HAZA ÉS HALADÁS Közpolitikai Alapítvány

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BASELINE PROJECTION (2015-19)

8 December 2015

This baseline projection is published by the Fiscal Responsibility Institute; contributors worked mostly on a voluntary basis and, unless indicated otherwise in the Methodological Appendices of more recent projections, relying on methodologies developed by the Office of the Fiscal Council, which was disbanded at the end of 2010.

The objective of this study is twofold. Firstly, it portrays, without any hidden motive or bias, the medium term macroeconomic and fiscal path emerging from economic developments and from legislation that entered into force by 23 November 2015. Secondly, it may be used by any analyst or economic actor to assess the expected fiscal effects of legislative bills discussed in this parliamentary session.

A professionally sound baseline projection needs to rely on the facts. In this respect, the data published by official statistical data sources (e.g., the Hungarian Central Statistical Office - HCSO) and the legislation promulgated in the Official Gazette are considered to be facts. Thus the calculation results presented are not forecasts as they consciously and consistently disregard future economic policy decisions – irrespective of the probability of their adoption. While we ourselves have not made assumptions about any future decisions, we could not overlook the fact that the expectations, and thus the decisions, of economic actors may be affected substantially by legislative changes not yet officially promulgated.

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1. Summary

Our baseline projection re-assesses, based on the most recent statistical figures and other information available to us, our macroeconomic path published in May 2015. Assuming the legislation promulgated before 23 November 2015 to remain unchanged, we present the baseline scenario we should expect to see unless there is a change in economic policy.

The Q2 2015 GDP figures were in line with our expectations, clearly confirming that growth in 2014 was driven primarily by one-off factors. As these factors gradually wear out, we expect the GDP growth rate to decrease to 2.9 per cent in 2015 and to below 2 per cent in subsequent years.

Declining oil and raw material prices have continuously overruled our expectations for average inflation in 2015. The recovery of domestic demand and the continuous weakening of the nominal exchange rate drives prices upwards; however, decreasing imported inflation and declining raw material prices offset the domestics inflationary pressures. After the stabilisation of raw material prices we expect inflation to start rising rapidly, then to stabilise around the central bank's target rate.

As regards fiscal developments, corporate profit tax revenues deserve special attention. According to information released by the NAV (the tax authority), the tax returns of businesses showed a significantly higher tax liability in respect of 2014 than the figure expected based on the tax payments made in December 2014. The reasons are unknown as yet, but information available to us indicates that it is predominantly attributable to the one-off tax payment obligation of a single company, which has 0 employees. In 2015 the balance of mandatory items will be HUF 470 billion better than envisaged in the Budget Act, while in 2016 the positive difference from the Budget Act of 2016 will be only HUF 235 billion.

The balance of discretionary items is almost HUF 300 billion worse than the statutory target in 2015 and more than HUF 200 billion worse in 2016. This is primarily due to the debt incurred by budgetary organisations and in particular by the KLIK (the agency responsible for the maintenance of schools), the lack of evidence for the collection of the proposed revenues from asset sales and the amendment of the Budget Act of 2015.

Net interest expenditures as a percentage of GDP will gradually decline from 3.2 per cent in 2014 to 2.8 per cent in 2017 because of the extremely favourable international interest environment, but downside risks are clearly dominant in this regard.

In 2015 the Maastricht balance, which takes into account adjustments as well as the cash balance, is expected at -2.4 per cent in line with the Convergence Programme, therefore no adjustment is needed. The same applies in the medium term: up to 2019 the fiscal balance will essentially follow the course outlined in the Convergence Programme, but there are no unallocated reserves.

In 2015 the debt ratio will remain on the end-2014 level due to the purchase of Budapest Bank, and it will start declining only after 2016. The rate of decline will not exceed 1 percentage point per year until 2018. Our projection does not reckon with the effective launch of the Paks project.

Among short-term risks we focus on the rate of disbursement of EU fund, the spending of unspent appropriations carried over at end-2015 net year, the slow-down of automotive exports and interest rate increases. Medium- and long-term risks include the low efficiency of the use of EU funds, the Paks 2 project, the decline in corporate investment, the overestimation of employment in the private sector, the underestimation of the number of persons working abroad, the overestimation of potential output and, as a result, the return of a pro-cyclical fiscal policy.

2. Analysis of macroeconomic developments

Our baseline projection re-assesses, based on the most recent statistical figures and other information available to us, our macroeconomic path published in May 2015. Assuming the legislation promulgated before 23 November 2015 to remain unchanged, we present the baseline scenario we should expect to see unless there is a change in economic policy.

In line with our projection in May, we still consider that the external environment will slightly increase the growth of the Hungarian economy. Even though the growth prospects of European countries have improved and fears of deflation have been alleviated in the wake of the quantitative easing of the ECB, the real growth of the European economy still appears fragile. The free-fall of the Chinese stock market and the persistently low oil prices raise additional concerns about the growth and import demand of our non-EU trading partners. The start of the interest rate upturn cycle of the FED was postponed to the end of the year, which slightly increased the margin of discretion of Hungarian monetary policy. As the foreign exchange exposure of households has been replaced by HUF interest rate exposure as a result of the conversion of currency loans into HUF, we expect the central bank to delay a base rate hike.

Table 1: Key macroeconomic indicators in the baseline scenario (annual real change, per cent*)

	2011	2012	2013	2014	2015f	2016f	2017f	2018f	2019f
GDP	1,8	-1,5	1,7	3,5	2,9	1,7	1,8	1,5	1,3
Purchased consumption	1,1	-1,6	1,1	3,9	4,3	4,6	2,3	1,8	1,7
Social transfers in kind	0,4	-2,5	1,1	3,5	2,0	0,2	-1,3	0,0	0,0
Actual final consumption of government	-0,4	-0,2	5,1	3,7	1,0	-0,4	0,2	0,0	0,0
Gross fixed capital formation	-2,2	-2,9	7,1	10,6	0,8	0,4	0,9	1,3	1,1
Export	6,6	-1,5	5,9	8,7	7,3	6,5	5,0	4,3	4,0
Import	4,5	-3,3	5,9	10,0	7,0	5,6	5,1	4,5	4,3
Consumer price index	3,7	5,5	1,6	-0,3	-0,2	1,8	2,9	3,1	3,2
Private sector - average gross real wage	1,6	1,7	2,0	4,6	4,1	1,6	0,8	0,0	-0,3
Private sector employee no.	1,2	1,5	1,1	4,6	1,5	0,7	0,9	0,9	0,9
Employee no. in national economy	0,7	1,8	1,7	5,3	2,7	0,4	0,6	0,6	0,6
Unemployment rate	11,0	11,0	10,2	7,7	5,8	5,8	5,5	5,1	4,7
HUF/EUR exchange rate	279,3	289,3	297,0	308,7	309,3	317,0	320,0	322,8	325,2
Three-month interest rate	6,1	6,7	4,0	2,1	1,6	1,5	2,6	3,9	4,6

** With the exception of the unemployment rate, the HUF/EUR exchange rate and the three-month interest rate, where the table contains annual average levels.*

The Q2 and partial Q3 2015 GDP figures were in line with our expectations, clearly confirming that the growth in 2014 was caused primarily by one-off factors. Examples included central and local government spending financed mainly from EU sources in the election year of 2014, the output of agriculture being higher than in prior years and capacity expansions in the automotive industry. As these transitory factors gradually fade out, we expect the GDP growth rate to decline to 2.9 per cent in 2015 and to below 2 per cent in subsequent years.

The disbursement of EU funds is a crucial factor for the medium-term macro-fiscal path. In our base case scenario we made the assumption (optimistic in the short term) that in 2016 the EU funds available to the private sector will not decline relative to the 2015 level and that EU funds used by the government sector will also be 'only' HUF 350 billion (rather than HUF 500 billion) less than in 2015. Taking into account the Hungarian co-financing amount, government consumption and investment will be some HUF 200 billion above the level envisaged in the Convergence Programme.

This is based on the assumption that over HUF 600 billion more EU funds are disbursed than the figure disclosed in the Convergence Programme (and in the approved 2016 Budget Act.)

