GOVERNMENT OF HUNGARY

CONVERGENCE PROGRAMME
OF HUNGARY
2018-2022

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1. ECONOMIC POLICY OBJECTIVES

Hungarian economic policy has had many challenges to face in recent years. First, the crisis found Hungary in a basically unstable state, where it was very vulnerable to external shocks. After the 2010 change of government, the economic policy regarded it as a key priority to restore the resistance of the Hungarian economy and to put it on a stable growth path. The implementation thereof was significantly complicated by, inter alia, the significant extent of the general government deficit, the high unemployment rate, the exposure to international creditors, and the indebtedness of households in foreign currency.

The most important task of economic policy was to create macroeconomic balance and a consolidated state budget. The temporary tax measures, affecting among others the bank sector, the telecommunication and energy sector, as well as retail chains, played a serious part in this, not only providing the budget with additional revenues, but also forming part of that turning point in fiscal policy which contributed to laying the foundations for financial and macroeconomic balance between 2010 and 2013. As a result of the measures, the general government deficit has remained well below the Maastricht reference value of 3% since 2012, and the government debt was brought on a gradually declining trajectory. As a recognition of the first phase of the turning point in economic policy after 2010, the excessive deficit procedure (EDP), pending since the accession to the EU, was terminated in 2013, and the debt owed to IMF has also been repaid.

After laying the foundations for macroeconomic stability and fiscal discipline, the strategic goal of the Government was to restructure economic growth and to increase the employment rate. All these required a proactive economic policy. In order to achieve this objective the government established a growth-supporting tax system. It lowered taxes both on labour and corporate income. This way, thanks to increasing investments and continuously decreasing tax burden, the growth of the employment rate received renewed impetus. The results of the past period include that the number of employees grew by more than 740 000, while the unemployment rate declined to the record low level of 4.2%. Between 2010 and 2017, the employment rate of those with the lowest level of school education improved in a pace higher than average, thanks to public employment and the jobs created by the private sector. In parallel, the outstanding growth in graduate employment and the decrease in the number of young unemployed can be traced back to the improvement in the economic situation and the job-creation capacity of domestic businesses.

One of the key objectives of the wage agreement concluded with the interest promotion organisations of employers and employees in November 2016 was to decrease the tax wedge. The agreement brings a considerable mitigation in employers' burden, coupled with a higher wage growth, which also improves the situation of employees. The agreement results in the increase of minimum wage and guaranteed wage minimum and, due to that, the growth of wages can be implemented in an optimal pace and results in considerable wage convergence. Net real incomes increased by 35.4% in seven years, taking into account the family allowance introduced in 2011. The agreement also includes the continuous decreasing of the employer's tax burden and making the corporate tax rate a single-digit one. In the corporate tax system a flat rate was introduced and the rate was decreased to 9%, which has attracted investors to Hungary since early 2017. Thanks in part to this, and in part to the active participation of the corporate sector and the state, last year the rate of investments exceeded the pre-crisis level.

The turnaround of growth, which started in 2014, has widened the room for manoeuvre for the economic policy. Therefore, the past period yielded results not only in terms of macroeconomic indicators. Considering the necessity for unfavourable demographic trends to change, assisting families has become one of the key objectives of economic policy measures. The main problem to be solved for families was their indebtedness; what is more, a significant part of Hungarian households became indebted in foreign currency between 2004 and 2009, which was a serious vulnerability factor for the whole country. In order to solve this, retail FX loans have almost completely been phased out in Hungary, eliminating the exchange rate risk threatening households. Beyond all this, due to the introduction of the family housing subsidy, families can obtain new or used dwellings with considerable support. In order to further support families, the family tax allowance was further increased both in 2017 and 2018, and will also rise in 2019.

The wage agreement and the rising employment rate contributed to the stabilisation of the households' financial situation, which could also be seen in the market of retail credits and savings. Not only the amount of newly disbursed credits to the households is growing, but the population is also playing an increasingly important role in the financing of the government sector. The share of government securities within retail savings has considerably grown, as, in the last five years, more than half of the new savings has been invested into government securities. This is because the government had assessed that the structural composition of the government debt is an important factor in terms of debt sustainability. In accordance with that, the Hungarian government debt management has as its main strategic goal to give a healthier structure to the government debt (in addition to lowering the debt ratio). Thanks to the measures, the foreign currency ratio declined to 24% from the end-2011 value of 52%, while the share of foreign investors decreased to below 37% from 65%.

During the period, the active participation of the central bank also contributed to the success of the economic policy. The growth of credits in the corporate sector, assisted by the favourable interest rate environment, can be regarded as balanced and stable, and this played an important part in the fact that the profitability of the Hungarian banking system hit a record height in 2017. Partly due to the increasingly favourable economic environment, a new profit record was attained: the Hungarian bank sector had a profit of HUF 632 billion. Beyond that, it is worth noting that return on equity is back at its pre-crisis level. Furthermore, in addition to the decrease in the share of non-performing loans, the stability of the Hungarian banking system is also due to the fact that more than half of the credit institutions are now in domestic ownership.

Last but not least, it is important to highlight that, as a recognition of the results of the second phase of the turnaround in economic policy in 2010, the country risk premium has significantly declined in recent years, and, following the rating upgrade to the 'investment' category in 2016, two of the three large credit rating agencies changed Hungary's rating outlook to positive in 2017.

As a result of the above, the Hungarian economy has been restructured by 2018, with the Government attaining its goals step by step. Thus, the focus point of the coming period will be to gear up growth. This requires an economic policy that results in a qualitative improvement in Hungary. Therefore, in the coming period, it will be of key importance to further improve competitiveness and productivity, and to this end it will be indispensable to assist domestic innovations, implement infrastructural investments, and to support the production of services and products with higher value added. This also requires the establishment of conditions that facilitate Hungarian businesses in successfully operating on international markets. To this end, the Competitiveness Council (established with the governance of the Minister for National Economy) assesses the development of productivity and competitiveness on a continuous basis, and harmonises the implementation of any necessary measures. Thanks to the growth-friendly economic policy, the Hungarian economy attained a 4% expansion in 2017, the structure of growth has become balanced, and the positive changes the positive developments achieved in the external and internal equilibrium remain sustainable. A similar economic expansion can be expected also for the coming period. Our growth, which is well above the EU average, allows for convergence that is much more rapid than before.

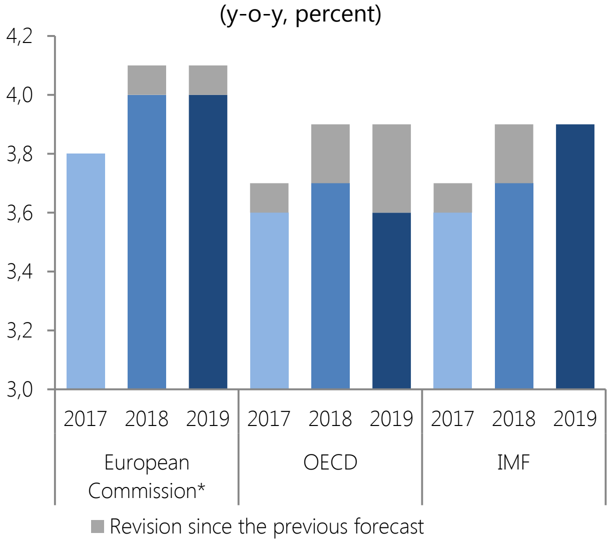
By maintaining the high growth rate of the economy, keeping up the disciplined budgetary policy, and with a continuously declining deficit-to-GDP ratio, the debt-to-GDP ratio can reach a level below 60% by 2022. It is a further goal that a budget without any cash deficit can be adopted for 2020. Due to the agreement concluded with the interest promotion organisations of the employers and employees, the public charges on wages can decline to below the regional average by 2022. Closer interconnections between businesses and the participants in education can lead to an increase in the number of corporate educational venues, which can further assist the growth of employment. By 2020, through the activation of the existing reserves in the economy, 1 million new workplaces can be created in 10 years.

2. Macroeconomic developments and forecast

2.1 International environment

The expansion of the world economy accelerated to 3.7% in 2017 compared to the post-crisis bottom of 3.2% in 2016. Growth was balanced, as all the major economies experienced expansion last year. In parallel, world trade has also regained its momentum, and the international trade of products and services grew by 4.7% i.e. to an extent not seen for six years.

Chart 2.1: Forecasts for the growth of world economy
(y-o-y, percent)



Source: European Commission, OECD, IMF

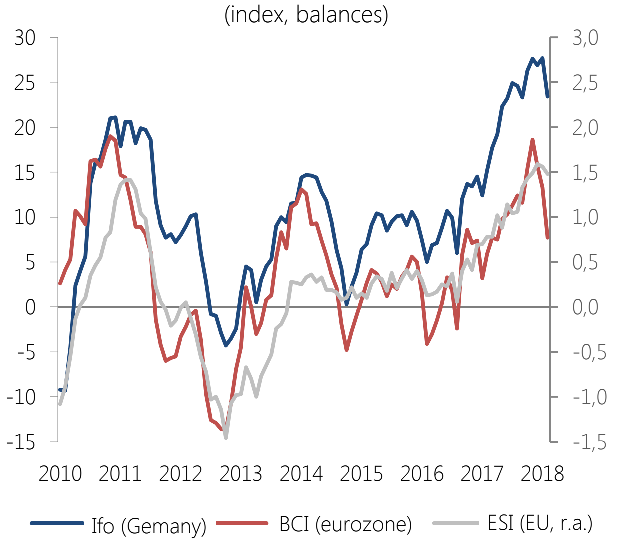
**Remark: world economy excluding EU*

Last year economic growth of the United States was more dynamic than expected, and the employment rate further improved. The tax cut announced by the Trump administration at the end of last year also had a positive impact on expectations and, in addition to that, the planned infrastructural projects can have a beneficial effect on GDP growth of the United States also in a longer term. Due to the low level of unemployment rate and of inflation having been above 2% recently, the Fed started to gradually phase out the loose monetary conditions. In Japan the GDP expanded in four consecutive quarters, which is unprecedented since 1980, and so the performance of the island state also exceeded expectations, and the economy is projected to have a similar expansion this year.

In 2017 the European Union and the Euro Area produced an economic growth not seen for 10 years, which was based on expanding consumption which is associated with outstanding improvement of the labour market, as well as reviving foreign trade and increasing investments. This year, international organisations expect continuing growth in the EA at a rate exceeding 2%. The economic growth of our largest trade partner, Germany, was also outstanding, hitting a six-year record last year, and is expected to further accelerate thanks to strong investments as well as recovery of internal and external demand.

Among emerging market economies, countries in recession earlier such as Russia and Brazil, recovered in 2017, and also the GDP of China also showed a larger expansion than expected. Oil and raw material prices, having normalised in the past period, stabilised the economies of exporting countries, and so the favourable outlook for the coming years points toward a continuing growth.

Chart 2.2: European confidence indicators
(index, balances)



Source: Cesifo, European Commission

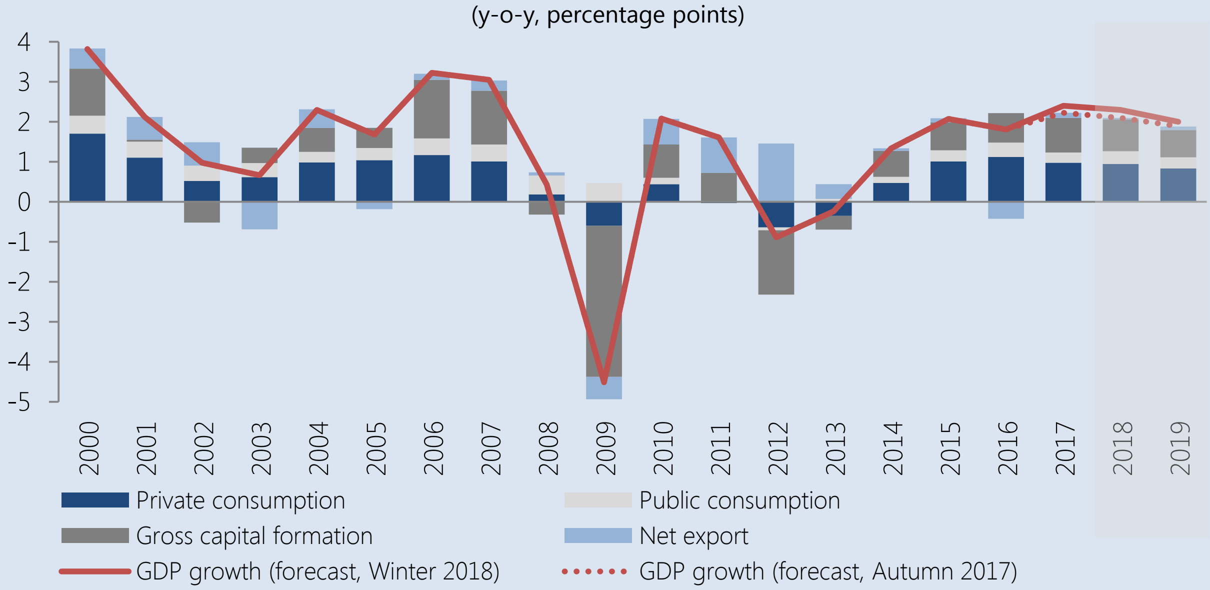
International organisations have a more favourable assessment of the outlooks than before: they forecast the persistence of strong economic upturn and the acceleration of growth for both 2018 and 2019 (*Chart 2.1*). This is also supported by the confidence indicators which reflect an optimistic business sentiment and which have been around their multiple-year peak values during the last months (*Chart 2.2*). However, the expansion of the world economy is still surrounded by risks, several of which are not of (real) economic origin. On the one hand, the low yield environment and small volatility led to the increased probability of an asset price correction on financial markets, which already had signs at the beginning of the year. This may be exacerbated by the diverging monetary policy of the leading central banks, in particular if the Fed increases interest rates at a pace higher than expected. On the other hand, the growth risk posed by a potential protectionist turn in trade policy of certain countries, the outcome of Brexit negotiations as well as the high indebtedness of China may cause uncertainty regarding the trends of international trade. Finally, a potential escalation of geopolitical tensions in the Middle East and Asia may also set back the favourable global economic developments.

Box 1: World economy growth in an advanced stage of maturity Growth of world economy is in mature stage of the cycle

The year 2017 saw a development in international economic trends which was more favourable than expected. The expansion of world economy exceeded the average growth rate of the last ten years, which was mostly due to the expanding demand in advanced economies and China, as well as the recovery of certain emerging market economies earlier in recession. The balanced nature of growth is shown by the fact that, in advanced economies, the expansion was supported on the expenditure side by the strengthening of consumption and investments, and, thanks to the recovering world trade, the growth contribution of net exports has also substantially improved. It is favourable that, among GDP items, the volatility of consumption is the lowest therefore expansion of consumption, which started in 2014, has a more persistent growth trajectory.

Similar economic trends can be observed also in the case of Hungary's biggest trade partners (such as the eurozone, which provides nearly 60% of Hungary's external trade). The expanding consumption supported by the historically favourable labour market processes as well as the capacity expanding investments increase the demand for Hungarian products. Due to Hungarian supplier companies being integrated in global value chains, the booming export of the eurozone – along with strengthening industrial production – also contributes to the expansion of Hungarian exports. Moreover, this February, the European Commission gave an even more positive assessment of the economic outlook of the eurozone (especially Germany) and revised its autumn forecast for the EA's GDP-growth upwards which underpins further increase in Hungary's external demand.

Contributions to GDP growth in the Euro Area
(y-o-y, percentage points)

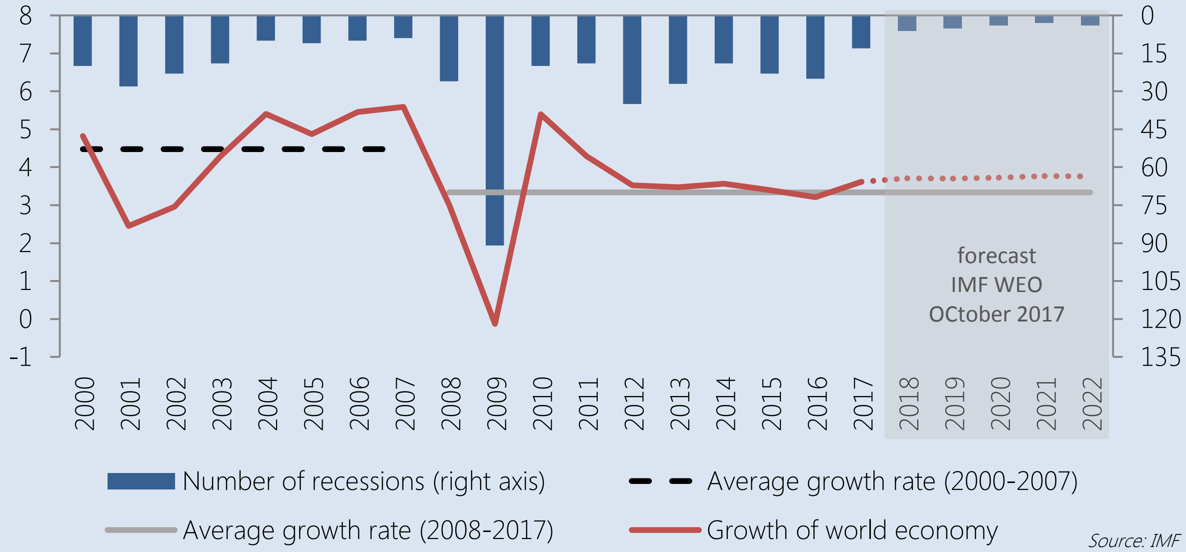


Source: European Commission, Ameco

It is especially favourable that, as estimated by the IMF, last year output decreased on an annual basis in only thirteen economies out of the 192 countries assessed, which is unprecedented since the crisis. Furthermore, the organisation forecasts that the growth of the world economy can accelerate in the coming years as compared to last year, and the spread between the expansion rates of the individual countries may further decrease, thus growth can rely on wider foundations. The favourable outlook is also reflected by the confidence indicators which have hit several years' records in the past half year throughout the world.

Growth of world economy between 2000 and 2022

(y-o-y, percent; and number of countries)



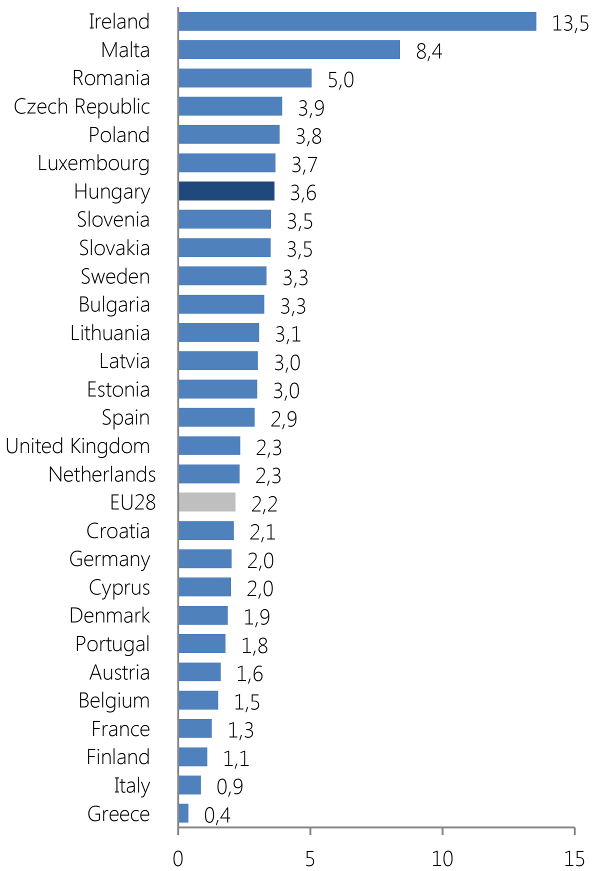
Source: IMF

The factors listed above indicate that the upturn of the global economy has reached a mature phase. However, there are also risks surrounding the growth of the world economy. Firstly, it can be observed that hard indicators do not keep pace with the upturn in soft indices, which show a large amount of optimism. Looking ahead, this divergence can diminish – in an unfavourable scenario, through the correction of optimistic business expectations – which can also set back activity. Secondly, due to the typically low yield environment and volatility of the past years, there is an increased probability of asset prices correction on financial markets. The first signs thereof appeared in the form of sudden changes in stock exchange markets at the beginning of this year. The past eight and a half years are unprecedented in terms of the developments in the stock exchange prices, as there was no such long growth period without a significant downturn since the Great Depression of 1929-1933. The probability of the correction of asset prices may be exacerbated by the monetary policy of the leading central banks gradually phasing out easing conditions, especially if the Fed raises the federal fund rate in a pace higher than expected. Thirdly, the durability of consumption expansion is also surrounded by risks. In advanced economies consumption is supported by the current low yield environment, while indebtedness, especially in China, threatens its sustainability. All in all, the current favourable situation of the world economy provides supportive environment for Hungarian economic growth, however, the global economic upturn is surrounded by risks.

2.2 The components of growth

Following the turnaround of growth, Hungary has expanded vigorously, in an average rate of 3.6% in the past four years. The Hungarian economy outperformed most of the economies of the newly accessed Member States, and performed significantly better than the EU average *(Chart 2.3)*. All this also resulted in the Hungarian economy's accelerated catching up to more developed Member States in the recent period.

Chart 2.3: Average growth between 2014 and 2017
(percent)

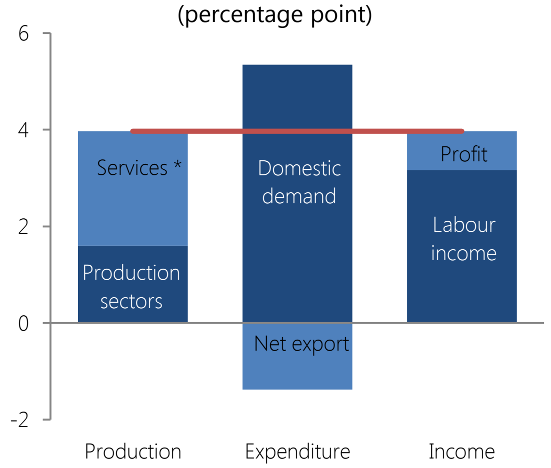


Source: Eurostat, MfNE calculation

In 2017 the performance of the Hungarian economy expanded by 4.0%, while the underlying growth (i.e. adjusted by working days and seasonality) showed a 4.2% increase. Thus, the economy considerably accelerated last year, while the growth path still remains sustainable, as the stable and dynamic expansion was not coupled with any external or internal imbalances. What is more, financial positions of the sectors have further improved.

From the production side, services contributed to the highest extent to last year's GDP growth (*Chart 2.4*). The dynamisation of market activities was considerably supported by the six-year wage and tax agreement entered at the Permanent Consultation Forum of the Private Sector and the Government, due to which additional income was generated for the economic agents in the form of wage increases (minimum wage and guaranteed wage minimum), social contribution tax and corporate tax cuts. The tax cuts counterbalanced the excess burden on companies (resulting from the additional wage development), which is well demonstrated by the fact that the profits of the private sector increased significantly, by about 6%, in 2017.

Chart 2.4: Decomposition of the GDP growth of 4.0% in 2017
(percentage point)



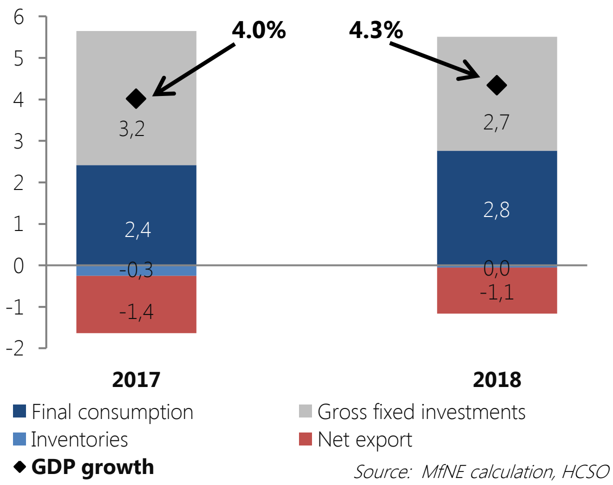
** Including net product on taxes* *Source: HCSO, MfNE calculation*

The production sectors also positively contributed to the acceleration of the economy. In parallel to the housing subsidies and the increasing utilization of EU funds, construction expanded by an unprecedented extent, exceeding 30%. Acceleration can also be witnessed in the case of industrial output, thanks to the new production capacities recently established and to the recovery in external demand. At the same time, mainly due to the dry summer period, the agriculture was not able to contribute positively to growth in 2017.

On the demand side, consumption has increased to an extent unprecedented since 2003, by nearly 5%, in line with rising income and expansion of market services. In parallel with construction, the other component of domestic demand, investments, also expanded by around 17% last year. Hungary's exports have also gained momentum; however, due to the import content of the strengthening domestic demand, net exports all in all had a negative effect on growth.

On the forecast horizon several factors affect the outlooks of Hungary. Concerning this year, monthly statistics for January and February are already available, which confirm that the Hungarian economy has actually geared up to a new growth level: the construction sector further improved its performance which was already outstanding last year, while the volumes of industry and the retail sector also substantially exceeded the recent trends.

Chart 2.5: Decomposition of GDP growth
(percentage point)

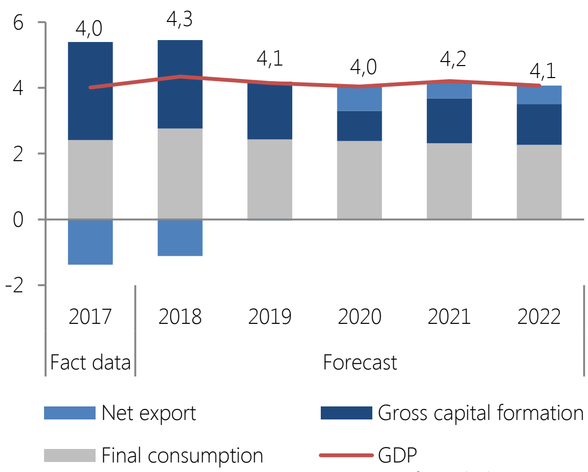


Source: MfNE calculation, HCSO

All in all, the growth structure of GDP in 2018 may be similar to that of 2017 *(Chart 2.5)*. The further acceleration of consumption is foreseen; and in the case of investments, a two-digit expansion can be expected also for this year, even though last year's basis was outstandingly high already. As a result of the capacities recently established, exports may further strengthen and, in parallel to that, net exports can be more favourable than last year. Substantial corrections can be expected both in the case of changes in inventories and the agriculture: the former is projected by the acceleration of the economy, while the latter by the long-term growth of the agriculture's performance. The outlooks are also supported by the fact that by the end of 2017, the growth rate of the economy has significantly strengthened, which resulted in a carry-over effect of nearly 2% in 2018.

In the coming years, the Hungarian economy may grow by a lasting rate of over 4% (*Chart 2.6*). Several factors contribute to the dynamic growth performance. First, forecasts by international institutions project increased external demand, strengthening Hungarian export opportunities. Second, the stronger growth effects of the six-year wage and tax agreement also support the lastingly favourable outlooks on the forecast horizon. One the one hand, until now, the dynamics of the expansion of consumption has lagged behind the increase of real wages, leaving more room for growth in the future. On the other hand, the supply-stimulating effect of social contribution tax and corporate tax cuts may also be stronger than expected, given the favourable reactions of the companies (already operating in Hungary or planning to invest here) to the incentives towards highly capital-intensive, technology-intensive production structures, able to produce high value added, which reactions result in an increasing number of investments (Box 2).

Chart 2.6: GDP growth: demand side
(percentage point)



Source: MfNE calculation, HCSO

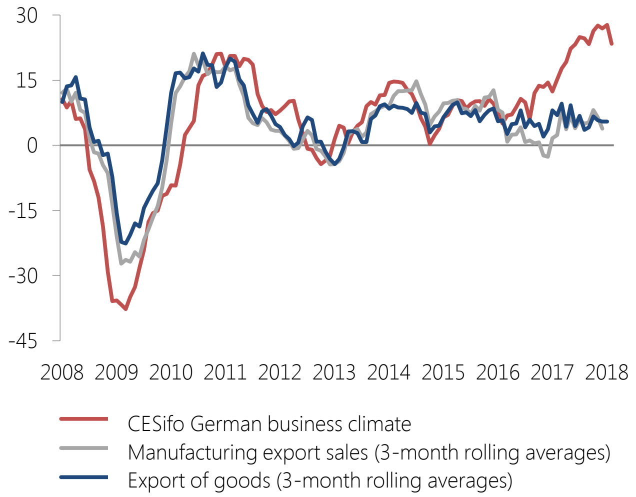
In addition to the wage agreement, the growing demand is further enhanced by fiscal measures. First, subsidies provided to dwelling construction (Family Housing Subsidy Scheme, 5% VAT for dwellings) give significant boost to the investment activity of households. Second, the enhanced utilization of EU funds – which is well demonstrated by the fact that, by the end of March 2018, more than HUF 4,400 billion have already been paid from the funds of the EU cycle – also supports the expansion of investments. Third, components of the winter utility cost reduction and the targeted VAT cuts appearing in consumer prices (*Box 6*) increase the households' disposable income, thereby underpinning the strengthening dynamics of consumption. Finally, there are several other measures – such as the extension of career schemes, or the government investments financed from domestic funds – also boost domestic demand.

2.2.1. External economy

As a consequence of the recovery of the world economy and, along with it, domestic industrial production, in 2017 Hungarian foreign trade showed dynamic expansion as compared to the previous year (*Chart 2.7*). Last year the volume of exports increased by 7.1%, whereas the volume of imports by 9.7% on an annual basis, while the structure of foreign trade remained balanced.

Chart 2.7: German business climate, Hungarian export of goods and manufacturing export sales

(balances, y-o-y volume, percent)



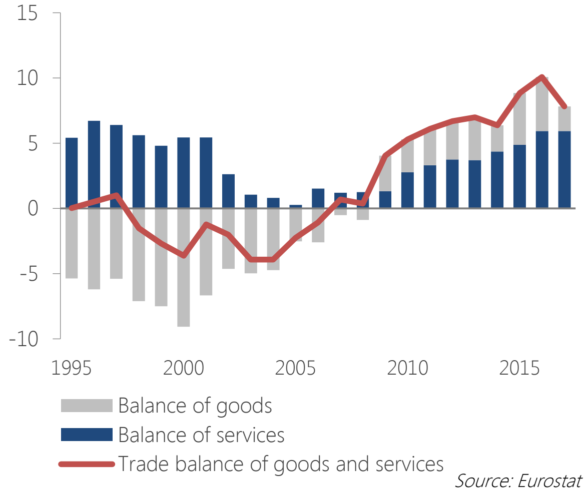
Source: CESifo, HCSO

On the export side, in 2017 the growth rate of services amounting to 8.2% exceeded the expansion of goods of 6.8%, similarly to the last five years. In case of services, the background of the significant growth includes, in addition to the growing exports of transportation and travel, the increasing exports of business services, in particular insurance, IT, cultural and other business services. In the case of goods, as compared to 2016, the expansion of exports accelerated in all the five main groups of trade in goods, except for machinery and transport equipments.

On the import side, the import of goods showed 10.0% growth year-on-year, while that of services amounted to 8.4% rise last year. The dynamics of import, which exceeded exports, was, on the one hand, fuelled by the expansion of domestic demand. First, due to their significant import contents, investments – which showed a vigorous 17% growth in 2017 – considerably contributed to the increase of imports. Second, since a significant part of the products consumed by the households are imported as well, the strong expansion of consumption also supported imports. Finally, the well-performing export also contributed to the growth of imports in relation to the high import content of exports. All this is reflected in trade in goods, where, following a significant acceleration, the value of imports of machinery and transport equipment calculated in EUR expanded by 7.8%. In the case of services, the growth in tourism, transportation and business services was predominant. On the other hand, due to growing energy prices, the import of energy carriers cost over 1 billion EUR more in 2017 than in 2016.

As a consequence of these developments, the surplus of trade balance declined after the record year of 2016 (*Chart 2.8*), however, is still at high level in international comparison, as it amounted to 7.8% of the GDP last year. This is mainly due to the decline in balance of goods last year, which was mostly affected by the increase in energy bills, followed by the import demands connected with increased machine investments. As a result, net exports contributed negatively to the GDP growth.

