with the economy's cyclical position and the one-off items affecting the given year. Based on the European Commission's estimate,¹⁵ the cycle has no material impact on the balance and it also quantified no major one-off items. In their opinion, the structural deficit thus corresponded to the accrual-based budget deficit, i.e. it was 2 per cent of GDP, which is higher than the 1.7 per cent target.

According to the **expenditure benchmark**, if a Member State fails to comply with the medium-term budgetary objective, it may raise its expenditures in accordance with the potential GDP growth. According to the European Commission,¹⁶ the rise in public sector expenditures in Hungary exceeded the benchmark by 1 percentage point in 2015.

¹⁵ European Commission: Assessment of the 2016 Convergence Programme for Hungary (Brussels, 16 May 2016).

¹⁶ European Commission: Assessment of the 2016 Convergence Programme for Hungary (Brussels, 16 May 2016).

3. Expected public finance developments in 2016

3.1. EXPECTED ESA BALANCE OF THE GOVERNMENT SECTOR IN 2016

According to our projection, in 2016 the accrual-based deficit of the government sector (ESA deficit) may be around 1.6-1.8 per cent of GDP. Thus, according to our forecast, even upon the full absorption of the free reserves, amounting to 0.2 per cent of GDP, the deficit ratio of 2.0 per cent, assumed at the time when the Budget Act was passed, may still develop more favourably. Although our forecast for the cash-based deficit of the general government, interpreted in a narrower sense than the government sector, is lower than the appropriation by 0.4 per cent of GDP, this is partially offset by our different estimate regarding the statistical corrections between the accrual-based and cash-based deficit.

	Statutory appropriation	MNB forecast	Statutory appropriation	MNB forecast	Difference
	HUF Billion	HUF Billion	GDP per cent	GDP per cent	GDP per cent
1. Balance of the central government	-762	-639	-2.2	-1.8	0.3
2. Balance of local governments	-25	-6	-0.1	0.0	0.1
3. Cash balance (GFS) of the general government (1+2)	-787	-645	-2.2	-1.8	0.4
4. GFS-ESA difference	82	4	0.2	0.0	-0.2
5. ESA balance of the government sector (3+4)	-704	-641	-2.0	-1.8	0.2
6. ESA balance with cancellation of free central reserves	-704	-561	-2.0	-1.6	0.4

Note 1. The cash balance reflects the statutory target amended in June. 2. The MNB's forecast for 2016 was based on the assumption that the government will decide on the full use of the available free reserves (Country Protection Fund) later.

The Budget Act approved in December 2015 set the 2016 cash balance of the central sub-sector of the general government at HUF -762 billion. Based on the amendment of the Budget Act in June 2016,¹⁷ the cash-based deficit target did not change, as the revenues and expenditures increased by the same amount after the amendments. The MNB's June Inflation Report projects a deficit that is lower than the cash deficit target specified in the Budget Act for the central sub-sector by HUF 122 billion, i.e. 0.4 percentage point of GDP.¹⁸ Within this, the cash interest balance may improve by HUF 38 billion due to the yield decline observed in the government securities market since the adoption of the Budget Act. The primary surplus of the budget may be HUF 84 billion higher than the value specified in the amended Budget Act. The difference between our projection pertaining to the balance of the central sub-sector and the amended appropriation is as follows:

- Our projection for the *central budget balance* is higher than the amended appropriation by HUF 94 billion. The cash balance may prove to be even more favourable if the free reserves earmarked in the Country Protection Fund are not utilised in full. The balance being better than appropriation is primarily attributable to the surplus revenues from sales of arable land. In addition, according to our forecast the dynamic expansion of the tax

¹⁷ The amendment of the 2016 budget is included in Act LXXVI of 2016, on which this analysis contains a separate box.

¹⁸ Assuming the full use of the reserves in the Country Protection Fund.

and contribution bases resulting from the favourable macroeconomic developments generate higher revenue than the appropriation. On the other hand, we also expect expenditures to exceed the appropriations, due to the anticipated overrun of the uncapped appropriations and the potential bonus¹⁹ payments at the tax authority, which is offset by the fact that under the expenditures for the home construction subsidies our projection expects a steeper rise in the demand than the government.

- Our projection for the balance of *extrabudgetary funds* represents an improvement of HUF 40 billion compared to the appropriation. The difference appears at the public employment expenditures (Start Labour Programme). The utilisation of the Start Labour Programme was lower than planned, and this year we also expect the base effect to prevail.

Box 1

Measures of the 2016 Budget Act

The adopted Budget Act contained a number of tax cuts on the revenue side. The reduction of personal income tax by one percentage point, the extension of the tax allowance for families with two children, lowering VAT on pork to 5 per cent and the decrease in administration fees, all served to lower households' burdens. According to our projection, which is consistent with the June Inflation Report, these measures generate savings for the households in the total amount of HUF 178 billion. The home purchase subsidy scheme was developed after the adoption of the Budget Act. Within the framework of this, the VAT rate on new home sales was reduced temporarily to 5 per cent, which is realised in the form of tax refund in the case of self-building. According to our expectations, the combined effect of these two items on the balance will amount to HUF 37 billion in 2016. The tax burden of the corporate sector is mitigated by the reduction of the vocational training contribution in parallel with the reform of the vocational education system, the extension of the social contribution tax allowance as part of the Job Protection Action Plan, and the first phase of the reduction of the financial institutions' special tax. According to our estimate, the listed tax changes reduce the corporate sector's tax burdens by more than HUF 90 billion on aggregate.

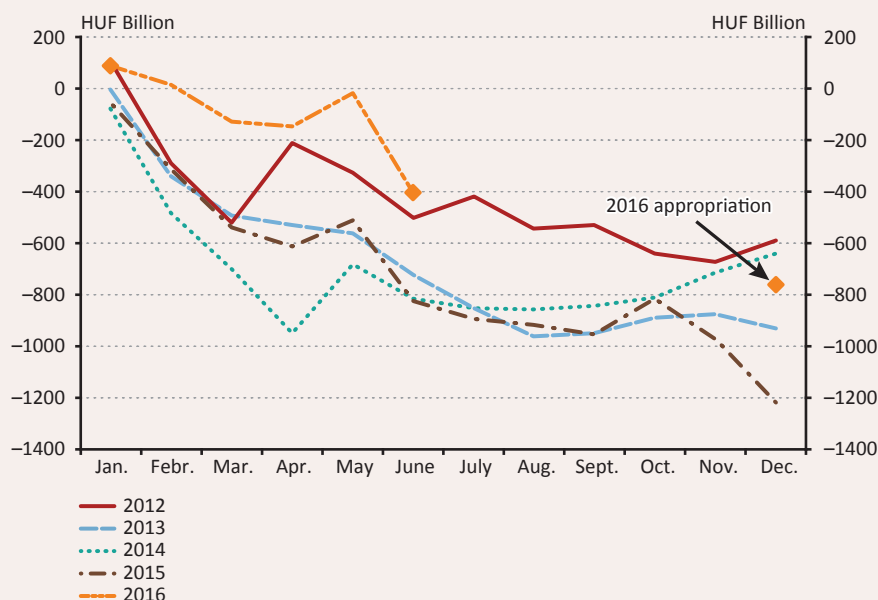
The expenditure measures of the Budget Act essentially continued the fiscal policy of previous years and were aimed at objectives consistent with that. Accordingly, the extension of the career path model in the public sector, the expansion of the number of public workers and the curbing of social expenditures in proportion to GDP, continue in 2016 as well. In addition to these, one new element is that the temporary decline in the funds of the new EU programming period is offset by the budget by increasing the volume of self-financed investments. According to our projection, which considers the appropriations, the increase in self-financed investment spending will reach nearly HUF 200 billion, the cost of extending the career path models and other wage measures will amount to around HUF 170 billion, while the extra expenditure spent on public employment may be around HUF 50 billion compared to last year.

The **cash-based deficit of the government budget – net of the local governments – in the first half-year** was HUF 402 billion, which is the lowest value in recent years and accounts for 53 per cent of the amended appropriation (Chart 8). This value is significantly lower than last year's rate of 92 per cent. The change is primarily attributable to the favourable development of revenues and the decrease in net expenditures related to the EU programmes. As a result of the growth tax credit, revenue from corporate income tax almost doubled in the first half the year compared to last year. In addition, revenues from labour taxes (social contribution tax, individual contributions, personal income tax) were realised adequately on a pro-rata basis, while the revenues from levies, e-road toll and excise duty also exceeded 50 per cent of the appropriations. On the other hand, the special tax payments by financial institutions decreased significantly compared to last year. This is due to the fact that in the case of credit institutions the upper rate of tax was reduced from 0.53 per cent to 0.24 per cent from 2016. On the whole, the budgetary developments in the first half-year establish a favourable basis for achieving the 2016 budget balance target.

¹⁹ The Budget Act authorises the Minister of National Economy to pay bonuses upon fulfilling the condition that the total tax revenues collected by tax authority exceed the appropriation.

The ESA balance of the budget was also extremely favourable in the first quarter. The balance of the entire government sector showed a surplus (0.1 per cent of GDP), which – according to the quarterly data available for almost 20 years – is unprecedented.

Chart 8
Intra-year cumulative cash balance of the state budget



Source: Budget Act of 2016, Hungarian State Treasury.

Box 2

Amendment of the 2016 Budget Act

The National Assembly modified the 2016 Budget Act in June by Act LXXXVI of 2016. This amendment of the Budget Act had no effect on the cash balance of the appropriations, since the National Assembly raised both the revenue and expenditure totals of the central sub-sector by HUF 422 billion.

The amendments related to the revenue side are mostly the result of the changes in macroeconomic developments since the adoption of the Budget Act. Accordingly, the appropriations for the direct revenues of the budget (corporate income tax, personal income tax, excise duty, VAT and levies) increased considerably, rising by a total amount of HUF 422 billion.

The largest increase in appropriations took place in the case of the corporate income tax (HUF 289 billion), the bulk of which can be attributed to the widespread utilisation of the Growth Tax Credit. The revenue appropriation for tax revenues directly related to sales (VAT and excise duty) increased by almost HUF 70 billion, in line with the combined effect of retail trade and consumption dynamics and of the government’s former measures (online cash register, development of the Electronic Trade and Transport Control System and other measures to reduce tax evasion). The appropriation for households’ personal income tax and levy payments increased with the amendment by HUF 63 billion in total, in part due to the higher-than-assumed national economy wage growth, and in part due to the increasing real estate sales.

As regards the expenditures, in line with the measures taken earlier, the amendment of the Act increased primarily the education, investment and housing subsidy expenditures. The amendment increased education costs (Klebelsberg Institution Maintenance Centre, vocational training centres, higher education institutions) by almost HUF 110 billion, which eliminates the earlier financing problems and facilitates structural reforms. The investment expenditures of the

government sector are increased by nearly HUF 140 billion in total due to the increase in public road development expenditures, the expansion of the Modern Cities Programme and the increase in expenditures related to state property. The National Assembly raised the housing subsidy appropriation by HUF 50 billion as a result of launching the Home Purchase Subsidy scheme. During the amendment the central reserves were also increased by HUF 30 billion.

3.2. CASH REVENUES OF THE CENTRAL SUB-SECTOR

According to our forecast, the **primary revenues of the central sub-sector** may exceed the current appropriations specified in the Budget Act by 0.6 per cent of GDP. We project a revenue surplus in excess of 0.2 per cent of GDP from tax and contribution revenues, primarily from social contribution taxes, individual contributions and excise duties. The surplus from state property revenues (sales of arable land) generates additional surplus revenue, which may be as high as 0.3 percentage point of GDP.

According to our projection, the total **payments by economic organisations** may exceed the appropriation by HUF 28 billion. Based on the data of the first half-year, revenues from the electronic road toll levied in proportion to road use (e-road toll) and the revenues from road toll levied time proportionately may exceed the appropriations specified in the Budget Act by HUF 12 billion and HUF 7 billion, respectively. On the other hand, based on the incoming data, revenues from the gambling tax may fall short of the appropriation by HUF 14 billion. Revenues from mining royalties may also fall short of the appropriation by HUF 5 billion owing to a lower oil price trajectory than that envisaged during budgetary planning. As regards **corporate income tax**, we expect the tax payments to exceed the budgetary appropriation, which was significantly raised during the amendment of the Act, by HUF 14 billion. The difference of HUF 14 billion is attributable to the divergence of the expectations related to the utilisation of the tax allowances. Compared to 2015, the higher corporate income tax revenue is the result of the Growth Tax Credit introduced last year, which permits companies to pay the surplus tax in eight equal instalments to the budget in two years, if its pre-tax profit significantly increases year on year. Within the framework of the Growth Tax Credit, based on the tax liability related to 2015, we expect surplus revenue of HUF 271 billion both in 2016 and 2017.

On a cash basis, in 2016 we project **value added tax** revenue of HUF 3,339 billion, which falls short of the amended budgetary appropriation by HUF 50 billion. The difference is partly attributable to fact that we estimate lower surplus revenue resulting from the improved efficiency of tax collection than the budget, and on the other hand, we assess the developments from the first half-year and the persistence thereof somewhat differently. This is because during the first half this year the year-on-year growth in gross VAT payments fell below 3 per cent, which was usually 6 to 9 per cent in recent years.²⁰ This deceleration in growth is attributed to the decrease in the additional impact of the measures taken in former years for the reduction of the shadow economy (introduction of online cash register and the Electronic Trade and Transport Control System) and also to the cyclical nature of the EU funds.

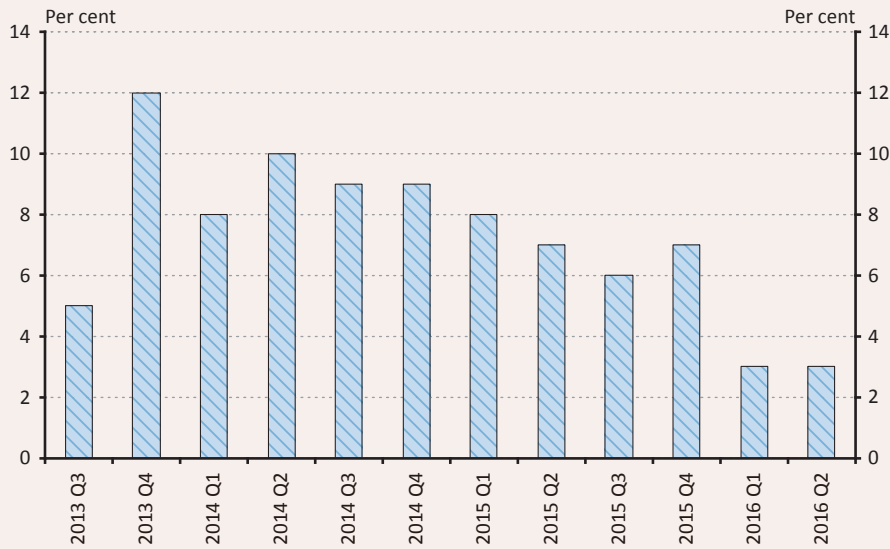
²⁰ For the purpose of calculating the index the raw data are slightly adjusted. Of the outstanding VAT revenues from last December, related to the phase-out of the 2007-2013 EU programming period, we allocated HUF 50 billion equally to October 2015 and February 2016.

Table 6
Partially consolidated cash revenues of the central sub-sector in 2016
 (HUF billion)

	Statutory appropriation (original)	Statutory appropriation (amended)	Realisation Jan–June	Per cent of appropriation	MNB forecast	Difference: MNB – amended appropriation
TAX AND CONTRIBUTION REVENUES OF THE CENTRAL GOVERNMENT	12 514	13 007	6 231	48%	13 061	54
Payments by economic units	1 267	1 557	676	43%	1 585	28
Corporate tax	401	690	282	41%	704	14
Bank levy	79	79	31	40%	76	–4
Simplified entrepreneurial tax	75	75	22	29%	83	8
Mining royalty	32	32	12	39%	27	–5
Gambling tax	41	41	13	31%	27	–14
Income tax of energy companies	41	41	14	34%	45	3
Lump sum tax of small enterprenuers	70	70	34	48%	66	–4
Small business tax	14	14	7	54%	14	0
E-road toll	141	141	73	54%	153	12
Utility tax	52	52	27	52%	52	0
Other taxes and payments	322	322	157	49%	340	18
Taxes on consumption	4 612	4 681	2 183	47%	4 662	–19
Value added tax	3 352	3 389	1 562	46%	3 339	–50
Excise duties	952	984	469	48%	1 013	28
Registration tax	21	21	12	57%	21	0
Telecom tax	56	56	27	47%	54	–2
Financial transaction levy	201	201	97	48%	203	2
Insurance tax	30	30	17	55%	32	2
Payments by households	1 829	1 891	939	50%	1 874	–18
Personal income tax	1 658	1 694	837	49%	1 680	–14
Duties, other taxes	125	152	78	52%	149	–2
Motor vehicle tax	46	46	23	51%	45	–1
Tax and contribution revenues of Extrabudgetary Funds	287	359	132	37%	363	4
Tax and contribution revenues of Social Security Funds	4 519	4 519	2 301	51%	4 577	58
Social security contribution	4 230	4 230	2 139	51%	4 279	50
Other contributions and taxes	289	289	162	56%	298	8
OTHER REVENUES	379	379	227	60%	522	144
Other revenues of the central government	263	263	130	49%	402	139
Other revenues of Social Security Funds	36	36	24	66%	36	–1
Other revenues of Extrabudgetary Funds	79	79	73	92%	85	5
TOTAL REVENUES OF CENTRAL GOVERNMENT	12 893	13 385	6 457	48%	13 583	197

Note: 1. The 2016 H1 actual data reflect the data provided by the Hungarian State Treasury. 2. The forecast of the MNB presents the fiscal projection included in the June 2016 Inflation Report. 3. The difference between the revenue totals shown in the table and those indicated in the Budget Act is due to the fact that, based on the data available, we excluded the effect of cash transfers within the central sub-sector, and recognised certain expenditure items in net terms, i.e. reduced by the related direct revenues. 4. The table contains rounded figures.

