

Brussels, 18.3.2015  
SWD(2015) 36 final/2

**CORRIGENDUM**

This document corrects document SWD(2015) 36 final of 26.02.2015

Addition of missing paragraphs on page 58 and 60

The text shall read as follows:

**COMMISSION STAFF WORKING DOCUMENT**

**Country Report Hungary 2015**

**Including an In-Depth Review on the prevention and correction of macroeconomic imbalances**

**{COM(2015) 85 final}**

**This document is a European Commission staff working document . It does not constitute the official position of the Commission, nor does it prejudice any such position.**



# CONTENTS

<a href="#"><u>Executive summary</u></a>	1
<a href="#"><u>1. Scene setter: economic situation and outlook</u></a>	4
<a href="#"><u>2. Imbalances, Risks and Adjustment</u></a>	13
<a href="#"><u>2.1. External sustainability</u></a>	14
<a href="#"><u>2.2. Government debt sustainability</u></a>	21
<a href="#"><u>2.3. Financial sector risks and deleveraging</u></a>	29
<a href="#"><u>2.4. Labour market with a focus on public works</u></a>	40
<a href="#"><u>3. Other structural issues</u></a>	49
<a href="#"><u>3.1. Fiscal policy</u></a>	50
<a href="#"><u>3.2. Labour market and social cohesion</u></a>	53
<a href="#"><u>3.3. Education and skills</u></a>	57
<a href="#"><u>3.4. Business environment</u></a>	60
<a href="#"><u>3.5. Network industries and environment</u></a>	64
<a href="#"><u>A. Overview Table</u></a>	67
<a href="#"><u>B. Standard Tables</u></a>	74

## LIST OF TABLES

<a href="#"><u>1.1. Key economic, financial and social indicators</u></a>	9
<a href="#"><u>1.2. The MIP scoreboard</u></a>	10
<a href="#"><u>2.2.1. The examined fiscal policy-risk scenarios</u></a>	21
<a href="#"><u>2.3.1. Budget contribution to mortgage relief schemes (2011-2015, HUF bn)</u></a>	28

<a href="#">2.3.2. Policy measures increasing the burden on the banking sector</a>	30
<a href="#">B.1. Macroeconomic indicators</a>	68
<a href="#">B.2. Financial market indicators</a>	69
<a href="#">B.3. Taxation indicators</a>	69
<a href="#">B.4. Labour market and social indicators</a>	70
<a href="#">B.5. Labour market and social indicators (continued)</a>	71
<a href="#">B.6. Product market performance and policy indicators</a>	72
<a href="#">B.7. Green growth</a>	73

## LIST OF GRAPHS

<a href="#">1.1. GDP in 2010 constant prices</a>	3
<a href="#">1.2. External and domestic demand contributions to economic growth</a>	3
<a href="#">1.3. Headline inflation and core inflation</a>	4
<a href="#">1.4. Net Lending/Borrowing by Sector</a>	5
<a href="#">1.5. Potential output growth</a>	6
<a href="#">2.1.1. Components of Net International Investment Position</a>	12
<a href="#">2.1.2. Components of the external position (current and capital accounts)</a>	13
<a href="#">2.1.3. Evolution of Hungary's export market share (year-on-year)</a>	14
<a href="#">2.1.4. Net foreign direct investment in the region (% of GDP)</a>	16
<a href="#">2.1.5. Foreign direct investment flows in Hungary (% of GDP)</a>	16
<a href="#">2.1.6. Greenfield foreign direct investment inflows into Hungary (2003-2014)</a>	17
<a href="#">2.2.1. Gross government debt ratio: historic data and short-term projection</a>	19
<a href="#">2.2.2. Composition of the annual change in gross government debt</a>	19
<a href="#">2.2.3. Gross government debt ratio: the baseline scenario</a>	20
<a href="#">2.2.4. Gross government debt ratio: state acquisition and wage compensation scenarios</a>	21
<a href="#">2.2.5. Gross government debt ratio: the Paks II and the combined policy scenarios</a>	22
<a href="#">2.2.6. Gross government debt ratio: sensitivity to macroeconomic variables</a>	22
<a href="#">2.2.7. The share of FX denominated government debt and the effect of previous exchange rate changes on the gross debt ratio</a>	23
<a href="#">2.2.8. Stochastic debt projections, 2015-19</a>	23
<a href="#">2.2.9. Fiscal policy-risks scenarios compared with the debt-reduction benchmark set by the one-twentieth rule</a>	24
<a href="#">2.3.1. Decomposition of private sector debt</a>	25
<a href="#">2.3.2. Decomposition of credit flows</a>	25
<a href="#">2.3.3. Change in corporate loans in international comparison (annual transaction-based growth rates)</a>	26
<a href="#">2.3.4. Change in household loans in international comparison (annual transaction-based growth rates)</a>	27
<a href="#">2.3.5. External funding transactions in the local banking sector (cumulative changes)</a>	29
<a href="#">2.3.6. The Financial Conditions Index (FCI) and economic growth</a>	33
<a href="#">2.3.7. Deleveraging pressures on the supply and demand side</a>	34
<a href="#">2.4.1. Participation, employment and unemployment</a>	35
<a href="#">2.4.2. Activity rate</a>	35
<a href="#">2.4.3. Unemployment rate</a>	36
<a href="#">2.4.4. Change in employment by source of employment, sectoral breakdown</a>	38
<a href="#">2.4.5. Change in employment by source of employment</a>	38
<a href="#">2.4.6. New vacancies and registered unemployed</a>	38

<a href="#"><u>2.4.7. Employment level with and without the public works</u></a>	39
<a href="#"><u>2.4.8. Probability of successful exit from the Public Work Scheme, by education</u></a>	40
<a href="#"><u>2.4.9. Probability of successful exit from the Public Work Scheme, by age cohort</u></a>	40
<a href="#"><u>2.4.10. Probability of successful exit by time spent in the Public Work Scheme (months)</u></a>	40
<a href="#"><u>3.2.1. The severe material deprivation rate in the region</u></a>	49
<a href="#"><u>3.3.1. Impact of socio-economic status on mathematics performance (2012)</u></a>	51
<a href="#"><u>3.3.2. Drop-out rate from tertiary education (2011)</u></a>	53
<a href="#"><u>3.4.1. Public R&amp;D intensity (1), 2005-2013</u></a>	57

## LIST OF BOXES

<a href="#"><u>1.1. Trade linkages and energy tie of Hungary to Russia</u></a>	7
<a href="#"><u>1.2. Economic surveillance process</u></a>	8
<a href="#"><u>1.2. Economic surveillance process</u></a>	8
<a href="#"><u>2.4.1. Recent tax and benefit measures affecting the low-skilled</u></a>	37
<a href="#"><u>2.4.2. Participation and budget allocation of the public work scheme</u></a>	41

## EXECUTIVE SUMMARY

**Following a meagre growth performance in the aftermath of the crisis, Hungary's GDP is expected to have increased over 3% in 2014, supported by stimulus factors of temporary nature.** The surge in growth was driven by temporary measures and factors, such as the increased absorption of EU funds, subsidised loan schemes as well as the regulated utility price cuts. Accordingly, the Commission forecasts a deceleration in growth from 3.3% in 2014 to around 2.5% in 2015 and around 2% in 2016 as the temporary effects peter out. The current negative headline inflation will likely pick up towards 3% by the end of 2016. The trend of employment gains is projected to continue to be led by the private sector. The government deficit is expected to remain broadly around 2.5% of GDP between 2014 and 2016, which may not be sufficient to achieve a robust debt reduction.

This Country Report assesses Hungary's economy against the background of the Commission's Annual Growth Survey which recommends three main pillars for the EU's economic and social policy in 2015: investment, structural reforms, and fiscal responsibility. In line with the Investment Plan for Europe, it also explores ways to maximise the impact of public resources and unlock private investment. Finally, it assesses Hungary in the light of the findings of the 2015 Alert Mechanism Report, in which the Commission found it useful to further examine the persistence of imbalances or their unwinding. The main findings of the In-Depth Review contained in this Country Report are:

- **Despite the rapid improvements in recent years, external indebtedness continues to be at unsafe levels.** Rebalancing of the economy has been on-going since the crisis, driven by sustained current and capital account surpluses, which reflect both private sector deleveraging and the increasing positive contribution from EU funds. In parallel, there has been some structural deterioration on the financing side, as net foreign direct investments, in particular greenfield inflows, have slowed down.
- **The high level of government debt remains an important source of vulnerability for the Hungarian economy.** Medium-term sustainability simulations show public debt, in

a baseline scenario, falling further in the coming decade. However, the projected improvements are subject to important fiscal policy-related risks and a considerable vulnerability to economic shocks is still present.

- **Financial deleveraging has continued in a difficult context characterised by a high regulatory burden on the financial sector and a high level of non-performing loans.** The fall seen in the loan-to-deposit ratio has to a large extent been necessary in order to repair balance sheets. Nevertheless, the pace and the channels through which the deleveraging pressures materialised were heavily influenced by financial sector policies, in particular the imposition of a high tax burden. Subsidised lending schemes and the recent pick-up in growth have started to reduce the speed of deleveraging, which is, however, expected to continue in the coming years.
- **The Public Works Scheme appears to be an inefficient active labour market policy measure and distorts the proper functioning of the labour market.** It nominally reduces unemployment, but there is a risk, also from a budgetary point of view, that public works of such a magnitude could entail significant 'lock-in' effects and become a permanent replacement for the system of welfare benefits for the low-skilled. The scheme is not adequately coordinated with other public employment services, and does not sufficiently support the reintegration of participants into the open labour market.

The Country Report also analyses other macroeconomic issues and the main findings are:

- **Investments peaked in 2014 and are forecast to decelerate until 2016.** Investments started to grow in 2013 for the first time since 2008. In 2014, they showed more than 10% real growth, mainly on the back of EU co-financed public investments. As EU fund absorption is expected to be lower in 2016, this will bring investment growth to around zero.
- **The efficiency of the Hungarian tax system is affected by a number of flaws both in**

**terms of design and governance.** Recent changes have reignited the earlier trend of raising the weight of sector-specific corporate taxes. The tax burden on some groups of low income earners has remained among the highest in the EU. At the same time, there has been some progress in fighting tax evasion.

- **The unstable regulatory framework, the lack of transparency in decision-making procedures and inadequate consultation of interested parties are, together, weighing heavily on the business environment.** Frequent and unpredictable regulatory changes, often resulting in new entry barriers in certain sectors, are worsening the investors' perception. This is exacerbated by the fact that the quality of legislative processes suffers from, inter alia, the lack of proper ex ante impact assessments and short transition periods for stakeholders.
- **Overall, Hungary has made limited progress in addressing the 2014 country-specific recommendations.** In particular, despite the sharp increase in the share of subsidised loans, normal lending in the economy has not yet returned, partly linked to the further increase in the overall regulatory burden on the financial sector. There has been some progress in the area of tax compliance and in the continued reorganisation of state-owned public transport companies. Some progress has also been made in strengthening the targeted active labour market policies: both the preparation of the profiling system in the Public Employment Service and set-up of the youth mentoring network are on schedule. However, some country-specific recommendations have remained broadly unaddressed. Specifically, the policy advice on the re-arrangement of the tax structure has not been followed. The period of eligibility for unemployment benefits has not been increased and worsening poverty indicators continue to call for integrated policy measures. Entry costs and regulatory restrictions have further increased in several market segments, particularly in the service sector. A systemic approach to promote inclusive mainstream education is yet to be developed.

**The Country Report reveals the policy challenges stemming from the analysis of macro-economic imbalances, namely:**

- **Hungary is still facing considerable external debt rollover needs, thus maintaining the confidence of foreign investors is of utmost importance.** A number of anti-competitive measures over the recent years in the non-tradable sectors are weighing on the attractiveness of the country as business location.
- **Normal lending flows to the economy have yet to be restored.** Subsidised lending schemes cannot substitute a sound operating environment for banks. There is a lack of sufficient capital accumulation possibilities in financial intermediation and the adopted relief schemes were not targeted. State interventions in the banking sector via increased direct ownership, even for a temporary period, may entail significant fiscal risks.
- **The increasing dominance of the Public Work Schemes poses a significant challenge for improving the efficiency of active labour market policies.** This is all the more so in light of its limited positive effect on the employment chances of participants and its quadrupling budgetary cost over the last four years.

**Other policy challenges are:** The legislated medium-term budgetary framework is not yet implemented. Despite recent progress, there is still a significant scope to improve administrative efficiency in tax collection and to reduce tax evasion. Gaps remain in the efficiency and coverage of social assistance. The rigorous enforcement of the legislated conditions for law-making is still missing. There are shortages of skilled professionals in science and engineering and of the SME's innovative capacities. Transitions between the stages of education are still weak and systemic measures to promote inclusive mainstream education, early school leaving prevention and wider access and completion of tertiary education have not been put in place. The adopted price cuts for household consumers in the energy sector have not been reviewed.

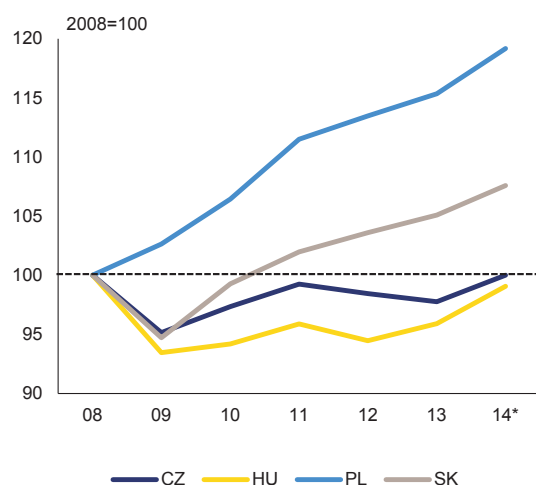
# 1. SCENE SETTER: ECONOMIC SITUATION AND OUTLOOK

## Macroeconomic developments

Hungary's economic growth has generally been weak since the start of the crisis, and growth accelerated significantly only since 2014. After the crisis, Hungary experienced a moderate recovery in 2010 and 2011 (0.8% and 1.8% respectively), before the country fell back into recession again in 2012 with a negative 1.5% GDP growth. In 2013, economic activity revived again with a moderate 1.5%. After five years of continuous decline, 2013 was the first year when gross fixed capital formation turned positive.

**GDP has only reached the level of the pre-crisis period but lags behind regional peers.** The Hungarian GDP is still below its 2008 level by about 1%, while Poland's and Slovakia's GDP far exceed the pre-crisis levels.

Graph 1.1: GDP in 2010 constant prices



Source: European Commission

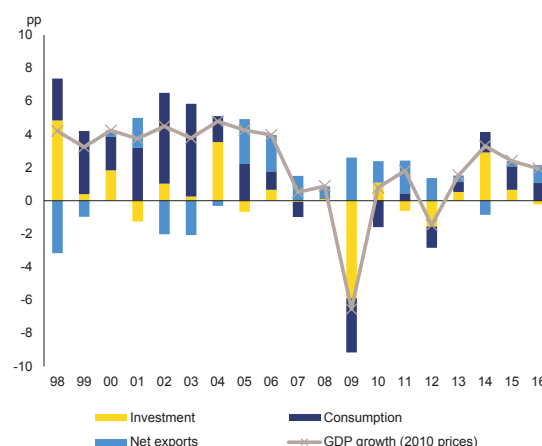
Note: \* Data is based upon European Commission winter 2015 forecast

**GDP picked up in 2014, and based on the Commission's winter 2015 forecast it is projected to have accelerated to 3.3%.** This is attributed to growing domestic demand with a significant contribution of gross fixed capital formation. The surge in growth (3.8% in the first half of 2014), however, was supported by temporary measures and factors, such as the stepped-up absorption of EU funds and the central

bank's Funding for Growth Scheme of subsidised loans to small- and medium-sized enterprises.

**Economic activity has started to slow down slightly in the second half of 2014 and is expected to further decelerate until 2016.** According to the Commission's 2015 winter forecast, economic growth is projected to stand at 2.4% and 1.9% in 2015 and 2016, respectively, reflecting the fading of the above mentioned time-bound stimulus measures. The flash estimate for 2014 annual growth is 3.5%, which increases somewhat the positive risks to the Commission's projections.

Graph 1.2: External and domestic demand contributions to economic growth



Source: European Commission

**Domestic demand is expected to remain the main driver of economic growth in the coming years, but with a shift from investment to private consumption.** Due to measures easing the burden of mortgage loans on households (see below), real disposable income will be affected positively in 2015, and this would stimulate consumption (Graph 1.2). With the start of the new Multiannual Financial Framework period for EU structural and investment funds, the absorption of EU funds is expected not to be at full speed in 2016. The associated drop will have a visible impact on investment activity, particularly in the public sector, and as a result investment growth is projected to be negative in 2016. Export growth, which is set to decrease in 2015 due to lower demand from major trade partners, is expected to pick up again in 2016, while imports will remain

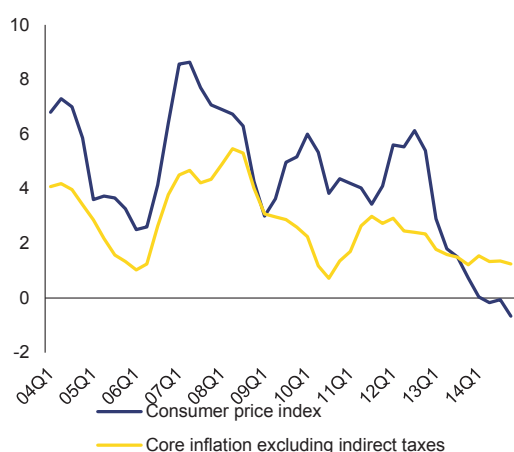


stable fuelled by private consumption. Thus net exports will contribute moderately to growth in 2015, but more significantly in 2016.

**Household final consumption expenditure could be boosted by expanding real disposable income.** First, this is due to the adopted settlement scheme for household loans, which requires banks to compensate borrowers for unfairly applied terms (for details, see section 2.3). This elevates the consumption path by almost 1 pp. in 2015. Second, also linked to the reduced uncertainty concerning mortgage loans, the precautionary savings attitude of households is expected to start to gradually decrease. Finally, there is the effect of low inflation which increases the purchasing power of wages and pensions.

**Inflation was on average around 5% until 2011, but has started to decrease rapidly since 2012.** The fall in inflation was driven by regulated and utility price cuts. Inflation decelerated to -0.2% in 2014, which was also influenced by falling oil prices as well as by imported disinflation. Inflation expectations have adjusted downwards, but core inflation in 2014 remained in positive territory. With the weaker exchange rate passing through to prices, inflation is expected to increase gradually to reach the 3% target of the central bank by the end of 2016.

Graph 1.3: **Headline inflation and core inflation**



Source: MNB

## LABOUR MARKET SITUATION

**The number of employed rose to an all-time high and unemployment rate dropped to an all-time low in 2014.** While employment has also recovered in the private sector with the economic uptake, this happened to a large extent on account of the expansion of the Public Work Scheme since 2011. Without the public works, the unemployment rate would be higher by at least 1.5 pps. Furthermore, it is foreseen in the medium-term budgetary plans that the size of the scheme will be further extended. It needs therefore a closer look to assess whether recent labour market developments, heavily influenced by the Public Work Scheme, can lead to a lasting improvement in Hungary's employment in the open labour market (see section 2.4).

**Although both the employment rate and the activity rate are increasing, they are still low in international comparison.** Activity is increasing rapidly, but still below the level of regional peers and by some 5 pps. below the EU average. At the same time, unemployment declined to the second lowest level among the Visegrád countries.

**Despite the improvements in the labour market, all poverty indicators have shown a substantial and continuous deterioration since the start of the crisis.** Specifically, the number of young people not in employment, education or training has been constantly increasing since 2010 and the number of people at risk of poverty or social exclusion has been increasing since 2009.

## Budgetary developments and outlook

**Following the exit from the Excessive Deficit Procedure in 2013, Hungary's general government deficit has been kept under control.** In 2014, the headline deficit is projected in the Commission's 2015 winter forecast to reach 2.6% of GDP, compared to 2.4% of GDP in the previous year. The estimated deterioration in the structural balance is more significant (1.3 pps.) revealing the easing of the fiscal stance in the election year. The government deficit is projected to increase slightly further this year before decreasing to 2.5% of GDP in 2016. The structural balance is also forecast to improve moderately, but will remain well above the country's medium-term objective (i.e. -1.7% of GDP).

**Government debt is expected to decrease only very moderately in the short term.** The debt-to-GDP ratio is forecast to having increased by about 0.4 pp. in 2014 to 77.7% mainly on account of the weakening of the exchange rate. The debt reduction is expected to be rather contained in 2015 and relatively faster in 2016.

**The high level of public debt is a source of fragility for the Hungarian economy.** With the current level of the gross government debt-to-GDP ratio, the country occupies an outlier position within the group of low and middle income economies. This results in elevated risk premia containing investment and economic activity. Although the government debt has been declining since the beginning of the decade, it is not yet on a firmly decreasing path. It is therefore relevant to explore the medium-term prospects for debt reduction (see section 2.2).

### Financial sector

**Private sector indebtedness continued decreasing on the back of a persistent active deleveraging in the economy, which pace has slowed down recently.** The balance sheet repair in the private sector has predominantly been driven by the continued contraction in private sector credit flows. Net lending flows to the private sector have improved recently, as the subsidized lending programmes provided some temporary relief in access to credit for firms, in particular for SMEs. However, the conditions of financial intermediation have not improved in a sustainable manner to restore normal lending.

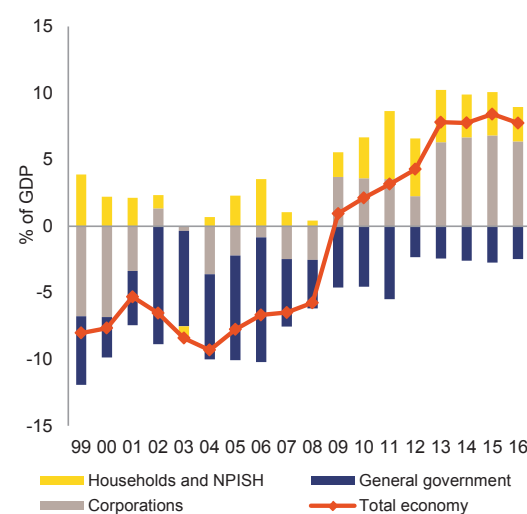
**The situation in the financial sector continues to raise concerns.** Although the sector seems to be adequately capitalised (the aggregate capital adequacy was hovering around twice of the regulatory minimum of 9% in recent quarters) and its liquidity position is relatively strong, the combination of a high level of tax and regulatory burdens as well as a high share of problematic loans does not provide the right incentives for banks to increase their lending activity. The persistence of banks' negative profits represents a risk to financial stability, which was exacerbated by costs of the ongoing settlements with foreign-exchange borrowers and the new tightening regulatory steps. An analysis is therefore

warranted on the main drivers of the deleveraging process and the related risks (see section 2.3).

### External Balances

**The external balance of the country is stable.** The current account turned positive in 2010 and currently stands just above 4% of GDP. In the Commission's 2015 winter forecast, it is expected to increase further, as the surplus in goods and services trade balance rises. The capital account surplus is projected to increase slightly in 2015 and to decline in 2016, reflecting the dynamics of EU funds absorption. Similarly, the net lending position will improve until 2015, but with reducing EU fund inflows, it is projected to decrease below 8% of GDP in 2016.

Graph 1.4: Net Lending/Borrowing by Sector



Source: European Commission

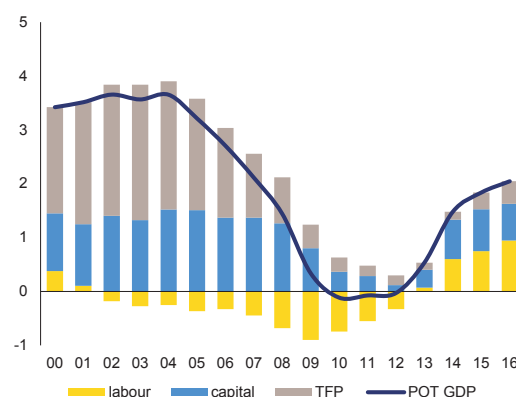
**Private sector deleveraging has been mirrored in a surplus of the external balance, despite a weak export performance.** Export market shares fell by a cumulative 19% between 2009 and 2013, the worst export performance in a regional comparison. Despite this negative development, the net lending/borrowing position of the whole economy was in surplus, driven mainly by the adjustment of the private sector resulting in a substantial decline in the investment rate. (see section 2.1).

### Medium-term economic outlook

**Although somewhat improving, the growth potential of the country remains moderate.** The weak growth potential mainly reflects a weak total factor productivity which in turn is linked to problems with financial intermediation as well as to the low level of innovation in the economy in general. Capital accumulation is also below the pre-crisis level. This is due to deleveraging (see section 2.3), but partly also stems from the perceived deterioration in the business environment. On the other hand, there have been some improvements in the contribution of labour to potential growth, which is linked to structural reforms (see section 2.4 for details). Looking ahead, the growth potential of the country is estimated at 1.8% on average between 2014 and 2016 according to the Commission's winter forecast, but it is projected to decline to 1.5% in the medium term. In an international comparison, Hungary is lagging behind regional peers in terms of potential growth. Hungary's potential growth is significantly below that of Poland (3.1%) and Slovakia (2.5%), while it is somewhat higher than in the case of the Czech Republic (1.2%).

**There is a lack of appropriate economic policies to address Hungary's relatively low growth potential.** Normal lending in the economy is not yet restored due to a high regulatory and tax burden on the financial sector and the continued need for portfolio cleaning. In addition, the Hungarian tax system faces several challenges both in terms of design and governance. The increased reliance on sector-specific taxes in recent years may have exacerbated the productivity problems. The introduction of additional restrictions to entry in certain service sectors also hamper an efficient allocation of economic resources and increase uncertainty for investors. The unstable regulatory framework coupled with a lack of transparency in decision-making procedures and inadequate stakeholder consultations are negatively affecting the business environment. Moreover, the education system appears to have a low ability to tackle the substantial disparity in the employment opportunities of high and low-skilled workers through increasing the education attainment.

Graph 1.5: Potential output growth



Source: European Commission

**Box 1.1 summarises trade and energy linkages between Hungary and Russia.** Regarding foreign direct investment, Hungary's exposure is not large, but one bank is substantially affected by the Russian crisis. The direct trade effect of the Russian crisis is also not significant, but together with indirect trade effects there is a small negative effect on GDP. The energy (oil and gas) exposure on the other hand is relatively large.

### **Box 1.1: Trade linkages and energy tie of Hungary to Russia**

FDI from Russia to Hungary is negligible, while Hungarian FDI outflows to Russia are also not significant, namely around 0.6% of GDP. Nevertheless, most of this FDI is related to one company, Hungary's largest commercial bank, OTP. OTP's exposure to Russia is around 3% of GDP. The bank has a very high capital adequacy ratio at 20% as well as high loan loss coverage in the Russian markets (around 100% in Russia). While the intensification of the Russian crisis could have a significant effect on its capital position, the bank's excess capital is above the regulatory requirement (at around 2.8% of GDP) and is close to its total exposure to Russia. This being said, OTP does not have a large parent bank behind it and its total size of assets stand around one third of Hungarian GDP. Therefore, its exposure could be an important vulnerability.

As regards trade channels, the share of exports to Russia is around 4½ % of total exports (2.9% in goods and 1.3% in services, 2013 data) while the share of imports from Russia in total imports is around 9½% (9% in goods and 1.3% in services, 2013 data). As regards the product structure of imports, Hungary is most exposed to Russia in terms of energy supply. The share of Russian gas in the country's natural total consumption is 64.5%, the share of Russian oil in total oil gross inland consumption is 91.3% (indirectly through Ukraine) and the share of Russian coal in total coal gross inland consumption is 3.1%. Current storage levels could mitigate the effects of such disruptions albeit just temporarily as they would cover supply needs for more than two months in case of natural gas, and for around 100 days in case of crude oil. Other sources of supply are deemed to be extremely difficult to find in the short to medium term, especially with regard to gas. In fact, the pipelines connecting Hungary to Western Europe (through the Austrian exchange and the new Slovak one, which is not yet operational) could not ensure a sufficient level of provision given the current demand. Moreover, the Southstream project was officially abandoned in December 2014. Alternative solutions are currently being investigated.

Although in the first half of 2014 exports to Russia and Ukraine declined by 20% and 10% year-on-year, respectively, GDP was a strong (3.8% year-o-year during this period and export volumes also performed well with a 7.2% growth. Overall, the Russian slowdown has not affected visibly the Hungarian economy yet. While the confidence channel effect is more prominent (the decline in stock prices affects both investment – user cost channel – and consumption – wealth effect) and has a negative GDP growth effect of less than 0.1 pp in 2014 and 0.3 pp in 2015. Hungary's trade comes mostly from countries that have relatively strong trade linkages with Russia (Germany, Austria and Central and Eastern European Countries). Finally, the indirect effects (the effects of the Russian crisis on Hungary's major trade partners) are forecast to have a further negative growth effect of 0.1 pp for both 2014 and 2015. Overall, according to most recent calculations of the Commission services', the negative impact of the Russian crisis on Hungary's GDP growth is estimated at 0.2 pp. in 2014 and is expected to be around 0.4 pp. in 2015.

The devaluation of the RUB against the HUF (and against the EUR) reduces export revenues for the concerned Hungarian firms, which affects profits, investments and thus GDP. Several Hungarian companies have a large exposure to Russia. In terms of exports, the pharmaceutical industry has a very significant share of revenues (around 30%) from Russia (revenues totalling around 0.4% of GDP).

### **Box 1.2: Economic surveillance process**

The Commission's Annual Growth Survey, adopted in November 2014, started the 2015 European Semester, proposing that the EU pursue an integrated approach to economic policy built around three main pillars: boosting investment, accelerating structural reforms and pursuing responsible growth-friendly fiscal consolidation. The Annual Growth Survey also presented the process of streamlining the European Semester to increase the effectiveness of economic policy coordination at the EU level through greater accountability and by encouraging greater ownership by all actors.

In line with streamlining efforts this Country Report includes an In-Depth Review — as per Article 5 of Regulation no. 1176/2011 — to determine whether macroeconomic imbalances still exist, as announced in the Commission's Alert Mechanism Report published on November 2014.

Based on the 2014 In-Depth Review for Hungary published in March 2014, the Commission concluded that Hungary was experiencing macroeconomic imbalances, which require monitoring and decisive policy action, in particular, the ongoing adjustment of the highly negative net international position, the high level of public and private debt in the context of a fragile financial sector and deteriorating export performance continue to deserve very close attention.

This Country Report includes an assessment of progress towards the implementation of the 2014 Country-Specific Recommendations adopted by the Council in July 2014. The Country-Specific Recommendations for Hungary concerned public finances and taxation, financial sector, labour market, education, business environment and network industries.