Table 2: Assumptions concerning the use of EU funds (HUF Bn)

	2015	2016		Difference	
	Convergence Programme 2015	Convergence Programme 2015	FRIB baseline	Convergence Programme 2015	FRIB assumption
Operation	616,3	324,9	516,3	-291,4	-100,0
General government	357,5	211,2	257,5	-146,3	-100,0
Private sector	258,9	113,7	258,9	-145,1	0
Capital formation	1 371,8	690,5	1 121,8	-681,3	-250,0
General government	795,6	448,8	545,6	-346,8	-250,0
Private sector	576,2	241,7	576,2	-334,5	0
Total	1 988,1	1 015,4	1 638,1	-972,7	-350,0
General government	1 153,1	660,0	803,1	-493,1	-350,0
Private sector	835,0	355,4	835,0	-479,6	0,0

Despite a significant acceleration of the use of funds we expect that GDP growth will be only 1.7 per cent in 2016, followed by a slight temporary acceleration, to fall to the potential growth rate from 2018 on.

In our projection we reckoned with the effects of the conversion of foreign currency loans into forints, the measures affecting the retail sector and the second-round macroeconomic effects of the favourable inflation trends. Having reconsidered our projections of January and May, we reduced the effects of the conversion into forints of mortgage-backed and home loans as approved by the Government as well as the reimbursement of exchange rate and interest spreads, while we also took into account the HUF conversion of vehicle and personal loans. The actual figures indicate that the main source of GDP growth is the pick-up in domestic demand, which was spurred by the aforementioned government measures.
As we expected in our projection of May 2015, the significant restriction of retail trade on Sundays, which became effective in mid-March 2015, has had a negative effect on employment that is noticeable on the macroeconomic level but is mostly temporary.

As indicated in our May projection, despite the Funding for Growth scheme we see no substantive reversal in lending trends in Hungary; the Funding for Growth scheme is still the only source of corporate lending. After 2014, when the EU-funded projects end, we expect the rate of investment growth to decline substantially. We think that, with the exception of projects financed by the Government or the EU, neither businesses nor households will embark on substantive investments due to the extremely unpredictable economic environment, thus investment will continue to lag behind the pre-crisis levels. As a result, we continue to expect potential growth to be modest, at around 1.5%, in the long term.

The considerable growth in the output of the automotive industry contributed significantly to export growth this year as the capacities established in 2014 were in production throughout the year. In forthcoming years no capacity expansions projects of similar magnitude are expected; consequently, we expect export growth to gradually decelerate.

Declining oil and raw material prices have continuously overruled our expectations for average inflation in 2015. The recovery of domestic demand and the continuous weakening of the nominal exchange rate drives prices upwards; however, decreasing imported inflation and declining raw material prices offset the domestic inflationary pressures. After the stabilisation of raw material prices we expect inflation to start rising rapidly, then to stabilise around the central bank's target rate. In line with our May projection, the more favourable inflation figures both in Hungary and internationally, the loose monetary conditions announced by the ECB and the postponement of the interest rate hike by the FED broadened the margin of discretion of Hungarian monetary policy and facilitate the maintenance of the present loose monetary conditions. We assume that the central bank will put off an interest rate hike even longer than it would be justified by this broadened margin of discretion because it will attach great importance to the fact that after the conversion of foreign currency loans into HUF, the financial position of households will be affected primarily by HUF interest rates, which determine the costs of variable interest rate HUF mortgage loans, rather than by the exchange rate. The central bank will embark on the substantive tightening of monetary conditions from the second half of 2016, with a slight lag relative to the interest rate upturn cycle of the FED. Failing this, we would expect the nominal exchange rate to depreciate more than we projected, which would jeopardise the attainment of the Hungarian inflation target.

3. Fiscal developments

Mandatory items

For the projection of mandatory items we took into account the actual cash-based data of the first 10 months. These figures indicate that in 2015 both income taxes and consumption taxes will yield revenues significantly above the budgeted levels. Within the category of income taxes, the corporate profit tax deserves special attention. According to information released by the NAV (the tax authority), the tax returns of businesses showed a significantly higher tax liability in respect of 2014 than the figure expected based on the tax payments made in December 2014. We have no more information about the causes; the competent senior official of NAV only disclosed in a presentation that most of the surplus arose in the sector of micro-enterprises. It can be concluded from the 2014 corporate profit tax return figures received from the NAV with certainty that the overwhelming majority of the surplus not included in the December tax payments but paid in June 2015 relates to a single wholly foreign-owned enterprise with 0 employees. Consequently, we consider the entire increase to be a one-off factor.

Until any further judicial decision, we consider the special tax on tobacco companies to be ineffective, therefore we reckon with no such revenue apart from the HUF 1.3 billion actually collected. Due to the change in the advertising tax, we reckon with revenues of HUF 2.6 billion for 2015 instead of the budgeted HUF 6.6 billion, but we expect this amount to increase (to HUF 8.5 billion) from 2016 onwards. On the whole, the balance of mandatory items in 2015 is expected to be HUF 475 billion higher than the originally budgeted figure.

Table 3: Mandatory items expected for 2015

	Original act	FRIB baseline	Difference HUF Bn	Difference GDP %
Taxes on income and labour	6 468,8	6 764,9	296,1	0,88%
Consumption taxes	4 249,6	4 405,3	155,7	0,46%
Other taxes, contributions and payments	1 111,6	1 108,7	-2,9	-0,01%
Pension payments	3 477,1	3 443,4	-33,7	-0,10%
Family benefits	560,7	564,7	3,9	0,01%
Social transfers	158,5	162,7	4,2	0,01%
Other mandatory expenditures	295,6	295,6	0,0	0,00%
Balance of mandatory items	7 338,0	7 812,5	474,5	1,41%

In 2016, as a result of the lowering of the bank levy and the disappearance of the temporary corporate profit tax surplus, the net surplus relative to the enacted budget will drop by half, to HUF 240 billion.

Table 4: Mandatory items expected for 2016

	Original act	FRIB baseline	Difference HUF Bn	Difference GDP %
Taxes on income and labour	6 803,7	6 893,6	89,9	0,26%
Consumption taxes	4 473,6	4 597,1	123,6	0,35%
Other taxes, contributions and payments	1 016,5	1 046,9	30,3	0,09%
Pension payments	3 477,3	3 466,4	-10,8	-0,03%
Family benefits	564,3	567,3	3,1	0,01%
Social transfers	163,3	163,7	0,4	0,00%
Other mandatory expenditures	314,8	325,2	10,3	0,03%
Balance of mandatory items	7 774,1	8 015,0	240,9	0,69%

After 2016, due to the continued decrease of the bank levy, tax revenues will stabilise at a somewhat lower level as a percentage of nominal GDP.

Balance of discretionary items

For the calculation of the balance of discretionary items we started from the enacted budget and adjusted it for several items.

1. The two promulgated amendments of the Budget Act worsened the balance of discretionary items by HUF 140 billion in aggregate.[1]
2. Due to the suspension of the food chain supervision fee we reckon with the loss of HUF 23 billion revenue until any new judicial decision.
3. Based on market information, we reckon with a HUF 22 billion balance worsening due to penalties for irregularities in past EU projects.
4. In 2015 housing subsidy expenditures fall short of the budget because of the conversion of foreign currency loans into HUF and the disappearance of budgetary expenditure relating to the

[1] The decrease of interest expenditures and the increase of VAT revenues, which are used as "offsetting items" in the two legislative amendments, are included in our projection in their appropriate places, that is, in the balance of mandatory items and interest balance, respectively, even though the change in the statutory target itself has no real effect on these items.

exchange rate cap, which improves the balance. (Simultaneously, half of this amount reduces revenues from the fees of financial institutions.)