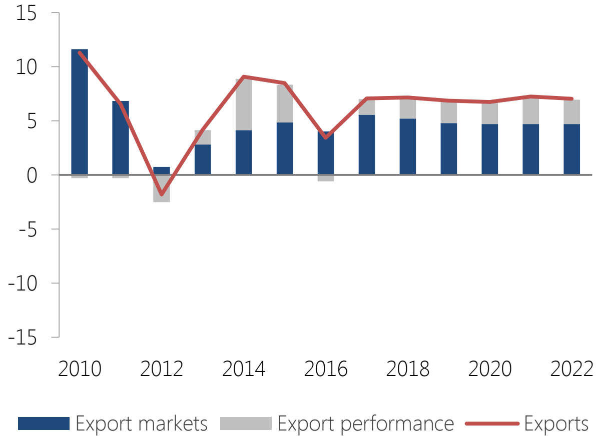
Chart 2.8: Hungarian balance of external trade in goods and services
(between 1995-2017, in percent of GDP)



Source: Eurostat

Looking forward, a vigorous expansion in external trade, similar to last year, can be expected in the coming years (*Chart 2.9*). From the aspect of exports, it is favourable that the world trade gained momentum in 2017is expected to keep expanding (Box 1) creating a beneficial demand environment for domestic export products. In the medium term, the persistence of dynamic export growth can be projected based on the fact that, since early 2016, investments in manufacturing have increased continuously. Furthermore, export capacities will considerably expand due to the already announced large corporate investments which will be realised in the coming years in a total value of nearly HUF 2,000 billion. In the long term, the corporate income tax rate cut, taking effect from 1 January 2017, will increasingly encourage investments in the coming years, which may also contribute to the expansion of exports.

Chart 2.9: Hungarian exports' developments
(y-o-y, percent)



Source: European Commission, HCSO, MfNE calculations

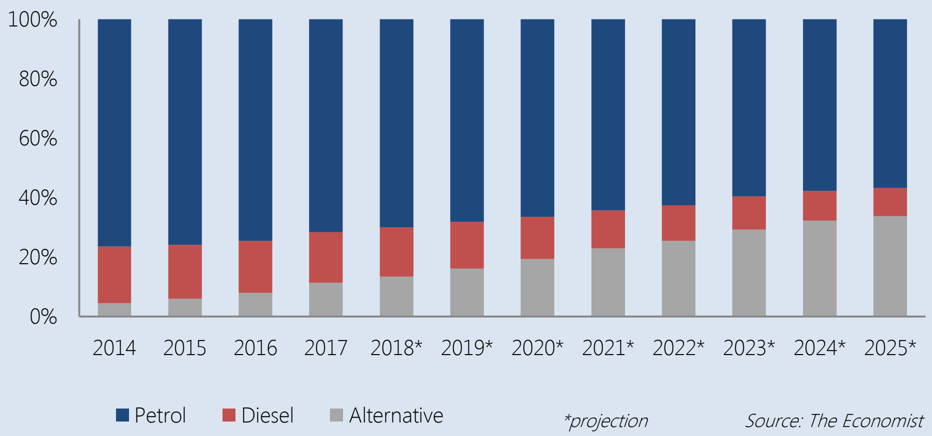
In the case of import, one of the key factors is the stable expansion of consumption which can be expected due to the ongoing increase in employment and the growth of wages. In addition to that, the growth of investments may keep its momentum due to the positive investment attitude of the companies and the allocation of EU funds. The vigorous domestic demand entails a significant demand for imports, in addition to the import content of the – also dynamic – export activity. Taking all these into account, net exports may still have a negative contribution to GDP growth in 2018, but it is projected to gradually turn into positive range over the forecast horizon.

Box 2: Exploring new paths – the Hungarian automotive industry in transition

In Hungary, the automotive industry is a determinant factor in production, giving nearly 5% of gross domestic product and about 17% of the Hungarian export of goods. Thanks to significant capacity-building investments, vehicle sector and connected sub-sectors have nearly doubled their performance since 2010, outperforming other branches.

Today we are witnessing a new transport revolution, as a result of which, on the one hand, partially or fully electrically-powered vehicles will become increasingly predominant on the passenger car market. This process may be further accelerated by the ban on diesel vehicles in large German cities. On the other hand, new solutions are appearing in transport, such as self-driving cars or car sharing service providers. Amidst these developments, it is important for the automotive companies already operating in Hungary to adjust to the changes, and also for the innovative players of the new technology to appear.

Global vehicle sales according to their fuel types (2014-2025)



**projection* *Source: The Economist*

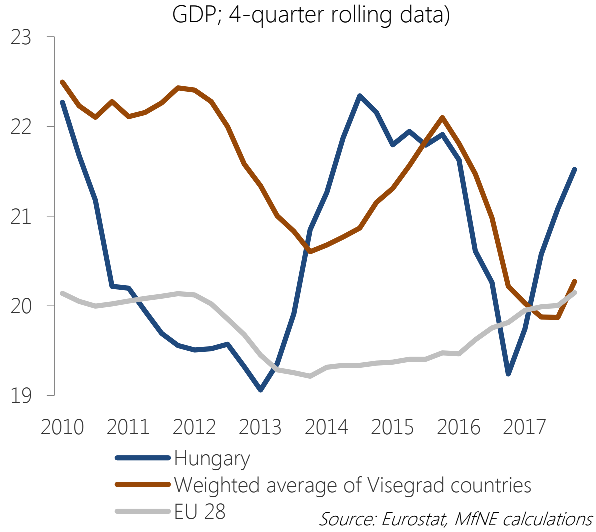
First, to face new challenges and also to use opportunities they offer, the Government has created the Industry 4.0 platform, which aims to spread the most modern tools and methods – robotisation, automation, interconnection of machines through the internet – in the Hungarian economy in the quickest possible way. Second, the corporate tax rate – which was cut to a record low in the context of the European Union as part of the long-term wage and tax agreement concluded in November 2016 – is a means of tax policy to help the spreading of capital-intensive technologies. Third, thanks to the test track to be put into operation in Zalaegerszeg this year, the region will offer a unique opportunity to test and develop self-driving vehicles in real traffic situations, which will also be supported by the construction of the 5G network assisting vehicle-to-vehicle communication. The features of the test track had greatly contributed to renowned IT, electronic and vehicle companies having established the Zala Autonomous Vehicle Cluster, aiming to research and develop intelligent transport systems and to harmonise innovation capacities.

The capacity extensions of the flagships of the domestic vehicle industry – such as Audi in Győr and Mercedes in Kecskemét –, which altogether reach 2% of the Hungarian GDP, created the opportunity for the serial manufacturing of electric vehicles in Hungary, which, through the production chains, can provide a wide foundation for the further development of the related industries. In addition to the developments in passenger car manufacturing, it is important to mention that the autumn of 2017 saw the production of the first electric buses in the Komárom factory of BYD, providing a new technology for public transport. Furthermore, the electric vehicle battery plants to be constructed in Göd, Miskolc and Komárom can provide batteries to about 300 thousand electric cars at an annual level in the future, through which Hungary may obtain production capacities that may be significant also in the international context. The already tangible presence and anticipated take-off of this new production, based on innovation, provides the foundation for the automotive industry to remain one of the success sectors of the Hungarian economy.

2.2.2. Investment

In 2017 more than HUF 8,200 billion developments has been implemented in Hungary, thus investment activity increased by 17% year-on-year. Thanks to that, Hungary's investment rate of 21.5% considerably outperforms the average rate of Visegrad Countries amounting to 20.3% as well as the EU average. It is a favorable factor that the growth of investments can be regarded balanced from several aspects: first, the performance of all three sectors contributed to the outstanding expansion; second, a two-digit dynamics was registered in the increase of both construction and machine-type developments directly strengthening production capacities. The expansion that affects nearly every sector of the national economy strengthens favorable economic outlooks not only for this year but also in the medium term, as, once capacities have been installed, the developments will give new boost to economic growth through the commencement of production.

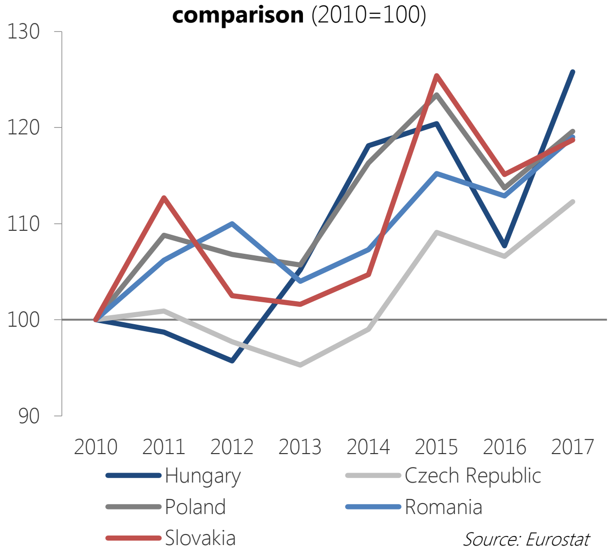
Chart 2.10: Investment rate in international comparison (gross fixed investments in percent of GDP; 4-quarter rolling data)



Source: Eurostat, MfNE calculations

The developments of private sector played a key role in this vigorous take-off. The investments in manufacturing with the largest weight in corporate sector expanded by 7.3% last year, of which developments of automotive industry increased outstandingly by 34% year-over-year. These capacity extensions are also substantially supported by the corporate tax rate cut to 9% from 2017 under the six-year wage and tax agreement resulting in the lowest rate in the EU. Besides that it substantially mitigates capital costs, looking ahead, also strengthens the investment activity of companies as well as Hungary's ability to attract capital.

Chart 2.11.: Gross fixed investments in regional comparison (2010=100)



Source: Eurostat

In addition, investments in manufacturing have also been encouraged through the Large Corporation Investment Subsidy Programme of the Ministry for National Economy since 2015, as well as the Supplier Development Programme available since 2017 supporting Hungarian small and medium-sized enterprises to join the supply chain of large international companies to the highest extent possible (*Box 3*).

In April 2017 the total value of high-volume planned capacity extensions exceeded HUF 1,200 billion, and since then additional corporate developments have been announced in a total value of about HUF 900 billion. Taking into account the investments closed last year, currently there are ongoing high-volume developments in the value of over HUF 1,900 billion, which will have substantial effect on Hungary's export performance as well in the coming period, after the build-up of production capacities (*Chart 2.12*).

The continuous strengthening of Hungary's ability to attract capital can be illustrated by the projects managed by Hungarian Investment Promotion Agency (HIPA). Based on these, as a result of the investment decisions with a total value of EUR 3.5

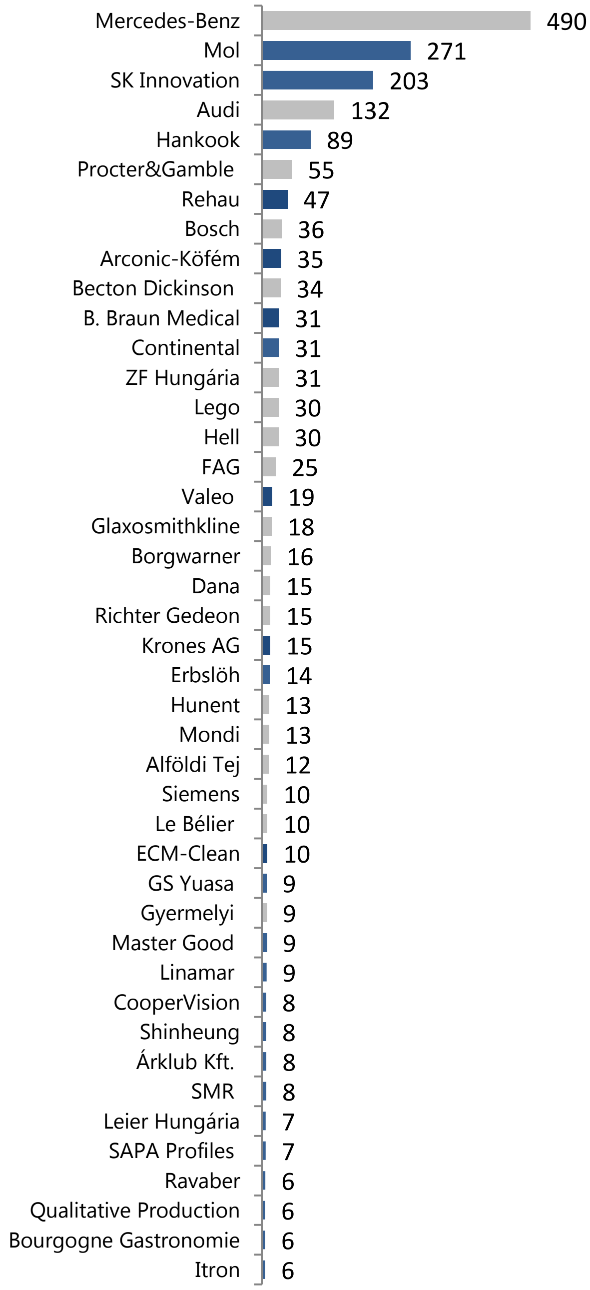
billion in 2017, 17,000 jobs will be created throughout the country in the coming period. Similarly to the previous years, one-third of the projects was connected to investments newly coming to the country, while two-thirds of them to re-investments or expansions of incumbent companies. These developments also confirm that the Hungarian economic and business environment is attractive, also the important and innovative actors of international market are satisfied with the past and expected future performance and profitability of their manufacturing units earlier established in the country, and therefore make further investments in their Hungarian units. It is worth noting that, total value of investment decisions made in the vehicle industry is EUR 1.5 billion within the HIPA projects resulting in the creation of 6,700 new workplaces.

In the case of automotive industry, it is an important trend that Hungary is no longer regarded as a mere traditional manufacturing venue, as in line with global trends, the electromobility and the manufacturing and development of self-driving cars requires modern technology as well as professionals and engineers able to handle the technology. Hungary already has excellent production and research and development references in these two areas, as recently significant German and Asian partners have decided to establish R&D capacities in Hungary.

Looking ahead it can be stated that the recently announced high-volume developments of large companies affecting mostly the automotive industry and its supplier network are expected to take off gradually. Besides low yield environment and favorable business climate the investment activity of small and medium-sized enterprises is also supported by the accelerated allocation of EU funds intended for economic development.

Regarding the households' investments, it can be established that after the positive turn in 2016, the vigorous expansion of housing market continued in 2017. Besides the stably low interest rate environment and the permanent improvement of employment and income situation of households, Government measures also gave a considerable boost to the housing market. As a result of this, the continuous rise in the number of new construction permits and simple notifications in the past years is already reflected in the surge of housing construction as well. During the last year altogether 14,400 dwellings were built in the country representing a 44% increase year-over-year. In 2017, total value of new housing loans increased by 39% year-over-year confirming the recovery on the demand side, as well as reflecting the households' confidence in a predictable and prospering future.

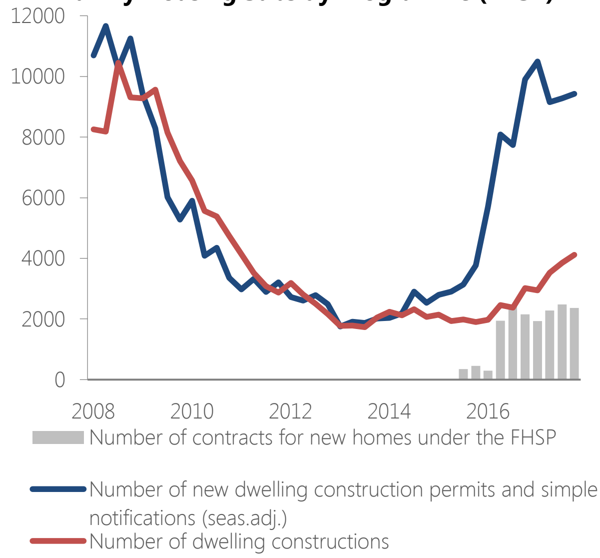
Chart 2.12: Main investment decisions of recent period (HUF billion; investment decision from the last one year in blue)



Source: Press information, HIPA

The Family Housing Subsidy Programme had a major contribution to the recovery of housing market. Until the end of February 2018 the banks received the application of altogether 70,000 households in the value of HUF 197 billion representing more than 0.5% of annual domestic GDP. Thanks to the applications received, the total value of subsidies paid to the 53,000 families under the Family Housing Subsidy Programme amounted to over HUF 165 billion in the period from January 2016 to February 2018. Within that, contracts have been concluded for the construction or purchase of new dwellings with more than 16,000 families in the value of about HUF 112 billion.

Chart 2.13: Number of dwelling constructions, permits and contracts for new homes under Family Housing Subsidy Programme (FHSP)



Source: HCSO, MfNE

The favorable tendencies in the housing market are expected to further strengthen during the coming quarters resulting in a further growth in the number of newly constructed dwellings in 2018. This is supported by the fact that the number of new construction permits and simple notifications continued to rise last year, as 38,000 of them were registered meaning a 20% growth year-over-year. Furthermore, it is important to stress that as the result of government measures mass amount of construction projects launched in the last 2 to 3 years, however the majority of them have not yet been finished. While in 2015-2017 82,000 permits were registered, only 32,000 dwellings were constructed during this time, and therefore a strong catch-up can be expected in the number of dwelling constructions in the coming years.

Finally, the acceleration of developments related to the 2014-2020 EU funds and/or realised from the budget also played an important role in the dynamic expansion of investments in 2017. From the available amount to Hungary under the new EU multiannual financial framework, more than HUF 4,400 billion has been paid out by the end of March 2018 contributing to the 54% nominal increase in public investments in 2017 year-over-year.

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. It is particularly favorable that every EU tender has been announced by the end of March 2017, and 94% of full available amounts have been committed by the middle of April 2018, in which respect Hungary ranks first in EU comparison. While the transfers allocated so far were still mostly advance payments, the projects implemented from EU funds continue to substantially strengthen the investment performance during 2018 and 2019.

Based on all these, the investments are expected to expand in a balanced structure in the coming period. Following the outstanding performance of last year, developments may have a two-digit volume growth in 2018 as well. Due to the peak at housing market and also in the absorption of EU funds in 2019, a more moderate increase in investments can be forecast for 2020; however, after the drop-out of high basis, the expansion of developments will become dynamic again. All in all, on the forecast horizon, due to the joint expansion of private and government investments the capital stock in the economy will significantly increase resulting in direct GDP effects and contributing to maintaining Hungary's high potential growth rate as well.

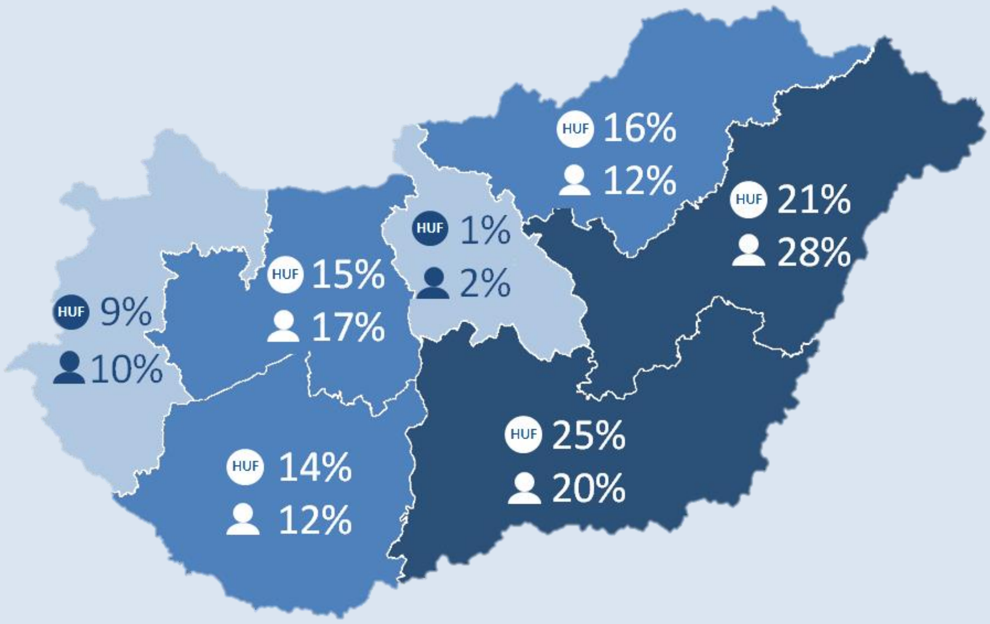
Box 3: The results of Large Corporation Investment Subsidy Programme achieved so far

Industrial development is a key element among the economic policy objectives of Government and Ministry for National Economy. One of the means thereof, the Large Corporation Investment Subsidy (LCIS) Programme was launched in 2015. This Programme supports the developments of manufacturing companies with significant contribution to the growth and modernisation of Hungarian economy and to the expansion of employment. 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.

Subsidies are granted based on a complexity of aspects, including economic as well as territorial and social development considerations. The factors assessed include the current development of the district affected by the investment, the tendering company's potential to increase its revenues, value added or export growth, the possibility of building new supplier relationships, the number of new workplaces created and the period for which they are committed to be maintained, the positive effect of project on the regional labor market, and the proportion to which the project requires skilled workers and employees with higher education qualification. Beyond that, in line with government priorities, the extent to which the investment targets or assists the application of Industry 4.0 solutions is also considered, along with whether the activity intended to be developed is one of the key sectors to be developed under the Irinyi Plan, and how much innovation it contains.

Under the LCIS Programme, 75 companies have received non-refundable subsidy with a total amount of HUF 42.6 billion since 2015, resulting in developments of HUF 105 billion which equals nearly 0.3% of annual domestic GDP. It is especially favorable that, thanks to the subsidized investments, a total of 1,987 new workplaces are created in the country.

Regional distribution of subsidies and new workplaces created by the LCIS Programme (%)

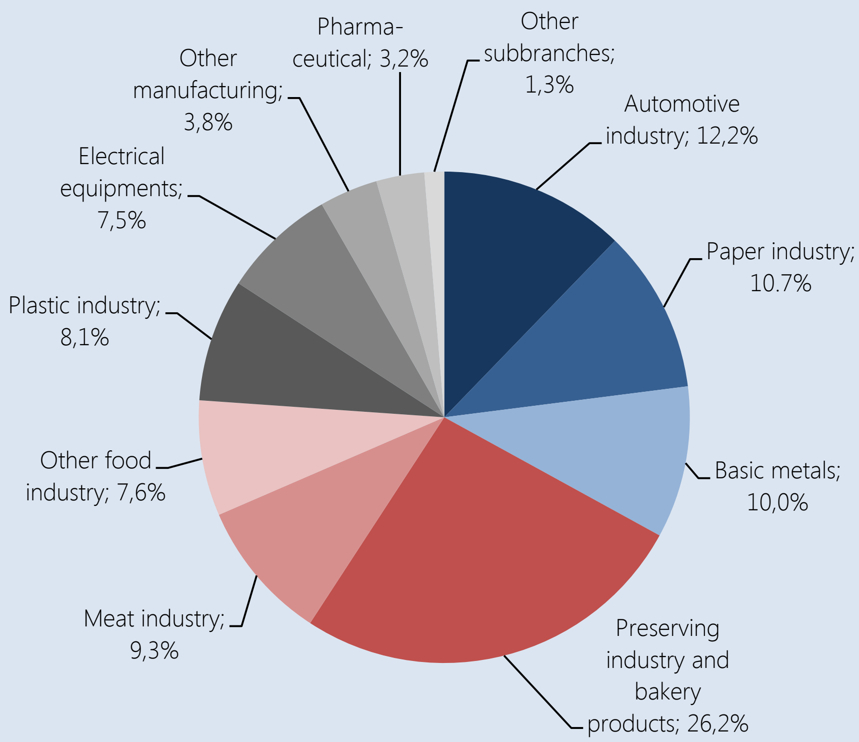


Remark: rounded values
Source: MfNE

The subsidies granted since 2015 have successfully contributed to balancing out the regional differences of the Hungarian economy, as capacity building developments planned to take place in the eastern regions of the country use up more than 60% of non-refundable grants, among which the North Great Plain and South Great Plain regions stand out with their more than 20% share each. Similarly, nearly a half of the workplaces to be created as a result of the investments will be located in these two regions, thereby assisting the convergence of the counties whose unemployment rate is above the national average. Beyond that, nearly 30% of subsidies and new workplaces concern the Central Transdanubian and Southern Transdanubian regions, while the Central Hungarian and Western Transdanubian regions, which are regarded as the more developed areas of the country, use 10% of the total subsidies and have a similar share of the new workplaces created.

A significant part, 43% of the amounts contracted so far is used by the food industry that is one of the key strategic sectors, and the strengthening its competitiveness is an important governmental objective. Within the food industry, 61% of the subsidies have been received by companies active in the field of preservatives and bakery products, and meat processing has also been given a considerable 22% share. Beyond that, the vehicle industry and paper industry had a share of slightly over 10% in the LCIS Programme, while the plastic, rubber industries (the latter typically containing companies connected with the supplier chains of automotive companies) and electricity represented a share of around 8% each. As regards the creation of workplaces, the food industry is the forerunner with its 40% share, with metal processing in second place with 16%.

Distribution of the LCIS subsidies among the sub-sectors of the manufacturing industry (%)



Source: MfNE

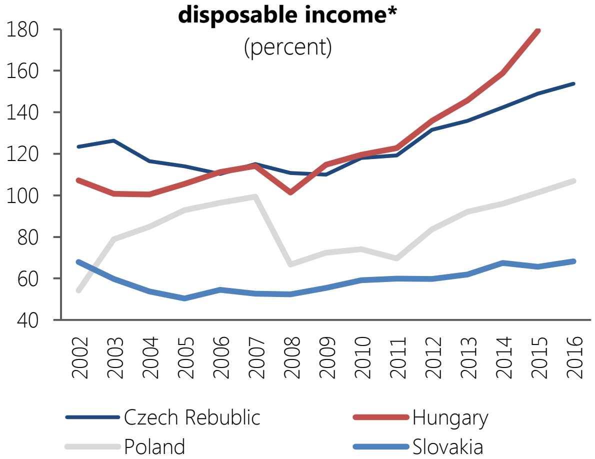
As under the LCIS Programme non-refundable supports are granted to the selected companies, examining the return on investments is a key consideration for the budget. In general terms, return on the 83 development projects realised by the 75 companies can be achieved in 4.7 years on average. From a budgetary point of view, it is especially favorable that 77% of the projects reproduce the granted amounts through the direct tax and contribution payments within 5 years, while 90% of them do so within 6 years. Thus, it can be said that thanks to the LCIS Programme only such corporate developments have been subsidised which ensure return for the budget.

Looking ahead, in 2018 a further amount of at least HUF 15 billion is available for the Government to subsidise large companies' investments. While between 2015 and 2017 the non-refundable amounts were channeled only to the manufacturing industry, however, from this year large construction companies can also tender. Due to the extension of the subsidy and through the easing of the capacity constraints, the LCIS Programme may contribute to meeting the recently increased demand in the construction industry.

2.2.3. Consumption

The expansion of consumption continued to accelerate in 2017. Gross wages and salaries has significantly increased as a result of the six-year wage agreement and the favourable labour market conditions. Besides, the raise of the family tax allowance for families with two children also contributed to the increase in the disposable income of households. The expansion of consumption is further supported by the reduction of the VAT rate on certain basic foodstuffs – such as poultry meat, fresh milk, eggs –, the internet and certain restaurant services. As a result of these factors, consumer confidence indicators have risen to a level not seen for 10 years. In 2017 the households' consumption expenditure has increased by nearly 5%, providing more than a half of the GDP expansion, as far as contribution to growth is concerned. Nevertheless, households still have a high propensity to save; as a result the sector's financial position is outstandingly strong in a regional comparison *(Chart 2.14)*.

Chart 2.14: Household net financial assets ratio in proportion of adjusted disposable income*

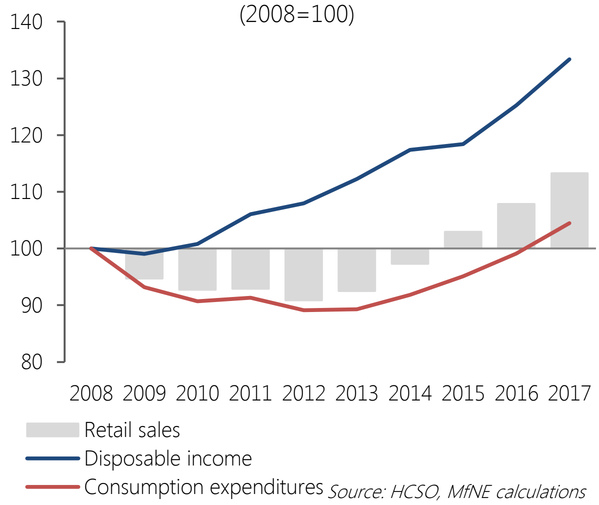


**Adjusted by the change in pension rights*

Source: HCSO, MNB, MfNE calculations

Consumption has expanded in an outstanding rate in the past two years, accelerating to a close to 6% growth rate by Q4 2017. Thereby the pace of consumption growth has approached the growth rate of disposable income *(Chart 2.15)*. Retail sales grew by 6% in Q4 2017, and the dynamics of growth further accelerated in 2018. As retail sales move very much in line with consumption, consumption data also expected to accelerate. As a result, the dynamics of consumption can further strengthen in accordance with income developments.

Chart 2.15: Retail sales, disposable income and consumption expenditure



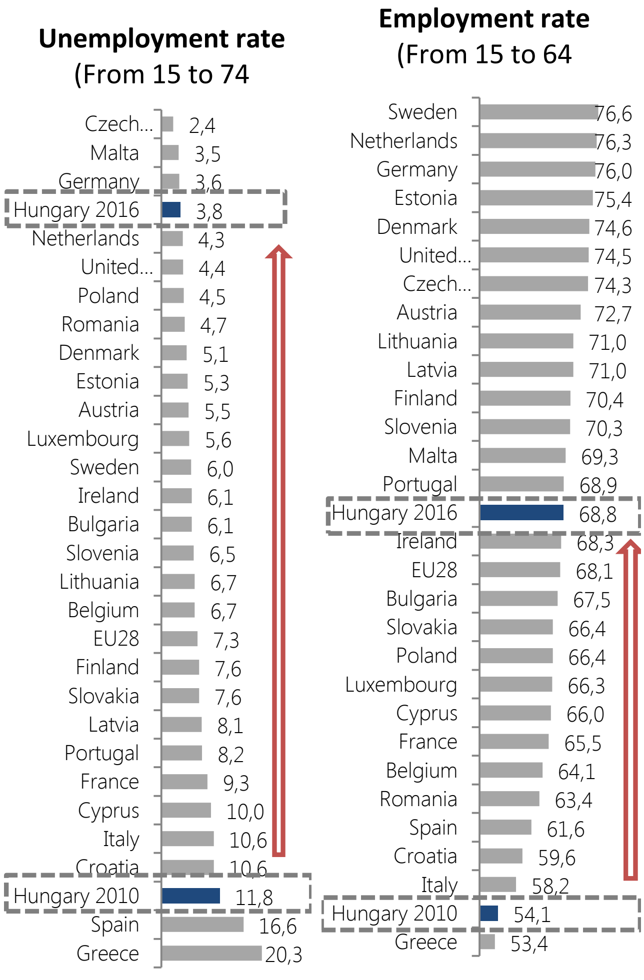
Source: HCSO, MfNE calculations

Looking ahead, favourable labour market trends can be expected to persist – owing much to the six-year wage agreement –, and so the income situation of households will further improve in 2018. This may result in a decrease in the sector's savings rate, opening the way for the continuing expansion of consumption. The latest monthly data – wage dynamics and the expansion of retail sales in early 2018 – suggest that consumption will further accelerate. In March 2018 the Government decided to cut winter utility costs, as a result of which HUF 12,000 from the utility bills are credited to each household in April. This adds about HUF 50 billion to the disposable income of households, having a positive effect on the 2018 consumption data. As a result of these, an expansion of above 5% can be expected in consumption in 2018, and this favourable trend will probably continue in the coming years as well.