Table 1.1: Key economic, financial and social indicators

	2008	2009	2010	2011	2012	2013	Forecast		
							2014	2015	2016
Real GDP (y-o-y)	0.9	-6.6	0.8	1.8	-1.5	1.5	3.3	2.4	1.9
Private consumption (y-o-y)	-1.1	-6.7	-2.8	0.8	-1.9	-0.1	1.8	2.8	2.2
Public consumption (y-o-y)	3.1	1.4	-0.6	0.0	-1.3	3.2	1.4	0.0	-0.2
Gross fixed capital formation (y-o-y)	1.1	-8.2	-9.5	-2.2	-4.2	5.2	13.7	3.1	-1.0
Exports of goods and services (y-o-y)	6.9	-11.4	11.3	6.6	-1.5	5.9	8.0	6.0	6.7
Imports of goods and services (y-o-y)	6.0	-14.7	10.1	4.5	-3.3	5.9	9.8	6.1	6.1
Output gap	2.4	-4.6	-3.8	-2.0	-3.4	-2.4	-0.7	-0.1	-0.3
Contribution to GDP growth:									
Domestic demand (y-o-y)	0.3	-5.2	-3.8	0.0	-2.1	1.6	4.0	2.1	0.9
Inventories (y-o-y)	-0.1	-4.0	3.3	-0.2	-0.7	-0.5	0.2	0.0	0.0
Net exports (y-o-y)	0.7	2.6	1.3	2.0	1.4	0.4	-0.8	0.3	1.1
Current account balance (% of GDP), balance of payments	-7.0	-0.8	0.3	0.8	1.9	4.1	.	.	.
Trade balance (% of GDP), balance of payments	0.4	4.1	5.4	6.2	6.9	7.6	.	.	.
Terms of trade of goods and services (y-o-y)	-1.2	1.3	0.1	-1.4	-1.0	0.8	0.7	1.0	0.1
Net international investment position (% of GDP)	-102.7	-116.1	-109.4	-106.7	-94.1	-84.4	.	.	.
Net external debt (% of GDP)	57.5*	63.4*	61.4*	54.5*	57.9*	47.6*	.	.	.
Gross external debt (% of GDP)	156.0	174.4	162.6	182.5	159.9	144.9	.	.	.
Export performance vs advanced countries (% change over 5 years)	39.4	22.4	11.8	6.6	-11.5	-13.4	.	.	.
Export market share, goods and services (%)	0.6	0.6	0.6	0.6	0.5	0.5	.	.	.
Savings rate of households (net saving as percentage of net disposable income)	3.5	5.5	6.1	6.8	4.8	5.4	.	.	.
Private credit flow, consolidated, (% of GDP)	12.7	6.1	-4.2	-4.6	-6.3	-1.0	.	.	.
Private sector debt, consolidated (% of GDP)	106.0	117.5	116.1	115.4	101.7	95.5	.	.	.
Deflated house price index (y-o-y)	-2.7	-8.9	-6.1	-7.4	-9.2	-4.1	.	.	.
Residential investment (% of GDP)	4.1	4.2	3.1	2.2	2.0	1.4	.	.	.
Total financial sector liabilities, non-consolidated (y-o-y)	28.1	-0.8	-0.3	7.1	-6.7	-3.2	.	.	.
Tier 1 ratio <sup>1</sup>	.	.	.	.	.	.	.	.	.
Overall solvency ratio <sup>2</sup>	.	.	.	.	.	.	.	.	.
Gross total doubtful and non-performing loans (% of total debt instruments and total loans and advances) <sup>2</sup>	.	.	.	.	.	.	.	.	.
Change in employment (number of people, y-o-y)	-1.2	-2.5	0.0	0.8	1.7	1.6	5.6	2.0	2.1
Unemployment rate	7.8	10.0	11.2	11.0	11.0	10.2	7.7	7.4	6.6
Long-term unemployment rate (% of active population)	3.6	4.2	5.5	5.3	4.9	4.9	.	.	.
Youth unemployment rate (% of active population in the same age group)	19.5	26.4	26.4	26.0	28.2	26.6	.	.	.
Activity rate (15-64 year-olds)	61.5	61.6	62.4	62.7	64.3	65.1	.	.	.
Young people not in employment, education or training (%)	11.5	13.4	12.4	13.3	14.7	15.4	.	.	.
People at risk of poverty or social exclusion (% of total population)	28.2	29.6	29.9	31.0	32.4	33.5	.	.	.
At-risk-of-poverty rate (% of total population)	12.4	12.4	12.3	13.8	14.0	14.3	.	.	.
Severe material deprivation rate (% of total population)	17.9	20.3	21.6	23.1	25.7	26.8	.	.	.
Number of people living in households with very low work-intensity (% of total population aged below 60)	12.0	11.3	11.9	12.2	12.8	12.6	.	.	.
GDP deflator (y-o-y)	5.0	3.9	2.1	2.2	3.4	3.0	2.2	2.4	2.8
Harmonised index of consumer prices (HICP) (y-o-y)	6.0	4.0	4.7	3.9	5.7	1.7	0.0	0.8	2.8
Nominal compensation per employee (y-o-y)	7.2	-1.6	0.3	3.4	1.8	1.5	3.8	3.9	3.0
Labour productivity (real, person employed, y-o-y)	2.7	-4.2	0.6	1.8	-1.6	0.7	.	.	.
Unit labour costs (ULC) (whole economy, y-o-y)	4.4	2.8	-0.3	1.6	3.5	0.8	4.2	2.5	2.3
Real unit labour costs (y-o-y)	-0.5	-1.1	-2.4	-0.6	0.1	-2.1	1.9	0.2	-0.5
REER <sup>3)</sup> (ULC, y-o-y)	0.8	-9.8	-0.3	0.1	-3.6	-1.6	-0.6	-2.2	1.3
REER <sup>3)</sup> (HICP, y-o-y)	3.3	-8.0	-1.0	-0.8	-2.8	-0.7	-2.1	0.0	0.6
General government balance (% of GDP)	-3.7	-4.6	-4.5	-5.5	-2.3	-2.4	-2.6	-2.7	-2.5
Structural budget balance (% of GDP)	.	.	-3.4	-4.3	-1.3	-1.3	-2.6	-2.6	-2.4
General government gross debt (% of GDP)	71.9	78.2	80.9	81.0	78.5	77.3	77.7	77.2	76.1

(1) Domestic banking groups and stand-alone banks.

(2) Domestic banking groups and stand-alone banks, foreign-controlled (EU and non-EU) subsidiaries and branches.

(3) Real effective exchange rate

(\*) Indicates BPM5 and/or ESA95

Source: European Commission, 2015 winter forecast; ECB

Table 1.2: The MIP scoreboard

			Thresholds	2008	2009	2010	2011	2012	2013
External imbalances and competitiveness	Current Account Balance (% of GDP)	3 year average	-4%/6%	-7.1	-5.0	-2.5	0.1	1.0	2.2
		p.m.: level year	-	-7.0	-0.8	0.3	0.8	1.9	4.1
	Net international investment position (% of GDP)		-35%	-102.7	-116.1	-109.4	-106.7	-94.1	-84.4
	Real effective exchange rate (REER) (42 industrial countries - HICP deflator)	% change (3 years)	±5% & ±11%	8.0	7.8	-1.2	-4.2	-1.0	-4.0
		p.m.: % y-o-y change	-	2.7	-5.3	1.6	-0.4	-2.2	-1.4
	Export Market shares	% change (5 years)	-6%	23.3	12.1	2.4	-2.7	-19.9	-19.2
		p.m.: % y-o-y change	-	3.3	-2.6	-8.2	-3.6	-10.0	4.1
	Nominal unit labour costs (ULC)	% change (3 years)	9% & 12%	12.6	13.5	7.0	4.1	4.8	5.9
		p.m.: % y-o-y change	-	4.4	2.8	-0.3	1.6	3.5	0.8
	Deflated House Prices (% y-o-y change)		6%	-3.1	-9.0	-5.8	-6.9	-9.3	-5.0
Internal imbalances	Private Sector Credit Flow as % of GDP, consolidated		14%	12.7	6.0	-4.2	-4.5	-6.3	-1.0
	Private Sector Debt as % of GDP, consolidated		133%	106.0	117.5	116.1	115.4	101.8	95.5
	General Government Sector Debt as % of GDP		60%	71.9	78.2	80.9	81.0	78.5	77.3
	Unemployment Rate	3-year average	10%	7.6i	8.4i	9.7i	10.7	11.0	10.7
		p.m.: level year	-	7.8i	10.0	11.2	10.9	10.9	10.2
	Total Financial Sector Liabilities (% y-o-y change)		16.5%	26.2	1.9	-0.2	6.2	-5.9	-0.3

Flags: na: not available.

Note: Figures highlighted are the ones falling outside the threshold established by EC Alert Mechanism Report. For REER and ULC, the second threshold concerns non-Euro Area Member States. (1) Figures in italic are according to the old standards (ESA95/BPM5). (2) Export market shares data: the total world export is based on the 5th edition of the Balance of Payments Manual (BPM5). (3) Unemployment rate: i=Eurostat backcalculation to include Population Census 2011 results.

Source: European Commission

## 2. IMBALANCES, RISKS AND ADJUSTMENT



## 2.1. EXTERNAL SUSTAINABILITY

**Although the current and capital accounts have repeatedly recorded historically high surpluses, the stock of net external liabilities at above -80% of GDP continues to be in risky territory.** The rapid decrease in the Net International Investment Position since 2009 has led to a notable correction in the severity of the related risks. The robust net lending position of around +8% of GDP in both 2013 and 2014 was supported by all external balance components, including the recently improving export performance. The drivers of this development and its durability are analysed in more detail in this section. Finally, a short discussion is warranted on the recent slowdown in foreign direct investment inflows, as the composition of debt-creating and non-debt creating elements on the financing side has important economic implications.

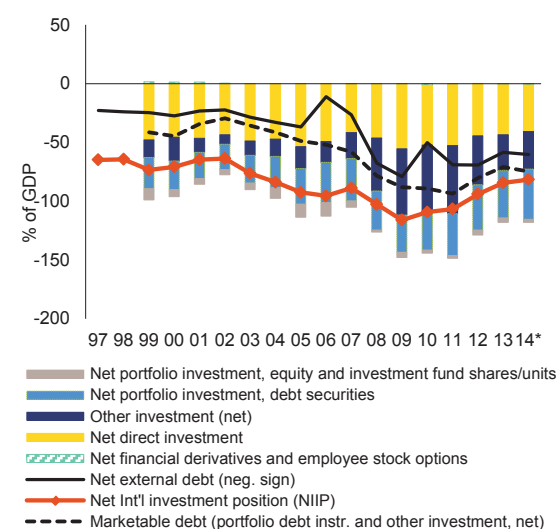
### Adjustment in external indebtedness

Since peaking at -116% of GDP in 2009, the overall improvement in the Net International Investment Position has been above 30 percentage points, reflecting the increasing current and capital account surpluses. The degree of the adjustment in the external balances reflects a level of rebalancing similar to that seen in the vulnerable euro area countries. At the same time, Hungary's regional peers (Visegrád countries) typically recorded improvements of much smaller magnitude (a couple of percentage points) over the last five years, their net lending positions are still being in deficit or showing a small surplus. Nevertheless, the significant reduction in external imbalances had up until 2012 been mainly driven by the compression of imports. The country's export performance clearly underperformed that of its regional peers, as demonstrated by the large accumulated losses in export market shares (see the detailed comparative analysis in the 2014 In-Depth Review). From a sectoral point of view, some two-thirds of the total change is attributable to the financial sector, and the remaining one-third to the private sector, with both the household and corporate sectors increasing their savings rates (while the net position of the central bank and the general government remained broadly unchanged).

**The rapid improvement in the Net International Investment Position has continued in 2013 by some 10 pps to -84% of GDP on account of**

**declining external debt.** Net external debt has declined from close to 70% of GDP in 2012 to around 58% by end-2013. The recent improvements came in spite of some negative effects from valuation changes in both 2012 and 2013, when the exchange rate remained relatively stable. This may turn out to be an even more important factor as the recent waves of forint depreciation may suggest a risk of prolonged weakness with the national currency. The stabilisation of this robust net lending position seen in recent quarters occurred despite a substantial pick-up in investment (which grew at 16.8% year-on-year in the first half of 2014). This suggests that the external balance surplus is also a result of improving export performance.

Graph 2.1.1: **Components of Net International Investment Position**



(1) Reserve assets excluded, \* indicates estimated figure using quarterly data

Source: European Commission

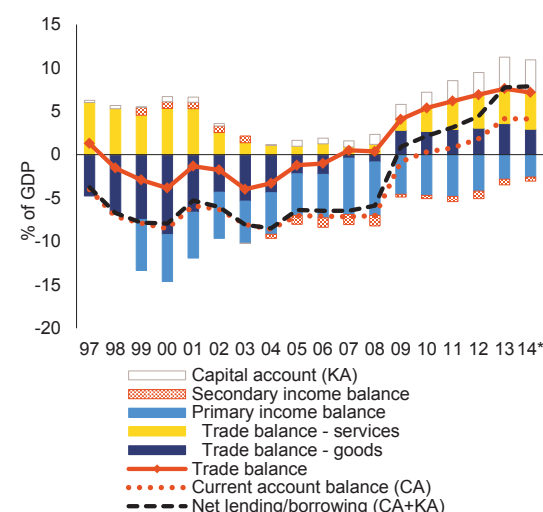
**Based on current information, the Net International Investment Position is anticipated to improve further markedly in the coming period.** By mid-2014, it declined further to around 82% of GDP. Regarding 2015 and 2016, the surplus projections for both the current and capital accounts contained in the Commission's 2015 winter forecast, ceteris paribus, would imply a further steep reduction in the Net International Investment Position to below 70% of GDP by the

end of 2016.<sup>(1)</sup> Looking further ahead, the illustrative medium-term scenarios modelled by the Commission show that Hungary would need to achieve a current account surplus of only 1.5% of GDP on average over the next 10 years in order to halve its negative Net International Investment Position by 2024 (to around -42% of GDP). Based on the government plans regarding the potential EU structural fund inflows in the present and forthcoming multiannual financial frameworks, the capital account could plausibly be projected to show a surplus in the magnitude of at least 2% of GDP in the coming decade. Taking into account this additional positive factor, the current account could be in a slight deficit of around 0.5% of GDP, yet the Net International Investment Position ratio could still be halved.

**All components of the current account have generally been constantly improving since 2008, leading to a historically high surplus of slightly over 4% of GDP in 2013.** Both the goods and services sub-balances have recorded significant surpluses, the former despite the fact that Hungary repeatedly had one of the highest trade deficits of energy products in the EU (consistently more negative than -6% of GDP over recent years). In addition, the structurally high primary income deficit (reflecting the accumulated large foreign direct investment stock) has been progressively curbed throughout the recent period. While the balance of factor incomes registered massive deficits of more than 6% of GDP prior to the crisis, more recently, it has been on a downward path falling to below -3% of GDP. This is chiefly due to the remittances of the rapidly increasing number of Hungarian frontier workers.<sup>(2)</sup> In addition, the

recent decreases in debt service payments (reflecting the fall in both interest rates and external indebtedness) also lowered the deficit.

Graph 2.1.2: **Components of the external position (current and capital accounts)**



\* indicates estimated figure using quarterly data.

Source: European Commission

**Financial flows from the EU made an increasing contribution to the current account surpluses as well as to improvements in the net external financing capacity.** Current EU transfers (primarily direct agricultural payments) improved the current account by close to 2% of GDP in recent years, while EU structural fund flows financing predominantly investment activities (registered in the capital account) followed a constant increase after the EU entry in 2004 to the magnitude of 2% of GDP in 2010 and rising further to over 3.5% of GDP in 2013. The recently observed levels of EU inflows are expected to be at least maintained in 2015, with some scheduled declines in subsequent years. Overall, financial relations with the EU progressively contributed to the increase in the country's net lending.

**Despite the recent large adjustments, the negative Net International Investment Position and the associated relatively high rollover needs continue to represent a source of vulnerability**

further details Central Statistical Office (2014), National accounts of Hungary, 2013 (preliminary data).

<sup>(1)</sup> Moreover, the conversion of households' foreign exchange mortgage loans into forints may further reduce the gross external debt figures through banks' balance sheet adjustment. At the same time, as credit institutions have predominantly obtained the necessary foreign exchange funds through the central bank's liquidity instruments, net external debt will not be affected by the conversion (i.e. the decline in gross external debt entails a decrease in international reserves).

<sup>(2)</sup> In September 2014, the Central Statistical Office introduced important methodological changes (more appropriate data sources for both the headcounts and the wages) for the calculation of compensation of employees, which overall led to a very significant revision of past data: most notably, the 2013 income balance was improved by 1.4% of GDP. As a consequence, this sub-item's net surplus more than tripled within a short time-period: from 0.6% of GDP in 2010 to 2.1% of GDP in 2013. See for

**for the economy.** Looking forward, sustainability calculations suggest there will be further significant improvements, even if the size of EU fund inflows will be moderating. Nevertheless, the country is still facing considerable external rollover needs (close to a yearly 25% of GDP), which underlines the importance of maintaining the confidence of foreign investors.

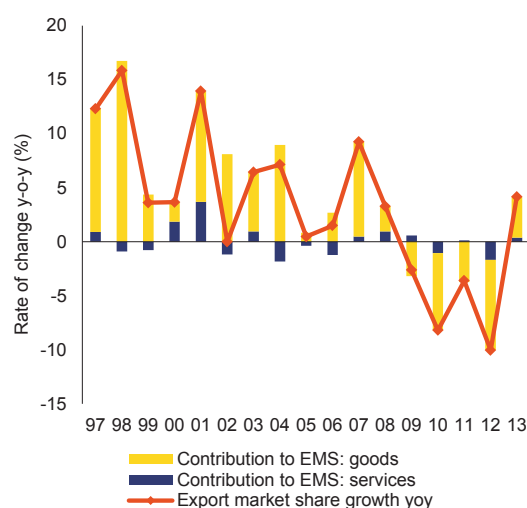
### Drivers of trade performance

**Following the uninterrupted fall in export market shares between 2009 and 2012, the deterioration was broadly halted in 2013.** The five-year loss in export market shares experienced by Hungary (-19.2% in 2013) was much more substantial than that of its regional peers (Czech Republic: -7.7%, Poland: -0.4%; Slovakia: -2.2%), while other new Member States (Baltic countries, Bulgaria, and Romania) have all recorded positive figures, often large increases). The moderate turnaround (year-on-year growth of 4.1% in 2013) in the export market share has chiefly been driven by increased production capacity in the automobile industry, which, according to the companies' reports, could have added to exports 2 to 4 percentage points in recent years. Based on the Commission's 2015 winter forecast, the export market share is expected to continue improving over the period to 2016.

**The loss of export market shares occurred despite slightly improving cost competitiveness since the crisis.** Growth in nominal unit labour costs remained under control. Despite a 19% hike in the minimum wage in January 2012 with some spill-over effects on the whole wage structure, the year-on-year unit labour costs growth was limited to 3.5%). The adjustment in the real effective exchange rate had originally been driven by the nominal depreciation of the forint and was subsequently supported by successive moderate declines in real compensation per employee. Indeed, based on updated estimates using the Commission's fundamental exchange rate equilibrium method <sup>(3)</sup>, the real effective exchange rate for 2012 appeared to be somewhat

undervalued (by roughly 3.7-5.6%). In this context, it is worth highlighting that the expected positive effects of the real effective exchange rate depreciation are likely to have been attenuated by a number of factors. First, given the high volume of foreign currency debt in the corporate sector <sup>(4)</sup>, improvements in price competitiveness could well have been offset by a deterioration in firms' balance sheet position. Second, the import share of Hungarian exports is traditionally one of the highest in the EU (hovering around 45% over the last 15 years <sup>(5)</sup>), implying that the impact of the exchange rate on exports is proportionally limited.

Graph 2.1.3: Evolution of Hungary's export market share (year-on-year)



Source: European Commission

**The large cumulative losses in export market shares could therefore be attributed to deteriorating non-cost competitiveness factors.** The traditional resilience of the Hungarian export sector has to a large extent been predicated on the

<sup>(3)</sup> For methodological details, see Salto, Matteo – Alessandro Turrini (2010), Comparing alternative methodologies for real exchange rate assessment, European Economy Economic Papers No. 427.

<sup>(4)</sup> Before the outbreak of the crisis, some 55% of all corporate domestic loans were denominated in foreign currency, out of which up to two-thirds were unhedged, suggesting a significant degree of currency mismatch in the economy.

<sup>(5)</sup> The Hungarian central bank published various estimates for the import content, and based on 2008 data, it arrived at an even higher ratio of 56% (Bodnár, Katalin, György Molnár, Gábor Pellényi, Lajos Szabó, Judit Várhegyi (2013), Dynamics of the trade balance and developments in exports and imports, MNB Bulletin, Special October issue, pp. 37-45.). The central bank study found that the local value added content was particularly low for electronic and optical products as well as for vehicles (most notably for the automotive industry).

very significant share of high-technology goods. Its share in total exports was hovering over 20% over the decade 2000-10, but has started to gradually decline since 2009 and reached around 16% in 2013. This is still the highest ratio among new Member States, but nevertheless represents some quality shift in the export structure. Furthermore, Vandebussche (2014) <sup>(6)</sup> found in an empirical study that Hungary displays a 'bimodal' quality distribution in the structure of its export products. This specialisation pattern is characterised by two peaks in the distribution: one in low, and one in the high quality products, with relatively few goods in the middle field. Low quality products are increasingly facing tough price competition from emerging markets, in particular from China. The study referred to above also found that quality upgrades between 2007 and 2011 showed an overall slow dynamics in the Visegrád countries (including Hungary, unlike in the Baltic states for example), which left a considerable part of their exports exposed to cost competition.

**Looking ahead, the durability of the record high trade surpluses in the medium term may not be guaranteed.** Starting from a level slightly above zero prior to the crisis, the trade surplus had surged to close to 8% of GDP by 2013. Concerning the overall values, service exports are much lower (some one-fifth) than the country's exports of goods, but the two factors' respective contributions to the increased surplus were broadly even in recent years. The question that naturally arises is to what extent the adjustment could be considered permanent, or at what level the trade balance will be when the temporary factors (such as the subdued domestic demand) peter out. In this context, it is worth recalling that according to the calculations by Halpern-Oblath (2014) <sup>(7)</sup>, based on Hungary's trade openness, its relative economic development (as measured by its GDP per capita in purchasing power parity terms) and the valuation of the local currency, the high surplus level in 2013 cannot be explained by the country's fundamentals. At the same time, some recent factors may delay the expected moderation of the

trade surplus. First, Hungary is set to enjoy a sizeable terms-of-trade improvement due to the substantial fall in the oil price. Second, some of the recent large-scale investments in the automotive industry are still in the maturation phase, and industrial production and exports will therefore further boosted in 2015 and potentially even in 2016.

**Recent investment trends may suggest some deterioration in the services trade balance in the coming period.** The investment-to-GDP ratio has stayed below 20% in the 2011-2013 period, compared to its level of 23%-24% seen prior to the crisis. This being said, the 2014 surge in investment as projected in the Commission's forecast should correct some of this erosion. In parallel to this overall decline, there was a significant change in the composition of investment activity over the last five years: the relative share of manufacturing and public investments increased, largely at the expense of real estate activities, but the share of market services also declined (e.g. wholesale and retail trade, transportation and storage, accommodation, information and communication). Given the significant role played by these internationally 'tradable services' in recent trade surpluses, the continuation of these trends may impact the country's external lending position both directly (through reduced trade in services) and indirectly (through a smaller net balance of tourism).

**Despite Hungary's recent high trade surpluses, and the improved cost competitiveness, the turnaround in its export performance is not yet ensured.** Further integration of domestic companies into global supply chains would be conducive to increasing the domestic value-added as well as potentially making more resilient the product structure of exports. In previous years, repeated interventions by the government in the functioning of certain service sectors, typically by increasing restrictions to entry, and the unpredictability of these actions have led to greater uncertainty for investors.

### Foreign direct investments

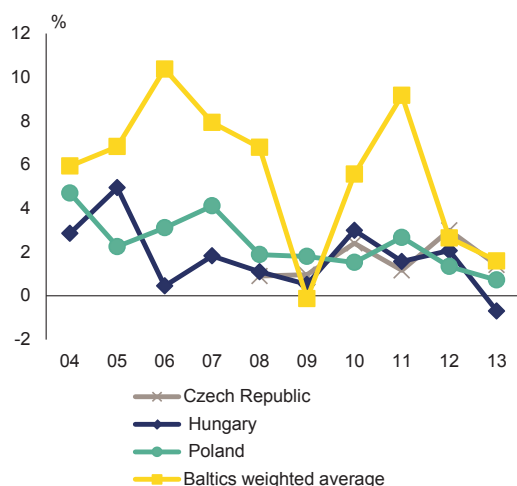
**The continued sluggishness of foreign direct investments in Hungary is a source of concern.** Attracting foreign direct investment has traditionally been treated as an important means of

<sup>(6)</sup> Vandebussche, Hylke (2014), Quality in Exports, European Economy Economic Papers. No. 528.

<sup>(7)</sup> Halpern, László – Gábor Oblath (2014), The "bright" and gloomy side of economic stagnation, Economic Review, Vol. 61. No. 7-8. pp. 757-800.

structural upgrading, technology transfer and productivity growth in the new Member States. For the Central and Eastern European region, annual net foreign direct investment flows are considerably smaller than prior to the crisis, reflecting a wider European trend. Nonetheless, the decrease appears to be slightly more pronounced in Hungary than for other new Member States, in particular over recent quarters (see Graph 2.1.4, which shows statistics including special purpose entities as these are the internationally comparable data).

Graph 2.1.4: **Net foreign direct investment in the region (% of GDP)**



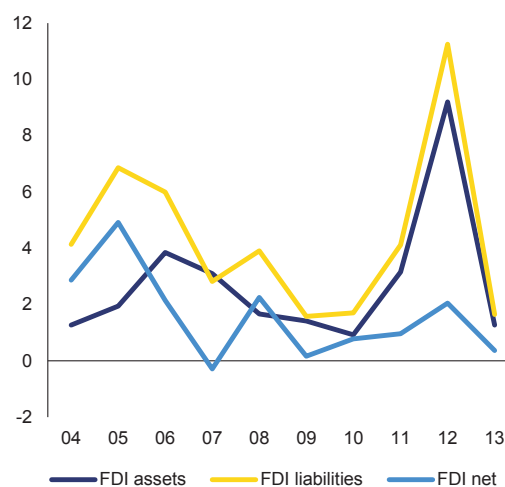
Source: European Commission Calculation

**Annual net foreign direct investment flows<sup>(8)</sup> have been on generally decreasing trend since Hungary's accession to the EU ten years ago.** Numerous one-off factors have featured over recent years, which could substantially distort the assessment of foreign direct investment. Specifically, it may be worth filtering out two factors to better capture the 'genuine' foreign direct investment transactions by non-resident corporations: (i) the continuous wave of capital injections by parent banks to offset the capital shortfall resulting from losses in their Hungarian subsidiaries (see also the discussion in section 2.3); (ii) large-scale corporate acquisitions by the state

<sup>(8)</sup> When analysing trends in foreign direct investments, it is worth focusing on net transactions, as the gross capital flows are heavily affected by the increasing weight of capital flowing through Hungary (capital in transit).

(2011: MOL, 2013: E.On). MNB<sup>(9)</sup> estimated the underlying trend (adjusted for the above-mentioned significant one-off impacts) in net foreign direct investment flows at an annual average of around EUR 0.5-1 billion between 2010 and 2013. An important explanatory factor for the low average is the decrease in reinvested earnings: in a subsequent central bank report<sup>(10)</sup>, the average ratio for reinvested profits was reported to be ca. 40% prior to the crisis, while the corresponding average for the 2009-13 period is less than 20%. On a positive note, while in 2009-10, dividend payments even exceeded total profits of foreign-owned firms (as presumably many parent companies used the retained earnings of subsidiaries to tackle their liquidity needs), the situation has been improving since 2011.

Graph 2.1.5: **Foreign direct investment flows in Hungary (% of GDP)**



(1) The data series are excluding SPEs

Source: MNB

**Statistics focusing on greenfield foreign direct investment investments also suggest a deteriorating attractiveness.** Total foreign direct investment inflows as reported in the balance-of-payment statistics may overestimate the related boosting effects as flows corresponding to the acquisition of existing facilities are also included.

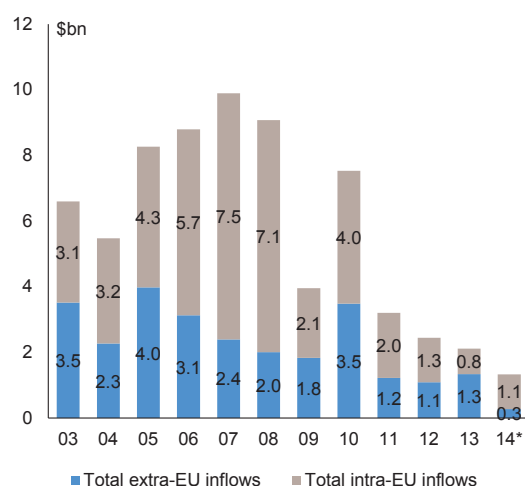
<sup>(9)</sup> MNB (2014a), Developments in Foreign Direct Investment in Hungary after the crisis, In: Report on the Balance of Payments – July, pp. 23-31.

<sup>(10)</sup> MNB (2014b), Corporate incomes, In: Report on the Balance of Payments – September, pp. 24-33.



It is therefore useful to analyse a dataset showing only greenfield investments, i.e. only those projects where a company establishes or expands its manufacturing base, service function, or extraction operation. This is important as greenfield projects, by definition, increase the host country's production capacity, thereby exerting a positive impact on economic growth, whereas this is not necessarily the case for mergers and acquisitions. Greenfield foreign direct investments show a clear deceleration in the aftermath of the crisis (see Graph 2.1.6), which is reflected in their decreasing role in private sector employment creation: while between 2004 and 2007, they accounted for at least 40 000 new jobs each year, this decreased to around 10 000 recently.

Graph 2.1.6: **Greenfield foreign direct investment inflows into Hungary (2003-2014)**



(1) Data for 2014 covers the January - August period.  
**Source:** Financial Times FDImarkets database

**The underlying foreign direct investment flows have recently even recorded negative figures.** The last available reading for the net foreign direct investment figure between Q4-2013 – Q3-2014 is EUR 0.5 billion, but if parent bank recapitalisations are deducted, the resulting figure is some EUR -1 billion. Furthermore, the observed outflow from non-financial corporations is not concentrated, but spread across a wide range of industries, including machinery, trade and communications. The recently concluded series of

strategic partnership agreements <sup>(1)</sup> do not appear to have been able to reverse the negative trend.