Chart 9
Year-on-year change in quarterly gross VAT payments

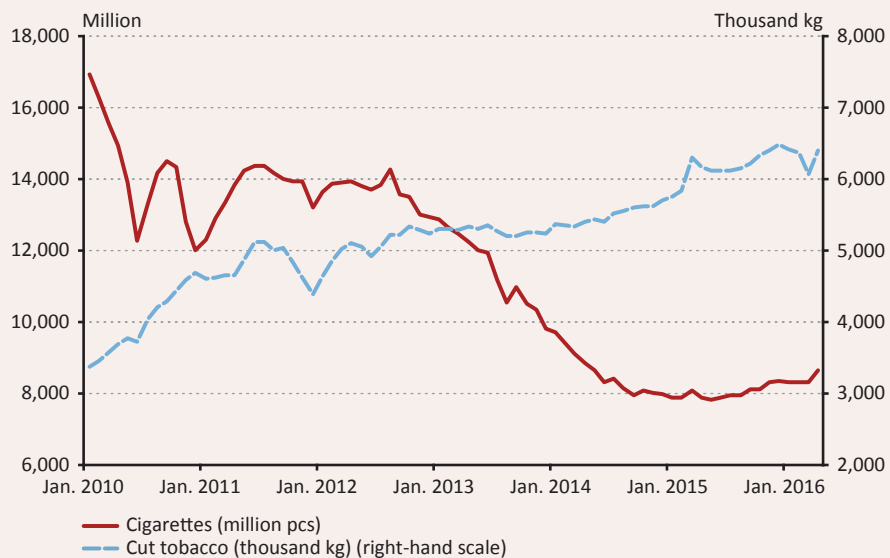


Source: Hungarian State Treasury

Our **excise duty** projection for this year is HUF 1,013 billion, which exceeds the amount stated in the budget by HUF 29 billion. In addition to the rising turnover of excise goods, the difference may be attributed to the fact that the motion for the amendment of the budget, submitted in April, presumably had not yet projected the increase in the excise duty payable on tobacco products in September. The trend growth in the nominal excise duty revenue from the distribution of tobacco products is attributable – in addition to the price increases – to the fact that while the decrease in cigarette sales halted (and sales have even slightly increased since mid-2015), the growth rate in the consumption of cut tobacco also did not decrease.

Chart 10
Developments in the structure of cigarette and cut tobacco consumption

(12-month cumulated value)



Source: National Tax and Customs Administration of Hungary

The dynamic growth in excise duty revenues in the last two years was borne by the rising fuel sales, and particularly the dynamic growth in diesel sales, in addition to tobacco products.

Chart 11
Revenues from excise duty on fuels
(12-month cumulated value)



Source: Hungarian State Treasury

Based on the first half-year’s actual data our **personal income tax** projection is slightly lower than the appropriation raised by HUF 36 billion by the amendment of the Budget Act. A more precise view on the probable revenue developments for the second half of 2016 can be formulated later, with information from the 2015 personal income tax returns. The dynamics measured relative to the previous year are determined, in addition to the wage bill, by the reduction of the standard personal income tax rate by 1 percentage point, the impact of which – based on the monthly data – is in line with our expectations (a tax decrease of HUF 112 billion for the whole year).

As regards the revenues of the **extrabudgetary funds**, our forecast essentially corresponds to the appropriation. Similar to previous years, only 30 per cent of the annual appropriation for the innovation contribution was realised by the end of June which, however, it is not expected to affect the realisation of the annual target, as most of the payments are usually transferred to the Fund in December.

According to our forecast, the **tax and contribution revenues of the social security funds** may exceed the appropriation by HUF 58 billion. Our higher revenue projection is attributable to the growth in the gross wage bill in 2016, which is more dynamic – according to the forecast included in the MNB’s June Inflation Report – than that envisaged in the macroeconomic path in the Budget Act. This year’s high wage growth is reflected by the fact that in the first half-year the tax and contribution revenues of the social security funds increased by 8.6 per cent year on year. In the second half of the year we expect slightly lower revenues than in the first six months, since according to the amendment of the 2016 budget from 1 July 5.17 per cent of the social contribution tax will be paid into the Labour Market Fund. Naturally, this measure has no effect on the total amount of the collected taxes and contributions, as it merely changes the allocation between the Funds.

As regards **revenues related to state property** (stated among other revenues in Table 6), we expect the revenues to exceed the appropriation by almost HUF 100 billion, due to the presumably higher amount to be received from the sales of state-owned arable land.

3.3. CASH EXPENDITURES OF THE CENTRAL SUB-SECTOR

Our projection for **primary expenditures** features an expenditure level higher by 0.3 per cent of GDP than the appropriations in the Budget Act. The main reason for this is that, relative to the government's expectations, we expect higher drawdowns from the home purchase subsidies, which necessitates the disbursement of subsidies in higher amounts equalling to 0.2 per cent of GDP. In addition, based on the first half-year's data, we also estimate higher expenditures for the budgetary institutions than the appropriation.

Payments related to **subsidies to economic units, support to the public media** reached 55 per cent of the annual appropriation in the first half of the year, with a slightly more even time profile than the seasonality seen last year. The higher than time-proportionate expenditure level was associated with special and normative subsidies (essentially with public service contracts), but since the time profile of the item during the year is typically not even, payments are not expected to overrun the annual appropriation.

Our projection for **housing grants** exceeds the amended appropriation by HUF 68 billion due to the different assumptions related to the drawing on the home purchase subsidy (HPS) scheme. In the first half-year HUF 60 billion was paid under the title of housing grants, of which the expenditure in June amounted to HUF 20 billion. If subsidies do not increase substantially in the second half, savings may be expected under these expenditures as compared to our forecast.

Family benefits, social subsidies were realised pro rata in the first half-year, and we do not expect a significant departure from this in the second half of the year either, and thus our projection essentially corresponds to the appropriations. Compared to last year, family allowances decreased slightly in the first half of the year as a result of demographic developments.

Our projection for the **net expenses of central government and chapters** exceeds the appropriation by HUF 58 billion. Compared to the appropriation, we projected extra expenditure in relation to the uncapped expenditures of chapters (grants for social and public education human services) and with the payment of incentive bonuses at NTCA.²¹

The appropriation for **net expenditures related to EU funds** is HUF 539 billion, while our projection is HUF 507 billion. Within this, the appropriation for the gross cash expenditures is HUF 1,432 billion in the Budget Act, while the amended budgetary appropriation specifies HUF 893 billion as revenues from the EU appearing in the budget. There is a minor difference between our forecast and the projection of the Budget Act on the gross cash expectations legs: according to our projection the EU payments will be made in the amount of HUF 1,465 billion, accompanied by cash revenues of HUF 958 billion. The difference between the expectations is primarily attributable to the revenues brought forward from last year, which are higher in the MNB's estimates than in the government's projection. The net EU expenditure related to the EU transfers are lower under the **accrual-based approach** used by the ESA methodology than under the cash approach, as under the accrual-based approach the EU transfers due this year but received only in the future may also be taken into consideration. The Budget Act projects budget expenditures of HUF 417 billion under the accrual-based approach, also taking these items into consideration. Our own forecast estimates the accrual-based expenditures to be higher by roughly HUF 40 billion (i.e. with opposite sign of the difference compared to the cash-based expectations).

In the first half of the year, cash expenditures related to EU programmes amounted to HUF 470 billion, while the EU revenues included in the budget amounted to merely HUF 130 billion. As regards the expenditures of the EU programmes, the realisation – which falls short of last year's level – corresponds to our expectations, as after closing the 2007-2013 programming period we projected the payment of lower EU transfers due to the

²¹ The Budget Act contains no separate expenditure appropriation for the bonus of the NTCA employees; the funding for this is provided by the surplus tax revenue realised in excess of the appropriation. Since in our June Inflation Report the anticipated tax revenues collected by NTCA are higher than the appropriation, the funds for the additional surplus expenditure related to the bonus payment are already available in our forecast.

Table 7
Partially consolidated cash expenditure of the central sub-sector in 2016
 (HUF billion)

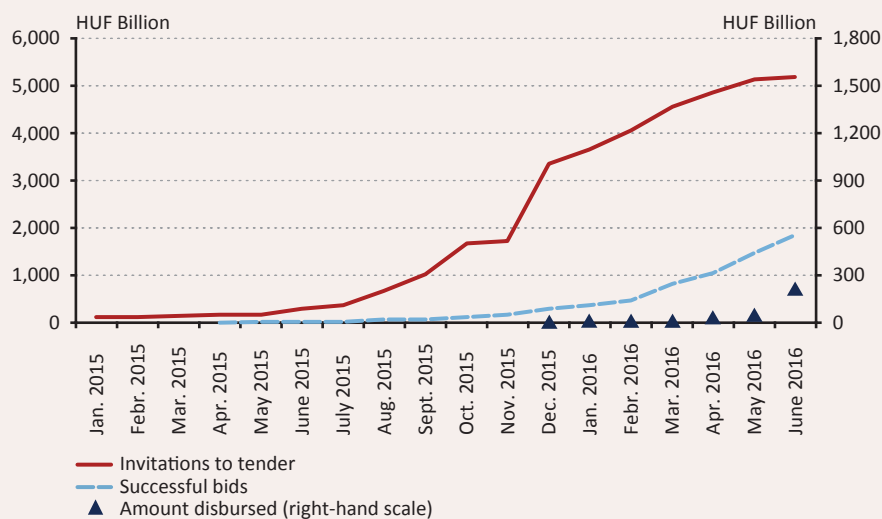
	Statutory appropriation (original)	Statutory appropriation (amended)	Realisation Jan–June	Per cent of appropriation	MNB forecast	Difference: MNB – amended appropriation
PRIMARY EXPENDITURES	12 680	13 173	6 299	48%	13 286	113
Special and normative subsidies and support to the public media	374	380	210	55%	380	0
Social policy fare subsidy	104	104	51	49%	103	–1
Housing grants	104	154	60	39%	222	68
Family benefits, social subsidies	571	571	287	50%	573	2
Benefits under retirement age	113	113	62	55%	113	0
Net expenditures of central government agencies and chapters	4 150	4 514	2 292	51%	4 540	27
Net own expenditures	3 608	3 975	1 954	49%	4 033	58
Net expenditures related to EU funds	542	539	339	63%	507	–31
Support to local governments	662	674	314	47%	674	0
Contribution to the EU budget	315	315	139	44%	315	0
Central reserves	331	361	0	0%	361	0
Debt assumption	0	0	0	0%	0	0
Expenditures related to state property	303	333	105	31%	333	0
Other expenditures	107	108	47	44%	108	0
Expenditures of Extrabudgetary Funds	581	581	249	43%	545	–36
NEF – Passive allowances	52	52	26	49%	53	1
NEF – Active allowances	340	340	141	41%	300	–40
Other expenditures	189	189	83	44%	191	2
Expenditures of Social Security Funds	4 965	4 965	2 483	50%	5 017	52
PIF - Pensions	3 042	3 042	1 518	50%	3 039	–3
HIF - Disability and rehabilitation benefits	323	323	157	49%	322	–2
HIF - Cash benefits	249	249	134	54%	259	11
HIF - Medical and preventive care	982	982	479	49%	1 001	19
HIF - Net expenditures related to drug subsidies	247	247	136	55%	267	20
Other expenditures	122	122	58	48%	129	8
INTEREST PAYMENTS	974	974	561	58%	936	–38
TOTAL EXPENDITURES OF CENTRAL GOVERNMENT	13 654	14 147	6 859	48%	14 222	75

Note: 1. The 2016 H1 actual data were prepared based on the data provided by the Hungarian State Treasury. 2. The forecast of the MNB presents the fiscal projection included in the June 2016 Inflation Report. 3. The difference between the expenditure totals shown in the table and those indicated in the Budget Act is due to the fact that, based on the data available, we excluded the effect of cash transfers within the central sub-sector, and recognised certain expenditure items in net terms, i.e. reduced by the related direct revenues. 4. The table contains rounded figures.

start of the new 2014-2020 programming period. The invitation of tenders related to the new programming period is on schedule, and thus we believe that the full financial allocation may be announced until mid-2017, in line with the government's plans. The aggregate amount of winning bids significantly increased in recent months, approaching HUF 2,000 billion; consequently, we calculate with a surge in payments in the second half of the year. The first signs of this already appear in the June data, as HUF 165 billion was paid from the new programming period, which represents major growth compared to the level of HUF 10-20 billion experienced in the previous months. A major part of the June payments was presumably advance payments only, while the amount of the invoice-based realisation may have remained at the levels seen in previous months.

Chart 12
Drawdown of EU transfers related to the 2014-2020 programming period

(cumulated value)



Source: palyazat.gov.hu, own collection

Contributions to EU budget fell short of the pro-rata realisation of the appropriation in the first half of the year, and hence the seasonality changed compared to the previous years, but this change is not expected to influence the realisation of the annual appropriation.

Within the expenditures of the **extrabudgetary funds**, we expect annual savings of HUF 40 billion in relation to the active spending of the Labour Market Fund compared to the appropriation, due to lower utilisation of the public work programme. The expenditures incurred in the first half of the year in the amount of roughly HUF 140 billion were consistent with this expectation. Last year, at the end of the first half-year the expenses of the Start labour programme were 49 per cent of the annual realisation, while this year it was 41 per cent of the appropriation.

According to our forecast, the **expenditures of the social security funds** may exceed the appropriation by HUF 52 billion. According to our projection, the budget may realise minimal savings on the pension benefits and on the disability and rehabilitation benefits by the end of the year, but extra expenditures in the total amount of HUF 57 billion are expected in relation to medical and preventive care, net expenditures related to pharmaceutical subsidies, therapeutic equipment subsidies and cash benefits.

We expect annual savings in the total amount of HUF 5 billion in the case of **pensions and pension-type benefits**.

- As regards *early retirement benefits*, the slightly higher value compared to the pro-rata expenditure level is not expected to affect the realisation of the appropriation and our annual projection. As regards the time profile of the expenditures during the year, a gradually and moderately decreasing expenditure level may be observed based on the actual data of the first half-year, and according to our projection this trend will offset the minor prorated overrun by the end of the year.
- Expenditures related to *disability and rehabilitation benefits* were slightly lower in the first half of the year than the pro-rata amount of the appropriation, and based on our projection we expect the expenditure related to these items to fall short of the appropriation by a total amount of HUF 2 billion at the annual level.

- Compared to the expectations stated in the budget, we project minimal savings of HUF 3 billion in expenditures for *old-age pensions*. The pro-rata realisation of the pension expenditures is in line with the annual appropriation.

Based on data for the first half of the year, the **cash benefits covered by the Health Insurance Fund** slightly exceeded the prorated amount of the annual appropriation. The difference was predominantly due to sick pay expenditures and the higher-than-expected number of beneficiaries.

Our projection related to the expenditure of **medical and preventive care** exceeds the appropriation by HUF 19 billion, which is attributable to the payment of the 2016 part of the multi-step healthcare wage rise announced in June. Cash figures for the first six months of the year are slightly lower than the pro-rata amount of the appropriation, but we assume that the entire amount of the appropriation will be spent by the end of the year. This is because in previous years we found that any savings accumulated during the year relative to the appropriation regularly led to a higher expenditure level in the last month of the year.

The **net expenditures related to pharmaceuticals subsidies** exceeded the pro-rata appropriation in the first half of the year, which suggests – in line with our projection – that the annual payments may result in a deficit of around HUF 20 billion compared to the appropriation. In addition, the **reimbursement of therapeutic equipment** may also exceed the amount specified in the budget, and according to our expectations it may exceed the appropriation by HUF 8 billion.