2.3 Labour market

Thanks to the reforms implemented since 2010 the number of active people has been increasing and employment has been expanding for eight years now. In recent years the labour market has played an important role in economic growth. The growth of employment and labour market participation is outstanding in European comparison, and the Hungarian unemployment rate has by now become the fourth best in the European Union (Chart *2.16*).

Chart 2.16: Labour market indicators in the EU
(Q4 2017, percent)

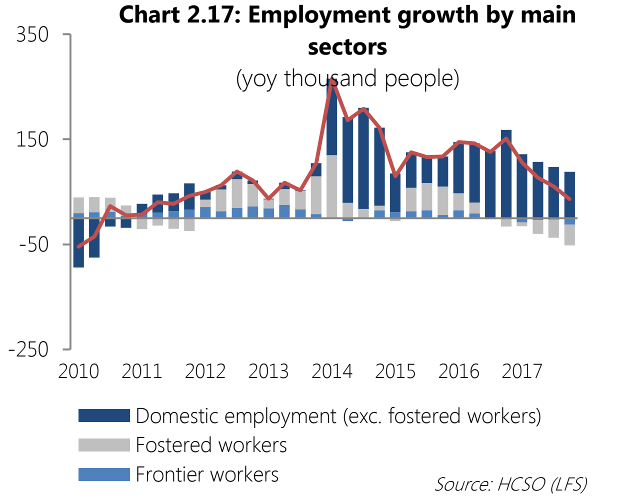


**Hungary was on the 21st place in 2010 Q1*

**Hungary was on the 28th place in 2010 Q1*

As a result of Government measures, the participation rate – following further increase – reached 71.2% in 2017, which took place in parallel with the expansion of employment and the moderation of the unemployment rate to 4.2%. After the expansion of the recent years, the number of fostered workers declined by 27 thousand in 2017 which was possible due to the improving employment opportunities in the private sector. It is also thanks to the latter that the number of those working abroad for a period shorter than 1 year decreased in 2017. Following the trend of the previous years, the number of employees grew by 103 thousand persons (2.6%), calculated without public employees and foreign workers, in the domestic primary labour market (*Chart 2.17*). Thanks to the favourable processes, the number of employees has risen to a level not seen since the democratic transformation, reaching 4,421 thousand persons resulting an employment rate of 68.2%.

Chart 2.17: Employment growth by main sectors
(yoy thousand people)



Source: HCSO (LFS)

Among the branches of the national economy, the manufacturing industry showed the most significant growth in employment last year. This growth was mainly associated with the automotive industry and the related supplier networks. Thanks to the general upturn, the transportation and storage sector and construction also saw a significant employment growth by 16 thousand and 25 thousand persons respectively (*Chart 2.18*).

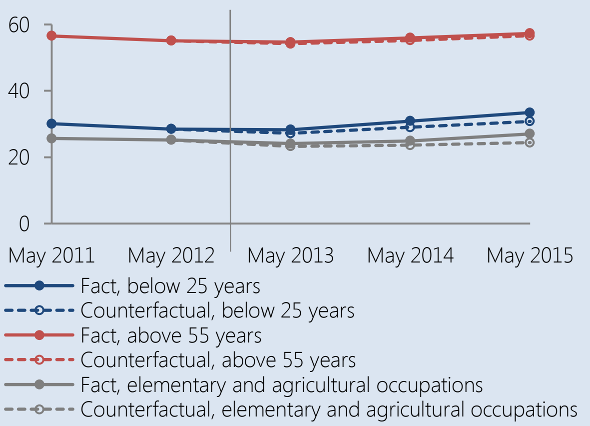
Besides the increasing labour demand, due to the stable growth path of the economy, the success was founded by a number of other measures stimulating labour market participation and labour demand as well: for example, the personal income tax rate cut, the social security contribution allowances provided in the framework of the Job Protection Act, the changes in job-seeking assistances, the tightening of the conditions of disability retirement, the rise in effective retirement age, as well as the six-year wage and tax agreement.

Box 4: The effects of the Job Protection Act on employment

The improvements in the employment of young, elder and low-skilled people in particular are worth highlighting among the favourable labour market trends. An econometric analysis prepared in the MNE quantified the part of the expansion of employment that can be attributed to the cuts in employers' allowances provided under the Job Protection Act (JPA, introduced in 2013). According to the estimation based on taxation micro data and carried out with the difference of differences method, the JPA had a statistically significant effect in the three main target groups already in 2013, and these effects continuously strengthened until 2015: By 2015, the employment probability of those under 25 years of age increased by 2.6 percentage points, that of those above 55 years by 0.8 percentage points and that of low-skilled workers by 2.7 percentage points as compared to respective control groups not affected by the JPA. Among young and unskilled workers there was no significant difference in the changes of the employment chances of men and women, however, in the case of the elderly, the complete effect can be attributed to the higher employment rate of women.

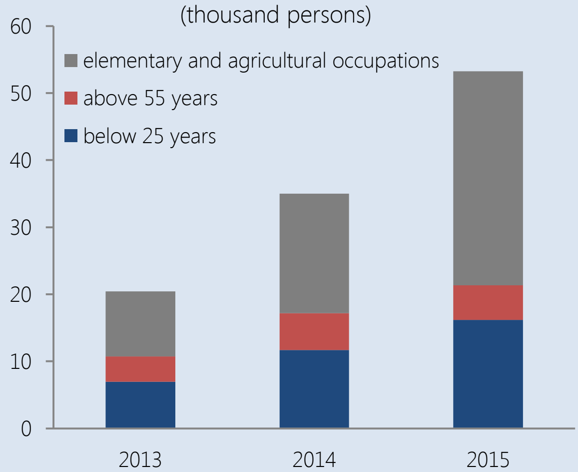
Comparing the factual processes with the hypothetic case which calculates without the launch of the JPA, it can be established that in the target groups – especially among young and low-skilled people – the JPA contributed to the increase in employment rates. Taking into account that due to changes in the relative wage costs employers may employ workers who are the beneficiaries of this programme instead of workers who are not members of any target group, it is estimated that as a result of the JPA the number of persons employed has increased by over 50,000 by 2015. It should be noted that the analysis has found no such substitution effect for the young and the elderly, but the employment of non-beneficiary low-qualified workers has slightly declined. Due to this the net expansion of employment is about 4 thousand persons lower than the increase shown in the target groups.

Observed and counterfactual employment rates in the main target groups of the JPA (percent)



Vertical line shows the introduction of the JPA *Source: MfNE calculation*

Net employment effect of the JPA in the main target groups (thousand persons)



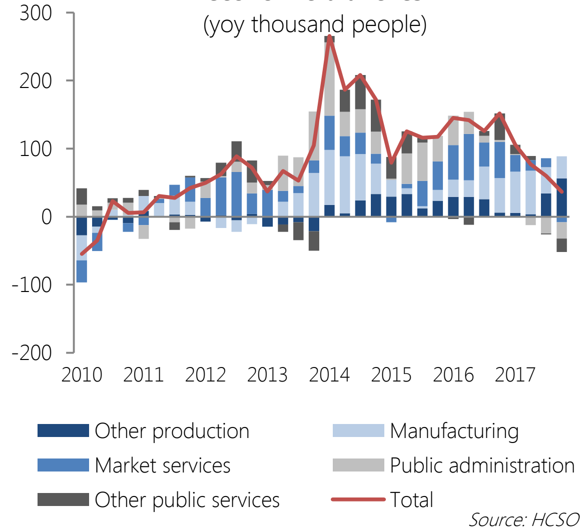
Source: MfNE calculation

The currently available data did not allow estimation of the JPA's effects in the target group of those returning to work after childcare leave. At the same time, the effect of the allowance targeted to the long-term unemployed was estimated based on the unemployment register. According to that, the probability of changing unemployment for a workplace in the private sector has increased by 1 percentage point to 2.8% by 2014 as the result of the measure. The use ratio of the allowances in the main target groups is high but not complete, in spite of the simple administration. There were companies especially in the SME sector that did not use the benefits available for their eligible employees. It can also be observed that the allowances for those returning after childcare leave or unemployment are the ones less used, which may be connected with the fact that the use of these requires separate certificates.

In conclusion, the JPA contributed to increasing the employment rate of – first of all – young and low-qualified workers. In parallel to that, the taxes and contributions associated with the higher employment rate produced a surplus income for the budget in the amount of HUF 55 billion in 2015, covering about 40% of the costs of the JPA in the given year.

Chart 2.18: Employment growth by economic branches

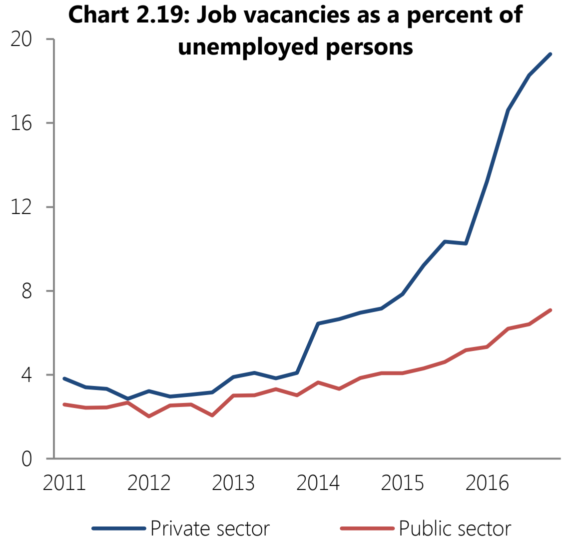
(yoy thousand people)



Source: HCSO

Due to the recently significantly expanding employment and strong economic growth, the labour market environment has become increasingly tight *(Chart 2.18)*. This trend is accelerated by the gradual depletion of labour market reserves, caused by the growth of employment on the one hand, and by the shrinking 15-74 years old population on the other. Due to these factors the number of inactive people decreased to 2.85 million by 2017 from the nearly 3.46 million in 2010. More than half of this group consists of pensioners, whose participation in the labour market will be increased in the coming years – in spite of the demographic effects – due to the gradual raising of the retirement age by 2022 as well as the jobs offered by pensioners' cooperatives. The labour market activity of full-time students may strengthen due to the increase in the number of those participating in dual training and by the spread of student work. The return to work of those receiving child-care allowance may be accelerated by the implementation of the nursery development programme. These two groups may be employed mainly in part-time. The convergence of unemployment in the regions being in a more unfavourable situation (typically eastern and south-western counties) to the rates of those with more favourable employment indicators may lead to a further decrease in unemployment. Moreover, the increasing labour shortage encourages employers – in addition to increasing wages – to loosen the recruitment conditions for the individual positions and to pay more attention to organising in-house trainings to develop employees' skills. Consequently, in parallel to the decreasing unemployment rate, more workers may enter the labour market.

Chart 2.19: Job vacancies as a percent of unemployed persons



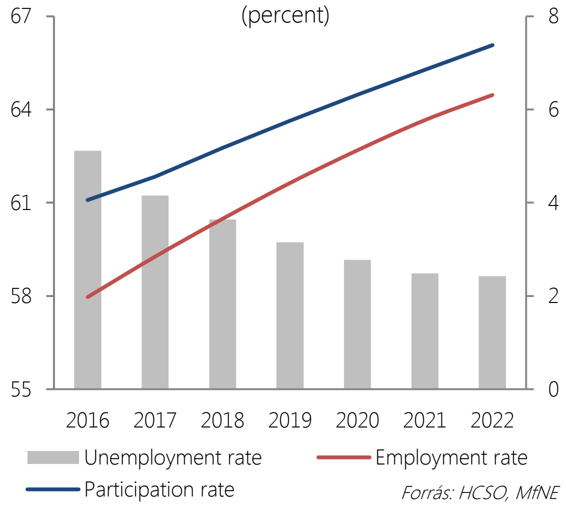
Source: HCSO, MfNE calculation

To address the shortage of labour force in the private sector, the average number of fostered workers must be gradually reduced from 223 thousand in 2016 to 150 thousand until 2020, based on the Government's decision. In addition, after 1 June 2018 – introduced in an ascending system –, the maximum duration of participation in the public work scheme 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 jobseekers are unable to find jobs beyond their own faults. The involvement of jobseekers in the public work scheme under the age of 25 and those with vocational qualification will be possible only with restrictions.

Higher wages, ensured by the six-year wage agreement entered upon the initiative by the Government (containing a significant increase in minimum wage and guaranteed wage minimum) will help to satisfy the still strong labour market demand by increasing the labour supply. Higher wages may also encourage regional mobility within the country, while the bigger difference compared to the fostered workers' wage facilitates the flow of these people to the private sector; in addition, the more rapid wage convergence reduces the attractiveness of taking a job abroad as well.

As an impact of past and current Government measures and favourable cyclical developments, increasing participation is expected to persist over the forecast horizon as well *(Chart 2.20)*. In parallel with the sustained 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 a further decrease in the Hungarian unemployment rate that is already in the leading group of the European Union.

Chart 2.20: Participation, employment and unemployment rate
(percent)



Forrás: HCSO, MfNE

Tighter labour market conditions caused faster wage growth, resulting in a two-digit wage increase in the private sector. The wage index of the public sector was raised by the career models as well as the wage settlement at certain state-owned enterprises. Thanks to the dynamic growth in wages and moderate inflation, real wages increased by 10.3% in the national economy in 2017 (*Chart 2.21*).

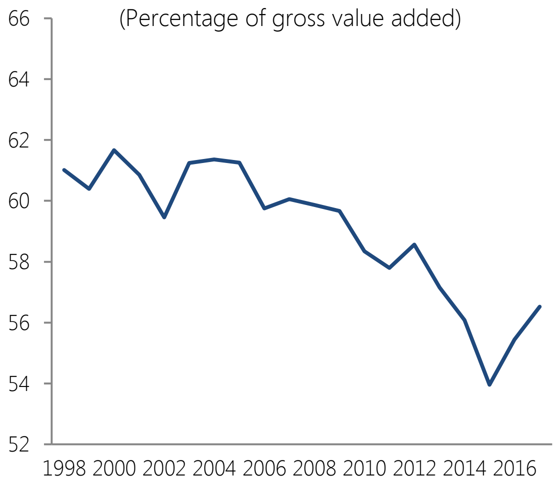
Even in foresight, this stronger wage dynamics will not change Hungary's competitiveness. This can be explained by the fact that, as a result of the favourable external environment, the convergence of minimum wages and wage levels of regional peers has also accelerated, on the one hand. On the other hand, following the robust wage increase in 2017 and expected this year, the growth rate of the private sector's adjusted wage share will slow down *(Chart 2.22)*. This is helped by the further decline of the social contribution tax rate by a combined 8 percentage points of in the coming years.

Chart 2. 21: Net real wages
(yoy, percent)

Source: HCSO

The six-year wage agreement entered upon the initiative by the Government may result in the faster increase of gross wages also in 2018. Thanks to the cut in employers' social security contributions by 5 percentage points in 2017 and by a further 2.5 percentage points in 2018, wage costs are growing at a slower pace than gross wages. The increase of wages – by encouraging the companies' efforts to increase efficiency – contributes to the expansion of employment high value added in positions. Thanks to the agreement the continuation of the rapid convergence of wages can be projected, while the favourable labour market developments can be maintained in the coming years as well. As a result real wages may increase by nearly 50% compared to 2016 by the end of the forecast horizon.

Chart 2.22: Adjusted wage share
(Percentage of gross value added)



Source: HCSO, MfNE calculation

Box 5: Assessment of the impacts of the wage and tax agreement which came into force in 2017

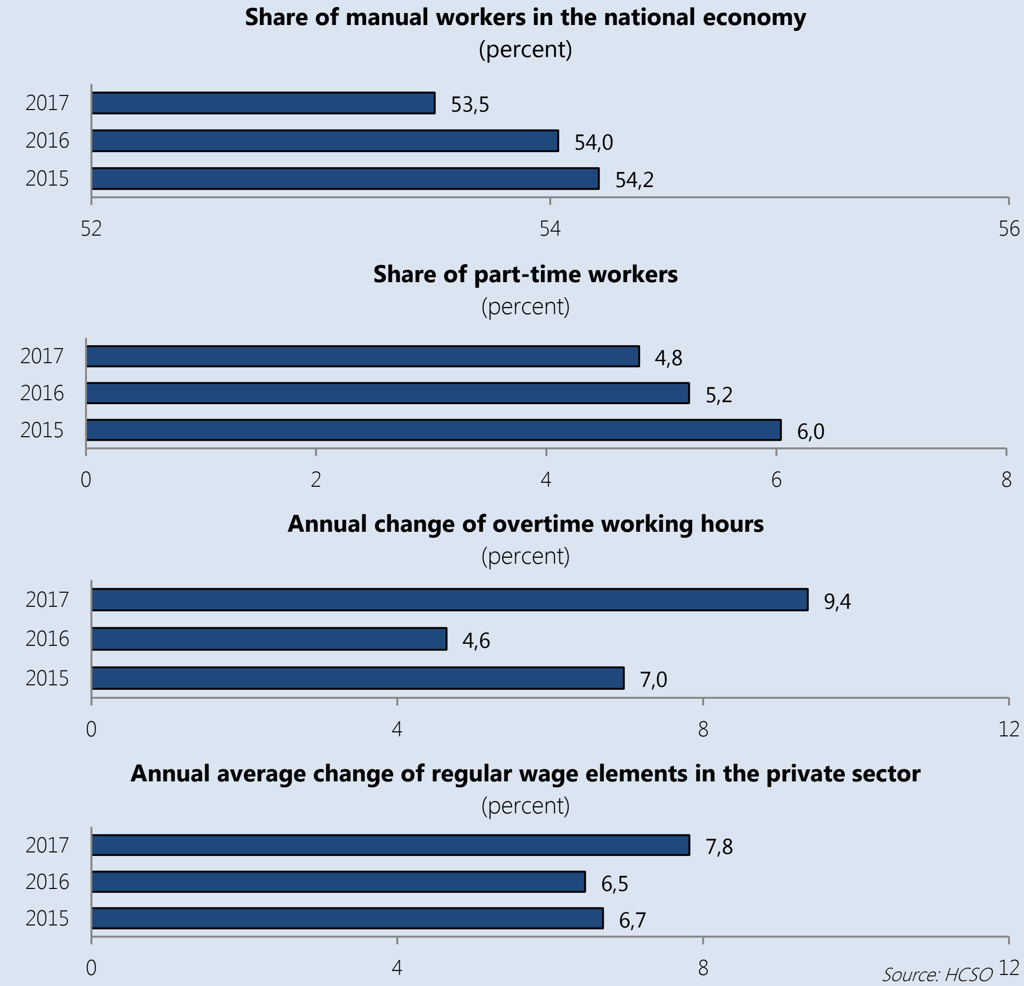
The agreement adopted for multiple years by the participants of the Permanent Consultation Forum of the Private Sector and the Government on raising the minimum wage, the guaranteed wage minimum and real wages, as well as on decreasing employers' social security contributions and the corporate income tax rate came into force in 2017. In accordance with the agreement, the amount of the minimum wage and the guaranteed wage minimum increased by 15 and 25 percent in 2017, and by 8 and 12 percent in 2018. In parallel with raising the amount of the mandatory minimum wage the rate of employers' social security contribution decreased by 5 percentage points in 2017 and by 2.5 in 2018. Furthermore, in the following years the rate of the social security contribution will decrease by 2 percentage points four times in those quarters when the increase in real wages reaches 6 percent since the date of the previous decrease. Finally, in line with the agreement the corporate tax system become flat rate and the rate was lowered to 9 percent at the beginning of 2017.
The agreement stems from the recognition that, as the employment rate significantly rose in the previous years, labour became scarcer. As a result thereof, focus needs to be increasingly shifted to strengthening productivity to maintain the dynamic economic growth. This requires motivated and qualified labour force, on the one hand, while on the other hand, the increase in wages may urge companies to improve their productivity. Higher wages opened the possibility for gradually lowering social security contributions to a level that is competitive even in regional comparison and also maintaining a balanced budget. Lowering the corporate tax rate to 9%, the lowest in the EU, also became possible. These measures are aimed to strengthen the competitiveness of the Hungarian economy also in the long term.

The experiences of the period since the effective date of the agreement show that companies were able to finance the wage increases (which were partially balanced out by decreasing tax burdens), while employment and investments continued to increase as well. The latter well demonstrates the efforts taken for increasing efficiency.

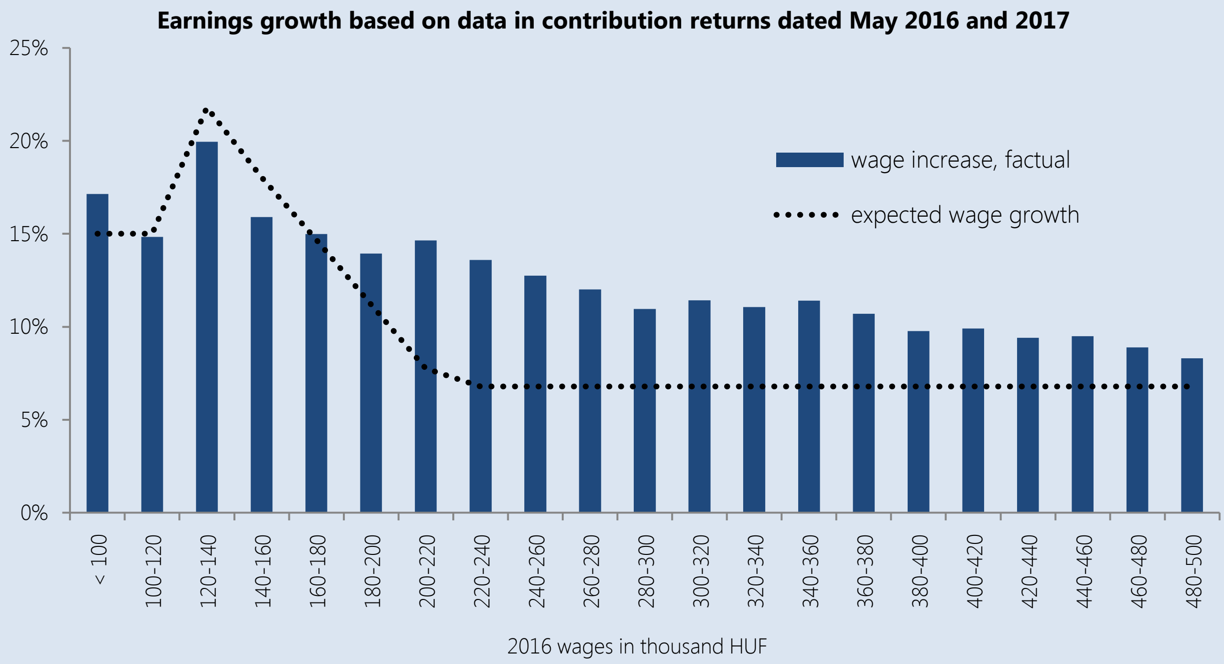
Several employment indicators confirm that the wage and tax agreement had no unfavourable effect on employment at the level of national economy. The most evident of these is that the number of persons employed continued to grow. Had companies been forced to cut costs, they would have increased the number of part-time workers and would have cut down on overtime. Other cost-cutting steps could have included paying minimum wage to employees instead of the higher guaranteed wage minimum by re-classifying some of the jobs requiring at least secondary qualification, or to cut non-regular wage elements paid over the base wage. However, data show that employers did not use these cost-cutting opportunities. The share of part-time workers continued to fall in 2017, overtime has grown, the proportion of physical workers has declined, while the growth of non-regular wage elements has accelerated. Furthermore, at 88% of the organisations taking part in the assessment carried out by Poór et al. (2017), the net amount of cafeteria benefits increased or did not change[1]. These positive developments can be attributed to the fact that employees maintained their strong bargaining position due to the high labour demand resulting from the strong economic upturn, so their position in the labour market continued to improve in spite of the wage raises.

[1] Poór et al. (2017): "A vállalati juttatásokban bekövetkezett változások 2017-ben" ("Changes in corporate benefits in 2017"), Final Research Report, Management and HR Research Centre, Szent István University, GTK TTI, ISBN 978-963-269-621-8

Changes in certain labour market indicators in the years before and after the wage agreement



The willingness of businesses to raise wages is also shown by the fact that, as compared to previous minimum wage increases, wage raises had a bigger spillover effect. In light of the experiences of the minimum wage raise of 2001-2002, employers could be expected to give a significant raise also to those on higher wages in order to maintain the wage differences within the company. Based on our subsequent estimates, however, this spillover effect was stronger than what we expected on the basis of previous experiences. The following chart shows how much the earnings in each income band calculated based on the earnings in 2016 increased in the same income band in 2017. It shows that the wage increase exceeded the expected amount even in the case of near average earners. The favourable cyclical environment and the tightness of the labour market could also contribute to the strength of the spillover effect.



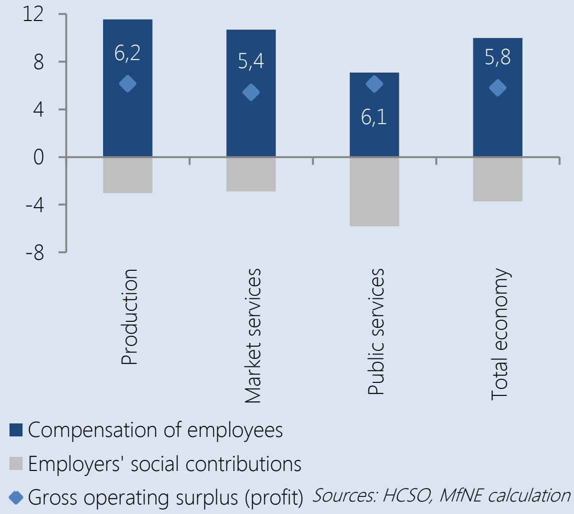
** The distribution is based on 2016 earnings*

Source: MfNE calculation

In assessing the wage and tax agreement, it is of key importance to understand the corporate sector's behaviour, especially in light of the fact that tax allowances and additional wage costs have different impacts on the individual companies. However, there was no significant difference between the performances of the respective economic branches. This is because although wages have considerably risen in all sectors, the cut of social security contributions has significantly mitigated the cost implications of additional wage increases. Partly due to that, and partly as a consequence of the recovery of demand, the individual branches experienced profit growth to a similar extent i.e. of about 5-6%. It has to be noted that the profitability in the private sector increased in an outstanding pace, by 10.5%, in the last quarter of 2017. The improvement in profitability also boosts demand for production factors, which is well demonstrated by the fact that, in addition to the two-digit expansion of private investments, the employment rate also considerably grew (by 2.9%) in the private sector last year. In parallel to that, the number of company foundations also strengthened in 2017 – significantly exceeding the trend experienced in the past years –, which can be largely explained by the acceleration of the economic growth and the favourable outlooks. In relation to that, the number of company liquidations continued to decline in 2017. It can therefore be established that there were no unfavourable shift in the corporate sector's behaviour after the introduction of the wage and tax agreement; on the contrary, demand by the corporate sector increased considerably and the sector's profitability has also improved.

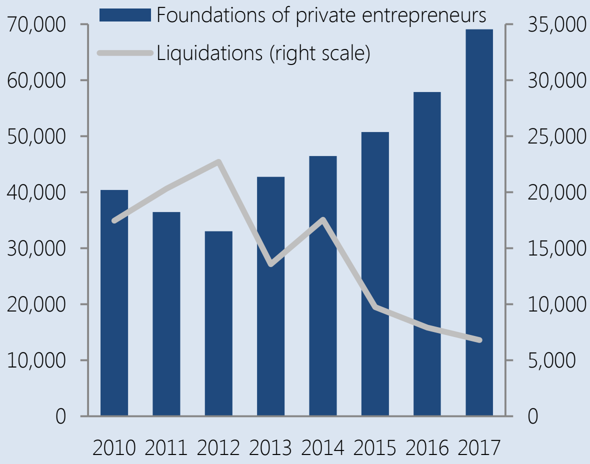
The agreement results in an improvement of Hungary's competitiveness also in the long term. This is due to the cut of employers' social security contribution, on the one hand, as these taxes were previously high in regional and OECD comparison as well; and to the moderation of the corporate tax rate, on the other. Moreover, these results were achieved while maintaining a balanced budget. Further results of the agreement include the acceleration of the growth of wages, which was necessary because of the tight labour supply due to low wages. First, the convergence of wages decreased the attractiveness of working abroad, thereby contributing to keeping the labour force at home. Second, the higher wages encouraged some of the inactive groups to return to the labour market. Third, the larger difference between the minimum wage and the wage of fostered workers increased the attractiveness of seeking jobs in the primary labour market. The raise of the minimum wage helped this process, as – in combination with the reduction of social security contribution – according to our estimations it contributed to the increase of wages by 6 percentage points in 2017. The reduction of territorial wage differences is another important achievement. It is demonstrated by the fact that wages grew at a higher pace in the eastern and south-western regions (which have lower wage levels) than in Budapest and the north-western regions that have higher wage levels.

Profit and wage costs
(y/y change in 2017)



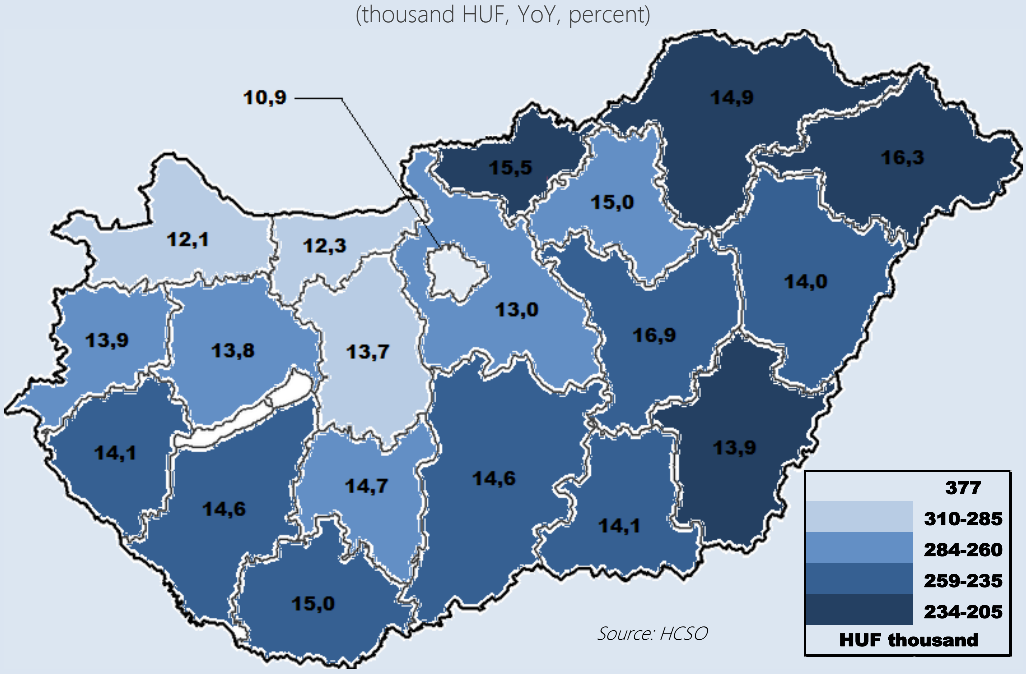
Sources: HCSO, MfNE calculation

Company foundations, liquidations
(number)



Source: Opten, Bisnode

Territorial distribution and growth of monthly gross average earnings, 2017
(thousand HUF, YoY, percent)



Source: HCSO

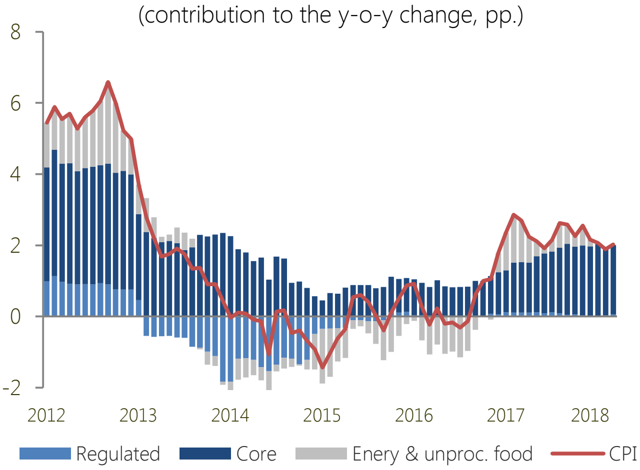
In summary, the long-term wage and tax agreement was concluded in a proper economic environment that was characterised by a strong economic growth. This is evidenced by the fact that the agreement caused no setback either in employment, the growth of corporate profit, or the willingness to invest. All these also confirm that the wage and tax agreement contributed to the recent dynamic expansion of the Hungarian economy from the side of both employees and employers and, looking forward, it lays the foundations for favourable growth expectations.

