



GOVERNMENT OF HUNGARY

**CONVERGENCE PROGRAMME
OF HUNGARY
2017-2021**



April 2017

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1. ECONOMIC POLICY OBJECTIVES

The excessive deficit procedure launched for Hungary in 2004 was abrogated in June 2013, and in spring 2016 the European Commission assessed that there were no longer macroeconomic imbalances in the economy. These developments contributed to the establishment of an economic environment which enables an economic growth exceeding 4%. At the same time, this means that the Hungarian GDP growth is well above the average level of the European Union throughout the whole time horizon of the convergence programme. As for the upcoming period, the rapid convergence of the country is ensured while keeping the general government deficit under 3% of GDP permanently.

The Hungarian economy was brought on a balanced and dynamic growth path. As a result of the proactive and growth-supporting economic policy, the GDP grew by 4% in 2014, 3.1% in 2015 and 2% in 2016. In the last three years, the GDP growth – regarding the production side – was driven by industrial production (in particular manufacturing) and services; whereas regarding the expenditure side, household consumption and exports were the engines of growth. It is a particularly favourable development that – despite the significant decrease of EU transfers – the Hungarian economy was able to perform better than the EU average last year. The Hungarian economic growth can be considered sustainable with a balanced structure, since the majority of the sectors of the economy positively contribute to growth which is not driven by unjustified borrowing.

The growth-supporting fiscal policy still takes into account the importance of a more rapid decrease of the debt ratio in an environment described by global ultra-low interest rates and buoyant economic growth. Hungary – with only one exception – met its medium-term budgetary objective in the last 5 years (since 2012); moreover, this is also true for the 5-year average. In addition, Hungary is one of the few Member States within the European Union where public debt has been continuously declining since 2011.

The external and internal balance indicators remain favourable. As a result of the disciplined fiscal policy, the general government deficit was 1.8% of GDP in 2016, whereas the debt-to-GDP ratio decreased to 74.1%, contributing to the moderation of the country's external vulnerability. The 5-year CDS spread – which presents the default risk of the country – decreased from around 300 basis points in 2013 below 120 basis points in April 2017. The credit rating agencies, one after the other, improved Hungary's rating. During 2016 each of the three big credit rating agencies improved the rating of Hungary to investment grade; as a result, the Hungarian Debt Management Agency is able to raise funds from a wider range of investors, thus contributing to the stability of debt financing. Due to the targeted measures the share of public debt denominated in foreign currency decreased, as well as the debt held by non-residents. All these significantly contributed to the moderation of the economy's vulnerability.

The number of employees – due to the favourable turnaround on the labour market – increased to near 4.4 million as compared to the 3.7 million seen in 2010. Following a consecutive decrease of 56 months (on an annual basis), the unemployment rate decreased to 4.5% in Q1 2017. After 2010, nearly 400 thousand – previously inactive – persons returned to the labour market and started to look for a job actively. This means a 10% increase approximately, while the European average did not reach 2%, and we saw a similarly low growth in our neighbouring countries as well. As a result, the activity rate increased to a level exceeding 70% and converged to the EU average that now is only 2.8 percentage points higher. In order to strengthen the positive labour market developments, as well as to improve the job-creation and labour force retention capabilities of the Hungarian economy and to ensure the competitiveness of the country, we can regard the wage agreement entered with the employers' organisations and trade unions in November as one of the most important economic

policy developments in the last year. This agreement contributes to the expansion of the domestic labour market supply, as well as to the increase in workers' willingness.

The six-year wage agreement is expected to result in a significant wage convergence by which the country will perform the convergence of Hungarian wages at an optimal pace. The increase of wages will not lead to the deterioration of the general government deficit. The agreement includes the raise of the minimum wage and guaranteed wage minimum for 2017 and 2018 and along with these (significantly decrease) the significant decrease of the employers' tax burden, the reaching of a single-digit corporate tax rate, as well as the decrease of the employers' social security contributions in the period after 2018 (depending on the real wage growth). These all represent meaningful support for the economic developments of the upcoming years, and bring the Hungarian economy on a more dynamic growth path.

Along with the improvement of wages, the Government announced an ambitious home creation programme. Besides supporting social policy objectives, it also boosts the economy. The programme includes the reduction of the VAT rate on the sale of new apartments from 27% to 5%, support in the form of a tax reimbursement for families building a home on their own and the introduction of the Family Housing Subsidy Scheme (non-refundable support and the related loan with supported interests). In addition to these measures, the reduction of the value added tax on certain basic foodstuffs, restaurant services and internet will also boost the purchasing power which – along with the measures supporting the sustainment of the mentioned labour market trends and those supporting families – will contribute further to a rise in household consumption.

The economic policy places an emphasis not only on improving the dynamics of household investments, but on supporting corporate investments as well. On the one hand, the corporate tax rate cut to 9% is one of the lowest rates in international comparison. On the other hand, the accelerated payments of the EU funds of the new multiannual financial framework serves the strengthening of the business climate in Hungary. Due to the typical pre-financing the

allocated amounts will significantly strengthen the investment performance in the period of 2017-2019.

The Hungarian economic policy has arrived to an important milestone in 2017. Though the sound budgetary management and the decrease of the debt ratio will continue, in parallel with mobilising the increasingly scarce reserves of the labour market the Government's tools to stimulate economic growth also include the more efficient use of economic resources, as well as the enhanced improvement of productivity and competitiveness. Besides the improvement of the productivity of the Hungarian labour force, it is of the same importance to ensure that the increase of wage level will take place proportionately with the improvement of productivity. Simultaneously with this, shifting the structure of growth towards innovation-led business activities with a higher added value is a headline target as well. Improving the quality of growth is a priority also from the aspect of competitiveness.

In order to continuously assess the realisation of economic policy objectives on a system-level the National Competitiveness Council was founded by the Government. By establishing the foundation for the structural reforms and improving the social acceptance of such reforms, this body actively contributes to the improvement of productivity and – through the substantial decrease of bureaucratic burdens – the business environment. The members of the Council were invited by the Minister for National Economy from among recognised representatives of the business sphere, economic organisations, educational and scientific institutes.

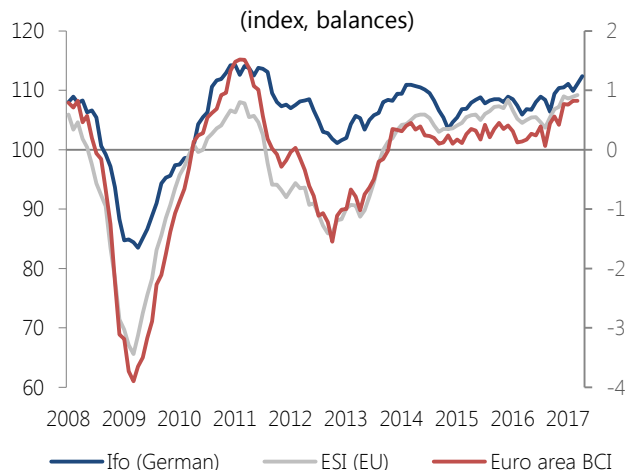
Overall, following the successful crisis management period, the macroeconomic stability of the Hungarian economy was restored, and the subsequent growth-supporting economic policy measures set the economy on a stable growth path, brought down the deficit-to-GDP ratio under 3%, fostered the reaching of a record level of employment and reduced the burdens on the households. In the following period, one of the Government's main goals will be to improve the competitiveness of the country by efficient measures which – besides stimulating the economy – will contribute to the further decrease in the public debt.

2. MACROECONOMIC DEVELOPMENTS AND FORECAST

2.1 INTERNATIONAL ENVIRONMENT

After almost a decade since the outbreak of the financial crises, the North Atlantic economies are increasingly leaving behind its adverse cyclical effects. However the year of 2016 meant a bottom in the world economy as the lowest growth was seen worldwide since the crisis, not only in the GDP, but also in the international trade. The following factors contributed to the slowdown: low raw material prices, risks related to the Chinese growth, referendum on the EU membership of the United Kingdom, and the uncertain outcome of the presidential election in the US. These effects were reflected in the decreasing confidence indices (Chart 2.1), as well as in the weaker H1 GDP figures both in the developed economies and on the emerging markets. However, the economic growth in the developed economies gained momentum in the second half of the year, and – due to the increase in raw material prices – the previously pressured situation of the raw material exporting economies could also ease; these resulted in strengthening GDP growth in a number of countries. Due to the unfolding favourable developments, the outlook for this year improved significantly, and even if global growth is surrounded by risks, the international environment will possibly show a better overall picture in the upcoming period according to the expectations.

Chart 2.1.: European economic sentiment indicators
(index, balances)



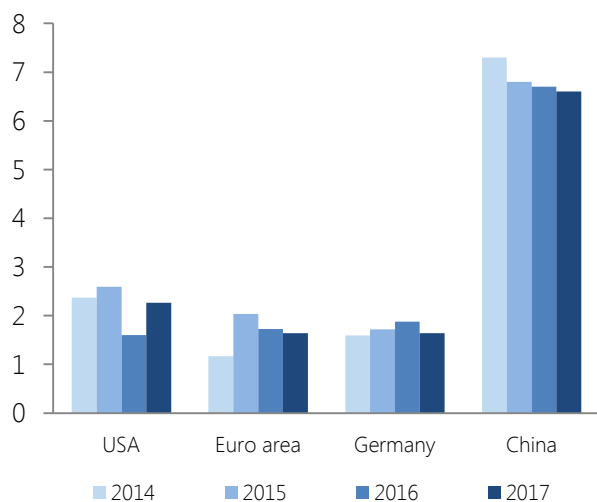
Source: Cesifo, European Commission

The economic growth of the US remained below the preliminary expectations with a moderate annual growth of 1.6% only. Nevertheless, the economy gained momentum in Q3: the labour market developments now indicate the approaching of full employment, the business cycle stepped into mature phase, also affecting wage and price inflation. As a result of these, the Fed raised the key interest rate in December 2016 and this March, thus the phasing out of previous loose monetary conditions continued. Looking forward, further growth may be fuelled by the tax cut announced by the new US administration, as well as further fiscal loosening steps. These measures due to the expanded foreign trade relations of the US could result in the growth of demand not only in the US, but throughout the world as well. Nevertheless, US trade policy, a potential protectionist turnaround of which would pull back the dynamics of world trade, poses a downside risk.

In line with the expectations, the European Union presented a GDP growth of 1.9% in 2016; the economic performance remained stable despite the uncertainty that was primarily generated by Brexit. Owing to the rapidly increasing employment rate, exceeded its pre-crisis level in the last year, and wages, consumption became the engine of growth, whereas the expansion of investments remained subdued. In addition, the growth in the euro area was supported by the loose monetary policy of the ECB and by low raw material prices, while the exports' dynamics decelerated in parallel with the more moderate expansion of the world trade. The slowdown in the foreign markets was noticeable in the case of Germany as well, since the exports increased by only 2.5% following the pace of 4-5% in the previous years. However, despite these developments, the economic growth of our largest export partner has been accelerated as compared with 2015, fuelled by the persistent expansion of domestic demand.

As for the next few years, the overall picture is more favourable. According to the forecast of the European Commission, substantial growth is expected in all Member States over the forecast horizon for the first time since the crisis (Chart 2.2). The continuing positive labour market developments create a solid base for stable expansion of consumption, even along with a slowly accelerating inflation. The increase of investments continues, and will be further supported by the gradual acceleration of projects implemented under the European Investment Plan. The positive global outlook may boost the foreign trade of the EU as well. In addition, in parallel with the favourable developments of economic performance, the budget balances of the Member States also improve which may enable the implementation of further government investments and structural reforms that raise the growth potential of these economies. However, the economic policy directions emerging in the aftermath of the elections held in numerous Member States this year and the exit process of the United Kingdom involve uncertainty.

Chart 2.2.: GDP growth in the main regions
(per cent)



Source: Eurostat, European Commission, IMF

The emerging markets show mixed picture, but in general their growth is more fragile. Within this group, due to the structural change taking place in the Chinese economy – a market of key importance from the aspect of Hungary’s external trade –, numerous question marks still remain about the sustainability of

its growth. In the second half of the last year, uncertainty was eased by the economic policy measures implemented by the Chinese government with whom the decision-makers aimed at mitigating the sharp decline in private investments. Nonetheless, this may further raise the already high level of corporate indebtedness, thus finally leading to an expanded shadow bank system and the increase of financial vulnerability. In Russia the recovery is anticipated to continue, thus economic growth can return in 2017 and 2018, due to the increase in domestic demand and the expected expansion of exports.

Overall, the growth of the global economy is expected to boost this year, which is also reflected in the values of forward-looking business indices hitting multiyear peaks at the beginning of the year. The majority of the countries returned again back to the growth path by the end of the last year, and raw material prices have also been on the rise, primarily since the conclusion of the OPEC agreement of November 2016. The forecasts for growth of this year and the next year may be positively affected by the fiscal loosening planned in larger economies, mainly in the US. Furthermore, expansion is also expected on the emerging markets, supported by the gradual increase of raw material prices, the predicted recovery of larger emerging economies, as well as the higher demand from developed economies.

In recent years the growth-supporting monetary policy tools gradually ran out; while by the improvement of the cyclical processes and the return of inflation the gradual phasing out of loose conditions has already started in many countries. At the same time, fiscal policy has come into view again, providing substantial room for manoeuvre to give further stimulus for growth. For this reason, the role of fiscal measures within economic policy is expected to become more appreciated also internationally in the upcoming period.

2.2 COMPONENTS OF GROWTH

The economic policy measures of the first years after 2010 focused on the restoration of the country's financial stability. As a result of these measures, since 2013 the Hungarian economy has been growing again in a stable way. The Hungarian gross domestic product expanded by 4% in 2014, 3.1% in 2015 and 2% in 2016. When assessing the growth developments of the last year, it should be noted that in 2015 the EU funds available in the EU programming period 2007–2013 and of that starting from 2014 could be used as well, whereas in 2016 only the funds of the new cycle were available. Despite of this, it can be stated that the Hungarian economy performed above the EU average in 2016, even though the absorption of the EU funds was more moderate than previously seen. Therefore, Hungary continued converging in the last three years, exceeding the growth of the majority of EU member states (Chart 2.3).

It is also a good sign that the structure of growth is balanced and sustainable. This is due to the fact that most of the sectors contributed positively to the strengthening performance of the economy, and the growth was not fuelled by imbalances. This is well illustrated by the fact that the external trade surplus reached a record high level in the last year, and – due to the disciplined fiscal policy – the general government deficit (1.8% of the GDP) remained at a low level.

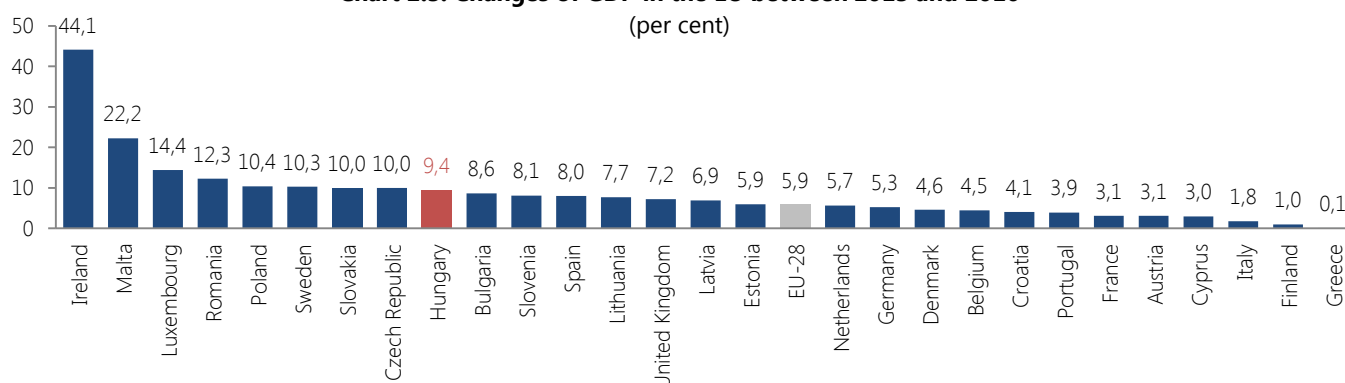
Analysing the GDP growth from production side, we can conclude that services contributed primarily to

the GDP growth (overall, by 1.6 percentage points) – including, for example, the trading and tourist activities –; which is mainly explained by the outstanding real wage dynamics. Out of the production sectors, agriculture – with its double-digit, nearly 17% expansion – also contributed greatly to the performance of the economy. However, industrial output grew at a slower pace (by 0.8%) as compared with 2015 due to the lower capacity expansion of the sector and the weak external demand; at the same time, the construction sector – resulting from the cyclical nature of EU funds – held back GDP growth by 0.6 percentage points.

On the demand side, the favourable labour market and inflation trends resulted in a substantial increase of consumption (by around 5%), which is highest rate since 2003. In parallel with the developments of construction, however, investments declined at a similar extent in the last year. The net export explained nearly one-third of the growth, originating from, inter alia, transportation and the outstanding performance of service centres operating in Hungary.

On the forecast horizon several factors affect the growth outlook of Hungary. Beside the strong fundamentals of the Hungarian economy, the expected, persistently high growth rates are also supported by the Government's economic policy measures.

Chart 2.3: Changes of GDP in the EU between 2013 and 2016
(per cent)



Source: Eurostat, MfNE calculation

One of the most important pillars of the growth-supporting economic policy measures is the 6-year wage agreement concluded at the Permanent Consultation Forum of the Private Sector and the Government, due to which additional income is generated for the economic agents in the form of wage increases, social contribution tax and corporate income tax cuts; these factors support the domestic demand, the increase of employment and export capacities, as well as the competitiveness of the Hungarian economy (Box 1). Regarding the corporate income tax cut, it is important to note that the measure may stimulate the generation of capital- and technology-intensive, high value added investments.

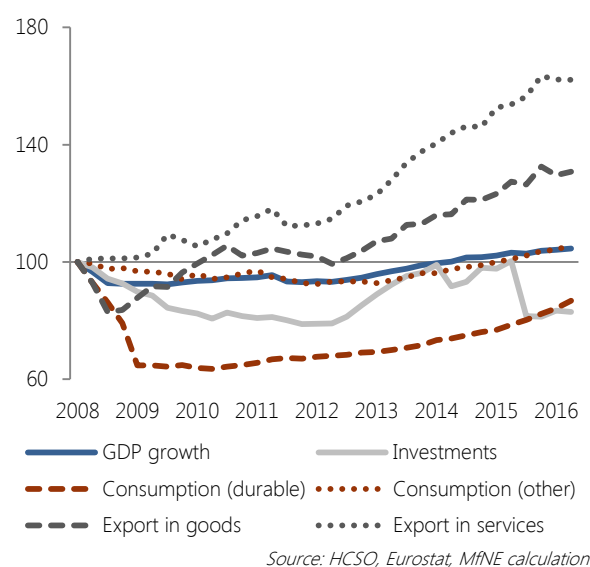
Beside the wage agreement, there is a wide range of fiscal incentives which stimulate the demand, e.g. the support of dwelling constructions (Family Housing Subsidy Programme, 5% VAT rate for dwelling construction). The upswing of the housing market and its economic impact is well reflected in the number of dwelling permits issued in 2016, rising by two and a half times. The enhanced utilization of EU funds also supports growth acceleration. In 2016 EU funds of more than HUF 1,700 billion were paid to the beneficiaries under the budgetary framework for 2014-2020; at the same time, this year's payment is planned to reach HUF 2,200-2,700 billion. In addition, it is important to note that a larger share of the transfers paid in the last year are advance payments, thus the stimulating impacts of these projects mainly applies for this year's and the following years' macroeconomic developments.

Beside the Government's economic policy measures, the expanding export capacities of the country, resulting from a number of already announced investment projects implemented by large companies, also support the acceleration of the Hungarian economy. Furthermore, the stronger dynamics of export is also supported by the favourable economic outlook of our main external markets.

Finally, we can conclude that although GDP and consumption recently reached the pre-crisis levels, there is still room for recovery, which supports further acceleration (Chart 2.4). Investments and durable consumer goods (within the category of consumption)

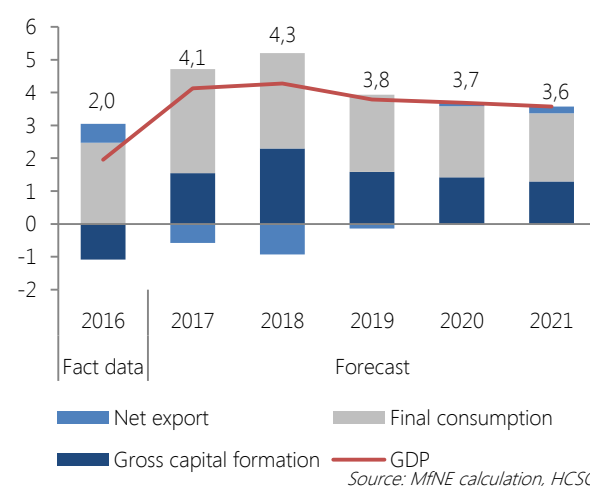
are still lagging behind their level of 2008. As for the latter, precautionary motives could play a significant role, making the households postpone their consumption (as far as it was possible). In the forthcoming period, the easing of such motives – and thus the decrease of savings – is expected to happen, which also supports growth acceleration (Box 5).

Chart 2.4: Economic growth since the crisis
(Q3 2008 = 100%)



Overall, substantial growth acceleration is expected: a GDP growth of 4.1% and 4.3% are estimated for this and for the following year, respectively, which is expected to remain above 3.5% in the consecutive years, as well (Chart 2.5). Partly due to the Government's economic policy measures, it becomes possible to speed up, thus the growth potential of the Hungarian economy improves significantly, contributing to a faster catching up of the country to the developed Western European states.

Chart 2.5: GDP growth: demand side
(percentage point)

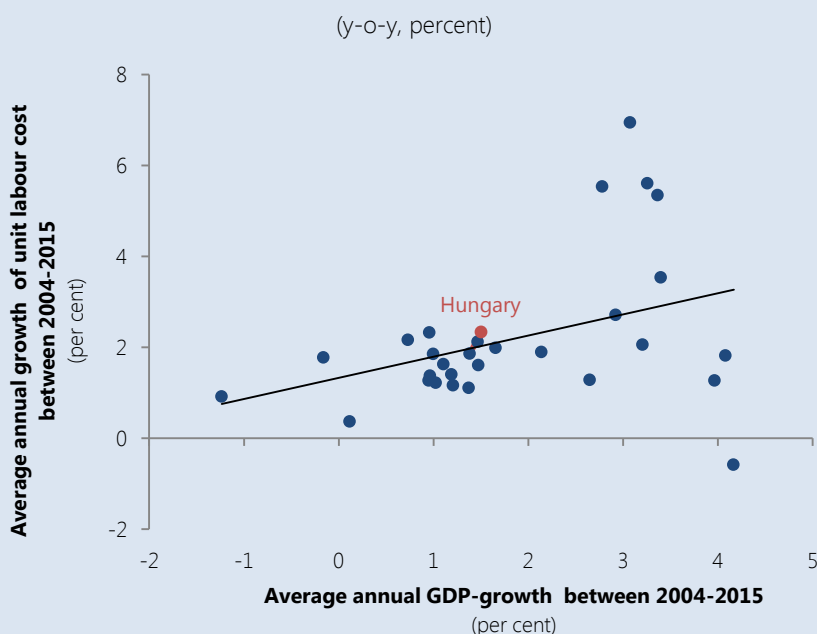


Box 1: Strengthening the competitiveness of Hungarian economy

Theories concerning international trade and international competitiveness focused on price-based competitiveness in the first times. This also contributed to the chosen policy attitude of Central European economies – supported by the unanimous advice from international organisations – after the regime change, i.e. the improvement of their price and cost competitiveness in the first place, enhancing capital inflows. However, these inflows utilized cheap labour force of the region and in many cases introduced technologies that proved to be of low profitability at that time in the home country of foreign investors due to high Western labour costs. Though these capital investments also contributed to the integration of the region's economies into international trade and their convergence, cheap labour force meant inadequate incentive for the introduction of modern, capital-intensive technologies.

This is of crucial importance, since nowadays other dimensions of competitiveness have become increasingly dominant: production processes capable of creating high added value, as well as innovation and technological development giving the base for such processes. These aspects are not new at all: almost a century ago, Schumpeter argued that innovation is not just simply the accumulation of capital, but also means the increase in capital productivity. He described innovation process and its permanent change with the well-known term “creative destruction”, by which he meant the establishment of new, more productive companies and the changes they cause, thus catalysing economic growth. In the field of competitiveness, Miklós Káldor observed in 1978 that economies presenting the most dynamic economic growth also witness a rapid increase of labour costs. Consequently, the message of the “Káldor-paradox” can be summed up as follows: keeping prices and costs low in itself does not clearly result in a competitive advantage or faster economic growth.

Changes in real GDP and unit labour cost between 2004 and 2015 in the EU member countries



Source: Eurostat

In accordance with the above, the Government pays special attention to the reinforcement of growth potential of the Hungarian economy and the sustainment of its long-term competitiveness. In order to achieve these, the Government also takes policy measures beyond the narrow category of macroeconomic (fiscal, monetary) policies. To ensure an institutionalised professional forum for dialogue on developments of competitiveness and the initiatives aiming to improve competitiveness, and also in line with the recommendations on national productivity boards approved by the Council of the European Union (only binding for the Member States of the euro area), the Government – with its Gov. Decree no. 1538/2016 (X.13.) – decided on setting up of the National Competitiveness Council. This consultative board – including recognised professionals from the business and

scientific world – does not only comment on the initiatives relevant from the aspect of Hungary's economic competitiveness, but also makes proposals for governmental interventions aiming to improve it. The opinion, positions and proposals of the National Competitiveness Council are presented to the Government by the Minister for National Economy through the Economic Cabinet. The institutional conditions and staff of analysts required for the efficient operation of the Council are provided by the Ministry for National Economy.

International experience shows that national competitiveness boards – by assessing structural conditions of economic growth, developments of productivity and various aspects of competitiveness on system-level and by making policy proposals based on these – are able to efficiently facilitate the provision of basis for policies and structural reforms improving competitiveness and also the development and social acceptance of these policies. The recognition of this fact led to the issue of the Council's above recommendation as well.

During its first three sessions, the National Competitiveness Council reviewed the factors basically determining the competitiveness of the Hungarian economy. Furthermore, beyond the long-term, system-level interventions aiming to improve the competitiveness comprehensively – such as the problems arising from the lack of qualified labour force or the challenges of digitalisation –, the Council identified several possibilities for intervention which enable the improvement of business environment even in the short run according to the findings of Doing Business survey conducted by the World Bank, in particular in the fields of company formation, construction permits and taxation, as well as corporate insolvency.

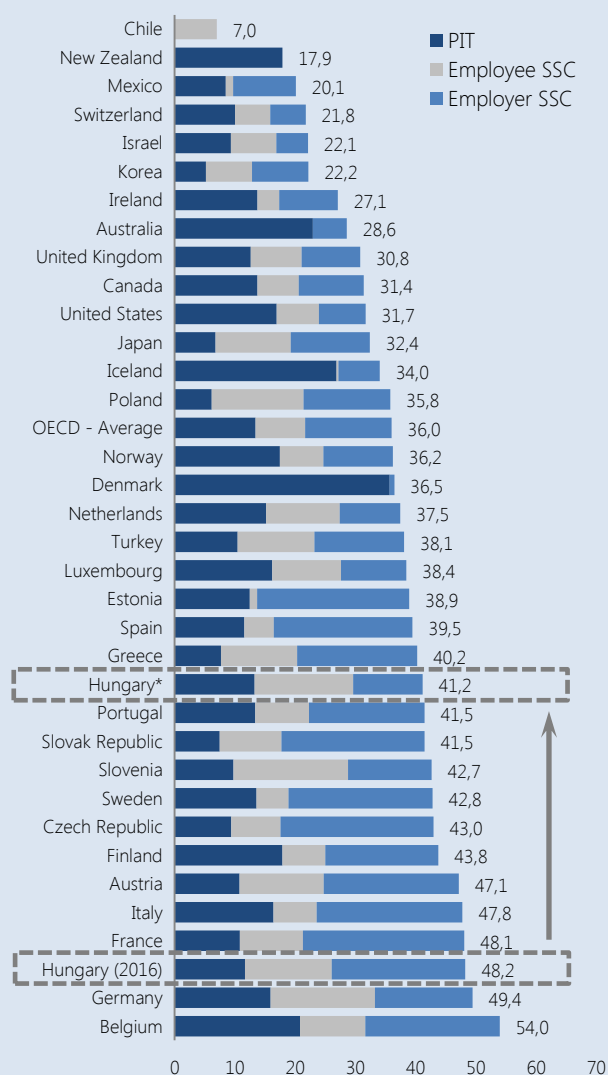
Following the detailed analysis of intervention possibilities for affecting business environment, two proposals were presented to the Parliament in the fields of facilitating the licensing of investments and the simplification of company formation: on the one hand, in connection with the reduction of time required for connecting to electricity network and the automation of registering for local tax on the other. Measures aiming to facilitate the licensing of investments also include the simplification of procedures related to settlement planning and connection to gas and water networks. In addition, in order to reduce cash in circulation, the Council formulated proposals for the introduction of a social account, as an encouragement of electronic payment of public utility bills and the completion of the companies' tax returns by the NTCA.

Beside the above, the conclusion of 6-year wage agreement focusing on the modern factors of competitiveness – initiated by the Hungarian Government – is also crucial. As a result of the wage increases coupled with the moderation of wage costs, it is increasingly worth to work; furthermore, the higher remuneration for work may encourage employers to improve their productivity and to shift to a production structure with higher added value. It is a particularly favourable development that taxes on labour become more competitive in the region due to the social contribution tax cut. From the aspect of labour force, it is the "efficiency wages" theory that sums up how increases of real wages result in stronger efforts and more efficient work performance on the individual's level, and that it can also improve the health condition of employees, hence the latter has positive repercussions on the employers' productivity. As a result of higher real wages, not only employees become more motivated, but also employers to improve their productivity and to renew the way how they organise and perform work in practice. In addition, higher wages raise activity, facilitate the companies' search for labour force, and also reduce costs resulting from the fluctuation thereof. With the improvement of income situation, conflicts between employers and employees may further ease.

The government supports improvement of productivity and the enhancement of competitiveness by cutting corporate tax rate to 9% as well, which is the lowest tax rate in the EU. According to researches, the effective corporate tax burdens negatively correlate with the long-term economic growth, since they pull back investments, capital-intensive FDI inflow (representing high technology level) and – last but not least – entrepreneurial activity. Consequently, the corporate tax cut encourages the renewal of companies, as well as motivates them to become more efficient and productive; these may result in the noticeable increase in productivity on macroeconomic level.