**The slowdown observed in net foreign direct investment flows, including greenfield investments, in particular over recent quarters, may be linked to a number of measures with potential detrimental impacts on the business environment.** Specifically, the introduction of new barriers in previously open markets and the increased reliance on sector-specific taxation might have detracted from the overall attractiveness of the Hungarian economy. Moreover, the regulatory framework suffers from the lack of both systematic stakeholder consultations and evidence-based impact assessments (see the discussion on business environment in section 3.4). Accordingly, among the Visegrád countries, OECD Product Market Regulation indicators show Hungary as having the highest legal barriers to entry. In addition, recent international competitiveness surveys (e.g. World Economic Forum) rank the country as having the least transparent policy-making in its Visegrád peer group.

<sup>(1)</sup> The government concluded some 50 strategic partnership agreements between mid-2012 and end-2014. According to Transparency International Hungary (Lifting the Lid on Lobbying. Strategic Partnership Agreements in an Uncertain Business Environment. National Report, 2014), the companies in question represent slightly more than 8% of private sector headcount, but they account for ca. 35% of total exports. Moreover, there is a notable concentration in the sectors openly preferred by the government: the companies chosen for such agreements cover approximately 90% of employment in the pharmaceutical sector, 37% in automotive industries and 47% in electronic and electrical industries.

## 2.2. GOVERNMENT DEBT SUSTAINABILITY

**At somewhat below 80% of GDP, Hungary's general government debt is an important remaining vulnerability of the economy.** Hungary's public debt is below the EU average, but is significantly higher than that of its regional peers <sup>(12)</sup> and exceeds the level which would be in line with the country's economic development <sup>(13)</sup>. Although decreasing, Hungary's short-term sovereign financing needs are still among the highest within the group of emerging and middle income economies. The strong dependency on external sources is a further factor contributing to the high exposure of the economy to risks related to government debt. After reviewing the origins of high public indebtedness, this section examines the prospects for reducing government debt. The surplus of the primary government balance (maintained since 2012) ensures a precondition for debt-reduction and the required further improvement could be facilitated by expected savings in age-related costs. The country's low growth potential, however, could hamper the decline of government debt and remains a source of fragility. Moreover, foreseeable budgetary risks may prevent the improvement of the primary balance. The impacts of these driving forces and risk factors are assessed on the basis medium-term debt projections.

### Historic developments and short-term outlook for government debt

**The current high level of Hungary's government debt is the result of lax fiscal policies in the last decade exacerbated by the impact of the subsequent financial and economic crisis.** Hungary saw a rapid increase in its government debt ratio during the last decade. From a level of 51.9% in 2001, it rose by almost 30 pps., to reach around 81% over ten years (see Graph 2.2.1). In the pre-crisis years, this was driven by accumulating primary deficits (which reached an annual average of 3½% of GDP

between 2002 and 2007; see Graph 2.2.2). At the same time, both the "snowball" effect <sup>(14)</sup> and stock-flow adjustments overall were able to contain the dynamics of rising public indebtedness thanks to a relatively high growth and the still significant receipts from privatisation. The outbreak of the financial crisis brought a turnaround in this situation. The primary deficit was practically eliminated as a result of fiscal consolidation efforts, including measures implemented under the EU-IMF financial assistance programme for Hungary. But the fall in output generated a large debt-increasing effect. Moreover, stock-flow adjustments made a contribution of a similar magnitude to the rising debt levels. This occurred mainly because of a sharp increase in state cash deposits <sup>(15)</sup>, but also as a consequence of the depreciation of the forint.

---

<sup>(14)</sup> The snowball effect measures the annual change in the debt-to-GDP ratio, which is produced by the difference between the implicit nominal interest rate and nominal growth. The magnitude of the effect is proportional to the previous year's debt ratio.

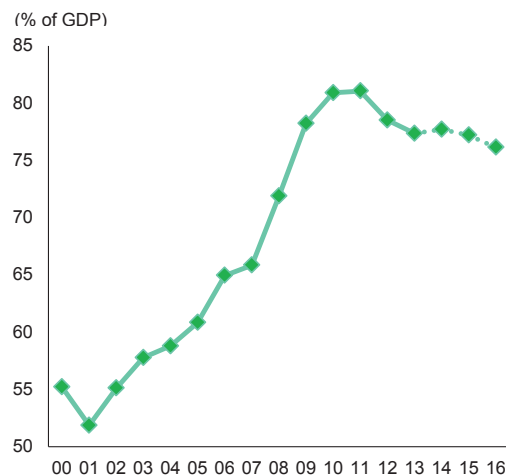
<sup>(15)</sup> While there was a temporary increase in the level of cash deposits due to the frontloaded nature of the EU-IMF financial assistance loan, government deposits have remained considerably higher since the crisis (i.e. around 5.5% of GDP on average compared with the pre-crisis levels of around 2.5%). This reflects the higher liquidity needs of government financing when market conditions are more volatile.

---

<sup>(12)</sup> Hungary's government debt ratio stood at 77.3% of GDP in 2013, whilst the average of the debt ratios of the other three Visegrád countries was only 52%.

<sup>(13)</sup> By regressing the debt ratio on per capita income, which could be seen as an indicator of a nation's wealth, Hungary's government debt is found to be around a third higher than would be expected at a similar income position. See also Hungarian central bank (MNB) (2013), Projection on the evolution of government deficit and debt (in Hungarian).

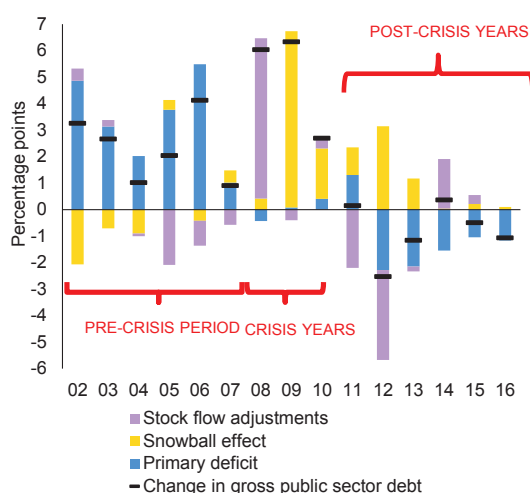
Graph 2.2.1: **Gross government debt ratio: historic data and short-term projection**



(1) Figures for 2014-2016 refer to the European Commission 2015 Winter Forecast.

Source: European Commission

Graph 2.2.2: **Composition of the annual change in gross government debt**



Source: European Commission Calculation

The government debt ratio has been falling since the start of the current decade and is expected to continue decreasing moderately in the short term, but it is not on a firm decreasing path yet. Between 2011 and 2013, the debt ratio was reduced by 3.6 pps., but this mainly was the result of a one-off effect generated by stock-flow adjustments. The debt-decreasing impact of the significantly improving primary balance was more

than offset by the joint effect of low growth and relatively high financing costs. The debt reduction was therefore achieved thanks to the sizeable capital transfer (amounting altogether to 10% of GDP) that resulted from the state's takeover of mandatory second-pillar private pension assets during the same period. <sup>(16)</sup>

With the fading effect of the pension asset transfer, the European Commission 2015 winter forecast projects a slowing down in the speed of debt reduction. Over the short-term horizon of 2014-16, the debt ratio is expected to decrease by only 1.2% of GDP. The reduction of the debt level is expected to be contained by adverse stock-flow adjustment effects, which may even result in a slight increase of the debt ratio in 2014 <sup>(17)</sup>. At the same time, the primary balance, although deteriorating slightly, would already set the pace for debt reduction. This is because the snowball effect (i.e. the effect of interest rates on government debt and GDP growth), would not counteract its impact noticeably in the short term thanks to economic recovery. However, the macroeconomic drivers of debt dynamics are expected to change adversely for Hungary in future years as the economy reverts to its relatively low growth potential and sovereign yields start to rise again from their current historically low levels. This implies that the primary balance would need to be improved in the medium term to ensure that the government debt continues to decrease sufficiently, unless the growth potential of the country can be increased. This issue is explored on the basis of a medium-term debt projection analysis.

### Medium-term debt projections

The medium-term debt projection for Hungary was performed with the help of the European

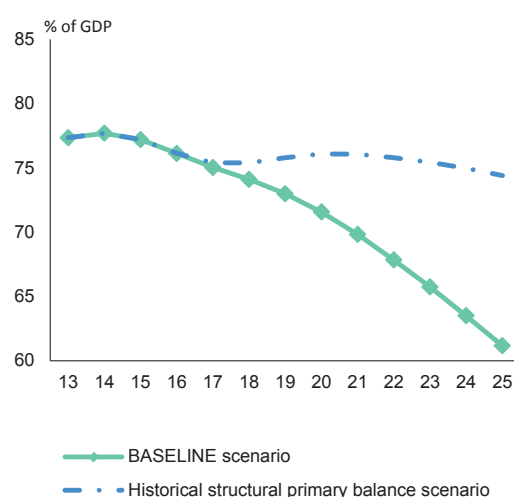
<sup>(16)</sup> Only about 70% of the transferred assets were used directly for debt reduction, while some 15% was kept in the permanent state portfolio with rest absorbed by the increased deficit in 2011. Moreover, the debt-reducing impact of pension assets was further reduced by offsetting stock-flow adjustments, including the revaluation effect of weakening the exchange rate and the financing of company acquisitions by the state.

<sup>(17)</sup> In 2014, this is mainly due to weakening of the exchange rate, but also partly to corporate takeovers by the government. In 2015, the need to provide domestic advance payments in the closing phase of EU co-financed projects is a major factor hindering the reduction of debt.



**Commission's debt sustainability analysis framework.** Crucially, the Commission's *baseline scenario* discussed below is based on assumptions of long-run convergence of the main macroeconomic variables <sup>(18)</sup>. The projection relies also on the assumption of constant fiscal policy (i.e. the underlying structural primary balance is set at the value of the last year for which a short-term forecast is available – 1.3% of GDP in 2016), and incorporates the effect on the fiscal balance of the changes projected in ageing costs (i.e. demography-sensitive public expenditures, like pensions, healthcare and long-term care) based on the Commission's most recent report on ageing.

Graph 2.2.3: **Gross government debt ratio: the baseline scenario**



**Source:** European Commission Calculation

**The Commission's baseline scenario projects a debt trajectory for Hungary that declines steadily in the medium term, primarily as a result of the projected decrease of ageing costs (see Graph 2.2.3). Along the baseline, the debt-to-**

GDP ratio is expected to decrease – at an accelerating rate during the next decade – from about 76% in 2016 to below 62% by 2025 (i.e. an overall decrease of 15 pps. equivalent to an average annual rate of 1.6 pps.). This improvement is largely driven by savings in age-related costs, which account for about two-thirds of the total estimated reduction <sup>(19)</sup>. If, however, the primary balance was not to improve beyond the level forecast for 2016 (i.e. in the absence of the projected savings in age-related costs), Hungary's debt ratio would likely decrease rather very slowly, remaining above 70% by the end of the examined 10-year period, under the given macroeconomic assumptions. On the other hand, the projected savings in ageing costs cannot secure a steadily declining path with the debt-to-GDP ratio essentially remaining stagnant, if the structural primary balance was to revert to its historical average (-0.5% of GDP vs. 1.3% for the baseline) as it is assumed under the historical structural primary balance scenario. This highlights the importance to sustain fiscal consolidation efforts.

**The projected fall in ageing costs, which would facilitate the reduction of debt, reflects to a large extent the effect of parametric pension reforms.** Most of the projected savings in demography-sensitive public expenditure incorporated in the baseline scenario (around 90%) will arise from the reduced level of spending on public pensions. The costs of financing public pensions will fall in Hungary despite a steadily ageing population <sup>(20)</sup>. This demonstrates the effect of successive parametric reform measures, adopted in part under the EU-IMF financial assistance programme, with the aim of reducing pension expenditure from a relatively high level in an international comparison. These measures limit both the level of benefits and the number of recipients over the projection period. <sup>(21)</sup> However,

<sup>(18)</sup> The convergence path of the underlying macroeconomic variables includes the following central assumptions as agreed by the Economic Policy Committee: i. long-term interest rates converge to 3% in real terms, while the short-term interest rates move to a value consistent with the historic euro-area yield curve. ii. real GDP growth is determined by the assumed closure of the output gap in T+5 (i.e. 2019) and potential growth estimated on the basis of the T+10 methodology. In the case of Hungary, this implies that the annual growth rate decelerates from around 2% in 2016 to 1.5% in 2019 and then gradually increases to 2% by 2025.

<sup>(19)</sup> New estimates of age-related costs are scheduled to be prepared in spring 2015. The overall profile of the forthcoming age-related cost projections for Hungary is likely to be broadly similar to that of the 2012 Ageing Report, i.e. showing a decrease in costs over the coming decade.

<sup>(20)</sup> The number of people aged 65 or over is projected to increase in Hungary by 18% between 2015 and 2025.

<sup>(21)</sup> An important element in limiting expenditure on pension is the reshaped indexation rule applied to benefits, which has been linked exclusively to inflation. In addition, a number of measures were introduced to increase the effective age of retirement. This includes the gradual increase of the

studies on the Hungarian pension system raise concerns regarding the future adequacy of retirement benefits as the number of elderly people without a sufficient contribution record to earn at least a modest pension is expected to increase considerably.<sup>(22)</sup> To tackle old-age poverty effectively, additional spending might thus be needed potentially leading to lower-than-projected savings in ageing-costs.

Table 2.2.1: The examined fiscal policy-risk scenarios

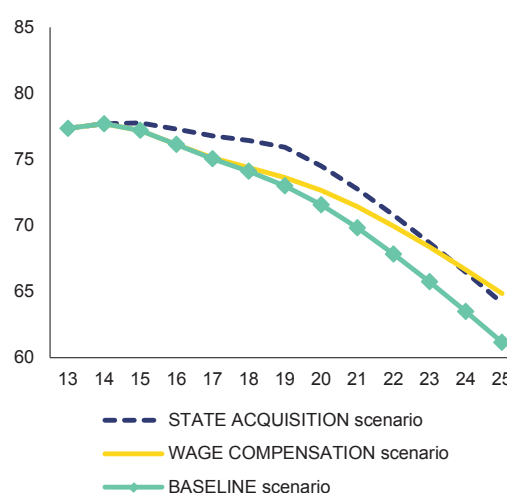
Policy-risk scenario	Details of the assumed budgetary effects
State acquisition	Starting from 2015, a debt-increasing stock-flow adjustment effect over five successive years amounting to 0.6% of GDP annually.
Wage compensation	The primary balance gradually deteriorates between 2017 and 2020, reaching an effect of 0.5% of GDP per annum due to the net budgetary costs of public pay rises.
Paks II. nuclear power plant construction	The costs of investment are evenly distributed during the construction phase from 2018 to 2025, deteriorating the primary balance by 1.1% of GDP per annum on average.
Combined	Merging the effects of the above three scenarios.

Source: European Commission Calculation

**Hungary's debt reduction path is surrounded by considerable budgetary risks.** In order to better evaluate these risks, the debt sustainability analysis framework was extended, by adding alternative scenarios that included assumptions on potential adverse fiscal policy developments. The following plausible policy-risk scenarios were examined (for the corresponding assumptions see Table 2.2.1): (i) the *state acquisition scenario* reflects the government's revealed preference for extending state ownership (in particular in the energy, banking and public utility sectors); (ii) the *wage compensation scenario* reflects the accumulating wage pressures in the government sector (with the majority of public employees' salaries having been nominally frozen since 2008) and the wage compensation schemes that are already implemented or are planned to be introduced in certain sub-sectors. It is therefore

assumed that the public wage bill would gradually revert back to its historical average; (iii) the *Paks II nuclear power plant construction scenario* models the impact of a large scale investment project on government debt. The estimated total costs of the project is EUR 12.5 billion, and it is planned to be implemented under an inter-governmental contract already signed with Russia<sup>(23)</sup>; and (iv) the *combined policy-risk scenario* incorporates simultaneously all the above mentioned effects on the government debt trajectory.

Graph 2.2.4: Gross government debt ratio: state acquisition and wage compensation scenarios



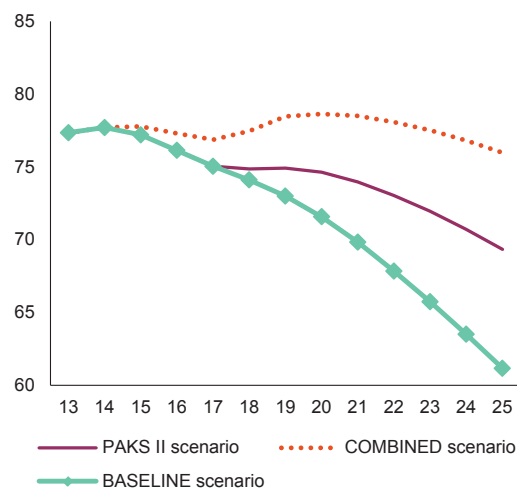
Source: European Commission Calculation

<sup>(23)</sup> The projection took into account the investment's effect on growth and additional tax receipts incorporating the estimates of a recent cost-benefit analysis. See Romhányi, B. (2014), The Paks II Project: Budgetary policy aspects of the investment, Energiaklub Climate Policy Institute and Applied Communications.

statutory retirement age to 65 years and the removal of most of the options for early retirement. For more details, see Hungarian Ministry of National Economy (2014), Country fiche on pensions – Hungary.

<sup>(22)</sup> The Prime Minister's Office (2010), Report on the Pension and Old-aged Roundtable (in Hungarian).

Graph 2.2.5: **Gross government debt ratio: the Paks II and the combined policy scenarios**

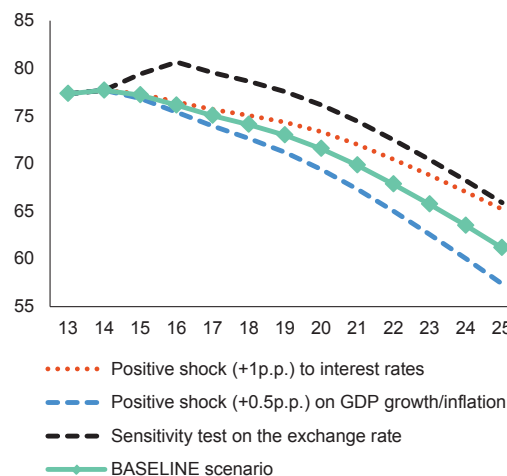


Source: European Commission Calculation

The budgetary risk scenarios examined would counteract to a considerable extent the effect of favourable age-related cost-savings on government debt. The state acquisition scenario would absorb about a fifth of the total debt-reduction projected in the baseline with a contained decrease of government debt during the second half of this decade, while the salary increases in the wage compensation scenario would negate a quarter of the reduction (see Graph 2.2.4). The impact of the planned nuclear power plant construction on public debt (as simulated under the Paks II scenario) is more substantial, equivalent to more than a half of the debt reduction achieved in the baseline (see Graph 2.2.5). The debt trajectory would flatten out and even slightly increase when the construction begins, before the effect of the declining ageing costs and the moderately improving economic growth eventually prevail, and the government debt ratio would remain close to 70% in the completion year (i.e. 8 pps. above the projected end-point of the baseline scenario). Allowing the combined impacts of the examined adverse fiscal policy developments, the government debt would start to increase again resulting in a full crowding-out effect vis-à-vis the baseline scenario. In sum, budgetary risks could

significantly alter the favourable outlook for debt reduction indicated by the baseline projection <sup>(24)</sup>.

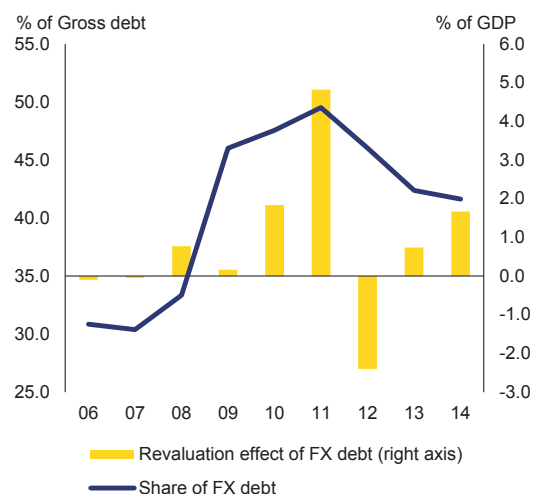
Graph 2.2.6: **Gross government debt ratio: sensitivity to macroeconomic variables**



Source: European Commission Calculation

<sup>(24)</sup> The budgetary risk scenarios could also be assessed in terms of fiscal effort – assumed to be implemented on a permanent basis in 2017 – which would be required to bring the debt ratio back onto its baseline path by 2025. On this basis, the assumed extension of state ownership would need an offsetting effort of 0.3% of GDP, while this would amount to 0.4% of GDP under the public-sector wage increases. To counterbalance the impact of the nuclear power plant project, the primary balance should be improved by 0.9% of GDP, and the required improvement would be 1.7% of GDP for the combined risk scenario.

Graph 2.2.7: **The share of FX denominated government debt and the effect of previous exchange rate changes on the gross debt ratio**



(1) The series showing the proportion of foreign currency debt uses annual averages. (2) The revaluation effect shows the component of stock-flow adjustment that affects the debt ratio, as a result of exchange rate changes.

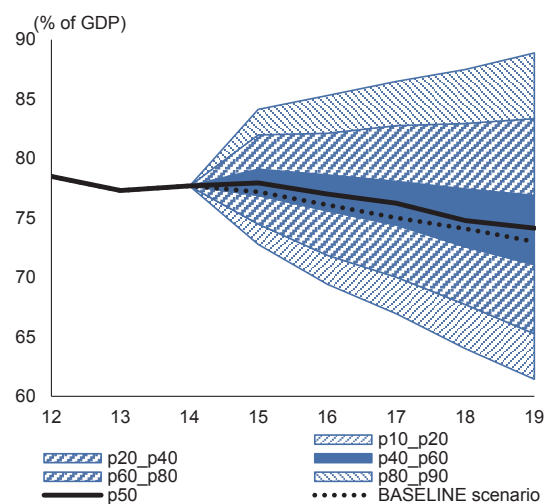
Source: MNB, Central Statistical Office of Hungary

**The debt trajectory projected for Hungary displays a relatively high sensitivity to macroeconomic shocks.** This is particularly the case for potential exchange rate movements due to a high proportion of foreign currency-denominated government liabilities (currently at around 40%; see Graphs 2.2.6 and 2.2.7). Since the beginning of the crisis, exchange rate developments have overall generated a debt-increasing impact equivalent to almost 8% of GDP. Assuming a shock – unfolding during 2015 and 2016 – identical to the maximum historical change seen in the exchange rate in recent years (i.e. the depreciation episode in 2011), the debt ratio would immediately rise above 80%, and within ten years, would reach a level that deviates from the baseline by around 5 pps. Given this, the Hungarian government's plan to reduce the proportion of its debt held in foreign currency – potentially close to the pre-crisis level of about 30% – via the central bank's self-financing programme would limit the risk exposure of government debt. <sup>(25)</sup> Turning to

<sup>(25)</sup> The self-financing programme announced in April 2014 entails a set of monetary policies to channel excess liquidity of commercial banks from the central bank's account to government securities. Thus the debt management agency could switch to increased forint

sensitivity tests for the other macroeconomic drivers, a permanent +1 pp. increase in interest rates (on newly issued and rolled over debt) is estimated to raise government debt over the projection horizon by about 4% of GDP. On the other hand, an increase of the real growth rate (or inflation) of +0.5 pp. would have a cumulative debt-reduction effect of a similar magnitude (or a symmetric debt-increasing effect for an equivalent shock with a negative sign). The likelihood of unfavourable scenarios in which a combination of adverse macroeconomic shocks would affect the debt trajectory can be investigated using stochastic debt simulations.

Graph 2.2.8: **Stochastic debt projections, 2015-19**



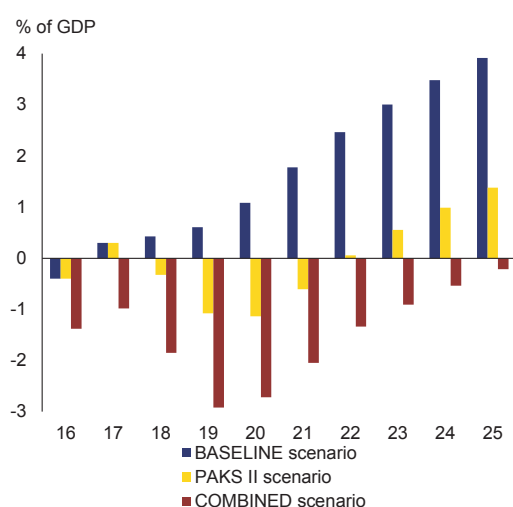
Source: European Commission Calculation

**Simulations reveal that the government debt reduction path is not robust enough to show resilience against adverse shocks.** In the medium-term baseline scenario, government debt is expected to decline gradually to 73% of GDP by 2019. Stochastic debt simulations based on historical macroeconomic shocks to the interest

issuances, while repaying maturing foreign currency debt by converting the receipts at the central bank, resulting in a parallel decline of the central bank's foreign-exchange reserves. Note, however, that this conversion process involves a trade-off from the point of view of gross government debt. Notably, exchange-rate losses resulting from the recent years of depreciation will be realised irrevocably. See Hoffmann, M. and P. Kolozsi (2014), The self-financing programme resulted in a more stable sovereign market, MNB (in Hungarian).

rate, the exchange rate, GDP and inflation indicate, however, that there is about a 40% probability that debt will exceed 77% of GDP by 2019 (see Graph 2.2.8). This implies that there is a 40% chance of the debt trajectory remaining flat or reverting to an increasing path.

Graph 2.2.9: Fiscal policy-risks scenarios compared with the debt-reduction benchmark set by the one-twentieth rule



(1) The figures show the difference between the level of debt dictated by the backward looking debt-reduction benchmark and the projected debt ratio. A negative value indicates an insufficient debt-reduction on this account.

Source: European Commission Calculation

**Hungary's public debt sustainability analysis highlights the need to sustain fiscal consolidation and to pursue growth-friendly economic policies.** The above discussion allows to draw a number of conclusions on the prospects for the reduction the country's high indebtedness. First, the Commission's baseline scenario projects a steadily declining public debt ratio primarily due to the impact of successive pension reforms. On this basis, a considerable progress towards the threshold value could be expected. Second, the generally favourable medium-term outlook indicated by the baseline scenario is nevertheless subject to significant negative risks. Adverse fiscal policy developments reflecting plausible assumptions could prevent the achievement of a sufficiently declining path. Moreover, Hungary's debt trajectory remains highly fragile against adverse macroeconomic shocks. Third, the analysis also underlines the importance of

maintaining the commitment to fiscal consolidation. With a government deficit stuck at its current level, Hungary's public debt would not be placed on a firmly decreasing path. Thus to the extent that the projected savings in age-related costs would be absorbed by budgetary policies, the need for further consolidation efforts would reoccur: this is also revealed by the assessment of the policy-risk scenarios against the criterion of the one-twentieth rule (i.e. the debt reduction benchmark laid down in the Stability and Growth Pact; see Graph 2.2.9). Finally, an improvement in the country's currently low growth potential would ensure a more robust debt-reduction path. The debt trajectory would also benefit then from the positive feedback effect of decreasing financial costs.

## 2.3. FINANCIAL SECTOR RISKS AND DELEVERAGING

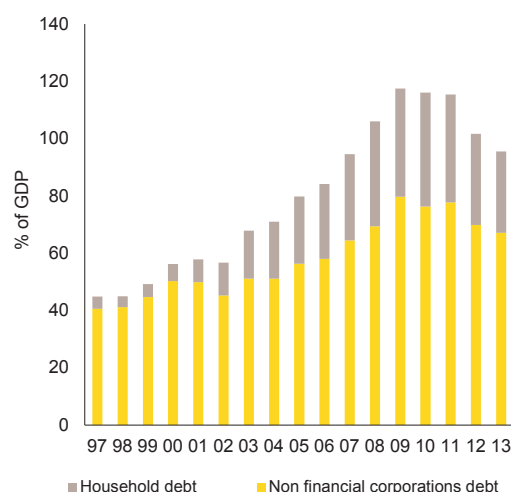
**Private sector deleveraging has continued in a difficult context characterised by a high regulatory burden on the sector and a high level of non-performing loans.** The fall in the loan-to-deposit ratio has to a large extent been necessary to correct accumulated imbalances and repair balance sheets, most notably in the household sector. Nevertheless, the pace and the channels through which the deleveraging pressures materialised were heavily influenced by financial sector policies, although subsidised lending schemes and a pick-up in growth from mid-2013 reduced the speed of deleveraging. This section analyses the main drivers of the deleveraging process and the related risks for the financial sector, also in the context of ongoing policy measures (most notably settlements with borrowers and de facto mandatory conversion of foreign exchange denominated mortgage loans). These issues are all the more important as the comparatively weak growth potential of the country may be linked to financial deleveraging through a number of channels.

### Private sector debt and lending flows

**Private sector indebtedness continued decreasing rapidly on the back of a persistent fall in credit in the economy.** Private sector debt (in consolidated terms) stood at 95% of GDP in 2013<sup>(26)</sup>, which marks an improvement of some 20 pps. over the last two years. The recent adjustments were predominantly driven by the continued contraction in private sector credit flows, both in the household and the corporate sector. This ‘active deleveraging’ was in an accelerating phase until 2012, but thereafter slowed down markedly to -1% in 2013. Credit dynamics were shaped by a combination of a high level of non-performing loans, a high regulatory burden on the financial sector and continuous decline in house prices.

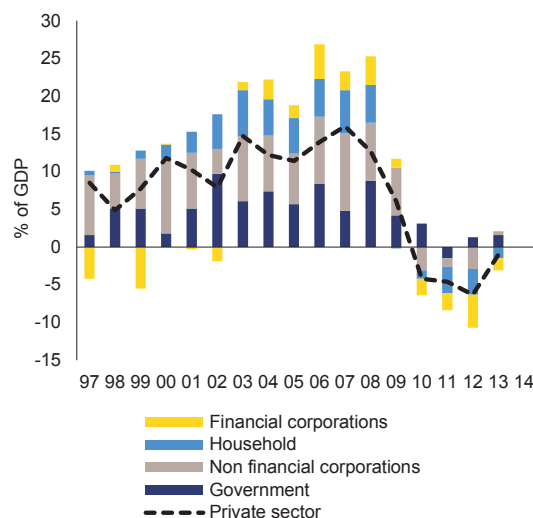
<sup>(26)</sup> It should be noted that there was a considerable downward level shift in private sector debt due to a number of methodological changes introduced in mid-2014. The most significant change was the reclassification of many entities (e.g. captive financial institutions, holding companies, special purpose entities), from ‘S.11 non-financial corporations’ to ‘S.12 financial corporations’, which alone led to a decrease in the private sector debt ratio by 25-30 pps (!) over the period 2011-13.

