GOVERNMENT OF HUNGARY

CONVERGENCE PROGRAMME OF HUNGARY 2019–2023

April 2019

CONTENTS

1. ECONOMIC POLICY OBJECTIVES

The economic stabilisation and recovery measures undertaken from 2010 onwards created the possibility for an economic turnaround. By 2013, the Government of Hungary laid down a solid basis for sustainable growth. The consistent economic policy of recent years has led to a more balanced growth structure, while the sustainability of public finances has also been further strengthened. This economic performance, outstanding even in EU comparison, allowed for the acceleration of convergence to the EU average. For several years, the government has been committed to improving the investment environment and to further increasing employment. The main target for economic policy for the current and coming years – building on the achievements – is to further improve the competitiveness and productivity of the Hungarian economy.

Macroeconomic balance and sustainable public finances are underpinned by several facts. By 2018, Hungary's net external debt fell below 10% of GDP, while it reached almost 70% of GDP in the post-crisis years. The disciplined fiscal policy played a key role in this development, but households and corporate savings also contributed to the decline in the external debt. The crisis showed the risks from exchange rate fluctuations and the proper regulations succeeded in reducing the share of retail FX loans almost to zero nowadays. The budget deficit has steadily been below 3% of GDP since 2012. The general government deficit was 2.2% of GDP in 2018 instead of the target of 2.4%. By 2018, the government debt-to-GDP ratio gradually fell below 71%. At the same time, there was a decrease in the ratio of foreign currency denominated debts held by foreigners, i.e. a growing part of the government debt is financed by domestic and HUF denominated savings, which significantly contributes to reducing the country's vulnerability. International credit rating agencies also acknowledged these favourable trends. In February this year Standard & Poor's and Fitch Ratings raised Hungary's rating by one category to class BBB.

However, in addition to macro level stabilisation and the restoration of external and internal balance of the economy, several other measures have also contributed to the fact that the confidence of investors in Hungary has grown. Foreign direct investments (FDI) coming to Hungary has also been enhanced by lowering the corporate tax rate to 9%, reducing tax and bureaucratic burdens on small and medium-sized enterprises (SMEs) and improving business environment. These measures contributed to the fact that in 2018 the investments to GDP ratio already exceeded one quarter. The increasing FDI inflow not only expands the opportunities of the Hungarian SME sector for growth, but also plays a major role in the creation of new jobs through technology import and spill-over effects. The results of the steps already taken towards creating an attractive business environment is well demonstrated by the latest assessment of one of the most read magazine of the United States dealing with investments, facility planning, and location analyses (Site Selection). According to Site Selection Hungary, based on the 2017 data, ranked 8th in the world, and so globally it is among the 10 most attractive countries for investment. To further encourage investments the measures undertaken so far need to be continued and extended, paying particular attention to enhancing the competitiveness of companies.

The companies' willingness to invest, their competitiveness as well as their ability to increase employment was largely supported by the wage agreement signed at the end of 2016 which includes increases of the minimum wage and the guaranteed wage minimum, in parallel with a substantial reduction of employers' social contribution tax easing the pressure on employers. Average wage grew by more than 10% in 2018 as compared to the previous year. The implementation of the agreement continues in 2019 through further social contribution tax cuts, which provides wage convergence taking on an accelerating pace. The further improvement of competitiveness requires the maintenance of the growth-friendly tax system, and a further streamlining of the tax system may also take place. This means not only the reduction of tax burden as set out in the wage agreement, but also the further improvement of tax regimes available for small enterprises, the substantial reduction of administration burden and the introduction of further measures for whitening the economy. The Government is committed to decreasing the number of taxes in order to simplify the tax system.

The Government pays particular attention to improving the business environment. In November 2018, the National Competitiveness Council, chaired by the minister of finance, has formulated proposals on the necessary steps to attain this goal. The Council has adopted the 'Programme for a More Competitive Hungary', which synthesises the initiatives of the Ministry of Finance, the Ministry of Innovation and Technology, the Ministry of Foreign Affairs and Trade, the Hungarian Central Bank and the Hungarian Chamber of Commerce and Industry. The Government has already adopted several proposals of the Council. This cooperation provides the framework to make the innovation and research system more efficient, to reduce further the administrative burden on companies and to improve the quality of adult education. The strengthening of the digitalisation of SMEs contributes to increasing the added value and productivity of Hungarian businesses.

Thanks to labour market measures, in March 2019 the unemployment rate dropped to a historic low of 3.6%. At the same time, the number of employees reached 4.5 million. By 2019, the mobilisation of existing labour market reserves became the primary task of the economic policy aimed at increasing employment. This, among others, includes supporting mobility, helping parents with small children return to the labour market, the further reduction of the number of public employees, reorganising the employment departments of government offices, providing incentives for working to pensioners, and encouraging those working abroad to return home. In order to prevent labour shortage, the Government has the further goal of improving human capital in terms of both quantity and quality.