2.4 Inflation

The utility cost reductions implemented broke the high inflation path that was typical in the previous years. Thanks to that, the Hungarian economy is characterized by historically low price dynamics since 2013, which has become entrenched into expectations as well. In 2014-2015 there was a record low inflation of about zero percent, which persisted until the end of 2016.

Chart 2.23: Main factors affecting inflation

(contribution to the y-o-y change, pp.)



Source: HCSO, MfNE calculation

From 2017 the inflation started to grow throughout Europe due to the low base of oil prices, and it could be percept also in Hungary. Thus, consumer prices increased by 2.4% on average last year, determined by – in addition to oil prices – the increasing prices of certain foodstuffs (in particular dairy products and pork meat) in the world market. As regards changes in indirect taxes, VAT rate cuts on milk, poultry meat, restaurant catering and internet services mitigated the inflation, moderated by the increase in the excise duties on tobacco products – cut tobacco in particular – and the changes in public health tax in the case of spirits. Thus, all in all, tax changes mitigated the price increases by 0.4 percentage points in 2017.

Although the higher minimum wage – which increased as a result of the wage agreement – could be felt in the final consumer price of the products and services of certain labour-intensive sectors, the strong wage dynamics (similarly to 2016 and in line with previous forecasts) did not have a general upward effect on prices. The increase in the price of the market services most dependent on changes in the domestic demand was 2.3% on average, which only slightly exceeds last year's figure. Expectations being anchored at a low level may continue to remain the underlying factor for moderate domestic price pressure.

Looking forward it is particularly important that, by the end of 2017, the pace of price growth has decreased in the case of services and several industrial products as well, and this has a carry-over effect also in 2018. Nevertheless, as regard of the whole of this year, domestic demand and the massive wage dynamics will all in all result in an accelerating inflation. As far as external market impacts are concerned, the price of dairy products may decline in the first half of the year, however, a significant increase was measured in the price of fruits at the beginning of the year, and this effect may persist throughout the year. In the eurozone, prices may increase with the strengthening of the economic upturn, and it may also show in the domestic prices of durable consumer goods and clothing. Unlike in previous years, oil price quotes forecast that the changes in energy prices will not be determinant for the whole of the year. Nevertheless, in association with the previous fluctuations, the changes in the basis may mitigate the inflation at the beginning of the year, and then it may temporarily increase it during the summer.

Core inflation may decelerate this year in spite of the rising demand. This is because although price dynamics is growing in the case of several products and services, the correction in the price of dairy products and, from the second half of the year, the phasing out of the excise duty increases on tobacco products will have a lowering effect on this indicator's value. Furthermore, prices will also be moderated by the reduction of the VAT rate on internet services, fish meat and pork offal to 5%. (*Chart 2.23*). Therefore, all in all, an inflation rate similar to that of last year i.e. about 2.5% can be forecast for 2018.

With the phasing out of the effects causing price decreases, price dynamics may continue to slightly grow in 2019, increasingly fed by the recovery of domestic demand and, this way, the rising prices of services, also supported by the favourable upward economic trends of the EU. All in all, in parallel with the closing of the output gap, inflation may fluctuate around a 3% level, meeting the criterion of price stability, in 2019 and the subsequent years.

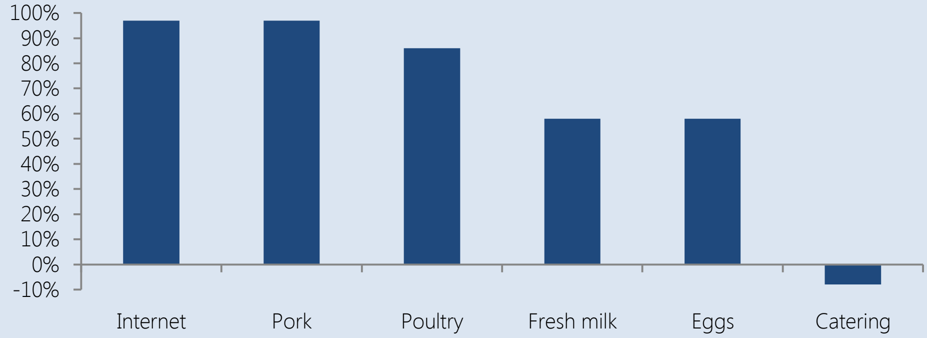
Box 6: Price impacts of the selective VAT rate cuts

In 2016 the VAT rate on pork meat was decreased to 5%, while at the beginning of 2017, the VAT rate on poultry meat, fresh milk and egg was cut to 5% while that on internet and restaurant catering services to 18%. With the exception of fresh milk, the tax rate of all categories had been 27% before the cut, while that of fresh milk had been 18%.

The extent to which tax changes spill over to prices is of central relevance to understand economic effects. If the price effect is considerable, consumers can access products more cheaply, and the demand for the affected good may increase. If the price effect is low, the revenues of the actors in the production and distribution chain – and maybe the wage of these companies' employees – may increase.

To calculate the price effects (passthrough) of VAT changes, we need to estimate how prices would have developed, had the VAT changes not taken place. In order to do this, the Hungarian price indices of the affected products have been compared to the price indices of the similar products in other European countries. The countries where the trends in the price indices had been most similar to that of Hungarian ones before the VAT rate cut were used as control groups for the individual products. This weighted group of countries has been chosen with the synthetic control method.

Price effect in percentage of the VAT rate cut by product group, 3 months after the change of the rules

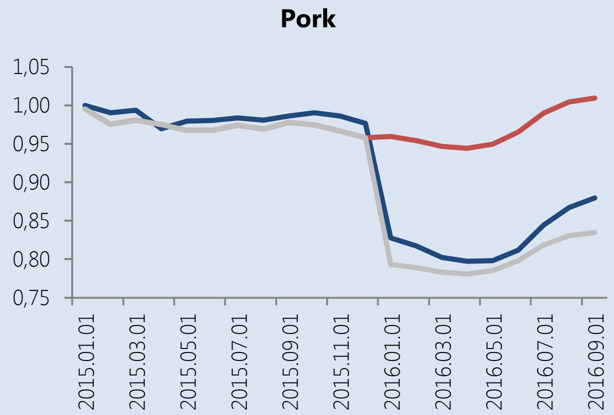


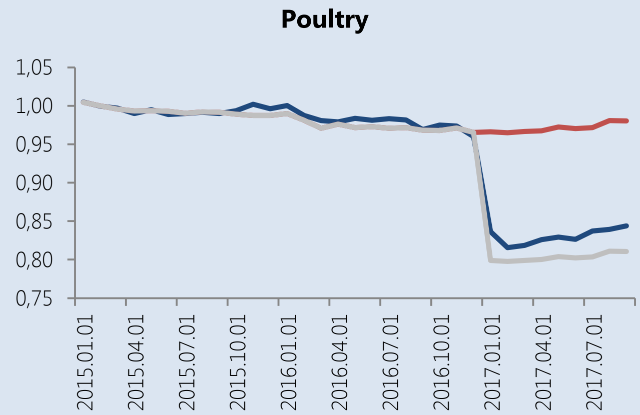
Source: MfNE calculation

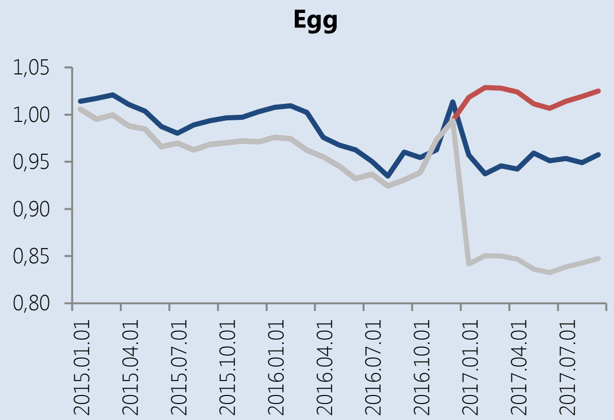
According to our estimations, a major part of the VAT rate cuts has appeared in the consumer price of internet, pork and poultry meat. About half of the VAT rate cut appeared in the price of fresh milk and egg, while there was no impact in the case of restaurant catering services.

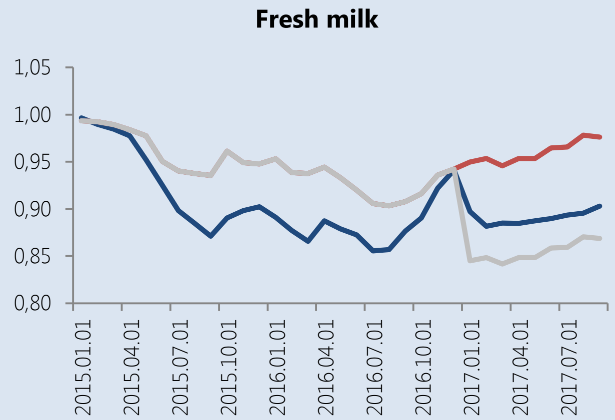
In the case of meat products, the tax change had an almost complete passthrough to consumer prices. The price increase experienced in the second half of 2016 in the case of pork also occurred in several other countries in our region, therefore it was likely to be the result of a wider market shock, and so it did not influence the estimate for the passthrough of the VAT rate cut. In the case of egg, about half of the VAT rate cut appeared in the price. The model is not directly able to shed light on the reasons thereof, however, the international data of the Research Institute for Agricultural Economics concerning egg prices at the places of packaging suggest that part of the VAT rate cut might have appeared in one of the segments of the production chain, maybe in relation to the clearing of the market. Although the model is not a perfect fit in the case of fresh milk, it can be stated that the VAT rate cut passthrough was only partial. A possible reason for this moderate price effect is that the VAT change only affected a smaller part of the milk market. Internet is an internationally non-competing market, and therefore we did not apply the synthetic control method but rather assumed the price of December 2016 to persist – given that most of the market is characterised by longer-term contracts. Based on previous market behaviour the decline in January 2017 did not fit into the trend, but could rather be attributed to a one-time shock (mostly to the VAT rate cut); and so we deem the price effect as complete. In the case of catering, prices did not decrease but increase after the VAT rate cut. This result is also in line with the international experiences regarding the sector. The change might have improved the profitability of the market operators also in Hungary, and might have provided the funds to finance the wage increases in the sector.

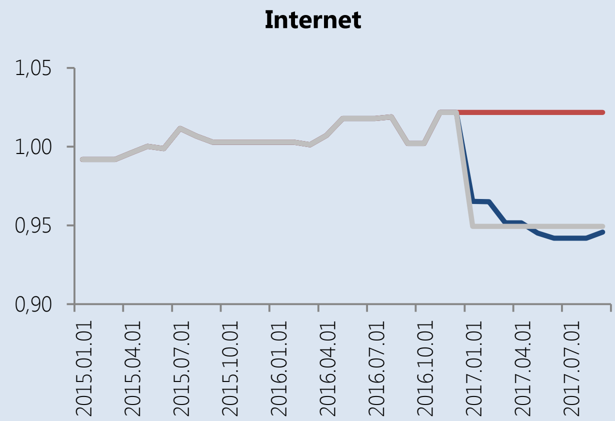
In the chart below, the synthetic (red) time series indicates in comparison to the actual (blue) prices how prices would have developed without the VAT rate cut. The synthetic price with a full price effect (grey) shows how much the price would have been in case of a full passthrough.

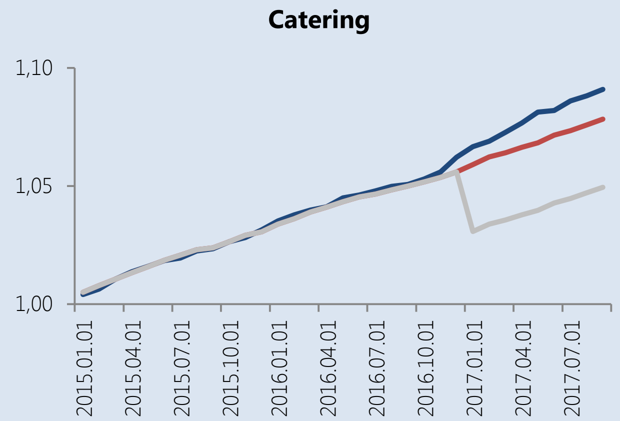












Source: Eurostat, MfNE calculation

We used similar method to examine the VAT changes implemented between 2004 and 2012. Most of these changes were more general (had a similar effect on multiple product groups at the same time) and typically mostly caused increased burdens. The experiences of previous years also confirm that VAT changes typically have a strong price effect on foodstuffs and consumer durables, both for increases and decreases of VAT rates; however, in the case of market services, a stronger asymmetry could be observed in previous Hungarian episodes: while decreases typically did not, increases mostly appeared in prices. The findings are also in line with international experiences; the different behaviour of products and services may be caused by the divergent strength of competition and the differing market structures. Of course, the actual price effects of a given VAT change may also be strongly influenced by any temporary shocks affecting the given market at the given time, and other individual features as well.

2.5 Cyclical processes

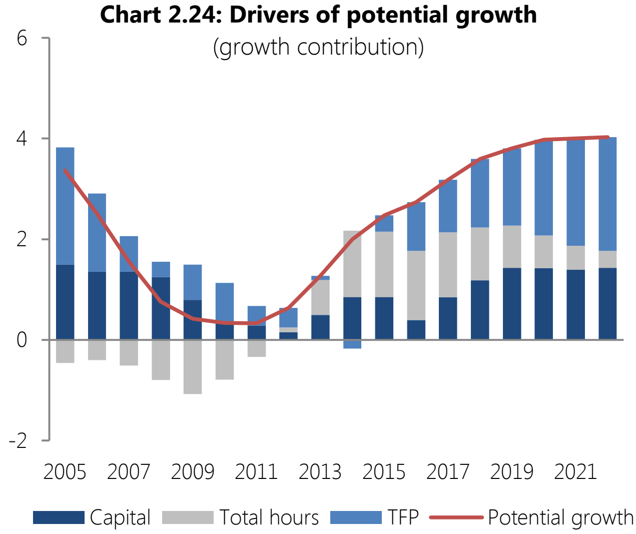
Basically, the performance of the Hungarian economy in the first half of the 2000s fluctuated around its potentially achievable level. Nonetheless, economic growth was marked by excessive lending and rapid external over-indebtedness prior to the crisis which turned unsustainable. With the outbreak of 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 subsequent years the gradual closing of the negative output gap could be observed. At the same time, since the turnaround of growth in 2013 the potential growth has significantly accelerated as well. As a result of the positive developments, the contribution of productivity to potential growth rose to over 2 percentage points by 2017 from 0.1 percentage point in 2010, and it is foreseen to grow further. Nonetheless, owing to the continued phasing out of debts accumulated during the boom, the economy's performance might have slightly fallen short of the level induced by structural factors in 2017. In the following period, however, in accordance with the moderation of precautionary savings, the upturn of lending and the strengthening of domestic demand, the output gap may close during 2019.

On the forecast horizon the expansion will be in line with potential growth. This is because in parallel with the boost of the economy, potential growth will also increase due to the joint effect of several factors. Although the reforms in the labor market may lead to further improvements in the level of participation and decreases in the unemployment rate, all in all, employment may less contribute to the potential growth than what was experienced earlier (in particular between 2010 and 2016). This effect, however, is far counterbalanced by the growth in capital stock and productivity. This is because with the decrease in labour market reserves the emphasis will shift increasingly towards efficiency and capital accumulation i.e. from the quantity of the labour force towards its quality. On the one hand, owing to large companies' capacity-building common mainly in manufacturing and the absorption of EU funds, capital accumulation will increase. On the other hand, the change in the relative price of labour and capital may act as a further incentive for the automation of production, which will also result in the increase of investments, capital stock and productivity. Finally, efficiency can be expected to grow as a result of experience gains of those having recently entered the labour market, the inflow of technology and the allocation effect of the six-year wage agreement. Thanks to these factors, the potential growth is expected to be around 4% on the forecast horizon.

Chart 2.24: Drivers of potential growth

(growth contribution)

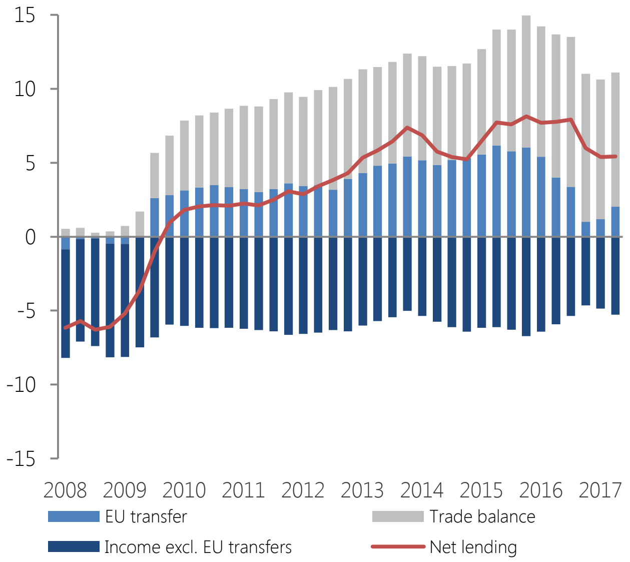


Source: MfNE

2.6 External balance

By assessing the trends of the last years, it can be stated that the current account deficit has declined considerably concurrently with the crisis and, in the following years, even had a surplus, which significantly expanded later. As a result of the process, net lending vis-à-vis the rest of the world peaked in 2015, receiving major support from the use of EU funds.

Chart 2.23: Net lending vis-à-vis RoW
(GDP %, four quarter rolling values)



Source: MfNE

After the closing of the 2007-2013 EU budget cycle, in 2016 and 2017 the balance of capital transfers was more moderate. Net lending vis-à-vis the rest of the world was 4.1% of the GDP in 2017, and although it falls behind the outstandingly high values of the previous years, it is important to stress that in regional comparison Hungary continues to be in an excellent position in terms of the external equilibrium processes.

Current account balance has also become more moderate as compared to the record value of 2016; however, all in all the surplus still remains considerable, amounting to 2.9% of GDP. The decline in the balance can mainly be attributed to increasing investment activity (due to its high import content) having reduced foreign trade surplus. The expansion in households' consumption and the unfavorable developments in terms of trade have also added to the process.

As regards income, although interest expenditure continued to decline due to the decreasing debt and the yield level, this was counterbalanced by the increasing revenues of foreign-owned companies and by the fact that with less people working abroad, there was less income flow to Hungary from abroad.

It is also important to stress that high financing capacity has coupled with the continued decrease of external debt in recent years. This process also continued in 2017, primarily related to the debt repayment by the general government and secondly to that by companies and households. Accordingly, the gross foreign debt-to-GDP ratio of the national economy was reduced to 60.1% by the end of 2017 from the 112.7%, measured in late 2010. Due to the significant external assets amounting to 47% of the GDP, the net debt reduced to 13.1% of the GDP; with this, Hungary ranks second in the region after the Czech Republic (which is a net creditor vis-à-vis the rest of the world) in the list of the lowest net foreign debts. The majority of the external debt is related to the general government; however, with the repayment of bonds and loans, the value thereof decreases year by year.

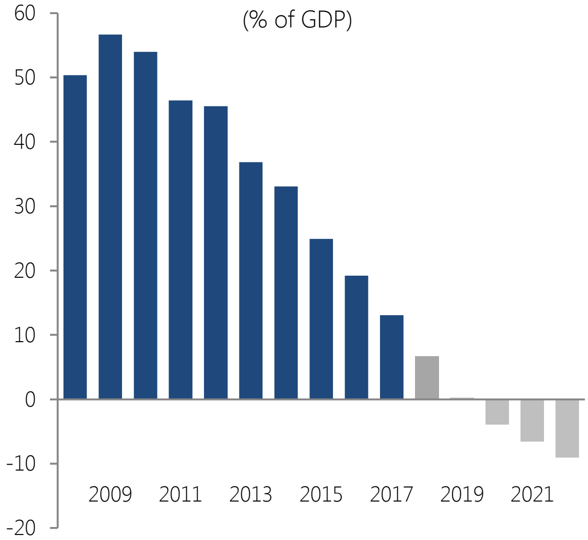
In the coming period, the performance of services (along with manufacturing which shows a significant expansion) will continue to contribute to the foreign trade surplus. Although the increasing domestic demand may moderate the foreign trade surplus, this will be counterbalanced by the dynamic expansion in the trade of goods, which – beside the Government's industry strategy – is also supported by the already announced capacity extensions of large companies in the manufacturing industry, as well as the use of EU funds for the purpose of economic development.

As regards income balance, on the one hand, thanks to the dynamic debt reduction, interest expenditures may further decrease; however, this process will be counterbalanced by the growing earnings of foreign companies. Finally, the use of the EU capital transfers that has a determinative impact on financing capacity may significantly take off in 2018 and 2019, then it may return to a more moderate level.

In summary, the foreign trade surplus may temporarily decrease, which is mainly due to the growth in domestic demand. In addition to that, also because of the more moderate inflow of EU funds, lending vis-à-vis the rest of the world may normalize lower at around 4% of the GDP after 2019. Nevertheless, thanks to the permanently prevailing robust surplus and the dynamic economic growth, Hungary's lending position vis-à-vis the rest of the world may further improve. As a consequence thereof, by 2020 Hungary may become a net lender vis-à-vis the rest of the world after being a net borrower for half a century *(Chart 2.26)*.

Chart 2.26: Developments in net borrowing vis-à-vis RoW

(% of GDP)



Source: MNB, MfNE

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 2017 Convergence Programme are demonstrated. The DYNAMO model of the Ministry for National Economy was applied for the analysis.

The structure of the DYNAMO[1] 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 in relation to 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 impacts on the economy.

The favourable development of macroeconomic fundamentals – while keeping the balance of the general government sector – enables the Government to take a number of measures which support economic growth and enhance the welfare of the society. The impact assessment addressed the following Government actions *(Table 2.1)*:

- New public investments and developments: subsidies for the technological modernisation and for improving the efficiency of the construction sector, the maintenance and operation of the intelligent CCTV-system on public roads (VÉDA).
- Bringing forward the wage increase of health workers (to 2018) and paying it earlier than planned.
- Demographic package: such as the extension of the baby bond, remission of mortgage credits, nursery developments.
- Provision of Erzsébet vouchers to pensioners in 2017 and 2018.
- Winter utility cost cuts: households' costs have been cut by HUF 12 thousand each, to moderate heating costs.
- Reducing the social contribution tax by additional 0.5 percentage points to 19.5 percent under the six-year wage and tax agreement.
- Targeted VAT rate cuts: VAT rate reduction on pork offal, Braille displays and printers.

The macroeconomic impacts of the measures estimated based on the DYNAMO model are shown in *Table 2.2*. Most measures directly or indirectly increase the disposable income of households and thereby result in the expansion of consumption. From among economic policy measures, the actions supporting capacity-building are also worth noting as these improve the economy's growth potential not only in the short but also in the long run. Finally, the reduction of social contribution tax improves companies' profitability, and thereby strengthens demand for production factors. Thus it has a boosting effect on both investments and employment. Certain government measures (such as targeted VAT rate cuts) have a negative, others (such as wage raises) have an increasing effect on consumer prices; the combination of these two effects, however, does not result in a substantial inflationary impact. At the same time, higher tax revenues from the higher GDP growth partly offset the negative impact of additional government measures on the general government balance.

Regarding the quantified impacts of the measures, GDP may exceed the 2018 levels estimated in the baseline scenario (the one without the implementation of such measures) by 0.2%. Consequently, the recent Government measures will contribute to the GDP growth by 0.2 percentage points this year. In the long run, the economic policy measures further improve economic performance (especially in 2020), which may result in a cumulative impact of 0.5% of GDP in 2022 compared to the baseline scenario.

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

Table 2.1: Government measures modelled in % of GDP

	2017	2018	2019	2020	2021	2022
Measures increasing expenditure	**0.07**	**0.29**	**0.14**	**0.48**	**0.44**	**0.42**
New government investments	0.00	0.00	0.09	0.44	0.40	0.38
Bringing forward the wage increase of healthcare workers	0.00	0.05	0.00	0.00	0.00	0.00
Demographic package	0.00	0.05	0.04	0.04	0.04	0.04
Providing Erzsébet vouchers (Christmas 2017, Easter 2018)	0.07	0.07	0.00	0.00	0.00	0.00
Reducing families' winter utility costs	0.00	0.12	0.00	0.00	0.00	0.00
Measures decreasing revenues	**0.00**	**0.14**	**0.14**	**0.14**	**0.14**	**0.15**
0.5 percentage point cut of the social contribution tax	0.00	0.13	0.13	0.14	0.14	0.14
Reduction of VAT rate on pork offal, Braille displays and printers	0.00	0.01	0.01	0.01	0.01	0.01
Total	**0.07**	**0.43**	**0.28**	**0.63**	**0.58**	**0.57**

Source: MfNE calculation

Remark: Due to rounding the sum data could differ from the sum of the detailed data

Table 2.2: Macroeconomic impacts of the government measures

(cumulated % difference in levels compared to the baseline scenario)

	2017	2018	2019	2020	2021	2022
GDP	**0.03**	**0.19**	**0.13**	**0.33**	**0.42**	**0.47**
Households' consumption expenditure	0.12	0.69	0.30	0.38	0.51	0.60
Investments	0.00	0.01	0.31	1.34	1.58	1.68
Export	0.00	0.01	0.01	0.00	0.00	0.00
Import	0.03	0.15	0.09	0.16	0.21	0.23
Consumer price level	0.00	-0.02	-0.03	0.00	0.03	0.06
Private sector employment	0.01	0.13	0.08	0.14	0.20	0.20
Gross average wage in the private sector	0.00	0.13	0.19	0.28	0.44	0.59
General government deficit (% of the GDP*)	-0.05	-0.29	-0.17	-0.30	-0.26	-0.25

** Change in percentage points*

Source: MfNE estimation based on the DYNAMO model..

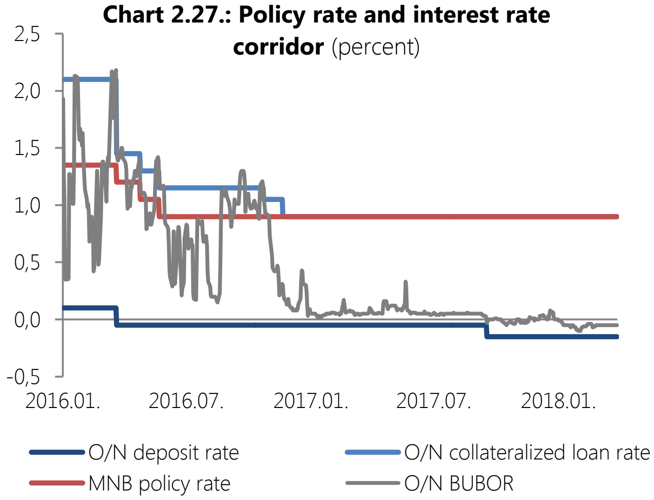
[1] The description of Dynamic National Accounts based Model (DYNAMO) is accessible via the following link: http://www.kormany.hu/download/9/97/10000/El%C5%91rejelz%C3%A9si%20m%C3%B3dszertan_angol.pdf

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 create room for manoeuvre to mitigate the effects of potential economic shocks. The monetary policy ensures inflation targeting by changing the base rate, by using the flexibility provided by the floating exchange rate and its non-conventional toolkit.

The MNB further modified its policy toolkit in 2017. The Monetary Council decreased the interest rate of the central bank overnight deposit from -0.05% to -0.15%, effective from 20 September 2017, increasing thereby the asymmetry of the interest rate corridor. Thus, the interest rate corridor have been expanded to 1.05 percentage points, with a lower limit of -0.15%, while its upper edge is still (as has been since November 2016) the overnight collateralised loan of 0.9%, identical with the policy rate *(Chart 2.27*). The central bank did not change the interest rate of the three-month key policy instrument last year, and so it is still 0.9% as was in May 2016.

Chart 2.27.: Policy rate and interest rate corridor (percent)



Source: MNB

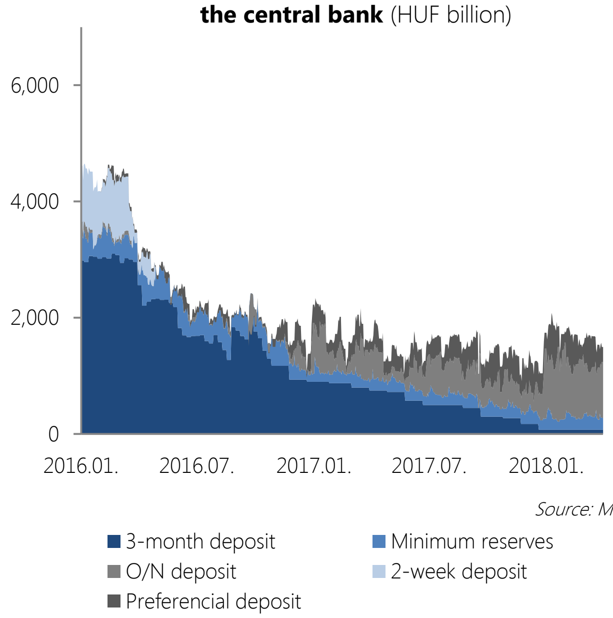
To loosen monetary conditions, the MNB further restricted the availability of the three-month deposit asset, and so the volume of the key policy instrument was narrowed from HUF 750 billion to HUF 75 billion in three steps between March 2017 and the end of that year. As the central bank concluded that the gradual restriction of the three-month deposit volume had fulfilled its role, its quantity limit will not be further lowered but will remain HUF 75 billion in 2018.

The liquidity forced out of the three-month deposit has flowed into the low-yield overnight deposit and to the interbank and government securities market, where it generated a drop in yields. Beside the quantitative restriction of the key policy instrument, the further development of the BUBOR quotation system also significantly contributed to the decrease of interbank rates. In order to make sure that the efficiency of monetary transmission is ensured also in the longer yields, from January 2018 the MNB extended the mandatory BUBOR quotation also to 6-month maturities (in addition to 1-month and 3-month maturities). Concurrently with that the MNB also reduced the 15-basis point fix spread to 10 basis points, and raised the mandatory minimum transaction amounts by HUF 50 million each, and so credit institutions must provide interbank credits in the value of at least HUF 150 million for 1-month maturity, at least HUF 100 million for 3-month maturity and at least HUF 50 million on the new 6-month maturity. Following the extension of the mandatory quotation the 1 and 6-month BUBOR quotation decreased by 1 basis point each to 0.02% and 0.05%, respectively, by the end of March 2018, while the 3-month one did not move from its January 0.03% level.

The mandatory reserve ratio prescribed for credit institutions in a standard manner did not change and remained 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 measures led to further decreases in the liquidity deposited with the Central Bank *(Chart 2.28)*, while the MNB provided the banking system with considerable surplus liquidity through its fine-tuning swap facility. The volume of the non-conventional facility, expanded with 6 and 12-month maturities, has grown to HUF 1,611 billion by the beginning of 2018, and its maturity scheme has been considerably changed *(Chart 2.29)*.

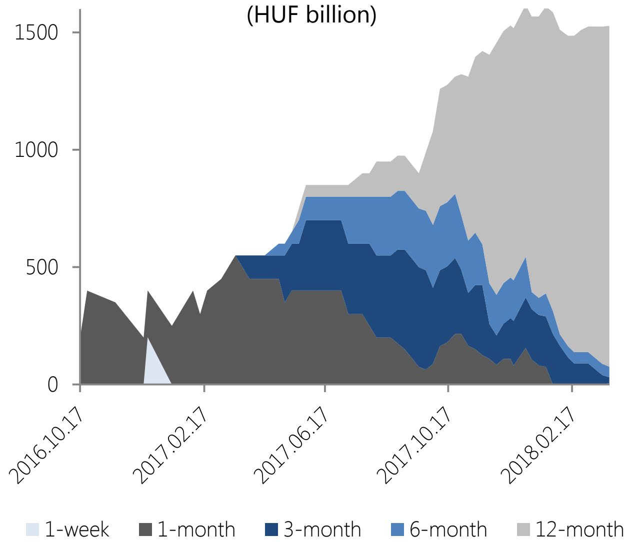
Chart 2.28: Credit institutions' liquidity at the central bank (HUF billion)



Source: MNB

The persistently low interest rates and the restricted key policy instrument led to an increase in the significance of the swap facility providing HUF liquidity, and now serves as a strategic monetary policy instrument. As MNB gradually increased the volume of swap instruments with longer maturity, monetary loosening could prevail over the longer maturities on the yield curve, as well.