5. We assumed in our macro path that the government would be able to accelerate the disbursement of EU funds substantively relative to the enacted budget, therefore we would need to also reckon with the required additional Hungarian co-financing amount. We assumed that the Hungarian co-financing ratio in the projects implemented in the government sector is 15 per cent.
6. The amended budget contains HUF 27.2 billion for the 2015 expenditures of the Paks II project, but only HUF 14 billion of this is expected to be actually spent.
7. We assume that the HUF 169 billion revenue from asset sales will not be collected this year, therefore expenditures relating to this investment fund present a fiscal risk. In the relevant expenditure appropriation there is nothing to prevent the spending of a total of HUF 67 billion unspent appropriation brought over from previous periods, furthermore, until the end of August HUF 38 billion worth of expenditures have accumulated that are, for the time being, not covered by unspent appropriations or other revenues. For 2016 we assume that actual revenues from the sale of assets of HUF 133 billion will be achieved from the HUF 169 billion not realised in 2015 and the HUF 133 billion budgeted for 2016.
8. Experience indicates that the expenditure level of the KLIK persistently exceeds the budgeted level by some HUF 40 billion. Of this, in 2015 some HUF 10 billion will be transferred to the institution and its legal successors from other unspent appropriations and HUF 33.7 billion from reserves.[2]We assume that the trend of previous years will be repeated in 2016, therefore we expect additional expenditures of HUF 43.7 billion to be incurred.
9. The stock of unpaid bills of budgetary institutions (in particular hospitals) resumed its previous levels despite the ‘one-off’ payments of HUF 60 billion made during the year. We assume that the same exercise will be repeated in 2016 and in subsequent years.

[2] The government has reallocated a total of HUF 33.7 billion from reserves. Of this, HUF 26.7 billion went to the KLIK, HUF 6.3 billion to the Vocational Training Centres (moved to the Ministry for National Economy in the meantime) and HUF 0.45 billion to the National Vocational Training and Adult Education Office. On the whole, the entire HUF 33.7 billion served to make up for the under-budgeted expenditures of the KLIK.

Table 5: Discretionary items expected for 2015 and 2016

	2015	2016
Approved statutory discretionary balance	**-7185,8**	**-7561,6**
Differences total	-296,9	-216,5
Amendments of the Budget Act		
Amendment 1 of the Budget Act	-57,2	0,0
Amendment 2 of the Budget Act	-86,0	0,0
EU decisions		
Food chain supervision fee	-23,0	-23,0
EU penalty	-22,0	0,0
Open-ended appropriations and discretionary revenues		
Housing subsidies	22,8	0,0
Guarantees called down	13,9	0,0
Pharmaceutical subsidy budget	-21,6	0,0
Road tolls	6,0	5,2
Dividend income	4,0	0,0
Hungarian co-financing for additional EU funding	-31,2	-95,0
Other		
Lag of Paks II expenditures behind the budget	13,2	
Asset sales	-105,9	0,0
Increase of the expenditure limit of KLIK from uns	-10,0	-43,7
Unpaid bills of budgetary institutions	0,0	-60,0
Estimated balance of discretionary items	**-7482,7**	**-7778,1**

In accordance with the rules of our baseline projection, we fixed the estimated 2016 figures in real terms for the years after 2016, that is, we indexed them for inflation.

Interest rates and the profit of the MNB

Since our May projection, interest rates have continued to fall, mainly on short terms. Interest expenditures as a percentage of GDP will decline from 3.1 per cent in 2014 to 2.9 per cent in the 2015-2017 period, then stabilise on that level.

Because of the weakening exchange rate the MNB continuously realises foreign exchange gains on the foreign exchange reserves, which can offset the losses made on HUF instruments and operating costs; consequently, we expect to see no loss reimbursements on the projection horizon.

Table 6: Expected development of interest rates on various terms

	2014	2015	2016	2017	2018	2019
3-month	2,1%	1,3%	1,4%	2,4%	3,4%	3,8%
1-year	2,1%	1,6%	1,9%	2,3%	2,8%	3,1%
3-year	2,8%	2,5%	2,8%	3,1%	3,3%	3,5%
5-year	3,4%	3,2%	3,3%	3,5%	3,6%	3,6%
10-year	4,3%	3,7%	3,7%	3,8%	3,8%	3,8%

It should be noted that, as indicated by experience, the longer end of the yield curve is significantly more sensitive to change in the central bank rate than what would follow from theories based on rational expectations; consequently, the start of an interest rate upturn cycle by the central bank, which we expect to occur some time in 2017, can trigger a faster-than-expected increase in long-term yields and thus on the financing costs of the public debt.

Fiscal balance and public debt

The primary balance of the central subsystem as a percentage of GDP will decline from 1 per cent in 2015 to 0.7 per cent in 2016, and remain on that level all the way up to 2019.

The total expected cash-based balance of the central subsystem is HUF -650 billion in 2015, or -1.9 per cent of GDP. Other factors also need to be taken into account for the calculation of the Maastricht balance:

1. the balance of the local government subsystem (HUF +5 billion based on the EDP report of 30 September)
2. items included in the cash-flow accounts but not affecting the Maastricht balance or the net balance of entities outside the general government but classified in the government sector (estimated effect on the balance: HUF -225 billion),
3. assumption of the debts of MÁV and BKV (effect on balance: HUF -75 billion),
4. effect of the adjustment of tax revenues and interests to the accrual-based approach (estimated effect on balance: HUF +134 billion).

Accordingly, in 2015 the Maastricht balance is 2.4 per cent of GDP, which corresponds to the value set in the convergence programme, but there are no unallocated reserves. The same applies in the medium term: the fiscal balance will essentially follow the course outlined in the Convergence Programme (except in 2017, when an adjustment of approximately HUF 40 billion may be required), but there are no unallocated reserves.

The debt ratio at end-2015 is the same as the end-2014 level, as the HUF 195 billion MFB loan extended for the purchases of Budapest Bank is to be considered part of the Maastricht debt in accordance with the ESA 2010 statistical methodology, even though the borrower is not the state. Taking into consideration the financing plan of the ÁKK (Government Debt Management Agency), we assume that in the last quarter new issuance on the HUF market will be close to zero, and the foreign currency debt maturing in December (HUF 375 billion) will be renewed only in 2016. Due to this renewal, the debt ratio will start declining gradually only after 2016. The rate of decline will be 1 percentage point up to 2019, which is required by the EU rules (1/20 rule) applicable to Hungary from 2016 onwards.

Our base case scenario relies on the implicit assumption that expenditures relating to the Paks 2 project remain on the 2016 level in real terms, which is unrealistic in light of the existing contracts.

4. Risks

Short term risks

Effect of the disbursement of EU funds on the 2016 growth and fiscal balance

The Convergence Programme (and the budget enacted at the same time) reckons with the disbursement of EU funds of HUF 1988 billion in 2015 but only HUF 1015 billion in 2016. Calculating with an average import ratio of around 40 per cent, the HUF 50 billion EU funds increase the growth rate of the given year by some 0.1 percentage point. This has no substantive effect on the fiscal balance because higher growth generates additional tax revenues, which offsets the balance-worsening effect of the Hungarian co-financing required for the draw-down.

If at the beginning of 2016 the budget had any outstanding payment obligations relating to projects that cannot be financed from the EU funds of the 2007–2013 or 2014–2020 programming period, it would worsen the fiscal balance, but we are not aware of any such problems at this time.

Effect of the disbursement of EU funds on the 2017 growth

The risk of the disbursement of EU funds has an effect on the expected growth rate of 2017 as well. The projections of a number of analysts and international institutions indicate that even though growth will decelerate in 2016, it will resume its rate above 2 per cent in 2017. We reckon with that scenario in our base case as well, but we must be aware that this higher growth is attributable primarily to technical causes, namely the low base of 2016. The more Hungary can accelerate the disbursement of EU funds in 2016, the less 'recovery' can be expected in 2017 as disbursements should be stepped up relative to a higher base. The growth rate of the years after 2017 is expected to be around the long-term level of 1.5 per cent.