By developing the strategy focusing on families, the Government has also set the objective of improving demographic trends and the long-term sustainability of public finances. In 2019, the implementation of the strategy continues with the realisation of new economic policy measures providing state support to young people for their plans to start a family and have children. On the one hand, the extremely popular Family Housing Subsidy Scheme (with Hungarian abbreviation: 'CSOK') available from 1 July 2015 will be expanded from July 2019 and, on the other hand, the preferential loan provided with the so-called Prenatal Baby Support, helping young people to start their life, will also be available from July. Both of these programmes are characterized by an increasing non-repayable interest and capital subsidy, depending on the number of children born. These measures contribute to successfully address the demographic challenges.

In addition to supporting families, improving the efficiency of public administration is also a key factor in terms of improving the quality of life. To this end, key targets are the systematic measurement of the efficiency of the public sector as well as increasing the ratio of public administration cases that can be managed by paperless means. The efficiency of central public administration will improve due to the complete digitalisation of the internal procedures. A substantial headcount rationalisation has already taken place, and the provisions on remuneration have been brought closer to the practices of private sector. The review of the legal and institutional frameworks of bankruptcy and winding-up proceedings is expected to result in better quality business regulations.

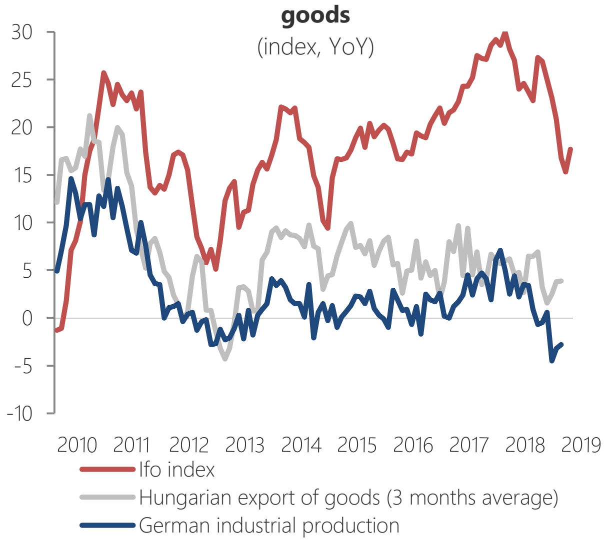
Overall, it can be established that the governmental measures set the Hungarian economy on a stable growth path, which is well underpinned by the fact that in Q4 of 2018 the expansion of GDP on annual basis exceeded 4% for the eighth subsequent quarter, and the Hungarian economy grew the third fastest in the EU in 2018. The growth is based on sound macroeconomic fundamentals, while budgetary developments also show a favourable picture. Hungary's vulnerability has substantially decreased in recent years. For all these reasons, the most important tasks of the Hungarian economic policy in 2019 include the further improvement of corporate competitiveness through the measures planned in the fields of employment, taxation, corporate environment and public sector. The maintenance of lasting economic growth requires a strong society, and therefore strengthening the situation of families as the basic units of society is the national strategic objective. Due to the outstanding performance of the economy and the favourable economic developments, economic policy instruments can contribute to meeting the objective on an unprecedented scale.

2. MACROECONOMIC DEVELOPMENTS AND FORECAST

2.1. EXTERNAL ENVIRONMENT

Last year the growth of the world economy reached its cyclical peak, as confirmed by its loss of dynamics as well as by the prospects that have become gloomier from the second half of 2018 *(Chart 2.1).* These can be in part attributed to certain risks occurring within the European Union, the protectionist economic policy of the United States and China's increasingly apparent growth limitations.

Chart 2.1: Ifo index, German industrial production and Hungarian exports of goods



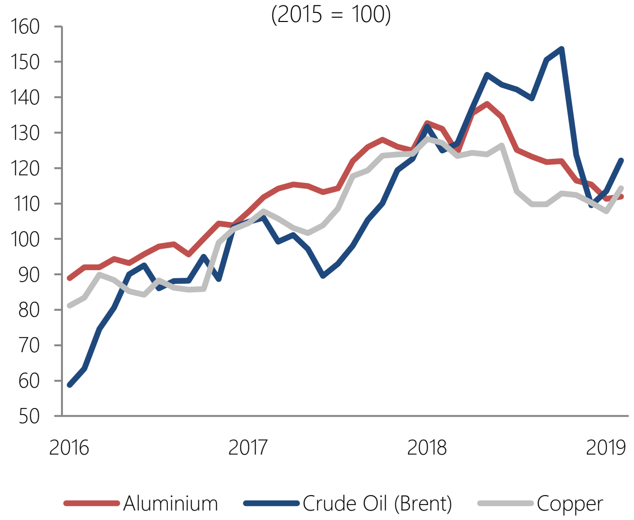
Source: Ifo, HCSO, Eurostat, MoF calculation

In 2018 the USA recorded one of the highest growth rates of the past ten years, i.e. 2.9%, however, its momentum is expected to mitigate in the coming years. The reasons underlying this may, in addition to the expiry of the fiscal package, include the slowdown of global economic recovery and the protectionist trade policy followed against China and Europe. Moreover, the sustainability of the American budget deficit and debt is also surrounded by uncertainties.