Chart 2.29: Volume of the Central Bank swap facility providing HUF liquidity
(HUF billion)



Source: MNB

Beyond the fine-tuning swap facility, the MNB introduced two additional instruments in January 2018, which also focus on the moderation of the long end of the yield curve. The 5 and 10-year MIRS interest rate swap instrument aims to mitigate the banks' interest risks by the Central Bank replacing fixed interest rates for floating interest rates. The MNB declared the limit of the transactions in HUF 300 billion for Q1 2018, and so the swap volume may expand to up to HUF 1,200 billion by the end of 2018. Beyond that, from January 2018 the MNB also launched a targeted central bank programme, focusing on purchasing mortgage bonds with a maturity of 3 years or more on the secondary or primary market. The Mortgage bond purchase programme is expected to substantially increase the liquidity of the market by the end of 2018, as the programme has a volume that equals 50% of the current stock, and therefore it can have a considerable effect. The new non-conventional instruments may entail a further decrease in long yields, and may visibly boost the mortgage market, while also substantially supporting longer interest fixation.

On the international level we can see that the leading central banks are gradually moving towards restrictive monetary policies, a development caused primarily by the improving cyclical positions and the slowly increasing inflation expectations. The Fed hiked its key policy rate on three occasions in 2017, and once more in March 2018 under Powell's chairmanship, by 25 basis points each, to the current 1.5-1.75% range. According to the market expectations, two further hikes may come in the remaining part of 2018, 25 basis points each. The monetary policy of the European Central Bank also shows slight signs of tightening as the ECB decided to gradually phase out its asset purchase programme. From January 2018 it reduced the volume of assets purchased from EUR 60 billion to half of this amount, and extended the programme until September 2018. However, according to the official communication by the ECB, it will hold the assets purchased under the programme on its balance sheet for a longer period, and it also intends to maintain the current low interest rate. In 2019 the Italian Mario Draghi is expected to be followed by German presidency in the ECB, and this change may entail a much more dynamic monetary policy, catching up more rapidly with the Fed's conditions. Still, the shrinking of the balance-sheet total – as done by the Fed – is expected to take place very slowly. In spite of international tightening trends, the MNB intends to sustain its loose monetary conditions, and so perceptions show that market players do not expect an interest rate hike to take place until Q1 2020.

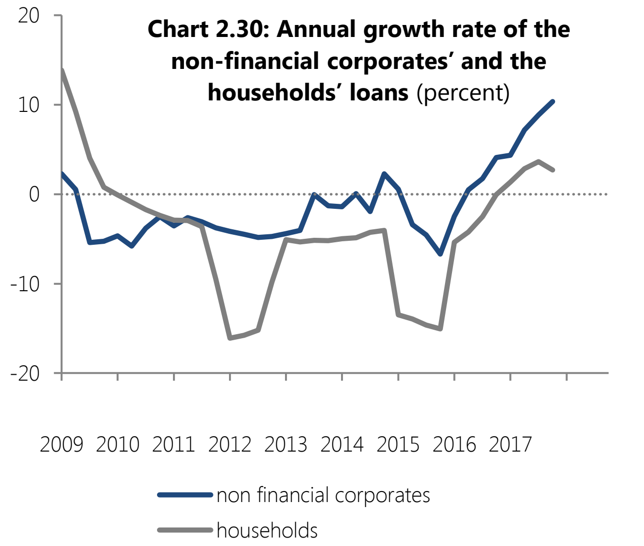
2.9 Financial sector

The transaction-based change in the loan portfolio of non-financial corporations presented a significant improvement in 2017. The unadjusted annual growth rate cleared from exchange rate effects reached 10.4% in the entire corporate sector, while in the SME sector the indicator was up to a record level of 11.4%. The SME sector had an eminent role in the outstanding growth of loans, as in 2017 approximately 65% of all transactions (HUF 401 billion) could be associated with these businesses.

The dynamic growth of the corporate loan portfolio was largely backed by the drawdown of the remaining loan tranches of the Funding for Growth Scheme (HUF 132 billion), the prolonged disbursement in the framework of the Land Purchase Loan Programme, as well as the second phase of the Market-based Lending Scheme (MLS) launched on 24 May 2017. In January 2017 – as a condition of entering swap transactions – 16 credit institutions undertook the expansion of their net annual lending to SMEs by a total amount of HUF 227 billion; this target was far exceeded until the end of the year, by 250%, well beyond the expectations.

The credit institutions participating in the Scheme did not reduce the amounts of loans undertaken for 2018, and therefore the loan portfolio belonging to SMEs will see dynamic growth in the upcoming quarters again.

The portfolio of corporate loans being in default for more than 90 days (NPL) has been continuously declining since its peak in 2012 (HUF 1,337 billion). In the past one year, the ratio of the non-performing loans of non-financial enterprises has shrunk by some HUF 110 billion (i.e. by 2.1 percentage points) to 3.3%, whereas in the case of SMEs the corresponding ratio has moderated even more significantly by HUF 212 billion (by -7 percentage points), and therefore the NPL rate stood at 9%. The substantial shrinking in the portfolio of non-performing loans in 2017 was due to the considerable amounts of loan sales and written off by commercial banks, which is clearly reflected in the fact that the NPL ratio was just insignificantly (by -0.02%) influenced by the change in the loan portfolio of the corporate sector.



Source: NBH

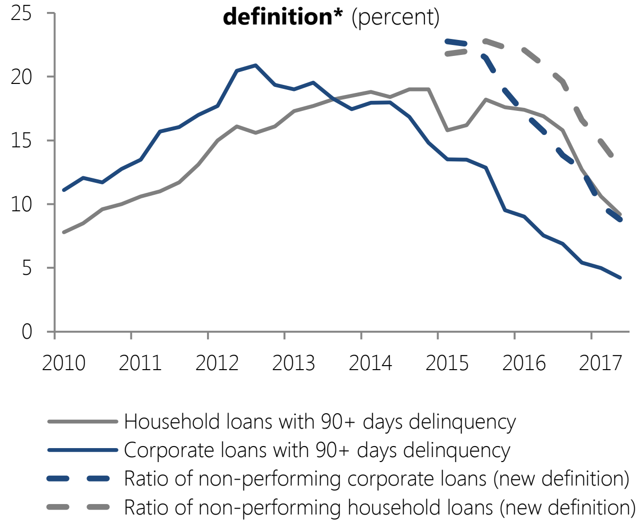
The loans of households also show positive trends. Interest rates continue to be low, while increasing real wages and the expanding real estate market created favourable lending conditions, leading to further rise in the loan portfolio of households in 2017.

In spite of the increasing amount of repayments, in 2017 the overall volume of households' loans witnessed the largest increase in the past 9 years by HUF 156 billion, indicating a 2.7% growth rate.

In 2017, credit institutions disbursed HUF 1,278 billion in new loans to households, which is 22% more than the HUF 1051 billion in 2016. The amount of housing loans disbursed increased by HUF 182 billion, principally as an effect of the continued expansion of the real estate market, while the Family Housing Subsidy Scheme (CSOK) also had a positive influence on lending. Loans for consumption purposes increased by HUF 102 billion, mostly driven by the growth of retail sales.

At the end of 2017, the proportion of non-performing loans overdue for more than 90 days was 7.6%, which is a significant, 5.2 percentage points decrease after 2016, almost fully explained by the reduction in the non-performing portfolio.

Chart 2.31: Changes in the NPL rate of the private sector based on the former and new definition* (percent)



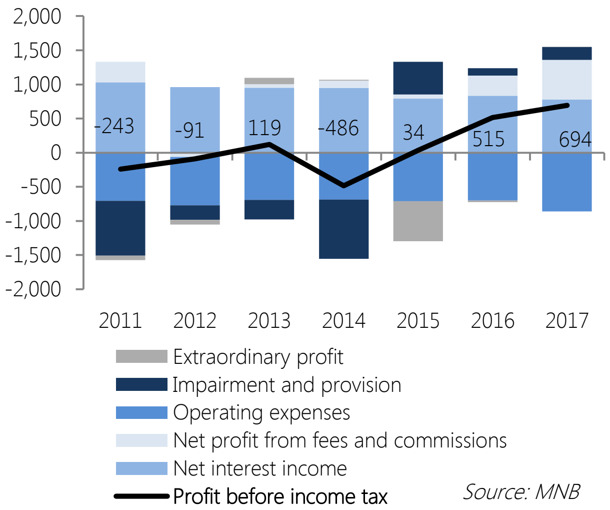
* Receivables not falling in delay exceeding 90 days may be also classified in the NPL category, if any information is available based on which it can be assumed that the debtor will not be able to settle its debts.

The Government launched several programmes to ease the situation of non-performing debtors with the most important of them being the National Asset Management Company. Until the end of 2017, the National Asset Management Company used budgetary sources in an amount of HUF 132 billion. Partly as a result of it, the volume of non-performing loans owed to financial institutions has been cut by HUF 312 billion. The National Asset Management Company purchases the properties of debtors in the worst financial position, while the former owners are allowed to stay in their homes as tenants. In the scope of the National Asset Management Company's programme, nearly 42,000 real estates were offered until the end of 2017, 35,000 of which were certified to meet all requirements and settled financially.

2017 proved to be an outstanding year also from the perspective of profitability, as the all-time profit record was exceeded, and the Hungarian banking sector closed the year with HUF 632 billion profit after taxes, resulting in 17.6% 12-month rolling return on equity. Notably, profitability in terms of the return on equity bounced back to the pre-crisis level after 10 years, and banking operations can again be regarded to be an eminently profitable business in Hungary. The need for a complex cost reform on the level of the banking system is indicated by the fact that 2017 also witnessed a record height of annual costs with HUF 859 billion.

In comparison with the previous year, the profit was further elevated by income from commissions and fees (i.e. not interest income), which could also counterbalance the negative effects of the low interest rate environment. However, operating costs deteriorated the profit to a larger extent than in 2016.

Chart 2.32: Annual profit of the credit institutions (HUF bn)



Source: MNB

The capitalisation and liquidity of the Hungarian banking sector are excellent even in international comparison. The overall capital adequacy ratio is over 20%, whereas the CET1 capital adequacy ratio also exceeds 18%. Similarly to the previous years, in 2017 the Hungarian banking sector operated with a sufficient level of liquid reserves, the system-level liquidity coverage ratio was nearly 200%. Long-term liquid reserves proved to be comparably outstanding, at the end of September the net stable funding ratio (NSFR) was close to 130%. Regarding the above, there is plenty of room for enhancing of lending activity and further intensive portfolio cleaning. It is regarded to be a warning sign, however, that loans currently offered with low and floating interest rates are becoming increasingly popular, which builds up a potential source of risk in the Hungarian banking system. For this reason, it is essential to enhance financial literacy and raise public awareness in relation to the risks that are associated with loans with floating interest rates. Nevertheless, the system-level risks of the banking sector have considerably moderated since the improvement of macroprudential regulations, which have given support to handle maturity and denomination mismatches through the introduction of the LCR and NSFR indicators, the Mortgage Funding Adequacy Ratio (MFAR) and the Foreign Exchange Funding Adequacy Ratio (FFAR). Alongside consumer-friendly housing loans, it is the debt brake rules that help consumer protection and transparency as substantial macroprudential means, while risk concentration is mitigated by the capital add-on requirements for systemically significant institutions, as well as the need to raise capital buffers for problematic commercial property exposures.

Compared to the previous years, the domestic banking system has a more favourable effect on economic growth, as dynamic expansion has been financially backed by the stability, profitability of the bank system, and its increasingly active lending operations. While several areas of the Hungarian bank system witnessed significant improvement, improving financial literacy, trust in banks and transparency is an important step to be taken in the future; the increasing need of consumers in this respect is apparently confirmed by the popularity of the Certified Consumer-Friendly Housing Loans. Further development in the Hungarian banking sector can be potentially brought about by the digitalisation of the banking system, the reorganisation of the branch network and the consequential reduction of operating costs.

Development of financial awareness in Hungary – “Use Money Smartly” strategy

Having proper financial knowledge is crucial in making conscious, deliberate and reasonable decisions on finances. Hungary regards it as a key social and economic priority to improve financial awareness, as it would contribute to the stable, sound operation of the financial system, and to the country’s competitiveness. To this end, the Government has framed and adopted the Strategy for the Development of Financial Awareness (Gov. Resolution 1919/2017 (XII. 08.)). The Strategy sets out seven key objectives.

- Strengthening financial education in school system (obligatory financial lessons.
- Strengthening financial behaviour (long-term financial goals, household budget) and financial stress tolerance (financial reserves).
- Supporting the development of financial infrastructure.
- Strengthening self-care approach.
- Increasing access to basic financial services (financial inclusion).
- Encouraging the use of cashless payment services, reducing the relative weight of cash usage.
- Supporting prudent borrowing.

The strategy embraces 7 years (from 2017 to 2023), and its practical implementation is broken down into 2-year action plans. The National Financial Awareness Working Group (NFA WG) was formed on 30 October 2017 with the task to operatively coordinate the implementation of action plans, to develop the order of procedures for data disclosures and reporting, to perform the follow-up evaluations of outcomes, and to make proposals on any correction. The members of the Working Group are delegated by the Ministry of Finance, Ministry of Human Capacities, National Bank of Hungary, MNB’s Money Compass – Foundation for Financial Awareness, the State Audit Office of Hungary, the Hungarian Central Statistical Office and the Hungarian State Treasury.

3. General government deficit and debt

3.1 Fiscal policy objectives

The budget 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 outdone in every year except for two, and was surpassed also with regard to the average of the last 6 years. Consequently, the general government 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 approach to budgetary planning.

Also taking into consideration the results of 2017, the Government has not changed the deficit targets set in the previous convergence programme. The fiscal path, which ensures the continued decline of general government debt and has a deficit that still remains well under 3% of the GDP, continues to support economic growth, contributing to the realisation of economic and social policy priorities.

The international and Hungarian experiences accumulated regarding the management of global financial and economic crises show that while monetary policy had a significant role in restoring growth, on the long run it cannot promote growth by itself. For this reason, if there is sufficient room for budgetary manoeuvre, it is reasonable to use it in line with the deficit – which is permanently and safely under 3% (with a view also to debt reduction goals in countries with a high debt) – in order to enhance growth. As a result of the economy being put on a permanently high growth path, deficit levels will start to decrease in 2019, and will be reduced to 0.5% of the GDP by 2022. Seeing that due to the already adopted and yet planned measures introduced by the government, Hungarian economy's growth potential is increasing, the cyclically adjusted balance is improving significantly, and according to the calculations it will overachieve the MTO from 2020 on.

Save for a minor recoil, since 2011 the general government debt-to-GDP ratio has been steadily declining, and is expected to find a more sharply descending trajectory over the time horizon of the convergence programme. The decrease in the debt ratio will be far higher in the next years than required by the EU's debt reduction benchmark. This is largely due to that both the rapid growth – which also ensures economic convergence – and the decreasing deficit facilitate a relatively rapid decrease of the debt ratio. The gross general government debt-to-GDP ratio decreased from 80.5% in 2011 to 73.6% by the end of 2017. The debt ratio may fall by a further 14 percentage points, and drop under the 60% reference value on the time horizon of the convergence programme.

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

	2017	2018	2019	2020	2021	2022
General government balance	-2.0	-2.4	-1.8	-1.5	-1.2	-0.5
Structural balance	-1.7	-2.1	-1.7	-1.4	-1.2	-0.6
Gross public debt	73.6	73.2	69.6	66.7	63.4	59.7

Source: HCSO, MNB, MfNE calculation

3.2 The 2017 budgetary outcome

Similarly to previous years, in 2017 fiscal developments once again were better than planned. The ESA2010 general government deficit was 2.0% of GDP, as compared to the deficit target of 2.4% set by the Government.

In 2017, the central government deficit (in terms of cash deficit) amounted to HUF 1,973.9 billion, which exceeded that of the preceding year by HUF 1,150 billion. It is mostly caused by the fact that while payments in relation to EU projects largely exceeded the level of the previous year and the modified statutory target, the amount of EU revenues received by the budget remained well under payments for EU projects, making up only 39.7% thereof. It means that during the year the budget transferred EU grants to the beneficiaries of the programmes in advance. The shortening of the time limit of VAT reimbursement for the so-called “good taxpayers” from 75 to 45 days reduced the cash balance by around HUF 200–210 billion. In the case of EU-related expenditures, only the value of domestic co-financing associated with the utilised EU funds is calculated to deteriorate the balance under ESA2010, while the alteration of the time limit for VAT reimbursement does not affect the accrual-based deficit, which turned out to be more favourable than the target in spite of the higher cash deficit.

Revenues

On the one hand, the 2017 budget showed signs of the tax cuts that had been initiated earlier (increased family tax allowance, moderation of the bank tax, reduced VAT rates for basic food products and restaurant catering services, as well as internet services). On the other hand, to further strengthen the implications of the above tax cuts in relation to the improvement of life standards, the six-year wage agreement was rolled out, resulting in the reduction of the social contribution tax rate and the corporate tax rate, while the minimum wage and guaranteed wage minimum were considerably increased from 1 January 2017.

The six-year wage agreement brought dynamism in the labour market and the intensification of consumption, leading to increasing tax bases.

2017 saw the collection of approximately HUF 630 billion more tax and contribution revenues than in 2016. The effects of the tax and contribution reductions related to tax revenues were set off by the favourable economic processes. In consequence of the larger wage development, some HUF 200 billion higher revenues could be realised on personal income tax than in 2016. Value added tax revenues increased by HUF 235 billion. The sum of corporate tax revenues was HUF 625 billion, which fell short of those of the previous year by HUF 58 billion.

The overall impact of changes deriving from the six-year wage agreement on the balance was slightly positive, amounting to HUF 20 billion (a sum higher than originally expected).

Expenditure

With respect to the execution of the expenditure plans, the most essential aspect is that the budgetary policy was able to ensure the enforcement of the Government’s priorities in economic and social policies.

In the public sphere, the career models that had been initiated earlier were continued, and during the year further decisions in connection with the wages paid from the central budget were made (the average wage of employees who did not hold specialised qualifications or have schooling as teachers, but directly supported educational and teaching activities was increased, district nurses employed in basic healthcare services were given HUF 33,000 monthly wage supplements). As a result of the career models, the total amount of wages paid in the governmental sector rose by HUF 271 billion in spite of the reduction of the social contribution tax rate. Besides, the budget covered HUF 114 billion wage expenses in comparison with the initial plans in relation to the increased minimum wage and guaranteed wage minimum, the higher wages paid at state-owned companies, as well as some of the sectoral wage-related measures (e.g. increased wages for judicial employees).

The amount of housing subsidies showed dynamic increase, too. Expenses on housing subsidies grew by 25% after the previous year thanks to the Government programmes introduced, including the Family Housing Subsidy Scheme (CSOK) and the reduced VAT rate.

In 2017, the amount of expenditures connected with state-owned assets was up to HUF 442 billion. In this area, dominant items belonged to the funding provided to state-owned companies and the expenditures of real estate projects (including the allocation of resources to the development of industrial parks).

The funds allocated for curative-preventive care exceeded the previous year's levels by HUF 106 billion due to the wage increases in the healthcare sector and the extra funds utilised for the settlement of the hospitals' financial situation.

As a result of the adoption of labour market measures, both the level of wage development and the inflation rate climbed higher, and therefore at the beginning of the year the Government made an adjustment to pensions, which then increased by 1.6%, at a rate over the figure specified in the Act on the state budget. In November, due to the further increasing inflation expectations, a one-off, 0.8% pension supplement was granted to every person receiving pension or any other pension-like benefit. The associated funding demand from the budget exceeded HUF 27 billion. Additionally, elderly people were paid a pension bonus, because the GDP growth rate went beyond 3.5%. In line with the foregoing, last year the budget spent HUF 118.6 billion more on pension benefits than in 2016, which was also HUF 71 billion over the initial target specified in the Act. At the end of the year, each person receiving pension or any other pension-like benefit was given Erzsébet voucher in an amount of HUF 10,000, resulting in an extra expenditure of HUF 26 billion.

The Government was able to spend HUF 39 billion more on childcare fees, sickness benefits and other cash-based expenses connected with health insurance than in 2016, whereas the excess spending on medicines and medical aids amounted to HUF 8 billion.

In comparison with the previous year, the cash expenditures of the public works programmes dropped by approximately HUF 30 billion owing to the positive labour market developments and the efforts to make the system more efficient.

As compared to the initial targets, approximately HUF 30 billion savings were achieved in net interest expenditures calculated with the EU methodology, in spite of the cash deficit coming well over the plans. It was the result of the "investment" grade re-rating of Hungarian government securities and – partly in this context – the decreasing government security yields.

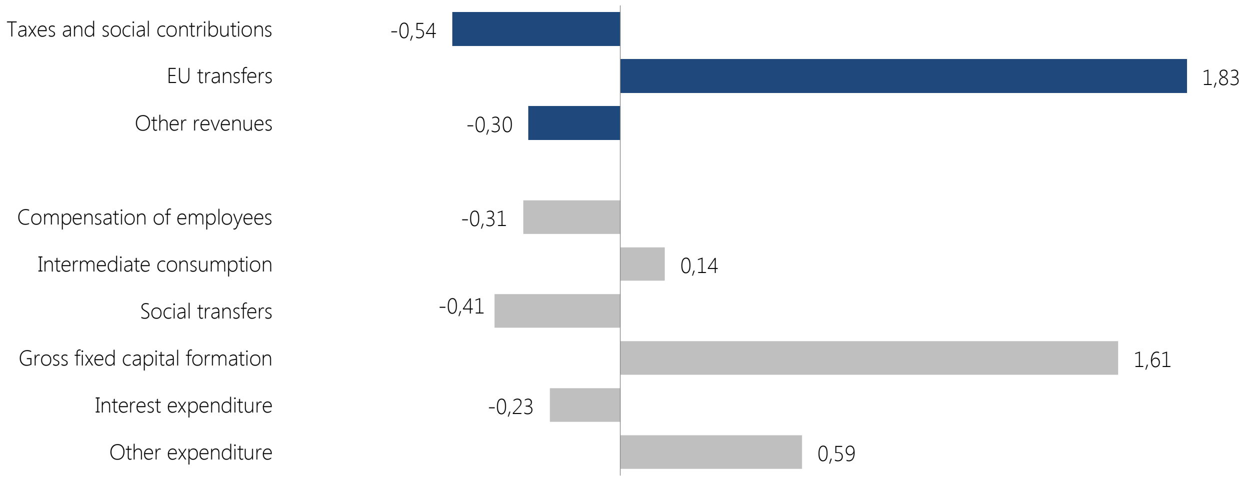
As a result of the Government measures taken for the acceleration of EU payments (and indirectly for stimulating the economy), EU payments exceeding the planned amount by more than HUF 316 billion were implemented. The extra amounts remitted were mostly paid in advance to ensure the liquidity needed for the scheduled progress of the projects. The EU funding connected with these payments was just partly covered by the European Commission in 2017, and therefore the budget was to furnish pre-financing in an amount approximating HUF 1,000 billion.

In the middle and at the end of the year, the conservative planning and the favourable outcome of the fiscal processes in 2017 allowed for the utilisation of the fiscal capacity without endangering the deficit target and the accomplishment of the goal to the reduce of general government debt.

In the middle of the year, the positive budgetary processes (extra revenues, savings on expenditures) gave way to extra expenditures on economic development objectives (Investment Preparation Fund, Supplier Action Plan, reconstruction and modernisation of the public road network, development of rail-mounted vehicle manufacturing), social and healthcare tasks (nursery and hospital developments, infrastructure investments), reinforcement of the country's defence capabilities (renewal of the helicopter fleet), certain municipal development projects, church, cultural and education programmes in a total amount of approximately HUF 200 billion, in the framework of the amendment of Act on the 2017 budget, without altering the targeted deficit.

At the end of the year, the Government decided to utilise the savings made on the additional financing of duties of public interest in an amount of HUF 215 billion. The beneficiaries of these funds were – among others – the churches (HUF 88 billion) and organisations beyond the national borders (HUF 33 billion); extra resources were allocated to the development of the sports infrastructure, sports activities, tourism and other priority investments (HUF 71 billion), cultural objectives (HUF 8 billion), educational and healthcare institutions (HUF 9 billion), local governments (HUF 3 billion) and civil society organisations.

Chart 3.1: Expenditure and revenue changes 2016-2015
(% of GDP, percentage point)



Source: MfNE calculation

3.3 The 2018 budget

The 2018 budget takes into account the continuation and widening 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 having regard to the economic growth, a pension premium will also be paid. The amount of housing subsidies has been increased, and the tax reduction programme started in 2017 pursuant to the six-year wage agreement continued.

The Government set the deficit target for 2018 at 2.4% of the GDP. With the set budget deficit target and the accelerating growth, the general government debt-to-GDP ratio may become more moderate, by approximately 0.4 percentage points after the significant, over 2 percentage point drop in 2017, with the concurrent increase in the overall volume of liquid financial assets in the budget.

The 2.4% deficit target corresponding to that of 2017 was justified by the structural reforms increasing economic growth potential implemented via the tax changes announced in the scope of the six-year wage agreement, the direct effect of which on the balance of the general government balance amounted to 1.6% of the GDP.

Similarly to the budgets of the past years, the Government created three types of central reserves in the 2018 budget to counter unexpected risks: the appropriation for the Country Protection Fund, the reserve for extraordinary Government measures and the chapter-based stability reserve.

The favourable developments in the labour market, the six-year wage agreement and the wage measures implemented with the use of the budget are expected to result in a material increase of various revenues associated with employment in excess of the budgetary target. In other types of taxes, the realisation of revenues is anticipated to be around the planned levels. In personal income tax, fulfilment exceeds the planned level by 11 percent, while Hungary is still among the countries setting the rate of this tax at the lowest level in the EU, currently at 15 percent.

Further tax reductions have taken place in 2018. In the scope of the six-year wage agreement, as of 1 January 2018 the rate of the social contribution tax was reduced by a further 2.5 percentage points to 19.5%. As of 1 January 2018, the VAT rate on fish, pork offal, Braille printers and displays was cut from 27% to 5%, whereas the VAT rate on restaurant catering service and internet services was reduced from 18% to 5%. The healthcare contribution levied on income from property leasing has been abolished, which simplifies administration, and facilitates the whitening of income from the leasing of apartments.

To further ease the burdens of businesses fully meeting their obligations, in the framework of a *qualification system based on the review of objective conditions*, the time limit for remitting the amounts of value added tax has been decreased from 45 days to 30 days for reliable taxpayers in 2018. As a result of this measure, in February 2018 the budget realised a HUF 220 billion larger amount of tax reimbursement. These increased expenses originating from the shortened time limit do not affect the accrual-based deficit.

The Programme for the Strategic Reformation worked out by the National Tax and Customs Administration targets *the whitening of the economy and larger taxation efficiency*, and has been designed to implement programmes affecting the operation and efficiency of the tax authority.

In 2018, the home creation programme, aimed at helping families to have access to housing and improve their housing conditions, has been given a new impetus. There have been several major changes in the forms of subsidisation associated with the programme, which will potentially accelerate the roll-out of the programme. Having any other residential property is not a ground for exclusion even in the case of grants requested for the purchasing of used dwellings or expansion works, and if the defined

conditions are satisfied, applications for grants can be submitted also by families coming home from the EEA member states. The associated administrative burdens have been largely reduced, as well. Pensioners can also rely on the VAT reimbursement option, and when families with three or more children, but without sufficient creditworthiness apply for the subsidised loan, parents or close relatives can be involved in the loan transactions as co-debtors. In comparison with the previous year, the amount of budgetary support increased by nearly one-fourth.
The increased rate of family tax allowances also served the betterment of the situation of families. For families with two children, the amount of the tax allowance that might be claimed increased to HUF 17,500 per month from 2018, which means that the revenue of families with two children went up 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. Since 2018, the Government has allocated additional resource to strengthen positive demographic processes. In the framework of the "*family action plan*", nursery developments have been started. With three or more children, the total amount of the student loan is discharged, while with two children half of the debt is taken over by the Government. The term of eligibility for childcare fee has been extended by 1 year for graduates. Having three children, families with mortgage loans can write off HUF 1 million from their debts, and this amount increases by HUF 1 million after each plus child. As the fourth element of the action plan, the baby bond and birth grant have been made available to families residing or living abroad, too.

Adjusted to the favourable conditions in the labour market, *expenditures on the public works programme have been cut*, while now there is closer focus on the improvement of the efficiency of the public works system and the broadening of other active labour market programmes.

For the *maintenance of the real value of pension expenditures and certain income replacement allowances*, in 2018 the budget is again putting in place the funds needed for the preservation of this value with the given inflation rate. Furthermore, the budget allows for pensioners to benefit from the results of the rapid economic growth, such as in the form of Erzsébet vouchers distributed in the first half of the year, at Easter.

2018 sees the pursuance of measures for the proper recognition of public employees, such as *the continuation of the teachers' career model and the law enforcement and military career model, providing additional benefits to the social sphere, the continuation of the career model of people employed at Government Offices and the National Tax and Customs Administration*. In the scope of the military and law enforcement career model, the wage of soldiers and law enforcement employees increased on average by 5% in 2018. The employees of the National Tax and Customs Administration received a further 15% increase to their salary in 2018, achieving a 50% increase on average. The basic salary of judges and prosecutors increased by a further 5% in 2018, while the salaries of higher education teachers, researchers and teachers by 5%. Employees working in the healthcare sector also received a significant raise, and a wage improvement took place also for employees working in a healthcare role in the social sector. Pursuant to the Government's decision in January, almost 80,000 people working in healthcare and the social field were given increased wages already in January, instead of November. In consequence and as a result of other wage-related measures unforeseen at the time of planning, HUF 40 billion extra expenditures are expected to be incurred in 2018, while in comparison with the previous year the overall amount of expenditures on wages in the government sector will rise by HUF 166 billion in spite of the reduced rate of the social contribution tax.

Similarly to the past years, the *facilitation of the quick absorption of EU subsidies* and the scheduled implementation of investments supporting economic development remain important tasks. The scale of payments in 2018 is expected to remain under, but be around the previous year's record level (approximately HUF 2,400 billion), which also contributes to high economic growth.

The government continues to commit a significant amount to transport developments, the statutory appropriation for priority public road projects in 2018 amounts to HUF 257 billion.

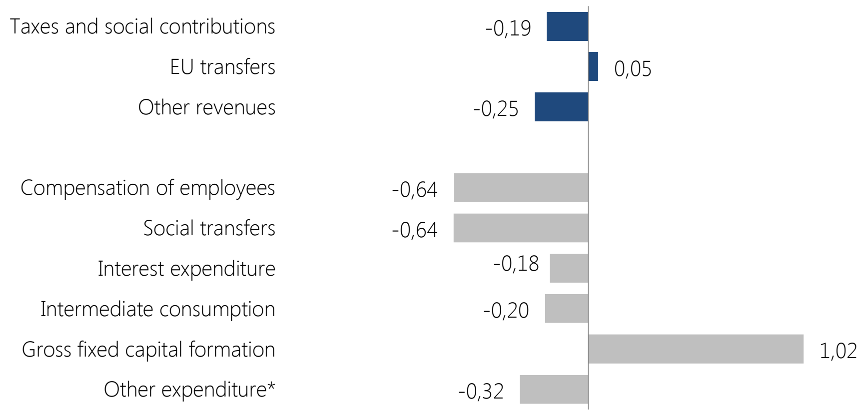
The Paks project will accelerate after procurement of the necessary permits.

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 are included in the 2018 budget.

Just recently, the Government has made a decision on reducing the heating costs of Hungarian families with respect to the extremely cold weather. In addition to some 3.2 million natural gas consumers, 650,000 households with district heat supply will also be provided with HUF 12,000 as winter utility cost reduction.