Graph 2.3.1: Decomposition of private sector debt



Source: European Commission

Graph 2.3.2: Decomposition of credit flows



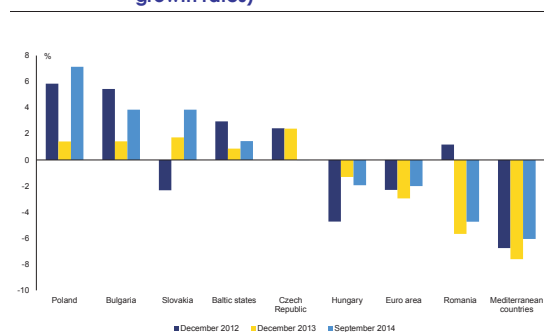
Source: European Commission

**Despite some temporary rebounds in corporate net lending flows thanks to the Funding for Growth Scheme, market-based lending is still not improving.** The crisis hit the SMEs more severely than larger corporates, which were able to access financing more easily through the use of trade finance and intercompany loans, but were prevented from taking on further debt due to elevated uncertainty. Net corporate lending flows moved to slightly positive territory in some recent quarters, mainly on account of the Funding for Growth Scheme), which grants banks zero cost



financing that they can then lend on to SMEs at a capped interest rate margin of 2.5%. Non-subsidised lending failed to rebound<sup>(27)</sup>, despite the fact that successive base rate cuts brought about a 5 pps decline in the interest rate of new loans issued in forints.

Graph 2.3.3: **Change in corporate loans in international comparison (annual transaction-based growth rates)**



(1) Club Med contains Greece, Italy, Portugal and Spain, Baltic states contains Estonia, Latvia and Lithuania

Source: MNB

**The Funding for Growth Scheme has brought some relief for corporate credits.** In the first phase of the scheme, a total of HUF 701 bn were utilised in 2013, out of which ca. 40% (HUF 290 bn, or 1 % of GDP) was recorded as new credit; the rest was used to refinance debt. Subsequently, the Funding for Growth Scheme was expanded to a maximum additional size of HUF 2000 bn (i.e. around 9% of GDP together with the first phase), running until end-2015 (the Monetary Council extended the original deadline of end-2014 by one year in September 2014). Half of the total allotment (HUF 1000 bn) was opened up in the standard part of the second phase to date, where only 10 % of loans could be used for refinancing. There were successive adjustments throughout 2014 in the modalities of the scheme to broaden its coverage as well as to increase the lending limits. The total value of contracts submitted to the central bank during the second phase reached around HUF 600 bn (2% of GDP) by the end of January 2015. Some 80% of these loans have already been disbursed and slightly over 60% serve investment purposes. On 18 February, the

central bank announced the launch of a new sub-scheme with a HUF 500 bn envelope (the so-called ‘Funding for Growth Scheme+’), which aims to reach more risky SMEs through a partial takeover of the credit risk by the central bank.<sup>(28)</sup>

**The Funding for Growth Scheme and other subsidised schemes may entail non-negligible fiscal costs over the medium term.** The Funding for Growth Scheme’s extension till the end of 2015, combined with increased allotments, also to target non-prime customers, are expected to further support lending to SMEs. The share of subsidised loans within the total SME credit portfolio has increased substantially over the last years: from around 10% in 2012 to close to 40% by Q3 2014. This was chiefly due to the roll-out of the Funding for Growth Scheme, but the step-up in Eximbank (Hungarian Export Credit Insurance Plc) activities, in particular its ‘Export promoting credit programme’, through which new loans worth over 1% of GDP were issued in 2014, contributed importantly to this surge.<sup>(29)</sup> From a financial stability perspective, it is preferable for the lending rate to be tightly linked to the policy rate in order to curb excessive risk-taking by banks and to reduce misallocation of capital. While targeted support schemes are being promoted in many countries across the EU, mostly to address market failures, it is important to keep the current schemes time-bound and well-targeted, and to recognise their embedded fiscal cost.

**Household lending seems to have passed its lowest level.** By 2013, households’ debt-to-GDP

<sup>(28)</sup> Since its launch in spring 2013, the Funding for Growth Scheme has already exceeded its famous precedent, the Bank of England’s ‘Funding for Lending’ scheme in relative terms (well over 4 pps of GDP of contracted amounts vs 3 pps of GDP). Based on the trends seen in the months in late 2014 (ca. HUF 60 bn increase in the take-up per month), it is very likely that the budget already allocated to the standard scheme will be fully utilised until the end of 2015. Even if one assumes that only half of the new ‘Funding for Growth Scheme+’ budget will be taken up, the total size of the programme would still be brought to some 6.3 pps of GDP.

<sup>(29)</sup> A study by MNB compared the total cost of the Funding for Growth Scheme’s loans with other subsidised facilities. The scheme was found to be clearly the cheapest preferential financial product, showing an overall cost advantage of at least 1.5 pps. See MNB (2014), Preferential financing schemes for Hungarian SMEs and the FGS. In: Funding for Growth Scheme: The first 18 months. pp. 26-43.

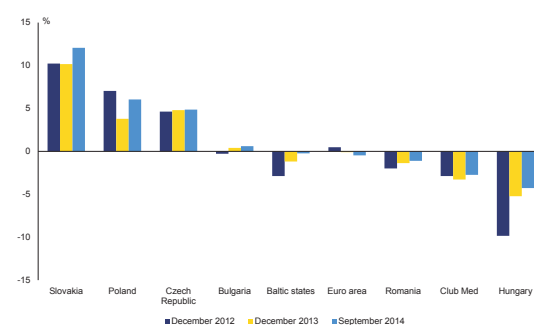
<sup>(27)</sup> Based on the calculations of central bank (MNB), market-based lending continued its declining trend throughout 2013-2014. See MNB (2014), Funding for Growth Scheme: The first 18 months.

ratio had fallen substantially to reach a level similar to that of its regional peers. In addition, after successive rate cuts by the central bank, lending rates on newly disbursed HUF loans declined by 4 pps. Based on the calculations of the MNB, after five years of deleveraging, the debt-to-income ratio is now on a healthier footing. Specifically, the monthly payment-to-income ratio for households declined by close to 1/3 (from 13% to below 10%). This being said, there are some signs of a structural change in the behaviour of many segments of the households towards the banking system and financial intermediation (e.g. the surprisingly low take-up of the exchange rate cap scheme, which provided financial benefits for participating foreign exchange mortgage borrowers). Hence, the demand for credit may remain subdued even with a stronger wealth and income position. Moreover, as late as autumn 2013, more than half of households with a loan still considered their debt as being excessive and expected some repayment difficulties going forward, the highest ratio among the surveyed countries in Central, Eastern and South-eastern Europe. Similarly, only about 2% of respondents planned to take out new loans within the next 12 months, the lowest share in the region (and less than a third of the corresponding Hungarian figure from 2008).<sup>(30)</sup>

**There are a number of factors expected to offer a gradually increasing support to credit demand in the household sector.** First, households' real incomes are on an increasing path for the third year in a row. Second, the ongoing loan settlements (see details below) could further increase consumer demand by reducing household debt by around 10%. However, the recent tentative signs of a revival in lending to households may not be sufficient to bring net lending flows out from negative territory.

<sup>(30)</sup> These findings are based on the Austrian central bank (OeNB) Euro Survey, which covers the following ten countries in Central, Eastern and Southeastern Europe: EU Member States: Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania; non-EU Member States: Albania, Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia, Serbia. See Corti, Majken – Thomas, Scheiber (2014), How Did CESEE Households Weather the Crisis? Evidence from the OeNB Euro Survey, Focus on European Economic Integration Q2/14, pp. 76-87.

Graph 2.3.4: **Change in household loans in international comparison (annual transaction-based growth rates)**



(1) Club Med contains Greece, Italy, Portugal and Spain, Baltic states contains Estonia, Latvia and Lithuania

Source: MNB

**2014 seems to be a turning point for the housing market.** For the first time since the start of the crisis, a positive year-on-year trend was registered for the number of new dwellings put to use (an increase of 27% from 2013). Moreover, the number of market transactions is also increasing: in 2014, more than 100 000 dwellings were expected to be traded, up from some 89 000 a year before. However, these positive developments are measured from a very low starting point, as construction and transaction activities in the housing market in 2013 have been the lowest, or very close to the lowest since EU accession. In particular, the number of dwellings built by businesses shrank markedly: around 3 000 in 2013, compared to an average above 17 000 during the period 2007-09.

**Portfolio quality remains a major challenge, despite some recent improvements.** Corporate and retail loans have a similar weighting in banks' aggregated balance sheet accounting for about 45% and 47% of banks' total loan portfolio, respectively. At the end of June 2014, 22.3% of banks' loan portfolio was past due (compared to 23.9% at the end of June 2013). The non-performing loan indicator (90 days or more past due) stood at 18.8% for the household sector, but had dropped to 16.8% for the corporate sector from around 19% a year earlier. The coverage ratio of non-performing loans remains relatively high (close to 60%) in international comparison. Nevertheless, the high proportion of restructured loans (17% of the total portfolio in Q2 2014) could cause problems, especially in light of the fact that



Table 2.3.1: **Budget contribution to mortgage relief schemes (2011-2015, HUF bn)**

Support schemes	Details of the scheme and the budget contribution	Budgetary cost (1)
<b>General support schemes</b>		
Early repayment scheme	30% of the losses from the application of a non-market exchange rate were compensated through tax allowances from the bank levy.	0.35% of GDP in 2011 and 2012
Exchange rate cap system (the scheme has practically closed with the conversion of FX loans)	Borrowers of foreign exchange loans are allowed to service their loans at preferential exchange rates. Within the difference period between the fixed exchange rate and the actual exchange rate, the principal part is recorded on a separate account to be borne by the debtor, while the interest part is shared 50/50 by the state and banks.	Altogether close to 0.1% of GDP in the 2012-2015 period
<b>Support schemes targeted to non-performing loans</b>		
National Asset Management Agency	The Agency contracted the purchase of close to 25 000 dwellings by end-2014 from distressed borrowers. The flats are rented out to the former owners at preferential fees.	Altogether 0.25% of GDP in the 2012-2015 period

(1) For the sake of simplicity, budgetary costs are aggregated at current values.

**Source:** MNB, Ministry for National Economy, European Commission Calculations

the coverage ratio for restructured loans is relatively low. This raises questions as to the real quality of the loan portfolio, especially given that some 44% of restructured loans become problematic again. Efficient portfolio cleaning is hindered by the lack of a market for purchasing receivables, particularly in the case of project loans, the virtual lack of foreclosures and the inefficiency of in-court and out-of-court resolution proceedings. This is illustrated by the relatively high average time taken to settle disputes (compared with other countries), and the low expected recovery rate. Banks have, on average, a relatively high exposure to the commercial real estate and construction sectors, and to trade and manufacturing, which together account for close to 70% of all corporate loans. The commercial real estate part of the loan book accounts for nearly half of all distressed corporate loans. In November 2014, an Asset Management Company was established directly under the central bank, but its operational modalities are still not final and purchases have not yet begun. This unique set-up raises legal concerns and presents a potential risk for the budget and the central bank's credibility. The European Central Bank and the Commission are in discussion with the Hungarian central bank in order to avoid the potential breach of relevant Treaty provisions.

**Foreign exchange indebtedness of households is still the major reason behind the high share of non-performing credit.** This reflects the weak economic situation of the country since the start of the financial crisis, as well as the fact that most of the foreign exchange relief schemes adopted so far

have not been targeted at distressed borrowers. This latter issue is illustrated by the fact that performing borrowers have to date received around twice as much support from the budget than have defaulted households (see the details in Table 2.3.1). The practice of repeatedly introducing new relief schemes has deteriorated the payment culture<sup>(31)</sup> among Hungarian borrowers. The only programme targeted at distressed borrowers is that of the National Asset Management Agency, which has agreed to purchase close to 25 000 dwellings owned by distressed borrowers by the end of 2014. However, the scheme's target falls short of the number of flats owned by problematic borrowers, which is estimated to be around 150 000. The ongoing settlement scheme will reduce the total debt of borrowers by approximately 16% on average, with marked heterogeneity among loan holders. This alone will probably not resolve the problem of non-performing loans.

**Normal lending flows to the economy have not yet been restored.** While the numerous support schemes introduced have certainly alleviated the credit supply constraints that many Hungarian SMEs experienced, they cannot provide a permanent substitute for a sound operating environment for banks. Moreover, the significant further plans for subsidised lending may end up crowding out market lending if the schemes are not properly targeted and imply non-negligible risks in

<sup>(31)</sup> Based on MNB (Report on Financial Stability, November 2013), some 25% of respondents who did not apply for the exchange rate cap system said that they were waiting for a new and improved scheme.

terms of future fiscal costs. Despite the tentative signs of revival in the housing market in terms of both volumes and prices, net lending flows to households may remain negative in the foreseeable future. It was recommended to Hungary to tackle the issue of restructured loans provisioning and improvement in insolvency proceedings along with the ability of lenders to foreclose collateral. On all these issues Hungary has yet to make progress.

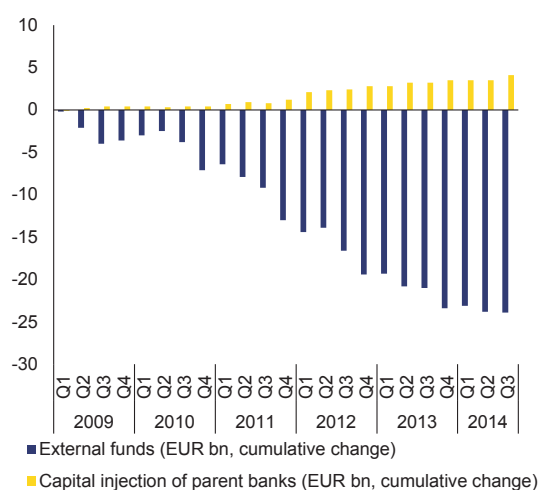
### Situation in the banking sector

**The Hungarian banking sector has been struggling to regain adequate profitability since the onset of the crisis.** In recent years, banks' results were persistently negative, affected by a number of government schemes aimed at supporting foreign currency borrowers (see Table 2.3.2 for details) as well as the high and worsening levels of non-performing loans. In addition, a substantial tax burden (the highest in the EU, mainly in the form of a levy on financial institutions based on their 2009 balance sheet in place since 2010 and the financial transactions duty introduced in 2013) has also taken its toll on profits. The weak level of economic activity, at least until mid-2013, the volatile operating environment and the generally low profitability compared to neighbouring countries have encouraged foreign parent banks to deleverage in Hungary in a sustained way (almost 6% per year on average). The loan-to-deposits ratio is now approaching 100%, down from a peak of 155% in December 2008. In parallel, however, the same parent banks have provided abundant capital (well over EUR 4 billion in cumulative terms since 2009, see graph 2.3.5) to keep their local Hungarian subsidiaries in line with local and international capital and liquidity rules.

**Despite persisting profitability problems, banks are well capitalised and their liquidity position is strong.** Throughout the recent years, banks have maintained a considerable capital buffer, due mostly to repeated capital increases by foreign parent banks. Accordingly, the capital adequacy ratio reached a record high of 19.5% in Q1 2014, an indication of the sector's strong shock-absorption capacity. All banks registered values above the regulatory minimum of 9%. The build-up of this substantial excess capital was primarily linked to the expected further losses stemming from additional relief schemes for mortgage

borrowers. In addition, Pillar II supervisory requirements related to individual risks also called for a high capitalisation level of banks. Banks' short-term liquidity (mainly available in forints) is also adequate at more than twice the regulatory requirement. Under stressed conditions the liquidity surplus of Hungarian banks also exceeds the regulatory minimum, while capital needs are very limited. Nevertheless, the persistence of banks' negative profits represents a medium- to long-term risk to financial stability.

Graph 2.3.5: External funding transactions in the local banking sector (cumulative changes)



Source: MNB

**The recent series of measures put considerable additional strains on banks.** Recent laws adopted to implement the Supreme Court's uniformity decision on bid-ask spreads and the unilateral interest rate increases for all retail loans in the past ten years could overall lead to potential gross losses for the entire financial system of around HUF 950 bn (or over 3% of GDP). The effect on the banking sector's profit is somewhat smaller: first, only around 83% of the gross impact will be felt by banks as the adverse impact is moderated by provisions already set aside. This still leaves banks facing a net loss of around HUF 600 bn (or 2% of GDP), which will wipe out, ceteris paribus, close to three quarters of the sector's excess capital. In addition, the legislated interest rate moratorium has further complicated the profitability situation. On a positive note, the Memorandum of Understanding concluded with the European Bank for Reconstruction and

Table 2.3.2: Policy measures increasing the burden on the banking sector

Policy measure	Details of the measure	Effect on the banking sector
Bank levy, introduced in 2010	0.53% on assets above HUF 50bn, 0.15% on assets up to HUF 50 bn. The base is fixed on the basis of the 2009 balance sheets.	0.5% of GDP from 2010 onwards
Financial transaction duty, introduced in 2013	0.3% on bank transactions with a ceiling of HUF 6000 (and 0.6% in case of cash withdrawal, without ceiling). The original rates until August 2013 were 0.2% and 0.3%. In 2013, 0.25% of GDP one-off extra duty was imposed.	0.75% of GDP in 2013, 0.6% of GDP from 2014 onwards (Treasury component is not included)
Early repayment scheme	Households were allowed to repay early their FX debt at a non-market exchange rate between October 2011 and February 2012. 30% of the related losses were compensated through a tax allowance.	0.9% of GDP in 2011
Exchange rate cap system	See the details of the scheme and of the burden-sharing in Table 3.3.1.	Altogether close to 0.1% of GDP in the 2012-2015 period
Settlements with borrowers	Banks are obliged to compensate borrowers for abusive terms of their loan contracts (unilateral interest increases and margins on foreign exchange denominated loans). The scope of the regulation covers all retail loans (also those denominated in HUF) and includes claims for the past ten years.	2% of GDP net loss (provisioning has already been deducted from the 2.6% of GDP gross loss)
Other regulatory changes	Free cash withdrawals for HUF 150 000 (net average wage) per month; increase in the fees to the National Deposit Insurance Fund (1)	Altogether around 0.1% of GDP from 2014 onwards

(1) The rate on the amount of total deposits was increased from 0.06% to 0.1% in 2014 and further to 0.14% in 2015.

Source: MNB, Ministry for National Economy, European Commission Calculations

Development on 9 February 2015, includes a commitment by the government to more than halve the bank levy by 2017, and then further align it with the European average by 2019.

**The new rules on consumer interest rates, and in particular the law on ‘fair banking’ clearly improve the transparency and predictability of lending transactions, but at the price of further strains on profitability.** The comprehensive overhaul of consumer credit regulation came into effect in February 2015. It prescribes the use of fixed or reference-based interest rates for both existing and new household loan contracts. Specifically, in the case of credit agreements of a less than three years duration, the interest rate or the spread is fixed without any possibility of change. If the repayment period is longer than three years, the interest rate may be modified once every three years, and for a maximum of five times over the entire life of the loan. Moreover, the adjustments in interest rates are allowed strictly on the basis of objective criteria, which are supervised by the central bank (the determining factors cannot be influenced by the concerned commercial bank, for instance the liquidity premium on the interbank

market). While the conversion of foreign exchange mortgages was profit-neutral as it was carried out at market exchange rates, the legislated re-setting of the interest rates of the new forint loans have also tightened banks’ margins. The combined permanent negative impact on interest revenues of the fair banking regulation and the new rules for converted mortgages could be around HUF 100 bn per year.<sup>(32)</sup> Overall, Hungarian banks are expected to remain persistently the worst performers in terms of profitability in the Central and Eastern European region, which has serious implications for the sector’s ability to attract foreign capital and funding.

**The State has consistently pursued a strategy of extending its direct ownership in the Hungarian banking sector.** Following the acquisition of minority stakes in two small lenders (Széchenyi Bank and Gránit Bank) in 2013, it completed the purchase of MKB (the country’s fifth largest commercial bank in terms of balance sheet) in September 2014 (the price was around 0.05% of

<sup>(32)</sup> MNB (2014), Report on Financial Stability, November

GDP, but the seller Bayerische Landesbank agreed to undertake a capital injection of 0.25% of GDP). In February 2015, it acquired Budapest Bank (the eighth largest commercial bank) from GE Capital for a maximum price of 0.6% of GDP. While MKB has been exposed to significant losses originating mainly from its commercial real estate loan portfolio, Budapest Bank, with its strong SME business focus, has managed to remain profitable in recent years. In parallel, the government has started to establish a new complex financial centre. It is foreseen to consist of the following elements: (i) the Hungarian Post with its 2700 units nationwide - in September 2014, the Post acquired a minority stake at FHB Commercial bank; (ii) the restructured system of savings associations (altogether 1600 branches); and (iii) the Hungarian Development Bank Group.

**Although the government's strategy is to sell its stake in the newly nationalised institutions, the increasingly large ownership has the potential to expose public finances to a contingent liability.** This risk – well-evidenced in many countries during the recent financial crisis – was underlined by the bankruptcy of Széchenyi Bank in early December 2014, whose credit stock has reportedly almost tripled over the last 18 months (i.e. following the state purchase of a minority stake), but whose operation involved serious irregularities. The State has probably lost all of its capital injection of HUF 3 bn in about 1.5 years, which has already put some strain on public finances.<sup>(33)</sup> MKB, which the State officially acquired in September 2014, was placed under resolution just three months later, on 18 December 2014. In the context of the recent agreement with the European Bank for Reconstruction and Development, the government expressed its intention to transfer its entire majority stakes in local banks to the private sector within the next three years.

<sup>(33)</sup> In addition, following the bankruptcy the government voluntarily provided extra coverage for deposits in the Széchenyi bank on top of the standard deposit guarantee (it covered 49% of deposits above the maximum amount of EUR 100 000, corresponding to the State's 49% share in the bank's equity). This step more than doubled the budgetary cost of this bank failure, and has raised some concerns both in terms of the use of state aid, and the principle of a level-playing field.

**Policy measures to help improve the capital accumulation possibilities for banks, and thereby restore normal lending flows show a large implementation gap vis-à-vis the size of the challenge.** The tax burden on banks remained at the former elevated levels (close to 1¼% of GDP per year since 2013). There were only two small adjustments: (i) the September 2014 law on settlements offered a small compensation for banks: some 0.05% of GDP could be recouped from their corporate taxes starting from 2015; (ii) on card payments, the normal tax rate was replaced by a flat annual financial transaction duty, thereby contributing to the increased use electronic payment means. With the notable exception of the conversion scheme for foreign exchange mortgages, the advocated systematic consultation with stakeholders on new policy initiatives has at best been occasional. The government transposed the EU directive on bank resolution, hence responding to this part of last year's recommendation.

#### Interlinks with the growth potential

**The Hungarian banking system has proved to be extremely pro-cyclical in recent years.** The accumulated highest foreign exchange share in private sector credit stock in the entire Central and Eastern European region (65% in 2008) had an adverse legacy even in the case of performing loans: Endrész-Harasztsi (2014)<sup>(34)</sup> found that firms with foreign exchange loan had an investment rate 4-5 pps lower during the crisis than would have been the case in the absence of such debt. Regarding the drivers of deleveraging, central bank experts estimate that the demand and supply side of the credit market have had an overall broadly equal contribution to the deleveraging in the corporate sector over the 2009-13 period, while the dominant factor was identified to be the lack of demand in the household sector (Bodnár et al., 2014<sup>(35)</sup>).

<sup>(34)</sup> Endrész Marianna – Péter Harasztsi (2014), Corporate Foreign Currency Borrowing and Investment. The Case of Hungary, MNB Working Papers, 2014/1

<sup>(35)</sup> Bodnár Katalin – Zsolt Kovalszky – Emese Kreiszné Hudák (2014), Recovery from crises and lending, Financial and Economic Review, Vol. 13, No. 4. pp. 57-85.

### Box 2.3.1: Capital gap in Hungary and its link to financial variables

The capital gap is estimated by decomposing capital in a trend and cyclical component so that trend capital is consistent with supply side conditions. The standard optimality condition for capital is used which equates the marginal product of capital with capital cost. The trend capital stock can therefore be written as a positive function of equilibrium employment growth, a positive function of trend TFP growth and a negative function of the growth rate of trend capital cost. The respective elasticities can be derived from the parameters of the production function which is used for potential output estimation in the Commission. A non-zero capital gap can happen if too much capital was accumulated because of for example a housing bubble or a stock price bubble. Shocks can occur to the economy which especially affect capital, e.g. financial shocks, such as credit loosening or tightening by banks, shocks to term spreads, loans and bank loan deposit ratios, or shocks to house prices or other assets, leading to an adjustment in capital. These (financial) shocks can be of great importance, as it has been shown in recent business cycle studies that they account for about 33% of forecast error variance of GDP. (1)

In the case of Hungary, capital has been above trend capital since 2008 (see Graph 1). However, according to the Commission's 2015 Winter forecast, in 2014 the gap is expected to be zero and decreasing afterwards. To research this, Commission experts related the capital gap to several financial variables, and the results are presented in this Box. (2)

Using factor analysis, it was possible to limit the financial variables to credit to households as a share of GDP, growth in total loans and short term interest rates. A linear regression of the capital gap on these selected financial variables and a lagged capital gap term (Table 1) shows that a higher reliance on credit (proxied by a larger credit-to-GDP ratio) leads to a larger positive capital gap. Also an increase in the growth of loans is positively related to the capital gap. Just before the peak in the capital gap in 2009, the growth in loans started to decrease and became negative in 2009. Credit to households seems to be more of a lagged indicator only starting to decrease in 2010.

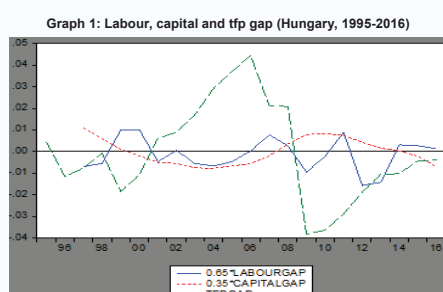


Table 1: Regression of capital gap on financial factors and lagged capital gap (dependent variable: capital gap, sample 1998 – 2013, method: OLS)

Variable	Coefficient	Prob.
constant	-1.53	0.00
lagged capital gap	0.76	0.00
credit to households as share of GDP	5.21	0.00
growth in total loans	1.53	0.03
short term interest rates	0.02	0.80
Adjusted R-squared	0.92	
Log likelihood	-7.57	
F-statistic (prob)	44.96 (0.00)	
Mean dependent var	-0.03	
Durbin-Watson stat	1.47	

It was also found that the loan-to-deposit ratio follows a similar path as the capital gap, suggesting that this ratio might be a good financial indicator for the capital cycle in Hungary, although the available time series are too short. Since the capital gap is often related to the output gap, this relationship is used to check the robustness of the results. Cancelling out the impact of the output gap on the capital gap leads to very similar estimations of the coefficients of the financial variables as well as their significance.

The decrease in the capital gap after 2009 as such seems to be clearly related to the deleveraging process in the Hungarian financial sector; and it could possibly be interpreted as a natural correction of the previously accumulated imbalances. The negative forecast capital gap for the coming years might be related to the continuing deleveraging, which puts pressure on the credit market.

- (1) See for example Hubrich, K., D'Agostino, A., Cervená, M., Ciccirelli, M., Guarda, P., Haavio, M., et al. (2013), Financial shocks and the macroeconomy: heterogeneity and non-linearities, Frankfurt: ECB.
- (2) Pioneering work has been done by the Bank for International Settlements, see the following publications: Borio, C., Disyatat, P. & Juselius, M. (2013), Rethinking potential output: Embedding information about the financial cycle. and Borio, C., Disyatat, P. & Juselius, M. (2014), A parsimonious approach to incorporating economic information in measures of potential output, Working Papers No. 442.



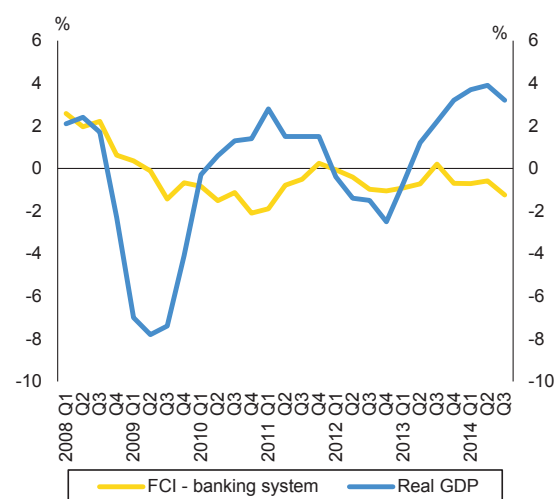
**Both analytical models and market surveys suggest that deleveraging is likely to continue in the coming years.**

A large part of the deleveraging observed over the last five years could certainly be interpreted as a natural correction of the accumulated indebtedness, most notably in the household sector. However, its pace and the channels through which these pressures have been materialising were heavily influenced by financial sector policies (see also Box 2.3.1 for a discussion on the interlinks between financial variables and potential growth trajectories). A very similar pattern can be identified from the Hungarian central bank's financial condition index (Graph 2.3.6), which shows that the financial sector has contributed negatively to economic growth as supply-side constraints have remained tight in a historical perspective, and recent quarters have not been an exception. Looking ahead, updated Commission estimates based on Cuerpo et al. (2013) <sup>(36)</sup> identify remaining deleveraging needs for Hungary, but at a relatively moderate level (more than 10% of GDP for households and less than 10% of GDP for corporates) compared to that needed in vulnerable countries in the periphery. This analysis reveals that in 2013 Hungary showed one of the most significant overall loan supply pressures in the EU, partly linked to the poor capital accumulation developments of the banking sector.

**Restoring financial intermediation in a sustainable manner does not appear to be feasible under the current operating environment for the banking sector.** After many years of deleveraging, the proper incentives to lend are still missing for banks. Nonetheless, there are tentative signs that the period of rapid deleveraging with its detrimental impacts on economic activity might soon be over for Hungary. While investment had been declining continuously until 2013, there has been a visible upturn since then, first fuelled by government investment

(linked to a substantial inflow of EU funds), but more recently also by the pick-up in the corporate segment. Nevertheless, the turnaround is based on fragile foundations as without the subsidised schemes, corporate lending would undoubtedly have remained in the negative territory. Implementing rigorously the measures laid down in the recent Memorandum of Understanding with the European Bank for Reconstruction and Development will be conducive to returning to a sound and predictable financial policy framework.

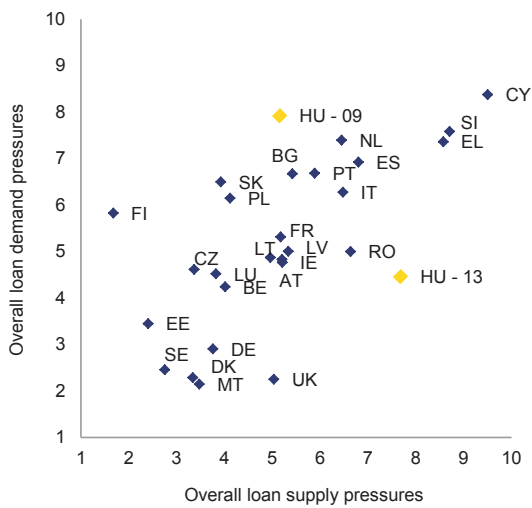
Graph 2.3.6: **The Financial Conditions Index (FCI) and economic growth**



Source: MNB

<sup>(36)</sup> Credit market conditions on the supply and demand side are assessed against aggregate macro-financial proxies as well as against direct survey indicators. See for details Cuerpo, Carlos – Inês Drumond – Julia Lendvai – Peter Pontuch – Rafal Raciborski (2013), *Indebtedness, Deleveraging Dynamics and Macroeconomic Adjustment*, European Economy Economic Papers, No. 477.