The 1.8% growth attained by the Eurozone last year was lower than expected, and was also lower than the figures of the previous years. This is the combined result of multiple factors. On one hand, the vehicle market is facing challenges on both supply and demand sides. The demand side is unfavourably affected by the fact that the sales of new vehicles have decreased on major markets, including Western Europe, overseas and, following a continuous expansion of twenty years, also in China. The diesel scandals of previous years, compliance with the new emission standard, and the expectations towards electric power trains as an increasingly promising alternative to internal combustion engines all acted as a brake on production. Furthermore, although the primary target of the market protection measures of the United States was China, a potential introduction of vehicle customs may have a negative impact on Europe too. On the other hand, Brexit, the outcome of which is still uncertain after nearly three years, still works as an uncertainty factor. Third, the money market turbulences that unfolded in the summer of 2018 and have so far proved to be temporary, also deteriorated the business sentiment (e.g. in Italy). The risks posed by internal tensions, the decrease in external demand, and the unfavourable business sentiment all push towards a 'wait-and-see' policy in terms of both durable goods and investments, which is conspicuous also in the decreasing number of orders placed in the manufacturing industry.

As regards emerging countries, the slowdown of Chinese growth is a key risk. The high outstanding debt in the financial system have been an unsolved problem for years in the second largest economy of the world, and the real estate sector increasingly shows the signs of overheating. In addition, the pace of growth may also be mitigated by labour market factors, such as the depletion of those reserves that can be involved in employment, or the fact that competitive advantage is decreasing due to the rising wage levels. For the first time in a long time, and to a dramatic extent, Chinese vehicle sales dropped in 2018, which can be an indicator of exhausted demand. Growth is expected to further slow in China in 2019.

Chart 2.2: Crude oil, aluminium and copper price indices
(2015 = 100)



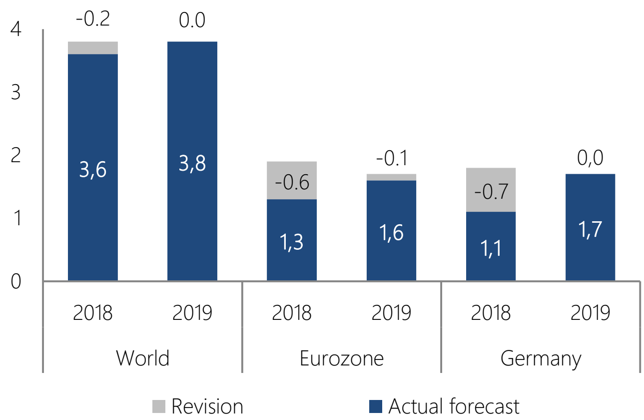
Source: EIA, COMEX, MoF calculation

The fact that both commodity and money markets have become volatile poses a further growth risk. These markets – the latter in particular – show the effects of the adjustments of exchange rate increases caused by cheap and abundant money supply *(Chart 2.2).* As a consequence of the worsening economic prosperity outlooks and due to the moderately evolving inflation, the FED postponed its further interest rate increases and the ECB may continue to persistently maintain a loose monetary policy.

Although the supportive financial policies may apply on a longer term, Hungary, based on its favourable external and internal financial balance position, has by now obtained adequate resistance against the effects of potential global monetary restrictions on capital flow.

Based on the current processes, the external economic prosperity relevant for the Hungarian economy may temporarily decline in 2019, however, according to the forecasts of international organisations, a gradually accelerating growth can be expected again from 2020 *(Chart 2.3).*

Chart 2.3: The revision of the latest European Commission forecast
(The difference between of the actual 2019 Winter and 2018 Autumn forecasts, %p.)



Source: European Commission, OECD, MoF calculation

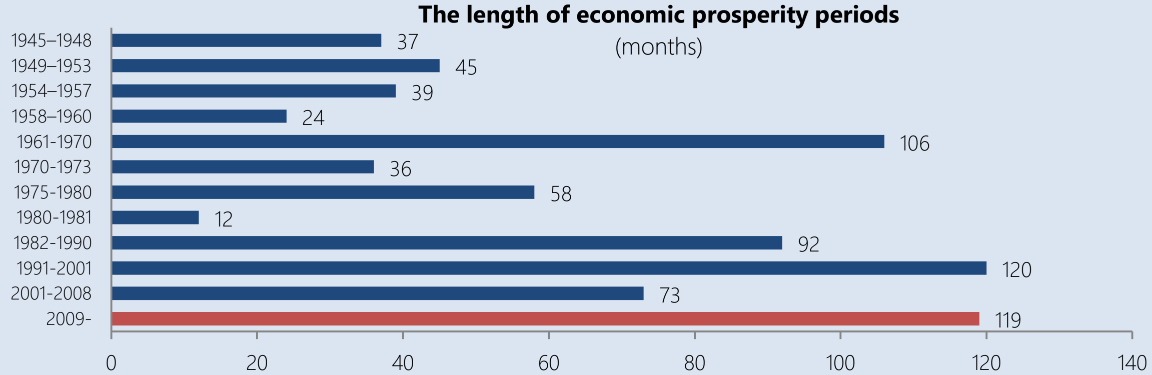
Box 1: Menace over the economic prosperity in the world economy