Outturn of revenues from asset sales

The planned value of revenues from asset sales is HUF 169 billion in 2015 and HUF 133 billion in 2016. In our base case we reckon with the collection of HUF 0 in 2015 and HUF 133 billion in 2016, whereas HUF 105 billion expenditure will be incurred in 2015 that was proposed to be covered by receipts from asset sales. Based on the extremely scarce information available (primarily relating to the sale of state-owned land), we consider that the upside and downside risks relating to the 2016 revenues are in balance. We should note, however, that the HUF 75 billion revenue from the sale of OTP shares increases the spending envelope of the investment fund under the Hungarian legal regulations, but as the ESA methodology does not recognise the sale of shares as budgetary income, any expenditure financed from this source worsens the Maastricht balance.

Generation of unspent appropriations at end-2015

There is an upside risk for the 2015 balance and a downside risk for the 2016 balance that the beneficiary institutions may be unable to spend, before year-end, the amounts reallocated from the budget reserve, which was increased at the end of the year. In this respect the practice of the government whereby in recent years it has reallocated, during the year, unspent amounts effectively without any parliamentary control to appropriations with completely different objectives (e.g., the money dedicated by the tax payers to fight the spreading of ragweed was reallocated to finance daily expenditures of the ministry) warrants special attention. This is important because if the proposed budget normally assumes the entire amount of unspent appropriations to remain unchanged, the balance-worsening effects of carried-over unspent appropriations used in certain areas over and above the current year appropriations are offset by spending lower than the current year appropriations in other areas, that is, new unspent amounts are generated. If the Government significantly increases the probability of spending such new carried-over appropriations by 'finding new uses' for unspent funds, the statistical balance will be upset. Even though in recent years the aggregate amount of unspent appropriations has not decreased substantively, the threat is continuously present – in addition, it constitutes a grave violation of the Parliament's power of the purse.

The HUF 1 billion open-ended appropriated set up in the 2015 budget during the year to finance immigration-related measures poses a threat to the 2015 balance if the Government uses the currently available reserves of approximately HUF 30 billion for other purposes and, in addition, spends more from the HUF 1 billion appropriation. Information currently available to us indicates that this is unlikely to happen.

Interest rate increase

A potential rise of the yield curve is a downside risk. Even though all the information relating to the interest rate policies of the Fed and the ECB have been headline news for years, it is possible that the entire HUF yield curve will shift upwards as the Fed commences a rate increase. This may have a substantive effect first on the exchange rate,[3] then on the cost of funding the public debt.

Decline of automotive exports

Both the Volkswagen scandal and the slow-down of the Chinese economy may have a negative impact on the export potential of the Hungarian automotive industry. Falling oil prises present an upside risk, which may to some extent offset these two factors that reduce demand for motor vehicles.

Medium and long term risks

Fast but inefficient use of EU funds

The Hungarian economy getting even more 'hooked' on EU funds is one of the major long-term risks. In the forthcoming years the Hungarian government co-financing will work like a fiscal stimulus efficient as a dream. If the Hungarian budget spends 100 forints on co-financing, it may realise projects worth 667 forints (assuming a co-financing rate of 15 per cent), which, at an import ratio of 40 per cent, represents a GDP growth of 400 forints. This yields 120 forints of additional tax revenues at a tax rate of 30 per cent (without VAT), that is, the fiscal balance will actually improve. This is a way to stimulate the economy without any short-term fiscal risk.

The more the disbursements of the 2014-2020 period are accelerated, the more the structure of the Hungarian economy is distorted relative to a pure market environment, therefore, when these funds run out, severe crisis symptoms are to be expected. Also, the free stimulus recipe will no longer work.

The accelerated disbursement of funds also has the risk of the inefficient use of funds; as a result, the contribution of the funds to the expansion of actual production capacities and the raising of the potential output level will be much lower than the potential maximum. And the output level after the EU funds have been spent will be determined by the capacity level accumulated by that time.

Paks 2

In our base scenario we expect annual investment expenditures to remain on the level of the HUF 113 billion budgeted for 2016 in real terms. If the entire project is to be completed by the deadline stipulated in the signed contracts, expenditures will have to rise to HUF 3–400 billion per year from 2018 onwards, which is a downside risk. In the context of the Paks project there is also an upside risk: the Commission is conducting investigations into several key issues, as a result of which the project may not be implemented or may be implemented in a form different from the current contractual arrangement.

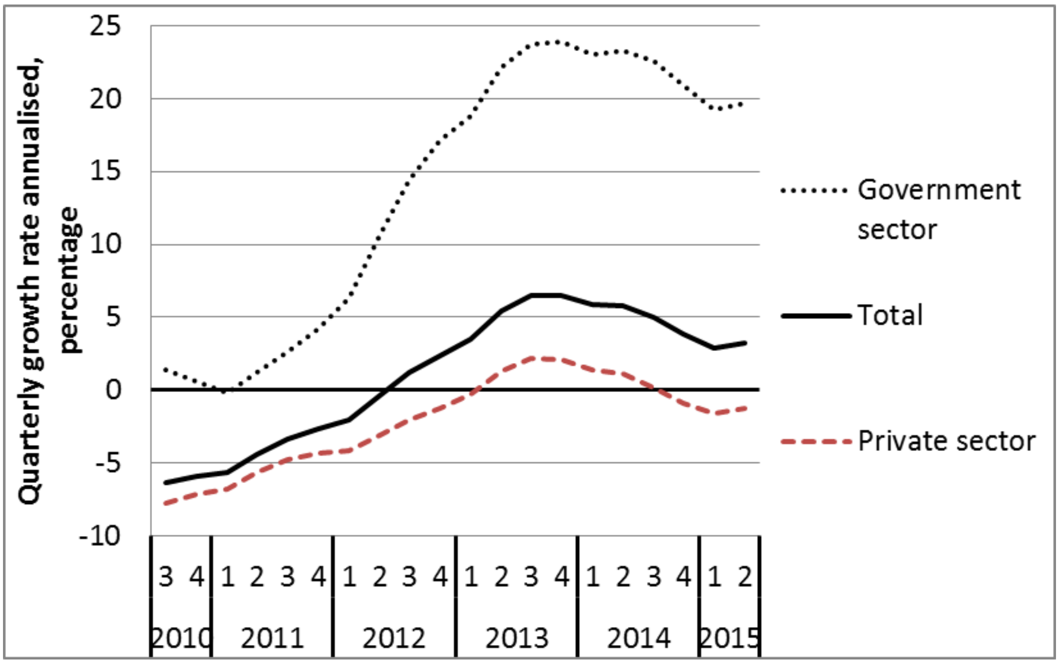
Shrinking investment in the corporate sector

On the production side the long-term growth prospect of the economy is determined by the capital stock of the private sector, and the headcount and productivity of employees working in the corporate sector. Even though in recent years, mostly due to the draw-down of EU funds and, to a

[3] We estimate that a 25-basis-point permanent increase in the required interest rate would trigger a depreciation of 3–5 forints in the exchange rate.

lesser extent, to certain large investment projects, the real value of investments has been rising continuously and at a fast pace. However government investments became dominant, while in the most recent quarters the investments of the private sector have actually fallen in real terms.

Figure 1: Growth rate of the gross fixed capital formation trend



Note: quarterly growth rates annualised based on the trend calculated from the constant-price national account figures of the CSO

It is not clear whether the decline of government investments financed almost exclusively from EU funds will trigger an acceleration or more slow-down of the investments of the private sector. On the one hand, government investments may crowd out certain private investments, therefore the reduction of government investment may open up the way for private investment. On the other hand, government investments also generate private investment required to satisfy government orders.

Overestimation of employment in the private sector[4]

The CSO measures the number of employed persons primarily through the Labour Force Survey (LFS). In the course of this, interviewers visit the households selected for the sample and ask the residents about their labour market positions. Persons who worked at least one hour, for remuneration, in the previous week are considered to have been employed. The CSO classifies respondents based on their main characteristics (age, sex, place of residence, etc.), then multiplies the data obtained for each category by the number of persons in the relevant category within the entire population.