Graph 2.3.7: **Deleveraging pressures on the supply and demand side**



**Source:** European Commission

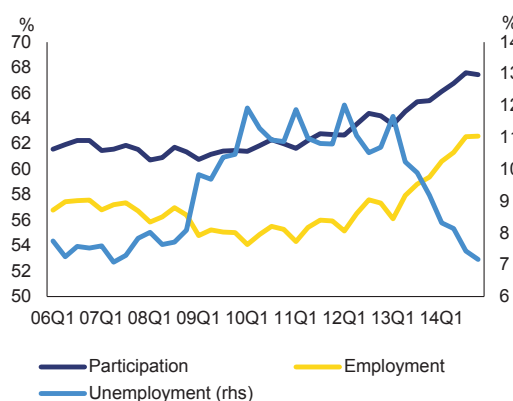
## 2.4. LABOUR MARKET WITH A FOCUS ON PUBLIC WORKS

Recent indicators show significant improvements in the Hungarian labour market. This is partly due to the strong economic growth seen in 2014, but is also the result of the increased reliance on subsidised job creation in the public sector, namely the Public Works Scheme. This section examines the current state of the labour market and how this has been influenced by public works. It also evaluates the plans laid down in the 2015 budget to further increase both the number of public works programmes and the resources allocated to the scheme. The section concludes that, without public works, unemployment would be higher. Empirical evidence suggests that public works have only a limited effect in terms of facilitating entry or re-entry into the open labour market. Instead of finding a job, individuals tend to return to public works.

### The labour market, recent improvements

The three-year average (2011-13) unemployment rate remains above 10 % in Hungary, as it has been for the last three years, but will fell below next year. The average will fall below 10 % next year, the yearly unemployment rate in 2014 being around 7½%. This is partly due to an increase in employment, resulting from the economic growth seen since mid-2013.

Graph 2.4.1: Participation, employment and unemployment

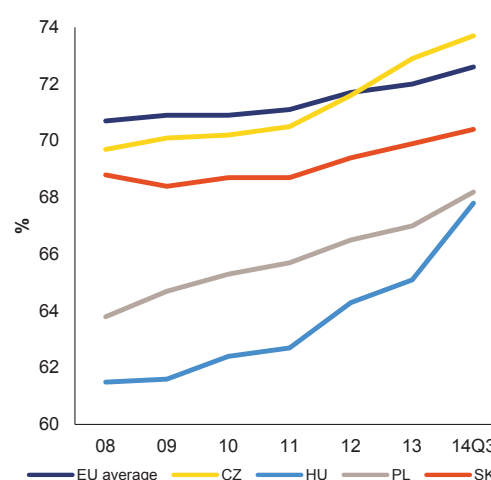


Source: Central Statistical Office (KSH)

Although the activity rate has been increasing since 2009, it remains low by international

standards. Nonetheless, Hungary's activity rate is increasing faster than that of its regional peers (see Graph 2.4.2). The activity rate stood at 67.8 % in Hungary in the third quarter of 2014, while the EU average was 72.6 %. As in Hungary the number of unemployed is decreasing and employment increases faster than activity (Graph 2.4.1), people are accordingly exiting inactivity and becoming employed.

Graph 2.4.2: Activity rate

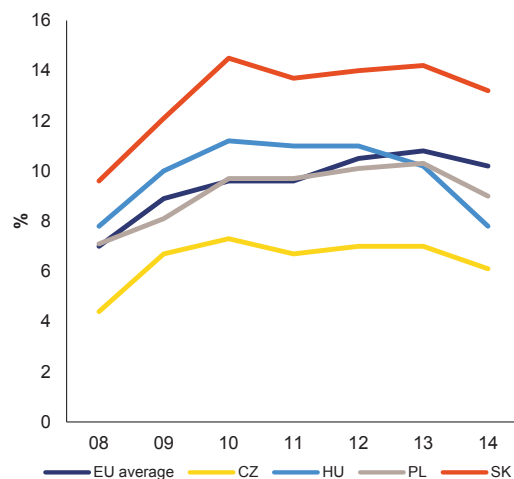


Source: European Commission

Having peaked in 2010, the unemployment rate has since been decreasing. The pace becoming more and more rapid since 2012 due to the expansion of the public works. The unemployment rate reached a high of 11.2 % in 2010, before starting to slowly decelerate. Hungary had had the second highest unemployment rate in its region before 2012, but by the end of 2014, its rate was the second lowest (see Graph 2.4.3).



Graph 2.4.3: Unemployment rate



Source: European Commission

**The after-effects of the economic recession were a factor in Hungary's low activity levels, but structural problems have been identified as the underlying cause.** According to Fazekas and Scharle (2012) <sup>(37)</sup>, Hungary's low employment level can be traced back to unfavourable demographic trends and the crisis experienced at the time of the regime change. The drop-out of workers from the labour force was partly attributable to a depreciation of human capital and the ensuing mismatches in the labour market. The rate of non-employed people taking up employment remained low due to easy access to early retirement or disability benefits. A further longstanding problem on the supply side is the low mobility of the Hungarian labour force both geographically and across sectors.

**Structural problems still affect the labour market, first of all the tax and incentive structure.** Frequent changes in the tax and incentive structure were the result of significant fiscal policy cycles in previous years (for fiscal policy, see below or chapter 3.1). More recently, the increasingly unstable business environment and tax cuts for high income earners have created the need for repeated fiscal correction with savings often affecting labour market and social policies. The second structural problem is that the

discretionary and non-transparent nature of minimum wage setting often results in significant jumps not matched by increasing productivity <sup>(38)</sup>. A relatively high level of the minimum wage may have an adverse effect on disadvantaged groups and regions as well as sectors with lower productivity.

**Recent tax and benefits reforms have had both positive and negative effects on overall employment.** While reforms to early retirement and disability benefits aimed at increasing labour market participation are expected to have positive effects in the long run, cuts in benefits may have had a contractionary effect in the short run. While the tax reform has eased the tax burden on high-income earners, the overall effect of the measures introduced on low-income and low-skilled workers, the part of the labour force most likely to move in and out of employment as a result of changes in incentives and the overall economic environment, has been mixed. The Job Protection Act introduced targeted reductions in the social contributions paid by employers for certain groups <sup>(39)</sup>. This increased demand for labour and counterbalanced the effect of increases to the minimum wage and the removing of the employee tax credit (see Box 2.4.1 on recent labour market tax measures affecting low-skilled workers). The reforms have, however, overall not had a clear favourable effect on employment <sup>(40)</sup>. Box 2.4.1 reviews recent labour market tax measures affecting low-skilled workers.

<sup>(38)</sup> Until 1 January, 2011 the minimum wage was set through tripartite negotiations through the National Council for the Reconciliation of Interests. 2011 was a turning point in social dialogue in Hungary: the previous Council was abolished, and replaced by a high-profile body, the National Economic and Social Council (including NGOs, church related organisations and other stakeholders besides social partners). Its operation is based on law but the consultation is not binding for the government

<sup>(39)</sup> The Job Protection Act was came into force in January 2013, and introduced reduced social security contributions for targeted groups (e.g. low-skilled, young and elderly employees, the long-term unemployed and women returning from maternity leave).

<sup>(40)</sup> Benedek, D., Kátay, G. and Kiss, A. (2013): Microsimulation as a tool for assessing the impact of tax changes. In: Fazekas, Benczúr and Telegdy (Eds.): The Hungarian Labour Market 2013.

<sup>(37)</sup> Fazekas and Scharle, (2012): From pensions to public works: Hungarian employment policy from 1990 to 2010.

#### Box 2.4.1: Recent tax and benefit measures affecting the low-skilled

A flat personal income tax of 16% was introduced in steps between 2011 and 2013. This significantly reduced the effective tax rate of high income earners. Low income earners were affected negatively by the elimination of the employee tax credit. At the same time the family tax credit (dependent on the number of children) was significantly extended especially for those with at least three children and a high enough taxable income to take advantage of the full tax credit. Starting from 2014, the family tax credit was further extended, by allowing it to be credited against employee social security contributions. This benefited low and middle-income families who previously could not use the full amount family tax credit.

The adverse effect on low income earners has been partly counterbalanced by the introduction of targeted cuts in the employer's social security contributions in the framework of the Job Protection Act, from January 2013 (for a discussion of the tax wedge of low income earners, see section 3.1, for target groups, see above). The measure targeted groups whose activity rate has indeed been low. The measure has also counterbalanced a significant increase in the minimum wage in 2013.

Benefit-related reforms that had an effect on the labour market include the reduction of the duration and generosity of the unemployment benefit, and reforms to welfare benefits, including related reforms to the public works program. The duration of the unemployment benefit was reduced to maximum of 90 days in September 2011. This is the lowest benefit period of the jobseekers' allowance in the EU, and does not correspond to the average time needed to find a job in Hungary which is above 1 year. In parallel, the maximum amount of unemployment benefits was also reduced to the minimum wage. Before, the maximum duration of unemployment benefits was altogether 9 months, their generosity reducing after 3 months and again after 6 months.

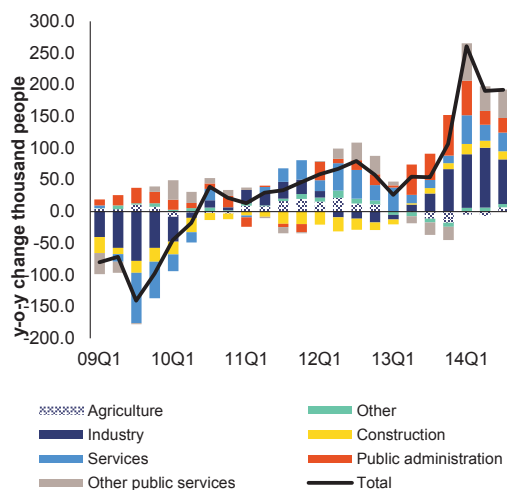
Welfare benefits, i.e., benefits for the unemployed who are not eligible for other benefits, have been also reformed. Between 2006 and 2008, the "regular social benefit" was determined as a function of total family income, and was capped at the minimum wage. Since 2009, the welfare benefit is lump-sum and is currently equal to 80% of the minimum old-age pension, currently HUF 22,800 (about EUR 70 per month; the benefit is currently named "foglalkoztatást helyettesítő támogatás"). Eligibility to the welfare benefit is conditional on 30 days of activity per year which can be public work, earning activity on the primary labour market (including household work and simplified employment), participation in labour market programme, training advertised for a period of at least six months or voluntary activity of public interest. Recent developments in the participation and budgetary allocation for the public work scheme are described in Box 2.4.2.

Other measures with a focus of directly increasing labour market participation and achieve expenditure savings included the review of disability-related benefits and the elimination of pathways to early retirement.

**The Public Works Scheme was responsible for a large proportion of employment growth in 2012 and 2013, but private sector employment also started growing significantly from late 2013.** Public administration (the sector the Public Works Scheme falls under) provided most of the employment growth in early 2013, with the contribution made by industry starting to increase in the last quarter of 2013 and the services sector becoming more significant in 2014. Graph 2.4.4 shows the composition of employment growth by sector, as compared with the same quarter of the previous year. It separates out growth in domestic

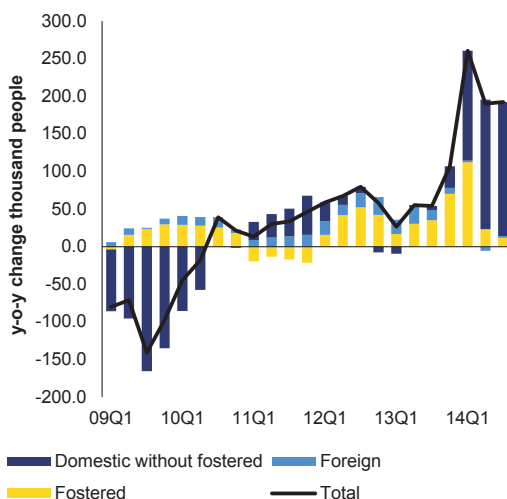
employment, cross-border employment and state-supported employment (created through the Public Works Scheme). The figures shown confirm that, during most of 2012 and 2013, employment growth was driven by employment abroad and in the Public Works Scheme. Domestic employment outside the Public Works Scheme started showing a significant increase in late 2013 (see Graph 2.4.5).

Graph 2.4.4: Change in employment by source of employment, sectoral breakdown



Source: Labour Force Survey

Graph 2.4.5: Change in employment by source of employment

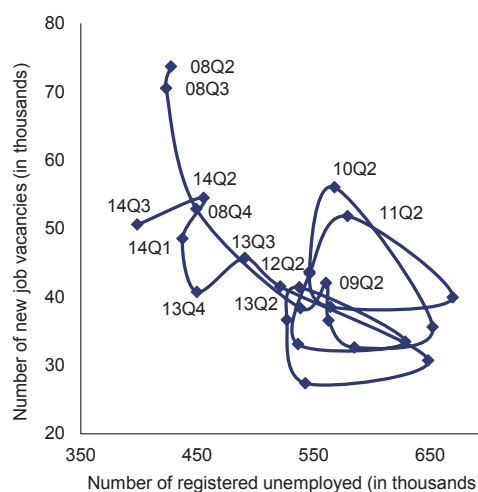


Source: Labour Force Survey

The number of new private sector vacancies increased in 2014, but is still below pre-crisis levels. The number of unsubsidised new vacancies increased to around 50 000 in the third quarter of 2014, which is still, however, around 70 % lower than before the crisis. The number of registered unemployed, meanwhile, fell to a level similar to that seen in the pre-crisis period. The economy is therefore currently characterised by a level of unemployment roughly equal to that seen before

the crisis, alongside lower labour demand (see Graph 2.4.6). The number of government-sponsored jobs offered in October 2014 was, however, two and a half times bigger than a year before, 95 % of these jobs were created through public works.

Graph 2.4.6: New vacancies and registered unemployed



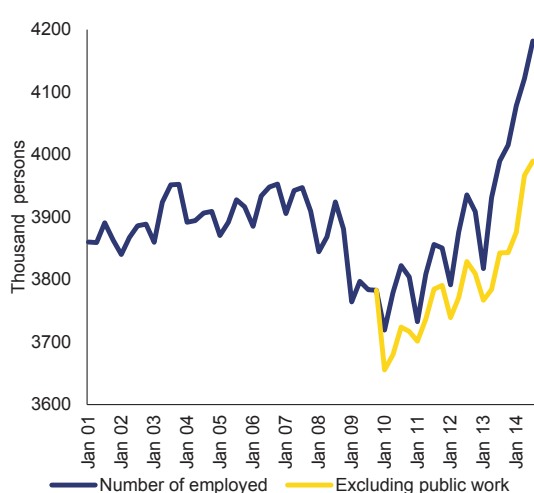
Source: National Employment Service, European Commission

The Public Works Scheme that was in operation over winter 2013-14 radically changed the employment patterns seen at the end of the year (Graph 2.4.1). Previously, public works had mainly been stopped during the winter due to the seasonal nature of most of the works. The employment which these works created therefore followed the same pattern as traditional seasonal work. In view of this, an increase in the number of jobseekers of around 100 000 and an increase in the unemployment rate to 11-12 % would normally have been expected towards the end of 2013. With the introduction of the winter Public Works Scheme, however, the decline in employment and the increase in unemployment were avoided. The scheme's target was to provide work for 200 000 people between November 2013 and March 2014.

Without the extensive use of public works, yearly unemployment could have been around 11½% in 2013 instead of the official 10.2 %. This estimate of the hypothetical unemployment rate is based on the assumption that half of those employed in public works were previously

inactive, thus the calculation recognises the scheme's effect in 'activating' a previously inactive part of the workforce. Without the Public Works Scheme, employment is likely to have remained below 4 million in 2013, but would still have reached the pre-crisis levels (see Graph 2.4.7).

Graph 2.4.7: **Employment level with and without the public works**



Source: Central Statistical Office (KSH), European Commission

### The Public Work Scheme: an effective measure to tackle unemployment?

**Studies examining the Hungarian public works conclude that these programmes are inefficient and do not sufficiently support the reintegration of participants into the open labour market.** Fazekas and Scharle (2012) argue that the public works programmes set up in Hungary between 2000 and 2010 were failures in terms of reducing long-term unemployment. Public works do not improve participants' employment prospects, nor do participants gain a wage advantage. In another study, Csoba and Nagy (2012) conclude that participants in public works programmes were no more likely to find work than those not taking part in any programme. <sup>(41)</sup> Other

existing active labour market policies, such as subsidy schemes and training programmes, were found to have positive effects. Evidence on whether public works are effective in leading participants into unsubsidised jobs afterwards is mostly negative for other central European transition economies as well. <sup>(42)</sup>

**A recent study of the current scheme finds that public workers have a low and falling chance of finding a job within six months of participation.** Bakó et al. (2014) <sup>(43)</sup> examined for the period 2012-2013 whether participants in the Public Work Scheme could find a job on the open labour market within 180 days of exiting the scheme (termed 'successful exit'). Results indicate that the probability of a successful exit increases with educational attainment and decreases with age (see Graphs 2.4.8 and 2.4.9). The extension of the programme in 2013 coincided with a fall in the overall probability of a successful exit. <sup>(44)</sup> While it was 13% in 2012, it decreased to 11% in 2013.

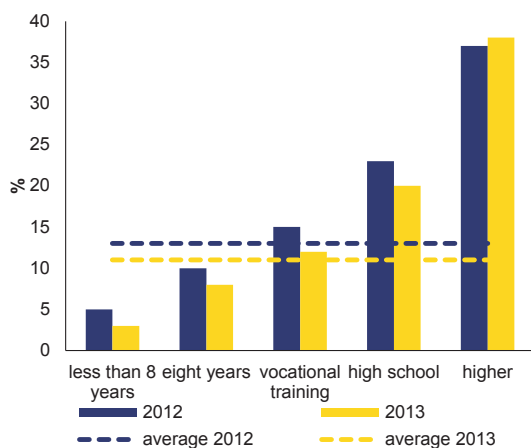
<sup>(41)</sup> Csoba, J. and Nagy, Z. E. (2012): "The Evaluation of Training, Wage Subsidy and Public Works Programs in Hungary" In: The Hungarian Labour Market 2012 In Focus: The evaluation of active labour market programs; p. 96.

<sup>(42)</sup> Puhani, P. A. 1998. 'Advantage Through Training?' Centre for European Economic Research, Discussion Paper No 98-25.

<sup>(43)</sup> Bakó Tamás, Cseres-Gergely Zsombor, Kálmán Judit, Molnár György and Szabó Tibor (2014): "A munkaerőpiac peremén lévők és a költségvetés", esp. pages 44-66, available at the site of the Fiscal Council and Parliament.

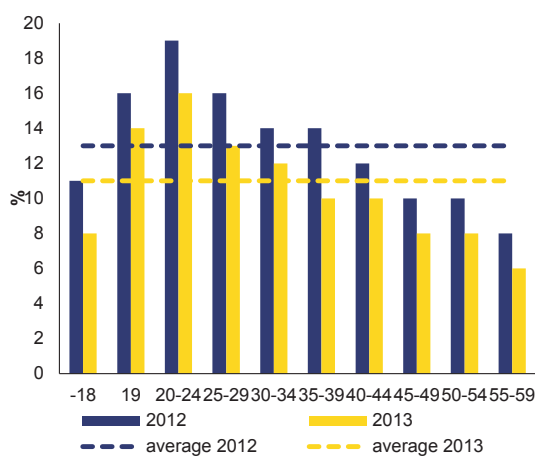
<sup>(44)</sup> This contradicts the official government figures, according to which the successful exit rate rose from 11.6 % in 2012 to 13.0 % in 2013. The methodologies used in producing the two sets of figures differ, which may explain the divergence in the trends shown.

Graph 2.4.8: Probability of successful exit from the Public Work Scheme, by education



Source: Bakó et al., 2014

Graph 2.4.9: Probability of successful exit from the Public Work Scheme, by age cohort

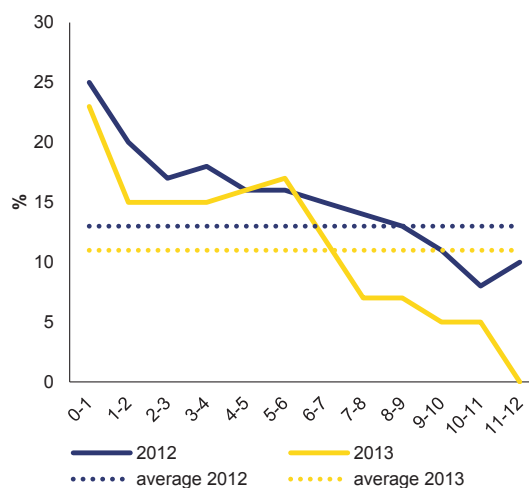


Source: Bakó et al., 2014

**Longer participation in public works decreases the chance of a successful exit.** The longer a person remains employed through the Public Works Scheme, the lower is their chance of successful exit (see Graph 2.4.10). Nearly half of the participants were involved in the same public works programme more than once. One possible explanation for this is a selection effect. Some individuals have a higher probability of finding a job, while the rest are likely to return to public works repeatedly.

**Public works might also cause a possible crowding out effect.** This happens because the wages in the Public Work Scheme are lower than the minimal wage. For example even in higher qualified jobs (e.g. data entry), public workers can be employed instead of the workforce currently employed there. There is survey data providing evidence that there are people doing the same job in the Public Work Scheme for lower wages in comparison to what they did before with a regular work contract for the municipalities <sup>(45)</sup>.

Graph 2.4.10: Probability of successful exit by time spent in the Public Work Scheme (months)



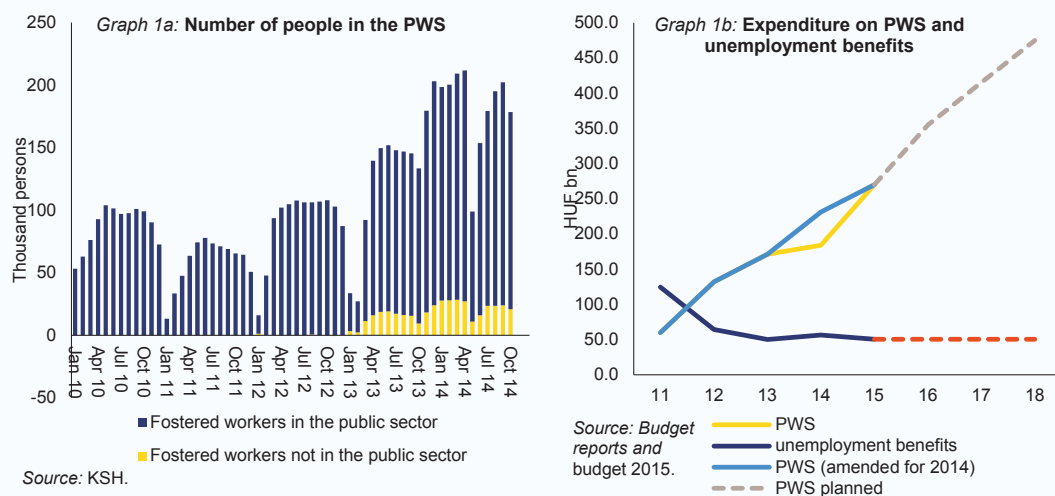
Source: Bakó et al., 2014

**The number of people within the Public Work Scheme and the allocated budget have been increasing extensively over time and are planned to further double until 2018.** Box 2.4.2 summarises the participation in the Public Work Scheme with the budgetary resources spent and planned to be spent on public works.

<sup>(45)</sup> Farkas Zs, Molnár Gy and Molnár Zs: 2014. "A közfoglalkoztatási csapda", Magyar Szegénységellenes Hálózat

#### Box 2.4.2: Participation and budget allocation of the public work scheme

Public works have been used in Hungary since 1991 but their size remained small until 2000 <sup>(46)</sup>. As part of a workfare reform, the coordination became to municipalities' responsibility. Eligibility rules were tightened for unemployment assistance and recipients were obliged to work in the public works for at least one month a year. New schemes were introduced in 2009 ("Way to work" program) and in 2011 ("The National Public Work Program"). The programmes increased the number of participants significantly and a shifted public work related employment toward short-term contracts. In 2011, a new type of employment relationship was created, the 'public works contract' which removes participants in a public works program from the coverage of labour legislation in many aspects. Notably, public employment is exempt from the statutory minimum wage regulation. For 2015, the minimum wage in public works is set at about 75% of the regular minimum wage (at HUF 79 155 gross, or about EUR 255). The reform had the declared aim to involve more participants for the same funding.



**Current plans include significant further expansion of the scheme until 2018.** The funding for public works has doubled from 2010 to 2012 and is growing ever since. The weight of the Public Work Scheme increased both in the number of people employed and the amount budgeted to the scheme (see charts above). In the autumn of 2013, the Public Work Scheme was amended by the winter Public Work Scheme element to avoid the typical end-year seasonal decline. This element aimed to include 200 000 workers per month during the period November 2013 to March 2014. Based on the experiences, the government decided to allocate 0.2% of GDP extra in the 2014 budget of the public works to achieve that the number of public workers on average stays at the 200 000 level throughout 2014. Moreover, the 2015 budget contains plans until 2018, showing that the expenditure on the public works are going to be elevated further (twice the size in 2018 than it was in 2014). A rough calculation implies that by 2018, 350 000 people would be in the scheme, 8.5% of the currently employed. The yearly average based on the first ten months of 2014 is around 183 000 people. It seems that the Public Work Scheme is to replace social welfare on the one hand and active labour market programmes on the other.

(1) Koltai L. (2012): "Work Instead of Social Benefit? Public Works in Hungary" Peer Review on "Activation measures in times of crisis: the role of public works"

**No progress has been made in evaluating the effectiveness of the Public Works Scheme, but limited progress has been made in reinforcing its activation elements.** Only a quarter of the

training courses offered in the 2013-2014 winter scheme led to a qualification. Training will be provided again throughout the 2014-15 winter period. This time 60 % of the training courses will lead to qualifications recognised by the state, but most of these will relate to qualifications needed by participants to perform their jobs in the public works programmes. Legislative amendments will

<sup>(46)</sup> Koltai L. (2012): "Work Instead of Social Benefit? Public Works in Hungary" Peer Review on "Activation measures in times of crisis: the role of public works"



allow participants to attend job interviews, and the Public Employment Service will offer them specific jobs when available. The amendment also includes sanctions to oblige the individual to accept any suitable job offer.

**Overall, the extension of the Public Works Scheme, and the almost exclusive reliance on this scheme as a means of providing employment, are hard to justify, given the limited positive effect it has on participants' chances of finding employment subsequently.**

There is a risk that, rather than providing temporary income support in times of recession, an extensive public works scheme may create a significant 'lock-in effect' and may become a permanent replacement for the system of welfare benefits for groups who are unlikely to find regular employment. The scheme is seen as a major component of the anti-poverty measures, but, regardless of providing work opportunities for many, it has not reduced poverty due to the low achievable wage level. The effectiveness and the sustainability of the Public Works Scheme would therefore deserve close monitoring.

### 3. OTHER STRUCTURAL ISSUES



### 3.1. FISCAL POLICY

**The Hungarian tax system is characterised by several challenges both in terms of design and governance.** The total tax burden in Hungary, at 38.6% of GDP in 2014, is the 8<sup>th</sup> highest in the EU and the highest in the region. In terms of the least distortive taxes to growth, the share of consumption taxes is already rather high, while the revenue from recurrent property taxes remains low and well below average. By contrast, reliance on sector-specific levies is inefficient from both a fiscal and an economic perspective. Despite recent progress, there is still a lack of administrative efficiency and concerns regarding tax evasion remains.

**The re-regulation of the fiscal framework since 2010 is yet to be completed with improvements on credibility, transparency and effectiveness.** The budgetary planning horizon was legislated to be extended beyond the actual budget year, but its implementation is yet to be launched. The Fiscal Council's narrow list of mandatory tasks and its analytical capacity are still not commensurate with its budgetary veto right.

#### Tax policy

**Following a period of relative stability in tax policy, the recent tax changes have reignited the earlier trend of raising sector-specific corporate taxes.** The main concern in the area of corporate taxation is the increasing reliance on sector-specific taxes. The trend of introducing such taxes began around 2006 and was significantly reinforced after 2010. By 2013, sector-specific corporate surtaxes, amounted to some 2.15% of GDP, mainly affecting the financial and utilities sectors. Because of their selectivity, such taxes have been identified as a cause of distortions to investment across sectors. In addition, their introduction and subsequent modifications have been unpredictable.

**In the course of 2014-2015 some new sector specific taxes were introduced and some of the existing ones were increased.** In some cases, the impact of these taxes is selective across operators within the sector concerned. In particular, the highest rate of the advertisement tax, in force since August 2014, was increased from 40% to 50% (on turnover). This change affects only one broadcaster. A sectoral tax with a steep schedule of up to 4.5% of the turnover was introduced on

tobacco manufacturers and distributors. The 'food chain control fee', originally set at a rate of 0.1% of turnover, is now applied to daily consumer goods retailers, and has a progressive rate structure with a maximum rate of 6% of turnover. The public health tax was extended to alcoholic beverages with rates being determined broadly in proportion to the alcohol content. Two categories of spirits, for which local production is significant, were, however, exempted.

**The labour tax burden for low income earners in Hungary is among the highest in the EU, even after taking into account the effect of recent measures such as the targeted social contribution cuts included in the Job Protection Act.** Most notably, Hungary has the highest tax wedge in the EU for single workers at 50% of the average wage, and the 4<sup>th</sup> highest at 100% of the average wage (both increased since 2010).<sup>(47)</sup> However, tax wedges for workers with children are substantially lower due to a family tax credit, which is especially generous towards families with higher earnings and at least three children (see details in box 2.4.1.). The high tax wedge of low income earners is a particular challenge in Hungary since the employment opportunities of the low-skilled are weak. A planned doubling of the family tax credit is relevant for low wage earners with two children, but it is due to be phased in between 2016 and 2019. No other change for a general reduction of tax wedge relevant to all low earners is foreseen.

**The effectiveness of VAT enforcement and compliance measures as gauged by the VAT gap, is at 25%, which is significantly above the EU average (16%), but lower than in some of the regional peers.**<sup>(48)</sup> Some recent measures are bringing about the tightening of controls. First, the establishment of on-line links to cash registers in the retail sector has been completed by the end of 2014 with favourable results in terms of VAT revenues. The extension of this requirement to certain service segments (e.g. restaurants, hairdressers) is foreseen for the course of 2015. Second, an Electronic Road Cargo Inspection

<sup>(47)</sup> Tax and benefits indicators database (OECD - European Commission, latest data, 2013).