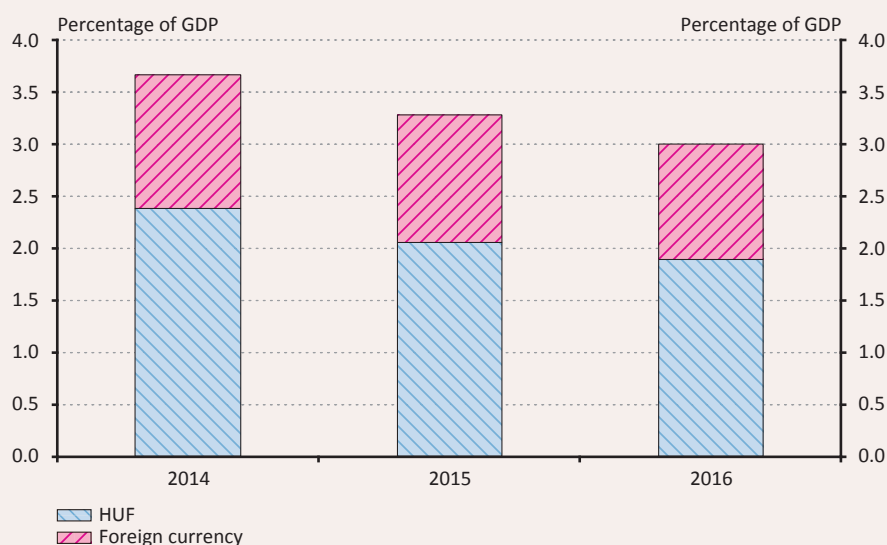
The combined appropriation for **central reserves** is HUF 361 billion, of which HUF 80 billion belongs to the Country Protection Fund. According to our projection, the anticipated accrual-based deficit of 2016 may be below the deficit target, hence in the baseline scenario we expect²² that the Country Protection Fund will be utilised, as the spending of the Fund's reserves does not jeopardise the deficit target. However, the utilisation of the Fund also requires a one-off government decision, hence there is possibility that this reserve budget partially will not be used. Accordingly, in the June Inflation Report we determined the anticipated balance of the government sector on a tiered basis.²³

In the first half of 2016, almost 60 per cent of the annual appropriation for **net cash interest expenditures** was realised. Within this, similarly to the previous years, the gross cash interest expenditures exceeded the pro-rata appropriation, since most of the annual interest expenditures are realised in the first half of the year. The main reason for this is that within the government securities there is a high ratio of those securities the interest payment of which is due in June. Cash interest revenues exceeded 80 per cent of this year's appropriation, which was attributed to the fact, similarly to previous years, that in the persistently low yield environment the Debt Management Agency realises high interest revenues at the auctions and switch auctions.

According to our forecast, **accrual-based interest expenditures** may fall short of the appropriation in the Budget Act by almost 0.1 per cent of GDP. The difference is attributable to the decline in yields which has occurred since the adoption of the original 2016 Budget Act. Within interest expenditures, interest paid on forint government debt fell to the largest degree as a result of the decline in yields. In addition, as a result of the decrease in the sovereign risk spread, foreign currency interest expenditures also fell significantly, and this trend may continue this year as well.

²² Our table presenting the partially consolidated expenditures of the central sub-sector reflects our cash-based expenditure expectations consistent with the full utilisation of the free reserves.

²³ According to the statutory regulation related to the utilisation of the Country Protection Fund, the government may use 50 per cent of the Fund's appropriation after the end-of-March EDP report. Up to 4 July, the government had decided on the reallocation of appropriations in the amount of HUF 36 billion, and thus the room for manoeuvre with the Country Protection Fund fell to 0.1 percentage point of GDP after the closing of the projection process of the June Inflation Report.

Chart 13**Changes in the structure of the GDP-proportionate forint and foreign currency interest expenditures***(MNB forecast for 2016)*

Source: Government Debt Management Agency, MNB

3.4. BALANCE OF LOCAL GOVERNMENTS

According to our forecast, the balance of the local government sector may be HUF 19 billion more favourable than the appropriation. This difference is justified by the first-quarter cash flow data, based on which the local governments' balance surplus was over HUF 160 billion. Part of the surplus is attributable to the fact that – similarly to last year – local governments responded to the reduction of central funding by increasing their own revenues. The growth rate of revenues from local business tax is outstanding, since in the first quarter local governments realised HUF 29 billion higher revenues compared to the previous year. On the expenditure side, the accumulation and capital expenditures substantially decreased in parallel with the decline in EU financing; however, we expect that self-financed investment spending will replace the EU funds during the year. According to our forecast, the financial management of the local governments may be balanced this year.

3.5. STATISTICAL CORRECTIONS (ESA BRIDGE)

The 2016 Budget Act was approved with an accrual-based correction equivalent to HUF 82 billion. On the other hand, the MNB's projection, which is consistent with the June Inflation Report, includes an accrual-based correction of HUF 4 billion. The difference is attributed almost in full to the recognition of incomes related to the EU transfers. According to the budget, part of the EU transfers due this year will not arrive in the budget from the EU allocation, and this shortfall must be recognised among the statistical corrections. However, according to our expectations, the suspended payments related to the 2007-2013 programming period may arrive in the budget this year, as the main disputed cases between the Hungarian authorities and the European Commission have been closed.

Corporate income tax may also be impacted by a new correction, which could not yet be included in the Budget Act. This is attributable to the fact, that according to the modified rules, in 2015 the taxpayers also have the opportunity to sponsor sports, performing arts or motion pictures from the paid tax advance, which is transferred to the specified beneficiary by the tax authority. In the cash-based budget, this was recognised last December as corporate income tax revenue and this January as expenditure. However, since the sponsorship in fact relates to last year, a positive correction, corresponding to the expenditure (HUF 29 billion), must be recognised in the ESA balance.

3.6. EXPECTED DEVELOPMENTS IN PUBLIC DEBT IN 2016

According to our forecast – which is consistent with the June Inflation Report – using the 2015 year-end exchange rate and assuming this to be constant, the gross public debt-to-GDP ratio will fall to 74.5 per cent by the end of 2016. In addition to the economic growth, the sustained, trend decline in the debt ratio is also supported by the moderate net borrowing of the general government. As a result of the negative net foreign currency issuance, the foreign currency ratio of public debt may fall below 30 per cent by the end of 2016, which may further reduce Hungary's external financial vulnerability.

According to the financial account data published by the MNB at the end of June 2016, at the end of the first quarter of 2016, the gross public debt ratio stood at 77.2 per cent of GDP. In the first quarter of this year, the debt ratio exceeded 75.3 per cent, measured at the end of 2015, and it was also slightly (by 0.4 per cent) higher in year-on-year terms. In contrast to previous years, this year this was attributable to the surplus debt issuance to top up the government's liquid reserves rather than to the budget deficit. The financing necessary for the payment of the last instalment (EUR 1.5 billion) of the EU-IMF loan package also contributed to the rise in the first-quarter public debt, as the debt-reducing effect of the instalment was reflected only in the second-quarter data. In addition, the rise in the debt ratio in the first quarter was also attributable to the more moderate-than-expected expansion of the real economy. However, the debt ratio on a stand-alone basis was reduced by the extremely favourable general government balance. According to the detailed financial accounts data, in the first quarter of 2016 the general government balance calculated from financing side generated a surplus of almost HUF 20 billion, which is the best figure since the political transition. The favourable change in the foreign currency structure of the debt continued; the ratio of foreign currency debt within the total public debt fell from 35.3 per cent measured at the end of 2015 to 33.0 per cent.

3.7. LEGAL COMPLIANCE OF THE 2016 BUDGET

According to our forecast, by the end of 2016 the GDP-proportionate gross public debt, defined in accordance with the Hungarian rules, will also fall further, and thus both the debt rule in the Fundamental Law and the debt formula in the Stability Act are expected to be met. According to our projection, the public debt-to-GDP ratio, defined in line with EU rules, will fall from 75.3 per cent measured at the end of 2015 to 74.5 per cent by the end of this year, while the debt ratio defined in line with the Stability Act may decrease to an even greater degree. That is, upon calculating the debt ratio defined in the Stability Act, the debt generated as a result of the non-realisation of the EU transfers must be ignored. Accordingly, the debt rule laid down in the Fundamental Law is likely to be met. The other national rule applicable to the debt, i.e. the debt formula of the Stability Act, stipulates that if the rates of inflation and real economic growth forecast for the fiscal year exceed 3 per cent, the balance of the budget should be planned in a way that the annual growth rate of nominal government debt must not exceed the rate of the difference between the planned inflation and half of the growth. However, if at least one of the two is below 3 per cent, the debt rule prescribes only a minimal, 0.1 percentage point reduction of the debt ratio. According to the MNB's forecast in its June Inflation Report, both inflation and economic growth are below 3 per cent in 2016, and thus the debt formula of the Stability Act prescribes a debt ratio reduction of 0.1 percentage point, which is likely to be met.

The deficit criterion prescribed by the Stability Act is likely to be fulfilled in 2016. According to our projection, the deficit in 2016 may be around 1.6-1.8 per cent of GDP, which complies with the 3 per cent deficit criterion specified in the Stability Act.

According to the Convergence Programme, in 2016 the structural deficit may temporarily be higher than the relevant medium-term objective. Pursuant to the provisions of the Stability Act, the balance of the public sector must be determined in a way that it can be in line with achievement of the medium-term budgetary objective. The value of the medium-term target is provided by the structural balance – net of the cyclical effects of the economy and the one-off items – set forth in the Convergence Programme, which is -1.7 per cent in 2016. The calculation of the structural deficit is rather uncertain and depends to a great degree on the selected method and the assumptions related to the cyclical position of the economy: thus, the various calculations may yield

different results. The Convergence Programme indicates a structural deficit of 2.1 per cent for 2016, which will decline to 1.2 per cent by 2020. Thus, according to the Convergence Programme, in 2016 the structural deficit may temporarily be higher than the relevant medium-term objective.

According to our forecast, in 2016 Hungary will comply with the rules belonging to the corrective arm of the European Union's Stability and Growth Pact. The ESA balance of the general government is expected to be below 3 per cent of GDP, as specified in the Maastricht criteria. According to the provisions of the Pact, the debt ratio should decrease at an appropriate rate, which in the case of a debt-to-GDP ratio over 60 per cent means one twentieth of the part that exceeds 60 per cent, annually. In our opinion, in 2016 the public debt rule of the corrective arm is also met.

According to the Commission's forecast, the structural deficit expected for 2016 exceeds 1.7 per cent, the value defined in the medium-term budgetary objective, and thus the budget does not comply with the MTO criterion. Breaching the rules belonging to the preventive arm of the Pact does not give rise to an excessive deficit procedure, but the European Commission prepares recommendations for the correction of the deviation. In the country-specific recommendations, approved by the Council in June, the Commission made a proposal for an adjustment corresponding to 0.3 per cent of GDP with a view to achieving the budgetary objective.

4. Expected public finance developments in 2017

In June 2016, the MNB published its analysis of the submitted – and since then adopted – 2017 budget bill in its Public Finance Report series.²⁴ The main findings of the Report are still valid, but since the General Assembly modified the bill slightly when discussing the budget and the MNB also revised its macroeconomic forecast in connection the June 2016 Inflation Report, in the following we present the adopted Act and the updated forecast of the MNB.

4.1. EXPECTED ESA BALANCE OF THE GOVERNMENT SECTOR IN 2017

According to the Budget Act, for 2017 the ESA budget deficit target is 2.4 per cent of GDP, which implies an increase of 0.4 percentage points in the deficit compared to the target for 2016. According to our forecast, the accrual-based budget deficit of 2.4 per cent applicable to 2017 can be achieved, if the budget does not utilise half of the Country Protection Fund (Table 8).

	Statutory appropriation	MNB forecast	Statutory appropriation	MNB forecast	Difference: MNB – appropriation
	HUF Billion	HUF Billion	GDP per cent	GDP per cent	GDP per cent
1. Cash balance of the central government	-1165	-1021	-3.1	-2.7	0.4
2. Cash balance of local governments	-20	-20	-0.1	-0.1	0.0
3. Cash balance (GFS) of the general government (1+2)	-1185	-1041	-3.2	-2.8	0.4
4. GFS–ESA difference	292	120	0.8	0.3	-0.5
5. ESA balance of the government sector (3+4)	-894	-921	-2.4	-2.5	-0.1
6. ESA balance with (partial) cancellation of central free reserves	-894	-894	-2.4	-2.4	0.0

Note: 1. The forecast of the MNB presents the fiscal projection included in the June 2016 Inflation Report. 2. Due to rounding, certain items of the table may show differences.

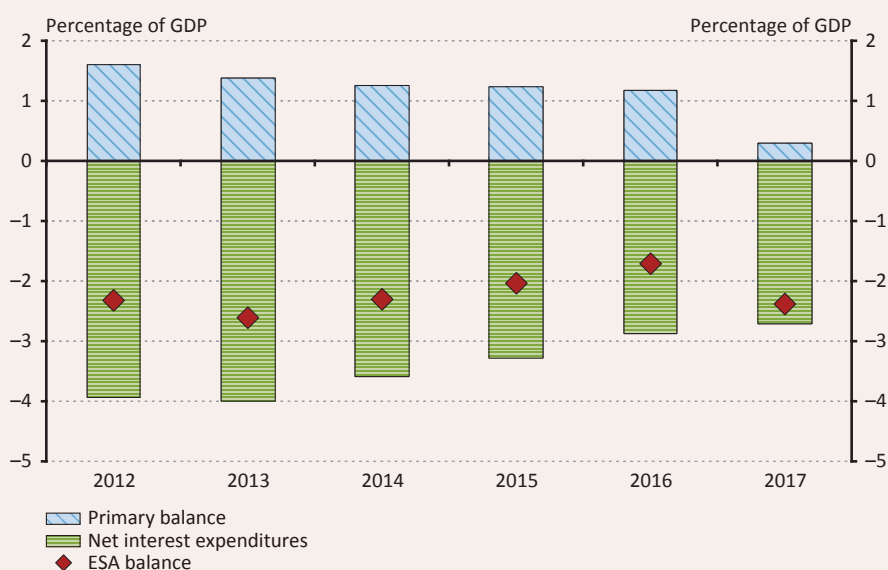
The 2.4-per cent GDP-proportionate deficit target set for 2017 is higher than that of 2016, i.e. the budget contains fiscal impulses boosting economic growth. The primary balance of the general government may decrease in 2017 by 0.9 percentage point compared to 2016, but it will still have a surplus. The decreasing primary balance resulting from the fiscal stimulus is offset by the further fall in the general government’s accrual-based net interest expenditure by 0.6 percentage point compared to 2015 by the end of 2017, decreasing to 2.7 per cent of GDP (Chart 14). The dynamic fall in the interest expenditures is attributable to the historically low domestic interest environment, resulting from the low level of the central bank base rate.

According to our forecast, the cash revenues of the central sub-sector may fall short of the appropriations in the adopted Budget Act slightly, while the cash expenditures may be significantly lower than that, but this

²⁴ <http://www.mnb.hu/letoltes/mnb-elemzes-a-2017-evi-koltsegvetesi-tv-javaslatrol.pdf>

is offset by the different assessment of the accrual-based correction (ESA bridge). According to our projection, in 2017 the cash revenues of the central sub-sector will fall short of the appropriation by 0.1 per cent of GDP. Revenues higher than specified in the appropriation may be expected primarily from the excise duty and the higher revenues of the social security funds. The revenues from value added tax and personal income tax may fall short of the values set forth in the Budget Act. According to our projection, expenditures may be lower than the appropriation by 0.5 per cent of GDP, mainly due to the slower-than-expected run-up of payments related to the European Union programmes. Our projection for the deficit of the local government sector corresponds to the estimate in the Budget Act. The different estimation of the ESA bridge is partially the consequence and offsetting of the difference in the cash balance (in the case of the recognition of the EU transfers).

Chart 14
Changes in the budget balance and the interest expenses of the government
 (percentage of GDP)



Note: 1. As a result of the ESA-2010 requirements, net interest expenditures do not include the imputed interest expenditures incurred as a result of the pension system reform. 2. MNB projection for 2016-2017
 Source: MNB

One change compared to previous years is that the operating budget and the accumulation (investment) budgets are shown separately in the 2017 budget, in view of the fact that the aim of the government is to reach a zero per cent operating balance in 2017. The operating budget contains almost all revenues and expenditures other than investment; consequently, its balance would be positive. Formally, however, its balance will be exactly zero, because the VAT revenue in excess of the level necessary to achieve this, will be shown in the accumulation budget. Thus, the accumulation budget deficit corresponds to the total government deficit.

Box 3**Amendments between the submission and approval of the 2017 budget bill**

The June issue of the Public Finance Report includes the analysis of the 2017 budget bill submitted to Parliament on 26 April. However, the bill approved on 13 June contains several modifications compared to the original proposal. The changes are essentially aimed at increasing expenditures, which the amended bill offsets by raising tax revenues and local governments' contributions, and thus it projects an unchanged balance. Based on the macroeconomic developments, we also forecast an increase in tax revenues, and accordingly with partial cancellation of the Country Protection Fund we still deem the 2.4-per cent deficit target for 2017 achievable.

In the amendments, operational expenditures for the Klebelsberg Institution Maintenance Centre increased by HUF 48.5 billion, and the indicative targets for tourism and development of tourism also rose by HUF 15 billion. Various sport-related expenditures are also slightly higher than in the original bill: there was a significant increase in the appropriation for expenditures for the development of outdoor sports parks, the development of handball infrastructure and for supporting the operation of national specialised sports associations and sports clubs. Offsetting the deficit-increasing items, the adopted budget bill also contains several deficit-reducing items; these mainly relate to the investment spending of local governments, courts and judiciary investments. Support to local governments and judiciary expenditures were cut by roughly HUF 25 billion and 16 billion, respectively, compared to the submitted bill.