Tax wedge in the OECD countries

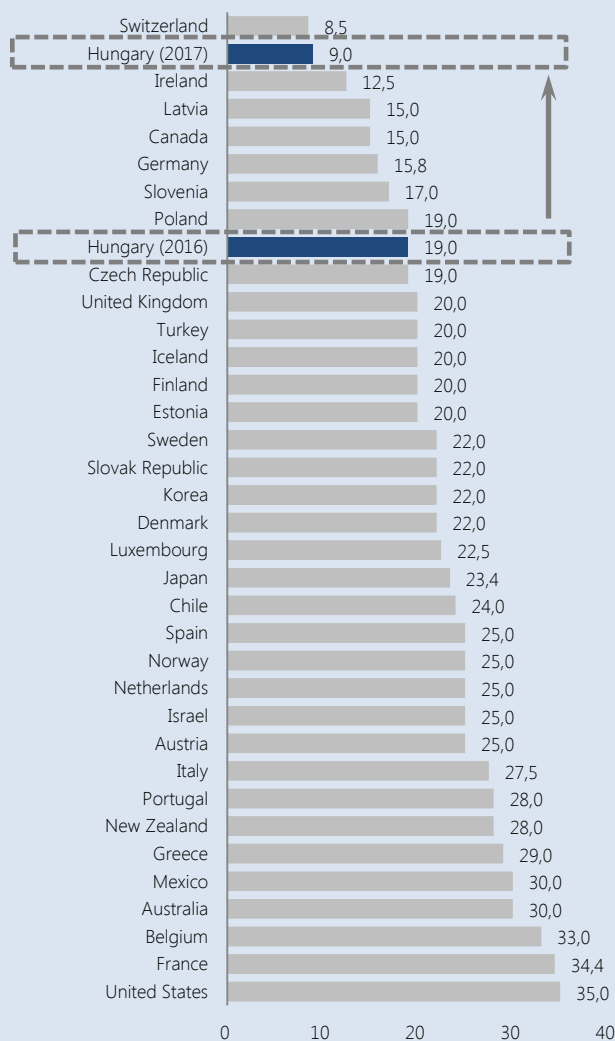
(2016, percent)



* Representing the tax wedge as a result of 6-year wage agreement

Corporate income tax rates in the OECD countries

(2016, percent)



Source: OECD, MfNE calculations

The 6-year wage agreement entered on the initiative by the Government is an economic policy milestone which breaks with previous price- and cost-based competitiveness approach that, after a while, hindered convergence; instead, the agreement encourages technology-based competitiveness. Therefore, through improving productivity – as a factor basically affecting potential growth in the long run – it also permanently strengthens the growth capability of the Hungarian economy.

External economy

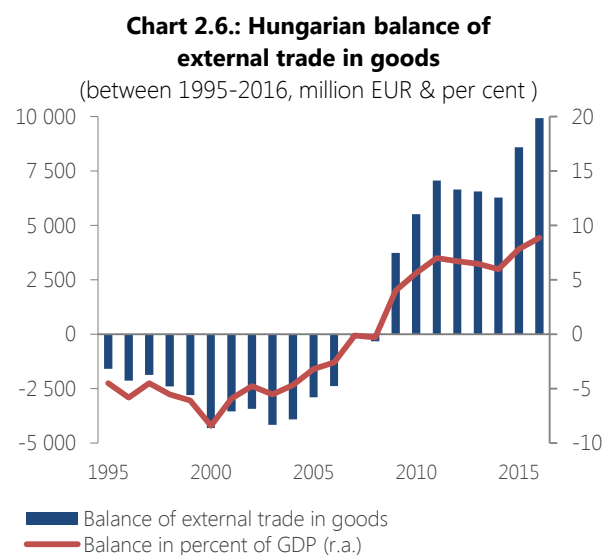
In parallel with the slowdown of world trade – similarly as to the economies of the European Union – the dynamics of the Hungarian foreign trade remained moderate in 2016 as compared to the pace of expansion in the previous years. Last year the volume of exports increased by 5.8%, whereas the volume of imports rose by 5.7% on an annual basis; in the meantime, the structure of foreign trade remained balanced.

The exports of services continued its rapid expansion (at a rate exceeding 7%); however, the dynamics of exports of goods decreased to a 5.3% growth. In the case of services, a significant expansion can be seen in the fields of transportation, tourism and business services. Beside the effect of the high base, the slowdown of the increase in exports of goods took place due to the fact that industry could not repeat its outstanding performance presented in the two preceding years. This is related to the heavy slowdown of the production of domestic vehicle manufacturers, which was caused partly by the reorganisation of production required for the modernisation of the models manufactured in Hungary. In addition, the dynamics of exports was also hindered by the Russian embargo both directly and indirectly through the production chain. Nevertheless, according to the commodity statistics, the EUR value of the exports of goods – except for the fuels – increased in every main product group as compared with 2015 – overall, by 2.9%. Within the group of products with higher weight, the most dynamic expansion of exports developed as follows: power-generating machinery and equipment (+7.9%), general industrial machinery and equipment (+4.8%) and electrical machinery and appliances (+3.7%).

As for the imports, the overall rate of expansion was similar to that of exports; however, the 6.2% dynamics of the imports of goods exceeded that of the services. The rise in incomes – due to the favourable labour market developments – resulted in the increase in households' consumption; this is also reflected in the 18.4% expansion of tourist activities. Beyond this, the export suppliers' needs ensured the basis for the buoyant imports.

The surplus of the external trade in goods continuously grew which was also supported by the improving terms

of trade, thus the surplus hit a record high level in the last year by reaching nearly EUR 10 billion (Chart 2.6). As an overall result, foreign trade contributed positively to the GDP growth.



Looking forward, the expansion of foreign trade is forecasted to be more dynamic as compared to the last year. The growth of exports is driven by the somewhat more moderate, but stable increase in the stock of orders in manufacturing, which may be also supported by the world trade that is expected to accelerate from this year. The favourable signs of the improving international business environment could be already experienced in the development of the domestic and foreign confidence indices since the beginning of the year, reflecting the optimism of market participants (Chart 2.7). As compared with last year's dynamics, industry is expected to grow at a more favourable rate, which will also reflect in the expansion of exports (Chart 2.8). Furthermore, the previously announced and implemented investments strengthen the companies' export activity as well. This is also supported by the corporate tax rate cut, which may encourage the companies to implement further investments aiming at expanding their export capacities in the coming years.

Chart 2.7.: German business climate, Hungarian export of goods and manufacturing export sales
(balances, y-o-y volume, per cent)



In the upcoming period, the increase of imports will be highly driven by the accelerating absorption of EU transfers which entails increasing import content of domestic demand. In addition, due to the import demand of the supplier networks and the accelerating domestic use, i.e. the expanding consumption of households and the investments of companies, the imports may grow at a rate exceeding that of the exports. As a result of these, the contribution of external trade to the GDP growth may shift to the negative range over the forecast horizon.

In the mid-run, domestic export activity may be further fostered by the economic development programmes announced by the Government, such as

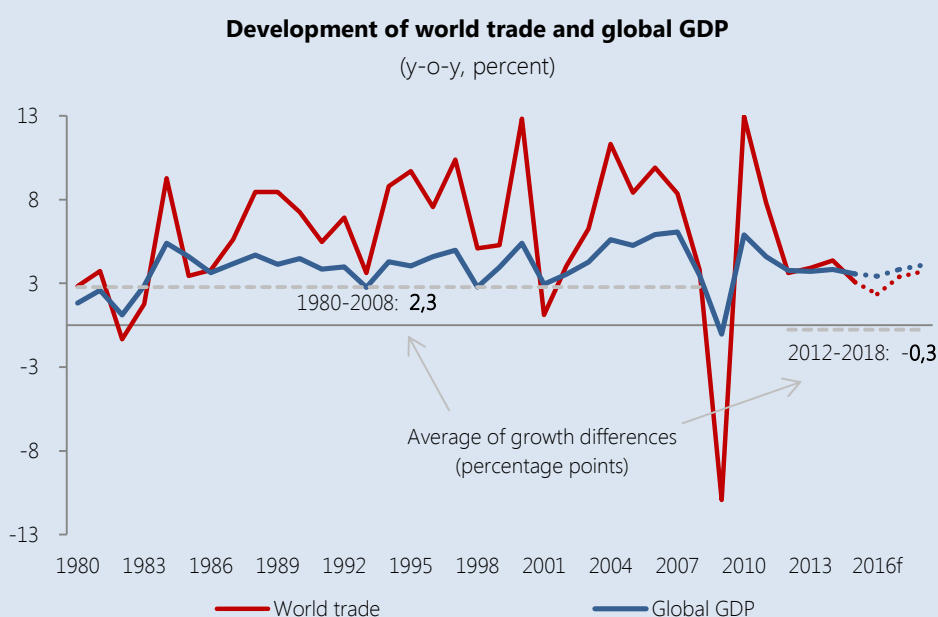
the Irinyi Plan and the Supplier Development Programme – which support the industrial production with higher added value, the networking and the introduction of modern technologies (e.g. industry 4.0) –, as well as the Digital Success Program supporting the improvement of the small and medium-sized enterprises' (SMEs) competitiveness. Furthermore, a significant part of the EU funds is dedicated to economic development, for instance many sources support – amongst others – the companies' R&D&I activity and their entry to the international market (Box 2).

Chart 2.8.: Hungarian exports' developments
(y-o-y, per cent)



Box 2: Growth-supporting fiscal policy as a tool for breaking out of low growth trap after the crisis

Following the financial crisis of 2008, growth of global GDP and world trade significantly slowed down. Output of economies in the world have grown by 3% in the recent years, lagging behind the 4% average of the two decades prior to the crisis, whereas the volume of world trade expanded by only 2% annually in the last two years. While in the 1990s and 2000s the volume of international trade of goods and services grew 2-2.5 times faster than global GDP, whereas the expansion of trade in the last two years fell short of the growth rate of the GDP. Several factors contributed to international trade losing momentum: the shift of East Asian economies to domestic consumption, the run-out of reserves hiding in international trade integration, the changing trends of manufacturing industrial production (e.g. declining import of semi-finished products as compared to manufacturing industrial export) and a number of further effects (for example financial volatility, the Russian embargo, Brexit and the spread of protectionist trade policy).



Source: OECD Economic Outlook Database

Being the driving force of integration, world trade can support growth and productivity. However, external demand lost momentum currently, thus the economies – including Hungary – cannot rely on the dynamic expansion of foreign markets. Therefore, in this situation, “domestic engines of growth” become increasingly important.

Regarding crisis management, the growth-constraining effect of fiscal austerity measures became the subject of international debate. Recently, it has become increasingly accepted that fiscal policies should focus on supporting long-term, balanced growth. This requires the review of budget structures by countries. Productive investments financed from government sources may catalyse investment activity of the private sector, which may, in the long-term, result in the expansion of the production capacities of the economy. Furthermore, the increase in potential GDP may entail the expansion of tax revenues as well. Such growth-friendly fiscal measures include infrastructural measures, green infrastructure, R&D, healthcare and educational developments, as well as labour market programmes. In order to break out from the low growth trap, beside developments implemented by the government, a long-term positive effect may be ensured through the tax reform. Regarding the revenue side, the shift from the personal income tax and the corporate tax to the taxes on consumption has a positive effect on growth. The cut of the personal income tax, the social security contributions and the corporate tax has a positive effect on the GDP both in the short-term and the long-term.

It can be stated that the Hungarian economic policy – far before the above, emerging consensus – implemented a stabilisation during which it could avoid the excessive restraining of domestic demand through the sharing of

burdens, thus prevented a self-generating process hindering growth. Besides keeping government deficit well below 3% and the debt ratio on a declining path, this turnaround made it available for the Government to take a number of measures that serve the economic and social enrichment of Hungary. As a result, for example, personal income tax rate was cut to 15%, family tax and social security contribution allowances were introduced, the Family Housing Subsidy was made available, a number of career models ensure now a calculable income path, and these measures enhance the keeping of labour force, the expansion of employment and positively affect demographic developments as well. Looking forward, social contribution tax will be reduced from 27% to 11.5% and tax on company profits was cut to 9% uniformly as a result of the 6-year wage agreement as well. On the expenditure side, a number of growth-stimulating investments were launched, such as the Modern Cities Programme (MVP) or complex road reconstruction programmes. Not least, due to the multi-year cycle of the public work programme, hundreds of thousands of people could return to the world of work, thus facilitating inclusive economic growth.

So the Government deployed, and will use also in the future, the entire fiscal room for manoeuvre available – and also that created by itself – to establish favourable conditions for the highest possible boosting of the domestic engines of growth.

Investment

In 2016 more than HUF 6200 billion developments has been implemented in Hungary; however, investment activity decreased by 15.5% year-on-year. This setback was primarily caused by the high base effect of government investments related to the 2007-2013 EU budget cycle, whereas some branches in private sector showed a strengthening performance. As a result, private investments contributed positively to the economic growth in 2016 as well. As for the future, a massive pick up in investments can be expected from 2017, with a contribution of all the three sectors (Chart 2.9). Dynamic increase in investments is favourable since the developments will support the economic growth also after the capacities have been built and the production has started.

Manufacturing investments, representing the largest weight in corporate sector, increased by 7% in 2016, also investments in trading services grew by 10% year-on-year (Chart 2.10). These two branches amount to 40% of investments, confirming that, the overall decrease in 2016 was not closely correlated with the performance of industrial productive and service providing companies.

Chart 2.9.: Contribution of sectors to the development of gross fixed investments
(percentage point)

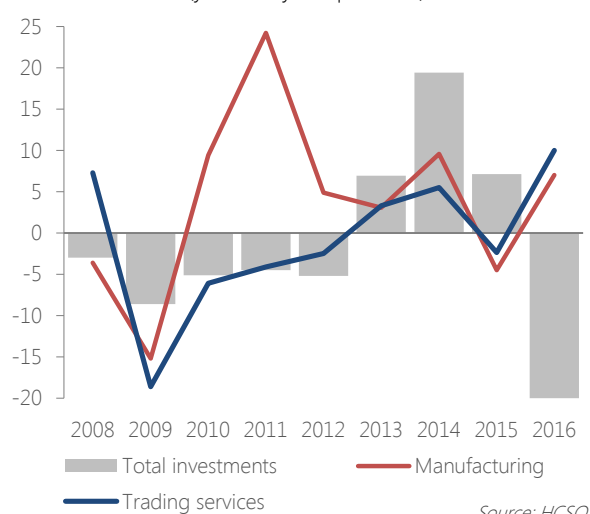


Source: MfNE calculation, HCSO

A strong growth dynamics is expected to unfold in the coming quarters, supporting on the one hand by the permanently high level of capacity utilisation in manufacturing industry anticipating further developments. On the other hand, the corporate income tax rate reduced to 9% and the historically low financial market yields along with the strong demand are establishing appropriate conditions for the replacement of depreciated production equipments, the deployment of new capacities and the enhancement of capital intensity in the Hungarian

economy. Furthermore, expansion of investments is also anticipated by the recently announced large projects primarily linked to the automotive industry and its supplier chain (Box 3). Favourable spill-over effects can be generated as the ongoing developments include capacity expansions by automotive flagships like Audi and Mercedes, attracting further significant investments into the country through their supplier network.

Chart 2.10.: Development of investments in manufacturing and trading services
(year-on-year, per cent)



The continuous strengthening of Hungary's ability to attract capital can be illustrated by the projects managed by the Hungarian Investment Promotion Agency (HIPA). Due to investment decisions with a total value of EUR 3.2 billion in 2016, nearly 18 thousand jobs will be created in the country resulting in a 131% increase in value of investments compared to 2015 and a 36% growth in the number of created jobs. Almost two-thirds of investments will be realized in the automotive industry, also the electronics industry and the food industry have a significant share within the developments. Regarding the new jobs created, shared service centers (SSCs) play significant role beside the automotive industry. It is particularly favourable that the announced 12 investment projects in service sector – as a result of positive decisions in 2016 – will create 2,500 jobs in the country, and will have a significantly positive impact on the service export in the coming period. More than half of total investment value is related to developments implemented by German companies, also the second place is held by the US.

The HIPA is increasingly focusing on technology-intensive investments, which resulting in higher value added production. It is supported by the changes in subsidy system based on individual government decisions (IGDs), supplemented by R&D and innovation-supporting schemes. The ability of Hungary to attract investments is further reinforced by the corporate income tax rate cut to 9% from 2017, which is the lowest within the European Union. This encourages investment decisions of newly arriving corporations, as well as further capacity expansions of incumbent companies.

Beyond the above, the Government and from 2015 the Ministry for National Economy support the incumbent companies with significant contribution to the Hungarian economic and employment growth under the Large Corporation Investment Subsidy Programme. Regarding these companies, their capacity expansions neither are a target group of tenders announced primarily for SMEs financed from EU funds, nor reach the development amount required for the IGD investment subsidies. In 2015 and 2016, 49 companies received non-refundable subsidy with an overall amount of HUF 27.3 billion, resulting in developments of nearly HUF 70 billion and 1,600 new jobs in the country. In 2017, a further amount of at least HUF 15 billion is available for the Government in order to subsidise investments of large companies. Consequently, total value of investments related to Large Corporation Investment Subsidy Programme for 2015-2017 is expected to exceed HUF 110 billion, representing 0.3% of annual Hungarian GDP.

As a favourable spill-over effect, developments of large companies also encourage the investments of supplier network. It is a top priority that, small and medium-sized enterprises could participate more in production and development of high value added products in order to get involved in supplier networks of international large companies. Thus Government supports the improvement of SMEs' competitiveness with the Supplier Development Programme, allocating a total amount of HUF 14 billion as of 2017. On the one hand, the programme aims to establish the required conditions for the qualified supplier status. On the other hand, the subsidy contributes to the implementation of technological developments and

innovations of SMEs (that already meet the supplier requirements) in order to obtain knowledge from large companies that meet the expectations of international market. In addition, regarding the improvement of domestic suppliers, the supplier programme of HIPA should be mentioned. Supporting a favourable investor decision, one element of this programme aims to provide the foreign partners with information, already in the interest stage, about the Hungarian supplier chains and their operation related to their sector. Another pillar of this programme is the widest possible involvement of domestic SMEs in the supplier chain of large companies.

Regarding households' investments, it can be stated that a strong pick up unfolded in 2016. Beside the stably low interest rate environment and the permanent improvements in employment stance and income position of households, the subsidies provided under the Family Housing Subsidy Programme also boosted the demand side of housing market. As a result of this, a continuous rise in the number of issued dwelling permits in the last three years is already reflected in the surge of dwelling constructions as well. During the last year, 10 thousand dwellings were built in the country, which means a 31% increase year-on-year. The expansion on

the demand side is also confirmed by the 29% annual increase in total value of new housing loans in 2016, which may be further boosted from 2017 by the wage increases thanks to the 6-year wage agreement.

The favourable tendencies started on housing market are expected to become stronger in the coming years confirming by the two and a half times growth in the number of dwelling permits in 2016, meaning 31 thousand permits, which is an 8-year record. The dynamics of housing construction is expected to accelerate further in 2017 thus households' investments will significantly contribute to the GDP growth (Box 4). Remaining favourable tendencies in real estate market can be underpinned by housing market surveys. According to the survey of GKI, at the beginning of 2017 the intention of households to build or purchase a home reached the pre-crisis level for the first time. As a result of all these, nearly 20 thousand new dwellings are expected to be built in 2017 and 30 thousand in 2018, in parallel with the continuous build-up of capacities in the construction industry. In the long run, the high number of housing constructions may stabilise, thus ensuring the gradual renewal of housing stock.

Box 3: Economic effects of announced corporate large investments

The corporate investment-to-GDP ratio of Hungary continuously exceeded the EU average in the last 15 years, whereas in regional comparison presented an average performance. The driving force for corporate investments may be the large investment projects announced recently, which may induce further developments through the supplier chain. Looking forward, the significant growth in corporate investments is expected, due to, for instance, the permanently strong demand and the corporate income tax rate cut. The high total volume of projects managed by HIPA also envisages the boost of investments by the corporate sector. In the event if a positive decision was made in the case of every project managed currently by HIPA, then EUR 6.1 billion would be invested creating 32 thousand jobs in Hungary.



After assessing the major corporate investments of last years, it can be stated that an investment of HUF 100 billion directly creates 1,000-2,000 jobs on average in the economy. Taking into account the significant import content of developments, an investment of such volume itself contributes to the GDP growth by 0.1 percentage point. In addition, the expansion of production capacities is followed by additional export sales of HUF 300-500 billion annually on average, thus – adjusted with the import content of export – the development means a further 0.2-0.3 percentage point increase in economic growth. Overall, an investment of HUF 100 billion boosts the GDP growth by a one-time 0.3-0.4 percentage points on average.

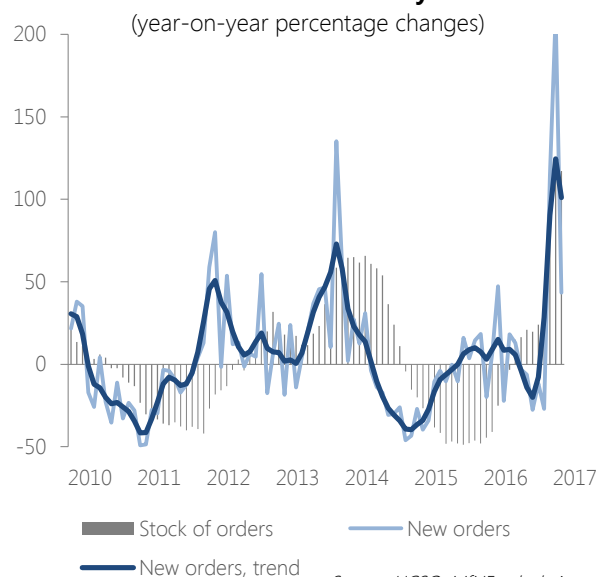
Due to the implementation of large-scale developments announced recently, Hungary's export performance will substantially improve through the significant extension of production capacities. The ongoing investments of these companies themselves represent nearly HUF 1,200 billion, thus they are expected to contribute to the economic growth in the next years with a one-time 1.2 percentage point increase. These announced developments together directly create more than 13 thousand jobs in the country, further improving the employment figures of private sector. In the mid-term, following their gradual expansion, the additional capacities implemented through the listed investments may raise Hungary's export performance by HUF 3,600-6,000 billion annually representing 12-21% of the country's annual exports of goods. Overall, in the coming years, the above investments may boost Hungary's economic growth by 3.6-4.8 percentage points.

Within the government investments, infrastructural developments will play a key role in the coming period, partly implemented from domestic funds and partly from EU funds. On the one hand, under the public road development concept adopted in 2016, by 2022, the currently 1,450 km long express road network will be further extended by 900 km from a total amount of HUF 2,500 billion. On the other hand, the reconstruction and modernisation of lower class public road network will also continue in 2017-2018. In addition, under the bus programme, the vehicle fleet of intercity bus service companies will be modernised as well. The Government will support the economic convergence of less developed regions, as well as the preservation of natural and cultural values by allocating funds for the development of tourism in the coming period.

On the forecast horizon, the dynamics of government investments is also significantly determined by the allocation of funds under the EU budget cycle for 2014-2020, since the structural funds of EUR 21.5 billion available for Hungary represent the highest GDP proportionate amount in the EU. It is particularly favourable that, every EU tender has been announced by the end of March 2017, and the full amount will be contracted until 31 March 2018. Furthermore, according to the plans, HUF 2,200-2,700 billion will be allocated from the tendered funds in 2017, amounting to 6-7% of annual Hungarian GDP. By the end of March 2017, more than HUF 1,900 billion were paid from the funds available in the new EU budget cycle; however, due to the large advanced payments, the allocated amounts will support the investment

performance in the next quarters. The fact that, these EU funds will significantly boost the economic growth in the coming period, is also confirmed by the sharp increase in the number of new contracts concluded in the construction industry at the end of 2016 and at the beginning of 2017, i.e. their number more than doubled on average year-on-year (Chart 2.11).

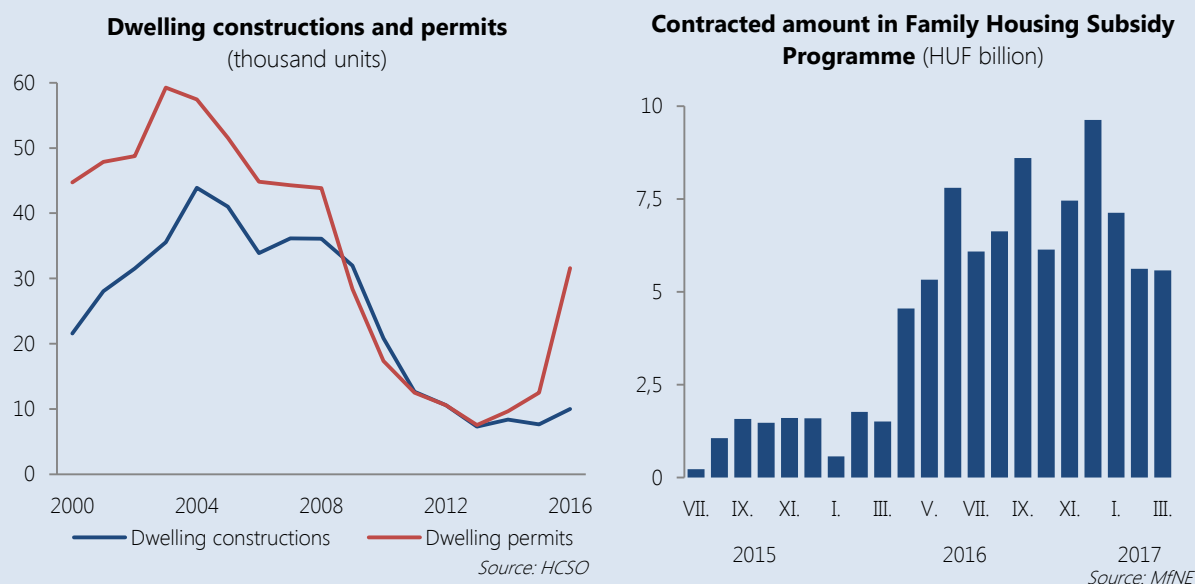
Chart 2.11.: New orders and stock of orders in construction industry



Based on all these, the overall investments are expected to expand in a balanced structure on the forecast horizon with a more than 10% growth rate in both 2017 and 2018. Due to the joint expansion of private and governmental investments, the capital stock of economy will significantly increase in the next period raising the pace of Hungary's potential growth as well.

Box 4: Housing market boom

The post-crisis recovery on housing market started in 2014, when the rising real incomes, the low interest rate environment and the postponed home purchases of previous years jointly supported the investment decisions of households. The slow easing of households' precautionary motives also contributed to the moderate level of demand in the recent years. In this stance, Home-creating Programme gave momentum to the housing market, as non-refundable subsidy was made available for the purchase of used real estate properties from the second half of 2015 and the range of subsidies available was significantly extended from the beginning of 2016. The nearly last two years prove the success of Home-creating Programme, as during this period 42 thousand families demanded the Family Housing Subsidy with an amount of HUF 107 billion. Since the extension of this Programme, 32 thousand households' applications were approved by the banks, including more than 10 thousand families that applied for the subsidy to build or purchase a new home with a total value exceeding HUF 65 billion. In line with the approved applications, the contracted amount under the Family Housing Subsidy Scheme also increased significantly from the second half of 2016, allocating HUF 92 billion subsidies to the families until the end of March 2017.

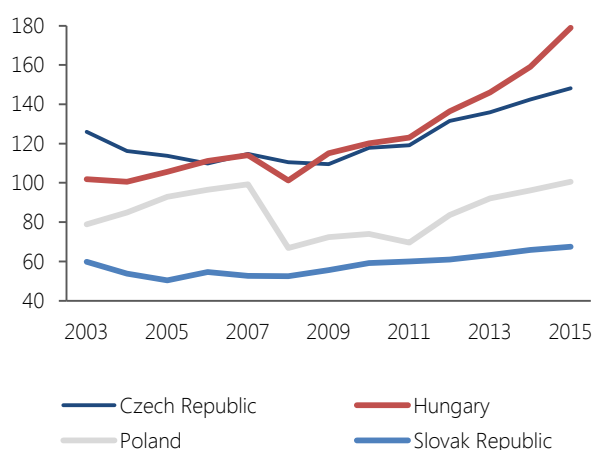


The housing market supply, supported by the preferential 5% VAT on housing construction, only gradually catches up with the boom on demand side: the number of housing construction permits rising by two and a half times in the last quarters was not yet followed by the pick-up in dwelling constructions. It could be observed in the past, that the number of housing constructions are followed by the issued permits with a nearly one and a half year lag. In addition, it was typical that, only the three quarters of issued dwelling permits resulted in realised real estate development. According to the last quarters, however, the time period between the issue of permits and the time when the real estate is taken into use has become longer. Also, nearly 54 thousand dwelling construction permits have been issued since the beginning of 2014, whereas 26 thousand homes have been constructed in this period. This 48% rate of realisation still lag behind the pre-crisis level ratios of 70-75%, nonetheless is expected to rise in the future. Taking into account the labour shortage also in the construction industry, the outstanding two and a half times rise in the number of dwelling permits in 2016 will be reflected gradually in the number of housing constructions, in a prolonged manner in 2017-2018. Therefore, an annual 30 thousand dwelling construction is expected by 2018. Economic growth is also supported significantly by the expansion in the number of housing constructions: in this year 0.8-1.1% of Hungarian economic performance is expected to come from housing investments, whereas in 2018 this amount may even reach 1.2-1.6%.

Consumption

Consumption growth continued to accelerate in 2016. Record high employment – along with low unemployment – and outstanding wage dynamics lead to a significant rise in total wages. Besides, personal income tax rate reduction to 15% and increased tax allowance for families with two children further supported the growth of households' disposable income. These favourable developments were also reflected in improving consumer confidence. Household expenditures increased by 5% in 2016, thus accounting for nearly half of GDP growth. However, due to the still high savings rate, net financial assets of households exceeded 100% of GDP in 2016 for the first time, and nearly doubled the amount of adjusted disposable income. These imply an outstandingly strong propensity to save and strong financial positions, even in comparison with the Visegrád countries (Chart 2.12).

Chart 2.12: Household net financial assets ratio (in proportion to disposable income) (per cent)

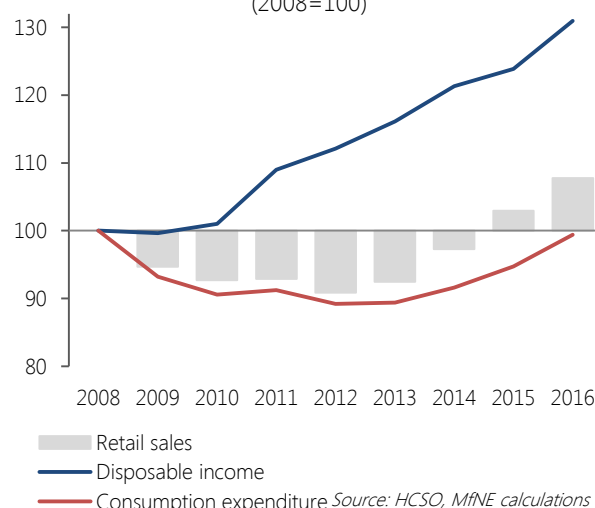


Source: HCSO, MNB, MfNE calculations

Although consumption expanded at a pace not seen in the past 13 years, its dynamics are still lagging behind that of the disposable income (Chart 2.13). Also taking into account the high willingness to save, it can be concluded that precautionary motives prevailing since the crisis still appear in the behaviour of households (Box 5). This is also reflected in the structure of

consumption expenditures, since the share of expenditures spent on durable goods was just over 6% in 2016, in contrast with the pre-crisis level that was typically above 10%.