Chart 3.2: Expenditure and revenue changes 2017-2016

(% of GDP, percentage point)



Source: MfNE calculation

3.4 Budgetary developments from 2019 to 2022

In the last four 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 subsequent 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 more than 2 percentage points between 2019 and 2022. As a result of the acceleration of absorption of EU transfers, a significant proportion of the funds available for the 2014–2020 EU programming period have been utilised until 2018, which will also be shown in the development of EU transfers remaining within the government sector. After the peak of 2019, a lower amount (virtually corresponding to the amount of the contribution paid to the EU) should be anticipated in the calculation. Therefore, EU transfers will not counterbalance the impact of tax revenues increasing at a pace falling short of GDP, and from 2020 the centralisation ratio will slide significantly. The total revenue-to-GDP ratio could be reduced in the last four years by more than 5 percentage points and could drop to about 40%.

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

	2019	2020	2021	2022
Taxes and social contributions	37.6	36.9	36.2	35.5
Other revenues without EU transfers	4.3	4.1	3.9	3.7
Total revenue without EU transfers	41.9	41.1	40.1	39.2
EU transfers	3.2	1.9	0.9	0.8
Total revenue	**45.1**	**42.9**	**41.0**	**39.9**

Remark: Due to rounding the sum data could differ from the sum of the detailed data *Source: MfNE calculation*

Besides the decreasing centralisation ratio, the deficit targets can be achieved with reliance on considerable reserves, that is very safely. In the period from 2019 to 2022, without the EU subsidies the total revenue-to-GDP ratio may be reduced by 2.7 percentage points, while expenditures without EU subsidies may drop by more than 4 percentage points. Investments funded solely with the use of domestic funds are expected to materially exceed the growth of the GDP in 2019–2020. 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, and thereafter 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 due to the tax cuts as per the six-year wage agreement. Beside the continuation of the career path models for teachers, law enforcement and other employees where the associated schemes have already been started, as well as considerable rise of wages and salaries in the healthcare sector, from 2019 the budget trajectory also foresees larger salaries for state officials who still have not been given any wage increase. The planned figures of healthcare expenditures (medical and preventive care) also cover the wage increases that have already been realised and planned in the healthcare sector in the period of 2016–2019.
- The expenditure 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. The increase in cash benefits reflects notably the preservation of the real value of pensions, certain benefits (sick allowance and childcare allowance) are on the rise due to the dynamic growth of wages, while in-kind transfers

provided through market producers may show an increase below the projected inflation rate. Between 2019 and 2022 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.

- In spite of the consistent moderation of the general government debt rate, interest expenditures will not decrease nominally after 2019 due to the expected increase of yield levels, however it will decrease by 0.3 percentage points of GDP.
- The launched large investment projects mean a determination affecting several years, and therefore the expenditure-to-GDP ratio (meaning investments financed purely from domestic resources) is foreseen to increase from 3.3% in 2018 to around 5% by the end of the period. In 2022, the vast majority of all government investments amounting to 5.5 percentage points in proportion to the GDP is assumed to be implemented solely with domestic funding. The Paks 2 investment will not contribute to this growth, as statistics take this project into account as capital transfer.
- From 2019, the calculations extend to the Tax Reduction and Development Fund, which can primarily serve as the source for governmental measures targeting the moderation of tax and contribution burdens, as well as development objectives. If the Government uses this fund either in part, or full for tax reductions, then the redistribution rate and tax centralisation may drop even more dynamically than what is now indicated in the balance.

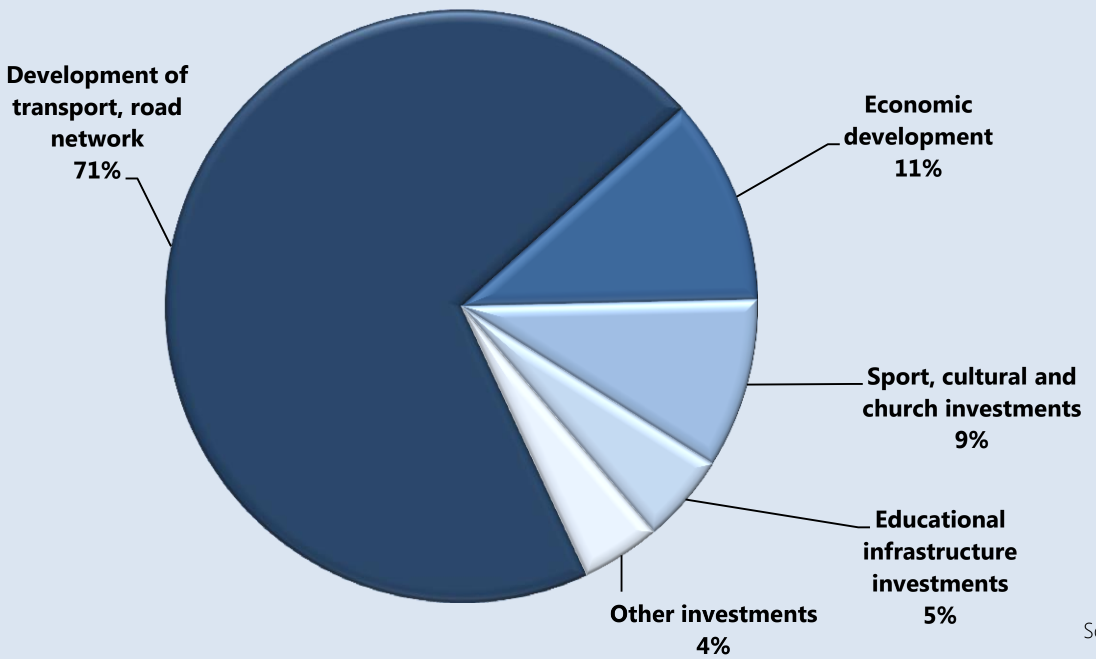
Table 3.3: Main expenditures of the general government (% of GDP)

	2019	2020	2021	2022
Balance	-1.8	-1.5	-1.2	-0.5
Total revenue	45.1	42.9	41.0	39.9
Total expenditure	46.9	44.4	42.2	40.5
Total expenditure without EU transfers	43.7	42.6	41.3	39.7
of which:				
compensation of employees	9.9	9.3	8.5	7.9
intermediate consumption financed from domestic resources	5.7	5.7	5.6	5.4
investments financed from domestic resources	4.5	5.3	5.1	4.9
social transfers	13.1	12.7	12.3	11.8
interest expenditure	2.4	2.3	2.2	2.1

Source: MfNE calculation

Box 7: Modern Cities Programme

Similarly, the Modern Cities Programme (MCP) is being implemented mainly from domestic budgetary resources, and encompasses infrastructure and economic development, healthcare and educational investments. In the framework of the Programme, the Government entered into cooperation agreements with cities of county rank in 2015 for the development of their public services, infrastructure and local economies, the improvement of the life quality of local inhabitants. Based on current cost estimates, the total value of the investments exceeds HUF 3,500 billion, with more than HUF 700 billion sourced from EU funding, HUF 500 billion from combined, i.e. both EU and domestic funds, while two-thirds of the programme are financed from the budget. The programme includes more than 250 projects in 23 cities of county rank. Most of these projects (71 projects) serve economic development goals: the establishment and expansion of industrial parks, the creation of new logistics centres, science and technology parks, the construction of market halls and market places, the expansion of accommodation units, investments for the enhancement of tourist attractions. Almost an identical number of programmes have been designed for transport: 28 projects for the development of the road network and 41 other transport investments (establishment of urban road and intermodal nodes, construction of under- and overcrossings, bridges, modernisation of vehicle fleets for local transport etc.). Their overall value corresponds to 71% of the expected expenditures of the entire programme. In addition to the transport-related items and economic development projects accounting for 11% of the expenditures, the third largest area is constituted by sports, cultural and church investments associated with 9% of all the MCP expenditure. More than HUF 170 billion is provided to promote the modernisation of educational infrastructure, whereas 120 billion is for other developments, for the improvement of the public utility infrastructure (e.g. electric power supply, development of district heat transmission lines and the water supply grid).



Source: MfNE

Under the programme, until the end of March 2018 more than HUF 480 billion and HUF 280 billion were disbursed from domestic and EU sources, respectively. It is the Committee of the Modern Cities Programme that decides on awarding budgetary grants, based on which the Prime Minister's Office issues a letter of grant to each of the local governments concerned, and then the justified amount of funding is furnished. If the investment can be realised more efficiently under state supervision, the funds are re-allocated to the ministry in charge of the supervision of the given governmental investment.

3.5 Structural balance

To gauge the structural balance, as a first step, the convergence programme uses a 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, the Government's growth-stimulating measures, the intensified internal demand, the rising volume of investments and the accelerated absorption of EU transfers will also drive towards the closing of the negative cycle. 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 scenario, the cyclically adjusted balance will be more favourable in 2017 and 2018, 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.For 2018, the Convergence Programme assumes a significantly smaller one-off item, corresponding to 0.02% of the GDP.

Due to events falling beyond the scope of the Government's control, recent years have witnessed a considerable rise in the expenditures associated with the management of migrant inflow, the effects of which have surfaced just thereafter (Tables 8–10, Annex). The expenditures were necessary to ensure the respect of the Hungarian and EU legislation, and the Government sought the most cost-efficient solutions.

In order to improve the effectiveness of countering terrorism and the potential of the law enforcement agencies and defence forces contributing thereto, as well as promote the efficient use of information collected by them, in 2016, 2017 and 2018 significant extra funds were allocated for, among others, the improvement of the technical equipment, the development of assessment and analysing capabilities etc. (Tables 11–12, Annex)

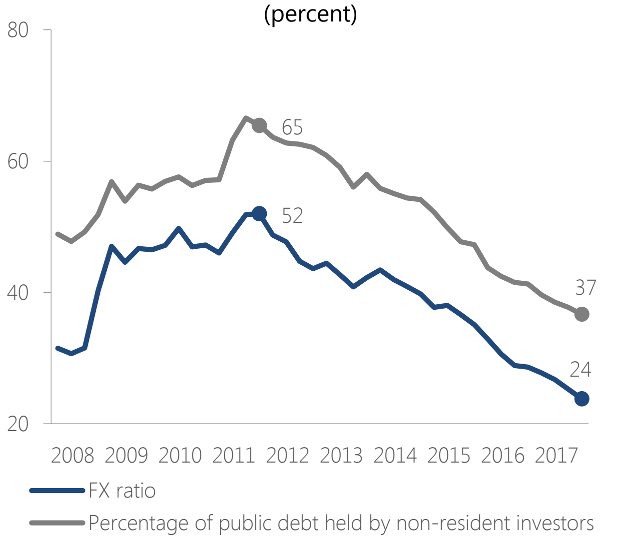
The structural deficit, i.e. the cyclically adjusted balance net of one-off and temporary items deviated from the medium-term objective (MTO) twice during the 6 years that passed since 2012, and on several occasions it showed significantly better values at the average of the 6 years. The structural deficit is expected to increase temporarily in the period of 2017–2019, but from 2020 it will return to the target, and by the end of the forecast horizon it will have considerably exceeded the medium-term objective.

The medium-term budgetary objective sets out a structural deficit target of 1.5% of the GDP as of 2017, in accordance with the methodology presented in the "Code of Conduct". The expenditure aggregate is expected to rise above the reference benchmark in 2018 temporarily, and remain at a lower level afterwards.

3.6 General government debt

Decreasing the debt ratio while improving the investor structure of the general government debt and reducing the share of FX debt remain the main priorities of the Hungarian government debt management strategy. The foreign currency ratio declined to 24% from the 52% at the end of 2011, while the share of non-residents decreased to below 37% from 65% (*Chart 3.3*), which resulted in the moderation of the country's FX exposure and external vulnerability.

Chart 3.3: FX share of the government debt and the share of government debt held by foreigners
(percent)



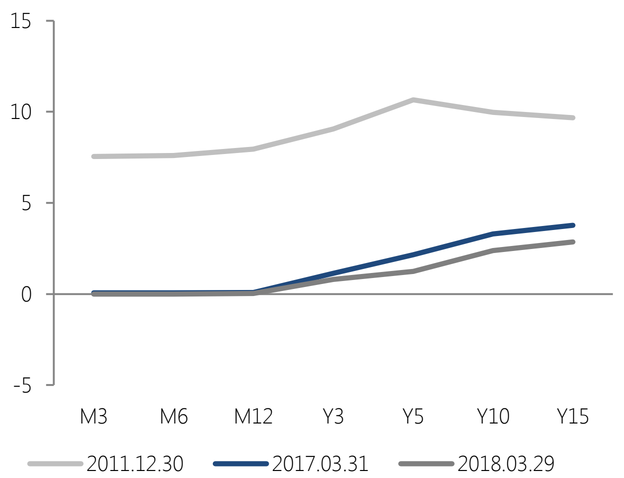
Source: MNB

Thanks to the enduringly disciplined budgetary policy and the further strengthening of economic performance, Hungary's market perceptions improved further in 2017. The low level of the five-year CDS spread also reflects these processes: having surpassed the critical 100 basis point threshold, the five-year CDS spread is currently around 85 basis points, as compared to the level exceeding 600 basis points recorded in 2012. Through the further moderation of the country risk premium, the conditions of debt financing has been positively influenced by the fact that within the investment category two of the three major credit rating agencies have changed Hungary's rating outlook to positive. First, in August it was S&P, followed by Fitch in November, to decide on the improvement of the credit rating outlook.

Partly due to the decreasing country risk premium, the yields of both short- and long-term government securities have decreased significantly, by around 7.5 percentage points since 2012: 3-month yields decreased from 7.5% to 0%, while five- and ten-year yields decreased from 10% to 1.3–2.5% (Chart 3.4).

With respect to the past one year, both the short and long ends of the yield curve have shifted downwards. Over the entire period, the 3-month yield decreased by 7 basis points, while the long-term yields covering 5–10 years dropped by 90 basis points, and as a result the yield curve generally flattened. Yields have been impacted by the fact that risk-free yield levels have started to rise in the international scene during the past one year as a consequence of the more tightening monetary policies. On the other hand, this process has been counterbalanced by the intensification of the domestic interbank market in the short end, as well as the effects of the rating upgrades and interest swap schemes in the long end.

Chart 3.4: Shift of the yield curve
(percent)



Source: ÁKK

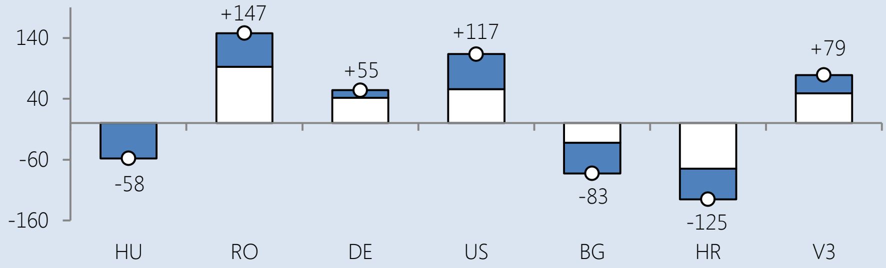
Similarly, the primary market and auction yields largely followed the secondary market trends. As a result of the favourable yield environment, debt can be financed at apparently lower costs: while in 2012 the implicit interest rate of public debt was up to 5.3%, by 2016 the average interest burden decreased to 4.2%, followed by 3.8 in 2017.

Box 8: Decreasing Hungarian yields

In recent months, Hungarian yields have dropped to historic lows: as of 30 March 2018, the 5- and 10-year government securities were at 1.24% and 2.38%, respectively. This decline by 42 and 58 basis points in comparison with the corresponding figures in September last year can be regarded as unique both domestically and on the regional level. It is particularly singular as the Hungarian favorable processes took place in an increasing risk-free yield environment. As a result, currently investors finance the Hungarian state with lower interest rates than in the United States: the difference in yields between the government securities of the two countries is 36 basis points for the 10-year bonds and 132 basis points for the 5-year bonds.

Changes in the 10-year yields

(basis point)

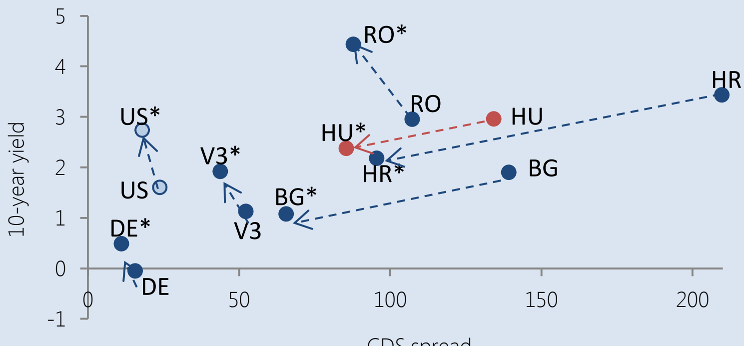


Source: Thomson Reuters

Recent years have brought about the dominance of a typically low yield environment, which has started a gradual rise with the Fed's monetary policy that has slowly become tighter, which is reflected in the general increase of yields both in the secondary market and primary yields. In spite of this trend, the yields of Hungarian government securities have taken a spectacularly declining course, which suggests that in the case of Hungary country-specific factors have influenced the changes of the curve.

One of these country-specific factors to be principally highlighted is the 5-year CDS spread showing the country's default risk. Owing to the improving macroeconomic fundaments and responsible budgetary policy, in 2016 all the three major credit rating agencies upgraded Hungary to the investment category. 2017 saw the continuation of the positive macroeconomic processes, the country's external vulnerability and debt further decreased, which was recognised by the credit rating agencies (S&P, Fitch) with a positive rating outlook. Due to these changes, the CDS spread gradually decreased, and has consequentially and in total improved by 49 basis points since September 2016. Among the countries of the region, only Bulgaria and Croatia have been able to generate larger shrinking.

Changes in 10-year yields and CDS spreads in comparison with September 2016



* Yield level as at 30 March 2018

Source: Thomson Reuters

While over the examined time horizon, the CDS spread came to lower levels both in Romania and the V3 counties, in these cases it was not accompanied by decreasing yields. The main underlying reason is that in these countries – in addition to the CDS spread itself – there were no other factors to counterbalance the general increase of risk-free yields. On the other hand, the risk-free yields of the U.S. and Germany themselves were obviously the mainstream in the global yield movements, showing larger or smaller rises in their level.

In contrast, beside the CDS spread, the long end of the curve in Hungary, Croatia and Bulgaria was also affected by other, country-specific factors. In the case of Hungary, such other factors included previous low inflation expectations and the loose monetary conditions. MNB's monetary toolkit has undergone some substantial changes lately: in a low interest rates environment and with quantitative restrictions (caps) on its policy instrument, the central bank has been using non-conventional instruments more intensively.

The long end of the yield curve came to the central bank's focus in September 2017. MNB's communication made it evident that the bank intended to support the downward alignment of long-term yields with the international level even by deploying new instruments. As the first step towards this end, MNB increased the volume of FX swap instruments used to ensure HUF liquidity so that monetary loosening could be realised over the longest possible section of the yield curve. Thereafter, in November it was announced that the so-called MIRS interest rate swap instrument would be added to the current set of instruments in January 2018 alongside the introduction of a targeted mortgage bond purchase programme. The substantial decrease at the long end of the yield curve has been obviously due to the introduction of the two new instruments by the central bank. From the announcement of the new focus point of the central bank (long end of the yield curve) in September until the first MIRS tender (18 January), the 10-year HUF yields showed a slide by 20 basis points, while regional yields increased by 35–40 basis points on average.

MNB's first MIRS tender was surrounded by overheated market expectations, because the market participants anticipated that the central bank would accept offers for a much larger overall amount than it was actually announced, which led to the buildup of considerable speculative positions in the interest rate swap market. Once the restricted availability of the swap instrument became clear, the closing of positions brought about adjustment in long-term yields. Consequently, present yields are over the level prevailing before the first tender by 34 basis points on the average, but – also on the average – by 50 basis points lower than in September 2017, which points out the effectiveness of the instrument.

After the first tender, MNB fine-tuned and changed the MIRS instrument to carry fixed interests. For this reason, the participants of the tenders would always accurately know what a volume they can individually have from the interest rate swap instruments – as it is set to be distributed on the basis of the respective balance sheet totals –, and therefore speculative transactions can be automatically ousted. As a result, the auctions in February and March were not followed by any significant fluctuation in yields.

Hungary's substantially moderated external vulnerability and the economic stability created by its improving macroeconomic fundamentals, together with the set of monetary instruments used by the central bank with the inclusion of non-conventional elements, are expected to keep long-term Hungarian yields on low levels. In turn, it has a positive influence on the costs of debt financing through the reduction of interest expenditure.

As part of the efforts to further moderate external vulnerability, the improvement of the debt structure can be implemented with reliance on domestic investors and the mitigation of the FX exposure of the government debt. The Hungarian Debt Management Agency (ÁKK) supports the efforts of the Government aiming at the gradual shrinking of the foreign currency ratio by negative net foreign currency issuances, i.e. by refinancing a significant part of the maturing foreign currency debt via HUF-denominated instruments. Being able to rely on funds from the HUF market, tapping international markets was not an absolute necessity in 2017, but considerations in relation to potential savings on interests and diversification justified the issue of these latter securities.

On 4 October 2017 the Hungarian state executed a FX bond swap transaction. USD-denominated bonds maturing between 2018–2023 were repurchased in a total amount of USD 1.165 billion concurrently with the closing of the connected FX swap transactions. The repurchase was financed by the Hungarian Debt Management Agency from the issue of new EUR-denominated bonds in a face value of EUR 1 billion. The success of the transaction is indicated by the fact that the EUR-denominated bonds faced a five-fold demand, while on the repurchase leg investors offered USD-denominated bonds of a value exceeding USD 3 billion, which accounted for nearly 40% of the aggregate volume of the five bond series on offer. Due to this additional supply, the repurchase could be taken at the most favourable offer price. One advantage of the transaction was that with the bond swap the average remaining maturity of the debt lengthened, as the new EUR-denominated bonds has a 10-year maturity. On the other hand, the coupon rate of the new bonds was also low (1.75%), which resulted in savings on interests. The consequential interest rate in fact meant the most favourable costs of EUR-denominated sources of all times from the market. In an accrual-based approach, the repurchase yields HUF 4 billion savings annually.

In addition, after the offshore, so-called dim sum issue in the Chinese market in 2016, 26 July 2017 saw an onshore, CNY-denominated bond issue transaction. The Hungarian state issued the so-called Panda bond with a 3-year duration, in a total amount of CNY 1 billion (EUR 0.13 billion), which was oversubscribed two times. The annual CNY coupon rate of the bond came to be 4.85%, which the Debt Management Agency converted into 0.68% annual EUR interest rate with an interest rate swap transaction. The issue of the Chinese dim sum and Panda bonds served the broadening of the investor base and opening to new markets, and at the same time served an option for the involvement of FX funding for Hungarian debt management, in addition to strengthening economic and diplomatic relations. Hungary is the first country ever that has issued both dim sum and Panda bonds (the RMB-denominated bonds issued in the spring of 2016 meant a link to external Chinese markets, whereas the Panda bonds were designed for the internal market).

In addition, on 14 March 2018 the Hungarian state also issued bonds in Japanese yens to strengthen diversification and the safe financing of public debt. The so-called samurai bond was issued with a duration of 3 years and in an amount of 30 billion yens (0.23 billion Euros). The interest rate turned out to be 0.37%, which corresponded to a EUR-denominated interest rate below 0.6% after its conversion into Euro yields.

Beside the reduction of FX-denominated debts, the debt structure was positively influenced by the fact that the Debt Management Agency strongly encouraged the financing of public debt by domestic investors to the largest possible extent. The first important initiative to this end appeared back in 2012 with the introduction of the retail programme, which has been supported by the ÁKK's ongoing measures (prolongation of the duration, improvement of accessibility, broadening of the retail securities portfolio) since that time. On the other hand, the turning point of orienting banks to the government securities market came with 2014, the kick-off of the self-financing programme. As a result of all these measures, the share of non-resident holders has decreased substantially, while the holdings of domestic actors in the government securities market have risen significantly, from 43% in 2011 to 67% to date. The portfolio of government bonds held by retail customers has been steadily growing, and increased by more than HUF 4,300 billion until the end of 2017, which means that the share of the households in the government securities market increased from 5% to 18%.

Table 3.4: Sovereign debt market share of investors (%)

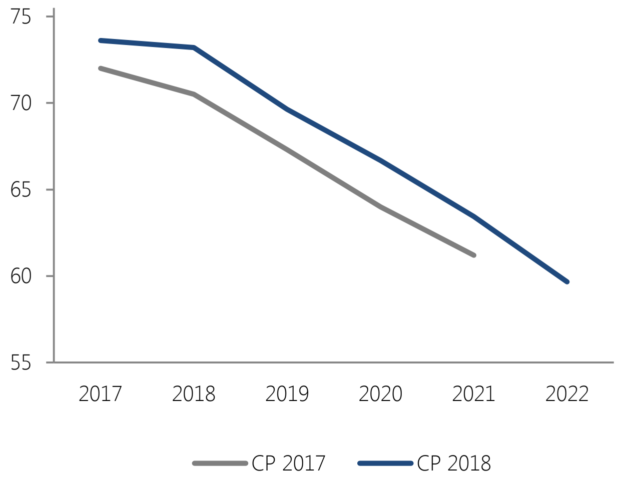
Investor groups	
Non-residents	33
Credit institutions	31
Households	18
Insurance companies, pension funds	8
Other	10

Source: MNB, MfNE calculation

In summary, it can be stated that the success of the debt management strategy has been rewarded by the market with gradually moderating country risk premia and yields, moreover,credit rating agencies regularly acknowledge the reduction of external vulnerability as a notably positive factor.

The government debt-to-GDP ratio has been steadily sliding since 2011. At the end of 2017, the debt ratio was 71.7% at a 310.14 HUF/EUR exchange rate. The 8.2 percentage point debt reduction implemented in the past six years was one of the most significant achievements among the EU Member States. From 2018, on Eurostat's initiative Eximbank's debt was reclassified into the general government sector, which changed the 2017 debt ratio to 73.6%. Although this reclassification is rather a technical–accounting issue, because it does not materially influence the fundamental processes shaping the debt trajectory, in view of the future, the convergence programme analyses the trajectory calculated with the inclusion of Exim's figures. According to the new data, until 2017 the debt ratio decreased significantly, as well, by 6.9 percentage points in comparison with 2011, and at a similarly large pace after 2016, by 2.4 percentage points when Eximbank's debt was taken into account retrospectively. After last year's strong dynamics, 2018 is expected to bring about a more moderate downward trend in the debt ratio (73.2%), and then by the end of the planning horizon, i.e. 2022 the debt ratio is foreseen to drop under the 60% Maastricht requirement (Chart 3.5).

Chart 3.5: Public debt in Convergence Programmes for 2017 and 2018
(in % of GDP)



Source: MfNE calculation

The current convergence programme forecasts a debt trajectory that will run considerably – by 2.2–2.7 percentage points – higher than last year, mainly as a result of the reclassification, because the deficit trend is virtually identical to that of the previous year. On the other hand, the favourable growth rate needs to be taken into account as a factor with positive influence on the debt trajectory.

Table 3.5: Discrepancy in public debt path forecasts for 2017 and 2018 (pps)

2018	2019	2020	2021
+2.7	+2.3	+2.7	+2.2

Source: MNB, MfNE calculation

(1) Nominal GDP: Set higher than in the convergence programme for 2017, the nominal GDP values will substantially push the debt trajectory downwards in comparison to last year's forecasts.

Table 3.6: Effect of nominal growth on the debt path (pps)

2018	2019	2020	2021
-0.9	-1.2	-1.4	-1.8

Source: MNB, MfNE calculation

(2) Numerator effect: Being higher in comparison to the convergence programme for 2017 over the entire time horizon, the debt forecast for the period from 2018 until 2021 itself modifies the debt trajectory projected for 2017 as follows.

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

2018	2019	2020	2021
+3.6	+3.5	+4.1	+4.0

Source: MNB, MfNE calculation

This change can be attributed to the combined effect of a number of factors, of which the most significant one is the above-mentioned reclassification of the Exim debt.

(2a) Reclassification: From 2018, on Eurostat's initiative Eximbank's debt was reclassified into the general government sector, which pushed the debt trajectory upwards by around 2 percentage points. Recent years have seen several series of consultations between Hungary and the European Union in relation to Eximbank's sectoral classification. Eurostat has put forward its classification proposal with respect to the full-scale governmental guarantee, the lack of deposit collection and the interest subsidisation system, meaning that in its opinion Eximbank is not involved in real financial mediation due to these characteristics. According to the Hungarian statistical authorities, however, Eurostat's guidance disrupts the unity of national account statistics with respect to the classification of state-owned banks in general government. In terms of economics, Eximbank's debt has purposes that are different from those of the debt elements issued for the financing of the budget deficit. Increasing public debt typically entails larger interest expenditure, and here profitability cannot be interpreted. In contrast, the bank directly furnishes loans to profit-making investments, and in this context it re-lends its debt. The bank's growing portfolio means an increasing amount of disbursed loans, which enhances profitability.

(2b) Gross interest expenditures and primary balance: From 2018, the key deficit figures correspond to the deficit trend presented in the convergence programme for 2017. It originates from two distinct effects. On the one hand, the interest expenditure forecast has shifted slightly (by 0.1–0.2 percentage point in terms of GDP) lower on the 2018–2021 time horizon as a consequence of the global market conditions that used to be permanently favourable, and has become just mildly stricter by today, as well as the rating upgrades and the interest rate swap programme. On the other hand, the primary balance is taking a somewhat higher course than the forecast of the 2017 convergence programme, still the deficit trajectory meets the 3% EU requirement, and at the same time it reflects a more relaxed fiscal policy that supports growth. Ultimately, it contributes to the moderation of the debt ratio through the higher nominal GDP.

(2c) Other items: Furthermore, the change of the debt trajectory 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 projections is 0.3% stronger than the HUF/EUR exchange rate of 311.02 in the Convergence Programme for 2017 (HUF/EUR 310.14). In itself, the assumed rate that is 0.9 percentage point stronger than that of last year would lead to a 0.05 percentage point lower debt trajectory. In addition, a major divergence 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 accruals-based balance of the budget. In the individual years, these latter items pushed the debt trajectory of the current Convergence Programme higher to a larger (0.9–1 percentage point) or smaller (0.1 percentage point) extent in comparison with the 2017 forecast.

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 2018 until the end of the horizon would moderate the debt-to-GDP ratio by 1 percentage point in 2018 and by 4.4 percentage points until 2022.

(B) Exchange rate: The share of foreign currency denominated Maastricht debt was 24% at the end of 2017, which, as a result of the Government's endeavours, is expected to decline to near 15% by

2022. Owing to the decreasing foreign currency share, the foreign exchange exposure of the debt will downslide. It is clearly reflected in the fact that a 1 unit shift in the exchange rate will change the debt ratio by 0.05 in 2018 and just 0.04 percentage point at the end of the time horizon. Therefore, a nominal exchange rate, which is 1% weaker than the exchange rate assumption specified in the convergence programme (HUF/EUR 314.5), would induce a 0.15 percentage point higher gross debt ratio in 2018–2019, and then from 2020 it would be only 0.1 percentage points higher.

(C) Economic growth: Should the nominal GDP growth end up 1 percentage point higher in 2018, the debt trajectory would see a 0.6–0.7 percentage point downward shift over the entire time horizon.

In general, the continuous improvement of the debt trajectory and debt structure are undoubtedly reflected in the lower level of interest expenditure and in the more moderate exchange rate sensitivity of the debt. These successes prove that the key Government endeavours relating to debt management took 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 in the investors that the positive processes will continue in the future, too.