As regards revenues, it is primarily tax revenues and local governments' solidarity contribution in respect of which the adopted Act specifies higher values. After the amendment, the Act projects total surplus revenue of HUF 20 billion from value added tax, excise tax and personal income tax, while the raised solidarity contribution by local governments also generates revenues for the central sub-sector in excess of HUF 20 billion. The solidarity contribution, to be introduced in 2017, represents the payments by the local governments as compensation for the tasks transferred from the local governments to the state. The increase in the appropriations for penalty revenues and household levies generates a further HUF 9 billion surplus in revenues, and thus on the whole the budget balance did not change compared to the submitted bill.

The MNB's expectations in respect of next year's balance also did not change substantially. The macroeconomic forecast prepared for the June Inflation Report justified raising tax and contribution revenues, and thus – assuming the partial cancellation of the Country Protection Fund – we project an accrual-based budget deficit of 2.4 per cent for 2017 even after the adoption of the bill.

Box 4**Main measures of the 2017 Budget Act**

Among the key measures of the Budget Act, we should highlight the targeted reduction of the value added tax covering certain areas. In 2017, the VAT rate on poultry and eggs will be reduced from 27 per cent to 5 per cent, and the rate on fresh milk will fall from 18 per cent to 5 per cent. VAT on Internet services and meals in restaurants will be reduced from 27 per cent to 18 per cent. According to our estimate, the downward effect of the measures related to value added tax on the tax burden may be HUF 63 billion.

The adopted budget contains several measures that serve to combat the shadow economy. These include the extension of the online cash registers, increasing the number of card acceptance points, introducing the online invoicing system and enhancing the Electronic Trade and Transport Control System. Due to the considerable uncertainty surrounding the forecasting of the measures, in our projection we only forecast the effect of the extension of the online cash registers, which, according to our projection, may improve next year's balance by HUF 30 billion.

Based on the 2017 budget, the credit institutions' contribution will be cancelled, which represents a revenue shortfall for the budget in the amount of almost HUF 7 billion.

One change that affects excise duty is that from September 2016 until the end of 2017 the excise duty on tobacco products will be raised in three steps, generating surplus revenue of HUF 37 billion for the budget in 2017. The excise duty on fuels will increase conditionally: if the world price of oil falls below USD 50, the tax on petrol and diesel will increase by HUF 5 and HUF 10, respectively. The correction is determined quarterly.

The family tax allowance for families with two children will increase further in 2017: next year, the allowance per child will rise to HUF 15,000. The deficit-increasing effect of the measure is expected to be around HUF 18 billion.

The special tax on financial organisation is affected by several measures. On the one hand, the upper rate of the tax levied on credit institutions will be reduced from the current 0.24 per cent to 0.21 per cent. On the other hand, in 2017 the tax base will have to be defined on the basis of the adjusted balance sheet total calculated from the data of the annual accounts for the second tax year preceding the tax year rather than on the basis of the 2009 adjusted balance sheet total. These two measures alone will reduce revenues from this tax type roughly by HUF 9 billion in total.

One important measure impacting the expenditure side is the increase in public investments. Expenditures on public road development will increase by 70 per cent in 2017 compared to 2016, representing an expenditure of roughly HUF 280 billion in total. As regards public investments, we should highlight the Modern Cities Programme, aimed at the development of provincial towns, which implements various infrastructure, cultural and economic stimulus investments in more than 20 towns. According to the appropriation, the cost of the programme will be HUF 152 billion in 2017.

The continuation and expansion of the career path models is another important element on the expenditure side. Elements anticipated in 2017 include the continuation of the career path models for national defence and police employees, healthcare wage increase, reclassification of teachers, expansion of career path model for government office workers, and the continuation of the career path model introduced in 2016 for the employees of the National Tax and Customs Administration. In addition, wage adjustment in higher education also continues in 2017. According to our forecast, the budget impact of the new measures (career path of NTCA and government officials) may represent an expenditure of almost HUF 70 billion.

4.2. CASH REVENUES OF THE CENTRAL SUB-SECTOR

According to our expectations, in 2017 the **primary revenues of the central sub-sector** will fall short of the appropriation by roughly HUF 30 billion in total. Our projection expects lower revenues than the appropriation in the case of value added tax and personal income tax, while payments by enterprises, revenues from excise duty and revenues of the social security funds may exceed the appropriations.

Our forecast for **payments by enterprises** exceeds the appropriation by HUF 17 billion. Within that, the difference of HUF 8 billion is justified by the different expectations, compared to the appropriation, regarding the recourse to tax allowances. Similarly to 2016, the high corporate income tax revenue is a result of the Growth Tax Credit, which means that if a company's pre-tax profit increases significantly from one year to the next, the additional tax arising as a result of the growth can be paid to the budget over 2 years, in 8 equal instalments. In our projection, in 2017 we do not expect recourse to the allowance related to the tax credit, and thus we expect revenues to be higher by HUF 271 billion.

Next year's Budget Act estimate with regard to the willingness to change over to the **small taxpayers' itemised lump sum tax (KATA)** is higher than our forecast, as a result of which it expects the tax revenue from this tax type to be higher by HUF 4 billion. At the same time, the expected lower use of the KATA increases the revenues from other tax types, and thus on the whole it has a positive impact on the budget.

The **special tax on financial organisations** is affected by two modifications in 2017: on the one hand, the upper rate of the tax on credit institutions decreases from 0.24 per cent to 0.21 per cent (Chart 15), and on the other hand, the tax base will have to be defined on the basis of the adjusted balance sheet total calculated from the data of the annual accounts for the second tax year preceding the tax year rather than on the basis of the 2009 adjusted balance sheet total, i.e. in 2017 the tax base will be calculated on the basis of 2015. Another change is that the **contribution of credit institutions** will be terminated from 2017. The measure affecting these two tax types generates a loss in revenues of HUF 16 billion in total.

Chart 15
Cash revenue from the special tax on financial organisations and tax rates applicable to credit institutions
(HUF billion and per cent)



Note: MNB projection for 2016-2017.
Source: Act LIX of 2006, MNB

Table 9
Partially consolidated cash revenues of the central sub-sector in 2016 and 2017
(HUF billion)

	2016			2017		
	Statutory appropriation	MNB forecast	Difference: MNB – appropriation	Statutory appropriation	MNB forecast	Difference: MNB – appropriation
TAX AND CONTRIBUTION REVENUES OF THE CENTRAL SUBSYSTEM	13 007	13 061	54	13 738	13 684	-54
Payments by economic organisations	1 557	1 585	28	1 622	1 640	17
Corporate income tax	690	704	14	735	743	8
Special tax of financial institutions	79	76	-4	67	67	0
Sector-specific surtax	0	-1	-1	0	0	0
Simplified entrepreneurial tax	75	83	8	81	77	-4
Mining royalty	32	27	-5	30	31	1
Gambling tax	41	27	-14	31	29	-2
Income tax of energy companies	41	45	3	56	49	-6
Lump sum tax of small entrepreneurs	70	66	-4	76	72	-4
Small business tax	14	14	0	14	15	1
E-road toll	141	153	12	155	153	-2
Utility tax	52	52	0	52	52	0
Other taxes and payments	322	340	18	329	355	26
Taxes on consumption	4 681	4 662	-19	4 891	4 806	-85
Value added tax	3 389	3 339	-50	3 542	3 413	-129
Excise duties	984	1 013	28	1 035	1 078	44
Registration tax	21	21	0	23	21	-2
Telecom tax	56	54	-2	54	56	1
Financial transaction levy	201	203	2	206	205	-1
Insurance tax	30	32	2	32	34	2
Payments by households	1 891	1 874	-18	2 000	1 983	-17
Personal income tax	1 694	1 680	-14	1 793	1 765	-28
Duties, other taxes	152	149	-2	164	173	9
Motor-vehicle tax	46	45	-1	44	46	2
Tax and contribution revenues of Extrabudgetary Funds	359	363	4	535	532	-3
Tax and contribution revenues of Social Security Funds	4 519	4 577	58	4 690	4 723	33
Social security contributions	4 230	4 279	50	4 388	4 408	19
Other contributions and taxes	289	298	8	301	315	14
OTHER REVENUES	379	522	144	305	325	21
Other revenues of the central government	263	402	139	183	198	15
Other revenues of Social Security Funds	36	36	-1	39	39	0
Other revenues of Extrabudgetary Funds	79	85	5	83	89	6
TOTAL REVENUES	13 385	13 583	197	14 043	14 010	-33

Note: 1. The appropriation for 2016 reflects the amended cash balance. 2. The forecast of the MNB presents the fiscal projection included in the June 2016 Inflation Report. 3. The difference between the revenue totals shown in the table and those indicated in the Budget Act is due to the fact that, based on the data available, we excluded the effect of cash transfers within the central sub-sector, and recognised certain expenditure items in net terms, i.e. reduced by the related direct revenues.

As regards **value added tax**, the revenue specified in the Budget Act exceeds our forecast by HUF 129 billion. The primary reason for the difference is that the Act's estimates for the absorption of EU transfers and for the additional revenues stemming from increasing the efficiency of tax collection are significantly higher than our forecast. In preparing our projection, of the measures aimed at combating the shadow economy we only considered the extension of online cash registers and do not yet expect the impact of other measures due to the uncertainties surrounding the forecast.²⁵ According to our estimate, in 2017 the targeted reduction of the VAT rate (poultry, eggs, fresh milk, internet services, restaurant services) may generate a loss in revenues of HUF 63 billion, but the impact of this is offset by the measures aimed at combating the shadow economy in the amount of HUF 30 billion.

Our forecast for **excise duty** exceeds the appropriation by HUF 44 billion. In preparing our projection, we took into account the increase in the excise tax on tobacco products, but did not take into account the rise in the excise duty on fuels, because based on the technical projection used by the MNB for oil prices, the world price of oil may remain above USD 50, i.e. the limit specified in the Act, in the individual quarters.

According to our projection, revenues from **personal income tax** may fall short of the appropriation by HUF 28 billion. The difference may be explained by the lower base specified in our forecast for 2016 compared to the appropriation, which was revised upwards. In 2017, the family tax allowance for families with two children will increase further to HUF 15,000 per child, and according to our estimate, the impact of this on the budget will amount to HUF 18 billion.

Our forecast essentially corresponds to the appropriations for **tax and contribution revenues of social security funds**. According to our forecast, among the revenues of the Health Insurance Fund, the revenues related to the health contribution and the social contribution tax are expected to exceed the appropriation by HUF 12 billion and HUF 14 billion, respectively. A change compared to previous years is that in the second half of 2016 and in 2017 the social security funds will not manage 100 per cent of the social contribution tax, as 7.89 per cent of these tax revenues in 2017 will belong to the Labour Market Fund. Another important change is that from the second half of 2016, the companies that have a negative tax base as a result of a tax base reduction implemented on the basis of their research and development activity carried out within their own scope of activities may claim a social contribution tax benefit for part of the remaining negative tax base; according to our forecast, this will reduce revenues by HUF 9 billion, at the most.

4.3. CASH EXPENDITURES OF THE CENTRAL SUB-SECTOR

In 2017, **the cash expenditures of the central sub-sector** will fall short of the appropriation by HUF 180 billion. The expenditures of the central budgetary institutions related to EU transfers may be significantly lower than the appropriation, by roughly HUF 270 billion, as our projection features a slower pick-up in the payment of funds than the Act. According to our expectations, this is partially offset by the expenditures on housing subsidies in excess of the appropriation. In addition to the primary expenditures, in the MNB's opinion, net cash interest expenditures may exceed the appropriation by roughly HUF 36 billion, attributable in part to the absence of a precise financing plan and in part to our estimate related to the anticipated buyback auctions in 2017.

Under **subsidies to economic units**, the bill contains an appropriation of HUF 381 billion, which practically corresponds to the base-year appropriation. Taking into account the recent railway developments, the modernisation of railway rolling stock and the improvement in the profitability of MÁV Start year by year, our projection does not expect any overshooting of the appropriation in relation to this item.

The estimate for **consumer price subsidy** is HUF 104 billion, which is an unchanged amount since 2014; this appropriation was not exceeded in the past two years. In the early months of 2016, expenditures were similar to last year, and there is no information on any new measures, so no overrun of these expenditures is expected for this year or next year.

²⁵ In our projection we do not calculate – apart from some special cases – with the revenue-increasing impact of the measures to combat the shadow economy. This is due to the fact that most of these are unprecedented measures, and hence the forecast of the behaviour responses is rather uncertain.

Under **housing subsidies**, the Budget Act expects expenditures to amount to HUF 211 billion, while our forecast in the June Inflation Report was HUF 287 billion. The difference is attributable to the different assumptions regarding anticipated developments in applications for the home purchase subsidies. According to our forecast, the home purchase subsidy drawn down in 2017 for new homes may generate a budget expenditure of HUF 150-160 billion, representing 0.4 per cent of GDP. Based on the appropriation, the Ministry for National Economy expects lower utilisation.

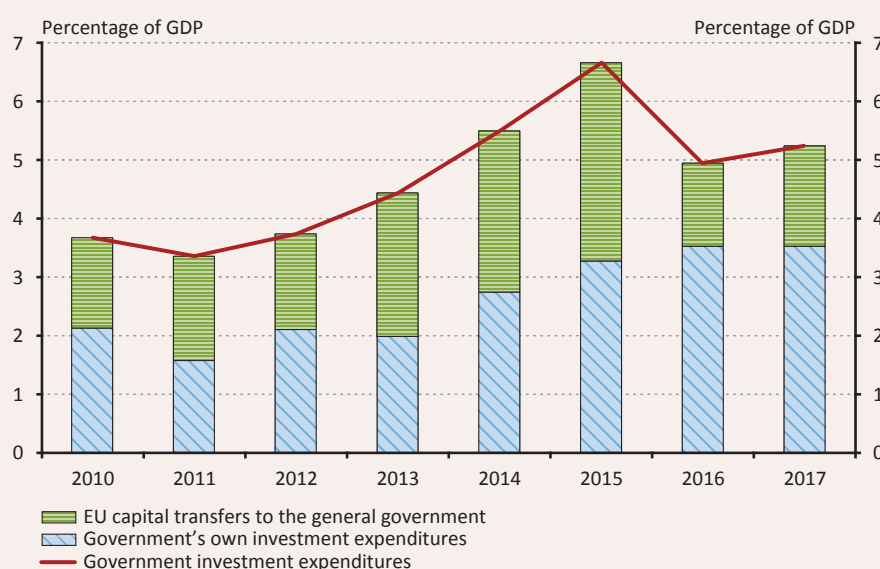
Table 10
Partially consolidated cash expenditures of the central sub-sector in 2016 and 2017
(HUF billion)

	2016			2017		
	Statutory appropriation	MNB forecast	Difference: MNB – appropriation	Statutory appropriation	MNB forecast	Difference: MNB – appropriation
PRIMARY EXPENDITURES	13 173	13 286	113	14 296	14 080	-216
Subsidies to economic units, support to the media	380	380	0	381	381	0
Consumer price subsidy	104	103	-1	104	101	-3
Housing grants	154	222	68	211	287	75
Family benefits, social subsidies	571	573	2	562	567	5
Benefits under retirement age	113	113	0	96	91	-5
Net expenditures of central government agencies and chapters	4 514	4 540	27	5 475	5 202	-274
Net own expenditures	3 975	4 033	58	4 781	4 779	-2
Net expenditures related to EU funds	539	507	-31	694	423	-271
Support to local governments	674	674	0	641	641	0
Contribution to EU budget	315	315	0	317	317	0
Central reserves	361	361	0	375	375	0
Debt assumption	0	0	0	0	0	0
Other expenditures	440	440	0	427	410	-17
Expenditures of Extrabudgetary Funds	581	545	-36	594	579	-15
NEF – Passive allowances	52	53	1	51	51	0
NEF – Active allowances	340	300	-40	325	310	-15
Other expenditures	189	191	2	218	218	0
Expenditures of Social Security Funds	4 965	5 017	52	5 112	5 129	17
PIF – Pensions	3 042	3 039	-3	3 102	3 102	0
HIF – Disability and rehabilitation benefits	323	322	-2	321	322	1
HIF – Cash benefits	249	259	11	276	274	-2
HIF – Medical and preventive care	982	1 001	19	1 040	1 040	0
HIF – Net expenditures related to drug subsidies	247	267	20	247	258	11
Other expenditures	122	129	8	127	133	6
NET INTEREST EXPENDITURES	974	936	-38	912	949	36
TOTAL EXPENDITURES	14 147	14 222	75	15 208	15 028	-180

Note: 1. The appropriation for 2016 reflects the amended cash balance. 2. The forecast of the MNB presents the fiscal projection included in the June 2016 Inflation Report and assumes that the Country Protection Fund of HUF 60 billion will be partially cancelled in 2017, in the amount of HUF 27 billion. 3. The difference between the expenditure totals shown in the table and those indicated in the Budget Act is due to the fact that, based on the data available, we excluded the effect of cash-transfers within the central sub-sector, and recognised certain expenditure items in net terms, i.e. reduced by the related direct revenues.