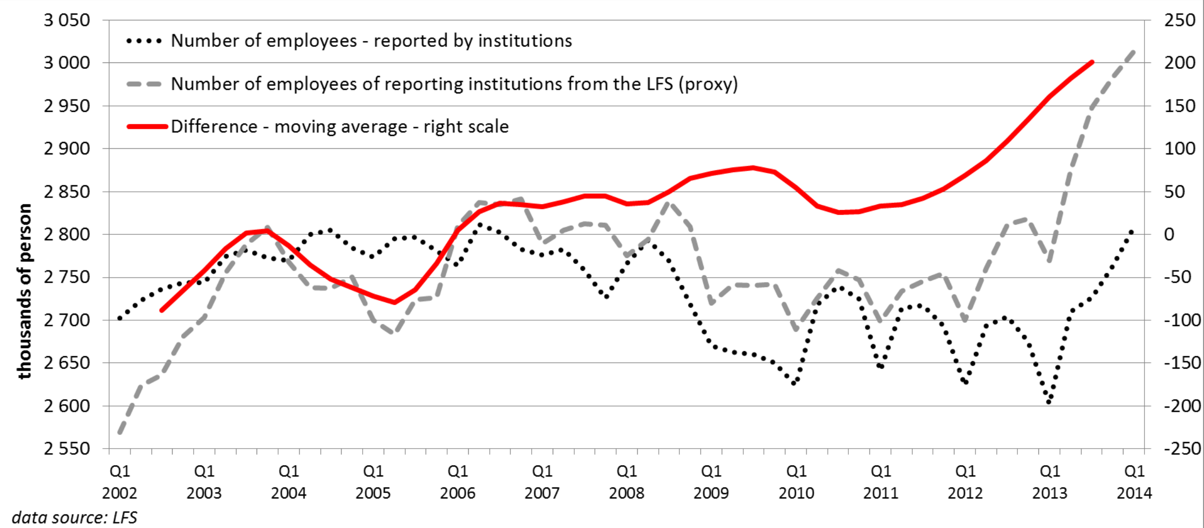
Institutional surveys serve as another data source. In these, the CSO collects data on the number of employees from undertakings and budgetary institutions. As this only estimates the number of employed persons, it yields lower values than the LFS. For instance, it does not contain the headcount of sole proprietors, persons working abroad or unpaid family workers. Considering that employees of institutions constitute some 70 per cent of all the employed persons in the LFS, the two

[4] Brief summary of Hosszú and Romhányi: Statisztika és valóság: a munkaerő-statisztikai módszertanválasztás hatása a gazdaságpolitikai narratívákra (Statisztikai Szemle, October 2015). The entire paper is available at: http://kfib.hu/uploads/kfib_Statisztika_es_valosag.pdf

time series should move parallel to some extent. To indicate the magnitude of the problem: in the 2011–2014 period the total headcount growth in the private sector (without persons in public work schemes and those employed abroad) was 294 thousand persons according to the LFS and only 3 thousand persons according to the institutional statistics.

As we found that the difference between the LFS and institutional data series showed a significant and trend-like increase in recent years, we conduced a more detailed analysis. In the LFS database it is possible to identify workers who should, in theory, be reported by their employers in the institutional survey as well. The figure below shows the number of persons employed by domestic entities with more than 4 employees based on the LFS and the institutional statistics.

Figure 2: Number of persons employed by domestic entities with more than 4 employees



data source: LFS

As evident from the figure, formerly the two time series moved together, while from 2012 on the LFS data have moved away from institutional statistics. In 2014 the difference was more than 200 thousand persons, compared to less than 50 thousand persons in 2010. Accordingly, either the LFS or the institutional survey (or both) capture the number of employees with a significant error.

As the overwhelming majority of the employment growth in the LFS appears to be among employed persons (in addition to persons working abroad and in public work schemes), this issue has a fundamental effect on the assessment of economic processes.

Estimation of the number of persons working abroad and their remittances

The CSO estimates the number of persons working abroad in the framework of the LFS based on the ratio of the persons questioned who stated that their place of work was abroad. Even though between 2010 and 2015 the estimated number increased from 47 thousand to 110 thousand, this is in all probability an underestimation of both the headcount and growth. As Lakatos (2015)[5] shows, the German and British authorities have considerably more Hungarian workers on their records than the number of Hungarian persons measured by the CSO as working in those countries. The difference is two- or threefold, but as the figures of the foreign authorities are also only low estimates, the rate

[5] Lakatos, J. [2015]: Külföldön dolgozó magyarok, Magyarországon dolgozó külföldiek. *Statisztikai Szemle.* vol. 93, No 2, pp. 93–112.

of underestimation may be even greater. This means that a large part of persons working abroad effectively disappear from Hungarian statistics, which has two direct consequences:

1. The CSO overestimates the number of persons employed in Hungary in the LFS because the population figure carried forward, which is used to multiply the values derived from the LFS sample, is unrealistic (too high)
2. The value of workers' remittances is underestimated in the balance of payments.

There is no high-quality, direct statistics available on workers' remittances. The compensation of employees figure in the balance of payments contains the gross wages of persons working abroad and the social contributions paid by their foreign employers.[6] Taxes and levies paid abroad are disclosed in another, expenditure line of the balance of payments, while the consumption of persons working abroad is found in yet another line, that of 'Travel expenditures'. There are substantive methodological problems with all three items.

1. Labour income from abroad is estimated based on the headcount of persons working abroad and the average wages abroad, specifically in Austria and Germany. As the CSO underestimates the headcount of such workers, particularly those living in faraway countries and therefore visiting Hungary less frequently, the compensation of employees is in all likelihood also underestimated.
2. The estimation of taxes paid abroad is also based on the German and Austrian tax regimes, which are not necessarily representative for purposes of the net income of persons working in more distant countries.
3. The consumption abroad of persons working in other countries is almost certainly significantly underestimated by the balance of payments relying on CSO data, because the consumption of persons travelling to other countries for work has been practically stagnant while their headcount more than doubled even according to the CSO.

On the whole, we can say nothing certain about the development of workers' remittances in recent years because both the compensation of employees and the value of the taxes and consumption expenditure to be deducted from that amount is likely to be significantly underestimated.
It would be essential for sound economic policymaking that statistical authorities do their utmost to resolve or at least mitigate these problems.

Pro-cyclical fiscal policy

It is a medium-term risk that the Government assumes that at present the economy performs well below its potential, therefore they spend practically all additional income almost immediately (cf. amendments of the budget act, use of the revenues from OTP shares, etc.). In this context, special mention should be made of the government's announcements that worsen the fiscal balance permanently rather than on a non-recurring basis. Examples include the reduction of the VAT rate on the internet or home purchases, or the termination of payments of the Paks nuclear power plant to reduce the price of electricity. This fiscal stance is expressly pro-cyclical, as numerous signs indicate that the output gap is already positive, that is, the additional revenues will prove to be transitory. Evidence that the output gap is positive includes the following:

[6] The Hungarian media has published numerous news and articles erroneously interpreting this figure to be the income remitted to Hungary by persons working abroad, which potentially generates demand in Hungary.

1. even though the headline consumer price index is still extremely low (below 1 per cent), the ‘demand sensitive’ inflation calculated by the MNB is already 2 per cent and rising.
2. real wage growth is way above real GDP[7], which is not caused by the ‘whitening’ of the economy because its presence not the most notable in sectors most affected by that ‘whitening’
3. businesses see labour shortage as the most severe obstacle to production growth (45.4 per cent of the companies questions cited this as the most important factor; the last time Eurostat measured a higher value was in Q2 1998). The problem is also highlighted by the fact that the number of vacancies in the business sector has been rising, and the unemployment rate falling, continuously.
4. capacity utilisation is above the multi-year average (the seasonally adjusted values were higher than the current level only in the periods 2000 Q1 – 2001 Q2, 2005 Q2 – 2008 Q4 and 2014 Q4 –2015 Q1)
5. private investment is declining, even though it is spurred by huge government orders

It is only natural that the corporate sector responds to the labour shortage by increasing the real wage. However, above-average and rising capacity utilisation should spur investment, which has not been observed. All this suggests that the corporate sector appears to expect the upturn in the business cycle to be drawing to a close rather than the economic upswing to continue. The positive output gap may also increase because the potential output is reduced by a fall in factors of production. In such a favourable cyclical environment the debt ratio should decrease significantly faster if the government is to prevent pro-cyclical adjustments in a subsequent, less favourable period. It is possible that the hard times will arrive only in a few years, when all the EU funds drawn down have been spent, but if the public debt is not reduced sufficiently by that time, then either the debt spiral will re-emerge or huge adjustment measures will be required. The situation is somewhat similar to 2011, when the Government implemented a sizeable fiscal adjustment under cover of the nationalisation of the private pension fund assets, which than had to be followed by an enormous fiscal adjustment in 2012. In the present case the role of the pension fund assets is played by EU funds, but the problem is the same: the budget has temporary revenues unrelated to the performance of the Hungarian economy at the time of the recognition of such revenues, which can be used to offset budgetary expenditure under the effective statistical rules. In the meantime the rules governing the recognition of the nationalisation of private pension fund assets have changed, and now the official balance figures show the effects of the relaxation in 2011. The government would act prudently if it would recognise no more than one seventh of the EU funds each year when assessing whether the fiscal balance target is met.