Following the outstanding growth of the world economy in 2017, an increasing number of signs – especially from the second half of the last year – started to point towards a potential ending of the current economic cycle that created favourable export opportunities for the Hungarian economy as well. Although economics still has not elaborated methods to reliably forecast the halts and expected crisis periods, several such indicators are in range that, in the past, were followed by significantly slower economic growth or downturns.

First, in spite of prosperity periods having become longer since the eighties, within a few months the current period will break a historic record by becoming the longest growth period in the USA, which, due to the cyclic nature of the market economy, will create a gradually growing chance for correction over time.

The length of economic prosperity periods

(months)



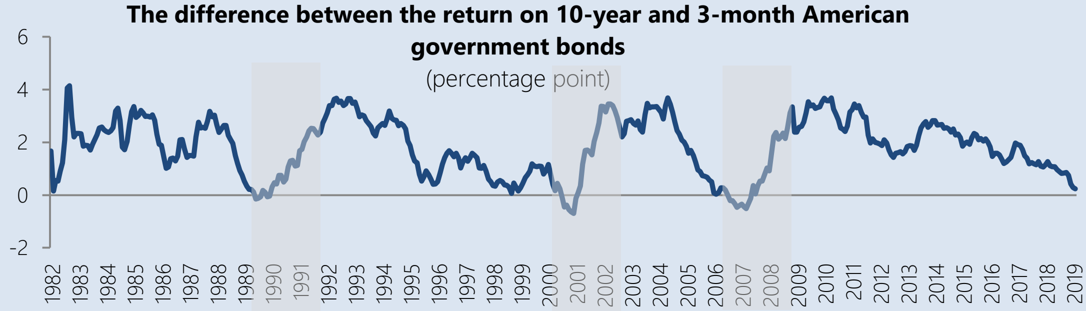
Source: FACTSET, MoF calculation

Second, the booming of stock exchanges (following the recession in 2008) is about to break records as well: the value of the S&P 500 index has tripled since the financial crisis. A growth of a similar rate, lacking larger corrections, has never been experienced except in the period preceding the 1929-1933 collapse.

Third, the difference between the premiums of short and long-term securities is decreasing, which implies the high probability of risks resulting in negative trends on the short term. In the last four decades, the difference of these two indicators has been in a negative range prior to recessions and, according to the latest data, it is about to be in a similar position.

The difference between the return on 10-year and 3-month American government bonds

(percentage point)