Chart 2.13: Retail sales, disposable income and consumption expenditure
(2008=100)

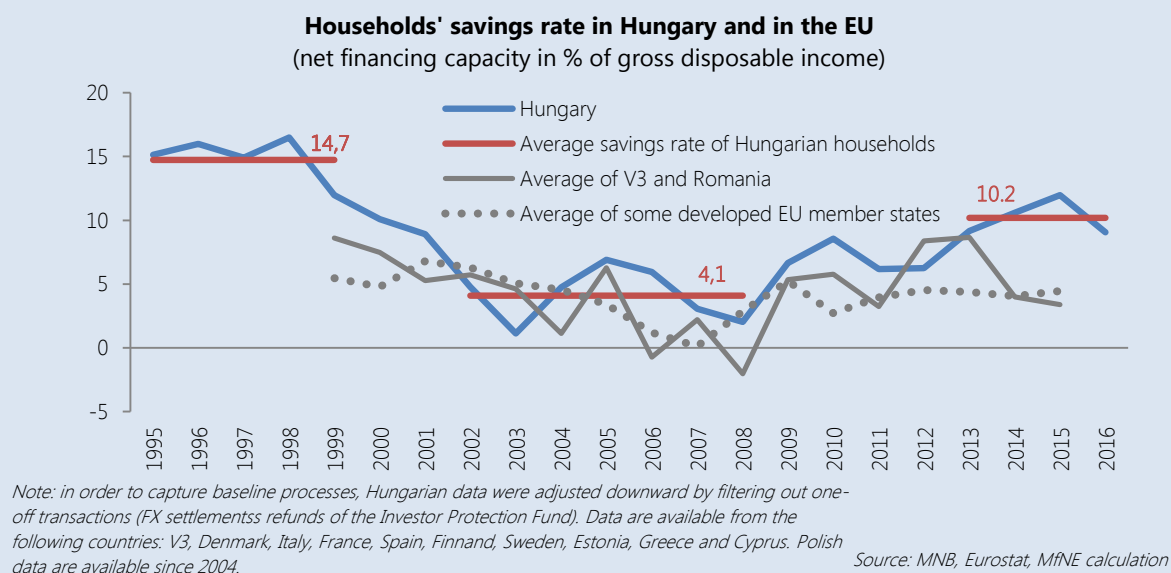


Dynamically expanding consumption, however, also indicates the gradual improvement of consumer confidence. Steadily improving employment and increasing real wages – thanks in part to the 6-year wage agreement – favourably affect both households' present financial position and their future outlook. These all contribute to the decline of the high savings rate, giving further room for consumption to increase. The financial position of households is also reinforced by the tax allowance for families with two children. The favourable developments are further supported by the reduction of the VAT rate of some essential food – poultry, fresh milk, eggs –, internet and certain restaurant services. VAT rate cuts will continue in 2018: the VAT rate on fish, certain restaurant services and internet will be reduced to 5%.

Based on the above, consumption dynamics will further strengthen in 2017, and the expansion will remain rapid in the coming years as well.

Box 5: Easing of precautionary motives in the Hungarian economy

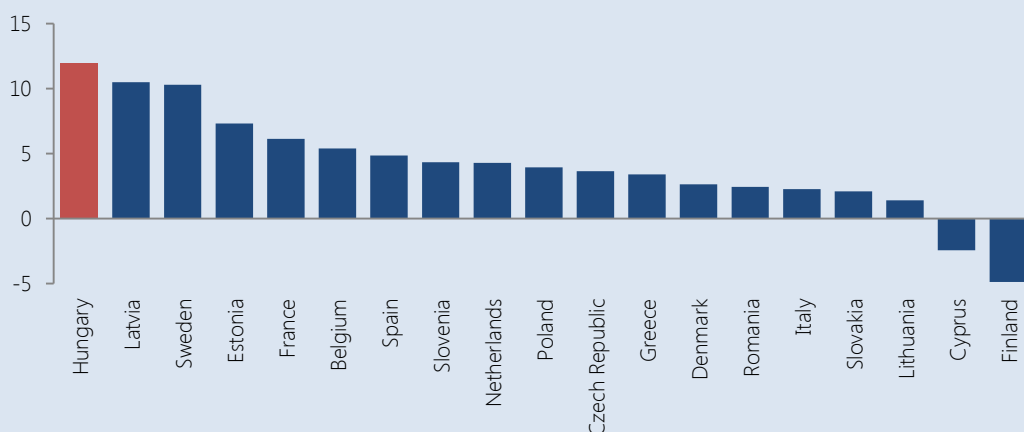
In the past 20 years, willingness to save presented an extremely diverse picture in Hungary. After the democratic transition, net savings rate stabilised around 15%, in line with the double-digit price increase and the relatively high unemployment rate. In the 2000s, however, a massive moderation has begun: in parallel with the presumed cyclical outlook, the fiscal loosening and the spread of foreign currency lending, savings decreased dramatically. The process towards indebtedness is well illustrated by the fact that the net savings rate decreased to around nil in 2003, whereas consumption expanded above 8%. However, the willingness to save sharply increased again after the economic and financial crisis of 2008, mainly fuelled by the formation of precautionary motives. The reason for this was the significant rise of the non-performing loan ratio – caused by the drastic increase of installments –, whereas, at the same time, the unemployment rate exceeded 10% due to the recession. As a result of these effects, both households' financial position and their outlook have become uncertain. Consequently, they accumulated additional savings for precautionary purposes. In parallel with this, the behaviour of households was defined by the prolonged setback of consumption, primarily reflected in the moderation of expenditures spent on consumer durables.



According to 2016 data, the savings rate decreased below 9% in Hungary, which is a combined result of several factors. The recent moderation of different forms of uncertainty indicates the easing of precautionary motives: the unemployment rate decreased to 4.4% by Q4 2016, and earnings are expanding permanently and dynamically. The latter is also strongly supported by the 6-year wage agreement, by affecting long run expectations. One of the important characteristics of this agreement is that it mainly improves the financial position of those with a lower income, who spend a larger proportion of their earnings on consumption. The conversion of foreign currency loans and the improving consumer confidence also contribute to the easing of precautionary motives.

Looking ahead, the further moderation of the savings rate can be expected, which is supported by several factors. Among domestic developments, the following factors should be mentioned: the low level of real interest rates, the easing of borrowing constraints, the favourable cyclical outlook, as well as the subsidies provided under the Family Housing Subsidy Programme (resulting in the boost of housing investments). In international comparison, it is important to mention that a much lower savings rate, typically around 3-4%, has been registered recently both in the region and in developed EU member states. Consequently, Hungarian households – with maintaining the expansion of financial assets – still have significant room for decreasing their savings rate, which points towards the boost of consumption. Within the latter, a significant increase in expenditures on consumer durables and investment purposes are expected primarily.

Households' savings rate in 2015
(net financial position in proportion of disposable income)



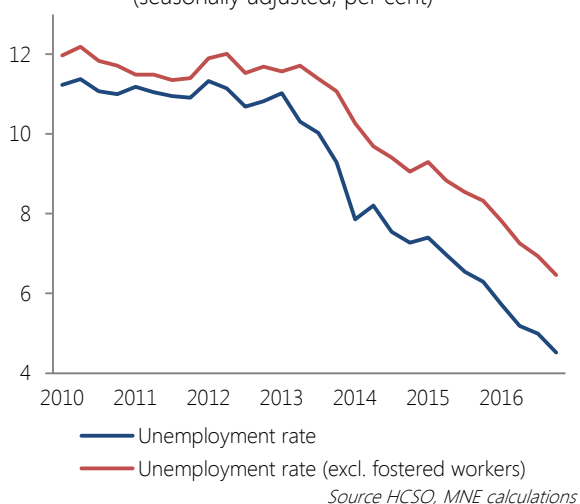
Note: data is not available for other EU member states. Hungarian data has been adjusted by early repayments, settlements and BEVA-compensation

Source: Eurostat, MfNE calculation

2.3 LABOUR MARKET

Thanks to the labour market reforms implemented since 2010, the participation rate continued to increase in 2016 as well. In the recent years, the better utilisation of labour force contributed to economic growth the most. Both employment and participation increased at an outstanding rate in European comparison, meanwhile the unemployment rate also continued to decrease (Chart 2.14).

Chart 2.14: Unemployment rate¹
(seasonally adjusted, per cent)

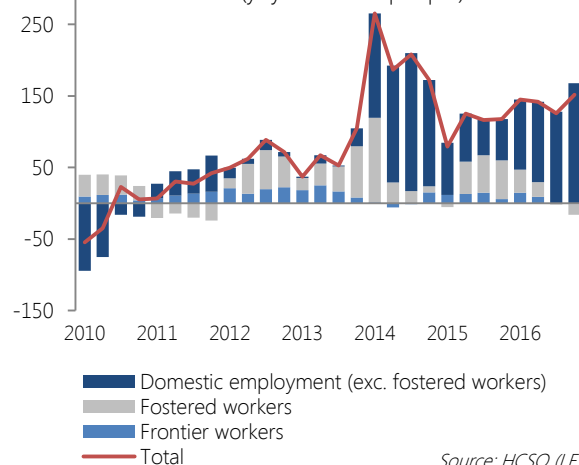


¹ Assuming that in the absence of public employment half of those taking a job under the programme would be unemployed, while the other half of them would be inactive.

As a result of Government measures, the participation rate increased further reaching 70.1% in 2016, which

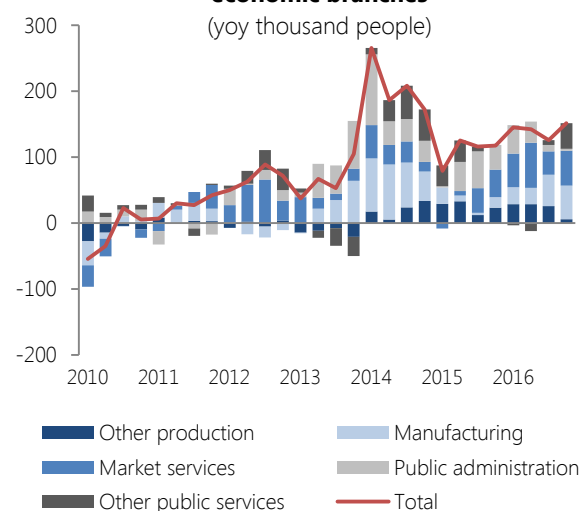
took place in parallel with the expansion of employment and the moderation of the unemployment rate to 5.1%. The dynamic expansion that started during the previous years continued in 2016 as well: the number of employees increased by 141 thousand (3.4%), thus exceeding 4.4 million and resulting in an employment rate of 66.5%, which is a level not seen since the regime change. The private sector played the most important role in this expansion, while the number of public employees started to decrease in the second half of the year (Chart 2.15).

Chart 2.15: Employment growth by main sectors
(yoy thousand people)



Among the branches of the national economy, the manufacturing industry presented the most significant growth in employment during the last year. This growth was associated primarily with the automotive industry and the related supplier networks. In agriculture, a substantial expansion could be seen as well: by nearly 14 thousand more people worked in the sector. Within the service sector, infocommunication, public administration and accommodation and food services boosted the growth primarily (Chart 2.16).

Chart 2.16: Employment growth by economic branches

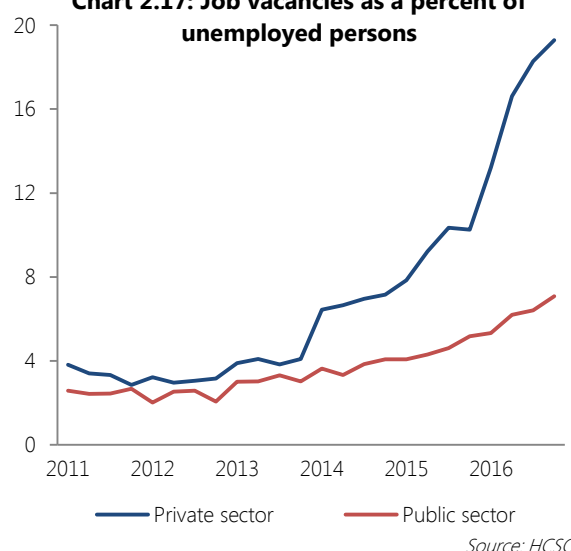


Beside the increasing labour demand – due to stable economic growth – the success was founded by a number of measures stimulating labour market participation and labour demand as well: for example, the personal income tax rate cut, social security contribution allowances provided in the framework of the Job Protection Act, the extension of the public work scheme, the changes in job-seeking assistances, the tightening of the conditions of early retirement, as well as the rise in effective retirement age.

Due to the already significantly expanding employment and strong growth, the labour market environment has become increasingly tight (Chart 2.17). However, this may improve the chances of unemployed people and public workers to find employment in the primary labour market. In order to facilitate the employment of public workers, instead of extending the size of the programme, the Government focuses on trainings and other measures supporting employment, the results of which could be already observed in Q4 2016, in the declining number

of public employees (by 15 thousand year-on-year) as specified by the labour force survey. Furthermore, given the labour shortage in the private sector, based on the Government's decision, the maximum monthly average number of participants in the public work scheme must be gradually reduced from 224 thousand in 2016 to 150 thousand until 2020. In addition, after 1 June 2018 – introduced in an ascending system –, the maximum duration of public employment during a three-year period will be one year with the exception of cases where the private sector cannot offer realistic employment opportunities to the individuals concerned, meaning that the job-seekers are unable to find jobs beyond their own faults. The involvement of job-seekers in public employment under the age of 25 and those with vocational qualification will be possible with various restrictions. In order to further strengthen active labour market policies, the appropriation to cover the financing of active tools was increased by HUF 40 billion from the funds allocated for public employment during 2017; the required sources for phasing out from public employment will be also available in the next years.

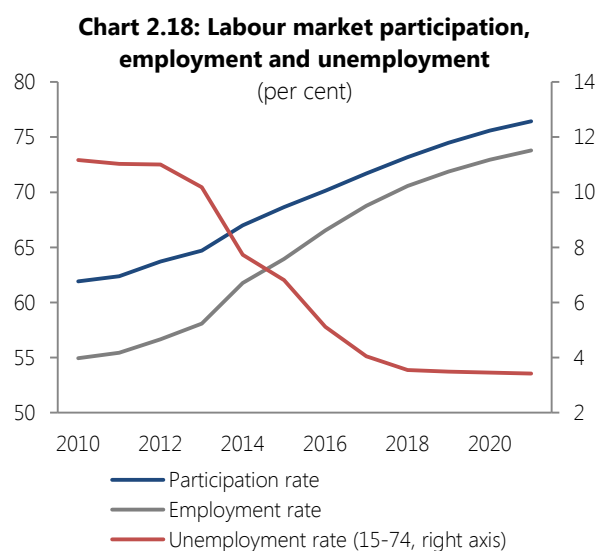
Chart 2.17: Job vacancies as a percent of unemployed persons



The still strong labour market demand will be met by higher labour supply due to increasing wages as a result of the six-year wage agreement concluded upon the initiative of the Government, containing a significant increase of the minimum wage and the guaranteed wage minimum. Higher wages may encourage regional mobility within the country, the bigger difference compared to the public workers' wage helps increasing private sector employment and

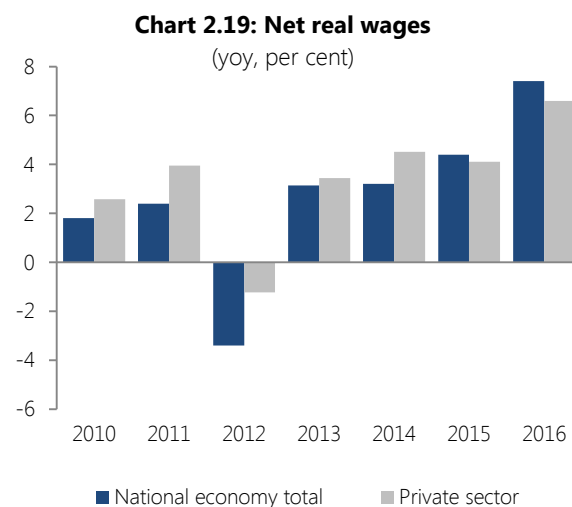
faster wage convergence reduces the attractiveness of taking a job abroad as well (Box 6).

As an impact of past and current Government measures and favourable economic conditions, increasing participation is expected to persist over the forecast horizon (Chart 2.18). In parallel with the continuing growth, as a result of the strong labour demand by the private sector, the expansion of employment and the decrease of unemployment may continue, which may lead to an unemployment rate below 4% by the end of the forecast period.



Tighter labour market conditions caused faster wage growth in the private sector compared to the previous years. Public sector wages were pushed higher by the career models. Wages in the private sector increased by 5.4% in 2016, while the gross wages of the national economy were up by 6.1% on average. Stronger wage dynamics, however, did not significantly change Hungary's relative competitiveness in the region, since the favourable external environment resulted in quicker wage convergence in the neighbouring countries as well.

Net average wages, including family tax allowance, increased by 7.7% in the national economy. Due to the low inflation environment, the real value of net wages was up by 7.4%, increasing faster than during the previous years (Chart 2.19).

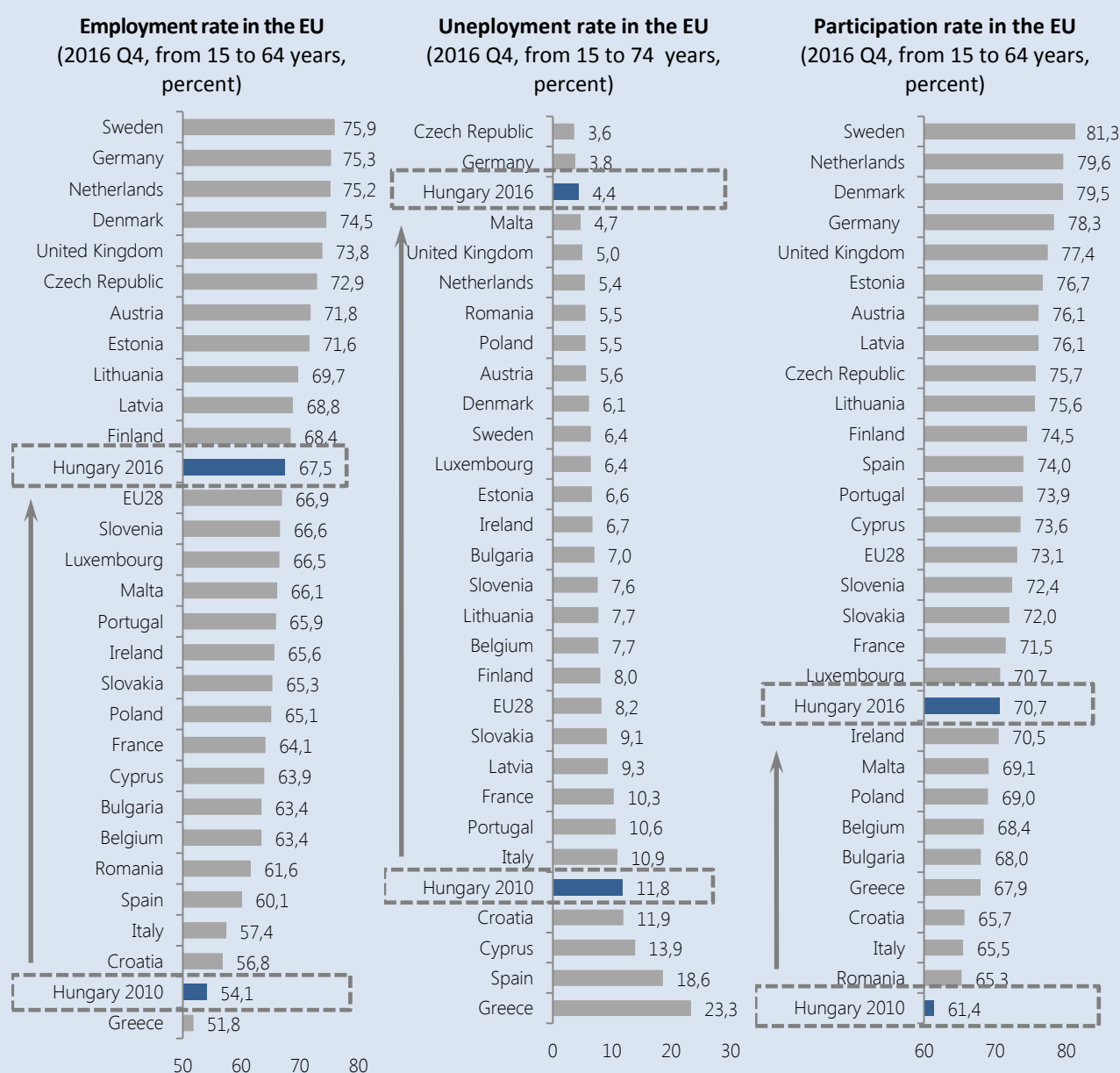


The six-year wage agreement concluded upon the initiative of the Government may result in the quicker increase of gross wages in the next years. As a result of the cut in employers' tax burdens by 5 percentage points in 2017 and by further 2 percentage points in 2018, the growth dynamics of wage costs will be slower than in the case of gross wages. By encouraging the companies' efforts to improve efficiency, increasing wages contribute to the expansion of employment in positions producing higher added value. Thanks to the agreement the convergence of wages is expected to continue in parallel with ongoing favourable labour market developments in the coming years. Therefore real wages, as compared to their level at the beginning of 2016 may rise by nearly 40%, while the number of employees may exceed the 2010 level by 1,000,000 by the end of the forecast horizon.

Box 6: Labour market reserves

The number of employed persons increased by more than 730,000 between 2010 and 2016 in Hungary. With this result, following the Baltic states, Hungary reached the fourth highest gain in the employment rate in the EU. A similar improvement can be observed in the unemployment rate: following the Czech Republic and Germany, Hungary ranks third on the top list of countries with the lowest unemployment rate. Beside the decline in unemployment, the outstanding growth of employment was also caused by the significant increase in the participation rate. Hungary achieved the second largest expansion of activity throughout the EU between 2010 and 2016, as a result Hungary moved from the second-to-last place in the EU ranking in 2010 to the twentieth in Q4 2016.

The successes achieved were founded by a number of measures supporting labour market participation and labour demand, including the flat-rate tax, the introduction of the Job Protection Act or the tightening of the conditions of early retirement. The quick expansion of employment also created challenges at the same time: labour force has increasingly become scarce. Consequently, the volume of available labour market reserves is an important factor in assessing long-term growth outlook.



*Hungary was on the 28th place in 2010 Q1

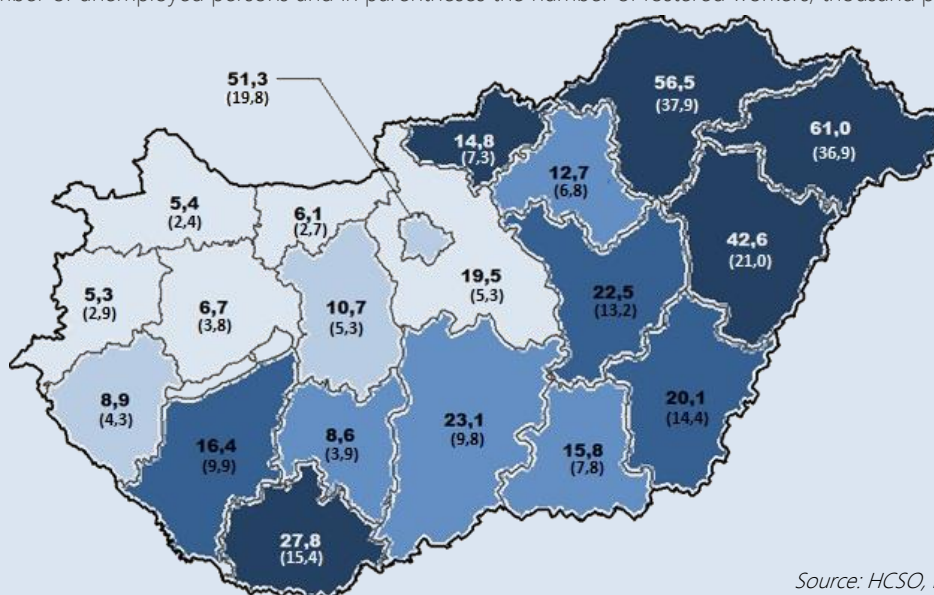
Hungary was on the 21st place in 2010 Q1,
In case of Italy and the UK Q3 data

*Hungary was on the 27.th place in 2010 Q1
Source: Eurostat

When assessing the size of the currently active but on the primary labour market not employed reserves, the unemployment rate is one of the important factors. Regarding unemployment, the current level of around 4% is quite favourable even in international comparison. Based on the method applied by the European Commission for the calculation of equilibrium unemployment based on structural factors (see Orlandi, 2012), and also taking into account the social contribution tax cut implemented as a part of the six-year wage agreement, the current 4% unemployment rate is close to its equilibrium level. However, territorial data show that in some regions we can observe lower unemployment rate as compared to the national average, whereas in other regions we see higher figures. The latter is typical in the Eastern and Southern part of the country. From this aspect, territories described by higher unemployment rate have substantial labour force reserves. Another important factor is the number of public workers, showing a similar territorial distribution as that of unemployed persons. According to calculations, the moderation of territorial differences in the case of these two groups, in which mobility is an important factor, would create the possibility for the employment of around 100,000 people.

Regional distribution of unemployed and fostered workers in 2016 Q4

(Number of unemployed persons and in parentheses the number of fostered workers, thousand people)



Source: HCSO, MfNE

Beside the active but on the primary labour market not employed people, considerable reserves can be observed among inactive people. In order to identify the groups that potentially can be attracted back to the labour market, we compared the participation rates of Sweden, a country with similar population size and presenting the highest activity rate in the EU, with the indicator of the same age groups in Hungary, separately for both males and females.

In this regard, it is an outstanding result, as well as justifies the comparability of the labour market indicators of the two countries, that the activity of Hungarian males in the 25–44 years age group reaches that of their Swedish counterparts, and even exceeds it in some smaller age groups within that. However, in older age groups the activity of the Hungarian males decreases more rapidly than in the case of Sweden. The difference in the activity of young males (aged between 15 and 24) is mainly explained by the major penetration of employment beside education and the dual training system. On the other hand the activity of Hungarian women does not reach that of their Swedish counterparts in any of the age groups. There is a prominent difference in the case of women of child-bearing age which has a significant impact on activity up to the 40–44 years age group. Above this age group, the difference gradually decreases by the return of women from child-birth, and approaches the Swedish level in the 50–54 years age group the most, by reaching a 2 percentage point gap only. In the age group of those above 55 years, however, the activity of women sharply decreases again, and the 2 percentage point gap jumps to above 20 percentage points. Consequently, the comparison with the Swedish labour market indicators tells us that there are major reserves in case of young and older people and women. The volume of this is reflected by the fact that by reaching the Swedish participation rates in every age group would mean the entry of further hundreds of thousands people on the labour market. In addition, the majority of these people (the older generations and mothers with small children) have sufficient work experience, even though a significant share

of them may be employed in part time due to their special circumstances.



Source: Eurostat, MfNE calculation

The number of people employed on the domestic primary labour market may be further increased by the return of foreign workers. The actual number of people working abroad is uncertain; various studies estimate it somewhere in the range of 300-500 thousand people. Higher wages abroad and, typically in the previous years, unfavourable domestic employment prospects can be found among the most important factors that encourage working abroad. However, with regard to these factors, substantial changes have occurred: the strong domestic labour demand and the renewed wage convergence – ensured by the six-year wage agreement – enhance the country's capability of keeping the labour force. This is proved by the fact that during the last six month labour force flowed back to the country instead of flowing out. If this process becomes permanent then this segment would also contribute to higher domestic employment. In addition, returning foreign workers could bring their work culture and work organisation knowledge obtained abroad, thus contributing to increasing efficiency.

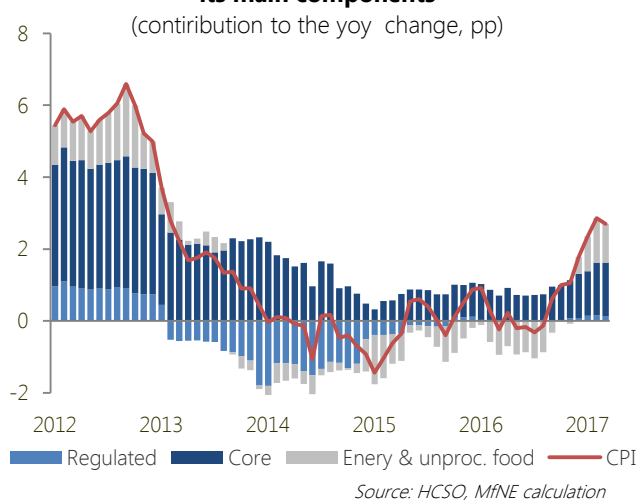
Overall, it can be concluded that the employment situation in Hungary has improved greatly during the last seven years, in which the Government's economic policy played a key role. As a result of this the Hungarian unemployment rate is among the lowest in Europe and reached a level from which it is hard to decrease further. However, there are still significant reserves for the inclusion of inactive population, even in spite of the outstanding results of the previous years. The exploration of these reserves is facilitated by a number of Government measures, such as the raise of the tax-exempt amount of the cost reimbursement for commuters, the housing support for mobility; beside these, the six-year wage agreement concluded last year also contributes to this purpose. Therefore, the considerably rising minimum wage and thus the sharp increase in the difference between the public employees' wage and the minimum wage means a greater incentive for public workers to enter the primary labour market, and the growing wage level motivates the more intensive job-seeking, while it also enhances the country's capability to keep its labour force.

2.4 INFLATION

Domestic inflation trends have changed radically in recent years. In contrast to typical yearly price increases of around 4-5% earlier, the Hungarian economy is characterised by historically low price dynamics since 2013, which has fed into expectations as well. As a result, a record low inflation rate close to zero was recorded over the past two years. This favourable change was first clearly related to the reduction of utility costs implemented by the Government in several stages, and was later amplified by the decrease in raw material, especially oil prices.

The record low inflation developed in 2014-2015 characterised the majority of 2016 as well, resulting again in a historically low figure last year (0.4%). In this development, imported effects – such as the drop in oil price and the moderate general price increase throughout Europe – played a key role; but the stable HUF-EUR exchange rate and the anchored inflation expectations also contributed to the record low inflation rate. In addition, domestic developments showed moderate price change, core inflation – despite minimal acceleration during the year – stood at 1.4%, while the price index of market services remained at a record low level (Chart 2.20).

Chart 2.20: Developments of inflation and its main components



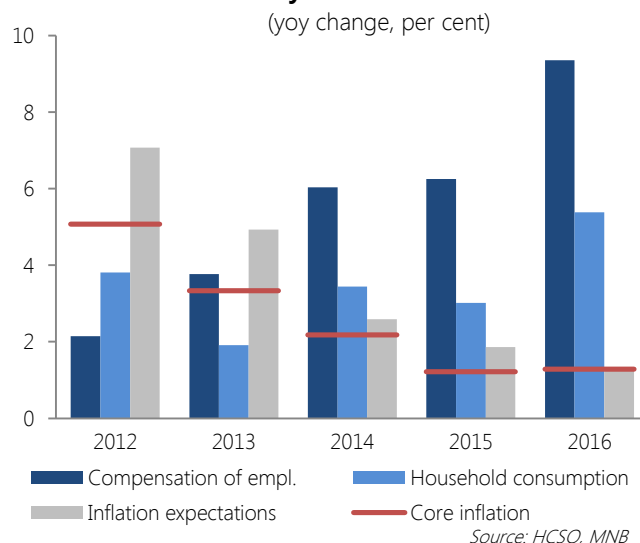
The pace of price change increased by the end of the year, which was caused in part by the expanding domestic demand reflected by the moderate rise in core inflation. However, the most important effect was that fuel prices showed a significant price increase on annual

basis due to low base. In addition the price of certain food products increased too, explained by various factors like weather, world market developments and the supply disruptions related to avian flu.

As for the external effects, energy and raw material prices are expected to act toward price increase throughout 2017, whereas from the euro area we expect a slowly strengthening inflation pressure. Regarding domestic developments, the picture is mixed. On the one hand, the reduction of VAT rate on certain foodstuffs, internet and catering services has a price-moderating effect. On the other hand, increasing labour costs (due to tight labour market and the minimum wage raise) and the additional demand generated by higher wages may appear in prices by time.