The net expenditures on a cash basis of **budgetary institutions and central budgetary chapters** – excluding EU settlements – are more than HUF 800 billion higher in the 2017 budget bill than in the amended 2016 appropriations. This difference increases further if we consider the new measures related to the career path programmes, since cover for the measures is included in the special reserves in the Budget Act. If we also consider the year-on-year growth of the special reserve balances, the net increase in expenditures reaches HUF 850 billion. Thus, the growth rate of net own expenditures reaches 20 per cent compared to the 2016 statutory appropriations. To a great degree, this is the consequence of the fact that due to the investment programmes offsetting the temporary decline in EU funds, self-financed investment expenditures will increase further next year; e.g. the priority public road development programme, which will rise by more than 70 per cent next year compared to the appropriation.

Chart 16
Composition of government sector investment expenditures
 (percentage of GDP)



Note: MNB projection for 2016-2017.
 Source: HCSO, MNB

The high growth index of budgetary institutions' chapter expenditure appropriations is primarily related to the increase in investment and accumulation expenditures, but the rise in other operating expenditures and transfer expenditures will also be above real value. At the same time, based on past experiences, the strong investment activity entails implementation risks. Therefore, our baseline scenario uses the assumption that HUF 30 billion of the planned investment expenditures will be carried over to the following year. As regards the budgetary institutions' expenditures (typically wages, purchases of products and services, institutional investment and renovation) we adopted the appropriations of the budget bill. Adoption of the statutory appropriations entails lower realisation risks than in former years, in view of the fact that upon planning the budgetary appropriations related to public education, the new appropriations are built on reasonably expected expenditure bases. It is assumed in our projection that the National Tax and Customs Administration will meet the conditions of bonus payments next year as well, and thus in the case of institutional expenditures we expect wage outflows of HUF 20 billion in addition to the budgetary appropriations.

The planned reduction in wage costs appears only in aggregate form, as the subsidy to be repaid by all institutions to the central budget. According to our estimate, this will generate savings in the amount of HUF 22 billion after implementation of the government decree published on 13 June 2016.²⁶ However, it is

²⁶ Government Decree 1312/2016 (VI. 13).

questionable whether in the future, after the restructuring of the institutional system, the appropriations for the materials, expenditure and renovation expenditures of institutions will be used.

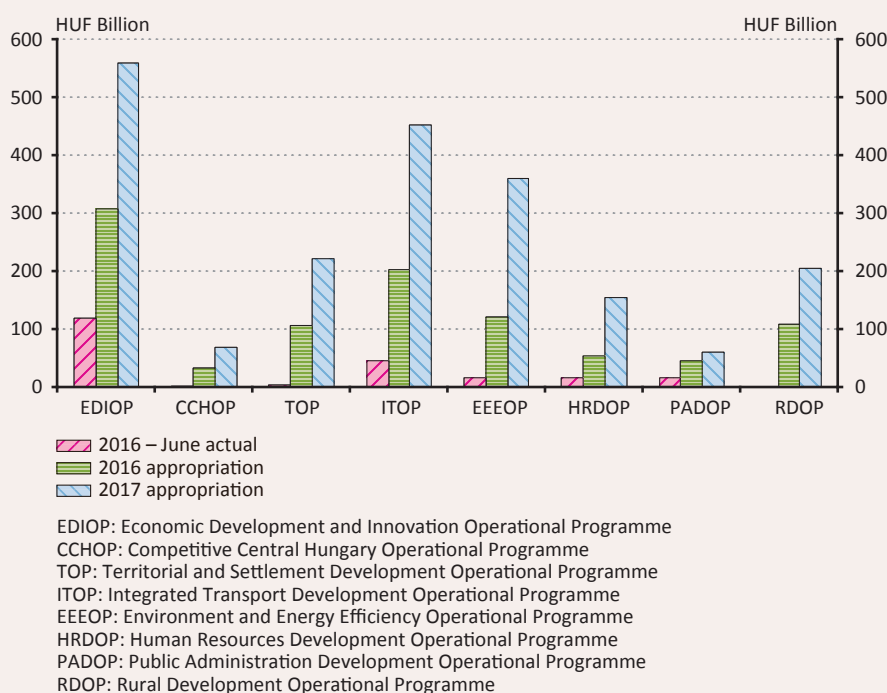
Spending on the wage costs of budgetary institutions will increase further in 2017. The previously introduced career path models (teachers, national defence and police organisations) will continue next year as well, and will be supplemented with the government official career path model starting in 2016. As a new element, a career path model will be also introduced for employees of the National Tax and Customs Administration (NTCA), and the wage adjustment in higher education will continue. According to our forecast, the wage increase for government officials and NTCA employees will generate extra expenditure of almost HUF 100 billion in 2017, while the expenditures for the career path models will increase by more than HUF 200 billion next year compared to 2016. The wage increase for higher education workers will boost expenditures by HUF 10 billion.

On the whole, as a result of the aforementioned differences, we project a minor saving in expenditures compared to the net expenditures derivable from the budget bill under the net expenditures of institutions and chapters (balance of the net own revenues and expenditures without EU relations).

The 2017 budget bill indicates HUF 2,239 billion in connection with **expenditures related to EU funds**, complemented with domestic co-financing. According to the budget bill, HUF 2,111 billion will be disbursed within the framework of the 2014-2020 EU budget cycle, while the remaining part is related to other EU funding. This represents a major increase compared to the 2016 appropriation of HUF 1,432 billion, and is only slightly below the – historically very high – average of the last three years. The adopted Act allocates cash-based revenues of HUF 1,545 billion to the disbursement of HUF 2,239 billion. The difference partly reflects the amount of domestic co-financing as well as the 10 per cent of the funding that is reimbursed by the European Commission only after the audit of the programmes; therefore this amount has to be advanced from the budget. The latter can be accounted for as accrual-based revenue, and thus it does not affect the ESA balance, but adds to the financing requirement and the government debt through the increase in cash expenditures.

Chart 17
Disbursement of funds related to the 2014-2020 Operational Programmes

(HUF billion)



Source: 2016 and 2017 Budget Acts, palyazat.gov.hu

According to our forecast, the disbursements of EU funds may be HUF 550 billion lower than the appropriation, while the related savings on own contributions are estimated to equal 0.1 per cent of GDP. According to our projection, disbursements related to EU programmes may amount to HUF 1,678 billion in 2017, with cash-based revenues of HUF 1,114 billion belonging to this item. The lower disbursement shown in our forecast is attributable to the slower run-up of the drawdown of funds related to the 2014-2020 programming period as compared to what is specified in the Act. This is supported by the fact that until June 2016 merely HUF 220 billion was paid from the new period.

According to our expectations, **labour market active and passive expenditures** will develop in accordance with the appropriation. Next year, budgetary spending on the Start Labour Programme may amount to HUF 325 billion, based on the appropriation. Our projection for passive expenditures corresponds to the appropriation, i.e. HUF 51 billion.

Within expenditures related to health insurance benefits in kind, the **net balance of the pharmaceuticals budget** and the **reimbursement of therapeutic equipment** may exceed the appropriation in the budget bill by HUF 17 billion in total. Our forecast projects that the net expenditures of the pharmaceuticals budget will exceed the appropriation by HUF 11 billion in 2017 (expenditures exceeded the original appropriation in the previous two years as well).

In the case of **medical and preventive care**, we adopt the appropriation included in the budget bill. The appropriation for 2017 exceeds the expenditure level expected for 2016 by HUF 57 billion, which represents an increase of around 6 per cent. The planned growth rate of expenditures exceeds the values observed in previous years and is also higher than the expected growth rate of nominal GDP. At the same time, part of the increase in funds (approx. HUF 20 billion) may provide cover for the additional tasks appearing in this budget. Firstly, HUF 4.5 billion was appropriated for the development of primary care and general health. Secondly, the special procurement drug expenditure, which was among the drug reimbursements in the previous years and amounted to some HUF 16 billion, may be transferred into the medical and preventive budget in 2017. The remaining increment may ensure the maintenance of the real value of material expenditures.

The gradually reoccurring supplier payable portfolio represents a negative risk to the operation and financing of healthcare institutions. Based on the data provided by the Hungarian State Treasury, the accumulated debt of healthcare institutions amounted to HUF 52 billion at the end of May. Outstanding debts increased by an average HUF 4 billion in the past months, accordingly, the risk appearing in this item may amount to 0.1 per cent of GDP in 2017.

Our forecast for **pensions and pension-type benefits** corresponds to the appropriation. The correspondence of the values is attributable to two opposite effects: on the one hand, a higher expenditure level is suggested by the fact that in the June Inflation Report for 2017 the MNB projects a consumer price increase of 2.6 per cent, which is higher than the inflation rate of 0.9 per cent planned in the budget bill. On the other hand, our estimate of fewer beneficiaries than specified in the appropriation justifies a lower expenditure level.

Our projection for **net cash interest expenditures** is HUF 36 billion higher than the estimate in the budget bill, which is adjusted for other costs that can be considered as non-interest expenditure.

Based on our forecast for net cash interest expenditures, gross interest expenditures and interest revenues may also exceed the appropriation. Without knowing the precise financing plan for 2017, we prepared the estimate based on the actual data related to switch auctions and buyback auctions, available until the end of the first half-year of 2016. The first simultaneously generates higher gross interest expenditures and interest revenues compared to the appropriation, while the latter raises gross interest expenditures. Accordingly, our projection for both expenditures and revenues is higher than the appropriation, but gross interest expenditures exceed the appropriation to a greater degree. In addition, in the period between the submission of the Budget Act and the preparation of the MNB's latest projection, a modest increase in yields was observed, which also justifies slightly higher gross cash interest expenditures than the appropriation.

According to our forecast, **net accrual-based interest expenditures** correspond to the value stated in the bill. That is, according to our projection interest expenditure will continue to decline in the future and the repricing of government debt may continue at the rate specified in the bill in the low domestic government securities market yield environment.

4.4. BALANCE OF LOCAL GOVERNMENTS

According to our forecast, next year local governments' deficit will be HUF 20 billion, which corresponds to the assumption in the Budget Act. In 2017, we expect local governments' investment expenditures to increase as a result of obtaining access to the funds of the EU programmes. According to our expectations, the share of own revenues in local governments' revenue structure will increase next year and thereafter as well, to a gradually rising degree.

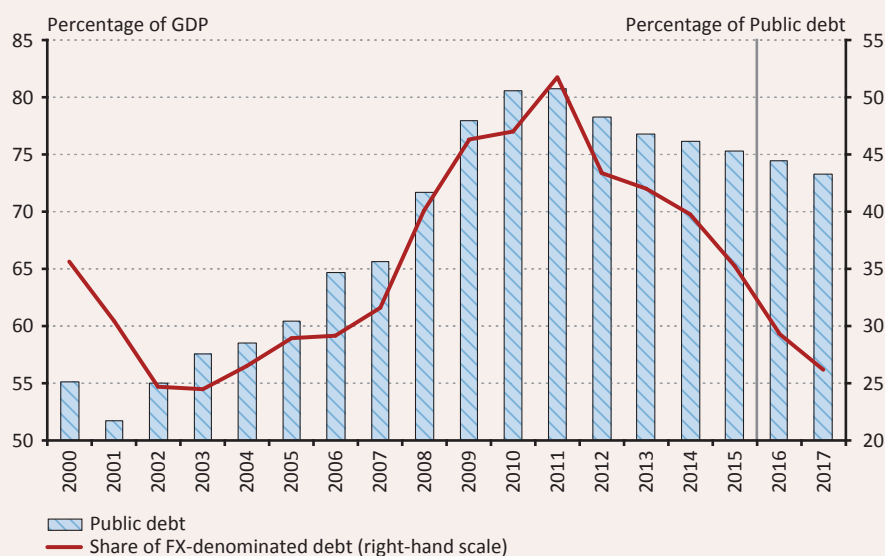
4.5. STATISTICAL CORRECTIONS (ESA BRIDGE)

The statistical corrections (ESA bridge) ensure transfers between the cash balance and the ESA balance, which is of outstanding importance in the EU rules. It is often difficult to judge in advance how much of the impact of a budgetary process or transaction will appear directly in the cash balance and how much must be recognised as statistical correction. Accordingly, the differences in the ESA correction forecasts should be examined together with the related cash projections rather than on their own. It may occur that the cash projection and the estimate for the ESA bridge also differ, but these offset each other, and the ultimate ESA balance corresponds in the two projections. Essentially, this is what we can observe when comparing the 2017 Budget Act and the MNB's forecast. The 2017 Budget Act was approved with a positive accrual-based (ESA) statistical correction amounting to HUF 292 billion, while the projection prepared by the MNB for its June Inflation Report contains only HUF 120 billion as an accrual-based correction (the difference is in EU settlements and interest expenditures). This difference essentially offsets the deviation of the opposite sign in the cash-based projection, and thus on the whole our ESA balance forecast is almost identical to the statutory projection.

4.6. EXPECTED DEVELOPMENTS IN PUBLIC DEBT IN 2017

According to our latest projection – consistent with the June 2016 Inflation Report – public debt calculated under the EDP methodology may decline to 73.4 per cent in 2017, using the EUR/HUF exchange rate of 313.1, which prevailed at the end of 2015. In addition to the continued disciplined fiscal policy, which however was eased somewhat in 2017, the decline in public debt continue to be supported by the historically low interest environment and the expansion of the real economy. According to our forecast, by the end of 2016 the public debt-to-GDP ratio will decline to 74.5 per cent, also contributed to by the MNB's dividend payment in the amount of HUF 50 billion; after a further decline by the end of 2017 it will decrease to 73.4 per cent of GDP. In parallel with the decline in the debt ratio, the foreign currency ratio of the debt will continue to decrease by financing the expiring foreign currency debts in forint, which is also supported by the MNB's Self-financing Programme with a view to mitigating external vulnerability. According to our forecast, the ratio of foreign currency within the total debt will fall to close to 26 per cent by the end of next year.

Chart 18
Developments in the gross public debt of Hungary, 2000-2017



Note: The projection for 2016 and 2017 is identical to that prepared for the MNB's 2016 June Inflation Report, calculated at a constant exchange rate from the end of 2015

4.7. LEGAL COMPLIANCE OF THE 2017 BUDGET

The (non-Maastricht) gross public debt-to-GDP ratio defined in line with the Stability Act will decline both according to the adopted Act and to the MNB's forecast, and thus the Budget Act complies with the provisions of the debt rule laid down in the Fundamental Law. According to our projection, the public debt ratio under the EDP methodology will drop by about 1 percentage point, while the debt ratio defined in the Stability Act will fall by 1.7 percentage points in 2017. The debt ratio defined in accordance with the Stability Act deviates from the debt ratio calculated under the EDP methodology due to statistical methodology reasons. The larger part of the deviation in the rate of decline in the debt in 2017 is due to the fact that the debt increment arising from the lack of EU funding must be disregarded when calculating the debt indicator defined in line with the Stability Act.

The 2.4-per cent deficit target included in the 2017 budget complies with the 3-per cent deficit criterion specified in the Stability Act and the effective debt formula of the Act. The debt rule stipulates that if the rates of inflation and real economic growth forecast for the fiscal year exceed 3 per cent, the balance of the budget should be planned in such a manner that the annual growth rate of the nominal government debt must not exceed the rate of the difference between the planned inflation and half of the growth. However, if at least one of the two is below 3 per cent, the debt rule prescribes only a minimal 0.1-percentage point reduction of the debt ratio. Both the Budget Act and the MNB's forecast expect inflation to be below 3 per cent in 2017, and thus the rule of the debt formula is satisfied.

The deficit target in the Budget Act does not comply with the attainment of the medium-term budgetary objective (MTO) in 2017. The value of the medium-term target is provided by the structural deficit – net of the cyclical effects of the economy and one-off items – set forth in the Convergence Programme, which is reduced to 1.5 per cent from 2017, instead of 1.7 per cent applied in former years. The fiscal deficit of 2.4 per cent under the EU methodology, as targeted by the Budget Act and included in the MNB's forecast, may correspond to a 2.1 per cent structural deficit in 2017, which exceeds structural deficit target of 1.5 per cent. On the other hand, the Act emphasises that the government intends to reduce the structural fiscal deficit to the prescribed level gradually in the coming years.

According to our forecast, in 2017 the Budget Act will comply with the rules belonging to the corrective arm of the European Union's Stability and Growth Pact. Next year, the ESA balance of the general government is expected to be below 3 per cent of GDP, as specified in the Maastricht criteria. According to the provisions of the Pact, the debt ratio should decrease at an appropriate rate, which in the case of a debt-to-GDP ratio over 60 per cent means one twentieth of the part that exceeds 60 per cent, annually. In our opinion, in 2016 the public debt rule of the corrective arm is also met.

On the other hand, the Budget Act does not comply with the rules of the preventive arm of the Stability and Growth Pact. According to the Commission's forecast, the structural deficit expected for 2017 exceeds 1.5 per cent, the value defined in the medium-term budgetary objective, and thus the budget does not comply with the MTO criterion. Moreover, the budget is not in line with the EU rule regarding the increase in expenditures. Breaching the rules belonging to the preventive arm of the Pact does not give rise to an excessive deficit procedure, but the European Commission prepares recommendations for the correction of the deviation. In the country-specific recommendations, approved by the Council in June in respect of 2017, the Commission made a proposal for an adjustment corresponding to 0.6 per cent of GDP with a view to achieving the budgetary objective.