<sup>(48)</sup> [http://ec.europa.eu/taxation\\_customs/resources/documents/common/publications/studies/vat\\_gap2012.pdf](http://ec.europa.eu/taxation_customs/resources/documents/common/publications/studies/vat_gap2012.pdf)

System was introduced in 2015, which primarily aims at reducing VAT carousel fraud. Finally, the threshold for itemised VAT declaration was lowered.

**According to the World Bank Doing Business 2015 report, compliance time with tax obligations for businesses has stagnated in Hungary in recent years and has remained the 4<sup>th</sup> highest in the EU.** Tax compliance costs are particularly high for small and medium-sized enterprises, amounting to a ten times higher burden for them in proportion to turnover than in the case of larger firms. <sup>(49)</sup> There is no systematic ex ante evaluation of the compliance impact of new tax provisions. This appears to be a particularly important issue for the introduction of the Electronic Road Cargo Inspection System (see above), which, according to businesses put a large compliance burden on operators. Additionally, a new rule granting broad taxation rights to local governments as of 2015 potentially leads to surge in the variety of local taxes, leading to increased compliance costs in the taxation of natural persons. At the same time, the Hungarian corporate tax system still features a multitude of tax regimes (including three simplified tax schemes), dealing with which is costly for businesses.

**There have recently been a number of tax increases in the field of environmental taxation.** Specifically, excise duties on some fuel products were increased as of 2015. Moreover, environmental product fees were raised on a set of products. At the same time, the scope of that fee was extended to certain products, such as photovoltaic panels, in a way that is questionable in view of green economy goals. Additionally, the Hungarian tax system is still characterised by some environmentally harmful subsidies, including the favourable tax treatment of personal use of company cars <sup>(50)</sup>. While the company car tax favours the renewal of the vehicle fleet, it does not compensate for the incentive to travel greater distances resulting in increased emissions, congestion and social costs.

<sup>(49)</sup> OECD (2015), *Hungary: Towards a Strategic State Approach*, OECD Public Governance Reviews, p. 93.

<sup>(50)</sup> Harding, M. (2014), "Personal Tax Treatment of Company Cars and Commuting Expenses: Estimating the Fiscal and Environmental Costs", OECD Taxation Working Papers, No. 20.

**Overall, Hungary has made limited progress to address the 2014 tax recommendation.** The role of sector-specific taxation has even increased. The progress on reducing labour taxes on low-wage earners is limited as the planned changes affect only workers with two children and the implementation will begin in 2016. Tax compliance costs, which are particularly high for small and medium sized enterprises, has stagnated in recent years. Despite some recent increases in environmental taxation, there has been limited progress in shifting the tax burden to environmental taxes.

### Fiscal framework

**Hungary began the process of fundamentally re-regulating its national fiscal governance framework in late 2010, which has led to mixed results.** The revamp has weakened some aspects of the efficiency of its operation (notably, by replacing the forward-looking real debt rule with a pro-cyclical debt ceiling), while strengthening others (inter alia, by establishing a commendable strong Constitutional basis for the new set-up). Moreover, the reform originally did not touch the existing medium-term budgetary framework, thus remaining purely indicative. As to institutional aspects, the Fiscal Council received some reinforcement in 2012, both in terms of optional tasks and resources. Most notably, a small dedicated analytical team was set up within the Office of the Parliament. However, the Council's analytical remit and capacities are still not commensurate with its unprecedented veto competence over the annual budget bill.

**The long overdue strengthening of the medium-term budgetary framework was legislated in December 2013, but its test of effectiveness in genuinely lengthening the planning horizon has been postponed until the 2016 budget.** The main novelty introduced by the new regulation is that differences between the medium-term budgetary framework (laid down in a government resolution with three-year expenditure and revenue plans) and the draft budget bill for any given year must be fully justified by factors or developments falling outside the scope of government influence, such as changes in the macroeconomic environment. The obligation to issue such a resolution was missed in 2014 (the original deadline was 30 April 2014). The government first argued that some delay was

inevitable due to the national election and the ensuing formation of the new (re-elected) government (completed in early June), but this issue has subsequently not been rectified. Consequently, the 2015 budget was prepared in the traditional way, with a narrow focus on the actual budget year. Neither the indicative three-year plans contained in the justification of the previous year's budget, nor the Convergence Programme plans played a meaningful guiding role in the derivation of budgetary appropriations.

**The Fiscal Council is not yet a body with a strong and unbiased analytical basis, in contrast with its uniquely strong veto power.** Despite its existing broad optional mandate to comment on any relevant public finance issues, over the last three years, the Council has not published any own analysis or opinion beyond what was strictly required by law. Its decisions are so far only based on qualitative risk assessments to date, and not on publicly accessible detailed calculations. <sup>(51)</sup> On a positive note, the Council has started to increase the number of commissioned external studies, such as short-term forecasts and analytical papers from partner institutions. In addition, a new initiative has been launched to commission a medium- to long-term macro-fiscal baseline papers from research institutes. Nonetheless, these undertakings could not replace the function of a genuine quantitative analysis of the official macro-fiscal projections. The Fiscal Council's standing would be enhanced by basing its opinion on the basis of a clear numerical benchmark: its own forecast and impact assessments. <sup>(52)</sup>

#### **Overall, Hungary has made limited progress in addressing the fiscal governance**

---

<sup>(51)</sup> A reinforced Fiscal Council could subsequently also be tasked with evaluating the completeness and validity of the government's justifications of the differences between the medium-term plans and the actual budget figures. In this regard, the regular preparation of comprehensive macro-fiscal forecasts would help the Fiscal Council to verify the government's explanations for possible deviations vis-à-vis the medium-term plans, which could considerably enhance the integrity and predictability of the entire medium-term framework.

<sup>(52)</sup> Indeed, it was a telling sign that the Fiscal Council announced an affirmative opinion on the 2015 draft budget plan in October 2014, while at the same time admitted that it was not able to determine the budgetary costs of the new tax package. See Fiscal Council (2014), Opinion of the Fiscal Council on the draft 2015 budget proposal.

**recommendation.** The implementation of the recently legislated medium-term budgetary framework suffered from repeated delays, and no legal action was taken to improve the transparency of public finances and to broaden the mandatory remit of the Fiscal Council.

## 3.2. LABOUR MARKET AND SOCIAL COHESION

**While in general the Hungarian labour market improved in 2014, significant challenges remain.**

Total employment increased to 62.8% by the third quarter of 2014 (the EU28 average was 65.5%) and the unemployment rate was 7.4% for the age group 15-64. Part of the improvement in labour market data can be explained by expansions of the Public Works Scheme and increased cross-border working, but faster-than expected output growth in 2014 contributed to improved employment in the private sector (see section 2.4. for details). Long-term and youth unemployment remains high. The employment gap of women with small children and Roma is particularly high.<sup>(53)</sup> Both absolute and relative measures of poverty increased in recent years, indicating that the ability of the social safety net to reduce poverty has diminished. The social and education systems are persistently characterised by a low ability to reduce the inequality of chances. Despite recent changes in the health care system, major challenges remain for the Hungarian health system, including poor health outcomes, low spending levels and an inefficient use of resources.

### Labour market functioning

**The labour taxation is not employment-friendly for certain employee categories** (like single and/or low skilled), which constitute an important barrier; particularly for low-wage earners (see section on taxation 3.1).

**In general labour market transitions remain very limited primarily due to institutional constraints reducing the potential of the labour market.** The unemployment benefits scheme and the employment policies available, in particular the public works scheme, are ineffective in supporting labour market transitions. Funds for labour market policies are not allocated based on a systematic impact assessment of measures. Long parental benefits and low childcare coverage also hamper the transition of women with small children back into the labour market.

### Unemployment benefits

**At three months, Hungary has the shortest duration of unemployment benefits in the EU but the average time required by job seekers to find employment is over one year.** While a short duration of unemployment benefits may enhance job search, it may also force jobseekers to accept jobs that do not match their qualifications, increasing turnover and reducing overall productivity in the economy. Other jobseekers, facing the limited benefit duration and not having adequate financial savings, may be indirectly forced to join the Public Works Scheme.

### Active labour market policies

**Despite steps to develop the profiling system, there is still significant room for improvement in active labour market policies.** The active measures target those whose unemployment benefit expires but without profiling the individuals. While low skilled workforce is a major problem, paired with a generally low participation in lifelong learning, the schemes (including trainings) are not specifically designed to the personal needs of the individuals. The development of a profiling system is under way according to its original timetable: the project was previously run by the head office, and will be taken over by the ministry responsible for employment policy. The planned profiling is to provide standardised system for directing people into the various schemes and a variety of individualised services to be offered for jobseekers, taking also into account local labour market conditions. While the plan is a step in the right direction, it is uncertain how the system will be used by other relevant authorities responsible for the various schemes in the future. The Public Works Scheme has been growing while other active tools receive proportionally less resources. (see also chapter 2.4). Funds for labour market policies are not allocated based on a systematic impact assessment of measures.

**The fragmented governance of the employment measures among various ministries may further reduce their effectiveness.** Notably the fact that the Interior Ministry is responsible for the

<sup>(53)</sup> The Roma-non-Roma employment gap is 34 pps. (Roma survey – Data in Focus: Poverty and employment: the situation of Roma in 11 EU Member States, European Union Agency for Fundamental Rights, 2014, and Employment and Social Developments in Europe 2014, European Commission.

administration of the Public Work Scheme, <sup>(54)</sup> carries further risk in this regard.

**As from January 2015, the head office of the Public Employment Service was abolished.** Its previous tasks in the field of employment policy will be delegated to various authorities and local labour offices will be reorganised as well. This fragmented institutional setup itself poses challenges on local labour offices and producing evidence related to employment policy impact.

#### *Youth unemployment*

**Parallel to general trends in Hungary, both the employment and unemployment rate of young people continued to improve in 2014.** However the number of young people (under 25) not being in employment, education or training has further increased (from 11.3% in 2007 to 15.4% in 2013) with the growing proportion of early school leavers - Roma youth are overrepresented both among those not being in employment, education or training and early school leavers. <sup>(55)</sup>

**The Hungarian Youth Guarantee is only partially meeting the challenge of youth unemployment.** This is because there is no guarantee what the quality offer will cover and whether sufficient human capacity at the Public Employment Service will be ensured for implementing the scheme. This can be seen in the inability to provide quality offers within the time period of four months. Several active measures have been launched even before the introduction of the Youth Guarantee, which will be boosted by the new programme aiming at the involvement of long term young jobseekers into specialised measures. A legal modification will ensure that young people below 25 and those involved in active labour market programmes do not have to accept public

work. This modification is to guarantee also that the definition of the "quality offer" will exclude public work and ensure that the trainings will lead to qualification. It is crucial that the monitoring system supports the follow up of the results and shows clearly the impacts of the Youth Guarantee on youth related macro indicators, particularly for disadvantaged groups such as the Roma.

#### *Female participation and low skilled workers*

**The impact of parenthood on employment of mothers is the highest in the EU.** While the general employment rate of women increased, it is still low compared to EU average, particularly for those with small children. This is due to long parental benefits and a low coverage of children in childcare facilities, in particular under the age of 3 years. Hungary has not yet reached the 33% Barcelona Targets of childcare participation. Efforts made in the previous years resulted in improved access to childcare which is to be continued to further facilitate female labour market participation. Hungary's gender pay gap has risen to 20.1% in 2012 and stands well above the 16.4% EU average.

**The disparity in the employment opportunities of high and low-skilled workers is bigger than in most EU countries.** Low-skilled workers have a very low employment rate (38.2%; EU average 51.4%, for age group 20-64) and their wage discount is considerable as compared to other workers. In the case of 25-49 years old the difference between employment rate of low skilled and the general population is 26 pps., thus it is two thirds of the overall employment rate. Education and training offers for job-seekers have not been able to address the challenges in basic and professional skills that are hampering labour demand for the low-skilled.

#### *Social protection and poverty*

**Indicators of poverty and social exclusion show a deteriorating situation in Hungary since the crisis, especially for children and the Roma.** While the proportion of individuals at risk of poverty or social exclusion has decreased in Europe, 33.5 % of the Hungarian population falls into this category. Between 2008 and 2013, the proportion of children at risk of poverty and social exclusion increased from around 33 % to 43 %

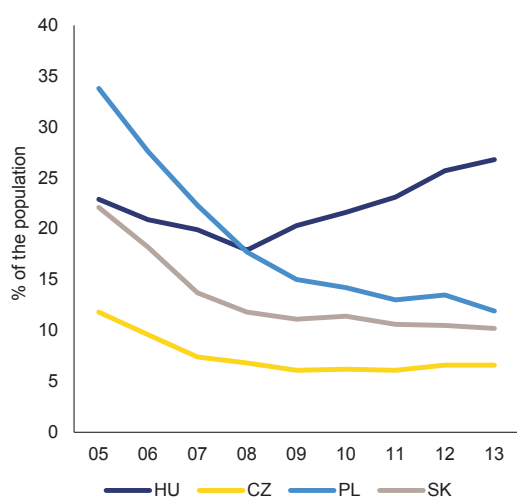
<sup>(54)</sup> The Ministry of National Economy (MoE) has an overall responsibility for employment policy, the Ministry of Interior (MoI) is responsible for the Public Work Scheme and the Ministry for Human Capacities (MfHC) holds responsibilities for social assistance system, for the rehabilitation of disabled people and for family issues (including regulation of parental leave and childcare facilities). Labour offices operating in the framework of government offices at local level has been supervised parallel by MoE and MoI, while MfHC established its separate institution for rehabilitation and social issues.

<sup>(55)</sup> NEET rate among Roma 16-24 year old is at 37%, ESL-rate at 82%. Roma survey – Data in Focus.



(compared with an EU average of 28 % in 2013). Poverty remains especially high among Roma, with 81% at risk of poverty, 60% lacking basic amenities, 39% living in low work intensity households, and 67% of working Roma experiencing in-work poverty. <sup>(56)</sup> The severe material deprivation index for Hungary is significantly above the EU average. The proportion of low work intensity households is falling, but in-work poverty has increased.

Graph 3.2.1: **The severe material deprivation rate in the region**



Source: Eurostat

**The targeting of income redistribution is very weak.** The upper three income deciles receive more in social transfers than the bottom three income deciles. Recent administrative cuts in utility prices do not appear to have substantially improved the affordability of housing for poor households. At the same time, the measure has created significant savings for households that were not in need: 36 % of the cost reduction benefited those in the highest income quintile, while only 15 % reached the lowest quintile. The situation of the most vulnerable groups is generally not affected by the utility price cuts.

**Gaps remain in the efficiency and coverage of social assistance.** Public social spending as a share

<sup>(56)</sup> Roma survey – Data in Focus: Poverty and employment: the situation of Roma in 11 EU Member States, European Union Agency for Fundamental Rights, 2014.

of GDP has increased in all OECD members of the EU since the crises with the exception of Hungary. Among OECD countries Hungary is the only country where cash income support for those in working age significantly decreased in this period, by 6% in real value. The Public Works Scheme has not reduced poverty among participants (see also section 2.4). Restrictive income protection policies, including the nominal freeze on social transfers in force since 2008 and the cutting back of the unemployment benefit period to three months, contributed to the worsening of the poverty situation. The restrictions on eligibility for social benefits mean that half of all jobseekers are left without any benefits.

**Plans to introduce further cuts to the social protection budget and to allow greater discretion in awarding benefits at local level carry the risk that the coverage and adequacy of benefits could further decrease.** The budget for 2015 contains approximately 10% less funding for social protection. The system of in-cash welfare benefits is currently undergoing reform: the various types of social benefits will be merged and local governments will be able to exercise more discretion in awarding benefits. The ‘employment substitute benefit’ received by the majority of beneficiaries is to be gradually phased out by 2018 and replaced by an offer of employment under the Public Works Scheme. As of March 2015, this type of social assistance will be administered centrally, along with some other forms of ‘income-type benefits’. One single ‘expense compensating’ benefit will replace all the other forms of social benefits currently provided by local government. The amount of benefits awarded (capped at HUF 28 500) and the eligibility rules will be left at the discretion of local authorities. Although poor authorities will receive compensation for the benefits they have paid out from the central budget if needed, the decentralisation risks further increasing regional inequalities.

### Health care systems

**Despite several organisational changes implemented between 2010 and 2014, some of the major issues facing the Hungarian health system have not yet been resolved, including poor health outcomes and an inefficient use of resources.** Both total and public healthcare



spending in Hungary remain below the EU average, with public funding showing a declining trend.<sup>(57)</sup> Hungary systematically appears towards the bottom of the ranking for headline health status indicators, such as life expectancy at birth. Premature mortality, measured in terms of potential years of life lost is not just among the highest, but is declining slowly in Hungary in international comparison, particularly among males. This is largely attributed to persistently high levels of mortality from diseases of the circulatory system. High mortality rates among the working-age population are prevalent. The overall efficiency of the Hungarian health system appears to be lagging compared to the rest of the EU, even taking into account relatively low spending levels, socio-economic factors and population life style behaviour. This observation holds for a range of considered health outcome measures and also when using various relevant assessment techniques.<sup>(58)</sup>

**Structural inefficiencies are being created by a number of specific characteristics of the Hungarian health system.** The level of out-of-pocket payments is disproportionately high, added to which there is widespread use of informal payments. This translates into health inequalities, affecting vulnerable groups in particular. Healthcare services are characterised by an excessively hospital-centred model. Hospitals are continuously generating arrears, which necessitate sizeable ad hoc payments from the state budget. Hungary also has relatively few general practitioners with a suboptimal geographic distribution. Weak payment incentives also result in general practitioners playing an ineffective ‘gatekeeping role’ while use of hospital services is high. A significant number of healthcare professionals have left the country and there are significant skills shortages, which are threatening the sustainability of the provision of healthcare services.

**The reforms implemented in recent years were mainly targeted at financing and service delivery, the aim being to contain the costs of care and to achieve further efficiencies.** It is not yet possible to evaluate the effect of these reforms in terms of health outcomes. A new strategy for healthcare is currently being developed, and includes plans to redistribute hospital capacity in order to eliminate duplications and reduce hospitals’ level of debt.

**Overall, Hungary has made limited progress in addressing the labour market and social cohesion recommendation.** Some progress has been made on active labour market policies as the preparation of the profiling system of the Public Employment Service is in progress. Some progress has been achieved in setting up the mentor network in the first Youth Guarantee programme, but it is not sure whether sufficient human capacity at the Public Employment Service will be ensured. No progress has been made in revising the public works scheme and the system of unemployment benefits. Some progress has been made in modification of social assistance cash benefits and in implementing the Roma inclusion the monitoring system. Poverty has been increasing, while an integrated policy approach to improve the situation of the most vulnerable groups is still missing.

<sup>(57)</sup> In 2012, total health expenditure was 7.8% of GDP in Hungary compared with 9.6% of GDP in the EU based on WHO data in 2012. At the same time, share public spending was about 64% of total health expenditure compared with the EU average of 76%, WHO data from 2012.

<sup>(58)</sup> See the report from 2015 on Comparative efficiency of health systems, corrected for selected lifestyle factors. [http://ec.europa.eu/health/systems\\_performance\\_assessment/docs/2015\\_maceli\\_report\\_en.pdf](http://ec.europa.eu/health/systems_performance_assessment/docs/2015_maceli_report_en.pdf)

### 3.3. EDUCATION AND SKILLS

**While educational attainment has been increasing in Hungary, there are significant challenges regarding the inclusiveness and flexibility of the system.** The country's education and training system is not capable to compensate sufficiently for the educational and cultural disadvantages of students from low socioeconomic status. The proportion of low achievers in basic skills and the early school leaving rate are increasing, in particular among the disadvantaged. The prevalence of the high share of Roma majority schools and classes remains a major issue. The transition possibilities of students to move between different educational paths are limited. The lack of measures to widen access and reduce drop-out rates in higher education remain a cause of concern. There are a number of ongoing reforms in the education sector, the effects of which on outcomes are not monitored and evaluated in a systematic way.

Graph 3.3.1: **Impact of socio-economic status on mathematics performance (2012)**



**Source:** OECD PISA 2012 (Table II.2.4a)

**In contrast to the trend seen at EU level, the proportion of early school leavers in Hungary has increased since 2010.** The rate of early school leaving reached 11.8% in 2013 and is thus moving further away from the national target of 10%. Early school leaving is particularly high in vocational education and training (30%), in less-developed regions <sup>(59)</sup> and among Roma (82%) <sup>(60)</sup>. Both the PISA and national competence tests

<sup>(59)</sup> Hungarian central statistical office education data 2012/2013.

<sup>(60)</sup> Roma survey – Data in Focus: Education: the situation of Roma in 11 EU Member States, European Union Agency for Fundamental Rights, 2014.

show that the proportion of low-achievers in reading, maths and science is increasing, and confirm the strong correlation seen between socioeconomic status and performance in education. Teachers are not prepared to provide sufficient support to low-achievers and potential drop-outs <sup>(61)</sup> and low-achieving schools are not required to take action to improve their results.

**In November 2014, the government adopted a strategy for addressing the problem of early school leaving, but its effective implementation may be hampered by the lack of cross-sectoral coordination and a clear implementation plan.**

An inspectorate and pedagogical services were introduced in 2014 and the rollout of further elements of the reform are planned for 2015 (related to the professional development of teachers, institutional action plans for addressing weak performance, and extending competence measurement). These elements may provide schools with the means for supporting learners so as to help them achieve all the main competences by the end of compulsory education. The relevant parties were, however, not consulted during the development of the strategy. In addition, the strategy does not go far enough in addressing the challenges faced in vocational education and training and in less developed regions.

**The considerable share of Roma majority schools and classes and a lack of high quality, inclusive mainstream education accessible to all remains a major challenge.** The proportion of Roma children attending Roma majority schools or classes remains high: 45% of Roma pupils attend schools or classes where 50% or more of their classmates are Roma. <sup>(62)</sup> The educational attainment of the Roma pupils is lower than the national average. In 2012, 77.7% of the Roma had only completed the eight years of primary education (i.e. primary education was their highest educational attainment) compared with 24.6% of the national average. Less than 1% of the Roma

<sup>(61)</sup> A végzettség nélküli iskolaelhagyás elleni középtávú stratégia. November 2014. (Mid-term Strategy Against School Leaving Without Qualification).

<sup>(62)</sup> Roma Education in Comparative Perspective. Findings from the UNDP/World Bank/EC Roma Survey. 2014.

acquired a tertiary degree compared to the national average of 18.5% in the adult population. <sup>(63)</sup>

**While some measures have been implemented to support the education of Roma, a comprehensive and systemic approach to reducing the share of Roma majority schools and classes in education has not been put in place.** Some administrative measures to address the prevailing issue of the high share of Roma majority classes and schools in state-maintained schools are in place. Ongoing programmes such as 'Tanoda' and 'Útravaló' contribute to increasing the competence levels of disadvantaged pupils. The school development strategy relies on the centralisation of public education management and the development of teachers' professional skills as a means of providing better quality education for all and ensuring that education also reaches the disadvantaged. In January 2015, an amendment to the school education law was adopted, allowing the government to determine the conditions under which religious and nationality-specific education is permitted. Stakeholders fear that the legislation could be used to anchor or even extend separated education of Roma in the system.

**Transition between the different forms and stages of education and to the labour market is still a challenge.** Students' educational performance influences the choice of secondary schools <sup>(64)</sup>. In principle, changing educational paths is possible. In practice, however, the gap in the competence level between pupils widens during their time in different types of upper-secondary schools, making it difficult to change between schools at a later stage. Pupils in vocational schools ('szakiskola') face obstacles to progress to higher education. <sup>(65)</sup>

---

<sup>(63)</sup> Hungarian Social Inclusion Strategy. The situation of Roma.

<sup>(64)</sup> The best performing students tend to go to general secondary schools that give direct access to higher education (in total around 79 % of the relevant age group), while those with weaker performance in education choose the vocational school ('szakiskola') (21 %). Hungarian central statistical office preliminary education data 2014/2015.

<sup>(65)</sup> Korai iskolaelhagyás a magyarországi szakkepesben. Refernet. 2013 [http://www.observatory.org.hu/wp-content/uploads/2013/09/ReferNet\\_2013\\_ESL\\_HU.pdf](http://www.observatory.org.hu/wp-content/uploads/2013/09/ReferNet_2013_ESL_HU.pdf)

**The planned changes in the allocation of state-funded places in secondary education may harm transition possibilities.** In November 2014, the government announced its intention to improve participation in vocational education and training and to reduce the number of general secondary school places, where pupils study for the *matura*. This may result in fewer applicants to higher education, and may make the vocational path less attractive to high-performing students. Combined with the increasing admission requirements for higher education, this development could further limit the social mobility of the disadvantaged.

**Monitoring of the implementation of the vocational training reform has not been established.** This gives particular cause for concern with regard to the shortened three-year vocational school programme ('szakiskola') and the 'bridge programmes' and their possible effects. An insufficient level of basic skills may limit students' chances of succeeding in further learning or of changing jobs in the long term. Despite financial incentives offered to companies and the significant role played by the Chamber of Commerce and Industry in supporting this reform, it is difficult to find good quality, practical training courses in some regions and for certain professions.

**The labour market demand for graduates of higher education is high and the number of jobs requiring for high-skilled professionals will further increase in the medium term.** The employment rate among recent higher-education graduates in Hungary was 85.6% in 2013, compared with the EU average of 80.7%. The rate of employment for those graduating from upper-secondary education in Hungary, meanwhile, was 64.9 %. The relative earnings of workers with university education are high, as are the private and public returns on tertiary education. <sup>(66)</sup>

**While tertiary attainment has increased, recent measures fail to improve the higher education participation of the disadvantaged.** Hungary has exceeded its national target rate for tertiary attainment of 30.3% among 30-34 year olds (with a rate of 31.9% recorded for 2013), but the level of tertiary attainment still remains below the EU

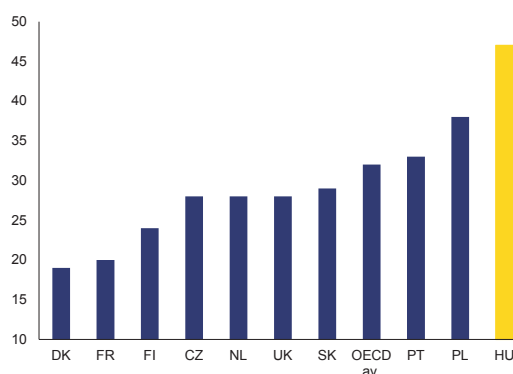
---

<sup>(66)</sup> OECD Education at a Glance 2014. Chart A7.1.

average (36.9%). In 2014, the number of students admitted to state funded courses decreased, even though 11% more students applied to higher education than in 2013. The fall in the number of state funded places is about 15% since 2011. <sup>(67)</sup> Participation in higher education largely depends on support from students' families and 25% of the students live under very modest financial conditions. <sup>(68)</sup> The current funding system does not guarantee equitable access. Overall, general government expenditure on education amounted to 4.8% of GDP in 2012, a fall of 0.9 pp. on 2011 spending levels. Hungary has the highest drop-out rate in higher education in the EU at 47%. Systematic monitoring and analysis of the reasons for students dropping out is not in place.

**Ongoing reforms prioritise the promotion of outstanding achievement, while policies to tackle non-completion of education or to widen access for disadvantaged students are not in place.** The practice of giving extra points to students from disadvantaged backgrounds when assessing their applications for higher education slightly improved their chances of being awarded a place, but their participation rate remains low. The new higher-education strategy increases the national target for tertiary attainment to 34% and puts particular emphasis on improving performance. There are, however, no plans to examine the causes of the high drop-out rate or to make guidance, mentoring and support widely available to students. The proposal for a performance-based financing system for higher education favours outstanding student achievement rather than trying to increase the proportion of students who complete their studies. A new institution type, 'community college' is to provide education opportunities in disadvantaged regions. Its particular role and management structure have not yet, however, been specified.

Graph 3.3.2: Drop-out rate from tertiary education (2011)



Source: OECD Education at a Glance 2013 (Table A4.1, p.71)

**Overall, Hungary has made only a limited progress in addressing the education recommendation.** Although a national strategy was adopted in 2014, little tangible progress has been made so far on early school leaving prevention with the proportion of early school leavers showing an increasing trend. More should be done in promoting inclusive mainstream education, a systemic approach, and active measures, to reducing the share of Roma majority schools and classes remain to be missing. Limited progress has been made to support transition to the labour market. No action was taken to monitor the implementation of the vocational training reform and further measures are needed to support the transition between different stages of education. The adoption of a national higher education strategy by the government has been announced in December 2014, aiming at an increase of the national tertiary attainment target to 34%. Yet policies supporting access for and completion of higher education by the disadvantaged have received little attention so far.

<sup>(67)</sup> Modernisation of higher education in Europe. Access, retention and employability 2014. Eurydice report.

<sup>(68)</sup> Szilvia Nyüsti: Disparities in the income and use of time of full-time students. Pp. 39-52. In: The Social Dimension of Higher Education. The results of Eurostudent V in Hungary. Budapest. 2014. Educatio Public Services Non-profit LLC.

### 3.4. BUSINESS ENVIRONMENT

**The unstable regulatory framework remains one of the biggest challenges for Hungary in terms of improving its business environment.**

Frequent and unpredictable regulatory changes, often at short notice and without allowing the parties concerned a sufficient transition period, new entry barriers in certain sectors, or the introduction or increase of sector-specific taxes, all have continued to weigh on the business environment and on competition in 2014. Legislative processes continued to be characterised by a lack of transparency and the notable absence of systematic consultations with the relevant parties. Corruption affecting public decision-making and public procurement remained a cause of concern.

#### Competition

**The stabilisation of the regulatory framework and fostering market competition especially in the services remains a big challenge.** The progressively increasing restrictions to entry in certain service sectors are hampering the efficient allocation of economic resources and increasing uncertainty for investors. The barriers to market entry introduced in the service sector in recent years have not been removed <sup>(69)</sup> and, instead, further barriers were introduced in 2014 (see below).

**Recent legislative initiatives on the retail sector resulted in new barriers and affect certain market players disproportionately.** New restrictions include the increase of the food chain control fee (see section on taxation), the regulations prohibit Sunday and night opening for medium to large shops, and forbid companies that have been operating at a loss for two consecutive years from selling consumer goods. While the so-called ‘Plaza Stop Law’, prescribing ex ante central authorisation for all retail establishments over 300 m<sup>2</sup>, expired on 1 January 2015, the new law establishing a similar retail authorisation procedure for outlets over 400 m<sup>2</sup> does not provide sufficiently clear criteria for authorisation to prevent arbitrary decision-making, and no implementation decree has yet been enacted. These

various measures could potentially have a serious negative effect on retail competitiveness. Barriers to entry in the Hungarian retail sector increased continuously between 2008 and 2013, as evidenced by the OECD’s Product Market Regulation Indicators for the service sector <sup>(70)</sup>. The size of mark-ups was already among the highest in the OECD before the crisis, and the allocative efficiency indicator is among the lowest among EU countries.