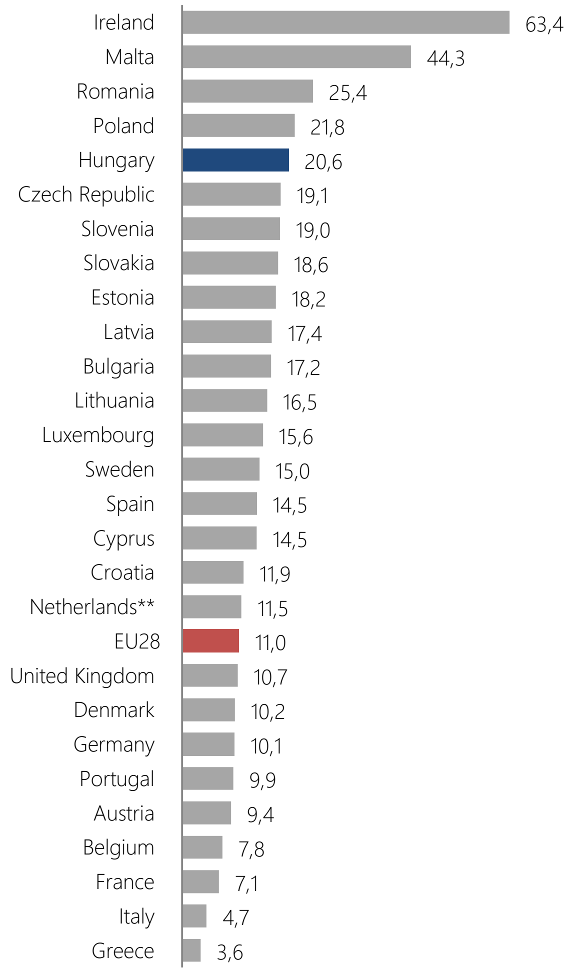
Source: Reuters, MoF calculation

Fourth, it is a warning sign that the global car market, which is sensitive to economic forecasts, has been stagnating for two years now, mainly due to the decrease in Chinese and European new car registrations. Looking ahead, vehicle demand may remain moderate due to the uncertain outlooks. This expectation is confirmed by the fact that none of the risk factors surrounding world economy developments for a long time has yet been solved: the slowing down of the Chinese economy, which is otherwise considered as a driving force of global trade, is still an uncertainty factor, which can be further enhanced by the prolongation of its trade war with the USA. In addition, the protectionist commercial policy of the USA can target Europe too. Moreover, the date and method of the Brexit has been pending for nearly three years now. These factors may result in a fall in demand and a lagging of investments, which, as a self-reinforcing process, may act as a break on the performance of world economy. Although, according to the expectations, the likelihood of a halt similar to the 2008 crisis is minimal, the scenario that our trading partners will face a growth period of persistently slower pace than in previous years – which would narrow the latitude of the Hungarian economy as well – appears to be a high risk.

2.2. The components of growth

The Hungarian economy has expanded by nearly 4% on average in recent years, and so, by the end of 2018, the GDP exceeded the 2013 level by approximately 21%. In terms of convergence, it is an outstanding result that the pace of the Hungarian economy's growth exceeded not only the majority of the old but also the new Member States *(Chart 2.4).*

Chart 2.4: Cumulative growth between 2013 and 2018
(percent)



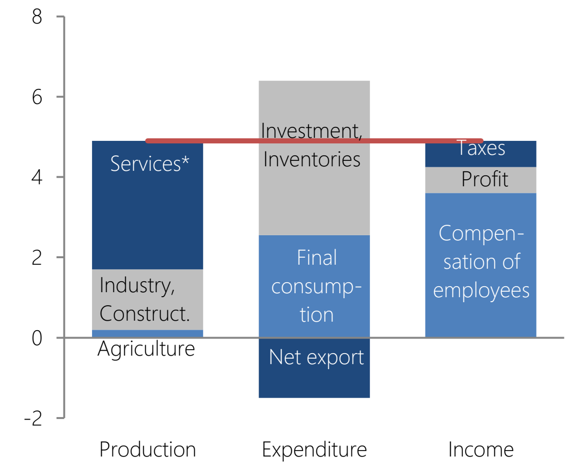
Source: Eurostat, MF calculation

Last year the Hungarian economy expanded by 4.9%, while the underlying growth (adjusted for working day and seasonal effects) showed a 5.0% increase. It is particularly favourable that all sectors have contributed positively to the growth, which is unprecedented in our country.

The largest contribution to acceleration was due to rising wages *(Chart 2.5)*. The main source of significant wage convergence is the wage and tax agreement concluded in the autumn of 2016 at the Permanent Consultation Forum of the Private Sector and the Government, which agreed on a significant increase in the minimum wage and guaranteed wage minimum, while reduced employers' burdens.

Owing to wage developments, domestic demand has increased significantly, which was reflected in the dynamic increase of both consumption and services. Parallel to tax cuts and the economic upswing, the profitability of companies has also changed favourably, which contributed to an increase in investments. In addition to growing profitability, the more than 20% expansion of construction has also been supported by the increasing use of housing subsidies and EU funds.

Chart 2.5: Decomposition of the 4.9% GDP growth of 2018
(percentage point)



** Including net product taxes*
Source: HCSO, MoF calculation

Industry has witnessed some slowdown, partly due to the lower external demand and partly as a result of the transition to the new international automotive standard (WLTP). As a result of this and the growing domestic demand for import goods, net export volumes had a negative contribution to growth. Agriculture has also contributed to growth.

On the forecast horizon several factors affect the outlook of Hungary. On the one hand, the Hungarian economy still has some room to grow. Hungary has the highest savings rate – as a proportion of GDP – in the EU, which is expected to represent a significant growth potential through consumption in the upcoming years. This trend is confirmed by the recent significant increase in spending on durable goods, suggesting that the precautionary motives have eased and consumer confidence has improved.

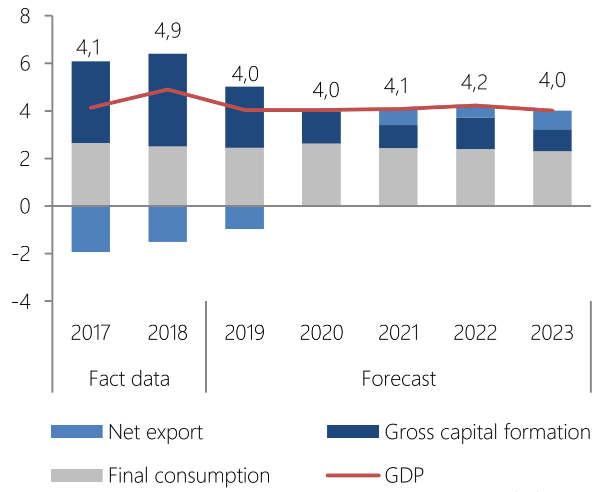
On the other hand, several capacity expanding projects have recently been announced, which are to substantially boost not only the investment activity directly but – through increased production – Hungary's exports as well. Such ongoing projects include for example the BMW factory in Debrecen, the Samsung SDI factory in Göd (making Hungary a European battery manufacturing powerhouse), the SK Innovation factory in Komárom and the GS Yuasa factory in Miskolc. The higher than 25% investment rate predicts a significant expansion in production capacities, as a result of which exports can remain dynamic even in case of a relatively unfavourable external economic environment and Hungary's world market share can grow.