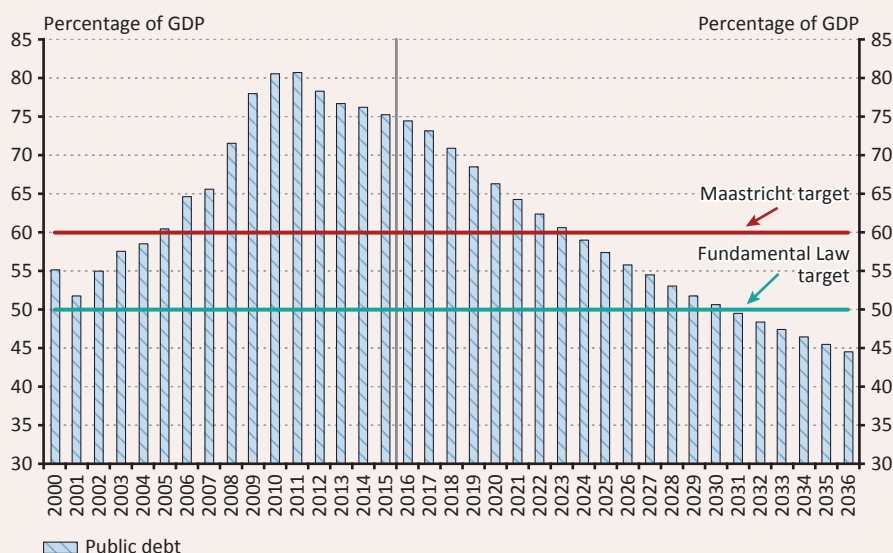
5. 20-year projection of the public debt

5.1. DEVELOPMENTS IN THE BASELINE SCENARIO

Our long-term projection anticipates a steadily declining debt path compared to the baseline gross public debt to GDP ratio of 75.3 per cent measured at the end of 2015. Based on this, the historically high (80.8 per cent) debt ratio from 2011 will decline to 45 per cent by the end of the forecast horizon, i.e. 2036, exceeding the dynamics shown in recent years (Chart 19).

According to our baseline projection, Hungary will reach the Maastricht debt level (60 per cent) prescribed by the European Union in 2024, which means that it will be achieved 3 years earlier than projected by the European Commission in its *Fiscal Sustainability Report*²⁷ published this year. According to the MNB's calculations, the requirement of the European Union's 'one-twentieth' debt rule would also be met. At present, the rule prescribes an annual decrease in the debt of almost 0.8 percentage point, which is gradually reduced until the end of the horizon with the decrease in the debt ratio. Based on our projection, between 2016 and 2036 on average the debt may decrease by 1.5 per cent annually. The debt expected on the basis of the technical projection satisfies not only the EU debt criterion, but also that of Hungary, as the 50 per cent target value prescribed by the Fundamental Law will be realised by 2031 (Chart 19).

Chart 19
Technical projection of the GDP-proportionate gross public debt



Note: The precise definition of the public debt is different in the EU and Hungarian legislation, but this does not cause a significant difference in the debt ratio over the long run.
Source: MNB

²⁷ The European Union publishes its Fiscal Sustainability Report, examining the EU Member States, every three years; the first one of these was published in 2006. The purpose of the analysis is to enable the Commission to obtain a comprehensive view – within the framework of a standard methodology – of the Member States' fiscal positions, and of the anticipated short-term and long-term development thereof. The report focuses on the future path of the Member States' gross public debt to GDP ratio and the sustainability thereof. http://ec.europa.eu/economy_finance/publications/eeip/pdf/ip018_en.pdf

5.2. UNDERLYING ASSUMPTION OF THE PROJECTED DEBT PATH

The macroeconomic factors that essentially determine the long-term development of the gross public debt-to-GDP ratio include the general government balance, the funding cost of the debt, the economy's growth rate and the exchange rate. Accordingly, in order to prepare a trend projection of the government debt, it is essential to use assumptions with regard to the long-term development of these factors. In our projection, 2016 and 2017 contain a forecast that is consistent with the June Inflation report, while from 2018 until the end of the horizon (2036) we applied technical projection for the debt determinants.²⁸

Key underlying assumptions of the baseline debt projection until 2036:

- For *GDP-proportionate general government debt* in the medium term, we relied on the budget projection in the Inflation Report and the Convergence Programme, while in the long run we used the technical assumption that the general government deficit will correspond to the medium-term objective undertaken in the 2016 Convergence Programme, i.e. 1.5 per cent of GDP. Accordingly, in 2016 we projected a deficit of 1.7 per cent in 2016, which will rise to 2.4 per cent in 2017 as a result of the anticipated fiscal easing. Based on the Convergence Programme, between 2018 and 2020 we assumed the public deficit to fall to 1.5 per cent of GDP, and from 2021 we fixed this value as the long-term fiscal deficit target until the end of the projection horizon. This, in addition to the sustained decrease in interest expenditures, permits moderate easing in the primary balance. It should be noted that achievement of the deficit targets specified in the Convergence Programme may necessitate the further boosting of the economy, measures to combat the shadow economy and the adoption of additional fiscal measures. The impact of the assumptions related to the general government balance was presented in Section 5.4. Similarly to the European Commission, we did not incorporate the potential debt-increasing effect of the expansion of the Paks nuclear plant, in addition to the costs appearing in the primary balance.
- For the *real GDP* growth rate, we also used a technical assumption: until 2020 the rate will be around 3 per cent and then settle at the currently estimated potential level of 2.5 per cent. However, the long-term growth rate of the economy may be increased by implementing proper competitiveness reforms, which we illustrated as a positive risk scenario.
- In 2016-2017, the *GDP deflator* and *inflation* rate will be line with what was anticipated in the June Inflation Report, while in the long run – in line with the inflation target – both indicators will settle at 3 per cent.
- The *public debt financing cost* may be duly approximated in the long run with the nominal implied interest rate of the debt, which is the quotient of the government's interest expenditure in the given year and its nominal outstanding debt in the previous year. However, due to the slow repricing attributable to the debt profile, the implied interest rate only follows market yield trends with a delay. The change in the yields can be followed simultaneously only by the floating rate and the newly issued debt components; however, the weight of these within the total outstanding debt falls far short of the weight of the fixed rate government bonds and those that are not yet renewed in the given year. After 2013, as result of the declining domestic inflation, and the decreasing risk spreads and central bank base rate, both market yields and the implied interest rate gradually decreased, dropping to their historic low of 4.5 per cent by 2015. As result of the presumably persistent moderate inflation and yield environment, by 2018 the implied interest rate may drop to 4.0 per cent and this record low level may remain in place for several years. However, over the longer run the change in the domestic price level corresponding to the inflation target and the increase in the major central banks' base rate which is anticipated over the long run, will cause the implied interest rate of the public debt to rise to close to 4.7-4.8 per cent towards the end of the horizon.

²⁸ The projection or technical projection does not correspond to the forecast. The latter one tries to respond to the most probable scenario also considering the potential economic policy responses, while the projection presents the long-term equilibrium of the key macroeconomic factors in a constant regulatory environment.

- As a neutral technical assumption, we projected a steady EUR/HUF *exchange rate* – the rate prevailing at the end of 2015 – until the end of the horizon. The exchange rate is a key determinant for public debt, because the volume of foreign currency-denominated debt is still significant in the structure of public debt, which – as a result of exchange rate fluctuations – modifies the forint equivalent of the public debt, and hence also its ratio to GDP. The ratio of foreign currency dropped to 35 per cent by the end of 2015 from 52 per cent in 2011, and thus the exchange rate sensitivity of the government debt also decreased significantly. Over the long run, we expect the foreign currency ratio to fall below its pre-crisis level of 25 per cent.

5.3. DECOMPOSITION OF THE LONG-TERM CHANGE IN THE DEBT RATIO

The trend development of public debt may be decomposed into the long-term changes in the factors determining the underlying process. In the following, we perform a quantitative decomposition to determine the cumulative degree to which the key macroeconomic factors influencing the change in the gross public debt-to-GDP ratio cause the debt ratio to fall roughly by 31 percentage points between 2015 and 2036.

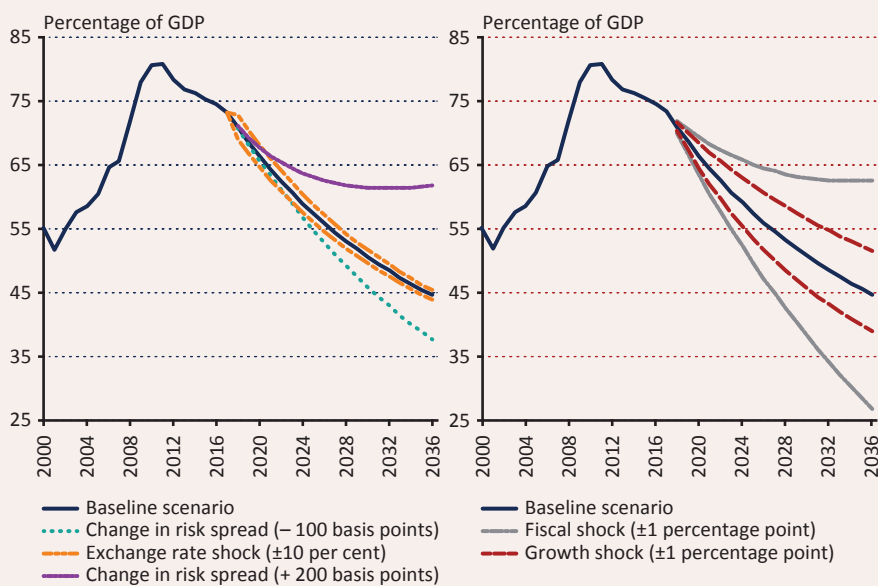
The two factors that contribute to the trend decrease in the debt ratio the most are the stable expansion of the real economy and the persistence of the primary general government surplus. Based on the projection, real GDP alone reduces the debt ratio by 31 percentage points in twenty years, while the primary budget surplus contributes to the decrease in the public debt-to-GDP ratio by almost 20 percentage points. The macroeconomic factor which increased public debt the most over the long run is the impact of real debt financing cost. According to our baseline projection, the payment of real interest increases the debt ratio by slightly more than 20 per cent of GDP until the end of 2036.

Looking ahead, one significant change is that, contrary to previous assumptions, the impact of the dynamic component (the difference of the real interest burden of the accumulated debt and the real economy growth) – as the fundamental determinant of the trend change in the GDP-proportionate public debt – steadily supports the reduction of the debt ratio already from 2016 over the entire horizon. In previous years, similarly to the EU average, Hungary’s debt was typically also influenced negatively by the dynamic component (or “snowball effect”), as the impact of real interest payment outstripped the positive effects of real growth. However, contrary to the EU average, after 2010 Hungary managed to offset this by the sustained improvement of the primary balance – attributable to the fiscal consolidation – and by the surplus thereof achieved from 2012. However, from this year not only the favourable fiscal position but the dynamic component as well may support the change in the debt ratio.

5.4. SENSITIVITY ANALYSES

The purpose of the partial sensitivity analysis is to demonstrate to what degree the long-term baseline scenario for the gross public debt-to-GDP ratio changes on the entire projection horizon by changing the key determinants of the debt ratio one by one, *ceteris paribus*. The partial sensitivity analysis disregards second-round effects, feedbacks and other cross-effects, and hence the results should be treated prudently. However, this type of analysis also provides a good approximation of the change in the debt path caused by shocks incurred by single components or the long-term maintenance thereof, i.e. of the sensitivity and long-term sustainability of the debt path (Chart 20).

Chart 20
Results of the sensitivity analyses



Source: MNB

We examined the partial sensitivity of the debt ratio to the persistent changes of the following factors, occurring from 2018 until the end of the projection horizon:

- a +200 basis point or -100 basis point change in the financing cost of public debt,
- ±10 per cent shift in the forint exchange rate,
- ±1 percentage point deviation in the GDP-proportionate general government balance,
- ±1 percentage point shift in the growth rate of the economy.

A persistent shift in the risk spread and thus in the implied interest rate path of public debt results in a gradually increasing deviation until the end of the horizon compared to the baseline scenario in both scenarios. The increasing deviation from the baseline scenario is attributable to the fact that revaluation of the debt takes place slowly and gradually due to the diversified composition of the portfolio. A 200-basis point upward shift of the implied interest rate path would increase the debt ratio by almost 0.3 percentage point already in the first year, which would rise to 17 basis points by the end of 2036. By contrast, a 100-basis point downward shift in the interest rate path would result in a close to zero deviation in the first year, but by 2036 it would reduce the debt ratio by roughly 7 per cent of GDP. This is because the decreasing interest rate reduces the government's interest expenditures, and thus the government deficit and the debt ratio decreases even with a constant primary (without interest payments) general government balance.

A shift in the forint exchange rate is felt immediately, as the repricing of the foreign currency debt takes place simultaneously with the exchange rate movements. However, the degree of the shift from the baseline scenario gradually decreases with the fall in the foreign currency ratio of public debt. A 10 per cent shift in the exchange rate generates a deviation of almost 2 percentage points compared to the baseline scenario in 2018, which falls to 0.7 percentage point by the end of the horizon.

The partial change in the primary general government balance also results in a gradually increasing deviation compared to the baseline scenario. A steady change in the balance corresponding to 1 per cent of GDP modifies

the debt path compared to the baseline scenario initially by 1 percentage point and by almost 18 percentage points by 2036. The improvement in the primary fiscal balance points to a contraction of the debt ratio.

The persistent deviation of economic growth from the baseline scenario modifies the initial debt path through the denominator of the debt/GDP ratio. A 1-percentage point change in the growth rate in the first year would cause a shift in the debt ratio corresponding to 0.7 per cent of GDP, which rises to 6-7 per cent by 2036. The acceleration of the growth rate reduces the public debt-to-GDP ratio.²⁹

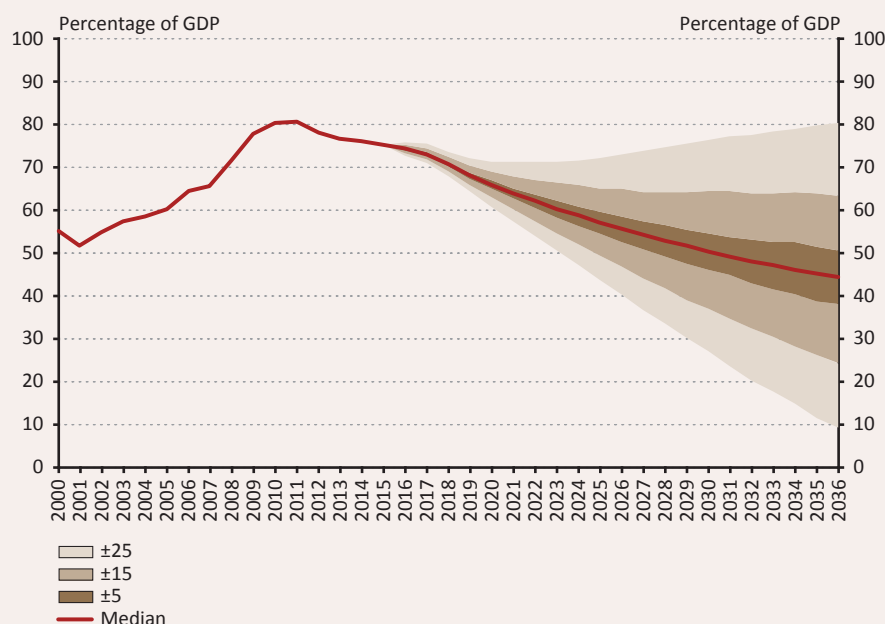
5.5. UNCERTAINTY OF THE PROJECTED DEBT PATH

The 20-year outlook is a technical projection, which assumes a steady fiscal policy, but considers the links between the individual variables. The projection carries substantial uncertainties, and thus it makes sense to also quantify the uncertainty surrounding this path, in addition to the baseline scenario. With a view to determining the uncertainties we applied an econometric model, which presents – based on the historic connections of the variables – the width of the bands to which the public debt ratio may fall under given probabilities. The simulation was performed for the period of 2016-2036, corresponding to the projection period.

The uncertainty is presented on fan charts. The black line indicates the baseline scenario of our forecast, while the bands of different shades indicate five per cent uncertainty intervals (i.e. the value of the inner, lighter band belonging to the individual years shows the band into which the debt ratio will fall with ten per cent probability). Naturally, the uncertainty bands become wider and wider on the forecast horizon: by the end of the horizon the value of the debt ratio falls between 10 and 80 per cent with a probability of 50 per cent. The large variance is attributable to the strong historic fluctuation of the debt ratio and the previous intense macroeconomic shocks (Chart 21).

Chart 21
Fan chart of public debt

(as a per cent of GDP)



Source: MNB

²⁹ The change in the growth rate of the economy impacts the debt ratio not only through the denominator of the debt ratio, but also through the fiscal balance. However, due to its nature, the partial analysis does not deal with these interactions.

6. Special topics

6.1. DEBT RULE OF THE EUROPEAN UNION

From 2016 the debt rule of the European Union also applies to Hungary in addition to the 3-per cent deficit criterion. The rules defined in the European Union's Stability and Growth Pact (SGP) contain four relevant fiscal requirements for Hungary. Of these, it is the deficit limit and the EU debt rule that should be considered, as breach of these may give rise to an excessive deficit procedure. Of the two, in the following we present the debt rule, as the details of it are known to a lesser degree.