Nevertheless, both consumption and wages have increased in recent years, but so far this had let to only slight raise in core inflation. This phenomenon is presumably explained by the inflation expectations having decreased to historically low level, resulting in moderate pricing behaviour of companies. Therefore, taking into account the domestic inflation developments that showed a slow strengthening at the beginning of this year, the effect of increasing demand may remain moderate in 2017 (Chart 2.21).

Chart 2.21: Key drivers behind core inflation



However, as presented in an alternative scenario among our sensitivity analyses, the strong domestic demand

and rapid wage increase poses an upward risk, still, the baseline scenario shows – mainly due to the base effect related to fuel prices – the moderation of inflation from Q2, which is also supported by the excise tax cut for petrol. In the second half of the year, the base effect may continue to fade however, the rising wages and demand point in the direction of higher prices at the same time. Overall, as a result of all the above factors, a price increase similar to that indicated in the forecast published by the Government in December 2016 is expected. Therefore, the inflation may exceed the near-zero value characterising the recent years, but may remain historically low.

2.5 CYCLICAL POSITION

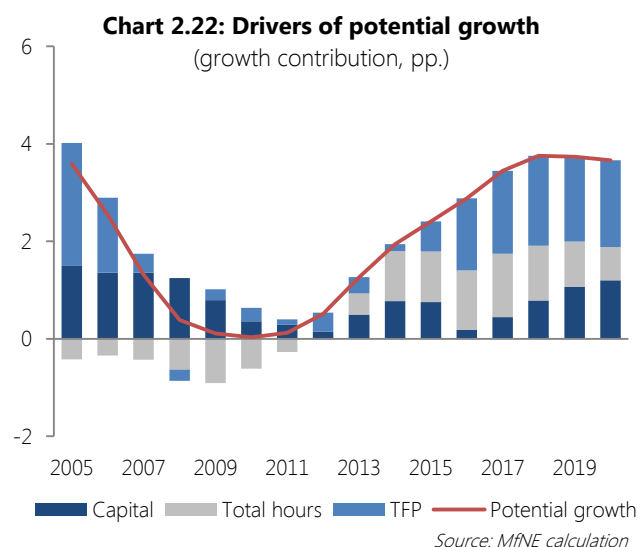
Basically, the output of the Hungarian economy in the first half of the 2000s fluctuated around its potential level. Nonetheless, economic growth was marked by excessive lending and rapid external over-indebtedness prior to the crisis which later turned unsustainable. With the outbreak of the global financial crisis in 2009, the focus shifted to debt repayment in parallel with a drop in the performance of the economy well below its potential level. In the following years the gradual closing of the negative output gap could be observed. At the same time, since the turnaround of growth in 2013 potential growth has significantly accelerated as well. Nonetheless, owing to the continued phasing out of debts accumulated during the boom, the economy's performance may fall short of the level induced by structural factors in 2017 as well. In accordance with the moderation of precautionary savings, the upturn in lending and the strengthening of domestic demand, output gap may close by 2018.

In the coming years, the Government's growth-stimulating measures and accelerated EU fund absorptions will also drive towards the end of the negative cycle. Therefore, in the first half of the forecast horizon – due to the rapid expansion – the output gap will close, and in the following period, expansion of the economy will be in line with the potential growth.

In parallel with the pick-up in the economy, potential growth will also increase due to the joint effect of several

In parallel with the closure of the output gap and the pick-up in domestic demand, inflation may further accelerate in 2018 and fluctuate around the 3% level, meeting the medium term target of the central bank. However, the VAT rate cut for internet, catering and raw fish to 5% will moderate the price increase. As for the world market developments, oil price is not expected to drive prices up; however food price may increase more robustly, and more substantial price pressure from the euro area is expected.

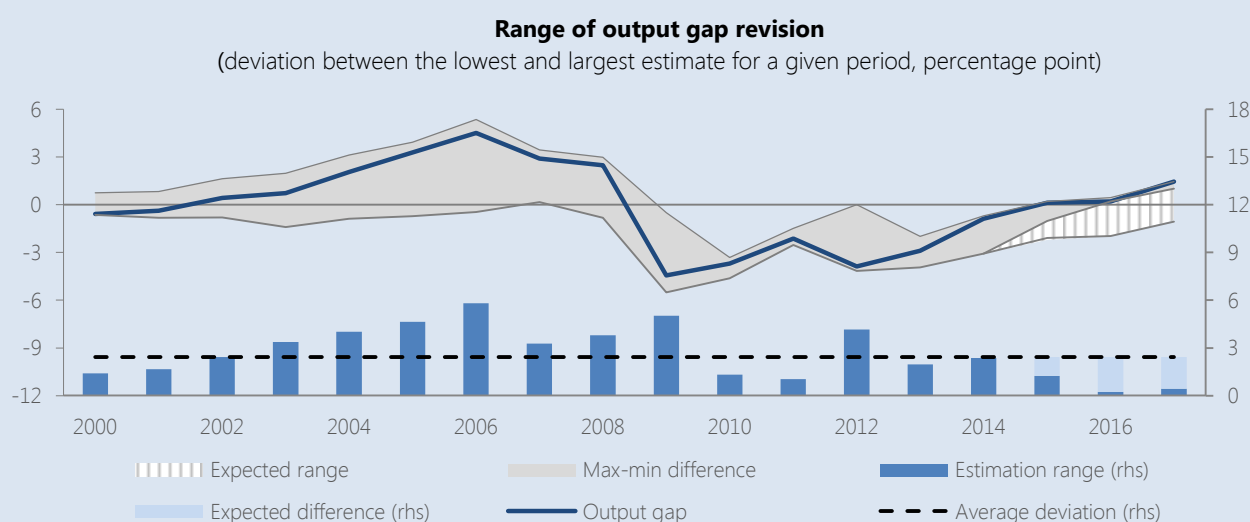
factors. On the one hand, as a continuation of labour market reforms, labour force participation may further improve; on the other hand, owing to large companies' capacity extensions especially in manufacturing and the absorption of EU funds, capital accumulation will increase. The change in relative price of labour to capital may mean a further incentive for automation of production, which will also result in investments and higher capital stock. Finally, growth is expected to be increasingly accompanied by the improvement of efficiency as those having recently entered the labour market gain further skills and experience, the inflow of technology and the allocation effect of the six-year wage agreement. Thanks to these factors, the potential growth is expected to exceed 3.5% throughout the forecast horizon.



Box 7: Uncertainties surrounding the output gap

Potential growth and the output gap cannot be observed directly, thus statistical-econometric methods are used for their estimation, necessarily carrying significant uncertainty. On the one hand, the perception of the cyclical position may differ due to the different conceptual approaches and methods; on the other hand, the estimations resulting from a given method might also vary greatly over time. The latter is mainly explained by the so-called endpoint uncertainty. This phenomenon played a key role prior to the outbreak of the financial crisis, since it contributed to the wrongful perception of the cyclical position when – beside other methodological reasons – the economic overheating was not proved clearly by potential output calculations. While the methods used for estimation of potential output still carry significant uncertainty, their role in policy making has become more pronounced: according to the effective EU regulation, the budgetary situation of Member States which are not subject to excessive deficit procedure are primarily assessed upon the structural balance, that highly dependent on the value of the estimated output gap.

Although the Commission staff proved that at the EU level the methodology they apply performs well as compared to the IMF and OECD in terms of endpoint uncertainty, the extent thereof is still considerable. In case of Hungary, the difference between the highest and lowest output gap values for each year averaged to 2.4 percentage points in the period between 2004 and 2016. A similar extent of uncertainty may describe the Commission's most recently published output gap estimation (1.0%) for 2017. Consequently, the Commission's consideration on the output gap may significantly change in the light of upcoming years' figures – presumably in a negative direction.



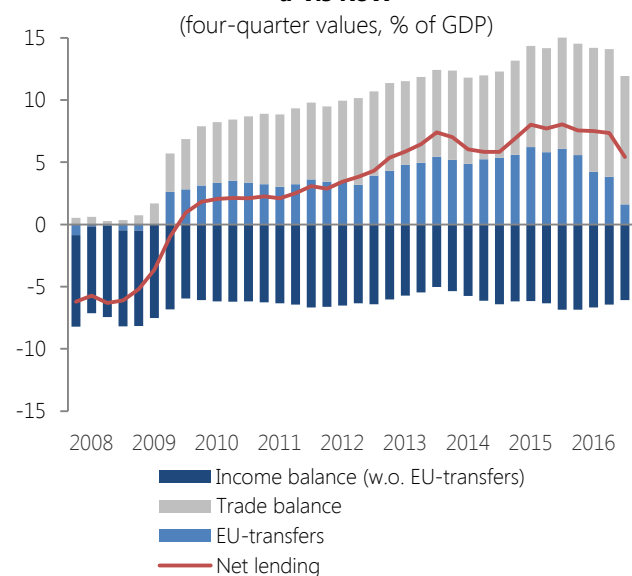
Source: European Commission, MfNE calculation

Regarding the financial developments, this is explained by the fact that positive output gap was accompanied by large-scale indebtedness in the period of 2003–2007. This is reflected by the current account deficit of 7–8% and the fact that the related net external debt-to-GDP ratio increased by nearly 24 percentage points. As for the economic sectors, the liabilities of both companies and households increased, while – as a result of permanently high budget deficit – the debt-to-GDP ratio also grew from 54.6% at the end of 2003 to 65.6% by the end of 2007. However, currently it can be stated that economic actors are still repaying their loans previously accumulated. Net financial assets of households increased by 31% since 2010, whereas the net debt of firms decreased by 19%. Besides, the government debt is on a declining path as well: the debt-to-GDP ratio has decreased from 80.6% at the end of 2010 to 74.1% by the end of 2016; looking forward. Further moderation of government debt is also ensured by economic growth, the debt rule and fiscal discipline. Although the permanently strong cyclical effects are encouraging the borrowing of households and companies, overall, the improvement of net financial positions is expected. As a result of this, the net external debt of Hungary may be terminated, and the country may become a net lender by the end of the forecast horizon. Therefore, in line with the above, the method used by the Government for the estimation of potential output – also taking into account the financial developments – still shows a negative cyclical position, which thus does not indicate any overheating (in contrast to the Commission's estimation).

2.6 EXTERNAL BALANCE

Assessing the past years' figures yields that the current account deficit has declined dramatically concurrently with the crisis and, in the following years, even turned into surplus, which significantly expanded later. The tendency is similar in regional peers as well; however, external financing capacity of Hungary consistently exceeded that of other countries in the region. As a result of favourable developments, the country's net lending hit a record height in 2015, amounting to 8.1% of GDP. The excellent performance was caused by the expanding foreign trade surplus combined with EU transfer inflows related to infrastructural developments and reconstructions. At the same time, the huge amount of funds used in 2014-2015 was a one-off phenomenon, given that transfers from the previous programming period could also be absorbed (Chart 2.23).

Chart 2.23: Developments in net lending vis-à-vis RoW



Explained by the more moderate inflow of EU funds, net lending to rest of world showed a somewhat lower level in 2016 as compared to 2015, amounting to 5.4% of GDP. With this performance, Hungary is still in an outstanding position in the region regarding external equilibrium processes. It is also favourable that – despite weaker capital account resulting from the more moderate transfers – the current account balance reached a record surplus, equal to 4.9% of GDP. This is partly caused by the very fact that the

investment activity that was decreasing because of the lagging capital transfers increased trade surplus due to high import content thereof. The surplus was also supported by favourable terms of trade developments stemming from low oil prices, as well as the excellent performance of services. On the other hand, owing to rapidly shrinking external debt and the low yield environment, interest expenditures and thus income outflow decreased significantly.

High external financing capacity has coupled with dynamic decrease of external debt in recent years. This process has also continued in 2016, primarily related to debt repayment by the general government and secondly to that by the credit institutions. Accordingly, the GDP-proportionate gross external debt was reduced to 68.9% by the end of 2016 from 112.7%, measured in late 2010. Due to the significant level of assets, net external debt reduced to 18.4% of GDP; with this, Hungary – after the Czech Republic - has the second lowest net external debt in regional comparison

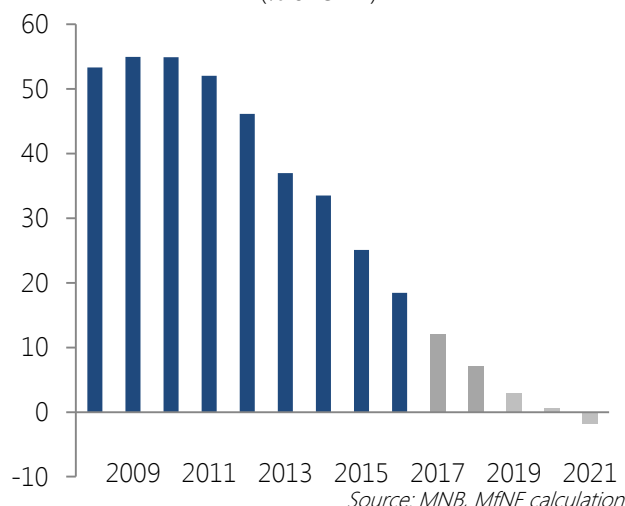
In the coming period, the performance of services – in particular leading branches like transportation, tourism and communication – will still contribute to the foreign trade surplus. Nevertheless, the domestic demand that is rising due to the increases in minimum wage and tax cuts may also moderate the foreign trade surplus as a result of the significant import content. In the mid-term, however, the trade of goods is expected to expand dynamically, which – beside the Government's industry strategy – is also supported by the already announced capacity extensions of large manufacturing companies, as well as the use of EU funds for purpose of economic development.

As regards the income balance, on the one hand, thanks to the dynamic debt reduction, expenditures may further decrease; however, this will be counterbalanced by the growing earnings of foreign owned companies and the yield environment that is about to rise over the second half of the forecast horizon. Following a boom in 2017, the inflow of EU transfers may further strengthen in 2018, however in

parallel with the use of the multiannual financial framework a cyclical slowdown is expected by the end of the forecast horizon in this regard. Therefore, as a joint result of gradually shrinking foreign trade surplus (being developed due to domestic demand), and the more moderate inflow of EU funds from 2019, external financing capacity is expected to stabilise at a lower level as compared to the extremely high figures witnessed in recent years.

Nevertheless, thanks to the permanently prevailing robust surplus and the dynamic economic growth, the foreign financing position of Hungary may further improve. By the end of the forecast horizon, Hungary may become a net external lender after being a net borrower for half a century (Chart 2.24).

Chart 2.24: Net external debt
(% of GDP)



2.7 ASSESSMENT OF THE ECONOMIC OUTCOMES OF GOVERNMENT MEASURES

In this chapter the macroeconomic impact of the main Government measures adopted since the publication of the 2016 Convergence Programme are demonstrated. The DYNAMO model of the Ministry for National Economy was applied for the analysis.¹

The structure of the DYNAMO model rests on neo-classical growth relationships in the long term, however, adjustment to this is slowed down by various frictions in the short term. The characteristics of the model make it suitable for impact assessments of Government measures. On the one hand, this is due to the fact that a wide range of macroeconomic variables are employed, thus the behaviour of each economic agent can be modelled. On the other hand, it consistently represents the relations between the national accounts and the financial accounts of public finances. In addition, several transmission channels have been incorporated in the model through which the fiscal variables exert their effects on the economy.

The favourable development of macroeconomic fundamentals – while keeping the balance of the general government – create an opportunity to take a number of government measures, which stimulate economic growth and the rise of welfare of the

society. The impact assessment is based on the following Government actions (Table 2.1):

- Wage hikes and career models in the public sector: cultural career model, wage/allowance hikes of judicial/prosecutorial professionals, career model of nannies, wage hike of employees working in the foreign affairs institutions, and other sectoral wage hikes.
- Additional payments at municipalities, state-owned companies and central budgetary organisations arising due to the minimum wage hike.
- Government investments: expenditure on infrastructure and tourism.
- The uniform cut of the corporate income tax rate to 9% from 2017.
- The social contribution tax is reduced by 5 percentage points from 2017 in accordance with the six-year wage agreement, and will further decrease as from 2018 as set out in the agreement.
- The increase of the minimum wage (by 15% and 8%) and the guaranteed wage minimum (by 25% and 12%) in 2017 and 2018, respectively.
- The reduction of VAT rate on internet services from 18% to 5%.
- The reduction of VAT rate on raw fish from 27% to 5%.

¹ The description of Dynamic National Accounts based Model (DYNAMO) is accessible via the following link:
http://www.kormany.hu/download/9/97/10000/EI%C5%91rejelz%C3%A9si%20m%C3%B3dszertan_angol.pdf

- The Programme for the Strategic Reformation of the National Tax and Customs Administration 2.0.
- The Government cuts the small business tax by 2 percentage points to 14% from 2017, while a further 1 percentage point reduction (to 13%) is on the way from 2018.

The macroeconomic impacts of the measures estimated based on the DYNAMO model are shown in Table 2.2. On the one hand, the economic policy measures bring along the increase of disposable income of the households, which directly contributes to the strengthening of consumption. The minimum wage hike contributes to this considerably. On the other hand, the measures (corporate income tax and social contribution tax rate cuts, infrastructural investments) support the activity of companies: the improvement of their profitability and competitiveness boosts employment and investments. Production capacities established also contribute to

the rise of exports. At the same time, Government measures generate additional wage hikes in the Hungarian economy, which also has a positive impact on the price increase. Simultaneously, higher tax revenues arising from the GDP growth partly offset the negative impact of the additional Government measures on the general government balance.

Regarding the estimated effects of the measures, the level of GDP may exceed the level in the baseline scenario (i.e. the scenario without the implementation of such measures) by 1.2% and by more than 2.5% in 2017 and 2018, respectively. Consequently, the Government measures taken will contribute to the GDP growth by 1.2 and 1.4 percentage points in 2017 and 2018. In the long run, the economic policy actions further improve the performance of the economy, which results in a cumulative impact of ca. 3.4% of GDP up to 2021, compared to the baseline scenario.

Table 2.1: Government measures modelled in % of GDP

	2017	2018	2019	2020	2021
Measures increasing expenditure	-0.20	-0.58	-0.88	-0.78	-0.70
Wage hikes	-0.20	-0.46	-0.67	-0.65	-0.62
<i>Career models in the public sector</i>	0.00	0.00	-0.19	-0.19	-0.19
<i>Other sectoral wages</i>	-0.05	-0.07	-0.07	-0.07	-0.06
<i>Additional payments due to the wage hikes</i>	-0.15	-0.38	-0.42	-0.39	-0.37
Programme for the Strategic Reformation of NAV 2.0	0.00	-0.05	-0.05	-0.05	-0.04
New government investments	0.00	-0.07	-0.16	-0.08	-0.03
Measures decreasing revenues	-1.40	-1.65	-1.89	-2.31	-2.56
Cut of the corporate income tax rate	-0.39	-0.25	-0.25	-0.25	-0.25
Cut of social contribution tax	-1.01	-1.34	-1.58	-2.00	-2.24
Reduction of VAT rate on internet services	0.00	-0.05	-0.06	-0.06	-0.06
Reduction of VAT rate on raw fish	0.00	-0.01	-0.01	-0.01	-0.01
Total	-1.60	-2.23	-2.77	-3.09	-3.25

Source: MfNE estimation

Remark: the items do not necessarily make up the total, which is the result of rounding.

Table 2.2: Macroeconomic impacts of the government measures
(cumulated % difference in levels compared to the baseline scenario)

	2017	2018	2019	2020	2021
GDP	1.15	2.53	2.85	3.15	3.38
Households' consumption expenditure	2.55	5.02	5.78	6.20	6.64
Investments	1.89	5.61	5.55	6.11	6.34
Export	2.45	3.98	3.91	3.87	3.85
Import	3.12	5.34	5.33	5.37	5.45
Consumer price level	0.28	0.87	1.38	1.51	1.47
Private sector employment	0.19	1.18	1.69	1.96	2.09
Gross wages in the private sector	4.05	6.53	7.05	7.43	7.66
General government deficit (% of the GDP*)	-0.59	-0.60	-0.75	-0.93	-0.99

* Change in percentage points

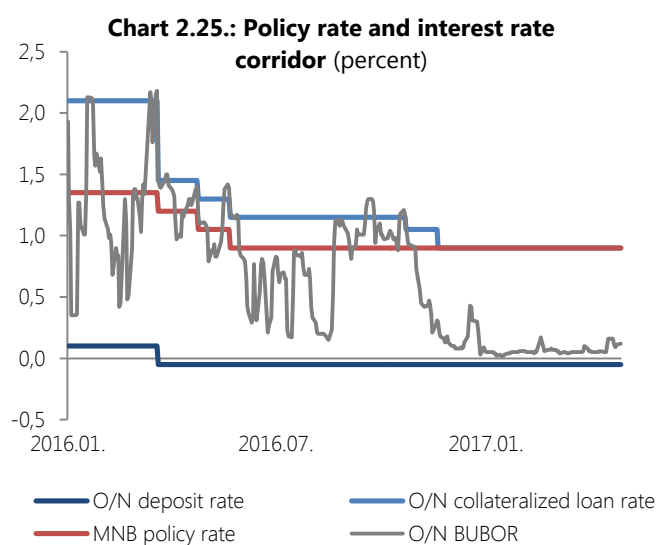
Source: MfNE estimation based on the DYNAMO model.

2.8 MONETARY AND EXCHANGE RATE POLICY

Following the previous regulation, the current Act on the Central Bank of Hungary Bank (MNB) sets out to achieve and preserve price stability as the primary objective. Since 2001 the MNB has been following an inflation-targeting monetary policy. Within the framework of this, the Monetary Council set a 3% mid-term inflation target, however, in March 2015 it defined a tolerance range of ± 1 percentage point around this value in order to mitigate the effects of eventual economic shocks. Monetary policy ensures inflation targeting by changing the base rate and exploiting the flexibility provided by the floating exchange rate.

The monetary policy instruments of MNB have undergone significant changes in 2016. The decrease of base rate has continued: the three-month key policy rate was gradually reduced by the Monetary Council three times from the beginning of 2016 until the end of May 2016 from the value of 1.35% by 0.15 percentage points each, to 0.9%. The overnight deposit interest rate has also been cut from 0.1% to negative range (-0.05%) as from 23 March 2016. Furthermore, the asymmetry of the interest rate corridor has increased further: the overnight collateralised loan rate, located in the upper margin, was cut from the early 2016 level (2.1%) to the 0.9% base rate in five steps. Thus, since November 2016 the overnight collateralised loan in combination with the key policy instrument practically represents the upper limit of the interest rate corridor – which has been

narrowed to 0.95 percentage points – while the lower limit is provided by the overnight deposit interest rate with -0.05% since March 2016 (Chart 2.25).



Source: MNB

Beside of the interest-rate cut, the key policy instrument has recently been subject to another substantial modification. In order to loosen monetary conditions the Monetary Council decided at its session on 12 June 2016 to gradually restrict the access to the three-month deposit instrument. As a first step, they reduced the weekly frequency of tenders to a monthly basis, which was followed by further restrictions. In autumn 2016, a HUF 900 billion upper limit has been set on the stock of the key policy instrument as at the end of the year, which has been further narrowed to HUF 750 billion for Q1 and HUF 500 billion for Q2.

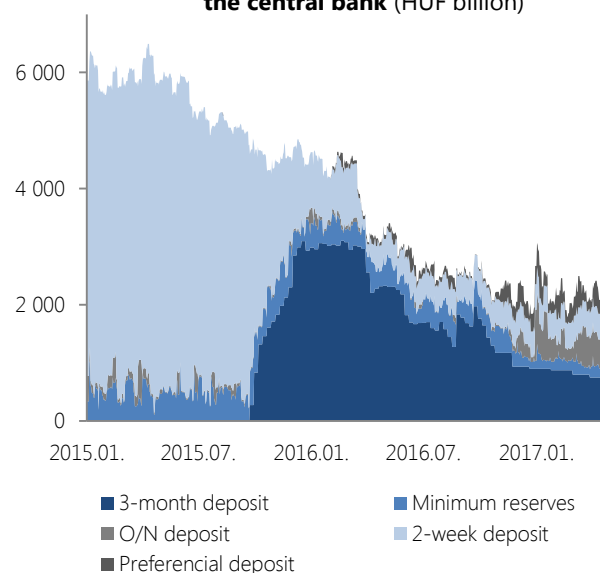
Should a difference be observed between the end-quarter and the planned liquidity due to permanent liquidity shocks, the MNB will attempt to adjust the divergence with fine-tuning swap instruments. The one-week, one-month and three-month HUF swaps are used to address liquidity shortage, while the one-week deposit instrument serves as an adjustment instrument for the case of excess liquidity.

In accordance with the expectations, the liquidity, that was crowded out of the three-month deposit, has flown into the low-yield overnight deposit, to the interbank and government security markets, where it generated a decline in yields. During only one year the one-month BUBOR rate has sunk by 106 basis points to 0.14% by April 2017, whereas the three-month BUBOR rate moderated by 102 basis points to 0.18%, i.e. a level below the base rate. Beside the quantitative restriction of the key policy instrument, the reform of the BUBOR market has also significantly contributed to the decrease of interbank yields. In spring 2016, mandatory price quotation has been introduced on the BUBOR market, implying the banks' dealing obligation in the case of instruments with one- or three-month maturity and with a value of at least HUF 50 or 100 million per partner. Thanks to the new quotation system, the underlying market of interbank reference rates has picked up spectacularly: the role of effective transactions strengthened, the volatility of BUBOR substantially increased, whereas yields decoupled from the base rate. As decreasing financial market yields are reflected in the quotation, the information content of BUBOR has significantly improved, while its guiding nature has strengthened. In addition, it should be highlighted that – beside the BUBOR reference rate – the HUFONIA and BIRS benchmarks are administered by the MNB since 1 November 2016. As a result of placing all duties related to the preparation and management of the indices to the MNB, the central bank is now able to influence the quotations and thus the interbank market activity more efficiently.

It can be regarded as a further change that as at 1 December 2016 the MNB has set to the credit institutions uniformly applied mandatory reserve ratio from the earlier 2% to 1%. The amount of the interest paid after the deposited reserves and the penalty interest payable by credit institutions in the case of

underprovisioning is equal to the base rate since the 2004 EU accession. The meeting of the reserve criterion is still inspected by the MNB on a monthly average. The above mentioned set of measures aims primarily to implement the directed flow of the banking system's liquidity through limiting the deposited liquidity at the central bank, as well as to boost the interbank market. The success of the reform is well demonstrated by the fact that before the reformation of the monetary policy toolkit (January 2015), the banking sector's liquidity deposited at the MNB was measured HUF 6,000 billion, which has dropped to HUF 2,000 billion by spring 2017 (Chart 2.26).

Chart 2.26.: Credit institutions' liquidity at the central bank (HUF billion)



Source: MNB

On the international level it is clear that due to improving cyclical and normalising inflation environment the leading central banks are gradually moving away from the era of extremely loose monetary policy. Following a one-year slowdown, the Fed continued its cycle of raising interest in December 2016 and implemented a 25 basis point rate hike which was repeated in March 2017. According to the market expectations, two further hikes (25 basis points each) may come in 2017. The monetary policy of the European Central Bank also shows slight signs of tightening, since the quantity of securities purchased under its Asset Purchase Programme as part of the quantitative easing was reduced from EUR 80 billion to EUR 60 billion per month from April 2017. Nevertheless, the Governing Council of the ECB reaffirmed that it will continue the programme until

December 2017 – by bearing in mind its long-term 2% inflation target –, but is also open to maintain it

2.9 FINANCIAL SECTOR

2016 was a successful year for banks from several aspects. Fundamental reforms that improve the operating environment of the sector had been implemented over the previous two years (settlement and conversion of FX loans to HUF, the Memorandum of Understanding signed with EBRD and the reformed legal-macroprudential framework). The results of these fundamental changes were visible in 2016, as well.

First, the sectoral tax of financial institutions was reduced by nearly HUF 76 billion (which will be further decreased by an amount exceeding HUF 12 billion in 2017).

Second, the acquisition of 15-15% share of Erste Bank was closed, as well, jointly with the EBRD in accordance with the Memorandum of Understanding.

Third, the resolution and reorganisation process of the MKB Bank conducted by the MNB was successfully closed. The result of the transaction process was welcomed also by the Moody's credit rating agency.

Finally, the problem of non-performing loans seem to ease, as well: the balance sheet of banks has been cleansed significantly in the corporate segment, primarily due to the sale transactions. As for the retail loans, developments could also be observed: legislative changes related to the private bankruptcy and the promotion of client-bank agreements point in the direction of solution. In addition, the real estate buying activity of National Asset Management Company was also extended in accordance with the commitments stated in the Memorandum of Understanding.

Following 2015, a year characterised by zero profit, the banks achieved an after-tax profit of HUF 456 billion in 2016 (with a ROA of 12.7%), a record high level never seen before. Beside the favourable effect of the bank tax cut, various one-off items (lower

further.

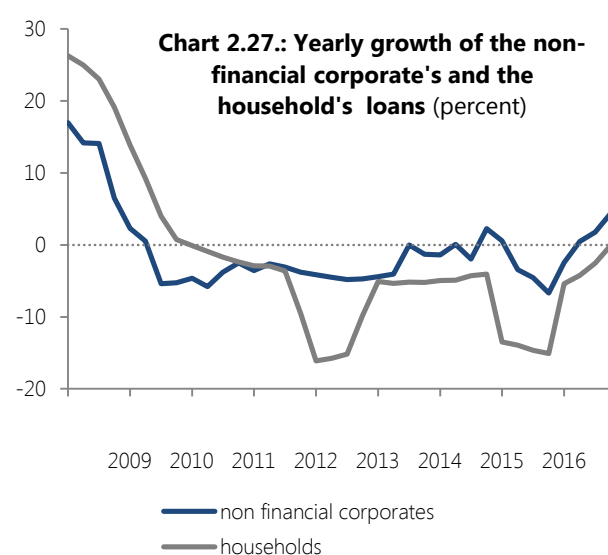
credit losses, reversals of loan loss provisions and credit losses, favourable trading results) significantly contributed to this result.

The moderation of operating costs is one option to maintain the successful results in the future, but in the long run the maintaining of the appropriate level of profitability requires larger risk-taking in order to achieve the long-awaited turnaround of lending, the signs of which can already be seen in some (retail and SME) segments.

For the enhancement of credit activity, the lending capacity has been available for a long time, since the banks have been in a solid capital and liquidity situation for years now. Their capital adequacy is still at historical height – exceeding 20% –, their liquidity situation is also outstanding, whereas the system-level liquidity coverage ratio stands at nearly 200%. Beside the above, there is plenty of room for the enhancement of lending activity and further intensive portfolio cleaning. It is the international developments which could carry substantial risks, primarily related to the future developments of the extremely heterogeneous non-performing loan portfolio of an estimated size of EUR 1,000 billion on EU-level. The heavy interdependence of institutions – which are important from the aspect of system-level risks – may cause turbulences of uncertain intensity and length on the European market.

The transaction-based change in the loan portfolio of non-financial corporations presented a significant improvement regarding the whole year of 2016 (Figure 2.27). The unadjusted annual growth rate excluding exchange rate effects reached 4.1% in the entire corporate sector, while in the SME sector the indicator was up by 6.7%, a new record; with this result, the growth now falls in the 5-10% range considered as sustainable by the MNB. The loans provided under the subsidized programmes considerably contributed to the outstanding lending developments.