**A series of recent changes to the Hungarian competition law are a source of concern.**

Based on a provision introduced in late 2013, the government declared thirteen mergers (in the energy, financial, textbook publishing, IT and transport sectors) to be of strategic national interest in 2014, thereby bypassing the scrutiny of the Hungarian Competition Office. The procedure for assessing potential mergers is more transparent in other Member States, where the assessment of the proposal on competition grounds, and the political decision to authorise the merger, are clearly separated and their results communicated openly.

#### Transparency of decision-making and quality of legislative processes

**The quality of Hungarian legislative processes suffers from lack of transparency, compromised ex ante impact assessments and the short transition periods given to those affected by the legislation to prepare for its implementation.** As a consequence, laws frequently have to be amended within one year of their publication. <sup>(71)</sup> This deteriorates the predictability of the law-making process, and thus the business environment.

**Impact assessments are rarely publicly available, the published impact assessment sheets are often lacking in quality.** The frequent

<sup>(69)</sup> Including for tobacco retail, pharmacies, textbook publishing and distribution, waste management, mobile payments, meal vouchers and retail outlets.

<sup>(70)</sup> The biggest negative change between 2003 and 2013 was in the area of special regulation on large outlets <http://www.oecd.org/eco/reform/indicatorsofproductmarketregulationhomepage.htm>.

<sup>(71)</sup> The percentage of laws modified within one year fell from 26.4% in 2011 to 12.7% in 2013, but is still at a high level. Empirical data on the legislative processes in this section are taken from: Corruption Research Center Budapest (2015), The Quality of Hungarian Legislation 2013-2014. [http://ec.europa.eu/hungary/about-us/growth-and-jobs/legislation\\_eu\\_2014\\_report\\_150216\\_2100.pdf](http://ec.europa.eu/hungary/about-us/growth-and-jobs/legislation_eu_2014_report_150216_2100.pdf)



use of motions from individual members of parliament <sup>(72)</sup> circumvents mandatory impact assessments and consultations <sup>(73)</sup>. Where proposals are initiated by the government, consultations with the relevant parties are often rushed. The median time elapsed between the submission of a draft bill and the publication of the final law in 2014 was 16-37 days, which means that consultations and the preparation of legislation are subject to time pressure. Moreover, the transition periods allowed under new legislation are short.

## Corruption

**Corruption in public administration remains a matter of concern.** The 2014 EU Anti-corruption Report points to concerns related to informal relations between businesses and political actors at local level. Research points to the existence of "close contractual relationships" between business and political elites <sup>(74)</sup>; unstable legislation and shortcomings in the system of political parties' financing and in public procurement as key drivers of the problem. A recent legislative act lifts previously existing restrictions on access to public funding by politically affiliated organisations and eliminates rules against conflict of interests and transparency requirements. Restrictions on public access to information effectively hamper transparency and further elevate corruption risks. Corruption in public healthcare also remains an issue and no concrete plans have been put forward to address it.

**The integrity management framework and the electronic platform for whistle-blower reports are in place, but there is no evidence as to their effectiveness in curbing corruption.** Integrity advisors have been appointed in some public institutions. They are subordinated and report to the head of their institutions. Furthermore, the 2013 whistle-blower law lacks measures to protect whistle-blowers from retaliation. Coupled with a

general lack of trust in the effectiveness of prosecution of corruption, fear of retaliation sheds doubt on the effectiveness of the system to fight corruption.

**Among other fields, public procurement is particularly vulnerable to corruption.** The 2013 Eurobarometer shows a significant number of business respondents concerned about corrupt practices in public procurement. As regards EU co-funded projects, the Commission repeatedly observes the lack of respect of the principles of equal treatment, transparency, non-discrimination and sound financial management in public procurement procedures. Whereas the formal arrangements are in place for ensuring transparent contract award procedure, the application of public procurement rules and principles seem to fail often in practice. Partiality appears to be frequent in case of major infrastructure investments <sup>(75)</sup>. Bid-rigging is the most frequently encountered form of corruption in Hungary. <sup>(76)</sup>

## Public procurement

**Significant concerns remain in Hungary in the field of public procurement with regard to ensuring competition and transparency.** Steps have been taken to address these issues, and future results will have to be closely monitored. The bodies responsible for the uniform application of the procurement rules, control, monitoring as well as legislation are now within the Prime Minister's Office. The concrete results of this recent reorganisation remain to be seen. In November 2014, Hungary submitted an Action Plan which includes measures concerning the transposition of the new public procurement directives and the steps to foster inter alia competition and transparency, including measures on e-procurement. In 2014, a low level of competition

<sup>(72)</sup> In the first half of 2014, 19 % of all published laws originated from drafts submitted by an individual member of parliament. The equivalent percentage in the second half of the year was 25 %.

<sup>(73)</sup> OECD (2015), *Hungary: Towards a Strategic State Approach*, OECD Public Governance Reviews, OECD Publishing, Paris.

<sup>(74)</sup> Controlling Corruption in Europe: The Anti-corruption Report — Volume 1.

<sup>(75)</sup> Alina Mungiu-Pippidi (editor) (2013): *Controlling Corruption in Europe*, The Anticorruption Report.

<sup>(76)</sup> Bid-rigging is when a contract is promised to one party, although for the sake of appearance other parties also present a bid. For further information on Hungary, see PWC and Ecorys (2013): 'Identifying and reducing corruption in public procurement in the EU', Report commissioned by OLAF.



in public procurement <sup>(77)</sup> and the extensive use of direct award of contracts persisted <sup>(78)</sup>.

**A more frequent use of e-procurement could generate significant cost savings, improve the transparency of public procurement and increase competition.** The electronic submission of tenders is not used in practice, although theoretically available <sup>(79)</sup>. The main challenge for the Hungarian government is to adopt a comprehensive strategy for the transition to mandatory e-procurement in the first half of 2015, as part of the broader public procurement reform. The success of this process will greatly depend on ensuring adequate human resources, sufficient administrative capacity as well as ensuring that the system clearly fosters transparency.

#### Administrative burden

**Although recent efforts to cut red tape brought about positive changes in certain specific areas, overall administrative burden remains high in Hungary.** Administrative burden of businesses was targeted by the Cutting Red Tape programme which was completed in 2014; however, no independent evaluations were made publicly available as regards its actual impact. Moreover, important challenges remain in the tax compliance burden or burden associated with frequent legislative changes and short transition periods. In a number of important aspects, – such as the compliance costs of taxation, time needed to export, use of evidence-based legal instruments,

<sup>(77)</sup> The high administrative burden on tenderers results in a low number of bids per public tender. Hungary ranked the 4th lowest in market competitiveness according to the 'Cost-effectiveness study' with an average of 3.5 bids per tender (EU average 5.4). The high frequency of tenders obtained by some specific contractors and bidding by consortia involving the major actors of the market are signs for limited or distorted competition that materialise in investment costs being often higher in Hungary than the EU average, as assessed by JASPERS (Joint Assistance to Support Projects in European Regions) experts.

<sup>(78)</sup> In 2014, Hungary had 10.6% of negotiated procedures without publication for above threshold tenders, compared to an EEA average of 6.2% / median of 4.7%. This is the 6<sup>th</sup> highest proportion in the EU.

<sup>(79)</sup> Since July 2013, a public procurement database is available online and must be updated by all tenderers. However, it is not completely transparent, as due to design weaknesses data, it is sometimes not coherent and the database does not allow for meaningful searches or researches. <http://www.crcb.eu/?cat=6>

strategic capacity and irregular payments and bribes – Hungary performs below the EU average. <sup>(80)</sup>

**The overall effectiveness of public administration remains a challenge over the short and medium term.** Administrative reform measures were continuously implemented under the Magyar programme, with a focus on centralisation and simplification of administrative procedures. Challenges remain in the area of better depth and coverage of regulatory impact assessments; enforcement, monitoring and evaluation of strategies and other programmes. Further simplification and cost-cutting of the public administration are planned pursuant to a recent proposal that foresees the integration of specialised authorities (such as the environmental authorities, mining authorities and national park directorates) into the Government Offices under the supervision of Government Commissioners. Hungary is currently developing its Public Administration and Public Services Development Strategy 2014-2020, with a focus on organisation, human resources management, quality of public services and electronic supports.

#### EU fund management

**A lack of stability and transparency in the implementation system of EU Structural Funds in Hungary contributes to bottlenecks for the effective delivery of investments.** Reorganisation of the managing authorities and implementing bodies did not follow an articulated strategy and further changes are announced. Investment strategies or capacity development measures to ensure the delivery of projects are not yet in place for some key areas (e.g. health, transport, ICT).

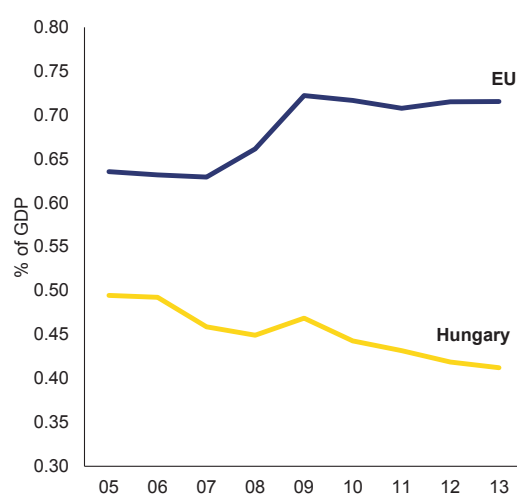
#### Research and development

**Public R&D intensity in Hungary has decreased over recent years from 0.46% of GDP in 2007 to 0.41% in 2013; this level is not only well below EU average (0.72%), but also lower than in most of the Central and Eastern European**

<sup>(80)</sup> Public administration scoreboard 2014: [http://ec.europa.eu/enterprise/policies/industrial-competitiveness/monitoring-member-states/improving-public-administration/index\\_en.htm](http://ec.europa.eu/enterprise/policies/industrial-competitiveness/monitoring-member-states/improving-public-administration/index_en.htm) Hungary ranks 24th in the EU in the overall effectiveness of public administration

**countries.** This development threatens to undermine the already weak supply of human resources for science and technology <sup>(81)</sup>, the quality of science base and contributes to a brain drain. While the adoption of the Smart specialisation strategy in November 2014 and of the 'Higher education concept' in 2015 could help to bring about a more effective public funding system, their successful implementation will also depend on a reversing of the decreasing trend in public R&D intensity and institutional funding.

Graph 3.4.1: Public R&D intensity (1), 2005-2013



**Source:** (1) Public R&D intensity: Government Intramural Expenditure on R&D (GOVERD) plus Higher Education Expenditure on R&D (HERD) as % of GDP.  
Source: European Commission

**The innovation capacity of SMEs has not improved, despite the implementation of several support schemes.** Increase in business R&D investment has been driven by foreign direct investment. Multinational companies' presence in Hungary is insufficiently used and the emergence of a national research and innovation ecosystem with innovative SMEs could be fostered. Some positive signs are linked to the approval of National Research and Development and Innovation Strategy (2013-2020) which sets out measures explicitly targeting innovative SMEs.

**The consolidation of the Hungarian research and innovation system is still an ongoing process.** This is due to the annual reorganisation of major innovation policy-making bodies and theresearch, development and innovation funding structure <sup>(82)</sup>.

**Overall, Hungary has made limited progress in addressing the business environment recommendation.** No progress has been achieved to stabilise the regulatory framework and foster market competition, especially in the services sector. The implementation of the Cutting Red Tape programme was finalized in 2014 tackling administrative burden for some areas, however new measures introduced in other policy fields resulted in increased administrative burden. A reorganisation of public procurement administration leading to changes in the structure and personnel of the system has been done in 2014, but the concrete results remain to be seen. In November 2014 Hungary submitted an Action Plan in the context of fulfilling the ex-ante conditionalities for the European Structural and Investment Funds. While this goes in the right direction, the implementation of the Action Plan needs to be closely monitored. The uptake of e-procurement is featured in the Hungarian Government's concept for the new Public Procurement Act, transposing the new public procurement directives. The government announced measures to improve the anti-corruption framework introducing corruption risk assessments as part of the mandatory impact assessments and an information campaign on corruption prevention for different target groups.

<sup>(82)</sup> The government adopted the law on 'Scientific Research, Development, and Innovation' (24 November 2014) providing legal mandate to the structure of the new Hungarian R&I landscape. The National Office for Research, Development and Innovation is the governmental body responsible for research, development and technological innovation as of 1 January 2015. The new office is responsible for the National Research, Development and Innovation Fund that integrates the Hungarian Scientific Research Fund (OTKA) and the Research and Technological Innovation Fund (KTIA).

<sup>(81)</sup> Science and Engineering graduates (ISCED 5 and 6) per thousand population aged 25-34 was 8.6% in 2012, which is well below the EU average of 16.3%.

### 3.5. NETWORK INDUSTRIES AND ENVIRONMENT

**An uncertain regulatory and strategic framework renders the performance of the network industries sub-optimal.** The country is well connected to its neighbours in electricity, but in case of natural gas important projects are still in the implementation phase. Because of price cuts, electricity and gas retail prices for household consumers dropped in 2013 and 2014. Energy efficiency shows a mixed picture. While the reorganisation of major public transport companies show some progress, the state of transport infrastructure remains a cause for concern. The Digital Economy performs below the EU average, especially regarding the use of digital technologies by enterprises. Hungary does not fully exploit economic instruments to promote reuse and recycling and improve resource efficiency.

#### Energy networks and internal market

**Hungary's electricity transmission networks are well connected to all its neighbours, with the exception of Slovenia, through interconnectors, and the country's interconnection capacity (measured relative to the net domestic power generation capacity) is well above the required 10 % level.** The security of natural gas supply is compromised by the lack of bi-directional connections with Croatia and Romania, with gas currently only able to flow from Hungary to these countries, but not in the other direction. Interconnectors allowing reverse flow are scheduled to be built by 2018. The gas interconnector between Slovakia and Hungary is expected to become operational in the first quarter of 2015, improving Hungary's access to competitive gas sources in central and western Europe.

**During the past few years several regulatory measures have impacted the business climate in the energy utility sector in Hungary.** Recognised rates of returns on investments in the regulated market segments were successively reduced to practically 0%, some cost elements (e.g.: charges levied on network infrastructure and banking transactions) were excluded from justified costs, and special taxes were levied on the energy sector.

#### Sustainability of recent price cuts

**In 2013 and 2014 significant retail electricity and gas price cuts<sup>(83)</sup> have been implemented by the government with impact on profitability of utilities.** As result, by the end of 2014 electricity and gas retail prices for household consumers were down by 23.5% compared to 2012. The Universal Service Provision segment of the retail electricity and gas utilities has never been a profitable business since data sets are available in 2007. In 2013 the Universal Service Provision segment of the four different regional utilities<sup>(84)</sup>, in the retail gas market, and the similar segment of the four different utilities in the retail electricity market produced a combined loss of HUF 41 bn (some EUR 140 million).

**The sustainability of price cuts for household consumers depends on the operators' ability to cross-subsidise these losses from other business segments.** Under current tariffs, only significantly lower wholesale electricity and gas prices, leading to lower purchase costs for retailers, could improve the profitability of the Universal Service Provision segment; however, in the long run this does not seem to be realistic.

**Reviewing the impact of the price regulation on the energy sector is limited and the autonomy of the national regulator on deciding on network tariffs was not reinforced.** In the first quarter of 2015, Hungary is scheduled to launch a comprehensive study on the impacts of price regulation. It is unclear how a new state-owned utility holding<sup>(85)</sup> could offer lower prices for the consumers and cover its costs at the same time, unless it would be financially compensated for permanent losses by the state.

---

<sup>(83)</sup> As of 1 January 2013 both electricity and retail prices for household consumers under the Universal Service Provision were cut by 10%, which was followed by a further cut of 11.1% as of 1 November 2013. In April 2014, the retail price of natural gas was reduced by 6.5%, while in September 2014 retail electricity prices were cut by 5.7% and as of October district heating tariffs by 3.3%.

<sup>(84)</sup> In the gas market Tigaz, GDF Suez, E.ON, Fogaz produced a combined loss of 27 bn HUF. In the electricity market, E.ON, Emasz, Edasz, EDF Demasz produced a combined loss of 14 bn HUF.

<sup>(85)</sup> According to the latest news a state-owned utility will start operating as of March 2015, entering in the retail gas utility sector; later it might also enter in the retail electricity sector.

## Renewable and energy efficiency measures

**Hungary has reached the interim 2011/2012 renewable energy target towards the 2020 target.** The developments in electricity and transport sectors do not meet expectations presented in Hungary's National Renewable Energy Action Plan.

**The current energy saving target of Hungary looks outdated in the light of the latest energy consumption developments.** The primary energy consumption target in 2020 is based on a projection of business-as-usual scenario, which would allow a 24% increase by 2020, given that the country's primary energy consumption was 21.7 Mtoe in 2012 (based on Eurostat data, decreasing since 2005). This increase appears as "saving" because the "business as usual" scenario forecasts a worrying 53% increase in 8 years.

**Preparing and adopting legislation necessary to increase energy efficiency in only limited.** Hungary is the only EU country which has failed to submit its National Energy Efficiency Plan, its long-term renovation strategy, and that has notified no measures yet to transpose the Energy Efficiency Directive. Energy intensity remains high by EU standards, especially for households. Combined heat and power generation is not supported in a way required by EU legislation.

## Transport sector

**Progress has been made in the reorganisation of MÁV (state railways) and Volán (interurban bus) companies, and in the service level of public transport in Budapest.** The inefficient organisation and operation of the major public transport companies have been a significant burden on the state budget for years, while long-term underinvestment in rolling stock and infrastructure have put service provision and human health at risk. On 1 January 2015, the 24 interurban bus companies were replaced by seven regional ones. This measure is expected to help optimise transport services and reduce overall costs. Both the state railway company and the Budapest transport company have recorded positive operational results in recent years <sup>(86)</sup> but their

level of debt continues to put considerable strain on the budget.

**While rolling stock is being renewed, the state of infrastructure remains largely unaddressed.**

The average age of rolling stock is still very high, but is decreasing both in the case of rail and metropolitan transport. New rolling stock has been able to be purchased in part due to the reallocation of funding from the EU Cohesion Funds previously intended for the improvement of rail and waterway connectivity. At the same time, there are still permanent speed limits on 38 % of the rail network and no action has been taken to improve the navigability of the Danube.

**Steps have been taken towards the introduction of electronic ticketing in Budapest in 2017, which will allow the tariff system to be revised.**

The new transport development strategy for Budapest examines the capital's transport system, identifying the current shortcomings and the areas for potential improvement. It does not, however, provide any information as to the financing and timing of investments. The introduction in January 2015 of tolls for passenger cars on ring roads and some expressways came unexpected. The government's sole purpose in introducing the measure was to raise revenue. Offering annual regional vignettes may appear to make the road charges more proportionate for regular users, but in practice, increases in the number of roads on which tolls are charged are placing a disproportionate burden on occasional users and can divert traffic to urban areas. The introduction of congestion charging in Budapest is currently being planned for the end of 2016, but details of the plans are not yet known. The measure may not only raise revenues but could also make public transport more competitive and reduce negative externalities.

## Telecommunications and digital economy

**Hungary scores somewhat below the EU average for the availability of basic fixed broadband infrastructure, as 5.6 % of homes are not yet connected (compared with 2.8 % in**

---

<sup>(86)</sup> The Centre for Budapest Transport has recorded increasing revenues from ticket sales since 2010. Fare revenues

continued to increase last year despite the reduction in monthly ticket prices for individuals. Source: [www.bkk.hu](http://www.bkk.hu)

the EU). <sup>(87)</sup> At the same time, fast broadband access technologies (at least 30 Mbps) are already available to 74 % of homes, above the EU average of 62 %. The government has recently set the ambitious target of fast broadband being available to all homes by 2018, two years ahead of the European target set in the Digital Agenda for Europe. Besides public investments, the modernisation of telecommunications infrastructure will require significant private investments as well, which is extremely difficult to attract, given the extraordinary sectoral tax currently levied on telecommunications operators.

**Businesses in Hungary do not fully exploit the opportunities offered by digital technologies.** For example, 36 % of firms shared internal information on sales and purchases electronically in 2014, compared with the EU average of 44 %. Only 26 % of businesses communicated with customers through social media (compared with 36 % in the EU), and 8 % used cloud computing services (19 % in the EU). Looking at eCommerce, 32% of Hungarians shopped online as opposed to 50% in the EU, and only 10% of SMEs were selling online (15% in the EU).

**The instability of Hungary's strategic framework can create a bottleneck effect in the flow of investment into online public services and digital public administration.** The Magyar Programme 2014-20 contains a long-term strategy for reducing the administrative burden. The new public administration and public services strategy is also being drafted. The links between these strategies and the 'digital state' pillar of the national ICT strategy is unclear.

## Environment

**Hungary does not fully exploit economic instruments to promote prevention of waste generation, to avoid incinerating and landfilling reusable and/or recyclable waste, while making reuse and recycling more economically attractive.** Such instruments could stimulate the circular economy, and improve the resource efficiency.

**Overall, Hungary has made limited progress in addressing the energy and networks recommendation.** Where energy price regulation still exists, usually the prices, network tariffs and methodology of their calculation are set by the regulator, but in Hungary, it is practically set by the government. Energy consumption has been decreasing in Hungary since 2005, even though energy intensity remains high by EU standards, especially for households. The country is on track in reaching its fairly unambitious energy efficiency target. Limited progress has been made in preparing and adopting the legislation necessary to increase energy efficiency. No progress has been made in terms of the economic incentives to reduce energy use. Some progress has been made in restructuring the state-owned transport enterprises and in reducing of their debt stock.

---

<sup>(87)</sup> Source of figures quoted in this section: Digital Agenda Scoreboard, <http://ec.europa.eu/digital-agenda/en/digital-agenda-scoreboard>



## ANNEX A

### Overview Table

Commitments	Summary assessment <sup>(88)</sup>
<b>2014 country specific recommendations (CSRs)</b>	
<p><b>CSR 1:</b> Reinforce the budgetary measures for 2014 in the light of the emerging gap of 0.9% of GDP relative to the Stability and Growth Pact requirements, namely the debt reduction rule, based on the Commission 2014 spring forecast. In 2015, and thereafter, significantly strengthen the budgetary strategy to ensure reaching the medium-term objective and compliance with the debt reduction requirements in order to keep the general government debt ratio on a sustained downward path. Further enhance the binding nature of the medium-term budgetary framework through systematic ex-post monitoring of compliance with numerical fiscal rules and the use of corrective mechanisms. Improve the transparency of public finances, including through broadening the mandatory remit of the Fiscal Council, by requiring the preparation of regular macro-fiscal forecasts and budgetary impact assessments of major policy proposals.</p>	<p>Hungary has made <b>limited progress</b> in addressing CSR 1 of the Council recommendation (this overall assessment of CSR 1 excludes an assessment of compliance with the Stability and Growth Pact):</p> <ul style="list-style-type: none"> <li>• No progress was made to implement the recently legislated medium-term budgetary framework. Government representatives announced that the issuance of the first resolution containing medium-term revenue and expenditure plans for the 2016-2018 period could take place in the first months of 2015.</li> <li>• Limited progress in improving the transparency of public finances and broadening the mandatory remit of the Fiscal Council. While the legal task list of the Fiscal Council was not extended, it plays a slightly more prominent role through publishing commissioned studies.</li> </ul>
<p><b>CSR 2:</b> Help restore normal lending flows to the economy, inter alia by improving the design of and reducing the burden of taxes imposed on financial institutions. Adjust the financial transaction duty in order to avoid diverting savings from the banking sector and enhance incentives for using electronic payments. Investigate and remove obstacles to portfolio cleaning inter alia by tightening provisioning rules for restructured loans, removing obstacles to collateral foreclosure as well as increasing the speed and efficiency of insolvency proceedings. In this respect, closely consult stakeholders on new policy</p>	<p>Hungary has made <b>limited progress</b> in addressing CSR 2 of the Council recommendation:</p> <ul style="list-style-type: none"> <li>• Limited progress in restoring normal lending. Since mid-2013, lending has mainly relied on the subsidised lending schemes, which has managed to loosen supply constraints, but cannot substitute for a sound operating environment for banks on a permanent basis. No progress in reducing the surcharges on the financial sector. Moreover, the ongoing settlements with borrowers and other new regulatory measures (while improving consumer protection and the transparency of pricing) are estimated to result in substantial further losses for</li> </ul>

<sup>(88)</sup> The following categories are used to assess progress in implementing the 2014 country-specific recommendations:

No progress: The Member State has neither announced nor adopted any measures to address the CSR. This category also applies if a Member State has commissioned a study group to evaluate possible measures.

Limited progress: The Member State has announced some measures to address the CSR, but these measures appear insufficient and/or their adoption/implementation is at risk.

Some progress: The Member State has announced or adopted measures to address the CSR. These measures are promising, but not all of them have been implemented yet and implementation is not certain in all cases.

Substantial progress: The Member State has adopted measures, most of which have been implemented. These measures go a long way in addressing the CSR.

Fully addressed: The Member State has adopted and implemented measures that address the CSR appropriately.



<p>initiatives and ensure that these are well-targeted and do not increase moral hazard for borrowers. Further enhance financial regulation and supervision.</p>	<p>the financial sector.</p> <ul style="list-style-type: none"> <li>• Some progress in the design of the financial transaction duty as the normal tax rate was replaced by a flat annual fee for card payments from 2015.</li> <li>• Limited progress in incentivising portfolio cleaning. In the household sector, the National Asset Management Agency has contracted close to 25 000 (and completed the purchase of around 14 000) real estates by end-2014. For non-financial corporations, the MNB set up an Asset Management Company, primarily aimed at commercial real estates. Discussions are ongoing to ensure that the new institution is governed in compliance with EU rules. Consultation with stakeholders on new policy initiatives has been at best occasional.</li> <li>• Substantial progress in financial regulation, as the government has transposed the EU directive on bank resolution.</li> </ul>
<p><b>CSR 3:</b> Ensure a stable, more balanced and streamlined tax system for companies, including by phasing out distortive sector-specific taxes. Reduce the tax wedge for low-income earners, inter alia by improving the efficiency of environmental taxes. Step up measures to improve tax compliance — in particular to reduce VAT fraud — and reduce its overall costs.</p>	<p>Hungary has made <b>limited progress</b> in addressing CSR 3 of the Council recommendation:</p> <ul style="list-style-type: none"> <li>• No progress in ensuring a more normative corporate tax regime. In contrast, a number of new sector-specific taxes were introduced with a steep progressive schedule or existing ones were increased.</li> <li>• Limited progress in reducing the tax wedge for low-earners. A doubling in the family tax allowance after two children is scheduled to be introduced in four linear steps way between 2016 and 2019. This measure will have only a minor effect on the tax wedge of a limited number of workers.</li> <li>• Some progress in the field of tax compliance. Following the successful completion of the establishment of on-line links to cash-registers for retail outlets, the authorities are planning to extend this requirement to a number of market services. The threshold for itemised VAT declaration was lowered as of 2015. A new surveillance system has been established from January 2015, which will permit the real-time monitoring of the transport of VAT-liable goods.</li> <li>• No progress in reducing the compliance costs of</li> </ul>

	<p>taxation. The compliance burden impact of new measures, such as the launch of road cargo inspection system and a new system for local taxes, is not monitored.</p>
<p><b>CSR4:</b> Strengthen well-targeted active labour market policy measures, inter alia by accelerating the introduction of the client profiling system of the Public Employment Service. Put in place the planned youth mentoring network and coordinate it with education institutions and local stakeholders to increase outreach. Review the public works scheme to evaluate its effectiveness in helping people find subsequent employment and further strengthen its activation elements. Consider increasing the period of eligibility for unemployment benefits, taking into account the average time required to find new employment and link to activation measures. Improve the adequacy and coverage of social assistance while strengthening the link to activation. In order to alleviate poverty, implement streamlined and integrated policy measures to reduce poverty significantly, particularly among children and Roma.</p>	<p>Hungary has made <b>limited progress</b> in addressing CSR 4 of the Council recommendation:</p> <ul style="list-style-type: none"> <li>• Some progress has been made on active labour market policies as the preparation of the profiling system of the Public Employment Service is in progress according to the original schedule. Institutional changes in the public employment services have been launched which might jeopardize the coordination and implementation of active policy measures.</li> <li>• Some progress for setting up of the mentor network in the framework of first Youth Guarantee active labour-market programme, but the Youth Guarantee is only partially meeting the challenge: the quality offer will be provided only within 6 months that raise concern whether sufficient human capacity at the Public Employment Service will be ensured for implementing the scheme.</li> <li>• No progress has been made in revision of the public works scheme and its effectiveness has not improved. According to the 2015 budget, passive and active measures will rely more and more on public works while further improvement is needed to provide trainings and services required for open labour market participation. Limited progress in strengthening activation elements of the public works scheme as time will be allowed for attending job interview; further improvement is needed to provide trainings required by open labour market employers.</li> <li>• No progress has been made to increasing unemployment benefit. Activation element is strong during the unemployment benefit period as there is a co-operation obligation with the Public Employment Service.</li> <li>• Some progress has been made in modification of social assistance cash benefits: the new system will be more transparent however the adequacy and coverage is uncertain. It is strongly linked to activation.</li> <li>• Some programmes have been implemented for</li> </ul>

	<p>Roma inclusion and the monitoring system has been set up. However only limited progress has been made to general poverty reduction; poverty indicators do not improve significantly and streamlining and policy integration still missing.</p>
<p><b>CSR 5:</b> Stabilise the regulatory framework and foster market competition, inter alia by removing barriers in the services sector. Take more ambitious steps to increase competition and transparency in public procurement, including better use of e-procurement and further reduce corruption and the overall administrative burden.</p>	<p>Hungary has made <b>limited progress</b> in addressing CSR 5 of the Council recommendation:</p> <ul style="list-style-type: none"> <li>• No progress has been achieved to stabilise the regulatory framework and foster market competition, especially in the services sector.</li> <li>• A reorganisation of public procurement administration leading to changes in the structure and personnel of the system has been done in 2014, results remain to be seen. Hungary submitted an Action Plan in the context of fulfilling the ex-ante conditionalities for the European Structural and Investment Funds. The Plan includes measures concerning the transposition of the new public procurement directives and the steps to foster inter alia competition and transparency, including measures on e-procurement. While this goes in the right direction, the implementation of the Action Plan needs to be closely monitored.</li> <li>• The uptake of e-procurement is featured in the Hungarian Government's concept for the new Public Procurement Act. The integrity management system is established, but its effectiveness in dealing with corruption allegations needs to be proven. The government announced measures to improve the anti-corruption framework including new amendments to the whistleblower law, introducing corruption risk assessments as part of the mandatory impact assessments and an information campaign on corruption prevention for different target groups. The implementation of the Cutting Red Tape programme was finalized in 2014 tackling administrative burden for some areas, however new measures introduced in other policy fields resulted in increased administrative burden.</li> </ul>
<p><b>CSR6:</b> Implement a national strategy on early school leaving prevention with a focus on drop-outs from vocational education and training. Put in place a systematic approach to promote inclusive mainstream education for disadvantaged groups, in particular Roma. Support the transition between</p>	<p>Hungary has made <b>limited progress</b> in addressing CSR 6 of the Council recommendation:</p> <ul style="list-style-type: none"> <li>• Limited progress has been made on early school leaving prevention. A national strategy was adopted in November 2014, implementation is yet</li> </ul>

<p>different stages of education and towards the labour market, and closely monitor the implementation of the vocational training reform. Implement a higher-education reform that enables greater tertiary attainment, particularly by disadvantaged students.</p>	<p>to be seen.</p> <ul style="list-style-type: none"> <li>• Limited progress has been made in promoting inclusive mainstream education; a systematic approach still needs to be developed.</li> <li>• Limited progress has been made to support transition to the labour market. No action was taken to monitor the implementation of the vocational training reform and no measures has been taken are needed to support the transition between different stages of education.</li> <li>• Limited progress has been made in implementing a higher education reform that enables greater tertiary attainment of disadvantaged students. The adoption of a national higher education strategy by the government was announced in December 2014, including an increase of the national tertiary attainment target to 34%.</li> </ul>
<p><b>CSR 7:</b> Review the impact of energy price regulation on incentives to invest and on competition in the electricity and gas markets. Take further steps to ensure the autonomy of the national regulator in establishing network tariffs and conditions. Take measures to increase energy efficiency in particular in the residential sector. Further increase the sustainability of the transport system, inter alia by reducing operating costs and reviewing the tariff system of state-owned enterprises in the transport sector.</p>	<p>Hungary has made <b>limited progress</b> in addressing CSR 7 of the Council recommendation:</p> <ul style="list-style-type: none"> <li>• In most Member States where price regulation still exists, the prices, network tariffs and methodology of their calculation are set by the regulator, but in Hungary, they continue to be practically set by the government while the regulator only gives its opinion.</li> <li>• Limited progress as to more regulatory autonomy and reviewing policies to regulate prices.</li> <li>• Energy consumption has been decreasing in 2005-2012, even though energy intensity remains high by EU standards, especially for households. The country is on track in reaching its energy efficiency target, which was set at a fairly unambitious level. Limited progresses have been made in preparing and adopting the legislation necessary to increase energy efficiency. A number of subsidy programmes were announced, however no progress has been made in terms of the economic incentives to reduce energy use.</li> <li>• Some progress in restructuring the state-owned enterprises (MÁV and Volán), and in reducing the debt stock of MÁV. The reorganisation of Volán bus companies was finalised in January 2015. Some progress has been made in improving environmental sustainability thanks to gradual</li> </ul>

	renewal of old rolling stock.
--	-------------------------------

Commitments	Summary assessment
<b>Europe 2020 (national targets and progress)</b>	
Employment rate target: 75%	Employment rate 60.7% in 2011; 62.1% in 2012; 63.2% in 2013 and 66.7% in 2014. While the employment rate is increasing, the pace of improvement is still not enough to achieve the Europe 2020 target and substantially reduce the difference from the EU average, particularly taking into account open labour market participation which continues to be a concern. Youth unemployment is still a challenge.
Early school-leaving target: 10%	Early leavers from education and training (percentage of the population aged 18-24 with at most lower secondary education and not in further education or training): 2010 - 10.5%, 2011 - 11.2%, 2012 - 11.5%, 2013 - 11.8%. The figures are particularly high among vocational school students (30%) and among Roma (seven times higher than in the non-Roma population; i.e. 82%). No achievement in this regard but the trend is worsening.
Tertiary education target: 30.3%	Tertiary educational attainment: 28.1% in 2011, 29.9% in 2012 and 31.9% 2013. Therefore, Hungary has already exceeded the national target, which is still below the EU average.
R&D target: 1.8% of GDP and 3% by 2030	While R&D intensity grew in 2007-2013 by an annual 6.5% reaching 1.41% in 2013 public R&D intensity decrease from 0.46% in 2007 to 0.41% in 2013. However Hungary seems to be on track to reach its R&D intensity target for 2020 due to an increase in Business expenditure on R&D (data for 2014 are not available yet). According to the commitments (RDI strategy), Hungary will increase its research and development expenditures to 1.8% of the GDP by 2020 and 3% by 2030. A complementary target is that BERD would reach 1.2% by 2020.
Target on the reduction of population at risk of poverty or social exclusion in number of persons: 450 000	3.05 million People were at risk of poverty or social exclusion in 2011, close to 3.19 million in 2012 and 3.28 million in 2013 (against a 2008 baseline of 2.83 million). No improvement was achieved in this target.