The debt rule stipulates that when the public debt-to-GDP ratio exceeds the 60-per cent reference value, the rate must decrease on average by one twentieth of the part in excess of the benchmark value. According to the SGP, the ratio of public debt to the gross domestic product (GDP) must not exceed 60 per cent, and if it does exceed this reference value, the ratio must "decrease to a sufficient degree" approaching the reference value "at a satisfactory pace". The EU debt rule is also referred to as the "one twentieth" rule, as the decrease of "sufficient degree" and "satisfactory pace" was defined such that the debt must decrease annually on average by one twentieth of the difference relative to the benchmark value.

In examining compliance with the rule, the European Commission calculates the average pace of the change in debt in three ways, of which the mildest one must be satisfied. Two calculation methods differ from each other only in the years inspected, while the third one also takes into consideration the impacts of the economy's cyclical volatility. In examining the fulfilment of the criterion, the Commission relies on its own estimate and forecast. The three arms of the debt rule are as follows.³⁰

- 1) Backward-looking criterion: the Member State will meet the criterion if the debt-to-GDP ratio falls by an average of one-twentieth of the excess between the actual debt ratio and 60 per cent of GDP in the current year and the preceding two years.

$$Criterion_t = 0.6 + \frac{0.95}{3}(Dept_{t-1} - 0.6) + \frac{0.95^2}{3}(Dept_{t-2} - 0.6) + \frac{0.95^3}{3}(Dept_{t-3} - 0.6)$$

The condition is met, if:

$$Dept_t < Criterion_t$$

, where $Dept_t < Criterion_t$ is the value of the public debt-to-GDP ratio at the end of the given year.

- 2) Forward-looking criterion: similar to the backward-looking criterion, essentially, the debt should be reduced to a sufficient degree as an average of three years. The forward-looking method, however, takes into account debt before, during, and following the current year, as expected based on the European Union's forecast.

$$Criterion_{t+2} = 0.6 + \frac{0.95}{3}(Dept_{t+1} - 0.6) + \frac{0.95^2}{3}(Dept_t - 0.6) + \frac{0.95^3}{3}(Dept_{t-1} - 0.6)$$

³⁰ The fiscal rules of the European Union are described in detail in [European Commission \(2016\): Vade Mecum on the Stability and Growth Pact](#)

The condition is met, if:

$$Dept_{t+2} < Criterion_{t+2}$$

3) Cyclically adjusted criterion: it also considers the impact of the cyclical position of the economy on the debt ratio, and examines whether – ignoring this – the debt ratio would have complied with the prescribed rate of decrease.

$$Cycle_t = \left(\frac{Dept_t + \sum_{j=0}^2 (C_{t-j})}{Y_{t-3} \prod_{h=0}^2 (1 + y_{t-h}^{pot})(1 + p_{t-h})} \right)$$

The c_t in the formula means the cyclical component, y_t the nominal GDP value, y_t^{pot} the potential growth rate, and p_t the GDP deflator.

The condition is met, if:

$$Cycle_t < Criterion_t$$

These three criteria ensure a certain degree of flexibility in the rule, as with the use of the backward-looking and forward-looking method it assesses changes in public debt across several years, while the third criterion is also intended to consider the impact of fluctuations in the cyclical position of the economy. Upon assessing the rule, the European Commission first examines the backward-looking method, as in this case it can be established from actual data whether or not the rule was fulfilled. If the rule was not fulfilled, the Commission determines – considering its own forecast – whether the debt reduction will be fulfilled looking forward. If the debt is not reduced to an adequate degree over the forecast horizon either, the Commission examines whether the breach of the backward-looking criterion is attributable to the negative output gap or the economic expansion that falls short of the potential growth. If the failure to reach the expected decline in debt is attributable to the negative impact of the economic cycle, the Commission regards the rule as fulfilled.

Regarding the current debt level in Hungary, the debt-to-GDP ratio should decrease annually on average by 0.7-0.8 percentage point to satisfy the rule. At the end of 2015, Hungary's public debt ratio was 75.3 per cent of GDP, which exceeds the benchmark by 15.3 per cent. The difference must be reduced annually by one-twentieth part thereof, i.e. in the case of Hungary by 0.7-0.8 percentage point of GDP. According to the methodology presented above, the European Union examines the fulfilment of the criterion over the average of three years and also considers the impact of the economy's cyclical volatility. Accordingly, the rule may also be satisfied in such a manner that in certain years the debt ratio is reduced to a lesser degree than that, but on the average of several years the expected reduction is realised.

6.2. DEVELOPMENT IN THE ASSETS AND LIABILITIES OF THE GENERAL GOVERNMENT SECTOR IN HUNGARY

The financial standing of the government may be described by many other data, in addition to one of the most well-known macroeconomic index, the gross government debt. In the following, we describe other indicators that can be derived from the government's assets and liabilities, and also place the gross debt figure in this context.³¹

The most frequently used indicator is **gross government debt**. This primarily has economic policy rather than statistical reasons, as certain fiscal rules of the European Union relate to the government debt which is defined by the Protocol attached to the Treaty establishing the European Economic Community as follows: "...total gross

³¹ In terms of methodology our analysis primarily relies on the MNB's publication entitled Hungary's financial accounts 2014.

*debt at nominal value outstanding at the end of the year and consolidated between and within the sectors of general government.*³² It is important in the definition that (i) the debt is to be measured at face value rather than at market value; (ii) it is a gross value, i.e. it should not be reduced by the receivables; (iii) consolidated, i.e. the debts within the government sectors offset each other.

Examining the time series of gross public debt, it can be seen that its GDP-proportionate value gradually decreased, after reaching a high in the first half of the 1990s, until the reversal in 2002. Thereafter, a continuous increase was observed, initially due to the high budget deficit and then partially as a result of the deceleration in economic growth. The financial crisis that started in 2008 accelerated the process: the debt soared as a result of the loans taken from international organisations. In the wake of the recession, the weakening of the exchange rate and the rising yields, the debt ratio continued to increase until the turnaround in 2011. Thereafter, several factors contributed to the reduction of the debt ratio, such as the disciplined fiscal policy, the emerging economic growth, the reform of the pension system and the falling yields from 2012.

In economic terms, **net government debt**, in which a part of the government's financial assets compared with the gross public debt is also taken into account, is as important as gross government debt. There is no clear definition for net debt; it is usually interpreted in two ways: (i) difference of gross debt and debt-type assets (i.e. the loans, credits and deposits provided by the state), and (ii) difference of the gross debt and the state's liquid financial assets. In theory, the first definition is more consistent, as it compares debt items with each other. However, based on practical considerations, the arguments for the second definition include that during the repayment of the debt the loans practically cannot be used in the short run, in contrast to liquid assets, such as quoted shares, which can be used (by selling them). In Hungary, the net debt ratio according to the second definition follows similar trends as the gross value, but the difference between them is somewhat volatile. The stable difference of 5 percentage points increased to 8-9 percentage points in 2008, and then rose to 10 percentage points in 2011. The change in 2008 was caused by the fact that the loans taken from international organisations exceeded the financing need of the budget and the difference was held in the government's foreign currency deposit. Later, the government gradually used this for financing, and it kept part of it until repayment. In 2011, the divergence of the two indicators was caused by the reform of the pension system: part of the assets transferred to the state materialised in deposits and shares, which reduced the net debt (the assets received in the form of government securities simultaneously reduced both gross and net debt).

Net financial debt is the difference of the state's total financial assets and total liabilities calculated at market value (i.e. the net financial worth with opposite sign). It follows from the definition that it shows strong similarities to net debt, although that considers a narrower range of the assets and liabilities. The trend growth in net financial debt observed in Hungary is attributable to complex processes. A one-off rise was generated by the fact that since 2011 the statistics recognise the pension liabilities to the members who left the private pension funds to join the state pension scheme among other liabilities. On the other hand, the calculation at market value increases the value of financial liabilities compared to the face value methodology applied in the calculation of the public debt. The reason for this is that the market price of the Hungarian government securities is currently higher than their face value due to the low yields. In recent years, the impact resulting from this was quite strong.

The **non-financial assets** of the government sector cover all assets in respect of which there are no third-party claims, which represent a value and which can realise profit either through use or property income (and naturally the asset itself is not of financial nature).³³ Both produced (machinery, equipment, real estate, inventory, intellectual products) and non-produced (natural assets, land) belong here. The statistics related to non-financial assets are less widely available than those related to financial assets. Their valuation is complicated by the fact that part of them is rarely marketed or they are of individual nature (land, property). Both gross and net, reduced by depreciation, a value can be calculated for them, of which the latter one is closer to the market price approach expected in the national accounts. Within non-financial assets, actual data are available for the government's **net capital stock**, i.e. for the amortised value of existing real property, plant and equipment.

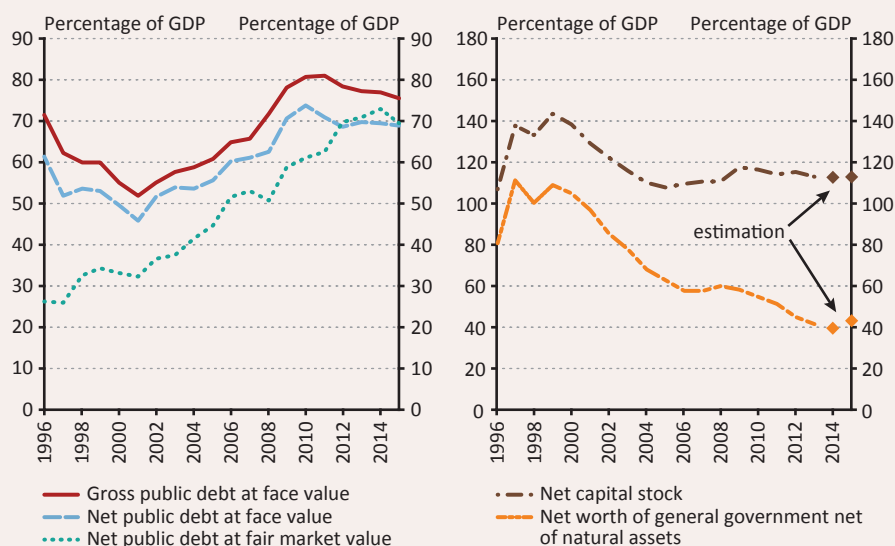
³² Article 2 of Protocol 12 attached to the Treaty establishing the European Economic Community.

³³ Bova et al (2013).

More than 95 per cent of the stock materialises in buildings and other structures (roads, railways, dams, etc.). After the fluctuation observed around the millennium, the value of these has been rather stable in the last ten years, at around 110 per cent of GDP. No data are available for the non-produced assets (land and other natural assets), although the value of these would also be rather significant.

The **net worth of the general government** is the difference between the last two indicators, i.e. the net capital stock and net financial debt. This because this indicator includes the general government's full calculated net worth, considering both financial and non-financial assets (in the absence of data related to natural assets, without those). The gradual decrease in this has been attributable for almost two decades to the increase in net financial debt, but according to our estimate this decline came to an end in 2015, as net financial debt also declined. The previous trend-like decline in the net worth of the general government was attributable to the growth in government debt, which lasted until 2011, and to the aforementioned technical settlements (private pension fund settlements, changes in securities prices).

Chart 22
Various debt and asset indicators of the general government



Note: Gross public debt was recognised at face value, in accordance with the EU's legal definition. By contrast, the financial accounts show the liabilities at market value, and thus the price changes of securities cause volatility in the value of the liabilities. As a result of the different methodology, the public debt ratios and net financial debt cannot be compared directly, but the different methodology has no impact on the trends and does not influence the overall view. Net public debt was defined as the difference between the Maastricht gross public debt and the liquid financial assets of the general government. Liquid assets include cash, deposits and quoted shares. We assumed constant net capital stock for 2014-2015, and estimated the net worth of the general government based on this (the other input necessary for this, i.e. the net financial debt of the general government is based on actual data).

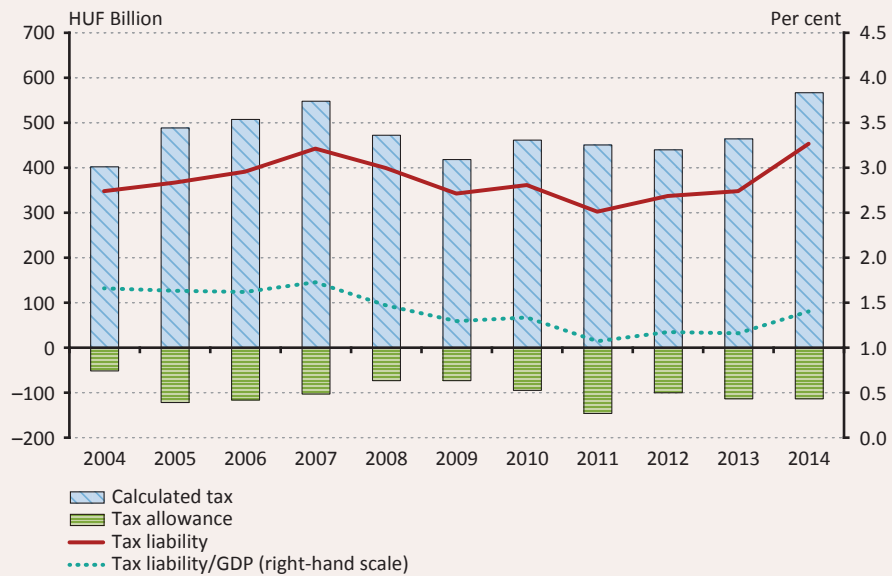
Source: MNB, financial accounts, HCSO, national accounts

6.3. ANALYSIS OF THE DISTRIBUTION OF CORPORATE INCOME TAX LIABILITY BASED ON MICRO DATA

In the following, we analyse the distribution of corporate tax liabilities during the period of 2004-2014 based on detailed micro data.³⁴ During this period the number of corporate taxpayers increased from 320,000 to approximately 420,000, while the amount of tax liability varied between HUF 300 and 460 billion, depending on the changes in the taxation rules and economic activity. During the period of the crisis, the tax liability decreased followed by a rise in the post-crisis period, and in 2014 the tax liability of HUF 455 billion already exceeded the pre-crisis years, albeit it fell short of it in proportion to GDP.

³⁴ The 2015 data is not available yet due to the 31 May submission deadline for tax returns.

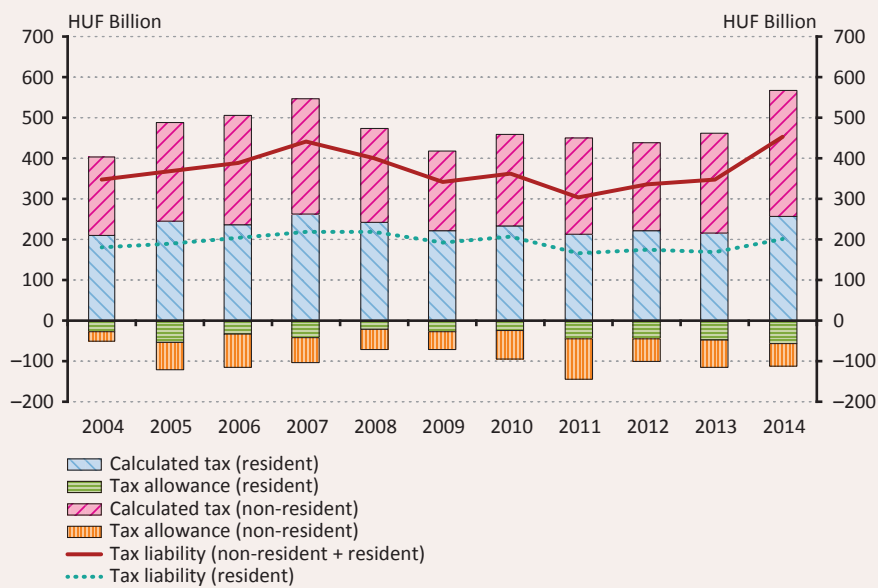
Chart 23
Corporate tax liability
(2004-2014)



Source: MNB calculations

About one half of the corporate tax liability is paid by domestic and the other half of it by foreign companies.³⁵ In recent years, the ratio of corporate income tax paid by foreign companies increased to above 50 per cent, while the ratio of the number of these companies has fallen from 8 per cent to close to 6 per cent since 2004. Within this, 60-70 per cent of the foreign companies' tax liability was paid by 500 large corporations. After 2011, the tax liability of foreign companies increased dynamically and by 2014 it exceeded the pre-crisis level. During

Chart 24
Corporate income tax liability
(foreign/domestic company)



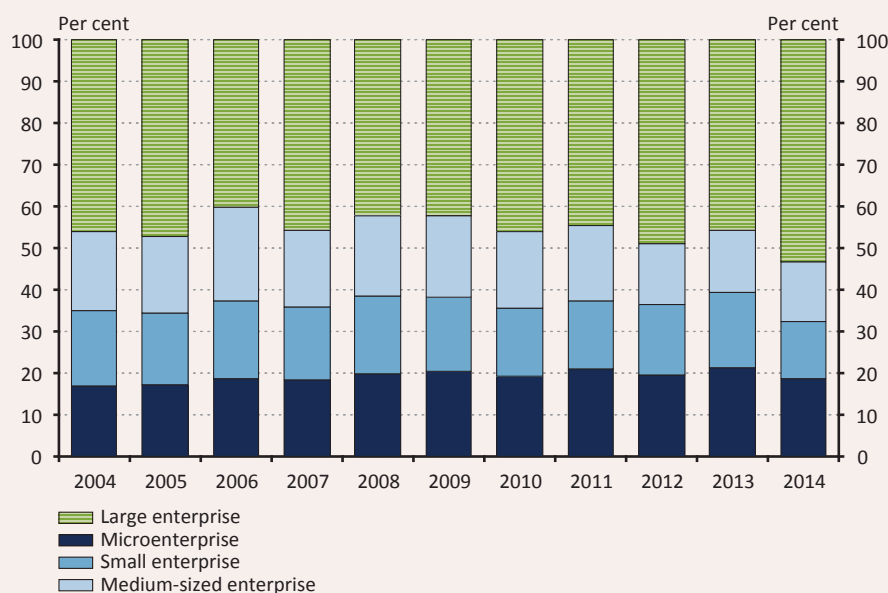
Note: A foreign company is defined as a company where at least half of the share capital is foreign.
Source: MNB calculations

³⁵ According to our definition: those where at least 50 per cent of the share capital ownership is foreign.

the same period, the tax liability of domestic companies – where the foreign ownership of share capital is less than 50 per cent – stagnated or slightly increased in 2014, but it has not yet reached the pre-crisis level. In the period under review, the total amount of tax allowance used by foreign companies exceeded the tax allowance of domestic companies. Since the start of the crisis, however, the tax allowance of domestic companies has increased slightly year by year, and consequently the difference had almost disappeared by 2014.