Due to the strong interest surrounding the last months of the Funding for Growth Scheme (FGS) closing on 31 March 2017, the funds of a total amount of HUF 700 billion allocated for the third phase of the programme were absorbed at 98%. Therefore, nearly a total number of 40,000 companies received loans under the FGS since 2013, in an amount of more than HUF 2,800 billion. Furthermore, the LIRS interest rate facility under the Market-Based Lending Scheme also positively affected the lending activity to non-financial corporations (these facilities primarily aim to reduce interest rate risks of credit institutions). In January 2016 – as a condition of entering swap transactions – 17 credit institutions undertook the expansion of their net annual lending to SMEs by a total amount of HUF 195 billion; this target was far exceeded (170%) by the end of the year, well beyond the expectations. Under the Market-Based Lending Scheme available until early 2018, credit institutions have undertaken to expand their SME loan portfolio by further HUF 170 billion for the year 2017, which will definitely give further boost to market-based corporate lending. In addition, following the phase-out of FGS, the expansion of loan programmes financed from refundable EU funds and allocated by the MFB, and also the Széchenyi Card Programme, will significantly assist in staying in the sustainable 5-10% growth range.



The credit institutions' portfolio of non-performing corporate loans (i.e. those being in default for more than 90 days) has been continuously declining since its peak of 2012 (then exceeding HUF 1,000 billion).

The volume of non-performing loans in this segment has decreased by nearly HUF 251 billion (by 4.2 percentage points) over the last year, meaning that it has nearly halved (has decreased to 5.4%). MKB Bank's portfolio cleaning and the debt consolidation of Budapesti Közlekedési Központ Zrt contributed substantially to the significant decrease of the stock of non-performing loans. In parallel with this development, the rate of domestic project loans overdue for more than 90 days has decreased continuously, falling to 9% in the last quarter of 2016 from the 20% recorded a year before.

In 2016, the predictable economic policy and the low interest environments resulted in a lending turnaround in the household sector, as the newly provided, dynamically growing loans exceeded the repayments in the second half of the year.

In regards to the entire year 2016, however, household loans still decreased to some extent (by 5 billion forints) – equalling a growth rate of -0.1% –, though this is a significant improvement over the HUF 1,104 billion loan stock decrease of 2015 affected also by individual effects. Nevertheless, the fact that new loans exceeded repayments in the second half of 2016 – and therefore loan stock increased by 75 billion forints between July and December 2016 – is very promising.

As an effect of the stable economic policy, precautionary motives are less and less prominent, which is also reflected by the increase of new household loans. In 2016, the credit institutions disbursed HUF 1,053 billion in new loans to households, which is 52% more than the HUF 694 billion in 2015. New housing loans increased by HUF 106 billion due mainly to the improved conditions on the real estate market, while the beneficial effects of Family Housing Subsidy Scheme (so-called CSOK) have also started to show. Consumption loans also increased at a similar volume, by HUF 107 billion, in line with the developments in retail trade.

The proportion of debtors with loans at credit institutions overdue for more than 90 days was 12.7% at the end of 2016, which showed a significant, 4.9-percentage-point decrease from the 2015 level.

The Government has been running several programmes intended to improve the situation of non-performing debtors. The National Asset Management Company currently continues to operate, and purchases the properties of debtors in the worst financial situation; the former owners are allowed to stay in their homes as tenants. In the scope of the National Asset Management Company's programme, more than 40,000 real estates were offered until February 2017, 29 thousand of which have been certified to meet all requirements and settled financially. In addition to the National Asset Management Company, non-performing debtors also have the option of using the institution of private bankruptcy protection for families. The system of private bankruptcy has been developed for those who are not able to pay their current instalments, however, with the help of an administrator their homes could still be saved and within the foreseeable

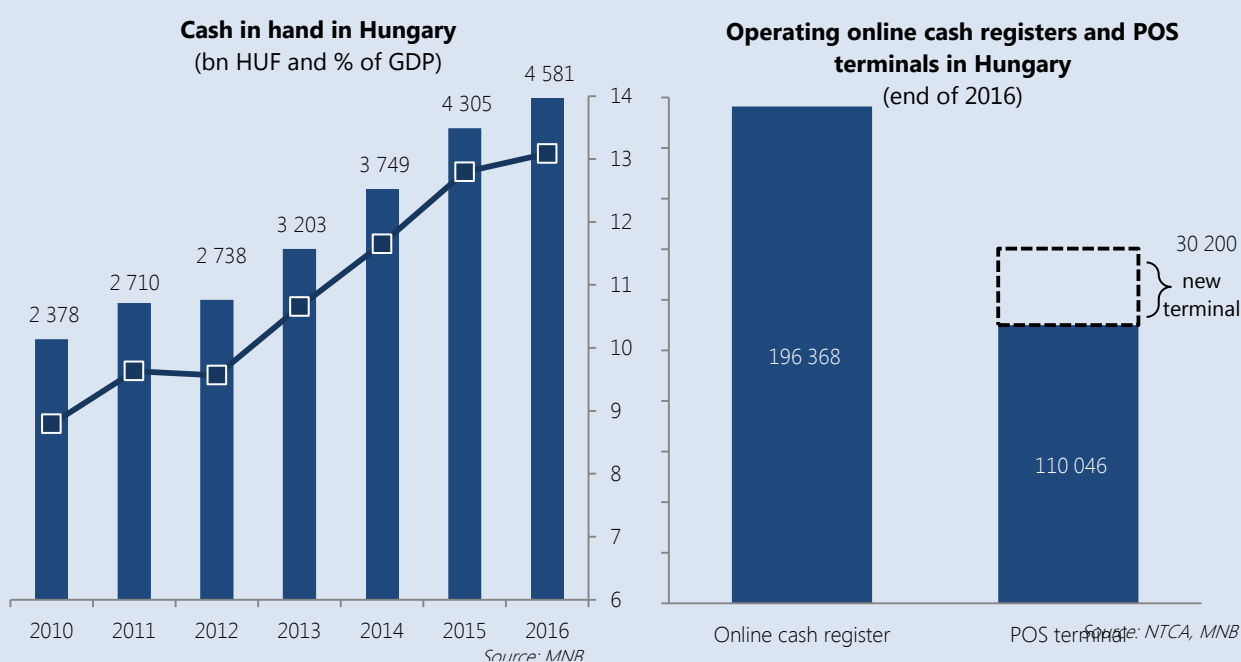
future they could repay all or a significant part of their overdue debts.

Overall, it can be stated that the banking sector's situation improved further in 2016. The capital levels and liquidity of credit institutions has been stable for years, while their ability to generate profit increased highly this year simultaneously with their portfolio cleaning. At the same time, the reduction of the bank tax in accordance with the commitments undertaken in the Memorandum of Understanding will be a good foundation for increasing the risk-taking willingness of banks. An increased lending activity contributes to maintaining appropriate levels of profitability on the one hand, while on the other hand it drives economic growth as well, enhancing the cyclical effects of government measures. Hence an expansion of lending activity is beneficial not only for the banking sector itself but also for the national economy as a whole.

Box 8: Increasing the number of POS terminals

The amount of cash in hand in Hungary has doubled since 2012, and its proportion to the GDP also increased to an exceptionally high level: it is above 13% of GDP. The high rate of cash in a given economy is a sign that payment infrastructure is lagging behind real economy, and it has several adverse consequences. For one, savings in cash do not contribute to the funding of the economy (loss of profit for the savers, less funds for the investors), while the maintenance of the cash payment system (production and checking of coins and banknotes and securing them against counterfeiting, organising cash logistics, appropriate protection of stored/transported cash etc.) incurs significant costs for the economy, and the widespread use of cash also allows the financial transactions to take place in the shadow economy, intended to be concealed from the authorities to remain anonymous and hidden.

The rise of shadow economy also affects the budget and the country's financial stability directly, and it has been a priority goal for the Government for years to efficiently remedy this problem. In line with this strategy, as a result of the government's measures implemented for the whitening of the economy (mainly the introduction of online cash registers and the "EKÁER", the Electronic Public Road Trade Control System), the tax morale of economic operators increased substantially in the past few years. This change is demonstrated by the fact that according to the European Commission's calculations, the rate of unpaid VAT in Hungary decreased from the 24.4% recorded in 2013 to 18% in 2014. However, the weight of shadow economy remains significant as compared to the developed European economies set as example, and so further steps need to be taken. In the current situation, the most effective way to take a stand against shadow economy would be to reduce the level of cash transactions. One of the main reasons behind the high rate of cash use – unfavourably high also in international comparison – is the lack of access: there are too few business units with electronic payment capability in Hungary – according to the data recorded for the end of 2016, there were only 110,000 POS terminals available for 200,000 online cash registers in Hungary.



Learning from international examples (and the Scandinavian countries in particular), it can be established that the high levels of cash promoting shadow economy can be reduced by introducing positive incentives that make electronic payment attractive and accessible. The historical data of the central bank of countries with developed payment systems display an inverse relationship between the share of cash use in the economy and the number of POS spots. Consequently, in Hungary, the first step should be to ensure appropriate access and to help the payment infrastructure catch up.

The main obstacle hindering the spread of POS terminals is the result of a market anomaly: due to the low

number of clients and card transactions, financial service providers are forced to charge relatively high commissions for providing card payment services in order to cover the costs of the installation of the system. These high commissions do not make electronic payment attractive for traders, which is particularly true for small and medium enterprises with a relatively low turnover. Due to the high fees, there are few new entrants, which forces financial service providers to maintain these high fees. As such, even though there is demand for the use of POS devices, the significant installation costs and the high rate of commission in proportion to turnover result in a lack of motivation for the financial service providers and the traders to expand the network. As a result, the number of POS spots has barely increased in the past years. A government intervention has become necessary in order to give momentum to the process. In order to achieve the economy benefit resulting from the modernisation of payment infrastructure, the budget provides support for the expansion of POS spots, on the condition that the financial providers operating the terminals also reduce the fees imposed on small traders, making the use of modern payment infrastructure more attractive for them.

The Government granted HUF 2,416 billion for funding the programme developed by the Ministry for National Economy and announced in December 2016, in the scope of which the budget provides a support of HUF 80,000 per terminal for the procurement and installation of new, modern terminals. Service providers had to commit to reduce their fees at least commensurately with the support provided, and had to ensure that the POS spot will pay at maximum an amount equal to 1% of the amount of credit card transactions. In this manner, the financial effects resulting from the support benefit the POS spots. With this measure, the Government facilitates not only the development of Hungarian financial infrastructure and the whitening of the economy, but also the modernisation and improvement of the competitiveness of small and medium enterprises with a lower turnover and weaker negotiating positions.

To sum up, the Government's POS installation programme is a significant milestone. As a result of the measure, the number of terminals rises by about 30% in a year. Moreover, making cash-free payment methods more attractive and promoting financial awareness in the populace, thereby gradually decreasing cash levels, are declared goals of the economic policy. Further steps in that direction could include the introduction of social accounts and encouraging the electronic settlement of utility bills.

3. GENERAL GOVERNMENT DEFICIT AND DEBT

3.1 FISCAL POLICY OBJECTIVES

The fiscal consolidation implemented in the past years was successful and sustainable. The general government deficit has been under 3% of GDP since 2012, and the medium-term budgetary objective (MTO) has been significantly overachieved in every year with only one exception and also on average during the 5 years. Consequently, the public debt-to-GDP ratio has been continuously decreasing year by year. The general government deficit has been better than the targets for years, which is in large part due to the Government's prudent budgetary planning.

The Government reviewed the deficit targets of the previous convergence programme – also taking into account the outturn of 2016 –, and set a new medium-term budgetary path. The Government took into consideration that economic growth may accelerate significantly after the temporary slowdown in 2016. This is partly attributable to the fiscal path itself which is projected to ensure the continued decline of public debt with deficits continuously remaining well under 3% of GDP. This fiscal path, at the same time is also expected to continue to support economic growth, which contributes to the realisation of economic and social policy priorities.

The international and Hungarian experience on the management of the global financial and economic crisis shows that while monetary policy has had a significant role in restoring growth, it cannot promote growth by itself in the long run. Therefore, if there is a fiscal room, it should be exploited in a prudent way in

order to enhance growth: This means that with a deficit permanently and safely under 3% of GDP and with a view also to debt reduction goals in countries with a high debt ratio, slightly growth-supporting fiscal stance can be appropriate.. Taking this into consideration, the 2018 budget bill set the ESA2010 deficit target at 2.4% of GDP, which is identical to the deficit target set for 2017. As a result of the economy being put on a permanently high growth trajectory, deficit levels will start to decrease in 2019, and will be reduced to 1.2% of GDP by 2021. Due to the enhanced growth potential of the Hungarian economy induced by the adopted and planned measures, the cyclically adjusted balance will improve significantly, and will overachieve the MTO already before the end of the programme period.

The debt-to-GDP ratio, which has been decreasing continuously since 2011, will remain on a declining path throughout the forecast horizon. The reduction of the debt ratio will be much faster in the coming years than what is required by the EU debt reduction benchmark. This is largely due to the both the rapid growth – which also ensures economic convergence – and the decreasing deficit. The combination of these factors will facilitate a relatively rapid decrease of the debt ratio. The ratio of gross public debt to GDP already decreased from 80.7% in 2011 to 74.1% by the end of 2016. The debt ratio may fall by further 13 percentage points to close to the 60% of GDP reference value by the end of the horizon of the convergence programme.

Table 3.1.: The medium term fiscal path (% of GDP)

	2016	2017	2018	2019	2020	2021
General government balance	-1.8	-2.4	-2.4	-1.8	-1.5	-1.2
Structural balance	-1.6	-2.5	-2.4	-1.8	-1.5	-1.2
Gross public debt	74.1	72.0	70.5	67.3	64.0	61.2

Source: CSO, MNB, MNfE calculations

3.2 THE 2016 BUDGETARY OUTCOME

Similarly to previous years, in 2016 fiscal developments once again were better than planned. The ESA2010 general government deficit was 1.8% of GDP, as compared to the deficit target of 2% set by the Government.

The central government deficit was HUF 848.3 billion, which is 31.4% (HUF 388.9 billion) lower than the 2015 deficit, and exceeded the statutory adjusted appropriation for 2016 (HUF 761.6 billion) by 11.4%. The excess was partly the result of the increased expenditure for EU subsidies, and partly of the Government's decisions made at the year's end in light of the exceptionally favourable budgetary conditions.

Revenues

In the context of a favourable macro-economic environment, labour market developments (rising employment, launch of career models and the wage hikes announced in previous years) and the increasing consumption increased taxable revenues.

The tax changes implemented in 2016 aimed mainly at the reduction of the taxes on labour, the support of families, the whitening of the economy and the promotion of further economic growth. The effects of the tax reductions were more than offset by the favourable economic developments. On the revenue side, the most significant tax measures were the reduction of personal income tax from 16% to 15%, the increase of benefits for families with two children and the reduction of the VAT rate for pork to 5%. Despite the tax rate reductions and the cyclical nature of EU funds, revenues from VAT increased by HUF 5 billion, while revenues from personal income tax by HUF 30 billion on an accrual basis as compared to 2015. The significant increase in corporate tax as compared to the previous year was mainly the result of the HUF 250 billion revenues generated in connection with the growth tax credit. The surtax on financial institutions decreased (from HUF 150 billion to HUF 73 billion) as compared to 2015, in accordance with the EBRD agreement and the deductibility related to the conversion of consumer loans to HUF. It is important to take note of the "Land to the Farmers!" programme, which generated revenues of

HUF 110 billion (ESA2010). This amount was used for the reduction of the public debt. The programme was successfully concluded, and the HUF 150 billion amount remaining from the total expected revenues will improve the 2017 budget balance.

Expenditure

The implementation of the 2016 Budget was characterised by fiscal discipline. The conservative planning and the favourable budgetary developments resulted not only in the reduction of public debt, but also enabled the use of fiscal room without compromising the deficit target.

On the one hand, the budget act was amended in the middle of the year, providing funding of HUF 420 billion for new programmes and objectives. Significant additional funds were allocated to education (HUF 91.6 billion), the supporting of vocational and adult education (HUF 17.7 billion), the facilitation of housing (HUF 50 billion) and the Modern Cities Programme (HUF 50 billion), while the Government increased budget reserves by HUF 30 billion. In addition, the last phase (HUF 12.2 billion) of the debt takeover also took place in 2016 for those municipalities that had not been subject to debt consolidation previously.

By the end of the year, budgetary developments turned out even more favourable than expected in the middle of the year. Accordingly, the Government once again decided to provide extra funding for public tasks. Capital injections and asset purchases with a view to the development of the economy were concluded via these governmental decisions; the Government raised the capital of Eximbank, Antenna Hungária and Volánbusz (the latter will have a role in the strengthening of the Hungarian bus sector and the renewal of public transport equipment), and the industrial parks widening the economy's growth base, as well as the car industry test track – used for development in the car industry – were also provided funds. Pensioners received additional support amounting to net HUF 27 billion, and health care, churches, sports organisations, educational and health institutions, civil society and cross-border organisations also received extra funds. The total

expenditure affecting the ESA2010 balance for 2016 in accordance with the decisions was about HUF 432 billion.

As a result of the government's measures taken for the acceleration of the utilisation of the EU funds (and indirectly for stimulating the economy), related payments exceeded the planned amount by more than HUF 660 billion, resulting in a total amount of HUF 2,100 billion.

The funds allocated for curative-preventive care exceeded the previous year's levels by HUF 130 billion due to the wage increases in the health care sector and the extra funds utilised for the settlement of the hospitals' financial situation. Support allocated for housing increased almost by a half, to HUF 148 billion, thanks to the governmental programmes

implemented, including the Family Housing Subsidy Scheme (CSOK).

The balance of interest expenditures and revenues decreased both in proportion to the GDP and nominally, by 0.3% of GDP, from 3.4% to 3.1% according to ESA2010.

Pension-type allowances were mostly as planned, and the government was able to spend HUF 25 billion more than planned on child care pay, and HUF 51 billion more than planned on expenditures related to pharmaceuticals and therapeutic equipment. In part in relation to the favourable labour market situation, a part of the available amount not spent in the appropriation for public work schemes was used for active labour market policies.

3.3 THE 2017 BUDGET

The Parliament adopted 2017 Budget with a 3.1% economic growth and 0.9% inflation projection, setting the ESA2010 deficit target at 2.4% of GDP. The Government developed the budget in such a manner that while maintaining the deficit that ensures the continued reduction of public debt, still remaining well below 3% of GDP, the budget should support economic growth as well as economic and social policy priorities of the Government.

The most important priority of the adopted budget was to continue the tax reductions (increasing family tax allowance, reducing the bank levy and VAT for basic foodstuffs, restaurant services and internet access services), to extend and launch career models in the public sector, as well as to provide funding for investments boosting economic growth in connection with the home creation programme and development projects financed from domestic funds. The weight of investment expenditure increases also in connection with the funding of the large infrastructure projects announced by the Government (for example, expansion of the Paks Nuclear Power Plant, the Budapest Park project, developments in prison facilities, Modern Cities Programme, priority public road investments etc.).

Since the adoption of the 2017 budget, Hungarian economy performed better than expected. The following changes were implemented in 2017 based on the disciplined fiscal policy, the decreasing public debt, the performance of Hungarian economy and the six year wage agreement concluded in November 2016 at the Permanent Consultation Forum of the Private Sector and the Government:

- the rate of social contribution tax is decreased from 27% to 22% as of 1 January 2017,
- the corporate income tax rate is decreased to 9%,
- the minimum wage is increased by 15%, the guaranteed wage minimum by 25%.

These measures lent new momentum to economic growth and the dynamic increase of wages. As a result, higher budgetary revenues are expected in 2017 from personal income taxes, contributions and taxes related to consumption, while the fall-off in social contribution taxes will be much smaller than implied directly by the tax reduction. A loss of revenues is expected as a result of the reduction of corporate income tax rate, which is expected to be mitigated by indirect effects (economic growth and whitening of the economy). In the first quarter of 2017, the central government deficit was HUF 198.1

billion, which is a very favourable result and shows that the achievement of the deficit target is realistic.

The direct budgetary effect of the tax reductions announced in the six-year wage agreement amounts to about 1.4 percentage points of GDP, however the steps constitute a structural reform increasing economic growth potential. The direct budgetary effects are mostly compensated by the extra revenues implied by a higher economic growth and a more dynamic wage increase than previously expected.

The favourable budget developments (revenue windfalls, expenditure savings) make it possible to implement the following additional expenditures in the scope of the amendment of the 2017 budget act without changing the deficit target:

- renovation and modernisation of the national public road network,
- funding the preparation process of public investments,
- implementation of the first sub-programme of the Supplier Action Plan,
- development of track-based vehicle construction,
- additional support for the Hungarian Interchurch Aid,
- joint improvements of the Bethesda Children's Hospital of the Hungarian Calvinist Church and the Buda Sisters of Charity Hospital,
- nursery improvements important both from a demographic aspect and for creating new jobs, as well as improvement of the funding situation of nurseries and support for low-value improvements of smaller municipalities,
- supporting the infrastructural projects aimed at the renovation of the Kőbánya Health House providing special care for outpatients under the administration of the Budapest District X Bajcsy-Zsilinszky Hospital and Clinic.
- Renovation of the Mi-24 type attack helicopters of the Hungarian Defense Forces in order to strengthen the country's defensive capabilities.

As a consequence of the measures aiming at the accelerated absorption of EU funds, related expenditures may exceed the original plans by HUF 215 billion. As a measure promoting economic growth and competitiveness and facilitating the whitening of economy to be implemented from January 2017, according to the new VAT refund rules favouring "good taxpayers", the tax authority will make the payment within 45 days instead of the previous 75 days. The measure does not affect the ESA2010 deficit.

In accordance with the current macro-economic prognosis, the amount that can be spent on pensions is higher by HUF 100 billion compared to 2016. This ensures constant purchasing power given the 1.6% inflation in the forecast, while the dynamic economic growth exceeding 3.5% is expected to allow for the payment of pension premiums.

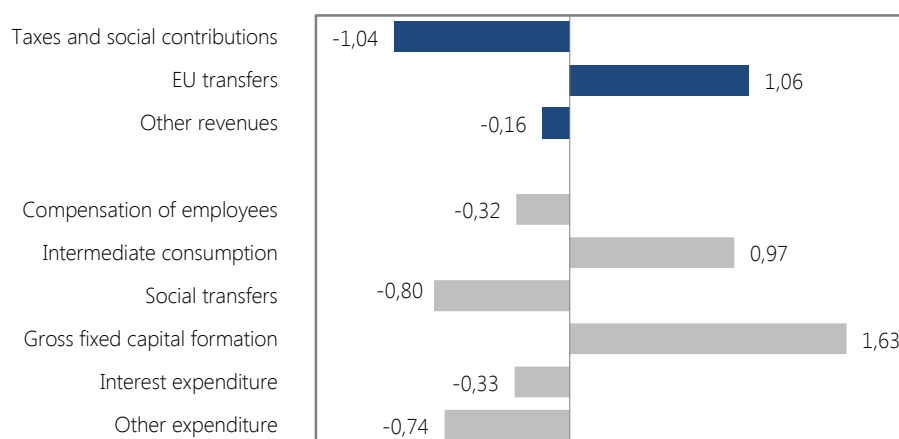
Due to the favourable labour market tendencies and the government goal to rationalise the public work schemes the funds allocated to the Start Programme decrease by HUF 60 billion, however expenditures on active labour market policies increase.

A larger than originally planned decrease is expected for interest expenditure, due mainly to the continued decline of yields. This is in part a result of the fact that the large credit rating agencies upgraded the Hungarian government bonds back to investment grade during 2016.

In divergence from the original plans, additional revenues of HUF 150 billion is gained in relation to the sale of state-owned lands also in 2017.

At the same time, additional expenditures of HUF 100 billion are expected as compared to the previous year due to migration and the increased terrorist threat.

Chart 3.1: Expenditure and revenue changes 2017–2016
(% of GDP, percentage point)



3.4 THE 2018 BUDGET

The 2018 budget takes into account the continuation of the current priorities, as well as new measures. Wages continue to grow dynamically in the public sector. Not only do pensions maintain their real value, but due to the rapid economic growth, pension premia will also be paid. Support for home creation increases, and the tax reduction programme started in 2017 pursuant to the six-year wage agreement continues.

The Government set the deficit target for 2018 at 2.4% of GDP. With the budget deficit target and the accelerating growth, the ratio of public debt to GDP may significantly decrease.

The upward revision of the previous deficit target for 2018 (1.8%) to 2.4% is justified by the structural reforms increasing the growth potential such as the tax changes announced in the scope of the six-year wage agreement, the direct budgetary effect of which amounts to 1.6% of GDP. The direct revenue reducing impact of the wage agreement is mostly offset by the extra income generated by the higher economic growth and faster wage dynamics than previously expected.

Similarly to the budgets of the past years, the Government created three types of central reserves in the 2018 budget bill to counter unexpected risks: the

appropriation for the Country Protection Fund, the chapter stability reserve and the reserve for extraordinary governmental measures. The system of reserves is supported by the stability reserve created for each budgetary chapter, which can be utilised in the last quarter of the year if the Government decides to do so.

Since 2011, the decrease of the debt-to-GDP ratio has been taking place simultaneously with the growth of the national wealth, thus the realisation of investments increasing the national wealth remains a high priority in 2018. This is the reason why the accumulation and EU sections are in deficit in the budgetary structure.

Similarly to the past years, the reorganisation of EU subsidies, and consequently the facilitation of efficient utilisation by prioritising investments supporting economic development remains an important task. The scale of payments in 2018 is expected to exceed the previous year's level, which also contributes to a high economic growth.

Having regard to the economic policy of the Government, the main objectives for 2018 are as follows:

- *Extending the home creation programme.* The home creation programme – aimed at helping

families have access to housing and improving their housing conditions – continues in 2018 in line with the intentions of the Government. Families with three or more children purchasing or building a new house or apartment in the scope of the Family Housing Subsidy Scheme may claim a budgetary support of up to HUF 10 million and a housing loan with a 3% interest rate. The reduction of the VAT rate applicable to sale of property to 5% and the tax refund support provided to people building property for their own use also facilitate the improvement of the housing situation.

- *Continued reduction of families' tax burdens by increasing the rate of the family tax benefit.* For families with two children, the amount of the tax benefit that may be claimed increases to HUF 17,500 per month from 2018, which means that the revenue of families with two children increases by an amount of HUF 60,000 per year as compared to 2017. In order to support the starting of families and marriages, from 2017, the support provided for people married for the first time may be claimed independent of the family benefit.
- *Continuation of the public work programme in accordance with the "work instead of unemployment benefit" principle and through the improvement of the efficiency of the public work system and the extension of other active labour market programmes.* By improving the situation of Hungarian economy, the Government creates opportunity for the market-based employment of public employees, which is also supported by through competence-developing and training programmes. The Government places priority emphasis on creating jobs in the competitive sector and supports the employability of certain disadvantaged target groups, and in particular unemployed people, people living in disadvantaged areas, unskilled workers, young people and women.
- *Maintenance of the real value of pension expenditures and certain income replacement allowances.* The budget provides the funds required for keeping up with the inflation in 2018 too, and also let pensioners benefit from the results of the rapid economic growth.
- *Continuation of the teachers' career model and the law enforcement and military career model, providing additional benefits for the social sphere,*

continuation of the career model of people employed at Government Offices and the National Tax and Customs Administration. Measures for increasing the appreciation of public service employees will be taken in 2018 as well. In the scope of the military and law enforcement career model, the wage of soldiers and law enforcement employees will increase on average by 5% in 2018. The employees of the National Tax and Customs Administration will receive a further 15% increase to their salary in 2018, achieving a 50% increase on average. The basic salary of judges and prosecutors will increase by a further 5% in 2018, while the salaries of higher education teachers, researchers and teachers by 5%. Employees working in the health care sector will also receive a significant raise, and a wage improvement will take place also for employees working in a health care role in the social sector.

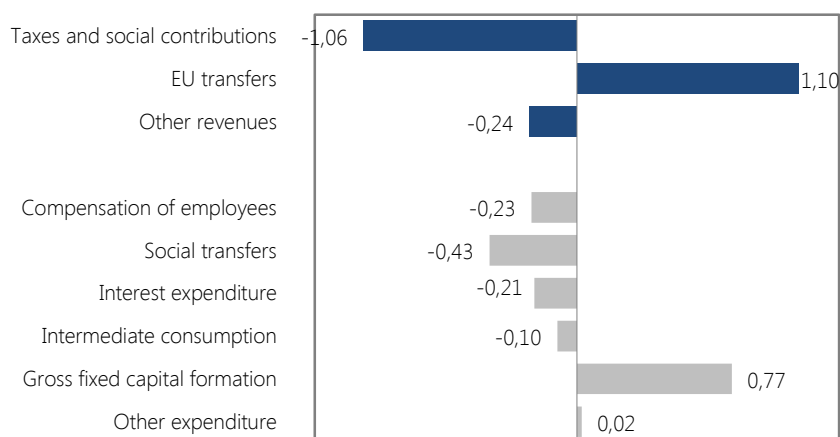
- *In regards to EU programmes, it is a priority to utilise the funds as fast as possible, so that the development funds may become accessible for the beneficiaries as soon as possible.* The Government treats the utilisation of EU funds as a priority. The main objective is to commit all funds in 2018 so that the development funds may become accessible for the beneficiaries as soon as possible. All this means that the scale of payments in 2018 can be expected to surpass even the exceptionally high values of the past years, maintaining the momentum of economic growth, considering that the Government will – in accordance with the EU objectives – allocate 60% of the development funds to economic improvement based on the stimulation of employment and competitiveness. In addition to non-repayable supports, financial assets are also announced in a significantly higher proportion as compared to the previous financial period, and through multiple allocations, these can provide a secure source of funding for the future improvements of growing undertakings for the long term.
- *The government continues to commit a significant amount to transport improvements, and the Paks project may accelerate after procurement of the necessary permits.* According to the Government's public road development concept adopted in 2016, by 2022 the current 1,450-km express road network will be expanded with a further 900 km of

- highways, motorways and main roads from a total amount of HUF 2,500 billion, half of which is covered by EU funds. Renovation of the national public road network will continue in 2018 from domestic budgetary funds. In addition, in the years to come, the Government will provide increased budgetary funds for the reconditioning of the vehicle fleets of state-owned bus companies in order to support national bus production.
- *A number of improvements modernising the major provincial cities increasing competitiveness, attractiveness for tourists and quality of life will take place in the scope of the Modern Cities Programme, while many higher education and cultural investments and subsidies intended for the development of economy as part of the national strategy will be included in the 2018 budget.* In the scope of the Modern Cities Programme, the Government entered into cooperation agreements with the Hungarian cities with county rights in order to support the improvement of the cities' utilities and infrastructure, their population's quality of life and the cities' attractiveness for tourists, as well as their local economy. Supporting tourism is an especially high priority for the Government due to the fact that it is also a tool for rural development, regional differentiation and the mitigation of differences of regional development levels. The positive economic effects of funds used for the improvement of tourism are measurable with indicators, and they generate profit and result in income for the national budget.
 - *Further reduction of the burdens imposed on undertakings fully meeting their obligations in the scope of a qualification system based on the assessment of objective conditions.* The deadline for transferring the VAT will be decreased from 45 days to 30 days for reliable debtors in 2018.
 - *Further tax reductions will take place in 2018.* In the scope of the six-year wage agreement, as of 1 January 2018, the rate of the social contribution tax will be reduced by a further 2 percentage points, to 20%. A further 0.5-percentage-point tax reduction may take place in 2018 if the gross average earnings index for the competitive sector published by the Hungarian Central Statistical Office increases by 11% in the first three quarters of 2017 as compared to the corresponding quarters of the previous year.
 - *Further tax reductions will be implemented from 1 January 2018: the VAT rate for fish will be decreased from 27% to 5%.* The health care contribution encumbering property leasing will be abolished, which will simplify administration and facilitate the whitening of income from the leasing of apartments. Further steps for the whitening of the economy and higher tax efficiency. After submitting the budget act to the Budget Council, the Government decided on the Programme for the Strategic Reformation of the National Tax and Customs Administration. In the scope of this multi-year (2017-2021) project, programmes affecting the operation and effectiveness of the NTCA will be implemented for increasing the competitiveness of the NTCA and the budgetary income. The strategy covers the following main points: promoting tax awareness, client-centred approach, improvement of the efficiency of recovery through professional modernisation, taxation that is sustainable on medium and long term, digitalisation, efficient operation. The project also aims – in line with the concept of a “service-providing tax authority” – to make it easier and faster for undertakings and individuals to fulfil their obligations relating to taxation and to comply with the laws. The first measures of the Programme will be implemented in 2018, focusing on communication with the customers, the facilitation of compliance, risk management and the sectors that remain affected by shadow economy. In addition to shadow economy, the Programme for the Strategic Reformation of the National Tax and Customs Administration places a significant emphasis also on increasing the efficiency of the NTCA. Recent years' measures against shadow economy and for increasing efficiency (e.g. online cash register and the EKAER) proved to be successful and contributed hundreds of billions of forints to central government incomes. Based on the past experiences described above, due to the programme the increase of income and the whitening of the economy will continue in the coming years. Due to the measures to be implemented, both direct and indirect results are expected not only for certain tax types but also in regards to tax incomes affected by certain forms of tax evasion, such as not reporting profits, revenue and wages. Based on the above, in 2018, a

total a HUF 21 billion extra income can be expected to be generated in the budget from

certain tax types and contributions.