[7] In September 2015 gross wages in the business sector (not including public work schemes) increased by 4.2 per cent, while in the same period prices fell by 0.4 per cent; that is, real wages were up 4.6 per cent.

ANNEXES

1. Annex 1: Key macroeconomic indicators in the baseline scenario

	2011	2012	2013	2014	2015f	2016f	2017f	2018f	2019f
NATIONAL ACCOUNTS (current prices, HUF bn)									
Nominal GDP	28134	28628	30065	32180	33605	34932	36551	38156	39786
Real GDP (annual % growth)	1,8	-1,5	1,7	3,5	2,9	1,7	1,8	1,5	1,3
Household consumption expenditure	14341	14889	15226	15651	16294	17346	18252	19146	20085
Purchased consumption (estimate)	13147	13645	14021	14528	15125	16100	16942	17772	18643
purchased consumption (annual % growth)	4,9	3,8	2,8	3,6	4,1	6,5	5,2	4,9	4,9
volume of purchased consumption (annual % real growth)	1,1	-1,6	1,1	3,9	4,3	4,6	2,3	1,8	1,7
Collective consumption of government	2856,0	2814,5	2972,2	3292,0	3385,0	3482,0	3579,8	3682,5	3791,5
Social transfers in kind from government	2990,6	2941,4	2958,0	3210,2	3331,1	3447,7	3490,1	3590,2	3696,5
Total government consumption at current prices	5846,6	5755,9	5930,2	6502,2	6716,1	6929,8	7069,9	7272,7	7488,0
Government investment acc. to Nat. Acc.	945,9	1071,6	1332,8	1771,3	2060,5	2029,7	2057,0	2099,8	2140,3
Financial transfers from the government to households	4311,3	4346,9	4453,2	4491,4	4476,8	4469,2	4635,9	4784,8	4883,7
Import	22812,9	22931,5	24249,7	26383,3	27990,4	30433,1	32780,6	35180,6	37664,4
Investments of households	871,3	833,1	896,5	943,0	930,7	970,9	1009,6	1034,7	1055,2
Disposable income of households	15269,7	15700,6	16288,9	16936,1	17662,7	18388,2	19560,7	20735,7	21813,6
PRICES (annual %)									
Inflation rate (CPI)	3,7	5,5	1,6	-0,3	-0,2	1,8	2,9	3,1	3,2
GDP deflator	2,2	3,4	3,0	2,8	1,5	2,2	2,8	2,8	2,9
Consumption expenditure deflator	3,6	6,2	2,4	0,7	1,5	4,2	2,9	3,1	3,2
Actual final consumption of government deflator	0,3	-1,3	0,5	6,8	1,8	3,3	2,6	2,9	3,0
Social transfers in kind from government deflator	-0,5	0,9	-0,6	4,9	1,8	3,3	2,6	2,9	3,0
Investment deflator	3,4	2,6	3,6	2,4	4,5	4,2	2,6	2,1	1,9
Export deflator	3,4	3,2	0,3	0,9	-1,3	1,4	2,5	2,6	2,7
Import deflátor	4,9	4,2	-0,5	0,2	-0,9	3,0	2,5	2,7	2,7
LABOUR MARKET (thousand people)									
Number of persons employed in the national economy (LFS, annual avera	3 759,0	3 827,2	3 892,8	4 100,8	4 210,1	4 228,8	4 255,0	4 281,9	4 308,4
of which: Business sector (LFS-institutional state)???	2 882,1	2 925,2	2 956,0	3 092,2	3 139,1	3 159,6	3 186,9	3 214,9	3 242,6
Budget sector (institutional, technical assumption)	734,6	751,3	786,0	854,1	865,0	865,0	865,0	865,0	865,0
Number of persons employed in the national economy (annual change %)	0,7	1,8	1,7	5,3	2,7	0,4	0,6	0,6	0,6
Business sector employment (annual change, %)	1,2	1,5	1,1	4,6	1,5	0,7	0,9	0,9	0,9
Public sector employment (annual change, %)	-4,9	2,3	4,6	8,7	1,3	0,0	0,0	0,0	0,0
Number of active persons	4 225,0	4 300,4	4 333,8	4 444,2	4 469,2	4 489,2	4 504,2	4 514,2	4 519,2
Number of unemployed persons in the national economy (annual average)	466,0	473,2	441,0	343,3	259,1	260,3	249,2	232,3	210,8
Unemployment rate (LFS)	11,0	11,0	10,2	7,7	5,8	5,8	5,5	5,1	4,7
Business sector gross nominal average wage (annual growth, %)	5,4	7,3	3,6	4,3	3,9	3,4	3,8	3,1	2,8
Public sector gross average wage (technical assumption)	203 516	200 027	207 191	209 706	219 477	223 327	229 803	236 851	244 320
Gross wage and salary bill in the national economy (current prices, HUF r	9 157	9 432	9 765	10 280	11 726	12 131	12 640	13 109	13 573
Gross wage and salary bill in the national economy (annual growth, %)	2,9	3,0	3,5	5,3	14,1	3,5	4,2	3,7	3,5
"HCSO headcount and earnings" gross wage (annual growth, %)	5,2	4,7	3,4	3,0	7,0	2,9	3,5	3,0	2,9
"HCSO headcount and earnings" net wage (annual growth, %)	6,4	1,2	3,4	3,0	7,0	2,9	3,5	3,0	2,9
Pension indexation rate (annual growth, %)	4,3	5,5	5,2	2,4	1,8	1,8	2,9	3,1	3,2
TECHNICAL ASSUMPTIONS									
HUF/EUR exchange rate (annual averages)	279,3	289,3	297,0	308,7	309,3	317,0	320,0	322,8	325,2
Yield, 3-month benchmark	6,1	6,7	4,0	2,1	1,6	1,5	2,6	3,9	4,6
Oil price, HUF/barrel	22293	25233	24351	22835	12490	12383	13180	14045	14999