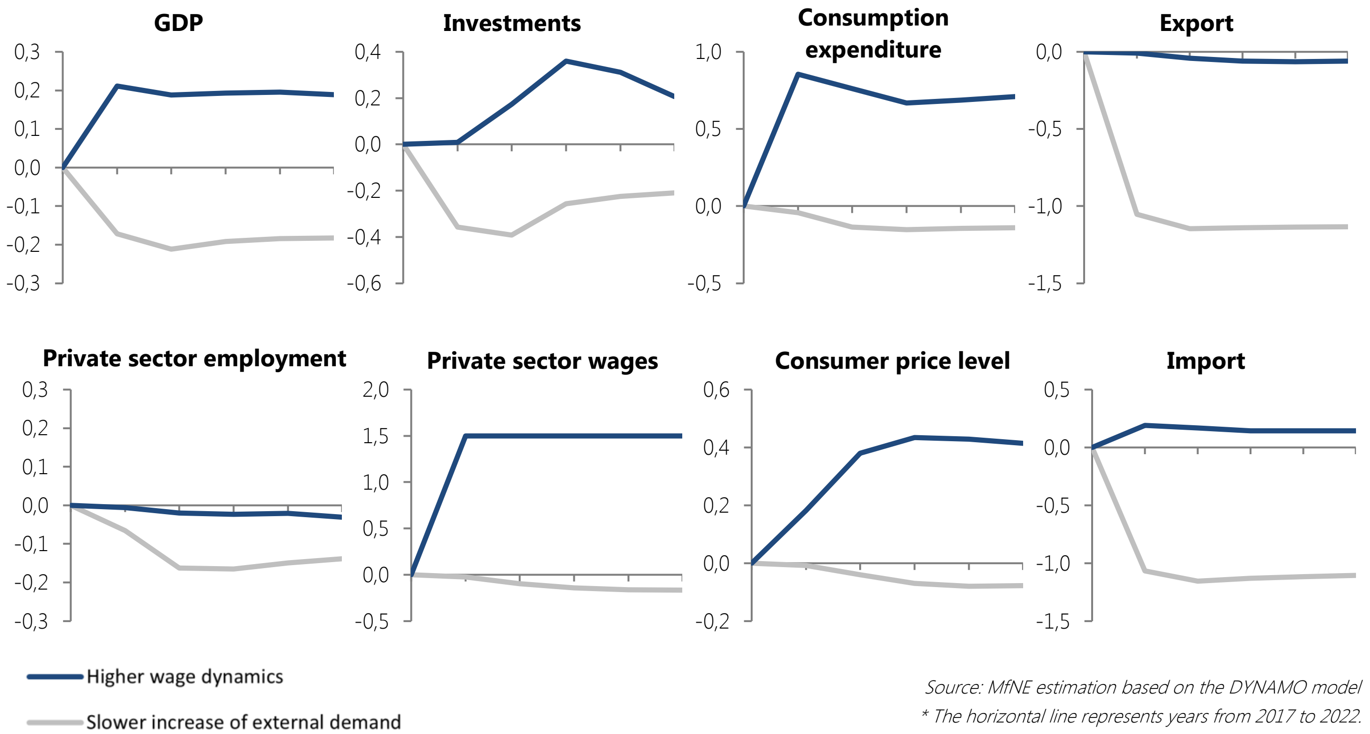
4. Sensitivity analyses

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 acceleration of wage dynamics, whereas the second scenario presumes a slower growth of external demand. Estimated based on the DINAMO model of the Ministry for National Economy, the sensitivity analyses 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].

Following the two-digit wage development experienced in 2017, dynamic wage growth is also expected for this year, in accordance with the increase of the minimum wage and the guaranteed wage minimum, the tight labour market environment, and the career schemes supporting specific segments of the public sector. Nevertheless, the early-year wage data available show upward risks. Accordingly, scenario 1 presumes that the average wages in the private sector may grow at a rate of 1.5 percentage points faster than assumed in the baseline scenario. The wage increase significantly raises the disposable income of households, to which market agents would react by expanding the investment capacities, though the related employment impact would not be substantial. Therefore, the level of GDP would increase additionally by 0.2 percentage points for this year. Originating from consumption and capacity expansion, the combined effect of production and income surplus would generate additional revenues for the general government, and would be accompanied by minor wage inflation pressure.

Chart 4.1: Alternative scenarios

(cumulated % difference in levels compared to the baseline scenario*)



Source: MfNE estimation based on the DYNAMO model

** The horizontal line represents years from 2017 to 2022.*

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

Scenario 2 presumes the realisation of risks which adversely affect the external economic upturn. The strengthening of protectionist measures and the intensification of geopolitical tensions, as well as the uncertainties surrounding the Brexit negotiations may also deteriorate the growth prospects on the forecast horizon. The impact is based on the growth of external demand that is expected to fall short of the expected rate permanently, by 1%. This directly deteriorates the demand for the Hungarian export. Slower export dynamics would also result in a slower growth of domestic production capacities, i.e. the dynamics of employment and investments would also be subdued. In turn, these effects are foreseen to be substantially mitigated by the large share of import content in the export. Slower demand would lead to a more moderate inflation rate. In line with the cyclical developments, the general government deficit would also be higher as a result of the 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: Higher wage dynamics	2017	2018	2019	2020	2021	2022
GDP	0.00	0.21	0.19	0.19	0.20	0.19
Households' consumption expenditure	0.00	0.86	0.76	0.67	0.69	0.71
Gross fixed capital formation	0.00	0.01	0.17	0.36	0.31	0.21
Export	0.00	-0.01	-0.04	-0.06	-0.06	-0.06
Import	0.00	0.19	0.17	0.14	0.14	0.14
Consumer price level	0.00	0.18	0.38	0.43	0.43	0.41
Private sector employment	0.00	-0.01	-0.02	-0.02	-0.02	-0.03
Gross average wage in the private sector	0.00	1.50	1.50	1.50	1.50	1.50
Income taxes*	0.00	0.14	0.14	0.13	0.13	0.13
Employer contributions*	0.00	0.11	0.11	0.11	0.11	0.10
Turnover taxes*	0.00	0.10	0.11	0.10	0.10	0.11
Taxes levied on companies*	0.00	-0.08	-0.07	-0.07	-0.07	-0.07
Interest expenditure of the general gov.*	0.00	0.00	0.00	0.00	0.00	0.00
General government balance*	0.00	0.16	0.17	0.16	0.16	0.15
Scenario 2: Slower increase of external demand	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
GDP	0.00	-0.17	-0.21	-0.19	-0.18	-0,18
Households' consumption expenditure	0.00	-0.04	-0.14	-0.15	-0.14	-0.14
Gross fixed capital formation	0.00	-0.36	-0.39	-0.26	-0.22	-0.21
Export	0.00	-1.05	-1.15	-1.14	-1.14	-1.13
Import	0.00	-1.07	-1.15	-1.13	-1.12	-1.11
Consumer price level	0.00	-0.01	-0.04	-0.07	-0.08	-0.08
Private sector employment	0.00	-0.07	-0.16	-0.17	-0.15	-0.14
Gross average wage in the private sector	0.00	-0.02	-0.10	-0.14	-0.16	-0.17
Income taxes*	0.00	-0.01	-0.02	-0.02	-0.03	-0.02
Employer contributions*	0.00	-0.01	-0.02	-0.02	-0.02	-0.02
Turnover taxes*	0.00	0.00	-0.02	-0.02	-0.02	-0.02
Taxes levied on companies*	0.00	-0.02	-0.02	-0.01	-0.01	-0.01
Interest expenditure of the general gov.*	0.00	-1.61	-1.54	-1.49	-1.44	-1.39
General government balance*	0.00	-0.04	-0.06	-0.07	-0.07	-0.06

Source: MfNE estimation 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, general government 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 government 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 impacts of the projected ageing of the Hungarian society through demographic changes.

The Fundamental Law stipulates that the general government debt-to-GDP ratio shall be constantly reduced until it reaches 50%. For this purpose, the Government has been implementing sound fiscal policy.

The parametric changes that have been introduced in multiple steps and subject to gradual implementation have already reduced the pension expenditures considerably in recent years, and are still expected to result in relatively lower expenditures in the future. In accordance with the 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 effective 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 1.53 according to the latest statistics (for 2016), while the EU average is 1.60.

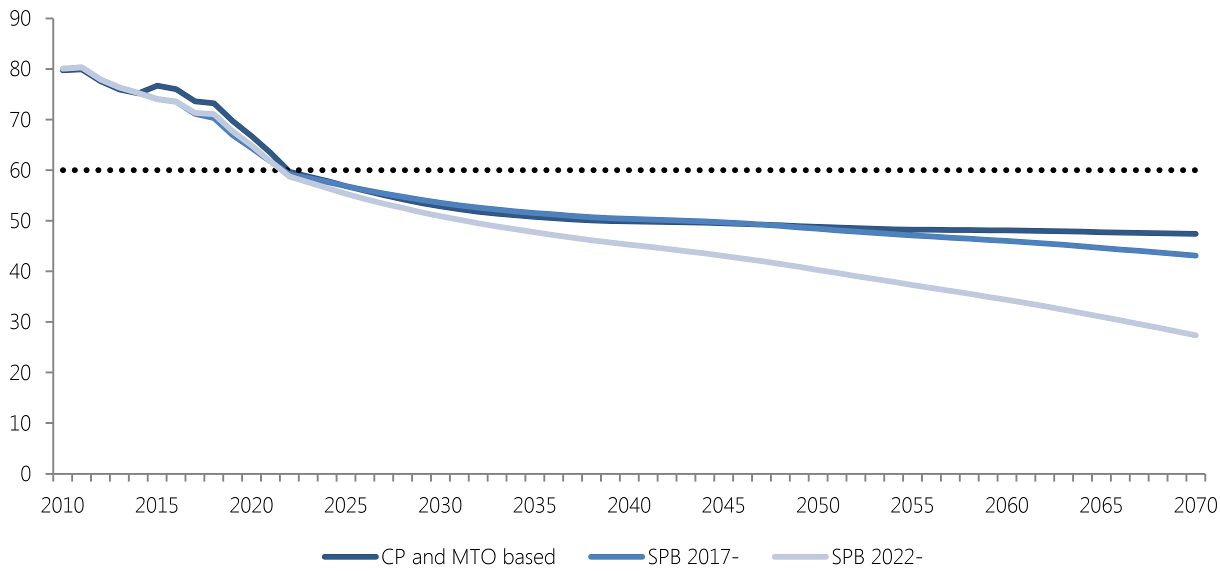
In order to encourage families to have children, the Government has strengthened the family incentive system. The main elements of the measures included various forms of pecuniary support to families, such as child-care allowance, child raising support, child protection benefit, as well as the family 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 the most recent calculations approved by the European Commission and the EU Economic Policy Committee, the pension expenditures relative to GDP are expected to increase from 9.7% in 2016 to 11.2% by 2070, which is considered an average 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 calculations, according to which health expenditures will increase from 4.9% of GDP in 2016 to 5.7% by 2070, long-term care expenditures will rise from 0.7% of GDP to 1.1%, and expenditures on education will be up from 3.6% of GDP to 3.8% of the GDP in the same period 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 trajectory is expected to continue to be sustainable in the long run, based on either the fiscal path presented in the convergence programme or the budgetary policy implemented in recent years.

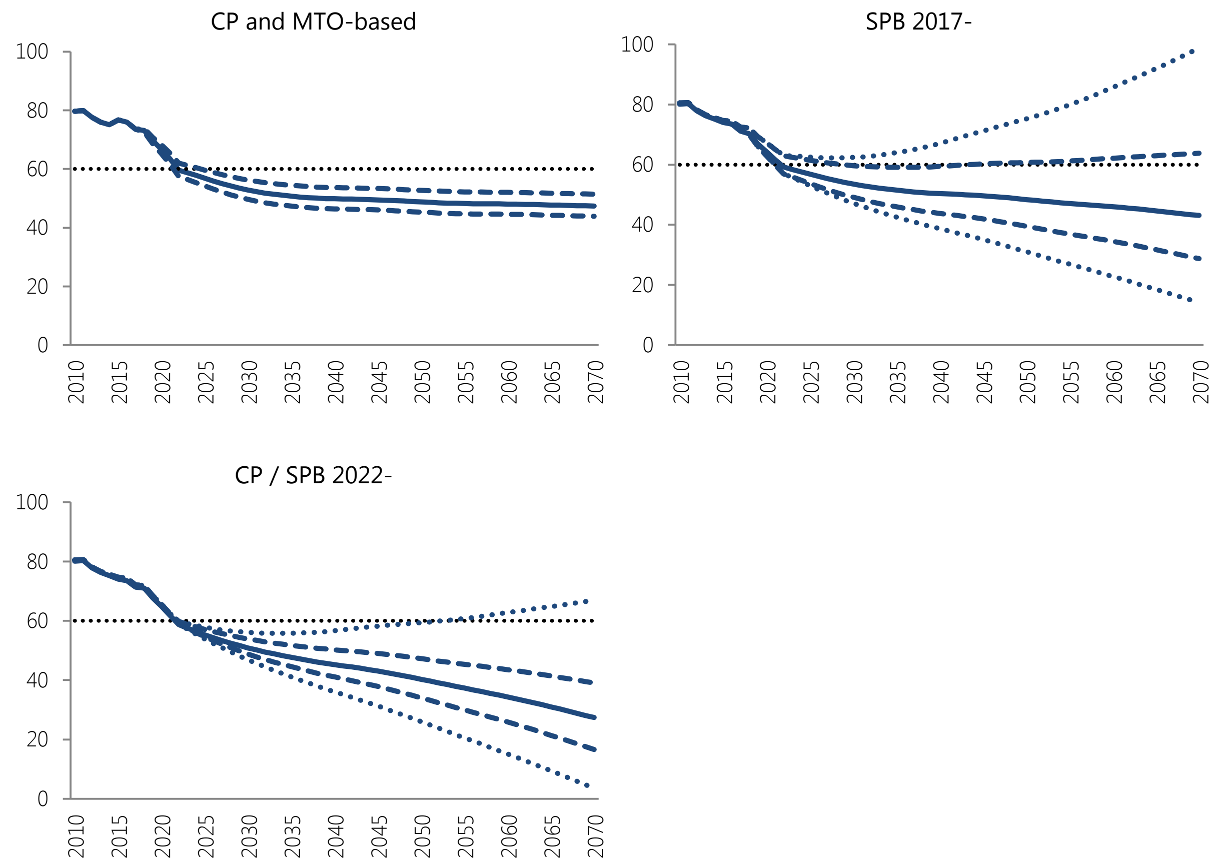
General government debt developments
(in % of the GDP)



Remark: macroeconomic trajectory until 2022 based on the assumptions described in the CP and thereafter with respect to the macroeconomic assumption presented in the 2018 Ageing Report, while the structural balance data based on the estimations of the CP

Sensitivity analysis of the different scenarios

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



Source: AMECO, MfNE calculation

Scenarios:

CP and MTO-based: Structural balance from 2022 in line with the MTO

underlying consideration: the scenario demonstrates the long-term trends of public debt provided that the trajectory described in the convergence programme is realised, in case the structural balance meets the current MTO after the last year of the convergence programme (i.e. it deteriorates to that level)

The simple extension of the trajectory in the convergence programme (with frozen structural primary balance from 2022) would result in a very similar situation to the scenario described below.

SPB 2017-: The structural primary balance for 2017 estimated in the CP frozen over the entire time horizon

underlying consideration: reliance on the observed budget results can similarly serve as an appropriate basis for the assumption relating to unchanged economic policy (though it would not manage the issues of the freezing of certain selected, non-recurrent values)

CP / SPB 2022-: on the last year's level of the CP's time horizon, the structural primary balance frozen over the entire time horizon

underlying consideration: the scenario demonstrates the long-term trends of government debts provided that the trajectory described in the convergence programme is realised

6. Quality of public finances

As a result of the prudent fiscal policy implemented in recent years, the general government deficit dropped well below 3% of GDP in a sustainable manner. In addition to ensuring the sustainability of public finances, it is a key objective of the Government to develop an economic policy that supports sustainable growth and job creation. In order to maintain, it continues the structural improvement of government expenditures and revenues.

6.1 Structure and efficiency of the expenditure of public finances

There are several labour market measures which indirectly support the realisation of a higher growth rate, originally taken to improve the quality of budgetary expenditures. In view of this, the convergence programme describes the steps taken and planned by the Government in the field of public works, 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 works.

The programme called “From Public Employment to the Private 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 jobseekers 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. However, the inclusion of inactives also needs to be supported. 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, who cannot find jobs in the open labour market even with support, as well as for those who are still inactive. With reliance on the profiling system, for the reinforcement and more efficient 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 the Hungarian economy, the Government creates opportunity for the market-based employment of public employees which is in line with the country specific recommendations.

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 (training) and employment opportunities (in the primary labour market) 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, the aim 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 jobseeker – for reasons attributable to employers –, or
- for 3 months the district (Budapest district) office has not been able to provide the jobseeker with a job opportunity in the competitive market.

The basic aim is to utilise any means to provide public workers with the opportunity to find a job in the private sector. Cost reimbursement is 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. Further possibilities of reimbursing the local travel expenses are under assessment by the ministries concerned.

With respect to the shortage of labour having surfaced in the private sector, 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 private sector cannot offer realistic employment opportunities to the individuals concerned, meaning that the jobseekers are unable to find jobs beyond their own faults.

On the one hand, the new restrictions encourage young people to prefer finding a job in the labour market; on the other hand, qualified workers and those who have already gained work experience and professional knowledge in public employment are also inspired to orientate towards the private sector.

In 2018 the wage of public workers remains the same as was in 2017. This is intentional and explained by the increasing minimum wage, which means a motivation for public workers to quit for the labour market.

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

- The support programme “From Public Employment to the Private Sectoor” 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 jobseekers 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.

These measures have the potential to ensure the employment of tens of thousands of public employees in the primary labour market.

In the period between 2016 and 2018, the trainings related to public employment are implemented under the “Training of Low Skilled and of Public Workers” priority project within the framework of the Economic Development and Innovation Operational Programme (EDIOP-6.1.1-15). The aim of the priority project is to encourage the adult population characterised by low level of educational attainment and lack of competence or qualification demanded in the labour market – in particular, the public workers – to take part in education, training, as well as to provide them with the opportunity to obtain qualificiation, knowledge, skills, competences that are relevant from a labour market prespective.

Vocational education and training (VET)

In 2017 – adapting to the rapid changes seen in the labour market – the transformation of vocational training and adult education continues, as well as their more efficient adjustment to the economic needs. For the enhancement of the competitiveness of economic players, the planned interventions aim to

establish and launch the system of corporate trainings in the short run. In the medium run, the school-based vocational training that is capable of ensuring sufficient labour supply and built on corporate interests continues to be transformed.
All in all, the previous supply-driven training system is replaced by a demand-driven skill and training system. In line with that, the following changes are expected to take place in the vocational and adult training policy:

1. Adult training will become an integrated part of working life
2. Making adult training regulations more flexible so as to increase efficiency without impairing quality *(As part of this easier access to NQR partial contents will be gradually ensured in adult education.)*
3. The role of employers will strengthen and become decisive in performing training-related tasks. Economic development will be increasingly carried out along sectoral policies, thus resulting in the establishment of new sectoral cooperations. As part of this, for example, the specification of the contents of individual sectoral trainings will be ensured through the so-called "sectoral skill councils" in line with the international trends.
4. The permanent development of training contents will be established; the focus will be on the competences necessary for successful employment and the new skills demanded by the "fourth industrial revolution" named Industry 4.0 which is based on new digital technologies. As part of this, the comprehensive reform of the NQR will be implemented in the form of establishing qualifications that ensure sectoral basic skills, and, at the same time, by also reducing the number of qualifications. The curriculum will be developed according to the competences demanded by the new jobs.
5. The necessary labour supply will be ensured through the quality reform of the vocational training. As part of this, for example, more flexible, career-like student paths will be provided, the apprenticeship contract system will be further improved, and the career tracking system will be also set up.

The scholarship system for students who attend trainings for the attainment of vocational qualifications in the so-called in-demand vocational qualifications 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 vocational training, in the dissemination of practical training at companies and in quality assurance. In 2015 the institution of the "chambers' guarantee" was introduced, which increases the number of apprentices involved in dual training by placing VET 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. 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 vocational training contribution in the case of SMEs).

Box 9: The role of public employment in the transforming Hungarian labour market

A key objective of the economic reforms introduced in Hungary since 2010 was to create a work-based society through enforcing the “work instead of unemployment benefit” principle. One of the key elements of reforms was the Start Labour Programme which was an adequate tool to address mass unemployment. On the one hand, the high level of public employment in the early-2010s was justified by the fact that several hundreds of thousands of persons lost their jobs as a result of the crisis (the number of registered unemployed constantly varied around 500,000 persons between 2010 and 2013); on the other hand, it was motivated by the intention to address the inactivity and loss of human capital which were the negative consequences of the unemployment benefit system operated in the preceding decades. The public works programme was capable of mitigating the financial and social crisis of the families concerned in the years of stabilisation; in particular, it was an effective tool in helping those living in the rural parts of Hungary, the people most exposed to unemployment, the groups of society without any qualification or which are difficult to employ for other reasons. It was an important goal of the public works programme to ensure that several ten thousand of people become able to exit from many years – in a great number of cases, decades – of inactivity, from the world of low unemployment benefits and loss of human capital, then after a couple of years to appear in the labour market as employees, to the largest extent possible. The efficiency of work performed under the public works programme increasingly improved during the years, thanks to, among others, the powerful efforts presented by the competent government and local government bodies.

As a result of the Government’s economic policy reform steps, the improving world economic environment and the boosting economic growth, the primary labour market demand started to massively gain momentum from 2014 onwards. In response to the changed circumstances, the Government introduced measures aimed at promoting the employment of public workers in the private sector. These measures concern the factors that prevent public workers from exiting for the primary labour market, and which can be influenced with the Government’s toolkit.

According to researches, the exit from public works is affected in the first place by the difference between the wage available in the primary labour market and the public works wage, since this difference is to cover the costs of commuting to work, the amounts required for being mobile. The six-year wage agreement signed in November 2016, as well as the significant raise of the minimum wage and guaranteed wage minimum brought along a decisive turning point also in this regard. The wages which had been paid in the primary labour market in the preceding years did not prove to be an adequate alternative for exiting public employment, and in many cases it was not worth for public workers to switch. The public works wage reached more than 80% of the guaranteed wage minimum. This ratio reduced to 63.9% between the public works wage and the minimum wage by 2017, while it amounted to 66.2% in the case of guaranteed wages. In 2018 this ratio fell to 59% for both wage types.

The programme named “From Public Employment to the Private Sector” aims to make public works interested in seeking jobs in the private sector before the public employment relationship expires. The prospective employee is eligible for incentive bonuses, while the employer is given the option to use the services of a professional contributor who helps the public worker in meeting the requirements set by the primary labour market and in becoming comfortable at the workplace. Following the use of professional services, the employer may be granted subsidy for the wage costs.

Another important factor which hinders the exit from public works is the high amount of commuting and accommodation costs if working outside the place of residence, compared to the wage. Being aware of this, the Government has decided to introduce the housing supports for mobility, which the employer may grant to its employees from 1 January 2017 in the first five years of employment, in a tax-exempt form in part. For this purpose, HUF 10.3 billion is made available in the budget for 2018.

The Youth Guarantee programme – by mobilising EU funds (EDIOP, CCHOP) – targets young unemployed below the age of 25 who are the most probably able to take part in education or further education, as well as public workers, in order to ensure employment in the primary labour market. The employment service shall, within a determined period of time, offer a concrete option of employment, gaining of work experience or participation in education. The programme aims that the young people spend the possibly shortest time in unemployment, public works, inactivity or without participating in education, as well as that they receive customised support to improve their labour market position. The employers hiring young people are granted wage cost subsidy. Moreover, the travel costs arising in connection with commuting to work may also be reimbursed, and housing support may also be applied for. The young people who are willing to take part in education have the possibility to choose between free-of-charge employment and training options. The programme also helps them in becoming entrepreneurs.

The people who have reduced capacities to work either as a result of a decade of unemployment or other factors represent a target group of public employment. This justified the creation of the option according to which those receiving rehabilitation benefits can work 4–8 hours a day in public employment. This option can be chosen by the persons who suffered a health impairment of at least 40%, determined by the competent official body. Support may be also granted to persons struggling with mental, social and health problems, who are placed in a six-hour public employment relationship by the district office.

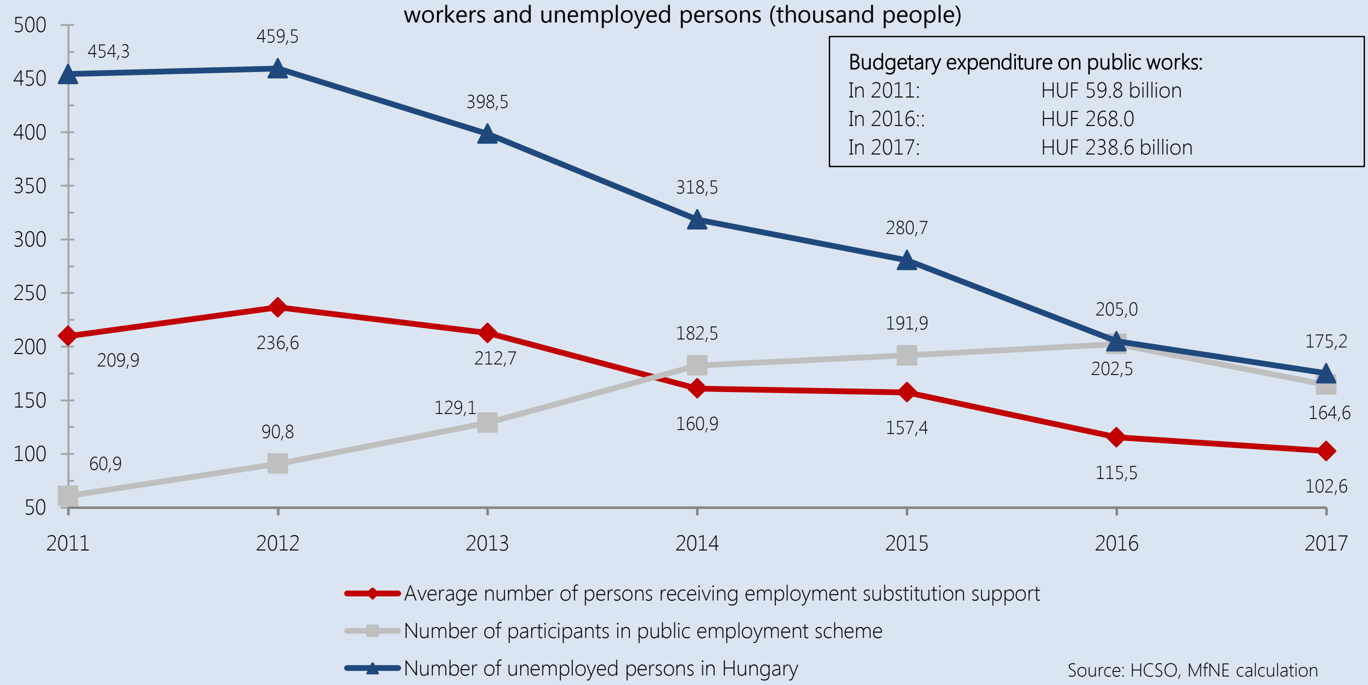
Since its introduction in 2013, the Job Protection Act has been aimed at the labour market activation of groups that are difficult to employ, by means of providing tax allowances to the employers. Within the framework of the Job Protection Act, the time spent in public employment may be also taken into account when calculating the time period required for the long-term jobseeker status. With this measure, the disadvantage of public workers was eliminated against those not participating in public works. The job protection allowances may be used together with Youth Guarantee programme.

Not only support elements were built in the framework rules of the public employment system, but ones which encourage participants to enter in the open labour market, thus strengthening the pull effect of the primary labour market. The maximum duration for which a person may be involved in public works was changed to one year, implemented in an ascending system with a three-year period. From this means an exception the person who is not offered a realistic job opportunity in the private sector, thus who is unable to find jobs beyond his or her own fault. If the public worker refuses to accept the primary labour market offer, then the public worker may be excluded for a period of three months.

The establishment of flexibility in public works was a natural need from the part of market enterprises in order to facilitate seasonal and casual work (especially in the agricultural sector). Accordingly, within the framework of simplified employment, a public worker is entitled to an unpaid leave of absence of 120 days a year.

Also, in connection with the favourable changes presented above, last year already witnessed a decline in the number of public workers. The drop is explained by the demand effect experienced in the primary labour market, since the number of those receiving grant provided for the non-employed of active age – meaning those who receive employment substitution support – and the number of unemployed persons also decreased along with the number of public workers. This means that the reduction of the share of public works (regarding both the number of persons involved and the budgetary sources used) is not a result of forcing the individuals concerned back in the world of unemployment benefits, but is rather taking place through the expansion of more efficient and better paying job opportunities.

Change in the average number of persons receiving employment substitution support, public workers and unemployed persons (thousand people)



Source: HCSO, MfNE calculation

Remark: in addition to the improvement of the employment situation and the boosting public employment, the decline in the number of persons receiving employment substitution support is also explained by the stagnating income brackets used for determining the eligibility for such support, in combination with the increasing incomes.

It needs to be stressed that the exit to the primary labour market will remain limited for a major part of public workers due to their cultural, psycho-social characteristics (limited scope of learning abilities, addictions or other adverse health issues, loss of motivation resulting from a previous period spent in unemployment) and family background (home-care, child-raising responsibilities). Government measures aimed at addressing these do not promise or only promise change in the long run, with regard to the time period the accumulation of such problems took in the past.

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 started in 2016 and was closed in 2017. The measure resulted in the reorganisation or termination of 37 budgetary organisations. 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 resulting HUF 7.8 billion was taken into account during the compilation of the budget for 2018). 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.

6.2 STRUCTURE AND EFFICIENCY OF REVENUES

Since 2010, 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 situations. 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, while the social contribution tax rate was cut by 5 percentage points in 2017 and by further 2.5 percentage points in 2018.

With the introduction of the family tax base allowance in 2011, the tax system now also takes into consideration the number of dependent persons in the household. The tax benefit for people married for the first time – was introduced in 2015 – can be claimed independently of the family tax base allowance from 2017. The family tax base allowance for families with two children is increased in 4 equal steps, in 2019 it will be the double of the value in 2015. . The measure will improve the situation of the 390–400,000 people concerned. In order to promote the employment of the most disadvantaged groups, in 2013 the Job Protection Act was 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 etc.) can be considered extremely broad in international comparison. The allowances used after900 thousand employees in the private sector, and it reduced the wage costs by HUF 110.6 billion in 2017.

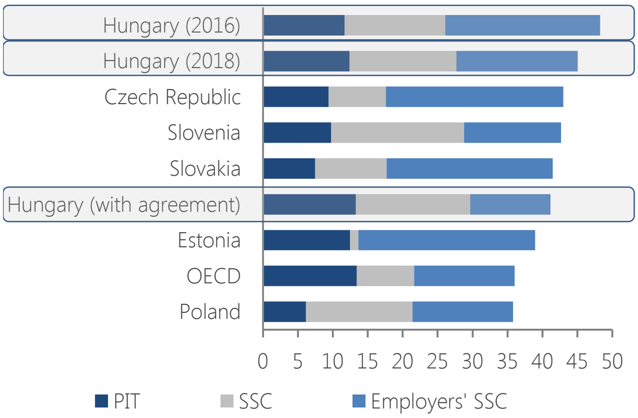
As far as the social contribution tax payable by employers is concerned, the already mentioned total reduction of 7.5 percentage points in this burden was implemented, in line with the agreement of the Permanent Consultation Forum between the Private Sector and Government. Pursuant to this agreement, the rate of the social contribution tax will be cut four times by further 2 percentage points each time, to be implemented in light of the development of wages, starting in 2019. In line with the reduction of the tax rates, the parameters of job protection allowances were also standardised.

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.

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 to 19.5%. The health contribution payable on interest income was eliminated, and from 2018 the eho derived from over 1 million HUF rental income was also 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.