Chart 3.2: Expenditure and revenue changes 2018-2017
(% of GDP, percentage point)



3.5 BUDGETARY DEVELOPMENTS FROM 2019 TO 2021

In the last three years of the programming period the forecast of the convergence programme does not assume any new measures, only the carry-over effects of decisions already made into the preceding years have been incorporated in the calculations.

The decisive elements of the revenue side are tax and contribution revenues and the development of EU transfers. Considering the gradual widening of the tax benefit for families and assuming that no more whitening measures will be implemented, tax centralisation could be reduced by almost 2 percentage points between 2018 and 2021. As a result of the acceleration of utilisation of EU funds, the

overwhelming majority of the funds available for the 2014-2020 EU programming period will have been utilised by 2018, which will also be shown in the development of EU transfers remaining within the government sector. In the last two years following the peak of 2018 lower amounts should be anticipated in the calculation. In 2018 EU transfers – increasing at a pace falling short of GDP – will still somewhat offset the impact of tax revenues, but from 2019 they will already be strengthening the reduction of the centralisation ratio. The total revenue-to-GDP ratio could be reduced in the last three years by more than 5 percentage points and could drop to about 40%.

Table 3.2. : Main revenues of the general government (% of GDP)

	2018	2019	2020	2021
Taxes and social contributions	37.5	37.0	36.2	35.6
Other revenues without EU transfers	4.6	4.4	4.2	4.0
Total revenue without EU transfers	42.1	41.4	40.3	39.5
EU transfers	3.1	2.9	1.5	0.6
Total revenue	45.3	44.3	41.9	40.2

Any deviations in the table are due to rounding.

Source: MfNE calculation

Besides the decreasing centralisation ratio, the deficit targets can be achieved by exercising restraint in expenditure. Without the EU subsidies, the total revenue-to-GDP rate may be reduced by 2.6 percentage points between 2018 and 2021, however,

expenditures without such subsidies may be reduced by almost 4 percentage points. An increase exceeding the growth of the GDP is expected in regards to investments funded by domestic funds only. The forecast takes into account the following:

- The wage increasing effect of the career models implemented in the public sector will have gradually worn off until 2020, the additional expenses compared to the previous year will be reduced year by year, the increase of expenditures spent on the compensation of employees will fall short of the GDP.
- The expenditures on the purchase of goods and services purely financed from domestic resources could also be increasing at a pace falling short of the GDP.
- The development of social benefits is still influenced by the structural reforms implemented earlier.
- In accordance with the assumption of the previous convergence programme, the increase in cash benefits reflects in particular the preservation of the real value of pensions, and the in-kind transfers provided through market producers may show an increase below the projected inflation rate.
- Between 2018 and 2021 total social transfers as a percentage of the growing GDP could decrease by 1.3 percentage points, by which they will contribute at a significant rate to the reduction of the redistribution ratio.
- Interest expenditure will not decrease further nominally due to the expected increase of yield levels, however the GDP will decrease proportionately, by 0.3 percentage points.
- The launched large investment projects mean a determination affecting several years, therefore the expenditures as a ratio to GDP of investments financed from purely domestic resources could increase by 2.2 percentage points in the last three years of the programming period. In 2021, the vast majority of all government investments amounting to 5.6 percentage points in proportion to the GDP, 5.1 percentage points in proportion to the GDP could be realised using domestic funds only.

Table 3.3. : Main expenditures of the general government (% of GDP)

	2018	2019	2020	2021
Balance	-2.4	-1.8	-1.5	-1.2
Total revenue	45.3	44.3	41.9	40.2
Total expenditure	47.7	46.1	43.4	41.3
Total expenditure without EU transfers	44.6	43.2	41.8	40.7
of which:				
Compensation of employees	10.5	10.0	9.4	8.8
Intermediate consumption financed from domestic resources	6.5	6.1	5.8	5.5
Investments financed from domestic resources	2.9	3.5	4.5	5.1
Social transfers	13.8	13.3	12.9	12.5
Interest expenditure	2.7	2.5	2.5	2.4

Source: MfNE calculation

3.6 STRUCTURAL BALANCE

To gauge the structural balance the convergence programme uses a semi-elasticity coefficient of 0.49 for the calculation of the cyclically adjusted balance, which is in line with the methodology adopted by the Output Gap Working Group of the EU. This means that the general government balance changes by 0.49 percentage points as a result of a 1% difference between actual and potential GDP (assuming no change in its composition).

In the coming years, both the Government's growth-stimulating measures and the accelerated absorption of EU transfers will support the closing of the negative output gap. In the first half of the forecast horizon, growth will exceed its potential rate, i.e. the negative output gap is closing. Thereafter growth will be in line with its potential (see Chapter 2.5). In this context, the cyclically adjusted balance will be more favourable

in 2017, and thereafter will be practically identical to the headline balance. Balance improving one-off items of 0.4% of GDP are expected in 2017 related to asset sales..

Due to developments outside the scope of the Government, expenditures linked to the management of the influx of migrants increased significantly in recent years, also affecting the later years (see Annex, Tables 8-10). The expenditures were necessary to ensure the respect of Hungarian and EU legislation and the Government sought the most cost effective solutions.

In order to improve the effectiveness of countering terrorism and the related potential of the law enforcement agencies and defence forces, as well as to promote the efficient use of information collected by them, in 2016 and 2017, significant extra funds were allocated for, among others, the improvement of the technical equipment, development of the capacities responding to new challenges and to ensure security, as well as of technical and logistical support, assessment and analysing capabilities, etc. (Annex, Tables 11-12). The Government established

the Counter-terrorism Information and Criminal Analysis Centre – operating at the base of the Coordination Centre Against Organised Crime –, in order to analyse and evaluate the data collected by the bodies concerned, to avoid the parallel procession of data and to facilitate the flow of relevant data between the bodies.

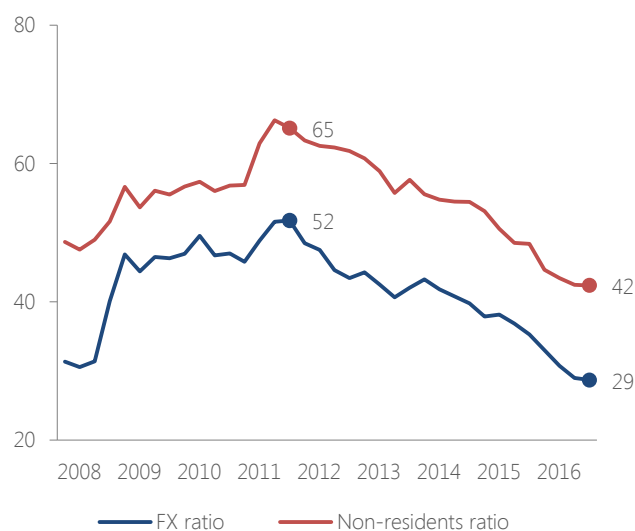
The structural balance, i.e. the cyclically adjusted balance net of one-off and temporary items deviated from the medium term objective (MTO) of -1.7% of GDP only once in the past 5 years (since 2012), and it showed significantly better values on multiple occasions, remaining above the MTO also if averaged over the last 5 years. The structural balance is expected to decline temporarily in 2017 and 2018, before returning to the MTO in the medium term.

As from 2017, the medium term objective sets out a structural balance target of -1.5% of GDP, in accordance with the methodology presented in the “Code of Conduct”. The expenditure aggregate is expected to rise above the reference benchmark in 2017 temporarily and remain at a lower level afterwards.

3.7A GENERAL GOVERNMENT DEBT

Decreasing the debt ratio while increasing the stock of retail government bonds and reducing the rate of foreign currency debt remains the main strategic priority of Hungarian government debt management. In accordance with this, the ratio of foreign currency debt dropped from the 52% recorded at the end of 2011 to 29%, and the share of non-resident investors from 65% to 42% (Chart 3.3).

Chart 3.3.: The FX ratio of public debt and the share held by non-residents (%)



Source: NBH

This significantly contributed to the mitigation of foreign currency exposure and external vulnerability

of the country. The low level of the five-year CDS spread also reflects these developments: the five-year CDS spread is currently around 115 basis points, as compared to the level exceeding 600 basis points recorded in 2012. Due to the decreasing country risk premium, the lower inflation expectations and the loose monetary conditions, both short- and long-term yields have decreased significantly (by around 7-8 percentage points) since 2012: 3-month yields decreased from 7.5% to around 0.07%, while five- and ten-year yields decreased from 10% to 2-3.3% (Chart 3.4).

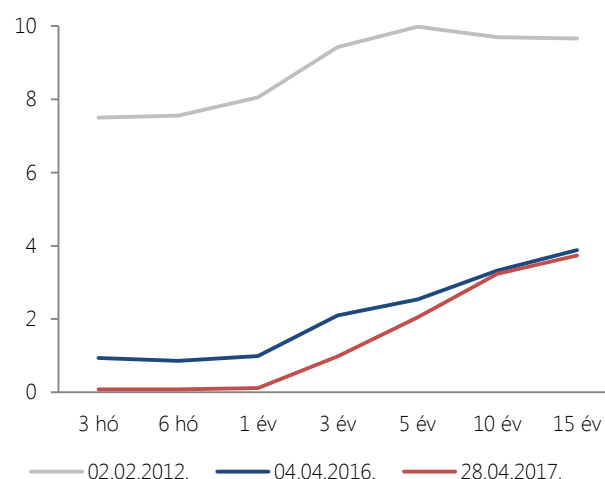
As a result of the favourable interest environment, debt financing can take place at a significantly lower price: In 2012, the implicit interest rate of public debt was 5.3%; this average interest burden decreased to 4.4% by 2016.

The only significant decrease took place in regards to the three-month yield in the past year, and the long end of the yield curve is around the level recorded in the beginning of 2016. The yield-decreasing effect of the country risk premium improvement as a result of the series of rating upgrades that took place in 2016 was mostly set off by the increased level of risk-free yields as a result of Fed hikes and the rising inflation expectations. As a result of the above, the slope of the yield curve rose in 2016.

The primary market and auction yields also followed the secondary market trends, and the average auction yield of 3-month discount treasury bills decreased from 1.1% to 0.04%. The auction yields of medium-

and longer-term bonds did not change in a significant way. As for the whole year, HUF government bonds were sold at 2.7x bid-to-cover ratios on average at the auctions.

Chart 3.4.: Shift of the yield curve (%)



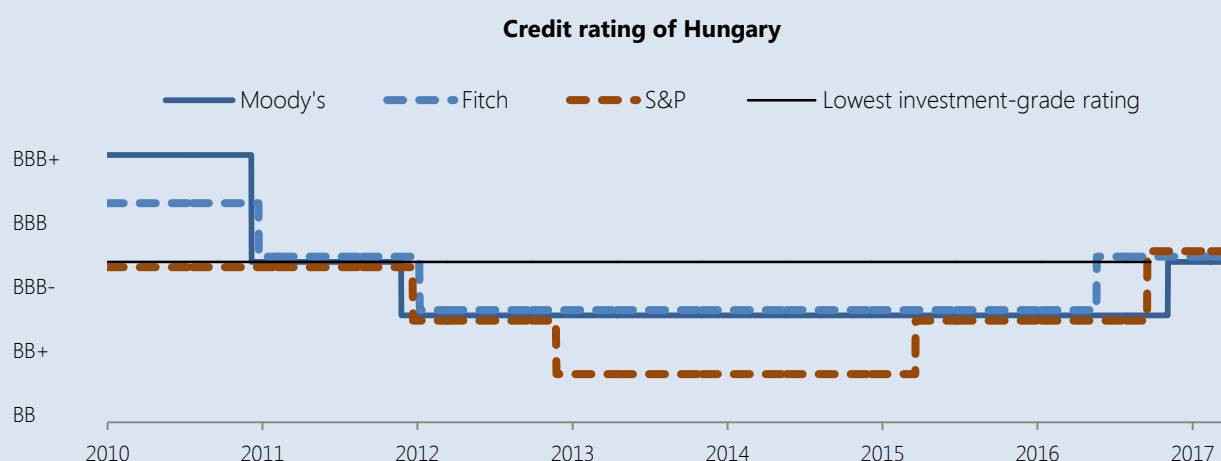
Source: ÁKK (Hungarian Debt Management Agency)

The Hungarian Debt Management Agency supports the efforts of the Government aiming at the reduction of the foreign currency ratio of public debt by negative net foreign currency issuance, i.e. by refinancing a significant part of the maturing foreign currency debt via HUF-denominated instruments. Thanks to the increased financing from the HUF market, there was no need in 2016 to issue international foreign currency bonds apart from a small-value issuance of renminbi bonds in spring 2016. The main reason of this, however, can be found more in market presence and diversification.

Box 9: Triple rating uplift in 2016

In the past year, all three leading credit rating agencies lifted Hungary's rating back to investment grade. The first upgrade came from Fitch on 20 May, followed – relatively unexpectedly – by S&P, which may be the strictest credit rating agency, and at the end of the year, on 4 November, Moody's lifted Hungary's rating too. The market perceptions of Hungary that fell low at the end of 2011 started to gradually improve in the past years, and there have been several decisions stabilising the situation, improving the outlook and, lastly, uplifting the rating as specified above. The performance of the Hungarian economy and the opinion of the market had already forecast these decisions, and the risk premium for default and the yields payable after government bonds have been around the levels of the countries with investment grade for several years.

The rating uplift has been justified for years. There was practically no macroeconomic indicator in which the Hungarian economy did not achieve a tendentious improvement in the past years, and the best performances were recorded for the indicators relating to external indebtedness and the labour market. Our country has an open economy and previously became too vulnerable in regards to external funding, but now it stands on a growth path with a healthier structure, becoming significantly less vulnerable.



Source: ÁKK, Tradingeconomics.com

Analyses mostly emphasised the continuous decrease of the government debt-to-GDP ratio, the improvement of external vulnerability indicators and the excellent growth data, while the improving relationship between the government and the prominent representatives of the private sector (EBRD agreement, reduction of the bank tax and corporate tax, etc.) also played a large role. The results above could not have been achieved without the steps taken in economic policy by the government and the Central Bank.

Economic policy steps leading to improving macro indicators

Indicator	Policy actions
GDP growth, incomes, domestic consumption	Growth supporting steps, exceptionally high utilization of EU funds, base rate reduction, FGS, etc.
Balance of payments and external balance, vulnerability	Strategic partnership agreements with the most important export oriented enterprises, conversion of FX loans
Government deficit and debt	Track of disciplined fiscal policy, self-financing programme, more rightful taxation based on wider tax base, whitening of the economy
Decreasing level of unemployment, increasing rate of activity	Public work scheme, cut in taxes and social contributions

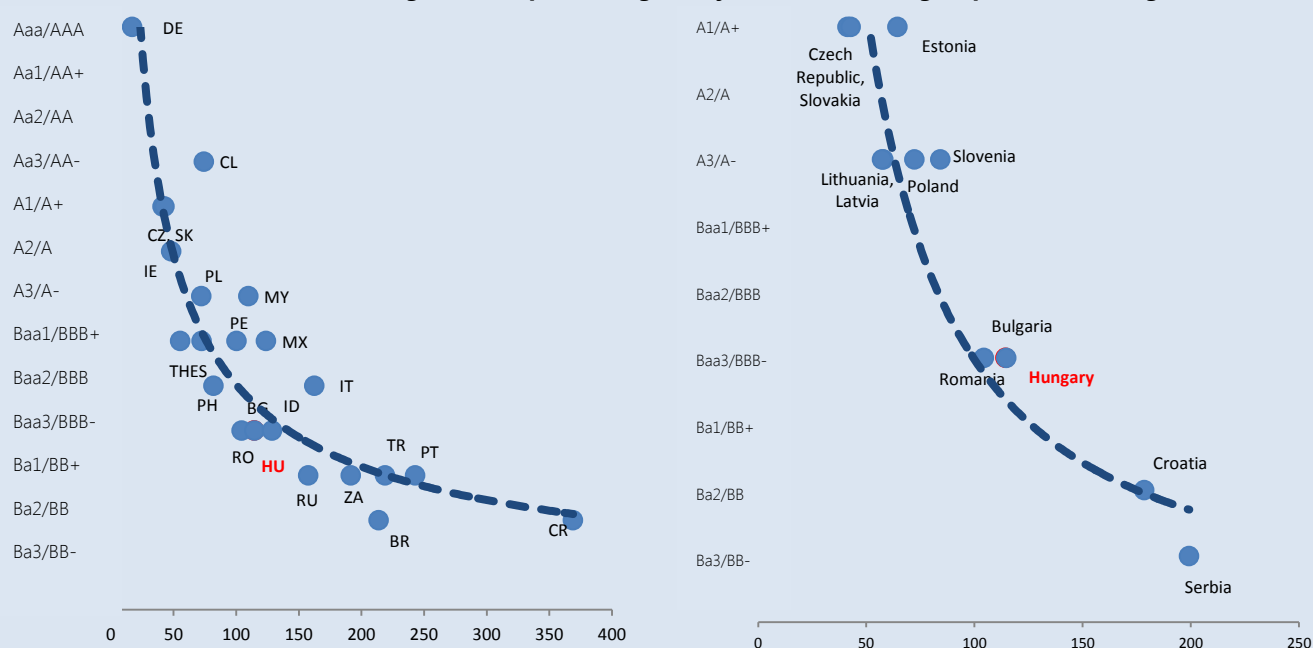
Source: MfNE edition

Since the second rating uplift (16 September 2016), Hungary has been officially in the investment grade category, which fulfills the business requirements of most institutional investors.

As a result, additional demand can be expected on the government bond market, which could relatively drive down yields thus mitigating interest expenditures in the budget, while the stability of debt financing would continue to improve. While the raising of funds for public finances has shifted towards domestic investors – including the residents and domestic banks – in recent years due to the efforts of the government and the Central Bank, the possibility of raising foreign funds supports diversification, increases average maturity and can remove burdens from a possibly overloaded forint market.

Further improvement of the macroeconomic situation may soon give way to further rating uplifts, as currently the country is ranked at the lowest level in the investment grade category. Based on the current CDS spread, there is a limited room for any upgrades on an international level, while ratings in our region can be deemed fair. In regards to this, further rating uplifts can be expected if the risk premium is reduced.

Link between credit rating and CDS premium globally (left) and in the group of CEE-12* (right)



*CEE-12: Hungary, Poland, Czech Republic, Slovakia, Slovenia, Romania, Bulgaria, Croatia, Serbia, Estonia, Latvia, Lithuania

Source: Thomson Reuters and Tradingeconomics.com, 13.03.2017

Based on the statements of the credit rating agencies, further rating uplifts can be expected in the case of further improvement of fiscal and external balance and, first and foremost, a decrease of the government debt-to-GDP ratio. In addition to the above, credit rating agencies may also take into account the business environment of enterprises and the efficiency of monetary policy in relation to the ratings.

The shift in the structure of investors towards domestic sectors took place as the combined result of two initiatives. On the one hand, the share of banks on the sovereign debt market grew as a result of the Self-Financing Programme, and on the other hand, the governmental retail programme aimed at encouraging households to buy government securities. The accessibility of government securities improved as a result of the numerous new sale points opened in the scope of the successful retail programme. As the second pillar of this effort, the range of government

securities aimed at households has been widened over the last five years, which have been developed in line with the preferences of various household groups. Retail government securities offer a favourable interest rate even in the current low yield conditions.

As a result of the successful retail programme launched in 2012, the portfolio of government debt securities held by retail customers has been constantly increasing, and increased by more than HUF 3,700 billion by February 2017, so that the share of the households in the

sovereign debt market increased from 5% to 17%. This means that retail customers not only renew their maturing investments in government securities, but also increase their holdings.

Table 3.4: Sovereign debt market share of certain sectors (%)

Investor groups	
Foreigners	36
Banks	29
Households	17
Insurance corporations and pension funds	8
Other	10

The impact of these developments is also reflected in the fact that within the savings of households the ratio of government securities increased by the end of 2016 to 9.4%, compared to 2.4% at the beginning of 2012, as in the past more than four years, half of all new savings increased the stock of government securities.

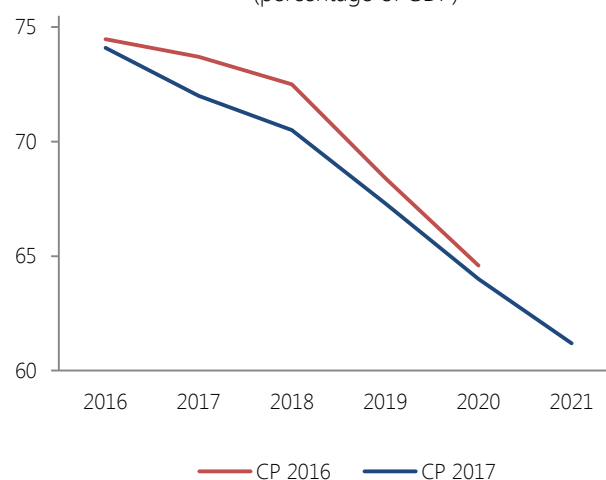
The goal, however, is not only to increase the quantity but also the maturity of government securities held by households. The measure package constituting of three elements introduced in recent months aims to encourage this goal. The Hungarian Debt Management Agency reduced the sales fee paid after shorter-term retail government bonds and set the redemption price of retail government bonds at a higher level (99% instead of 98%). In addition, the new Two-year Government Bond was put on sale in April 2017, mainly targeting the segment of households who would commit to a longer term instead of repeatedly renewing retail papers with a maturity of one year or less, but deem the 3-year or longer term of the previously available retail government bonds to be too much due to their current situation. The effects of these measures can already be felt in 2017: there has not been a retail government security previously that would have achieved such a success in the month of its introduction as the new Two-year Government Bond did with its one-month sales revenue exceeding HUF 100 billion. Simultaneously with this, a clear reorganisation seems to be in progress, shifting the balance from short-term government securities mainly towards the Two-year Government Bond and

the Premium Hungarian Government Bond guaranteeing inflation-linked interest.

In total, it can be said that owing to the constant success of the retail programme, debt financing became more stable, since the household sector is a reliable type of investor, one that typically does not want to get rid of its government bond holdings abruptly, as do foreign investors in the case of market turbulence. Moreover, it is also an important aspect that interests paid on the securities are spent in Hungary and therefore strengthen the domestic economy.

The debt-to-GDP ratio has been continuously decreasing since 2011. At the end of 2016, the debt ratio was 74.1% at a 311.02 HUF/EUR exchange rate. The 6.6-percentage-points debt reduction implemented in the past five years was one of the most significant achievements among EU Member States. On the medium term, the growth trajectory boosted by the government's economy-stimulating measures is expected to result in an even more dynamic decrease of the debt ratio. Thus, the GDP-proportional Maastricht debt ratio is expected to decrease to 72% by the end of 2017, and to about 61% by 2021 (Chart 3.5.).

Chart 3.5.: Public debt ratio in Convergence Programmes for 2016 and 2017
(percentage of GDP)



Sources: MfNE calculation

Accordingly, the current Convergence Programme expects a lower debt trajectory than anticipated last year.

Table 3.5.: Discrepancy in debt path forecasts for 2016 and 2017 (pps)

2017	2018	2019	2020
-1,6	-2,0	-1,1	-0,6

It is mostly due to the higher nominal GDP, and to a much smaller extent to the exchange rate used for planning, which is now stronger than last year. As a consequence of the Government's economy-stimulating measures and owing to the growth prospects that are even more favourable than last year, the downward debt trajectory will be realised with a concurrently broadening room for the Government to manoeuvre in the fiscal field.

(1) Nominal GDP: Higher nominal GDP values than in the Convergence Programme for 2016, push the debt trajectory substantially lower in comparison to last year's forecasts.

Table 3.6.: Effect of nominal growth developments for the debt path (pps)

2017	2018	2019	2020
-0,4	-1,3	-2,0	-2,5

(2) Numerator effect: Being lower in the first half of the time horizon and then set on a higher level in comparison to the Convergence Programme for 2016, the public debt stock forecasts for the period from 2017 until 2020 itself modifies the debt trajectory projected in 2016 as follows.

Table 3.7.: Effect of public debt stock developments on the debt path (pps)

2017	2018	2019	2020
-1,2	-0,7	+0,9	+1,9

This shift can be attributed to the combined effect of a number of factors.

(2a) Gross interest expenditures and primary deficit: The interest expenditure predictions remain on a level that is more or less similar to last year's as a combined result of on the one hand, the earlier permanently favourable global market conditions and the yield-decreasing effects associated with the upgrading of Hungary's ratings in 2016, on the other hand, the globally rising interest rates and the yield-increasing effects of the expectations relating to

higher inflation. Although this latter effect is stronger towards the end of the forecast horizon, interest expenditures will still amount to 2.4% of GDP in 2021 in contrast to the expenditure level realised at above 4% until 2014, which on the whole reflects the tendentious moderation of yields since mid-2012. The primary balance will evolve lower compared to the forecast of the Convergence Programme for 2016 owing to the growth-stimulating actions of the Government (including the 6-year wage agreement made at the Permanent Consultation Forum of the Private Sector and the Government, housing subsidies and tax cuts). In total, the effect of a higher-than-earlier deficit path – which still meets the 3% Maastricht requirement of the EU – results in a slower pace of debt reduction, at the same time, it also reflects a somewhat more relaxed fiscal policy that supports growth. Ultimately, this contributes to debt reduction through the higher nominal GDP.

(2b) Other items: Furthermore, the change of the debt path is also caused by the balance of other items (the so-called SFA, stock-flow adjustments). The technical assumption for the exchange rate used for debt prediction is 0.9% stronger than the exchange rate of 312 HUF/EUR in the Convergence Programme for 2016 (i.e. 309.3 HUF/EUR). In itself, the assumed rate that is 2.7 percentage points stronger than that of last year, leads to a 0.1–0.2 percentage point lower debt trajectory. In addition, a major deviation from the projections of the previous Convergence Programme is caused by the change in cash reserves (Single Treasury Account and the foreign currency deposit at the MNB), along with the advance payment of EU transfers, and different values for the difference between cash flow and ESA-balance of the budget.

The future development of the debt ratio is sensitive to changes in the following major factors, *ceteris paribus*:

(A) Primary balance: A 1 percentage point upward shift in the primary balance in terms of GDP from 2017 until the end of the horizon would reduce the debt-to-GDP ratio by 1 percentage point in 2017 and by 4.4 percentage points by 2021.

(B) Exchange rate: The share of foreign currency denominated Maastricht debt ratio was 29% at the end of 2016, which, as a result of the Government's endeavours, is expected to decline to well below 20% by 2021. Owing to the decreasing foreign currency share, the foreign exchange exposure of the debt will downslide, which is clearly reflected in the fact that the 1 percentage point shift will change the debt ratio by 0.06 percentage point in 2017 and by only 0.03 percentage point at the end of the time horizon. Therefore, the nominal exchange rate that is 1% weaker than the exchange rate assumption specified in the Convergence Programme (312.4 HUF/EUR) would still induce a 0.2 percentage point higher gross debt ratio in 2017–2018, but from 2019 it would be only 0.1 percentage point higher.

(C) Economic growth: Should the nominal GDP growth end up 1 percentage point higher in 2017, the debt path would see a 0.6–0.7 percentage point downward shift.

In general, the outcomes of the permanent improvement of the debt trajectory and debt structure are undoubtedly reflected in the lower level of interest expenditures and in the more moderate exchange rate sensitivity of the debt. These successes prove that the key governmental aspirations relating to debt management have taken a proper course in the past few years. The consistent implementation of the strategy in the past attests it, and additionally it raises evident trust among investors that the positive processes will continue in the future, too.

4. SENSITIVITY ANALYSIS

The macroeconomic baseline scenario of the convergence programme is also shaped by the potential realisation of risk factors. Of these, two alternative scenarios have been selected, and their economic outcomes are also presented. The first one is based on the strengthening of domestic factors (i.e. consumption and investments grows at a higher rate than in the baseline scenario), whereas the second scenario presumes a slower increase of external demand. Sensitivity analyses made applying the DYNAMO model of the Ministry for National Economy quantify the extent by which the levels and growth rates of the major macroeconomic variables would deviate from the baseline scenario due to the shocks (Chart 4.1 and Table 4.1).²

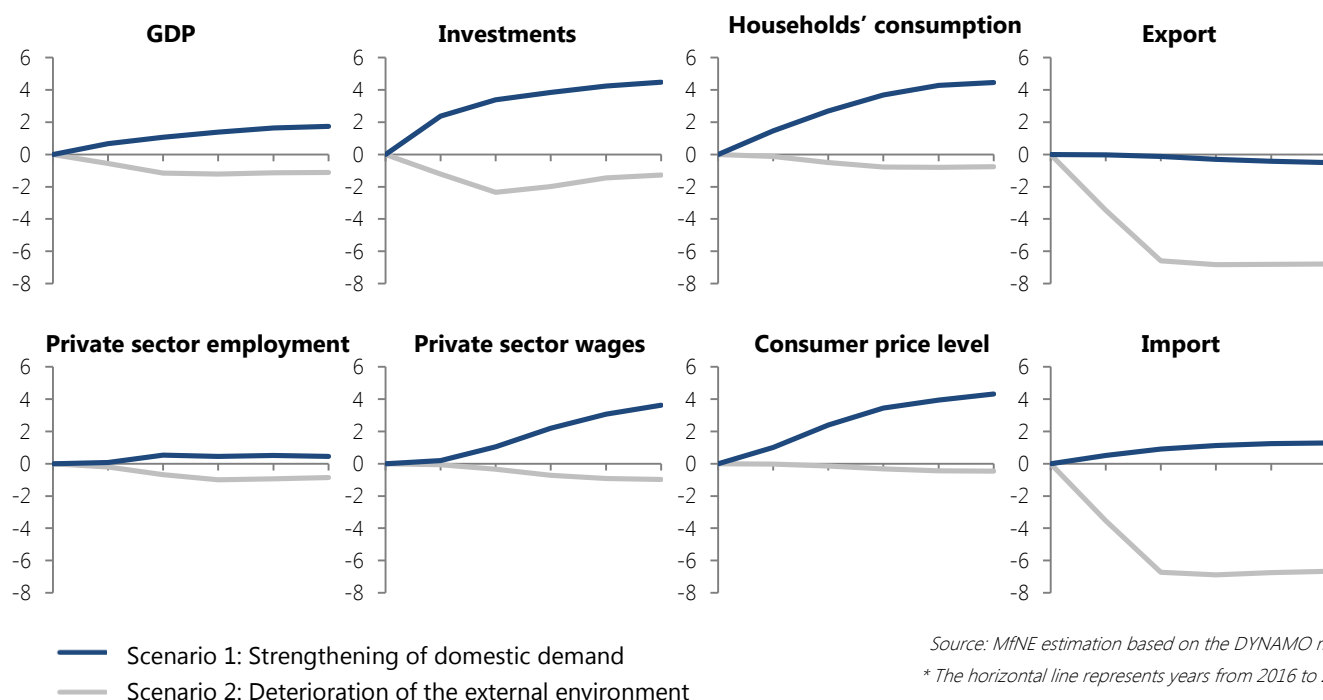
On the one hand, Scenario 1 assumes that consumption will grow more rapidly than projected in the baseline scenario as a result of the wage increase due to the 6-year wage agreement, the higher employment rate and the faster easing of the precautionary motives. On the other hand,

investments can also potentially grow at a higher rate than estimated in the baseline scenario, underlined by the accelerated utilisation of European Union funds, the more favourable trend in building of dwellings and the more robust investment activities as a result of the reduction of the corporate income tax rate. The capacity expansion in the production sector will lead to the further increase in employment. The increase of domestic demand will also result in the growth of import volumes and higher prices. Driven by the consumption and capacity increase, the growth of production and incomes will generate additional revenues to the general government.