Annex 2/a: Changes in mandatory items in the base scenario

REVENUE SIDE								
Budget item	2012	2013	2014	2015f	2016f	2017f	2018f	2019f
Payments by economic organisations								
Corporate profit tax	342,3	322,5	394,8	459,7	433,6	483,6	523,4	564,0
Fees of financial institutions	9,7	17,5	20,6	8,7	3,8	3,4	3,0	2,7
Special tax on financial institutions	84,9	139,1	148,6	149,2	89,2	62,2	62,2	62,2
Financial transaction tax		259,6	277,9	209,8	205,7	211,5	218,0	224,5
Insurance tax		26,2	28,7	29,8	30,9	32,5	34,3	36,3
Telecommunications tax	12,2	47,0	56,0	55,5	56,1	56,1	56,1	56,1
Special taxes on certain sectors	164,7	9,8	0,0	0,0	0,0	0,0	0,0	0,0
Company car tax	32,3	33,1	31,7	31,9	32,8	33,9	35,2	36,6
Income tax of energy suppliers	5,6	54,1	35,0	51,2	53,3	55,7	58,2	60,7
Simplified business tax	146,5	110,0	96,8	91,8	95,5	99,9	104,3	108,7
Small business tax (KIVA)		10,1	12,7	12,0	12,5	13,1	13,7	14,2
Itemized tax of small businesses (KATA)		28,3	42,2	52,3	54,3	56,8	59,3	61,9
Utilities tax		54,9	55,0	55,9	55,9	55,9	55,9	55,9
Advertising tax			3,3	2,8	8,5	8,9	9,3	9,7
Energy tax	16,9	16,3	14,6	18,3	18,5	18,5	18,4	18,3
Environmental load charge	7,3	6,2	5,5	5,4	5,9	6,0	6,1	6,2
Environmental product fee	56,4	48,2	49,8	61,0	63,1	64,2	65,2	66,1
Landfill tax		6,3	9,6	8,6	8,8	8,9	9,1	9,2
Mining rent	103,6	63,2	63,0	37,1	46,0	47,0	48,0	49,1
Innovation contribution	58,1	62,0	68,9	66,4	69,0	72,2	75,4	78,6
Other payments	18,0	22,9	24,2	22,5	21,5	20,9	20,5	20,2
Pre-pension insurance contribution	0,0	0,0	17,1	1,5	0,0	0,0	0,0	0,0
Consumption related taxes								
Value added tax	2 747,0	2 809,6	3 035,6	3 232,6	3 415,3	3 544,6	3 707,8	3 871,3
Excise tax	929,4	897,3	918,9	1 004,3	1 002,1	1 009,2	1 018,4	1 016,6
Gambling tax	64,2	41,8	45,6	46,9	49,9	52,5	55,1	57,8
Cultural tax	0,2	0,1	0,1	0,1	0,1	0,1	0,2	0,2
Registration tax	13,7	15,6	18,8	21,5	23,7	26,2	28,6	30,8
Vehicle tax	0,0	41,2	42,4	44,1	45,4	46,9	48,8	50,8
Public health product tax	20,1	18,9	20,0	29,2	32,3	33,1	33,7	34,3
Accident tax	25,2	22,5	23,8	26,5	28,5	30,0	31,4	33,0
Payments by households								
Personal income tax	1 499,7	1 505,5	1 590,6	1 698,4	1 653,2	1 736,9	1 818,4	1 894,2
Tax payments	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2
Stamp duty payments	109,6	107,4	120,3	133,3	140,5	150,4	159,5	167,9
Special tax on private persons rel. to termination of employment	1,2	0,9	1,5	0,1	0,1	0,1	0,1	0,1
Customs duty and sugar industry contribution reimbursement of cost of	9,2	9,2	11,2	13,2	14,3	15,4	16,6	17,7
Taxes on labour								
Employer's and insured persons' contribution (PFund, HFund and LMF) a	3 625,3	3 795,6	4 076,4	4 399,4	4 591,2	4 780,4	4 960,0	5 136,5
Rehabilitation contribution	62,7	64,1	66,0	68,5	67,8	68,3	68,8	69,2
Vocational training contribution	78,7	60,3	60,9	65,8	68,8	71,6	74,3	76,9
SS funds and other mandatory contribution revenues	58,3	61,5	59,4	62,7	38,9	47,4	52,7	56,6
Repayment of wage guarantee subsidies	0,8	1,0	0,8	0,6	0,6	0,6	0,6	0,6
Mandatory revenues total	10 303,9	10 790,0	11 548,3	12 278,8	12 537,6	13 025,1	13 550,6	14 056,0

EXPENDITURE SIDE								
Budget item	2012	2013f	2014	2015f	2016f	2017f	2018f	2019f
Pension payments	3281,2	3412,7	3425,2	3443,4	3466,4	3619,7	3756,3	3840,3
Family benefits								
Family allowance	335,6	334,8	328,1	322,3	320,1	318,7	318,1	317,8
Maternity benefit	5,5	6,1	5,4	6,0	6,0	6,0	6,0	6,0
Repayment of time off available to fathers	1,8	2,1	4,4	2,7	2,8	2,9	2,9	3,0
Pregnancy-confinement all.	38,3	38,2	41,3	45,4	46,7	48,4	49,8	51,2
Child care benefit	84,1	94,0	104,5	112,9	116,7	118,1	119,4	120,6
Child care allowance	61,9	58,4	57,6	63,0	63,0	64,8	64,8	64,8
Child raising support	13,0	13,0	12,1	12,3	12,1	11,9	11,7	11,6
Social transfers								
Passive benefits	65,0	50,8	49,7	47,8	49,5	49,0	47,1	43,9
Wage guarantee payments	6,6	5,5	4,2	3,8	4,1	4,0	3,9	3,6
Sick pay	56,5	59,9	68,2	77,6	80,3	83,6	86,7	89,8
Benefits to blind and disabled persons	30,3	30,4	32,9	33,5	29,9	30,7	31,6	32,6
Other mandatory expenditures								
Contribution to EU budget	234,9	272,3	290,9	295,6	325,2	312,2	326,1	348,2
NBH loss reimbursement	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Mandatory expenditures total	4 214,9	4 378,1	4 424,4	4 466,4	4 522,6	4 670,0	4 824,4	4 933,4
Balance of mandatory items	6 089,0	6 412,0	7 124,0	7 812,5	8 015,0	8 355,1	8 726,3	9 122,5

Annex 2/b: comparison of the mandatory items with the enacted budgets

Comparison of mandatory items									
Budget item	2014 actual	Budget Act		FRIB baseline		Difference - HUF Bn		Difference - per	
		2015	2016	2015	2016	2015	2016	2015	2016
Payments by economic organisations									
Corporate profit tax	394,8	341,4	400,5	459,7	433,6	118,3	33,1	34,7	8,3
Fees of financial institutions	20,6	15,4	6,3	8,7	3,8	-6,7	-2,5	-43,6	-40,4
Special tax on financial institutions	148,6	144,2	79,2	149,2	89,2	5,0	10,0	3,5	12,7
Financial transaction tax	277,9	206,2	200,9	209,8	205,7	3,6	4,8	1,7	2,4
Insurance tax	28,7	28,6	30,0	29,8	30,9	1,2	0,9	4,1	3,0
Telecommunications tax	56,0	56,4	56,0	55,5	56,1	-0,9	0,1	-1,5	0,3
Company car tax	-1,0	28,8	27,7	31,9	32,8	3,1	5,1	10,8	18,4
Income tax of energy suppliers	31,7	44,7	41,3	51,2	53,3	6,5	12,0	14,6	29,0
Simplified business tax	35,0	83,8	75,2	91,8	95,5	8,0	20,3	9,6	27,0
Small business tax (KIVA)	96,8	16,4	13,8	12,0	12,5	-4,4	-1,3	-26,6	-9,3
Itemized tax of small businesses (KATA)	12,7	56,3	70,1	52,3	54,3	-4,0	-15,8	-7,2	-22,5
Utilities tax	42,2	54,0	52,2	55,9	55,9	1,9	3,7	3,5	7,1
Advertising tax	55,0	6,6	10,9	2,8	8,5	-3,8	-2,4	-57,7	-21,7
Energy tax	3,3	15,5	16,7	18,3	18,5	2,8	1,8	17,8	10,9
Environmental load charge	14,6	6,0	5,3	5,4	5,9	-0,6	0,6	-10,7	11,8
Environmental product fee	5,5	63,4	63,4	61,0	63,1	-2,4	-0,3	-3,8	-0,5
Landfill tax	49,8	9,0	8,0	8,6	8,8	-0,4	0,8	-4,3	9,8
Mining rent	7,8	49,0	31,5	37,1	46,0	-11,9	14,5	-24,4	46,1
Innovation contribution	63,0	69,1	70,6	66,4	69,0	-2,7	-1,6	-4,0	-2,3
Other payments	68,9	27,0	26,0	22,5	21,5	-4,5	-4,5	-16,5	-17,3
Other centralised revenues (mandatory only!)	24,2	1,5	0,0	1,5	0,0	0,0	0,0	0,0	0,0
Consumption related taxes									
Value added tax	3035,6	3172,4	3351,9	3 232,6	3 415,3	60,2	63,4	1,9	1,9
Excise tax	918,9	913,5	952,2	1 004,3	1 002,1	90,8	49,9	9,9	5,2
Gambling tax	45,6	48,7	51,1	46,9	49,9	-1,8	-1,2	-3,6	-2,4
Cultural tax	0,1	0,1	0,1	0,1	0,1	0,0	0,0	0,0	0,0
Registration tax	18,8	19,6	20,7	21,5	23,7	1,9	3,0	9,6	14,3
Vehicle tax	42,4	45,5	45,5	44,1	45,4	-1,4	-0,1	-3,1	-0,3
Public health product tax	20,0	26,4	26,8	29,2	32,3	2,9	5,5	11,0	20,6
Accident tax	23,8	23,5	25,4	26,5	28,5	3,0	3,1	12,8	12,3
Payments by households									
Personal income tax (PIT) (incl. special tax and local government portion	1589,1	1639,7	1658,4	1 698,4	1 653,2	58,7	-5,2	3,6	-0,3
Tax payments	0,5	0,5	2,0	0,2	0,2	-0,4	-1,9	-70,0	-92,5
Stamp duty payments	120,3	120,0	121,7	133,3	140,5	13,3	18,8	11,0	15,4
Special tax on private persons rel. to termination of employment	1,5	0,9	0,9	0,1	0,1	-0,8	-0,8	-92,2	-92,3
Customs duty and sugar industry contribution reimbursement of cost of	11,2	11,2	10,8	13,2	14,3	2,0	3,6	18,2	33,2
Taxes on labour									
Employer's and insured persons' contribution (PFund, HFund and LMF) a	4078,5	4286,5	4544,4	4 399,4	4 591,2	112,9	46,8	2,6	1,0
Rehabilitation contribution	66,0	65,0	65,5	68,5	67,8	3,5	2,3	5,3	3,6
Vocational training contribution	60,9	63,1	57,0	65,8	68,8	2,7	11,8	4,3	20,6
SS funds and other mandatory contribution revenues	57,9	69,2	73,0	62,7	38,9	-6,4	-34,1	-9,3	-46,7
Repayment of wage guarantee subsidies	0,9	1,0	1,0	0,6	0,6	-0,4	-0,4	-35,8	-41,9
Mandatory revenues total	11528,0	11829,9	12293,8	12 278,8	12 537,6	448,9	243,8	3,8	2,0