Chart 6.2: Tax wedge

(single person, no child, at 100% of average earnings)



Source: MfNE calculation, OECD

Company taxes

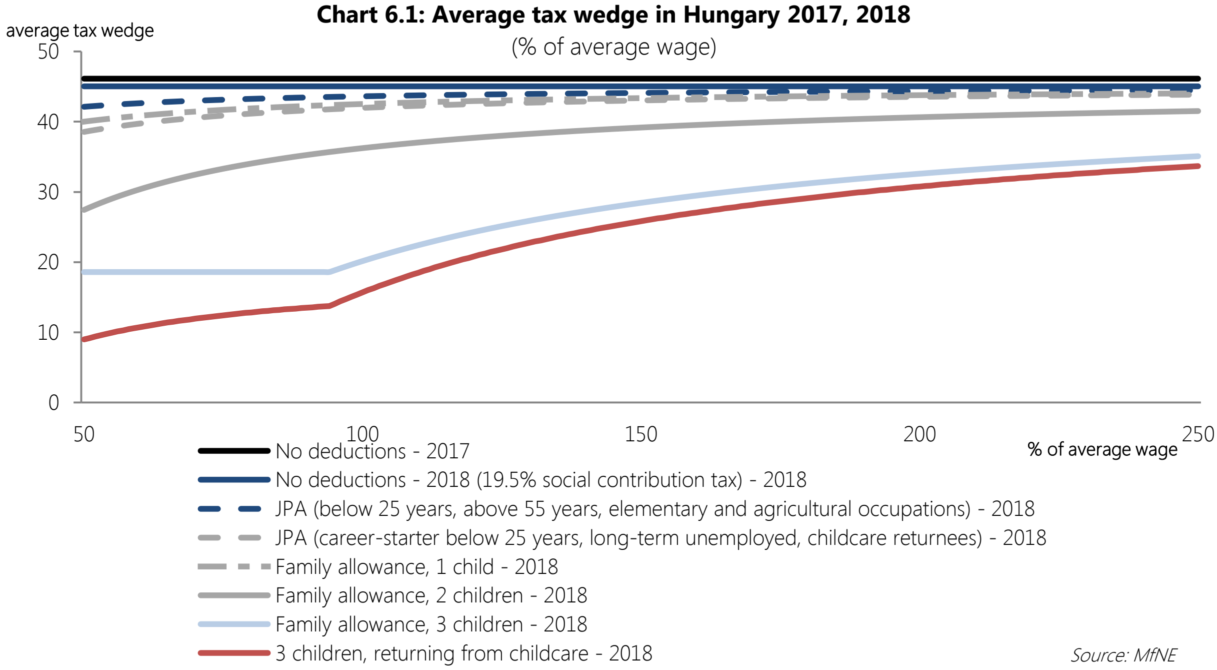
In the case of the corporate income tax, the most significant change is that from 1 January 2017 its rate was reduced to a uniform 9 percent. Through the intensification of investments, the effect of the measure can also surface in the improvement of productivity and consequently the wage level, which 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 the tax rate, corporate taxation has been a scene for various incentives for investments since 2017. Substantial easements have been made in case of the tax allowances that are available to small and medium-sized enterprises for investments, while in the system of development tax incentives the required extent of headcount increase has been considerably lowered since 2017. In addition, the development tax incentives have been also made available for initial investments resulting in product diversification and initial investments resulting in new procedural innovation from the end of 2017.

It is a substantial change for small and medium-sized enterprises that with the simplification of the rules of small business tax (kiva) and the reduction of the corresponding tax rate, from 2017 the tax system has created even more favourable taxation environment for them. The calculation of the tax base was also significantly transformed to simplify tax returns considerably and facilitate conversion to this type of taxes, while the tax payment obligation became much more predictable and favourable than before. As a

Chart 6.1: Average tax wedge in Hungary 2017, 2018

(% of average wage)



Source: MfNE

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, while the headcount limit from 50 to 100 employees. With respect to the fact that this type of taxes replaces both the social contribution tax and the corporate incomes tax, the 16% rate of kiva was reduced to 14% in 2017 and to 13% in 2018 in line with the measures affecting these taxes. As a result of the measures and the related campaigns, the popularity of the kiva greatly increased, the number of SMEs opting for this tax type has more than quadrupled by early-2018 compared to the number seen before the measures.

In order to encourage the competitiveness of the smallest enterprises, the upper revenue cap for the small business lump sum tax (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.

Consumption and turnover taxes

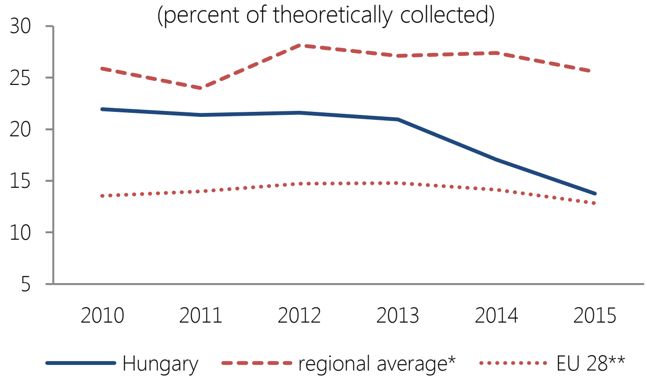
Although the Government still aims to increase the relative weight of consumption and turnover taxes in the tax system, the favourable economic processes witnessed and the measures implemented with success in whitening the economy in recent years have enabled the targeted reduction of the VAT rate on several products and services. The underlying reason of this is that the pressure because of the standard VAT rate applied has increased to reclassify some specific products and services that are more exposed to the grey economy under preferential VAT rate. Accordingly, the VAT rate on pork meat and dwelling construction was cut to 5% from 2016. The VAT rate on poultry meat, egg and fresh milk has been reduced to 5% from 2017. Following the tax rate cut to 18% in 2017, a 5% VAT rate is applied to restaurant catering services, internet access, as well as to fish, pork offal, Braille printers and displays from 2018.

Measures for combating tax avoidance

In recent years, the key measures for the whitening of the economy primarily focused on the collection of consumption taxes. Of these measures, the following ones should be highlighted: the introduction of the online cash registers in 2014, the Electronic Public Road Trade Control System in 2015, the promotion of electronic payments through the POS terminal installation programme of 2016, as well as the electronic invoicing system currently running in test mode and expected to go live in mid-2018. As a result of the measures, the amount of uncollected VAT showed a significant drop, which fact is also supported by the CASE's study ordered by the European Commission[3]: while the VAT gap amounted to 21% of the theoretical VAT liability in 2013, this value decreased to 14% by 2015. The latter value only slightly exceeds the EU average, and is significantly lower compared to other countries in the region.

Chart 6.3: Value added tax gap

(percent of theoretically collected)



*Bulgaria, Czech Republic, Poland, Slovakia , Slovenia, Romania
**Except Cyrus and Croatia

Source: CASE (2017), MfNE

Another important measure aimed at the whitening of the economy, motivated by the success of previously implemented measures, is the extension of the scope of businesses subject to the mandatory use of online cash registers from 2017. The online invoicing system which is expected to become mandatorily applicable from 1 July 2018 has been introduced to cut back

[3] *Case (2017): Study and Reports on the VAT Gap in the EU-28 Member States: 2017 Final Report, Warsaw, September 18*

frauds concerning transactions between taxpayers. The measure fits into the previously implemented ones which are based on real-time data reporting. The essence of the system is to provide the tax authority with online information regarding the data content of invoices (instead of providing invoice-level data subsequently), thus enabling a more efficient risk analysis and control. At the same time, due to the automatism of the system, no additional administrative burden arises for the enterprise beyond the one-off investment costs. In fact, it even reduces this burden since it replaces the invoice issuer's obligation to report invoice-level data subsequently. In order to ensure a sufficient preparatory period, taxpayers have the option to apply the online invoicing system voluntarily, as a test, from 1 July 2017, thus making their own decision whether they send any data to the tax authority through this channel.

In addition, Hungary actively takes part in combating aggressive tax avoidance on the international scene. Also in this regard, Hungary has signed the OECD's Multilateral Instrument, as a result of which a general provision on combating tax avoidance may be incorporated in the majority of Hungary's double tax agreements. Furthermore, Hungary has implemented the rules of the EU Anti-Tax Avoidance Directive governing controlled foreign companies, and the further aims in this regard include the timely implementation of several provisions of the Directive, such as rules on hybrid mismatches, interest limitation and exit taxation. Beyond making new legislation in order to prevent tax avoidance and artificial profit shifting, Hungary strives to build broad cooperation in the field of tax information exchange, among others concerning financial account information and country-by-country reports.

Tax procedure

Tax procedure still aims to improve the tax compliance, the relations of the tax authority, as well as to further encourage cooperation and voluntary compliance. To this end, recent years have seen the restructuring of the tax authority's organisation, and a number of measures have been introduced in order to strengthen the service provider profile of the tax authority. 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 qualification procedure with the goal to encourage the legally compliant behaviour and operation of taxpayers. In the context of the supporting procedure 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. From 1 January 2018, the legislative background of tax procedure has been also renewed with the entry into force of the new Act on Tax Administration Procedures and the Act on the Rules of Taxation. The aim of the measure is to create a possibly short, transparent, easy to comprehend and follow regulatory environment, to reinforce the service-oriented profile of the tax authority, to provide institutionalised support to voluntarily complying taxpayers in fulfilling their obligations, and to eliminate excessive and unjustified penalties by reviewing the system of sanctions.

In accordance with the decision of the Government, within the framework of the multi-year (2017–2021) Strategic Reformation of the National Tax and Customs Administration (NAV 2.0), programmes affecting the operation and efficiency of the tax authority are being implemented in the upcoming years. These programmes aim to improve the competitiveness of the National Tax and Customs Administration and to raise the budgetary revenues. The key points of the strategy include the promotion of tax awareness, the customer-driven support, the improvement of the tax enforcement efficiency through professional upgrading, taxation that is sustainable in the medium and long run, digitalisation and efficient institutional 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 the population to fulfil their obligations relating to taxation, and to comply with the laws.

Modernisation of payment infrastructure, increasing the transparency of financial processes

The most expedient way to reduce the high volume of cash as the driver of shadow economy is the introduction of positive incentives that make electronic payment attractive and accessible. An intervention by the Government became necessary to give momentum to this process. The programme of the Government announced in December 2016, aimed at increasing the number of POS spots offered support to the establishment of new POS spots, but in exchange prescribed the substantial reduction of the fee payable for using the payment system, thus making it also affordable to shops generating lower turnover. As a result of phase I of the Programme the number of domestic POS spots rose by 30%, which means an unprecedented expansion of POS spots never seen before in the history of domestic electronic payment. Seeing the success and popularity of phase I and relying on the positive feedbacks received from domestic enterprises, the Government had decided to continue the development even before phase I was closed, and also to launch phase II aimed at supporting the deployment of further 31,000 terminals.

Following the prospective successful implementation of phase II of the Programme, the POS coverage of operating online cash registers will approach 80%, meaning that the option to use bank card for payment will be made available to the majoriy of the population. This nationwide coverage means a prerequisite for the development of the population's financial capabilities, the implementation of the strategy on the Hungarian financial awareness.

Box 10: The burden of tax administration and strengthening the role of the NTCA as service provider

It almost qualifies as an axiomatic statement that the administration relating to taxation in Hungary means a substantial burden for every economic agent. However, the accurate extent of this burden is not supported by any recent, reliable – and, in particular, internationally comparable – estimation. The studies available – though they often use a similar method, the so-called Standard Cost Model – include only 1-2 major tax type(s), and regularly involve only specific taxpayer groups; moreover, the approaches used to measure the time spent on tax administration and to quantify the related costs are strongly heterogeneous, thus the quantified results are not directly comparable.

Despite this, the surveys assessing the last 30 years of developed countries present some interesting conclusions. In the case of income taxes, the administration costs arising at taxpayers varies between 2% and 10% of the collected tax revenues. Nearly two-thirds of this result from the use of the company's own resources, one-quarter represents consultant fees, while the remaining part is made up of other external costs.

The tax administration costs of companies (those arising from income tax, VAT, social contributions) heavily depend on business size. The burden-to-revenue ratio of companies with less than 50 employees was estimated at 2–4% in most countries a level significantly deteriorating profitability. This ratio typically remains below 0.5% at companies with more than 50 employees, but the survey conducted by the OECD in 2001 found this value to be 3% in some cases. The administration of employers' payment liabilities means a substantial additional burden in every country (according to the OECD, it makes up approx. the half of all burdens taken into account, but others identified significantly different internal ratios).

The use of e-tax filing channels is encouraged in many countries, typically with the intention to reduce the burden of administration. According to the experiences in this field, the expectation is often not met, because paper-based processes remain in place beside the electronic channel; moreover, in many cases both formats are required . A further problem is that electronic data processing is often accompanied by an increasing volume of requested information. It is also noteworthy that the introduction of e-administration for SMEs may result in above average additional burden, since small businesses often use their own resources even if it is more expensive due to the lack of competence than using outside expertise.

In Hungary, a comprehensive survey on administration burden was conducted in 2009, which confirmed that the administrative burden of participating companies is predominantly connected to taxation, the related accounting activities and to data reporting. The preliminary conclusions of a standardised analysis including 20 countries, ordered by the European Commission (under preparation) are very similar to those presented above, but it is particularly noteworthy that it found the administrative burden to be almost unchanged compared to the most recent survey of 2004 in the majority of countries involved – despite the spread of electronic data reporting . This is partly explained by the fact that the collection of information means the largest burden and cost within the administrative process, not reporting.

The reorganisation and development of the National Tax and Customs Administration (NTCA) is being conducted by also using these experiences. As part of this, special attention is paid, beyond the development of electronic communication channels, to the optimisation of internal processes, and to offer more – if possible, customised – services by combining data from electronic systems. The first examples of these include the taxpayer qualification procedure launched in 2016 under which more than 200 thousands businesses could already exploit the benefits of “reliable” rating last year; the eSZJA system successfully launched in 2017 under which the tax authority has automatically generated more than 5 million returns this year; the KIVA campaign conducted in late-2017 under which approx. 70,000 small businesses received notification about the form of taxation considered more favourable for them, or the mentoring program launched in 2018 which provides the start-up businesses with customised guidance. Through the developments under way in the NTCA, new services will appear gradually in the upcoming years, and pre-filled returns may become also possible for new types of returns.

7. Institutional features of public finances

7.1 Budgetary framework

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

In 2017, for the purpose of ensuring the conformity with Directive 2011/85/EU of the Council, the Economic Stability Act and the Public Finances Act have been amended during the EU Pilot programme. The improvement of the regulation predominantly affected the following parts: i. clarification of the binding nature of budgetary rules; and ii. the strengthening of the medium-term budgetary framework through the determination of the debt prognosis in the Government's individual decision and the application of a scenario assuming unchanged policies. The legislative changes adopted for the development of the budgetary framework were also acknowledged by 2018 country report on Hungary.

In the light of the experience earned in recent years, the existing system of rules is sufficiently helpful in fostering the disciplined execution of the fiscal policy to ensure the stability and long-term sustainability of public finances.

This system of rules has three key elements. The general government deficit may not exceed 3% of the gross domestic product (budget balance rule), and the structural balance needs to be in line with the medium-term objective specified in the convergence programme (MTO rule).

The third key element of the system of rules means the requirements relating to the government debt. Pursuant to the Fundamental Law, the Parliament may only adopt an act on a central budget that results in the reduction of the government debt-to-GDP ratio. For the adoption of the act on the budget, the prior consent of the Budget Council is required. The Council provides its consent if the reduction of the government debt ratio fulfils the criterion set forth in the Fundamental Law.

In addition, pursuant to the Economic Stability Act, if both the rate of inflation predicted for the budget year and the real pace of growth of the gross domestic product exceed 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 of 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 are 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 the 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 were 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 the GDP.

TABLES

Table 1.a Macroeconomic prospects

	ESA-code	2017 HUF billion	2017	2018	2019	2020	2021	2022
			percentage change					
1. Real GDP (at constant prices)	**B1g**	**36,833.1**	**4.0**	**4.3**	**4.1**	**4.0**	**4.2**	**4.1**
2. Nominal GDP	B1g	38,183.3	7.8	7.1	7.4	7.2	7.4	7.2
Components of real GDP								
3. Households' consumption expenditure	P.3	17,811.6	4.7	5.2	4.8	4.7	4.6	4.5
4. Government consumption expenditure[1]	P.3	7,193.5	0.3	1.4	0.7	0.5	0.4	0.4
5. Gross fixed capital formation	P.51	7,957.5	16.8	12.8	7.5	3.8	5.7	5.1
6. Changes in inventories and net acquisition of valuables (percent of GDP)	P.52+ P.53	92.9	-0.3	0.0	0.0	0.0	0.0	0.0
7. Exports of goods and services	P.6	33,962.4	7.1	7.2	6.9	6.7	7.3	7.1
8. Imports of goods and services	P.7	30,880.1	9.7	9.2	7.4	6.3	7.1	6.9
Contribution to real GDP growth								
9. Final domestic demand		33,657.9	5.7	5.5	4.2	3.3	3.7	3.5
10. Changes in inventories and net acquisition of valuables	P.52+ P.53	92.9	-0.3	0.0	0.0	0.0	0.0	0.0
11. External balance of goods and services	B.11	3,082.3	-1.4	-1.1	0.0	0.7	0.5	0.6

[1]: Including government and NPISHs as well

Table 1.b Price developments

	2017	2018	2019	2020	2021	2022
	percentage change					
1. GDP deflator	3.7	2.7	3.1	3.0	3.0	3.0
2. Private consumption deflator	2.3	2.5	2.7	2.9	3.0	3.0
3. HICP	2.4	2.5	2.7	2.9	3.0	3.0
4. Public consumption deflator	6.5	4.7	5.7	4.0	2.0	1.2
5. Investment deflator	3.3	3.2	3.1	3.0	3.0	3.0
6. Export price deflator (goods and services)	1.3	1.5	1.7	1.9	2.0	2.0
7. Import price deflator (goods and services)	1.7	1.8	1.8	2.0	2.1	2.1

Table 1.c Labour market developments

	ESA-code	2017 level	2017	2018	2019	2020	2021	2022
			percentage change					
1. Employment, persons ('000; 15-74)[1]		4,421.4	1.6	1.5	1.5	1.3	1.1	0.9
2. Unemployment rate (%; 15-74)		-	4.2	3.6	3.1	2.8	2.5	2.4
3. Labour productivity, persons		-	2.3	2.8	2.6	2.7	3.1	3.2
4. Compensation of employees (HUF bn)[2]	D.1	17,781	10.9	10.8	9.5	7.7	7.0	7.1
5. Compensation per employee (HUF million)[3]		4.0	9.2	9.1	7.9	6.3	5.9	6.2

[1] LFS employment
[2] Domestic concept
[3] Compensation of employees (national concept) per person employed (LFS)

Table 1.d Sectoral balances

	ESA-code	2017	2018	2019	2020	2021	2022
		percent of GDP					
1. Net lending/borrowing vis-à-vis the rest of the world	B9.	4.1	5.9	5.9	4.1	3.1	3.0
of which:							
- Balance of goods and services		7.7	6.1	5.5	5.9	6.0	6.1
- Balance of primary incomes and transfers		-4.8	-4.3	-4.0	-3.8	-3.8	-4.1
- Capital account		1.2	4.0	4.3	2.0	0.9	0.9
2. Net lending/borrowing of the private sector including statistical discrepancy	B9.	6.0	8.2	7.8	5.5	4.2	3.5
3. Net lending/borrowing of general government	B9.	-2.0	-2.4	-1.8	-1.5	-1.2	-0.5

Table 2.a General government budgetary prospects

	ESA-code	2017 HUF billion	2017	2018	2019	2020	2021	2022
			percent of GDP					
Net lending (EDP B.9.) by sub-sector								
1. General government	S.13	-746.3	-2.0	-2.4	-1.8	-1.5	-1.2	-0.5
2. Central government	S.1311	-720.6	-1.9	-3.0	-2.1	-1.7	-1.3	-0.5
3. State government	S.1312	-	-	-	-	-	-	-
4. Local government	S.1313	-10.1	0.0	0.4	0.0	0.0	0.0	0.0
5. Social security funds	S.1314	-15.6	0.0	0.3	0.3	0.1	0.1	0.1
General government (S.13)								
6. Total revenue	TR	17,008.4	44.5	45.5	45.1	42.9	41.0	39.9
7. Total expenditure	TE	17,754.7	46.5	47.9	46.9	44.4	42.2	40.5
8. Balance	B.9	-746.3	-2.0	-2.4	-1.8	-1.5	-1.2	-0.5
9. Interest expenditure	D.41	1,067.4	2.8	2.6	2.4	2.3	2.2	2.1
10. Primary balance		321.1	0.8	0.2	0.6	0.8	1.0	1.6
11. One-off and other temporary measures[1]		140.4	0.4	0.0	0.0	0.0	0.0	0.0
Selected components of revenues								
12. Total taxes (12=12a+12b+12c)		9,740.3	25.5	25.1	25.0	24.8	24.6	24.3
12a. Taxes on production and imports	D.2	6,891.7	18.0	18.1	17.9	17.6	17.4	17.0
12b. Current taxes on income, wealth etc.	D.5	2,833.4	7.4	6.9	7.0	7.1	7.2	7.2
12c. Capital taxes	D.91	15.2	0.0	0.0	0.0	0.0	0.0	0.0
13. Social contributions	D.61	4,898.4	12.8	12.7	12.6	12.2	11.6	11.2
14. Property income	D.4	141.2	0.4	0.5	0.4	0.4	0.3	0.3
15. Other		2,228.5	5.8	7.3	7.1	5.6	4.5	4.2
16.=6. Total revenue	TR	17,008.4	44.5	45.5	45.1	42.9	41.0	39.9
Tax burden[2] (D.2+D.5+D.61+D.91-D.995)		14,687.5	38.5	37.9	37.7	37.1	36.3	35.6
Selected components of expenditure								
17. Compensation of employees + intermediate consumption	D.1+P.2	6,861.6	18.0	17.8	17.0	15.6	14.5	13.7
17.a. Compensation of employees	D.1	4,132.7	10.8	10.5	9.9	9.3	8.5	7.9
17.b. Intermediate consumption	P.2	2,728.9	7.1	7.3	7.1	6.4	6.0	5.7
18. Social payments (18=18.a+18.b)		5,407.2	14.2	13.8	13.1	12.7	12.3	11.8
of which: Unemployment benefits[3]		84.6	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	734.7	1.9	1.9	1.8	1.7	1.6	1.5
18.b. Social transfers other than in kind	D.62	4,672.5	12.2	11.9	11.3	11.0	10.7	10.3
19.=9. Interest expenditure	D.41	1,067.4	2.8	2.6	2.4	2.3	2.2	2.1
20. Subsidies	D.3	499.5	1.3	1.4	1.4	1.3	1.2	1.1
21. Gross fixed capital formation	P.51	1,687.3	4.4	6.0	7.0	6.5	5.8	5.5
22. Capital transfers	D.9	988.9	2.6	2.6	2.3	2.6	3.0	3.1
23. Other		1,242.8	3.3	3.7	3.7	3.4	3.3	3.1
24.=7. Total expenditure	TE	17,754.7	46.5	47.9	46.9	44.4	42.2	40.5

Remark: 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

	2017 HUF billion	2017	2018	2019	2020	2021	2022
		percent of GDP					
1. Total revenue at unchanged policies	17,008.4	44.5	45.5	45.1	42.9	41.0	39.9

The table contains revenue projections based on measures till 30 April 2018.

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

	2017 HUF billion	2017	2018	2019	2020	2021	2022
		percent of GDP					
1. Expenditure on EU programmes fully matched by EU funds revenue	501.9	1.3	3.1	3.2	1.9	0.9	0.8
1.a. of which investment fully matched by EU funds revenue	219.5	0.6	2.1	2.1	1.2	0.6	0.5
2. Cyclical unemployment benefit expenditure	-38.8	-0.1	-0.1	-0.1	-0.1	0.0	0.0
3. Effects of discretionary revenue measures[1]	-718.8	-1.9	-0.7	-0.4	-0.4	-0.6	-0.5
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	2017	2018	2019	2020	2021	2022
		percent of GDP					
1. Gross debt		73.6	73.2	69.6	66.7	63.4	59.7
2. Change in gross debt ratio		-2.4	-0.4	-3.5	-3.0	-3.2	-3.8
Contribution to changes in gross debt							
3. Primary balance		-0.8	-0.2	-0.6	-0.8	-1.0	-1.6
4. Interest expenditure	D.41	2.8	2.6	2.4	2.3	2.2	2.1
5. Stock-flow adjustment		1.1	2.1	-0.3	0.2	0.1	0.0
Implicit interest rate on debt (%)		3.8	3.6	3.5	3.5	3.5	3.5

Table 4 Cyclical developments

	ESA-code	2017	2018	2019	2020	2021	2022
		percent of GDP					
1. Real GDP growth (%. at constant prices)		4.0	4.3	4.1	4.0	4.2	4.1
2. General government balance	B.9	-2.0	-2.4	-1.8	-1.5	-1.2	-0.5
3. Interest expenditure	D.41	2.8	2.6	2.4	2.3	2.2	2.1
4. One-off and other temporary measures[1]		0.4	0.0	0.0	0.0	0.0	0.0
of which: 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		0.4	0.0	0.0	0.0	0.0	0.0
5. Potential GDP (%)		3.2	3.6	3.8	4.0	4.0	4.0
contributions: - labour		1.3	1.0	0.8	0.6	0.5	0.3
- capital		0.8	1.2	1.4	1.4	1.4	1.4
- total factor productivity (TFP)		1.0	1.4	1.5	1.9	2.1	2.3
6. Output gap		-1.2	-0.5	-0.2	-0.1	0.1	0.1
7. Cyclical budgetary component		-0.6	-0.2	-0.1	-0.1	0.0	0.1
8. Cyclically-adjusted balance (2-7)		-1.4	-2.1	-1.7	-1.4	-1.2	-0.6
9. Cyclically-adjusted primary balance (8+3)		1.4	0.5	0.7	0.9	1.0	1.5
10. Structural balance (8-4)		-1.7	-2.1	-1.7	-1.4	-1.2	-0.6

Remark: 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	2017	2018	2019	2020	2021	2022
Real GDP growth (%)							
1. April 2017 Convergence Programme		4.1	4.3	3.8	3.7	3.6	-
2. April 2018 Convergence Programme		4.0	4.3	4.1	4.0	4.2	4.1
3. Difference		-0.1	0.0	0.3	0.3	0.6	-
General government net lending (percent of GDP)							
1. April 2017 Convergence Programme	EDP B.9	-2.4	-2.4	-1.8	-1.5	-1.2	-
2. April 2018 Convergence Programme	B.9	-2.0	-2.4	-1.8	-1.5	-1.2	-0.5
3. Difference		0.4	0.0	0.0	0.0	0.0	-
General government gross debt (percent of GDP)							
1. April 2017 Convergence Programme		72.0	70.5	67.3	64.0	61.2	-
2. April 2018 Convergence Programme		73.6	73.2	69.6	66.7	63.4	59.7
3. Difference[1]		1.6	2.7	2.3	2.7	2.2	-

[1] The difference between debt trajectories is predominantly explained by the reclassification of Exim in the government sector.

Table 6 Long-term sustainability of public finances[1]

	2016	2020	2030	2040	2050	2060	2070
	percent of GDP						
Pension expenditure	9.7	9.0	8.4	9.4	10.6	11.1	11.2
Old-age and early pensions	8.0	7.4	7.0	8.5	9.5	10.1	10.2
Other pensions (disability, survivors)	1.7	1.5	1.3	1.1	1.0	1.0	1.0
Healthcare, education and other age-related expenditure	9.3	9.2	9.5	10.0	10.4	10.7	10.8
Healthcare expenditures	4.9	5.1	5.4	5.6	5.8	5.8	5.7
Long-term care expenditures	0.7	0.7	0.8	0.9	1.0	1.1	1.1
Education expenditures	3.6	3.4	3.3	3.5	3.6	3.7	3.8
Other age-related expenditures	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pension contribution revenue	9.4	8.3	8.5	8.5	8.4	8.4	8.5
Assumptions							
Labour productivity growth	0.2	1.8	2.4	2.1	1.9	1.7	1.5
Real GDP growth	2.0	1.0	2.1	1.2	1.5	1.3	1.3
Participation rate, males (20-64)	82.8	84.1	88.1	87.9	88.1	88.2	88.1
Participation rate, females (20-64)	68.0	71.8	78.5	78.1	78.5	78.6	78.6
Total participation rate (20-64)	75.3	78.0	83.3	83.0	83.3	83.5	83.4
Unemployment rate	5.0	3.9	4.8	4.8	4.8	4.8	4.8
Population aged 65 + over / total population	18.5	20.3	22.2	25.2	28.2	29.6	29.1

[1]: Based on the budgetary projections approved by the Economic Policy Council (EPC) in January 2018

Table 6.a Contingent liabilities

percent of GDP	2017
Public guarantees	5.1

Table 7 Basic assumptions

	2017	2018	2019	2020	2021	2022
Hungary: Short-term interest rate (annual average, %)	0.1	0.2	0.9	1.2	1.2	1.2
Hungary: Long-term interest rate (annual average, %)	2.9	2.2	2.3	2.4	2.4	2.4
HUF/EUR	309.2	311.4	311.3	311.3	311.3	311.3
World excluding EU, GDP growth	3.9	4.2	4.2	4.2	4.2	4.2
EU28 GDP growth	2.4	2.3	2.0	2.0	2.0	2.0
Growth of relevant foreign markets	5.6	5.2	4.8	4.7	4.7	4.7
World import volumes, excluding EU	5.1	5.0	4.5	4.5	4.5	4.5
Oil prices (Brent, USD/barrel)	55.7	63.4	61.8	59.1	57.6	57.1

Table 8 Impact of refugee crisis on the headline balance — breakdown by functional categories

	2016	2017	2018
		HUF bn	
1. Initial reception costs	6.7	3.9	3.5
2. Transport (including rescue operations)	0.3	0.7	0.2
3. Healthcare	0.2	0.2	0.4
4. Administrative costs (incl. processing applications for asylum)	1.2	2.5	1.5
5. Contributions to Turkey Facility (excluding through EU Budget)	0.0	0.0	0.0
6. Other costs and measures	84.9	138.9	101.4
Judiciary activity	0.3	0.1	0.1
Communication	0.5	0.1	0.0
Border control	60.0	105.4	88.3
Temporary security barrier	23.8	32.0	13.0
International assistance	0.2	0.7	0.0
Develop transit zones	0.0	0.5	0.0
7. Total impact on headline deficit (7) = Σ(1..6)	**93.3**	**146.1**	**107.0**

Remark: Due to rounding the sum data could differ from the sum of the detailed data

Table 9 Impact of refugee crisis on the headline balance — breakdown by ESA categories

	ESA-code	2016	2017	2018
			HUF bn	
1. Compensation of employees	D.1	31.2	41.3	25.7
2. Intermediate consumption	P.2	26.0	43.3	35.7
3. Social payments	D.62, D.63	0.8	0.1	0.1
4. Subsidies	D.3	0.0	5.2	1.4
5. Gross fixed capital formation	P.51	21.5	31.8	31.1
6. Capital transfers	D.9	11.8	24.3	13.0
7. Other	D.7	2.0	0.0	0.0
8. Total impact on headline deficit (8) = Σ(1..7)		**93.3**	**146.1**	**107.0**
9. Compensation from EU		-	-	-
10. Total impact on headline deficit net of EU contributions (10) = (8) - (9)		**93.3**	**146.1**	**107.0**
11. Total impact on headline deficit net of EU contributions (percent of GDP)		**0.3**	**0.4**	**0.3**

Remark: Due to rounding the sum data could differ from the sum of the detailed data

Table 10 Additional country-specific information on costs

	2016	2017	Q1 2018
		persons	
1. Arrivals (total no of persons, incl. transiting refugees)	29,432	3,676	332
2. Arrivals who are transiting refugees	9,681	3,007	300
3. First time applicants	28,216	3,119	283
4. Positive decisions	438	1,359	270

Table 11 Impact of terrorist threats on the headline balance – breakdown by functional categories

	2016	2017	2018
		HUF bn	
1. Additional capacity, headcount and materials	4.8	70.3	64.9
2. Security equipment, purchase and storage	8.5	6.6	21.9
3. Guarding of facilities	0.0	2.2	0.1
4. Total impact on headline deficit (1+2)	**13.4**	**79.2**	**86.9**

Remark: Due to rounding the sum data could differ from the sum of the detailed data

Table 12 Impact of terrorist threats on the headline balance – breakdown by ESA categories

	2016	**2017**	**2018**
		HUF bn	
1. Compensation of employees (D.1)	1.6	8.1	4.2
2. Intermediate consumption (P.2)	9.9	18.7	11.8
3. Social payments (D.62, D.63)	0.0	0.0	0.0
4. Subsidies (D.3)	0.0	0.0	0.1
5. Gross fixed capital formation (P.51)	1.8	52.4	70.8
6. Capital transfers (D.9)	0.0	0.0	0.0
7. Other (D.7)	0.0	0.0	0.0
8. Total impact on headline deficit (8) = Σ(1..7)	**13.4**	**79.2**	**86.9**

Remark: Due to rounding the sum data could differ from the sum of the detailed data

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