Scenario 2 presumes that external demand will increase slower than expected. Beyond a number of geopolitical factors (e.g. Brexit, spread of trade policies in favour of market protection), potential tightening of the US monetary policy or the delay in the launch of the US budget stimulus, can influence the global and European economic growth negatively,

Chart 4.1: Alternative scenarios

(Cumulative deviation from the baseline scenario in levels, % *)



² The description of the Dynamic National Accounts Based Model (DINAMO) is accessible via the following link:
http://www.kormany.hu/download/9/97/10000/EI%C5%91rejelz%C3%A9si%20m%C3%B3dszertan_angol.pdf

and, consequently, this applies for the demand for Hungarian export, as well. Any slowdown of export growth would result in a more moderate increase of domestic production capacities. Consequently, export, as well as employment and investment dynamics would grow at a slower rate. These effects are

substantially dampened by the large share of imported goods in the export. Slower demands would also lead to a moderate inflation rate. In line with the cyclical developments, the general government deficit would also be higher as a result of a potential weakening of external demand.

Table 4.1: Risk scenarios (difference of growth rates of the variables from the baseline scenario, in percentage points)

Scenario 1: Strengthening of domestic demand	2016	2017	2018	2019	2020	2021
GDP	0.00	0.69	0.40	0.34	0.27	0.09
Households' consumption expenditure	0.00	1.49	1.25	1.00	0.63	0.16
Gross fixed capital formation	0.00	2.58	1.05	0.50	0.41	0.27
Exports	0.00	-0.03	-0.11	-0.18	-0.13	-0.07
Imports	0.00	0.56	0.41	0.24	0.12	0.03
Consumer price level	0.00	1.04	1.38	1.04	0.50	0.36
Private sector employment	0.00	0.07	0.46	-0.08	0.06	-0.07
Gross average wages in the private sector	0.00	0.20	0.90	1.23	0.94	0.58
Income taxes *	0.00	0.02	0.14	0.23	0.32	0.36
Employer contributions*	0.00	0.02	0.11	0.18	0.25	0.28
Turnover taxes*	0.00	0.24	0.48	0.67	0.76	0.81
Taxes levied on companies*	0.00	0.14	0.15	0.16	0.15	0.15
Interest expenditure of the general gov.*	0.00	0.00	-0.02	-0.04	-0.07	-0.09
General government balance*	0.00	0.46	0.91	1.21	1.37	1.44

Scenario 1: Deterioration of the external environment	2016	2017	2018	2019	2020	2021
GDP	0.00	-0.53	-0.64	-0.07	0.09	0.03
Households' consumption expenditure	0.00	-0.12	-0.39	-0.33	-0.01	0.04
Gross fixed capital formation	0.00	-1.26	-1.34	0.41	0.59	0.18
Exports	0.00	-3.37	-3.41	-0.28	0.04	0.02
Imports	0.00	-3.48	-3.53	-0.19	0.17	0.09
Consumer price level	0.00	-0.02	-0.12	-0.19	-0.12	-0.02
Private sector employment	0.00	-0.19	-0.49	-0.31	0.05	0.09
Gross average wages in the private sector	0.00	-0.07	-0.29	-0.39	-0.22	-0.07
Income taxes *	0.00	-0.02	-0.08	-0.12	-0.13	-0.13
Employer contributions*	0.00	-0.02	-0.06	-0.10	-0.11	-0.10
Turnover taxes*	0.00	-0.01	-0.06	-0.11	-0.12	-0.13
Taxes levied on companies*	0.00	-0.07	-0.12	-0.09	-0.07	-0.06
Interest expenditure of the general gov.*	0.00	0.00	0.01	0.01	0.02	0.03
General government balance*	0.00	-0.12	-0.32	-0.42	-0.43	-0.43

Source: MfNE calculations based on the Dynamo model

* Difference of the baseline and the alternative scenario, in % of the baseline nominal GDP.

Remark: the items do not necessarily make up the total, which is the result of rounding.

5. LONG-TERM SUSTAINABILITY OF PUBLIC FINANCES

The sustainability of public finances is basically determined by the current fiscal stance (budget balance, public debt and debt-to-GDP ratio), the size of future budgetary expenditures associated with ageing and demographic trends.

The Government fosters the improvement of long-term sustainability of public finances through several channels with complex and targeted measures. The Government has set the reduction of the debt ratio as a key objective and has been implementing fiscal discipline accordingly. A lower public debt level and budget deficit create more favourable conditions to tackle the challenges of an ageing population in the long run. Furthermore, a number of parametric changes have been introduced in the pension system which have considerably reduced long-term pension expenditures and the cost of other age-related spending. Additionally, the Government has introduced family-friendly incentives which could mitigate budgetary consequences of the projected ageing of the Hungarian society through demographic changes.

The Fundamental Law stipulates that the public debt-to-GDP ratio shall be constantly reduced until it reaches 50%. The achievement of this target was significantly facilitated by the termination of the mixed system introduced in 1998, composed of a compulsory, fully funded private pension fund pillar and a state-run, social-security-based, pay-as-you-go pillar. This affects the sustainability of public finances in many ways. On the one hand, the government debt was immediately and significantly cut due to the assets transferred from the private pension funds and, on the other hand, the contributions paid by members switching back into the public pillar are now paid to the budget, thereby permanently improving the fiscal position.

As a result of the parametric changes implemented gradually in several steps, future pension expenditures have been reduced significantly. In conformity with best international practices, the main

direction of the measures is to raise retirement age in line with rising life expectancy, a significant increase in effective retirement age and change of the indexation rules. By 2022, the statutory retirement age will have been gradually increased to 65 years. In addition, a considerable rise in the actual retirement age is facilitated by the regulations introduced in 2011 for the termination of benefits provided below the retirement age, as well as the transformation of the disability benefit system. All these measures have a beneficial effect not only on the pension system but also on employment.

Long-term demographic trends have a major impact on expenditures relating to long-term sustainability. The demographic trends forecast the ageing of the population. The ageing of the population increases age-related expenditure, which has an upward pressure on public debt on the long term. One reason underlying the unfavourable demographic developments is the low fertility rate in Hungary, which, despite an increase in recent years, is below the average in Europe, standing at 1.45 according to the latest statistics (Europop2015), while the EU average is 1.58.

In order to encourage families to have children, the Government has strengthened the family incentive system. The main elements of the measures included various forms of pecuniary support to families, such as child-care allowance, child raising support, child protection benefit, as well as the family tax allowance introduced in 2011 and the so-called GYED extra from 1 January 2014 aimed at improving the conditions of having and raising children while returning to the labour market for parents with small children.

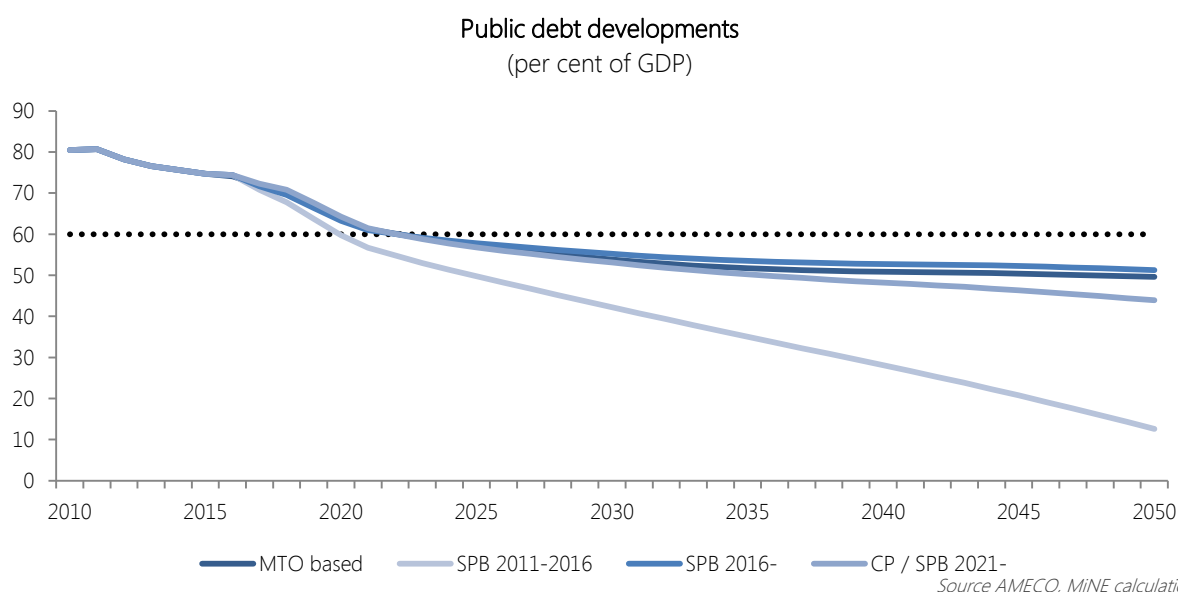
The measures include child-care and child raising benefits, better conditions of employment, parallel disbursement of benefits for families with several children, eligibility for child-care support for students studying in higher education and graduates at the beginning of their career, as well as the extension of the term of tax allowance available for parents with

three or more children intending to return to employment after using child-care benefits. Besides, to promote the employment of women with small children a reform of nursery institutions has been elaborated, and by the end of 2018 capacities will have been increased by 18,000. At the end of 2015 the Family Housing Subsidy Scheme (CSOK) was introduced at a higher amount, which also grants more support to families having or raising more children. All of these measures are expected to mitigate the projected ageing of the Hungarian population. It should be noted however that the natural decline rate is decreasing.

In the long run, pension expenditures are expected to increase at a much slower pace due to the measures implemented in the pension system. According to calculations approved by the European Commission and the EU Economic Policy Committee, pension expenditures are expected to drop between 2013 and 2060 from 11.5% only to 11.4% of GDP, which is considered a good result in the evolution of long-term

pension expenditure in the European Union. Further expenditure figures with relevance to long-term sustainability are taken from the most recent, 2015 Ageing Report, according to which health expenditure will increase from 4.7% of GDP to 5.4%, long-term care expenditure will rise from 0.8% of GDP to 1.3% and expenditures on education will shrink from 3.6% to 3.4% of GDP between 2013 and 2060 in Hungary.

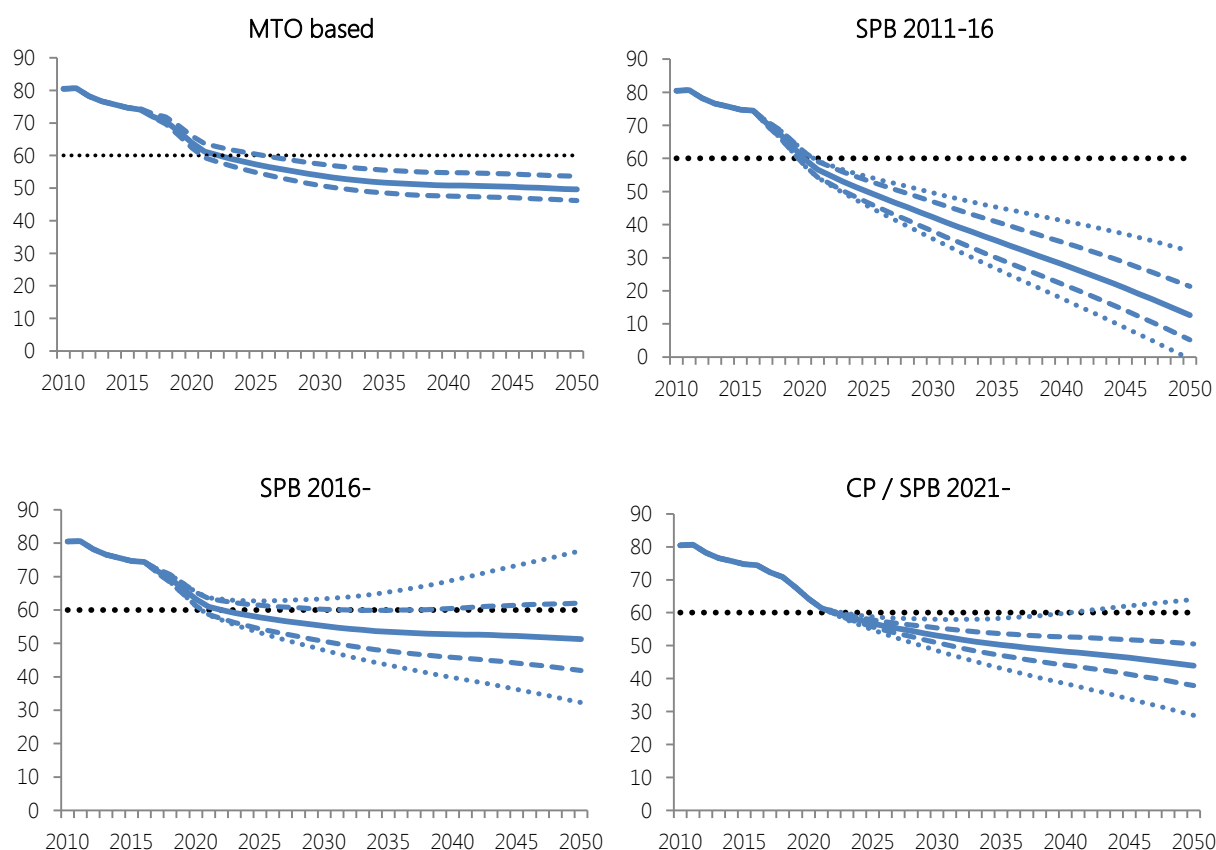
With the moderate increase in age-related expenditures and fiscal discipline implemented recently, the continuous reduction of the debt ratio since 2011 is foreseen to be continued, and the ratio will be brought down under the 60% of GDP reference value already in the medium term. Thereafter, the debt path is expected to continue to be sustainable based on either the most recent figures (fact data (2016) for the debt ratio and the general government balance) or the fiscal path presented in the convergence programme or the budgetary policy implemented in recent years.



Note: macroeconomic assumptions based on the CP until 2021 and on the 2015 Ageing Report thereafter, structural balance fact data from the European Commission's 2017 Winter Forecast

Sensitivity analysis of the different scenarios

20% higher/lower growth (dashed line) or interest rates (dotted line) assumptions



Source: AMECO, MfNE calculations

Scenarios:

MTO based: structural balance from 2021 in line with the MTO

rationale behind: fiscal policy implemented in recent years proves that the Government stood ready to adjust in order to keep even the headline targets; therefore based on a no-policy-change assumption the scenario incorporating fiscal discipline that takes also into account the change in cyclical developments and interest rates in normal times is realistic

SPB 2011–2016: the average of structural primary balance figures between 2011 and 2016 (based on the European Commission's 2017 Winter Forecast) frozen from 2017

rationale behind: taking the average of fiscal outcomes of recent years with unchanged fiscal policy governance mitigates the impact of freezing certain, potentially unrepresentative figures whereas provides good basis for a no-policy-change assumption

SPB 2016–: the most recent, 2016 structural primary balance fact data (based on the European Commission's 2017 Winter Forecast) frozen from 2017
rationale behind: freezing the most recent, observed fiscal outcome also serves as a good basis for the no-policy-change assumption (albeit the problem of freezing certain, potentially unrepresentative values remains unhandled)

CP / SPB 2021–: structural primary balance frozen at the level at the end of the convergence programme from 2021

rationale behind: the scenario demonstrates long-term public debt trends based on the convergence programme

6. QUALITY OF PUBLIC FINANCES

As a result of the fiscal consolidation implemented in recent years the general government deficit dropped well below 3% of GDP in a sustainable manner. While ensuring the sustainability of public finances the Government builds on accomplishments so far and continues the improvement of the structure of

government expenditures and revenues, in order to provide the best possible support to a sustainable and job-creating economic growth, which is one of the Government's most important economic policy objectives,

6.1 STRUCTURE AND EFFICIENCY OF THE EXPENDITURE OF PUBLIC FINANCES

In the context of the improvement of the quality of budget expenditures, growth is supported by a number of measures associated with the labour market. The convergence programme describes the steps taken and planned in the field of public employment, labour market mobility and vocational training. Furthermore, the reorganisation of public administration serves the rationalisation of the expenditures.

Public employment

In an effort to increase employment for the long term, it is justified to promote employment in the primary labour market. The promotion of employment in a way that is sustainable in the long term is possible if the business sector represents the highest possible ratio, and as many new, tax-paying jobs will be created as possible, and if those who are able and willing to work according to the conditions of the open labour market receive appropriate assistance in finding jobs for themselves. The Government's aim is to increase the proportion of people returning to the primary labour market from public employment.

The programme called "From public employment to the competitive sector" was launched on 1 February 2016. In that programme those in public employment receive an employment benefit if they find a job before the expiry of the term of the legal relationship of public employment. This programme is financed from the National Employment Fund.

In addition to this, from 1 January 2016 a system for the profiling of job-seekers has been developed, in order to determine who should be offered the option

of public employment and who should receive assistance with finding a job in the open labour market, with the appropriate incentives, support and services. In profiling a basic principle that must be implemented is that public employment is only warranted for those who cannot be helped in getting employment by any other means or supports. At the same time, the opportunity for public employment must be guaranteed for those clients who are most exposed to the danger of persistent unemployment, i.e. who cannot find jobs in the open labour market even with support. With reliance on the profiling system, for the reinforcement and more effective operation of the labour force recruitment services, the National Employment Service is planning to elaborate a competence-based labour force recruitment system.

The experience earned in recent years has pointed out that it is necessary to encourage the employment of public employees in the primary labour market. By improving the situation of Hungarian economy the Government creates opportunity for the market-based employment of public employees.

In the case of young persons under the age of 25 public employment is not considered an appropriate job opportunity. They can receive favourable support and employment opportunities from the Youth Guarantee Programme, and therefore persons under the age of 25 may only be referred to public employment in exceptional, well-justified cases.

As a step towards the transformation of public employment, a future orientation is to include people

with vocational qualification and those who are expected to find jobs by themselves in public employment only if

- any district (Budapest district) office has made 3 unsuccessful attempts for the placement of the job-seeker – for reasons attributable to employers –, or
- for 3 months the district (Budapest district) office has not been able to offer an appropriate job to the job-seeker.

In the future, cost reimbursement will be provided to public employees in relation to the local and intercity travel expenses incurred with the use of the means of public transport for the purpose of job seeking.

With respect to the shortage of labour having surfaced in the business sphere, until 2020 the Government is planning to gradually reduce the maximum monthly number of those participating in public employment schemes to 150,000.

After 1 June 2018, the maximum duration of public employee legal status within any period of 3 years will be 1 year with the exception of cases where the business sphere cannot offer realistic employment opportunities to the individuals concerned, meaning that the job-seekers are unable to find jobs beyond their own faults.

For the implementation of active labour market programmes contrived to support exit from public employment

- The support programme “From public employment to the competitive sector” was launched on 1 March 2017 with a focus on encouraging public employees to find jobs in the primary labour market by furnishing job-seeking allowances;
- Through the announcement of job-creation funding schemes, priority subsidies will be provided to those hiring people from public employment;
- In the framework of the “Active exit to the market” programme, there are mentors to motivate persons who have spent at least one year in public employment to find jobs in the primary labour market;

- The “Alternative prevention” programme has been designed to prevent those job-seekers from entering the system of public employment who are partly able to find employment independently, have marketable vocational qualifications, or who have low schooling, but are motivated to work.

Preparations for these programmes, funding schemes are currently under way. These measures have the potential to ensure the employment of tens of thousands of public employees in the primary labour market.

Labour market mobility

To promote the mobility of labour force and the proper matching of the demand and supply in the labour market currently hindered by regional differences, the Government has raised the tax-exempt amount of the cost reimbursement for commute in own cars to 15 HUF/km from 1 January 2017. On the other hand, a housing support that can be disbursed to jobless people finding employment far from their places of residence has been made available for one year. As the third measure, from 2017 employers are allowed to provide tax-exempt housing support for mobility accompanied by a corporate tax benefit for 5 years in a maximum monthly amount corresponding to 40 percent of the minimum wage in the first 24 months of employment, to 25 percent of the minimum wage in the second 24-month period, and thereafter to 15 percent of the minimum wage during the following 12 months.

Vocational training

In order to implement a vocational training system that is capable of serving the needs of the labour market flexibly, in the first half of 2015 the Government decided on the strategic concept necessary for the reorganisation of the sector. The changes focused on serving the expected needs of the economy in such a manner that the training and educational systems should be able to train and release more professionals than at present. To accomplish these goals, the Government has announced a reform programme called “Vocational training at the service of the economy”.

The feedback received from employers shows that there is an increasing need for a highly trained labour force. Therefore, the current changes in the vocational training system significantly enhance the chances of students obtaining a school leaving certificate at the end of each vocational training path, which will enable them to enter higher education from September 2016.

As an element of the vocational training reform, as of 1 July 2015 several vocational schools and vocational secondary schools were transferred from Klebelsberg Institution Maintenance Centre to the Ministry for National Economy as the operator. These institutions were reorganised into 44 vocational training centres at the national level. As part of the institutional reorganisation, from the academic year of 2016/2017 vocational schools are converted into vocational grammar schools, in which the students may obtain a trade together with their school leaving certificate. Furthermore, if they complete one more year of training, they will also obtain a technician qualification. At the same time, current vocational schools will be converted into vocational secondary schools, and after completing three years of training necessary for learning a trade, students will also have the option of obtaining a school leaving certificate in the span of two years. In the case of the institutional reorganisation it is registered as a highlighted aim to have vocational training centres converted into service centres, where clients of any generation may receive career consulting, proposals for adult education courses, training courses and survey of abilities.

In full-time formal education, the 21-year age limit has been increased to 25 years. It affords young people a longer time for joining vocational training programmes and completing their studies after the end of the phase of general education (completion of the primary school, attainment of school leaving certificate).

The opportunity of a second vocational qualification, assured by the Government from the second half of 2015 and obtainable free of charge in the system run by the State, significantly contributes to increasing the number of students involved in vocational training. This impact can be mainly registered in adult

education, where a sharp increase is expected in the number of students, independently of age groups.

From 1 September 2016, the Ministry for National Economy came in charge of the renewed 2-year Vocational Training Bridge Programme, which was designed to offer an alternative chance of learning or returning to the system of vocation training for young people dropping or having already dropped off from the educational system. An incentive in this respect is that during their studies the students participating in the programme are paid scholarships.

The scholarship system for students who attend trainings for the attainment of vocational qualifications in the so-called niche vocations that are particularly demanded by the economy has also been transformed. In the framework of the Szabóky Adolf vocational training scholarship system operated under the new conditions, from September 2016 scholarships can be provided regarding 20 niche vocational trainings in any county instead of the earlier 10. Furthermore, among niche vocational trainings formerly based solely on primary school qualifications now vocational trainings based on the school leaving certificate can also be included.

The Hungarian Chamber of Commerce and Industry has a significant responsibility in the operation of dual training, in the dissemination of practical training at companies and in quality assurance. With the amendment of the law on vocational training in 2015, the institution of the “chambers’ guarantee” was introduced, which increases the number of students involved in dual training by placing students during their practice in a real business working environment, thereby promoting the training of professionals in order to meet the needs of the labour market. The implementation of the “chambers guarantee” may contribute to the increase of the number of student contracts to 70,000 by 2018, i.e. about 50% of the number of students. In order to ensure the enhanced participation of enterprises in the dual training system in the future as well, the Government continues to provide individual company support in dual vocational training by supporting the establishment of training workshops and the training of the company's own workers (option to recognise the costs of investment required for the completion of practical training,

deduction of a certain part of the wage-related costs of the teachers participating in these trainings from the amount of the vocation training contribution in the case of SMEs).

Rationalisation of the institutional system of public administration

Since 2010 the reorganisation of ministries and territorial agencies of state administration has been completed in several steps, which has led to a more efficient structure. On the other hand, the organisational and operational layout of central offices and background institutions was not uniform, which made the transparency and supervision of the activities of the agencies, as well as their operation more difficult, with special respect to the large number of centralised offices and background institutions, the overlapping support functions managed by separate organisations (e.g. HR, IT, finance).

In order to improve efficiency, a move to significantly reduce the number of central offices and background

institutions of budgetary organisations was initiated in 2016 and will be taken further in 2017. This measure will result in the reorganisation or termination of approximately 40 budgetary institutions. This may result in significant savings on tangible and personnel expenditures, and the transparency of the organisational system will also be improved. A significant proportion of the responsibilities and competences belonging to the central budgetary organisation designed to be wound up will be handed over to the regional and local levels of the organisational system of public administration, as well as the district-based offices, Budapest- and county-level government offices. The organisations in focus were required to implement a 20 percent reduction in wage-related expenditures. The measures also have the goal to strengthen district offices in order to make efficient administration facilities available to citizens and business operators close to their places of residence and operation.

6.2A STRUCTURE AND EFFICIENCY OF REVENUES

In recent years, significant steps have been taken towards the improvement of the competitiveness of the tax system. The period of 2010–2014 witnessed the major structural changes, followed by considerable cuts in the taxes imposed on labour and incomes and the broadening of the system of targeted incentives for the promotion of economic growth in parallel to the enhancement of the efficiency of tax collection. The Government has remained determined in pursuing further reductions in the tax and contribution burden, as well as the reinforcement of the pro-employment and pro-business nature of the tax system. To this end, in the upcoming years, tax policy will continue to focus on the reduction of the payroll taxes, the taxation and administration burdens on business operations, the improvement of the efficiency of tax collection and the simplification of the tax system.

Measures for tax reduction

Taxes on labour

The Government continues to regard the reduction of payroll taxes as a priority. In the past few years, the Government's aim has been to create a tax system that provides the least possible disincentive to work, while also ensuring better conditions for those in the most disadvantageous labour market situation. As a result of the flat-rate personal income taxation, introduced in several stages between 2010 and 2013, and the abolition of the pension contribution ceiling, such a tax and contribution system came into being that, as a main rule, is completely linear. The economic growth of recent years and the successes in the fight against the shadow economy enabled the continued reduction of taxes on labour, and in consequence the personal income tax rate decreased from 16% to 15% in 2016.

With the introduction of the family tax allowance in 2011, the tax system now also takes into

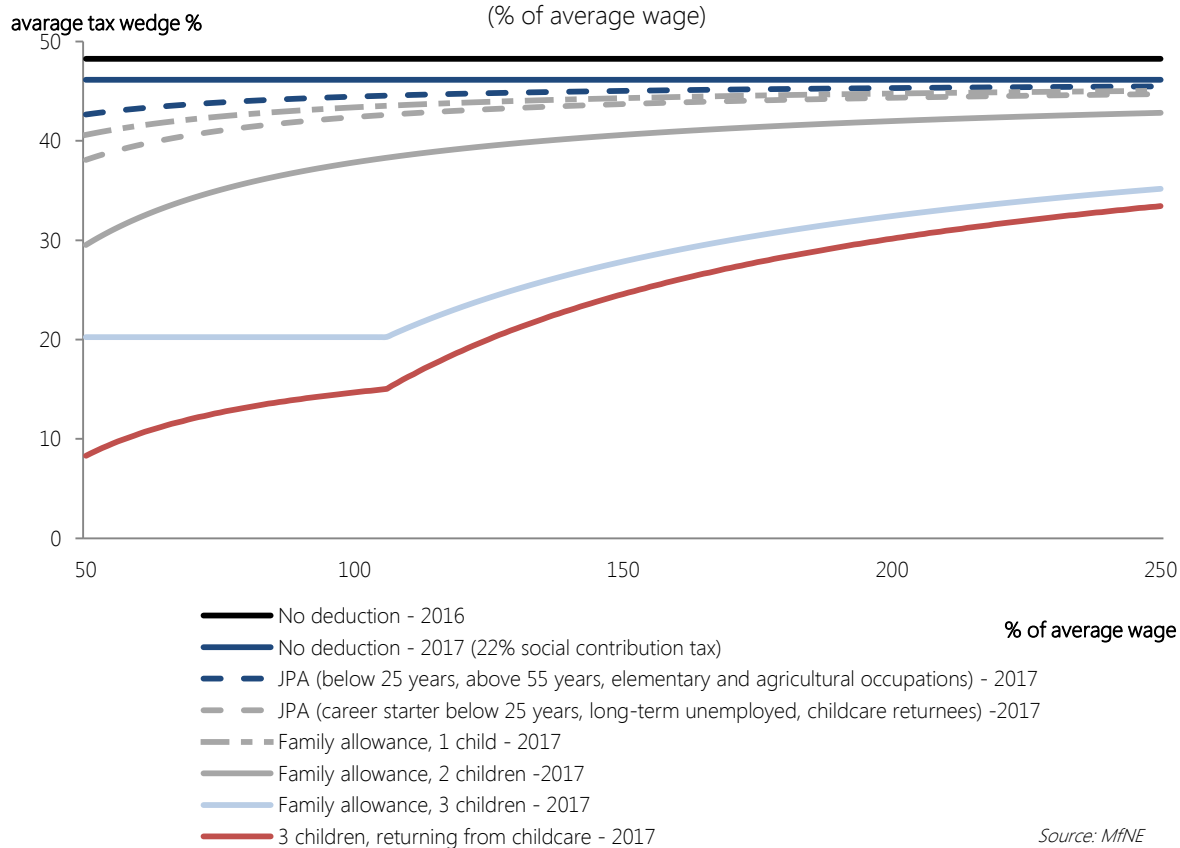
consideration the number of dependent persons in the household. From 2015, the Government introduced tax benefit for people married for the first time, which – starting from 2017 – can be claimed independently of the family tax allowance. 2016 saw the commencement of a gradual increase of family tax allowance for families with two children in four equal steps, which double the value of the allowance in 2015 by the year of 2019 for 350–360 thousand people concerned.