Third, economic growth is stimulated by several government measures. The 'Programme for a More Competitive Hungary' contains comprehensive action plans for several areas (e.g. taxation, corporate environment, public sector, labour market, education, healthcare), the implementation of which contributes to the exploration of growth potentials as well as to the improvement of productivity and competitiveness. These measures support long-term growth, at the same time improve the outlooks in the short run as well. In addition to competitiveness improving actions, many other measures of the Government will have favourable effects. The Family Protection Action Plan, launched with a view to reach a demographic turn, will have a positive impact not only on the long-term demographic trend but will support growth as well. The further decrease of the social contribution tax and the expansion of EU funds will also contribute to increasing demand in the coming period.

As a consequence of these developments, the Hungarian economy may grow by a stable rate of over 4% in the coming years *(Chart 2.6)*.

Chart 2.6: GDP growth: demand side

(percentage point)



Source: HCSO, MoF calculation

Box 2: 'For a More Competitive Hungary' Programme

In the initial period of fiscal consolidation, Hungarian economy focused on the expansion of employment. However, improving the productivity and strengthening the competitiveness of the Hungarian economy has by now become indispensable for this convergence trajectory that substantially surpasses the average growth pace of European Union. In its economic policy discussion started in the spring of 2018, the National Competitiveness Council set the objective to create a comprehensive economic strategy covering multiple professional fields using a fact-based approach. In that framework, a material titled 'For a More Competitive Hungary' Programme was prepared under the auspices of Ministry of Finance and adopted by the Government, inspired by recent works of the Hungarian Chamber of Commerce and Industry, the Central Bank of Hungary, the Ministry of Foreign Affairs and Trade and the Ministry of Innovation and Technology.

Considering domestic and international experiences and by taking into account economic characteristics of the country, the analysis found that progress is required in terms of four key factors so that the development of the Hungarian economy can surpass the average of the European Union by 2 percentage points on a sustained basis: (i) reduction of public expenditures, (ii) encouragement of investments, (iii) strengthening a predictable investment environment, and (iv) exploitation of labour reserves.

In recent years, the balance of Hungarian public finances has approximately equalled the budget performance of our regional competitors. In spite of the establishment of fiscal discipline, the level of public expenditure in proportion of GDP can still not be considered optimal, as it exceeds the average of both our regional competitors and the Eurozone. One of the negative effects of expenditure financed from the budget is that it drains away resources from the private sector. Due to the state's crowding-out effect, investments of private sector cannot reach the optimal level. This is a problem because capacity expansions, including the developments in the private sector in particular, significantly contribute to the acceleration of economic growth.

The improvement of productivity is a determinant factor in rapid convergence. The most obvious means of this is the increase of capital stock i.e. the encouragement of investments. Between 1995 and 2008 the investment rate was around 24 percent on average in Hungary. After the outbreak of global crisis its average rate dropped to below 21 percent, preventing capital stock from expanding. Recently, however, the investment rate has started to increase again and grew to over 25 percent. International examples and historic domestic facts allow to conclude that an investment rate of around 25 percent is required to ensure that the economic growth is persistently above 4 percent.

For businesses, a predictable investment environment primarily means stable operational conditions that help their activities. These factors can only be ensured if the financial situation of other two sectors i.e. the households and the state is also stable. While before the global crisis of 2008 the state's indebtedness and the accumulation of residential FX loans made the country vulnerable, permanent stabilisation of budget processes and reinstated external-internal balance of the economy, including the conversion of FX loans to HUF, allowed to regain financial stability. All these developments also have a mitigation effect on the risk of businesses and financing costs, while ensuring an expanding market for their products and services.

The dynamic growth experienced in the Hungarian economy in recent years was most apparent in the labour market. Both employment and labour market activity grew in an outstanding rate in European comparison. However, the favourable results also constitute serious challenges. Labour shortage has appeared in an increasing number of labour market areas (both in geographical and sectoral sense), in which the expanding labour demand of the private sector as well as the draining effect of Western European labour markets, offering higher income, play an important role. At present, an increasing number of businesses consider the lack of adequate workforce a production limiting factor. The availability of workforce in proper quantity and quality is a key factor in maintaining the country's ability to grow (and it is also key for social and demographic reasons).