Budget item									
Pension payments	3423,5	3477,1	3477,3	3 443,4	3 466,4	-33,7	-10,8	-1,0	-0,3
Family benefits									
Family allowance	328,4	327,0	319,7	322,3	320,1	-4,6	0,3	-1,4	0,1
Maternity benefit	5,8	5,2	5,0	6,0	6,0	0,8	1,0	15,5	18,9
Repayment of time off available to fathers	2,2	1,6	1,3	2,7	2,8	1,1	1,5	70,5	111,9
Pregnancy-confinement all.	41,4	42,4	45,9	45,4	46,7	3,0	0,8	7,0	1,7
Child care benefit	104,2	109,5	116,3	112,9	116,7	3,4	0,4	3,1	0,3
Child care allowance	60,2	62,2	63,6	63,0	63,0	0,9	-0,5	1,4	-0,9
Child raising support	12,5	12,9	12,4	12,3	12,1	-0,6	-0,3	-4,7	-2,8
Social transfers									
Passive benefits	49,2	50,0	47,0	47,8	49,5	-2,2	2,5	-4,4	5,2
Wage guarantee payments	4,2	6,2	5,0	3,8	4,1	-2,4	-0,9	-38,5	-17,9
Sick pay	68,2	68,5	76,9	77,6	80,3	9,1	3,3	13,3	4,3
Benefits to blind and disabled persons	33,2	33,9	34,4	33,5	29,9	-0,4	-4,6	-1,1	-13,2
Other mandatory expenditures									
Contribution to EU budget	290,9	295,6	314,8	295,6	325,2	0,0	10,3	0,0	3,3
NBH loss reimbursement	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Mandatory expenditures total	4423,8	4492,0	4519,7	4 466,4	4 522,6	-25,6	2,9	-0,6	0,1
Balance of mandatory items	7104,3	7338,0	7774,1	7 812,5	8 015,0	474,5	240,9	6,5	3,1

Annex 3/a: Various balance indicators in the base scenario (HUF bn)

	2012	2013	2014	2015f	2016f	2017f	2018f	2019f
Mandatory items	6056	6382	7123	7812	8015	8355	8726	9123
Discretionary items	-5598	-6168	-6915	-7483	-7778	-8088	-8414	-8767
Primary balance	458	214	208	330	237	267	313	355
Interest balance	-1056	-1145	-1011	-975	-1018	-1056	-1080	-1078
Balance of the central sub-system	-598	-932	-803	-645	-781	-789	-768	-722
Balance of the local government system	140	751	442	5	6	6	6	6
ESA bridge in the central government	-204	-568	-451	-163	87	123	142	147
General government balance	-662	-748	-812	-803	-689	-661	-620	-569
Balance target (as per the 2015 convergence programm	-773	-812	-837	-807	-699	-621	-610	-637
Difference	**-111**	**-64**	**-25**	**-4**	**-10**	**39**	**9**	**-67**
Unallocated central reserves	0	0	0	0	0	0	0	0
Measure required		**-64**	**-25**	**-4**	**-10**	**39**	**9**	**-67**
GDP	28628	30065	32180	33605	34932	36551	38156	39786

Annex 3/b: Various balance indicators in the base scenario (% of GDP)

	2012	2013	2014	2015f	2016f	2017f	2018f	2019f
Mandatory items	21,2%	21,2%	22,1%	23,2%	22,94%	22,86%	22,87%	22,93%
Discretionary items	-19,6%	-20,5%	-21,5%	-22,3%	-22,27%	-22,13%	-22,05%	-22,04%
Primary balance	1,6%	0,7%	0,6%	1,0%	0,7%	0,7%	0,8%	0,9%
Interest balance	-3,7%	-3,8%	-3,1%	-2,9%	-2,9%	-2,9%	-2,8%	-2,7%
Balance of the central sub-system	-2,1%	-3,1%	-2,5%	-1,9%	-2,2%	-2,2%	-2,0%	-1,8%
Balance of the local government system	0,5%	2,5%	1,4%	0,0%	0,0%	0,0%	0,0%	0,0%
ESA bridge in the central government	-0,7%	-1,9%	-1,4%	-0,5%	0,2%	0,3%	0,4%	0,4%
General government balance	-2,3%	-2,5%	-2,5%	-2,4%	-2,0%	-1,8%	-1,6%	-1,4%
Balance target (as per the 2015 convergence programm	-2,7%	-2,7%	-2,6%	-2,4%	-2,0%	-1,7%	-1,6%	-1,6%
Difference	-0,4%	-0,2%	-0,1%	0,0%	0,0%	0,1%	0,0%	-0,2%
Unallocated central reserves	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Required measures additional to blocking of reserves	**0,0%**	**-0,2%**	**-0,1%**	**0,0%**	**0,0%**	**0,1%**	**0,0%**	**-0,2%**

4. Annex 4: Gross debt of the government sector in the base scenario

	2012	2013	2014	2015f	2016f	2017f	2018f	2019f
Gross debt of the central government (HUF Bn)	21380	22641	24490	25543	26594	27474	28322	29109
Debt of the local government sector (HUF Bn)	1034	435	24	19	13	8	2	-4
Gross debt of the general government	22414	23076	24514	25562	26608	27481	28323	29104
Nominal GDP	28628	30065	32180	33605	34932	36551	38156	39786
Debt ratio of the general government	78,3%	76,8%	76,2%	76,1%	76,2%	75,2%	74,2%	73,2%
Implicit interest rate	4,82%	4,93%	4,37%	4,38%	3,91%	3,99%	3,90%	3,88%