In order to promote the employment of the most disadvantaged groups, in 2013 the targeted social contribution tax allowances of the Job Protection Act were introduced. This measure is aimed at the employment of groups whose labour force participation is low in regional comparison, and based on the available Hungarian and international empirical literature are usually more responsive to various tax incentives. The scope of beneficiary employees (those under the age of 25, over the age of 55, persons returning from home child care allowance, long-term unemployed persons, career starters and persons working in unskilled or agricultural occupations) can be considered extremely broad in international

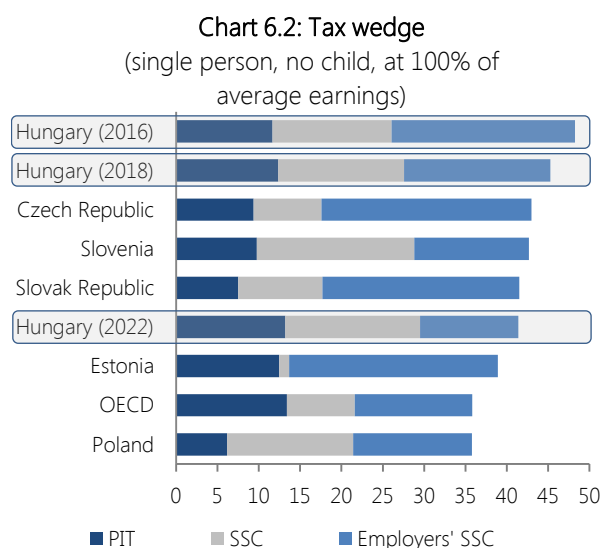
comparison. Currently, on a monthly basis targeted allowances are applied in relation to some 900 thousand employees in the private sector, and these allowances reduced the wage costs by around HUF 142.1 billion in 2016. From 2017, in the application of the tax allowance that can be used in relation to long-term job-seekers the calculation of the time for eligibility can further take the duration of participation in public employment into account.

From 2017, a determining change is that under the agreement of the Permanent Consultation Forum between the Private Sector and Government the rate of the social contribution tax was cut by 5 percentage points, and in 2018 it will be further decreased by 2 percentage points. According to the agreement, depending on wage developments tax rate may be reduced by further 0.5 percentage point in 2018. That would be followed by potential 2-2 percentage points tax rate decrease steps in the period from 2019 until 2022. In line with the reduction of the tax rates, the parameters of job protection allowances were also standardised.

Chart 6.1: Average tax wedge in Hungary 2016, 2017
(% of average wage)



As a result of the reduction of the employers' taxes, the amount of tax deduction from additional incomes from the sides of both employers and employees decreased in all income categories. With respect to the announced measures, the tax burdens of a single employee earning an average wage can potentially drop to the regional level even without the job protection allowances.



Source: OECD and MfNE calculations

Company taxes

In the case of the corporate tax, the most significant change is that from January 2017 the corporate tax rate was reduced to a uniform 9 percent. The intensifying effect of the reduction of the corporate tax rate on investments can surface in the increase of productivity and consequently the wage level, which will generate additional revenues to the budget. For this reason, it can be reasonably expected that this measure will mostly bring its returns in the form of budgetary revenues in the medium term.

Besides the reduction of its rate, corporate tax has been a scene for various incentives for investments and growth since 2017. Substantial easements have been made to the limits of reliance on tax benefits that are available to small and medium-sized enterprises for investments, while in the system of development tax credit the required extent of headcount increase has been considerably lowered, to one-third of the earlier obligations. Moreover, for the improvement of competitiveness and the betterment of growth prospects, a tax benefit that can be used for investments to comply with energy efficiency targets have been introduced alongside a

tax base allowance for the encouragement of investments into early-phase enterprises.

With the material simplification of the small business tax (kiva) and the reduction of the corresponding tax rate, from 2017 the tax system creates even more favourable taxation environment for SMEs with growth potentials. With respect to the fact that this type of tax replaces both the social contribution tax and corporate tax, the 16% rate of kiva was reduced to 14% in 2017 and then to 13% in 2018 in line with the measures affecting these two latter taxes. The calculation of the tax base was also significantly transformed to simplify tax returns considerably and facilitate conversion to this type of tax, while the tax liability became much more calculable and favourable than before. As a result of these changes, in addition to personnel expenses, solely cash flows in between the enterprise and its owners give rise to tax payment obligations from 2017, meaning that the small business tax does not burden the incomes reinvested into the business. Besides, from 2017 eligibility criteria also saw positive changes: instead of 25 employees, kiva can now be chosen up to a headcount of 50 employees, and the revenue value limit from which this tax payer status cannot be applied increased from HUF 500 million to HUF 1 billion.

In order to encourage the competitiveness of the smallest enterprises, the upper revenue cap for the lump-sum tax for self-employed (kata) was risen to HUF 12 million from 2017, from the earlier HUF 6 million. In order to relieve administrative burdens, partly in relation to the given increase in the value limit for the selection of kata, the upper threshold for the value-added tax exempt status was risen from HUF 6 million to HUF 8 million.

A move to considerably simplify the system of the payment of health contributions (eho) was made to moderate administration. From 1 January 2017, the number of eho rates was reduced from 5 to 2, and in line with the diminishing rate of the social contribution tax, the rate of the health contribution was cut to 22%, whereas from 2018 it is set to be further reduced to 20%. The health contribution payable on interest income was eliminated, and from 2018 the eho derived from over 1 million HUF rental

income will also be cancelled, which potentially results in the whitening of the activities in question. As a result of the modifications – among other things –, public dues payable on interest incomes, certain specific benefits, business entertainment and business gifts decreased.

The Government continues to make efforts to improve the relationship between taxpayers and the tax authority. To this end, recent years have seen the restructuring of the tax authority, and the upcoming years will bring about the modification of the rules of taxation. The reorganisation taking place on 1 January 2016 also affected the management of the tax authority, its organisational structure and its system of legal remedies. 2016 further witnessed the introduction of taxpayer rating with the goal to encourage the legally compliant behaviour and operation of taxpayers. In the context of the support mechanism made effective from 1 January 2017, the tax authority recommends self-revision if any risk on the part of the taxpayer is observed, and also provides direct support in eliminating defects, deficiencies as necessary.

Consumption and turnover taxes

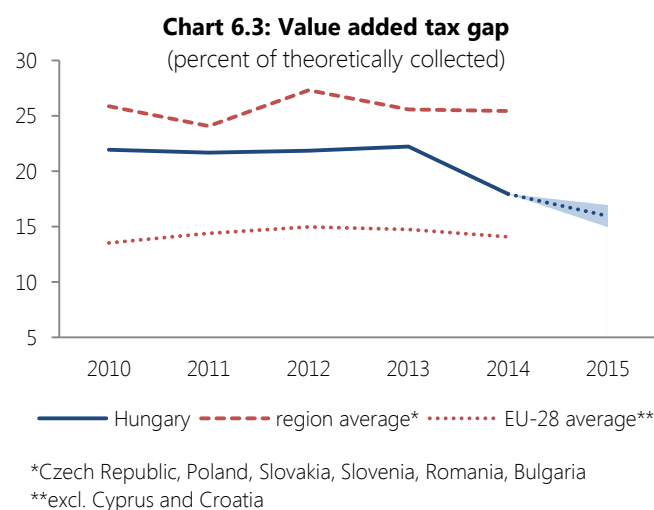
The Government still has the goal to increase the relative weight of consumption and turnover taxes in the tax system. The accomplishment of this objective is promoted by the modification of the rate of the excise tax on fuels from September 2016. Accordingly the excise tax rate on petrol, petroleum and gas oil increases if the world market price of crude oil is not above USD 50 per barrel. For the purpose of modernisation and simplification, the Excise Tax Act has been renewed, and will become effective from 1 July 2017.

In view of the value-added tax, the economic growth in recent years and the successes in the fight against the shadow economy enabled the targeted reduction of value-added tax on specific products. With respect to certain sectors particularly affected with the shadow economy, the reverse charge VAT was expanded to new activities in 2015, the VAT rate on certain livestock was reduced to 5%, followed by the introduction of a 5% VAT rate on pork in 2016. With the goal of continuing the fight against the shadow economy and helping families, the VAT rate on poultry

meat and egg was decreased from 27% to 5% from 1 January 2017, and the VAT rate on fresh milk was reduced from 18% to 5%. From 2017 the VAT rate imposed on restaurant catering services and internet access was also lowered from 27% to 18% in order to promote the broad-scaling accessibility and affordability of internet access. From 2018, a 5% tax rate will be applied to restaurant catering services, internet access and fish.

Measures for the whitening of the economy

In recent years, the Government has adopted a number of measures for the whitening of the economy (e.g. online cash registers), which had a key role in closing the level of the domestic VAT gap (differences between the amount of theoretical and fact VAT revenue) by 4.3 percentage point in 2014 (Case, 2016). Due to the whitening effects originating partly from the introduction of online cash registers and partly from new measures (e.g. EKAER), the level of the VAT gap could be further lowered in the light of the preliminary estimates for 2015.



Source: CASE (2016), MfNE calculations

With respect to the success made so far, in 2017 the Government continued its fight against the shadow economy. In this context, the scope of sectors obliged to use online cash registers was broadened: from 1 January 2017, some parts of the service sector that provides the repair and maintenance of vehicles, retail of vehicle parts, repair of motorcycles and trade in motorcycle parts, performing cosmetic surgery activities, operating discos and dance halls, performing cleaning of clothing and providing various services improving physical well-being and exercise

are obliged to use online cash registers. With this measure, the tax authority has an opportunity to follow the turnover of the sectors in question with reliance on real-time data, and consequently unveil frauds more effectively. Similarly, in the field of transactions between individual taxpayers the Government continued its fight against VAT frauds. To this end, from 1 July 2018 the online provision of invoicing data will become obligatory in order to provide real-time information to tax authority in relation to the data of invoices issued between individual taxpayers. Besides, to combat the shadow economy, the Government offers budgetary subsidies to foster the spread of transactions settled with bankcard payments.

7. INSTITUTIONAL FEATURES OF PUBLIC FINANCES

7.1 BUDGETARY FRAMEWORK

The framework rules of the preparation of the budget are included in Act CXCV of 2011 on the Economic Stability of Hungary (Economic Stability Act), Act CXCV of 2011 on Public Finances and Government Decree 368/2011 (XII. 31.) on the implementation thereof, in accordance with Directive 2011/85/EU of the Council.

The budgetary framework system has not been subject to changes. In the light of the experience earned in recent years, the existing set of systems is sufficiently helpful in fostering the disciplined execution of the fiscal policy to ensure the long-term sustainability of public finances.

This system of rules has two key elements. On the one hand, the deficit of public finances may not exceed 3% of the gross domestic product, and on the other hand, the structural balance needs to be in line with the medium-term objective (MTO) defined in the convergence programme.

Another element of this set of regulations is the debt-related rule of the Economic Stability Act, wherein the balance of the budget shall be planned in such a manner that if both the rate of inflation predicted for the budget year and the real pace of growth of the gross domestic product exceeds 3%, then the annual growth rate of government debt shall not exceed the difference between the expected inflation and the half of the real growth of the gross domestic product. If at least either of the inflation predicted for the budget year or the real growth rate of the gross domestic product does not exceed 3%, then the government debt ratio shall decrease by at least 0.1 percentage point.

Therefore, there are no budgetary requirements under adverse circumstances (low growth) or low inflation that would unjustifiably restrict the performance of the national economy, and would result in other negative consequences, while the reduction of the government debt is guaranteed in accordance with the Fundamental Law.

7.2 PUBLIC FINANCE STATISTICAL GOVERNANCE

In Hungary, the general government sector related statistics are prepared by the Hungarian Central Statistical Office (HCSO) and by the Hungarian Central Bank (Magyar Nemzeti Bank, MNB). According to the current division of tasks, the HCSO is responsible for non-financial accounts and the MNB for financial accounts. Concerning the provision of data in the context of the Excessive Deficit Procedure (EDP Notification), the above division of tasks prevails in compiling the actual figures up to the period before the reported year, whereas the calculation of government balance and debt envisaged for the reported year is the task of the Ministry for National Economy. A statistics working committee consisting of delegates from the HCSO, the MNB and the Ministry for National Economy operates at the level of executives and experts; data flow, division of work and procedural questions of methodological treatment are set out in a cooperation agreement which was updated in

2015. Key data sources of government finance statistics is the public finance information system, the annual and interim reports of budgetary entities, supplemented by statistical data collected from corporations and non-profit entities classified within the general government sector, as well as bank and securities data for the entire government sector. The EDP Notification Report is published on the HCSO website as soon as it has submitted the report to Eurostat. After the three-week consultation period with Eurostat, the HCSO also publishes, together and simultaneously with the Eurostat press release, the approved EDP Notification tables. Moreover, it publishes the description of the methodology related to the compilation of the report, regularly updated and extended in 2016 by the Hungarian statistical authorities ("EDP Inventory"). In accordance with the established practice, the Ministry for National Economy dedicates a separate chapter to the

explanation of the difference between the official national and the Maastricht deficit and debt indicators, as part of the general explanation attached to the annual budget and the final accounts submitted to Parliament.

The Ministry for National Economy fully satisfies the public disclosure requirements laid down in Council Directive 2011/85/EU of 8 November 2011 on requirements for budgetary frameworks of the Member States.

The requirements set forth in the Eurostat guidance on the statistical settlement of mobile phone frequency allocation rights will be fulfilled in the course of the EDP Report in the autumn of 2017. This change will involve a conversion from the one-off settlement of proceeds in relation to use over several years to the recognition of considerations throughout the period of actual allocation. This change will cause a follow-up deterioration of the balance primarily due to the frequency allocation revenues settled in 2013–2014 as per the European Union's associated methodology to an extent of 0.1% and 0.4% of GDP, respectively, with these amounts to be accrued for 15 years in association with both years, which will lead to the improvement of the balance up to 0.03–0.04% of GDP.

TABLES

Table 1a. Macroeconomic prospects

	ESA-code	2016 HUF bn	2016	2017	2018	2019	2020	2021
			percentage change					
1. Real GDP (at constant prices)	B1g	34,663.5	2.0	4.1	4.3	3.8	3.7	3.6
2. Nominal GDP	B1g	35,005.4	3.0	7.1	7.6	6.9	6.7	6.6
Components of real GDP								
3. Private consumption expenditure	P.3	16,999.0	4.9	6.1	5.4	4.4	4.3	4.1
4. Government consumption expenditure*	P.3	7,428.7	0.6	0.8	1.0	0.7	0.0	0.0
5. Gross fixed capital formation	P.51	6,228.5	-15.5	10.2	12.9	7.8	6.8	6.1
6. Changes in inventories and net acquisition of valuables (per cent of GDP)	P.52+ P.53	783.7	2.3	-0.3	0.0	0.0	0.0	0.0
7. Exports of goods and services	P.6	32,629.8	5.8	5.4	6.5	6.0	6.2	6.9
8. Imports of goods and services	P.7	29,406.3	5.7	6.8	8.2	6.7	6.6	7.1
Contribution to real GDP growth								
9. Final domestic demand		30,656.3	-0.9	5.0	5.3	3.9	3.6	3.4
10. Changes in inventories and net acquisition of valuables	P.52+ P.53	783.7	2.3	-0.3	0.0	0.0	0.0	0.0
11. External balance of goods and services	B.11	3,223.5	0.6	-0.6	-0.9	-0.1	0.1	0.2

*/: Including government and NPISHs as well

Table 1b. Price developments

	2016	2017	2018	2019	2020	2021
percentage change						
1. GDP deflator	1.0	2.9	3.2	3.0	2.9	2.9
2. Private consumption deflator	0.1	2.6	3.1	3.0	3.0	3.0
3. HICP	0.4	1.6	3.0	3.0	3.0	3.0
4. Public consumption deflator	3.6	6.2	6.0	4.7	3.9	3.9
5. Investment deflator	0.0	2.0	2.2	2.2	2.4	2.4
6. Export price deflator (goods and services)	-0.8	0.5	1.0	1.4	2.0	2.0
7. Import price deflator (goods and services)	-2.2	1.4	1.2	1.5	2.1	2.1

Table 1c. Labour market developments

	ESA-code	2016 level	2016	2017	2018	2019	2020	2021
			percentage change					
1. Employment, persons ('000;15-74) ¹		4,351.6	3.4	2.5	1.8	1.2	0.8	0.4
2. Unemployment rate (%; 15-74)		-	5.1	4.0	3.6	3.5	3.4	3.4
3. Labour productivity, persons		-	-1.4	1.5	2.4	2.6	2.9	3.2
4. Compensation of employees (HUF bn) ²	D.1	16,309	9.2	9.3	8.8	6.6	5.3	5.8
5. Compensation per employee (HUF million) ³		3.7	5.7	6.6	6.9	5.8	6.0	5.0

¹ LFS employment² Domestic concept³ Compensation of employees (national concept) per person employed (LFS)**Table 1d. Sectoral balances**

	ESA-code	2016	2017	2018	2019	2020	2021
		per cent of GDP					
1. Net lending/borrowing vis-à-vis the rest of the world	B9.	5.4	7.6	7.2	6.0	4.2	4.1
of which:							
- Balance of goods and services		10.3	8.4	6.9	6.3	6.1	5.9
- Balance of primary incomes and transfers		-5.4	-4.1	-3.9	-3.9	-3.7	-3.5
- Capital account		0.5	3.2	4.2	3.5	1.8	1.7
2. Net lending/borrowing of the private sector including statistical discrepancy	B9.	7.3	10.0	9.6	7.8	5.7	5.3
3. Net lending/borrowing of general government	B9.	-1.8	-2.4	-2.4	-1.8	-1.5	-1.2

Table 2a General government budgetary prospects

	ESA- code	2016 HUF bn	2016	2017	2018	2019	2020	2021
			per cent of GDP					
Net lending (EDP B.9.) by sub-sector								
1. General government	S.13	-646.7	-1.8	-2.4	-2.4	-1.8	-1.5	-1.2
2. Central government	S.1311	-746.0	-2.1	-2.8	-3.1	-1.8	-1.5	-1.2
3. State government	S.1312	-	-	-	-	-	-	-
4. Local government	S.1313	122.6	0.4	0.3	0.5	0.0	-0.1	0.0
5. Social security funds	S.1314	-23.3	-0.1	0.0	0.1	0.1	0.1	0.1
General government (S.13)								
6. Total revenue	TR	15,970.6	45.6	45.5	45.3	44.3	41.9	40.2
7. Total expenditure	TE	16,617.3	47.5	47.9	47.7	46.1	43.4	41.3
8. Net lending/borrowing	B.9	-646.7	-1.8	-2.4	-2.4	-1.8	-1.5	-1.2
9. Interest expenditure	D.41	1,117.5	3.2	2.9	2.7	2.5	2.5	2.4
10. Primary balance		470.8	1.3	0.5	0.2	0.8	1.0	1.2
11. One-off and other temporary measures ¹		110.0	0.3	0.4	0.0	0.0	0.0	0.0
Selected components of revenues								
12. Total taxes (12=12a+12b+12c)		9,044.9	25.8	25.7	25.0	24.7	24.5	24.3
12a. Taxes on production and imports	D.2	6,396.4	18.3	18.4	18.2	18.0	17.8	17.6
12b. Current taxes on income, wealth, etc.	D.5	2,632.8	7.5	7.3	6.7	6.7	6.7	6.7
12c. Capital taxes	D.91	15.7	0.0	0.0	0.0	0.0	0.0	0.0
13. Social contributions	D.61	4,832.1	13.8	12.9	12.6	12.3	11.7	11.3
14. Property income	D.4	134.5	0.4	0.4	0.4	0.4	0.4	0.4
15. Other		1,959.1	5.6	6.5	7.3	6.9	5.3	4.2
16.=6. Total revenue	TR	15,970.6	45.6	45.5	45.3	44.3	41.9	40.2
Tax burden ² (D.2+D.5+D.61+D.91-D.995)		13,929.8	39.8	38.7	37.7	37.1	36.3	35.7
Selected components of expenditure								
17. Compensation of employees + intermediate consumption	D.1+P.2	6,305.8	18.0	18.7	18.3	17.4	15.8	14.6
17.a. Compensation of employees	D.1	3,860.4	11.0	10.7	10.5	10.0	9.4	8.8
17.b. Intermediate consumption	P.2	2,445.4	7.0	8.0	7.9	7.4	6.4	5.8
18. Social payments (18=18.a+18.b)		5,264.5	15.0	14.2	13.8	13.3	12.9	12.5
<i>of which: Unemployment benefits³</i>		74.5	0.2	0.2	0.2	0.2	0.2	0.2
18.a. Social transfers in kind supplied via market producers	D.6311, D.63121, D.63131	712.7	2.0	1.9	1.8	1.7	1.6	1.5
18.b. Social transfers other than in kind	D.62	4,551.8	13.0	12.3	12.0	11.6	11.3	11.0
19.=9. Interest expenditure	D.41	1,117.5	3.2	2.9	2.7	2.5	2.5	2.4
20. Subsidies	D.3	497.9	1.4	1.3	1.3	1.3	1.2	1.1
21. Gross fixed capital formation	P.51	1,088.5	3.1	4.7	5.5	5.8	5.6	5.6
22. Capital transfers	D.9	1,096.2	3.1	2.3	2.3	2.1	1.9	1.7
23. Other		1,246.9	3.6	3.7	3.7	3.6	3.6	3.5
24.=7. Total expenditure	TE	16,617.3	47.5	47.9	47.7	46.1	43.4	41.3

Due to rounding the sum data could differ from the sum of the detailed data.

¹: A plus sign means deficit-reducing one-off measures.

²: Including revenues collected by the EU

³: Cash benefits of National Employment Fund and financing of certain trainings

Table 2.b No-policy change projections

	2016 HUF bn	2016	2017	2018	2019	2020	2021
		per cent of GDP					
1. Total revenue at unchanged policies	15,970.6	45.6	45.5	45.3	44.3	41.9	40.2

The table contains revenue projections based on measures till 30 April 2017.

Table 2c. Amounts to be excluded from the expenditure benchmark

	2016 HUF bn	2016	2017	2018	2019	2020	2021
		per cent of GDP					
1. Expenditure on EU programmes fully matched by EU funds revenue	346.8	1.0	2.1	3.1	2.9	1.5	0.6
1.a. of which investment fully matched by EU funds revenue	222.8	0.6	1.4	2.1	1.9	1.0	0.4
2. Cyclical unemployment benefit expenditure	-20.2	-0.1	-0.1	-0.1	0.0	0.0	0.0
3. Effects of discretionary revenue measures ¹	-262.4	-0.7	-0.6	0.1	-0.4	-0.5	-0.4
4. Revenue increases mandated by law							

¹: The discretionary revenue measures include the direct and indirect effects of the November 2016 wage agreement.

Table 3. General government debt developments

	ESA-code	2016	2017	2018	2019	2020	2021
		per cent of GDP					
1. Gross debt		74.1	72.0	70.5	67.3	64.0	61.2
2. Change in gross debt ratio		-0.7	-2.1	-1.5	-3.2	-3.4	-2.8
Contribution to changes in gross debt							
3. Primary balance		-1.3	-0.5	-0.2	-0.8	-1.0	-1.2
4. Interest expenditure	D.41	3.2	2.9	2.7	2.5	2.5	2.4
5. Stock-flow adjustment		-0.4	0.4	1.2	-0.4	-0.7	0.0
Implicit interest rate on debt (%)		4.4	4.1	4.0	3.9	3.9	3.9

Table 4. Cyclical developments

	ESA-code	2016	2017	2018	2019	2020	2021
per cent of GDP							
1. Real GDP growth (%. at constant prices)		2.0	4.1	4.3	3.8	3.7	3.6
2. Net lending of general government	B.9	-1.8	-2.4	-2.4	-1.8	-1.5	-1.2
3. Interest expenditure	D.41	3.2	2.9	2.7	2.5	2.5	2.4
4. One-off and other temporary measures ¹		0.3	0.4	0.0	0.0	0.0	0.0
<i>of which:</i> One-offs on the revenue side: general government		0.0	0.0	0.0	0.0	0.0	0.0
One-offs on the expenditure side: general government		0.3	0.4	0.0	0.0	0.0	0.0
5. Potential GDP (%)		2.9	3.4	3.8	3.7	3.7	3.6
<i>contributions:</i> - labour		1.2	1.3	1.1	0.9	0.7	0.6
- capital		0.2	0.4	0.8	1.1	1.2	1.2
- total factor productivity (TFP)		1.5	1.7	1.8	1.7	1.8	1.8
6. Output gap		-1.2	-0.6	-0.1	0.0	0.0	0.0
7. Cyclical budgetary component		-0.6	-0.3	0.0	0.0	0.0	0.0
8. Cyclically-adjusted balance (2-7)		-1.3	-2.1	-2.4	-1.8	-1.5	-1.2
9. Cyclically-adjusted primary balance (8+3)		1.9	0.7	0.2	0.8	0.9	1.2
10. Structural balance (8-4)		-1.6	-2.5	-2.4	-1.8	-1.5	-1.2

Due to rounding the sum data could differ from the sum of the detailed data.

¹: a plus sign means one-off item improving the EDP balance.

Table 5. Divergence from previous update

	ESA-code	2016	2017	2018	2019	2020	2021
Real GDP growth (%)							
1. April 2016 Convergence Programme		2.5	3.1	3.4	3.1	3.2	-
2. April 2017 Convergence Programme		2.0	4.1	4.3	3.8	3.7	3.6
3. Difference		-0.5	1.0	0.9	0.7	0.5	-
General government net lending (per cent of GDP)							
1. April 2016 Convergence Programme	EDP B.9	-1.9	-2.4	-1.8	-1.5	-1.2	-
2. April 2017 Convergence Programme	B.9	-1.8	-2.4	-2.4	-1.8	-1.5	-1.2
3. Difference		0.1	0.0	-0.6	-0.3	-0.3	-
General government gross debt (per cent of GDP)							
1. April 2016 Convergence Programme		74.5	73.6	72.4	68.4	64.6	-
2. April 2017 Convergence Programme		74.1	72.0	70.5	67.3	64.0	61.2
3. Difference		-0.4	-1.6	-1.9	-1.1	-0.6	-

Table 6. Long-term sustainability of public finances¹

	2013	2020	2030	2040	2050	2060
	per cent of GDP					
Pension expenditure	11.5	9.8	8.9	9.6	10.7	11.4
Old-age and early pensions	9.1	7.9	7.2	8.0	8.9	9.7
Other pensions (disability, survivors)	2.3	1.8	1.7	1.6	1.7	1.7
Health care, education and other age-related expenditure	9.3	8.9	9.1	9.5	9.9	10.2
Health care expenditures	4.7	4.8	5.1	5.3	5.4	5.4
Long-term care expenditures	0.8	0.8	0.8	0.9	1.1	1.2
Education expenditures	3.6	3.1	3.0	3.1	3.2	3.4
Other age-related expenditures	0.3	0.2	0.2	0.2	0.2	0.2
Pension contribution revenue	10.5	10.5	10.4	10.2	10.2	10.2
Assumptions						
Labour productivity growth	0.3	1.4	2.2	2.1	1.9	1.5
Real GDP growth	0.4	1.9	2.0	1.2	1.4	1.0
Participation rate, males (20-64)	77.1	82.6	84.7	84.3	84.4	84.5
Participation rate, females (20-64)	63.3	72.3	75.2	74.6	74.8	74.7
Total participation rate (20-64)	70.1	77.4	79.9	79.5	79.7	79.6
Unemployment rate	10.0	8.4	7.4	7.3	7.3	7.3
Population aged 65 + over / total population	14.0	17.0	23.0	25.0	25.0	23.0

¹: Based on the 2015 Ageing Report**Table 6a. Contingent liabilities**

per cent of GDP	2016
Public guarantees	9.0

Table 7. Basic assumptions

	2016	2017	2018	2019	2020	2021
Hungary: Short-term interest rate (annual average)	0.7	0.5	1.0	1.6	2.1	2.3
Hungary: Long-term interest rate (annual average)	3.1	3.6	3.7	4.0	4.3	4.4
HUF/EUR	311.4	309.3	309.3	309.3	309.3	309.3
World excluding EU, GDP growth	3.4	3.8	4.1	4.2	4.1	4.2
EU28 GDP growth	1.9	1.8	1.8	1.8	1.8	1.8
Growth of relevant foreign markets	3.7	4.1	4.4	4.4	4.4	4.4
World import volumes, excluding EU	1.7	4.4	4.3	4.4	4.2	3.9
Oil prices (Brent, USD/barrel)	45.1	53.5	53.2	53.2	53.2	53.2

**Table 8. Impact of refugee crisis on the headline balance –
– breakdown by functional categories**

	2015	2016	2017
	HUF bn		
1. Initial reception costs	6.9	6.7	4.0
2. Transport (including rescue operations)	2.4	0.3	0.0
3. Health-care	0.2	0.2	0.2
4. Administrative costs (incl. processing applications for asylum)	1.0	1.2	2.7
5. Contributions to Turkey Facility (excluding through EU Budget)	0.0	0.0	0.0
6. Other costs and measures	38.5	84.9	134.5
Judiciary activity	0.5	0.3	0.3
Communication	0.5	0.5	0.0
Other additional administrative expenditure	0.0	0.0	0.0
Border control	20.6	60.1	81.1
Temporary security barrier	16.9	23.8	49.8
International assistance	0.0	0.2	0.0
Develop transit zones	0.0	0.0	3.3
7. Total impact on headline deficit (7) = $\Sigma(1..6)$	49.0	93.3	141.4

**Table 9. Impact of refugee crisis on the headline balance –
– breakdown by ESA categories**

	ESA-code	2015	2016	2017
		HUF bn		
1. Compensation of employees	D.1	14.8	31.2	37.7
2. Intermediate consumption	P.2	14.4	26.0	41.5
3. Social payments	D.62, D.63	0.3	0.8	1.4
4. Subsidies	D.3	0.0	0.0	0.0
5. Gross fixed capital formation	P.51	6.6	21.5	51.6
6. Capital transfers	D.9	0.0	11.8	0.1
7. Other	D.7	12.9	2.0	9.1
8. Total impact on headline deficit (8) = $\Sigma(1..7)$		49.0	93.3	141.4
9. Compensation from EU		-	-	-
10. Total impact on headline deficit net of EU contributions (10) = (8) - (9)		49.0	93.3	141.4
11. Total impact on headline deficit net of EU contributions (per cent of GDP)		0.1	0.3	0.4

Table 10. Additional country-specific information on costs

	2015	2016	2017
	persons		
1. Arrivals (total no of persons, incl. transiting refugees)	177,135	29,432	5,160
2. Arrivals who are transiting refugees	149,091	9,681	3,268
3. First time applicants	174,434	28,216	4,328
4. Positive decisions	508	438	316

**Table 10. Impact of terrorist threats on the headline balance –
– breakdown by functional categories**

	2016	2017
	HUF bn	
1. Additional capacity, headcount and materials	4.9	49.4
2. Security equipment, purchase and storage	8.5	18.0
3. Total impact on headline deficit (3) = (1)+(2)	13.4	67.4

**Table 11. Impact of terrorist threats on the headline balance –
– breakdown by ESA categories**

	2016	2017
	HUF bn	
1. Compensation of employees (D.1)	1.6	6.6
2. Intermediate consumption (P.2)	10.0	11.9
3. Social payments (D.62, D.63)	0.0	0.0
4. Subsidies (D.3)	0.0	0.0
5. Gross fixed capital formation (P.51)	1.8	48.9
6. Capital transfers (D.9)	0.0	0.0
7. Other (D.7)	0.0	0.0
8. Total impact on headline deficit (8) = $\Sigma(1..7)$	13.4	67.4