Greenhouse gas (GHG) emissions target: +10% compared to 2005 emissions (ETS emissions not covered by this national target)	Change in non-ETS greenhouse gas emissions between 2005 and proxy 2013: -21%. Based on the latest national projections submitted to the Commission and considering existing measures, it is expected that Hungary will achieve the target: -16% in 2020 as compared to 2005 (i.e. a margin of 26 pps. below target).
2020 renewable energy target: 13%. Share of renewable energy in all modes of transport: 10 %	According to the preliminary data of EurObserver (in the lack of 2013 official Eurostat data, to be published later), the share of renewables in Hungary's final energy consumption was 10.1%. Hungary has reached the interim 2011/2012 renewable target towards the 2020 target, but the level of consumption from renewable energy decreased in 2011 and 2012. In 2011 and 2012 the share of renewable energy has increased only in heating sector while the share of renewable energy in electricity decreased in 2011 and continued to decrease in 2012. The developments in electricity and transport sector are both below Hungary's National Renewable Energy Action Plan (NREAP) expectations in these sectors. A renewable energy support scheme reform was announced in 2011 is delayed since then.
26.6 million tonnes of oil equivalent (Mtoe) primary consumption	The energy consumption target given in the 2014 National Reform Programme (NRP), when compared to the 2012 consumption, actually allows a 24% increase. This appears as "saving" because the "business as usual" scenario forecasts a worrying 53% increase in 8 years.
18.2 Mtoe final energy consumption	The Staff Working Document of the 2014 exercise highlighted the unrealistic nature of the 2020 BAU scenario on energy consumption (and of the related saving target), compared to observed trends between 2008 and 2012. In the final version of the operational program on Energy Efficiency and Environment submitted to the Commission in December 2014 HU indicated that an updated scenario and target would be adopted by 31 March 2015.

Table B.1: Macroeconomic indicators

	1996- 2000	2001- 2005	2006- 2010	2011	2012	2013	2014	2015	2016
<b>Core indicators</b>									
GDP growth rate	3.0	4.2	-0.1	1.8	-1.5	1.5	3.3	2.4	1.9
Output gap <sup>1</sup>	n.a.	1.6	0.3	-2.0	-3.4	-2.4	-0.7	-0.1	-0.3
HICP (annual % change)	15.2	5.9	5.3	3.9	5.7	1.7	0.0	0.8	2.8
Domestic demand (annual % change) <sup>2</sup>	3.6	4.1	-1.8	-0.2	-3.0	1.2	4.5	2.2	0.9
Unemployment rate (% of labour force) <sup>3</sup>	8.2	6.1	8.8	11.0	11.0	10.2	7.7	7.4	6.6
Gross fixed capital formation (% of GDP)	24.3	24.2	22.8	19.8	19.1	19.9	21.6	21.5	21.4
Gross national saving (% of GDP)	21.2	18.1	18.7	21.2	20.9	24.0	25.6	25.8	26.3
<b>General government (% of GDP)</b>									
Net lending (+) or net borrowing (-)	-5.1	-6.9	-5.5	-5.5	-2.3	-2.4	-2.6	-2.7	-2.5
Gross debt	61.8	56.9	72.4	81.0	78.5	77.3	77.7	77.2	76.1
Net financial assets	-30.1	-38.7	-54.9	-52.5	-60.1	-61.6	n.a.	n.a.	n.a.
Total revenue	44.4	42.4	44.9	44.4	46.4	47.3	47.5	47.0	44.4
Total expenditure	49.5	49.3	50.3	49.9	48.7	49.7	50.0	49.8	46.9
of which: Interest	7.3	4.2	4.1	4.2	4.6	4.6	4.1	3.8	3.6
<b>Corporations (% of GDP)</b>									
Net lending (+) or net borrowing (-)	-5.6	-1.6	0.3	3.5	2.3	6.3	6.7	6.8	6.4
Net financial assets; non-financial corporations	-105.7	-103.3	-113.0	-122.5	-109.1	-101.1	n.a.	n.a.	n.a.
Net financial assets; financial corporations	-1.3	-3.2	-1.2	9.9	8.9	8.2	n.a.	n.a.	n.a.
Gross capital formation	18.5	15.6	14.3	13.9	12.5	12.6	14.3	14.1	15.4
Gross operating surplus	18.5	21.5	23.2	23.6	22.9	24.0	24.0	24.8	26.0
<b>Households and NPISH (% of GDP)</b>									
Net lending (+) or net borrowing (-)	4.9	1.0	2.0	5.1	4.3	3.9	3.2	3.2	2.6
Net financial assets	60.8	60.6	63.0	58.8	66.3	70.9	n.a.	n.a.	n.a.
Gross wages and salaries	33.1	35.5	36.2	36.7	37.6	37.7	38.5	38.5	38.3
Net property income	6.0	4.2	3.7	3.1	3.8	3.5	4.5	3.8	3.5
Current transfers received	16.4	17.7	19.3	19.1	19.1	18.7	17.6	17.4	17.0
Gross saving	9.8	6.5	6.4	7.3	6.1	6.3	6.0	6.1	5.6
<b>Rest of the world (% of GDP)</b>									
Net lending (+) or net borrowing (-)	-5.9	-7.5	-3.2	3.2	4.3	7.8	7.8	8.4	7.7
Net financial assets	76.7	85.2	106.6	107.3	94.5	83.9	n.a.	n.a.	n.a.
Net exports of goods and services	-1.3	-2.7	1.9	6.2	6.9	7.6	7.0	7.9	8.6
Net primary income from the rest of the world	-4.9	-4.9	-5.4	-4.8	-4.3	-2.9	-2.7	-2.9	-2.8
Net capital transactions	0.1	0.3	1.2	2.4	2.6	3.6	3.7	4.0	2.8
Tradable sector	48.2	45.9	45.4	45.8	45.5	45.9	n.a.	n.a.	n.a.
Non-tradable sector	37.7	40.2	40.0	39.0	38.4	38.3	n.a.	n.a.	n.a.
of which: Building and construction sector	4.2	4.7	4.1	3.4	3.2	3.3	n.a.	n.a.	n.a.

(1) The output gap constitutes the gap between the actual and potential gross domestic product at 2010 market prices.

(2) The indicator of domestic demand includes stocks.

(3) Unemployed persons are all those who were not employed, had actively sought work and were ready to begin working immediately or within two weeks. The labour force is the total number of people employed and unemployed. The unemployment rate covers the age group 15-74.

**Source:** European Commission 2015 winter forecast; Commission calculations



Table B.2: **Financial market indicators**

	2009	2010	2011	2012	2013	2014
Total assets of the banking sector (% of GDP) <sup>1)</sup>	142.7	135.5	121.9	121.6	118.5	116.2
Share of assets of the five largest banks (% of total assets)	55.2	54.6	54.6	54.0	51.9	n.a.
Foreign ownership of banking system (% of total assets)	54.3	53.1	54.6	50.0	46.2	n.a.
Financial soundness indicators:						
- non-performing loans (% of total loans) <sup>2)3)</sup>	8.2	10.0	13.7	16.0	16.8	16.3
- capital adequacy ratio (% <sup>2)4)</sup>	13.9	13.9	13.8	16.3	17.5	16.6
- return on equity (% <sup>2)</sup>	8.4	0.4	-7.7	-1.4	2.4	-21.5
Bank loans to the private sector (year-on-year % change) <sup>1)</sup>	-5.4	-5.2	-13.1	-5.5	-4.1	-3.2
Lending for house purchase (year-on-year % change) <sup>1)</sup>	-1.1	-4.4	-18.9	-9.4	-5.4	-4.0
Loan to deposit ratio <sup>1)</sup>	132.4	136.9	128.0	110.6	102.1	98.0
Central Bank liquidity as % of liabilities <sup>5)</sup>	0.0	0.0	0.1	0.5	3.0	3.3
Private debt (% of GDP)	117.5	116.1	115.4	101.7	95.5	n.a.
Gross external debt (% of GDP) <sup>6)</sup> - public	47.9	47.0	48.5	53.1	49.1	50.9
- private	89.9	71.2	79.9	80.7	76.5	75.4
Long-term interest rate spread versus Bund (basis points)*	590.1	453.8	502.7	639.6	435.3	364.6
Credit default swap spreads for sovereign securities (5-year)*	334.5	282.1	342.5	418.0	269.8	179.2

(1) Latest data November 2014.

(2) Latest data Q2 2014.

(3) Overdue loans declared nonperforming before 90 days.

(4) All data refer to the annual data ending March of the indicated calendar year. Figures up to 2012 are based on Basel II. Data from 2009 onwards are reported by the authorities for dissemination on the IMF's FSI website.

(5) Latest data September 2014.

(6) Latest data June 2014. Monetary authorities, monetary and financial institutions are not included.

\* Measured in basis points.

**Source:** IMF (financial soundness indicators); European Commission (long-term interest rates); World Bank (gross external debt); ECB (all other indicators).Table B.3: **Taxation indicators**

	2002	2006	2008	2010	2011	2012
<b>Total tax revenues</b> (incl. actual compulsory social contributions, % of GDP)	38.0	37.3	40.3	38.1	37.3	39.2
<b>Breakdown by economic function</b> (% of GDP) <sup>1)</sup>						
Consumption	14.1	13.9	14.3	14.8	14.6	15.7
of which:						
- VAT	7.8	7.6	7.8	8.8	8.6	9.4
- excise duties on tobacco and alcohol	1.1	1.3	1.4	1.3	1.3	1.5
- energy	2.2	2.1	2.0	2.1	2.0	1.9
- other (residual)	2.9	2.9	3.1	2.7	2.7	2.9
Labour employed	18.8	18.0	19.8	17.5	17.3	18.0
Labour non-employed	0.3	0.3	1.0	0.5	0.3	0.2
Capital and business income	3.7	3.7	3.8	2.6	2.5	2.5
Stocks of capital/wealth	1.1	1.4	1.6	2.6	2.6	2.8
<i>p.m.</i> Environmental taxes <sup>2)</sup>	2.8	2.8	2.7	2.7	2.5	2.5
<b>VAT efficiency</b> <sup>3)</sup>						
Actual VAT revenues as % of theoretical revenues at standard rate	45.2	55.0	57.1	52.9	52.4	52.7

(1) Tax revenues are broken down by economic function, i.e. according to whether taxes are raised on consumption, labour or capital. See European Commission (2014), Taxation trends in the European Union, for a more detailed explanation.

(2) This category comprises taxes on energy, transport and pollution and resources included in taxes on consumption and capital.

(3) VAT efficiency is measured via the VAT revenue ratio. It is defined as the ratio between the actual VAT revenue collected and the revenue that would be raised if VAT was applied at the standard rate to all final (domestic) consumption expenditures, which is an imperfect measure of the theoretical pure VAT base. A low ratio can indicate a reduction of the tax base due to large exemptions or the application of reduced rates to a wide range of goods and services ('policy gap') or a failure to collect all tax due to e.g. fraud ('collection gap'). It should be noted that the relative scale of cross-border shopping (including trade in financial services) compared to domestic consumption also influences the value of the ratio, notably for smaller economies. For a more detailed discussion, see European Commission (2012), Tax Reforms in EU Member States, and OECD (2014), Consumption tax trends.

**Source:** European Commission

Table B.4: Labour market and social indicators

	2008	2009	2010	2011	2012	2013	2014
Employment rate (% of population aged 20-64)	61.9	60.5	60.4	60.7	62.1	63.2	66.7
Employment growth (% change from previous year)	-1.8	-2.4	0.2	0.0	0.1	0.8	3.4
Employment rate of women (% of female population aged 20-64)	55.1	54.4	55.0	54.9	56.4	57.0	60.0
Employment rate of men (% of male population aged 20-64)	69.0	67.0	66.0	66.8	68.1	69.7	73.6
Employment rate of older workers (% of population aged 55-64)	31.4	32.8	34.4	35.8	36.9	38.5	41.7
Part-time employment (% of total employment, age 15 years and over)	4.6	5.6	5.8	6.8	7.0	6.7	6.4
Part-time employment of women (% of women employment, age 15 years and over)	6.2	7.5	8.0	9.2	9.7	9.3	8.6
Part-time employment of men (% of men employment, age 15 years and over)	3.3	3.9	3.9	4.7	4.7	4.4	4.5
Fixed term employment (% of employees with a fixed term contract, age 15 years and over)	7.9	8.5	9.7	8.9	9.4	10.8	10.5
Transitions from temporary to permanent employment	50.9	49.9	39.2	39.3	35.3	38.2	n.a.
Unemployment rate <sup>1</sup> (% of labour force, age group 15-74)	7.8	10.0	11.2	11.0	11.0	10.2	7.9
Long-term unemployment rate <sup>2</sup> (% of labour force)	3.6	4.2	5.5	5.3	4.9	4.9	3.9
Youth unemployment rate (% of youth labour force aged 15-24)	19.5	26.4	26.4	26.0	28.2	26.6	21.1
Youth NEET rate (% of population aged 15-24)	11.5	13.4	12.4	13.3	14.7	15.4	n.a.
Early leavers from education and training (% of pop. aged 18-24 with at most lower sec. educ. and not in further education or training)	11.7	11.2	10.5	11.2	11.5	11.8	n.a.
Tertiary educational attainment (% of population aged 30-34 having successfully completed tertiary education)	22.4	23.9	25.7	28.1	29.9	31.9	n.a.
Formal childcare (from 1 to 29 hours; % over the population aged less than 3 years)	2.0	2.0	1.0	1.0	2.0	n.a.	n.a.
Formal childcare (30 hours or over; % over the population aged less than 3 years)	5.0	5.0	8.0	7.0	6.0	n.a.	n.a.
Labour productivity per person employed (annual % change)	2.7	-4.2	0.6	1.8	-1.6	0.7	-0.4
Hours worked per person employed (annual % change)	0.0	-0.8	-0.2	0.9	-4.3	-0.5	0.0
Labour productivity per hour worked (annual % change; constant prices)	2.8	-3.5	0.8	0.9	2.8	1.2	-0.4
Compensation per employee (annual % change; constant prices)	2.2	-5.3	-1.8	1.2	-1.5	-1.4	1.6
Nominal unit labour cost growth (annual % change)	4.4	2.8	-0.7	2.3	2.5	3.9	n.a.
Real unit labour cost growth (annual % change)	-0.9	-0.7	-3.0	-0.3	-0.6	1.3	n.a.

(1) Unemployed persons are all those who were not employed, but had actively sought work and were ready to begin working immediately or within two weeks. The labour force is the total number of people employed and unemployed. Data on the unemployment rate of 2014 includes the last release by Eurostat in early February 2015.

(2) Long-term unemployed are persons who have been unemployed for at least 12 months.

**Source:** European Commission (EU Labour Force Survey and European National Accounts)

Table B.5: Labour market and social indicators (continued)

Expenditure on social protection benefits (% of GDP)	2007	2008	2009	2010	2011	2012
Sickness/healthcare	5.7	5.7	5.8	5.8	5.6	5.1
Invalidity	2.1	2.1	2.1	1.9	1.7	1.6
Old age and survivors	9.8	10.2	10.4	10.4	10.5	11.2
Family/children	2.8	2.8	3.0	2.9	2.8	2.7
Unemployment	0.8	0.8	1.0	0.9	0.8	0.6
Housing and social exclusion n.e.c.	0.9	0.7	0.7	0.5	0.4	0.3
<b>Total</b>	22.3	22.5	23.0	22.6	21.9	21.6
of which: means-tested benefits	1.4	1.2	1.2	1.1	1.0	0.9
Social inclusion indicators	2008	2009	2010	2011	2012	2013
People at risk of poverty or social exclusion <sup>1</sup> (% of total population)	28.2	29.6	29.9	31.0	32.4	33.5
Children at risk of poverty or social exclusion (% of people aged 0-17)	33.4	37.2	38.7	39.6	40.9	43.0
Elderly at risk of poverty or social exclusion (% of people aged 65+)	17.5	17.5	16.8	18.0	20.6	19.0
At-risk-of-poverty rate <sup>2</sup> (% of total population)	12.4	12.4	12.3	13.8	14.0	14.3
Severe material deprivation rate <sup>3</sup> (% of total population)	17.9	20.3	21.6	23.1	25.7	26.8
Proportion of people living in low work intensity households <sup>4</sup> (% of people aged 0-59)	12.0	11.3	11.9	12.2	12.8	12.6
In-work at-risk-of-poverty rate (% of persons employed)	5.8	6.2	5.3	6.1	5.3	6.6
Impact of social transfers (excluding pensions) on reducing poverty	59.2	57.1	56.7	52.2	48.3	45.6
Poverty thresholds, expressed in national currency at constant prices <sup>5</sup>	614799.9	624955.1	599141.4	601200.4	614952.4	574129.9
Gross disposable income (households)	15059911.0	15012489.0	15282537.0	16342483.0	16536454.0	n.a.
Relative median poverty risk gap (60% of median equivalised income, age: total)	17.3	16.3	16.5	18.3	21.0	21.7
Inequality of income distribution (S80/S20 income quintile share ratio)	3.6	3.5	3.4	3.9	4.0	4.2

(1) People at risk of poverty or social exclusion (AROPE): individuals who are at risk of poverty (AROP) and/or suffering from severe material deprivation (SMD) and/or living in households with zero or very low work intensity (LWI).

(2) At-risk-of-poverty rate (AROP): proportion of people with an equivalised disposable income below 60 % of the national equivalised median income.

(3) Proportion of people who experience at least four of the following forms of deprivation: not being able to afford to i) pay their rent or utility bills, ii) keep their home adequately warm, iii) face unexpected expenses, iv) eat meat, fish or a protein equivalent every second day, v) enjoy a week of holiday away from home once a year, vi) have a car, vii) have a washing machine, viii) have a colour TV, or ix) have a telephone.

(4) People living in households with very low work intensity: proportion of people aged 0-59 living in households where the adults (excluding dependent children) worked less than 20 % of their total work-time potential in the previous 12 months.

(5) For EE, CY, MT, SI and SK, thresholds in nominal values in euros; harmonised index of consumer prices (HICP) = 100 in 2006 (2007 survey refers to 2006 incomes)

(6) 2014 data refer to the average of the first three quarters.

**Source:** For expenditure for social protection benefits ESSPROS; for social inclusion EU-SILC.

Table B.6: Product market performance and policy indicators

	2004-08	2009	2010	2011	2012	2013	2014
Labour productivity <sup>1</sup> in total economy (annual growth in %)	3.2	-4.3	0.6	2.0	-1.7	1.3	n.a.
Labour productivity <sup>1</sup> in manufacturing (annual growth in %)	6.1	-11.8	13.0	-2.7	2.6	2.0	n.a.
Labour productivity <sup>1</sup> in electricity, gas (annual growth in %)	-0.4	-8.4	0.5	-5.6	1.0	0.9	n.a.
Labour productivity <sup>1</sup> in the construction sector (annual growth in %)	-3.4	1.8	-3.2	5.6	-5.0	6.3	n.a.
Labour productivity <sup>1</sup> in the wholesale and retail sector (annual growth in %)	1.9	-11.9	-2.9	3.2	1.6	3.8	n.a.
Labour productivity <sup>1</sup> in the information and communication sector (annual growth in %)	2.5	15.7	-5.5	-2.0	2.0	-4.1	n.a.
Patent intensity in manufacturing <sup>2</sup> (EPO patent applications divided by gross value added of the sector)	0.0	0.0	0.0	0.0	n.a.	n.a.	n.a.
<b>Policy indicators</b>	<b>2004-08</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Enforcing contracts <sup>3</sup> (days)	335	395	395	395	395	395	395
Time to start a business <sup>3</sup> (days)	29.8	4	4	4	5	5	5
R&D expenditure (% of GDP)	1.0	1.1	1.2	1.2	1.3	1.4	n.a.
Total public expenditure on education (% of GDP)	5.3	5.1	4.9	4.7	n.a.	n.a.	n.a.
(Index: 0=not regulated; 6=most regulated)	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Product market regulation <sup>4</sup> , overall	1.54	n.a.	n.a.	n.a.	n.a.	1.33	n.a.
Product market regulation <sup>4</sup> , retail	1.44	n.a.	n.a.	n.a.	n.a.	2.06	n.a.
Product market regulation <sup>4</sup> , professional services	3.02	n.a.	n.a.	n.a.	n.a.	3.05	n.a.
Product market regulation <sup>4</sup> , network industries <sup>5</sup>	1.87	1.83	2.17	2.14	1.73	1.73	n.a.

(1) Labour productivity is defined as gross value added (in constant prices) divided by the number of persons employed.

(2) Patent data refer to applications to the European Patent Office (EPO). They are counted according to the year in which they were filed at the EPO. They are broken down according to the inventor's place of residence, using fractional counting if multiple inventors or IPC classes are provided to avoid double counting.

(3) The methodologies, including the assumptions, for this indicator are presented in detail here: [HYPERLINK](http://www.doingbusiness.org/methodology)

"<http://www.doingbusiness.org/methodology>".

(4) Index: 0 = not regulated; 6 = most regulated. The methodologies of the OECD product market regulation indicators are presented in detail here: [HYPERLINK](http://www.oecd.org/competition/reform/indicatorsofproductmarketregulationhomepage.htm)

"<http://www.oecd.org/competition/reform/indicatorsofproductmarketregulationhomepage.htm>"

(5) Aggregate OECD indicators of regulation in energy, transport and communications (ETCR).

**Source:** European Commission; World Bank — Doing Business (for enforcing contracts and time to start a business); OECD (for the product market regulation indicators)

Table B.7: **Green growth**

<b>Green growth performance</b>		<b>2003-2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Macroeconomic</b>							
Energy intensity	kgoe / €	0.31	0.29	0.29	0.29	0.28	0.27
Carbon intensity	kg / €	0.89	0.79	0.77	0.77	0.74	0.71
Resource intensity (reciprocal of resource productivity)	kg / €	1.75	1.47	1.26	1.14	1.11	n.a.
Waste intensity	kg / €	n.a.	0.18	n.a.	0.19	n.a.	0.19
Energy balance of trade	% GDP	-3.7	-6.3	-4.9	-5.2	-6.1	-6.5
Energy weight in HICP	%	13.0	13.6	13.7	14.7	15.5	16.8
Difference between energy price change and inflation	%	6.2	7.5	3.1	1.6	1.9	0.3
Ratio of environmental taxes to labour taxes	ratio	15.2%	13.2%	13.9%	14.8%	14.4%	14.0%
Ratio of environmental taxes to total taxes	ratio	7.4%	6.8%	6.7%	7.0%	6.8%	6.5%
<b>Sectoral</b>							
Industry energy intensity	kgoe / €	0.17	0.16	0.14	0.14	0.14	0.13
Share of energy-intensive industries in the economy	% GDP	12.0	12.0	10.5	10.8	9.6	9.6
Electricity prices for medium-sized industrial users**	€ / kWh	n.a.	0.12	0.13	0.11	0.10	0.10
Gas prices for medium-sized industrial users***	€ / kWh	n.a.	0.04	0.04	0.03	0.04	0.05
Public R&D for energy	% GDP	n.a.	0.01	0.01	0.00	0.00	0.01
Public R&D for the environment	% GDP	n.a.	0.02	0.02	0.01	0.01	0.01
Recycling rate of municipal waste	ratio	15.8%	23.8%	24.9%	29.6%	32.7%	34.6%
Share of GHG emissions covered by ETS*	%	n.a.	37.2	33.5	34.0	34.1	34.5
Transport energy intensity	kgoe / €	1.04	1.12	1.22	1.06	1.04	0.99
Transport carbon intensity	kg / €	2.90	3.04	3.33	2.87	2.80	2.71
<b>Security of energy supply</b>							
Energy import dependency	%	62.0	63.2	58.5	58.1	51.8	52.3
Diversification of oil import sources	HHI	0.62	0.66	0.62	0.67	0.73	0.68
Diversification of energy mix	HHI	n.a.	0.27	0.25	0.25	0.25	0.24
Renewable energy share of energy mix	%	4.2	6.0	7.3	7.6	7.5	7.5

Country-specific notes:

2013 is not included in the table due to lack of data.

General explanation of the table items:

All macro intensity indicators are expressed as a ratio of a physical quantity to GDP (in 2000 prices)

Energy intensity: gross inland energy consumption (in kgoe) divided by GDP (in EUR)

Carbon intensity: Greenhouse gas emissions (in kg CO<sub>2</sub> equivalents) divided by GDP (in EUR)

Resource intensity: Domestic material consumption (in kg) divided by GDP (in EUR)

Waste intensity: waste (in kg) divided by GDP (in EUR)

Energy balance of trade: the balance of energy exports and imports, expressed as % of GDP

Energy weight in HICP: the proportion of "energy" items in the consumption basket used for the construction of the HICP

Difference between energy price change and inflation: energy component of HICP, and total HICP inflation (annual % change)

Environmental taxes over labour or total taxes: from DG TAXUD's database 'Taxation trends in the European Union'

Industry energy intensity: final energy consumption of industry (in kgoe) divided by gross value added of industry (in 2005 EUR)

Share of energy-intensive industries in the economy: share of gross value added of the energy-intensive industries in GDP

Electricity and gas prices for medium-sized industrial users: consumption band 500–2000MWh and 10000–100000 GJ; figures excl. VAT.

Recycling rate of municipal waste: ratio of recycled municipal waste to total municipal waste

Public R&D for energy or for the environment: government spending on R&D (GBAORD) for these categories as % of GDP

Proportion of GHG emissions covered by ETS: based on greenhouse gas emissions (excl LULUCF) as reported by Member States to the European Environment Agency

Transport energy intensity: final energy consumption of transport activity (kgoe) divided by transport industry gross value added (in 2005 EUR)

Transport carbon intensity: greenhouse gas emissions in transport activity divided by gross value added of the transport sector

Energy import dependency: net energy imports divided by gross inland energy consumption incl. consumption of international bunker fuels

Diversification of oil import sources: Herfindahl index (HHI), calculated as the sum of the squared market shares of countries of origin

Diversification of the energy mix: Herfindahl index over natural gas, total petrol products, nuclear heat, renewable energies and solid fuels

Renewable energy share of energy mix: %-share of gross inland energy consumption, expressed in tonne oil equivalents

\* European Commission and European Environment Agency

\*\* For 2007 average of S1 & S2 for DE, HR, LU, NL, FI, SE & UK. Other countries only have S2.

\*\*\* For 2007 average of S1 & S2 for HR, IT, NL, FI, SE & UK. Other countries only have S2.

**Source:** European Commission unless indicated otherwise, European Commission Calculation