During the time horizon under review, more than half of the tax liability was paid by SMEs. Within this, the share of micro, small and medium-sized companies was almost identical, although in recent years this ratio has shifted towards the micro enterprise segment. The remaining 40-50 per cent of the corporate income tax was paid by large corporations. This tax payment ratio was fulfilled in 2014 by almost 1,000 large companies, 5,000 medium-sized companies, 27,000 small companies and 380,000 micro enterprises. Not all micro and small companies are included in this data, as instead of the corporate income tax they could also opt for the simplified entrepreneurship tax (EVA) or from 2013 for the small taxpayers' itemised lump sum tax (KATA) or for the small business tax (KIVA).

Chart 25
Total tax liability amount by enterprise size
(per cent)

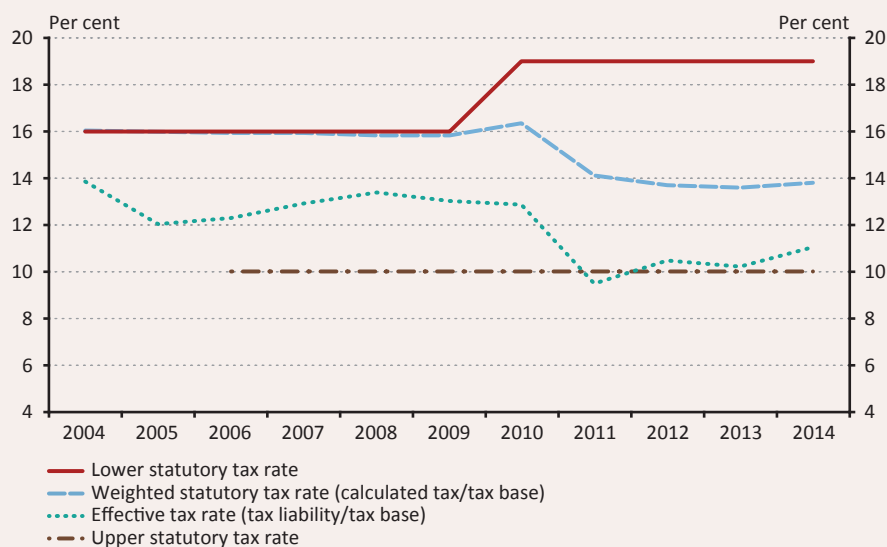


Source: MNB calculations

The corporate income tax rate decreased in the period under review: the weighted tax rate was 16 per cent for a long time and then declined to 14 per cent from 2011. From 2006 a lower, 10 per cent rate was introduced for the tax base not exceeding HUF 5 million, in addition to the 16 per cent statutory rate; from 2008 the threshold was raised to HUF 50 million. However, this lower tax rate could be applied to the below-the-threshold tax base only if corporations fulfilled certain conditions; accordingly, in practice, almost 95 per cent of the enterprises paid tax on their tax base at the higher rate. Thus, the weighted statutory tax rate – i.e. the total calculated tax divided by the tax base – was close to 16 per cent.³⁶ From 2011, as a result of two opposite measures, the average tax rate decreased. On the one hand, in 2010 the higher rate was raised from 16 per cent to 19 per cent, and on the other hand, from August 2010 the threshold for the lower rate

³⁶ From 2007 to 2009 an additional surtax (“társas vállalkozások különadója”) was also introduced at the rate of 4 per cent, where the tax base was also the pre-tax profit, but the list of the tax base modifying items was narrower, and no tax allowance could be enforced either – due to this reason and to the non-availability of data, this is not shown on Chart 2. In the period under review, the enterprises were burdened by various industry special taxes as well, in addition to the corporate income tax (e.g. the retail trade, telecommunications, energy or the bank and insurance sectors); however, in this analysis we do not examine these as part of these are projected on a different tax base, furthermore data absence also hinders the analysis.

Chart 26
Statutory and effective corporate tax rate



Note: The weighted tax rate is the total calculated corporate income tax divided by the tax base, while the effective tax rate is the total tax liability after tax allowances divided by the tax base.

Source: MNB calculations

increased to HUF 500 million. Since fewer than 1,000 companies were subject to the higher tax rate, the vast majority of the enterprises paid tax at the lower tax rate; hence, on the whole the weighted tax rate decreased to around 14 per cent.

The effective tax rate also decreased to the largest degree in 2011, following the change in the weighted statutory tax rate.³⁷ The difference in its level compared to the weighted tax rate and the larger variance between the individual years is attributable to the sum of the tax allowance in the given year. The effective rate between 2004 and 2010 was between 12 and 14 per cent, and from 2011 it fell to 10–11 per cent, following the change in the average rate. In 2011, the effective rate fell below 10 per cent due to the relatively higher amount of the utilised tax allowance.

6.4. OUT-OF-POCKET HEALTHCARE EXPENDITURES IN HUNGARY

The ratio of the healthcare expenditures paid directly by the households is one of the highest in Hungary among the OECD countries. In the following, we analyse the details and reasons of this based on the available international data. The healthcare expenditures are measured and classified based on the System of Health Accounts (SHA) elaborated by the OECD, in a manner that permits international comparison. The methodology differentiates three³⁸ healthcare financing schemes: (i) government-financed systems, (ii) voluntary healthcare payment schemes and (iii) household out-of-pocket schemes. The first area is also referred to by the specialist literature as public sector spending, while the second and third areas are referred to jointly as private spending. Our analysis focuses on area (iii), on out-of-pocket expenditures, but also touches on all the financing schemes.

In Hungary, the GDP-proportionate value of health expenditures is below average by international standards, but within that the share of private expenditures is rather high. In 2013, Hungary spent 7.4 per cent of GDP on health expenditures, which is well below the OECD countries' average of 8.8 per cent, but exceeded the expenditure level of the Czech Republic (7.1 per cent) and Poland (6.4 per cent). The below-average

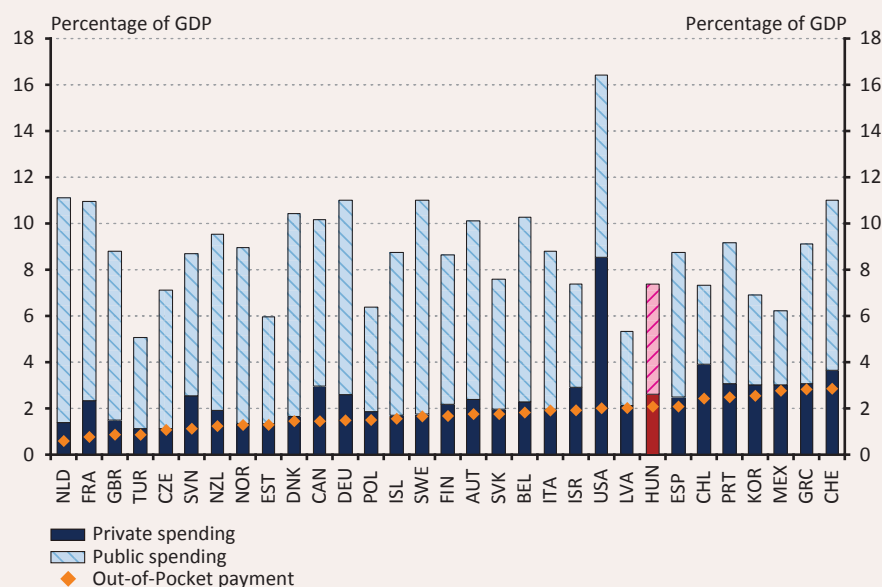
³⁷ The average effective tax rate is the weighted average of the statutory rates adjusted for the tax allowances and the tax exempt incomes.

³⁸ The fourth financing schemes includes the rest of the world (non-resident) financing schemes, but it falls beyond the scope of this analysis.

expenditures are attributable to the low level of public sector health spending, which is 4.8 per cent of GDP in Hungary compared to the OECD countries' average of 6.4 per cent. By contrast, the 2.6-per cent private spending in Hungary exceeds the OECD average by 0.1 percentage point (Chart 27). This also means that in Hungary the share of private funding within the total healthcare expenditure is higher (35 per cent) than the OECD average (28 per cent).

Chart 27
Healthcare expenditures as a per cent of GDP by financing scheme

(2013, or the latest available data)



Source: OECD

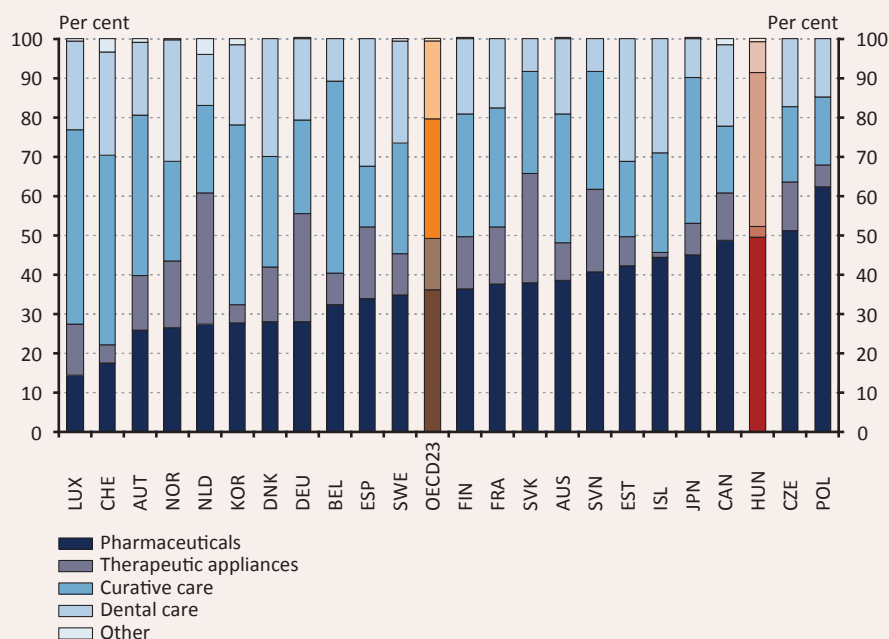
In Hungary, private healthcare expenditures are paid within a framework that is less formal, and hence less efficient than the average of the developed countries. In Hungary, four fifths of the private expenditures are paid directly to the providers, while the larger part of the remaining amount is paid through health accounts and the smaller part thereof through private insurance. Thus, the share of private insurances in the total private healthcare expenditures is one of the lowest in Hungary among the OECD countries (10 per cent compared to the average of 19 per cent). All of this suggests that there is plenty of room for expansion in Hungary for the enterprises offering private health insurance products.³⁹

The share of medical goods and curative care in the out-of-pocket healthcare expenditures of households is extremely high, while dental care expenses are low (Chart 28). In most of the OECD countries, pharmaceutical expenditures represented the largest item within the households' direct contribution (36 per cent on average). In Hungary, the share of pharmaceutical expenditures was the third highest (49 per cent) among the examined countries, following Poland and the Czech Republic. The curative care has the second largest share in the countries under review, with an average share of 30 per cent, but in Hungary this ratio – 39 per cent – also exceeds the average. By contrast, among the OECD countries, expenditure on dental care was the lowest in Hungary, with merely 8 per cent of out-of-pocket payments compared to the average of 20 per cent.

³⁹ In fact, health funds manage earmarked savings accounts the balance of which may only be used for individual purchases of health products and services. By contrast, the health insurances create a risk pool among the clients and the insurance company purchase and provide services to their customers.

Chart 28
Distribution of households' out-of-pocket payments by purchased services and goods

(2013 or latest available data)



Source: OECD

In the following, we examine how households' out-of-pocket expenditures are distributed by the type of purchased services and the exact method of financing. Households' direct health contributions may be allocated to the following three categories by the method of financing: (i) clearly market-based services, (ii) cost sharing between public and private financing, and (iii) informal payment (gratuity).

The degree of pharmaceutical expenditures is extremely high in Hungary not only within households' out-of-pocket contributions, but also within total healthcare expenditure. In 2013, in proportion to the total healthcare expenditures, Hungary spent the highest amount on pharmaceuticals within the OECD member states. In addition, within medicine-related expenses, the share of private expenditures is high in Hungary (57 per cent). Within these expenditures, the role of voluntary payment schemes (primarily the health funds) was relatively high, which reimbursed 13 per cent of the costs. Even so, 44 per cent of all such expenses were financed directly by households, partially in cost sharing form (co-financing of pharmaceuticals subsidised by the social insurance) and partially on market basis (OTC pharmaceuticals).

Within curative care, households' out-of-pocket payment is extremely high in outpatient care, while the ratio of direct contributions in inpatient care was merely 9 per cent. In the case of outpatient clinics, the high ratio of out-of-pocket payment (52 per cent) is not surprising, as this is the area where the range of private services available on market basis is the widest, and it can offer better or faster care than public services. By contrast, in the case of inpatient care private providers are present only in certain fields (e.g. obstetrics and gynaecology, spine surgery), and thus the direct contribution in the financing of these services appears partially in the form of gratuity, while the purchase of market-based service is low – due to the absence of available providers – apart from a few specialist fields.

Hungary generally spends very small amount – merely 0.25 per cent of GDP – on dental care. Moreover, 64 per cent of dental expenditures are paid directly by households, as only certain primary care services are available without cost sharing, even within the publicly financed care.

Charles Robert

(1308 – 1342)

King Charles I. was one of the most significant rulers of Hungary. He eliminated the anarchy that came about at the end of the Arpadian age, restored the prestige of royal power and its real influence as well as managed to put the economy back on its feet again. King Charles could well be called the new founding father of Hungary, since he could make Hungary a unified and great economic power even in the state of feudal division. A Hungarian king of French ancestry, the descendant of the Capeting dynasty and member of the Anjou family with great influence in Europe, Charles could only take the throne after considerable struggle.

Charles laid royal power onto new foundations and introduced profound reforms. The old and rebellious nobility was replaced by noblemen loyal to him and seized lands were divided up among them, but only as an office fief for the time they held a royal office. The king became even stronger after establishing a new military organisation with the royal banderium, shire banderium and cuman light cavalry.

He pursued a peaceful foreign policy establishing dynastic ties with neighbouring states, which enabled his son to become heir to the Polish crown. At the congress of Visegrád in 1335 (which is also the basis of our current neighbourhood policy) with the Polish and Czech king present, among others decision was made to create a new trade route,

Charles strengthened royal power in terms of finances as well by filling up the treasury. Since Hungary was the primary source of gold and silver in Europe, Charles put mining and trading under close royal control. Charles shared a significant part of royal revenues from mining lease paid for mining precious metals with the owner of the land to facilitate the discovery of new mines. He forbade the export of precious metals; gold and silver had to be given to newly established minting chambers at a price set by the king.

Instead of numerous various currencies, he started minting the silver denarius with a permanent value, then coining golden florins modelled on the golden coins of Florence with the silver farthing becoming its change. Charles abolished the practice of former rulers to inflate money by occasionally reducing the precious metal content of minted coins.

He increased royal revenues by imposing a new tax. Gate tax was levied for each land that had a gate wide enough to let through a cart laden with hay. Customs duty was introduced set at 1/30 of the value of goods exported to or imported from the west or north and 1/20 of southbound goods. Relying on sound economic foundations, in the second part of Charles' reign numerous gothic buildings were constructed, e.g. the royal palace in Visegrád and the Diósgyőr Castle. However, only traces of many of these buildings were left to posterity due to the Turkish devastation.

A Hungarian king with a truly outstanding life, Charles passed away after his 40-year-long reign, and left a strong and rich kingdom to his son. The political ambitions of the Hungarian Anjou dynasty were embodied in Louis the Great, Sigismund and Matthias Corvinus who restored the bygone glory of royal power, but the first stones in this path were laid by Charles I.

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