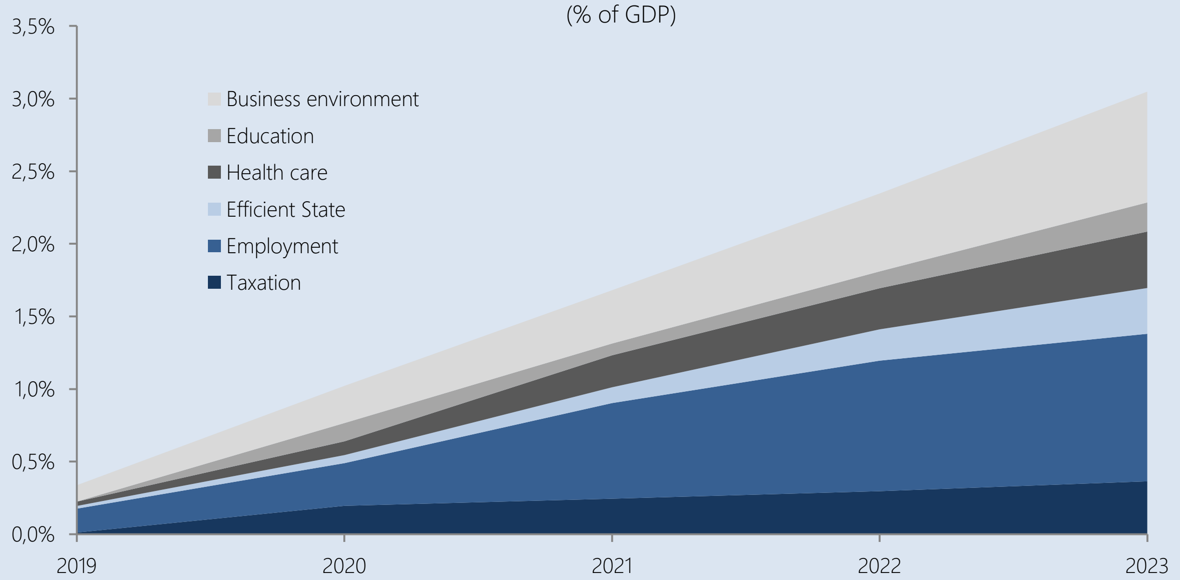
Based on the assessment of the economic policy situation, the competitiveness programme outlined six structural areas for action:

– *Employment:* In the countries having a population similar to that of Hungary, the number of persons employed is still higher than in our country, which shows that the Hungarian economy has robust labour reserves. Progress seems possible in the case of vulnerable groups (young people, young mothers, elderly workers) in particular, however, on the longer term, focus is expected to shift to the raising of qualification levels. The employment departments of Government Offices, as well as the chambers of commerce and industry have an important role to play in this process.
– *Corporate environment:* The long-term relationship between businesses and the public sector built on mutual trust is a key priority. During the transformation of corporate environment, more emphasis must be placed on production with a higher value added. The more than 20 new development proposals and sectoral strategies to be adopted this year and the next through the implementation of Digital Welfare Programme, i.e. DWP 2.0 extended in 2017, specify the digital developments supporting digitalisation in nearly all areas of Hungarian economy, state's operation and society. The next phase, the DWP 2030 Strategy aims to determine the exact organisational structure and system of responsibilities in the areas of digital state, data policy, data assets, robotization, network research, competence development, affordable access and SME digitalisation.
– *Taxation:* The expansion of budgetary room for manoeuvre makes it possible to decrease burdens on labour, which act as a brake on investments within the taxation structure. The demolition of administrative burdens attached to taxation, which can promote the productivity and 'whitening' of economy, plays a determinant role in increasing the country's ability to retain its labour force and attract capital. The tax returns prepared for small and medium-sized enterprises make the administration of cases faster and easier, promoting the

compliant behaviour of businesses.

- *Public sector:* Digitalisation helps to expand the scope of public services as well as to reorganise work processes. With a view to high quality services, it is practical to set performance criteria that are suitable for putting performance in the focus point.
- *Education:* The increasingly expanding curricula places a heavy burden on the shoulders of the next generation. In the acquisition of knowledge, emphasis will shift to ability-focused education in the coming period. This requires a knowledge that, in addition to theoretical correspondences, can be used also in practice. The ability of students to adjust is also promoted by a strong presence of employer needs.
- *Healthcare:* Healthcare transformations must focus on prevention of illnesses. This is supported by – in addition to various screening programmes - the improvement of primary care and strengthening its gatekeeper position. This allows for the early detection – and so the more effective and more cost-efficient treatment – of serious illnesses. When it comes to patient care, it is necessary to bear in mind the cost efficiency of healthcare treatments such as the use of short-term types of care. Funding too needs to adjust to modern healthcare.

The cumulative growth effects of the Competitiveness Programme
(% of GDP)



Source: MoF calculation

The implementation of action points included in the competitiveness programme will result in substantial additional growth. Calculations show that the implementation of competitiveness programme may lead to an additional growth of up to 0.7 percentage point per year. The additional growth expectable in the first years can mainly be linked to the direct economic effects of budgetary implications of the programmes. However, the realisation of programme points will lead to the strengthening of indirect effects resulting from structural factors, what is more, these effects will dominate from the third year on. As regards the structure of the programme, the points connected with employment and business environment will have the largest aggregate growth effect (1 percent and 0.8 percent, respectively) on the examined horizon. Although the effect of taxation-related programme points on budgetary balance is of a magnitude similar to these two items, employment and business environment programmes still cause a higher additional growth due to their strong structural impacts. In addition, it is important to note that although their results will mature more slowly, on the ten-year horizon the growth impacts of education- and healthcare-related developments will be determinant in respect of both their absolute value and proportions. In the first three years, the implementation of competitiveness programme will strain the budgetary balance by 0.2-0.4 percent in proportion of GDP, however, the revenues attached to higher growth trajectory that can be attained this way may balance the budgetary impacts of the competitiveness programme from 2022 and even swing them into a surplus from 2023 through the larger tax bases.

2.2.1. External economy

The first half of 2018 saw a relatively buoyant external demand which supported the dynamic growth of exports. Parallel to that, import also achieved a significant expansion due to its integration in global production chains and to the growing domestic demand. During the last year the volume of exports increased by 4.7%, whereas the volume of imports by 7.1% on an annual basis, while the structure of foreign trade remained balanced.

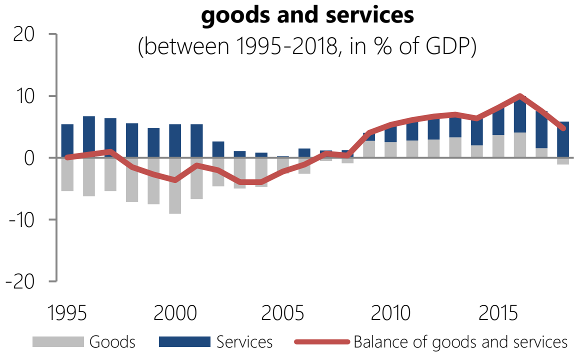
On the export side, the growth rate of services amounting to 6.3% during the last year, which – similarly to the past six years – exceeded the expansion of goods of 4.3%. The significant growth of services is primarily due to the increase in tourism and transport, particularly air transport. As for export of goods, from among the main groups the expansion of machinery and transport equipments export accelerated, while the export volume for food, beverages and tobacco showed moderation as compared to the previous year.

On the import side, services grew by 5.9%, while the import of goods grew by 7.3% compared to the previous year. The increase in transport and business services substantially contributed to the expansion in the import of services. For the import of goods, the main driving force of growth was the significant increase of manufactured goods, machinery and transport equipments. The dynamic 17% expansion of investments – due to their high import implications – substantially contributed to imports being able to grow more dynamically than exports.

As a consequence of these developments, the surplus of trade balance declined after the record year of 2016 (Chart 2.7), however, it is still high in international comparison, as it amounted to 4.8% of the GDP last year. This is mainly due to the decline in balance of goods, which was most affected by the increase in energy bills, followed by the deterioration in the balance of manufactured goods, machinery and transport equipments. As a result, net exports contributed negatively to the GDP growth.

Chart 2.7: Balance of external trade in goods and services

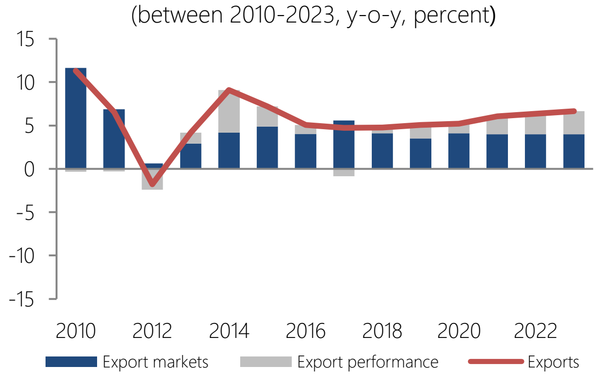
(between 1995-2018, in % of GDP)



Looking forward, a further expansion in foreign trade can be expected in the coming years *(Chart 2.8*). In view of export, while it is rather unfavourable that external demand is less supportive of the expansion, export performance may witness a potentially substantial expansion through the already announced large-scale corporate investments that have the total value of more than HUF 3,000 billion and are to be implemented in the coming years. This export growth may even increase the Hungarian world market share as well. In addition, in the automotive industry, the resolution of the factors that temporarily hindered production last year may help to increase export.

Chart 2.8: Exports' developments

(between 2010-2023, y-o-y, percent)



Concerning import, one of the key factors is the stable expansion of consumption, which can be expected due to the continuing increase in employment and the growth of wages. Furthermore, as a result of the activeness of companies and the drawdown of EU funds the growth of investments may remain dynamic. Vigorous domestic demand brings about considerable import demand, which is accompanied by the import implications of similarly dynamic export activities. As a result of all this, net exports may still have a negative contribution to GDP growth in 2019, however, thereafter they can have a persistent positive impact.

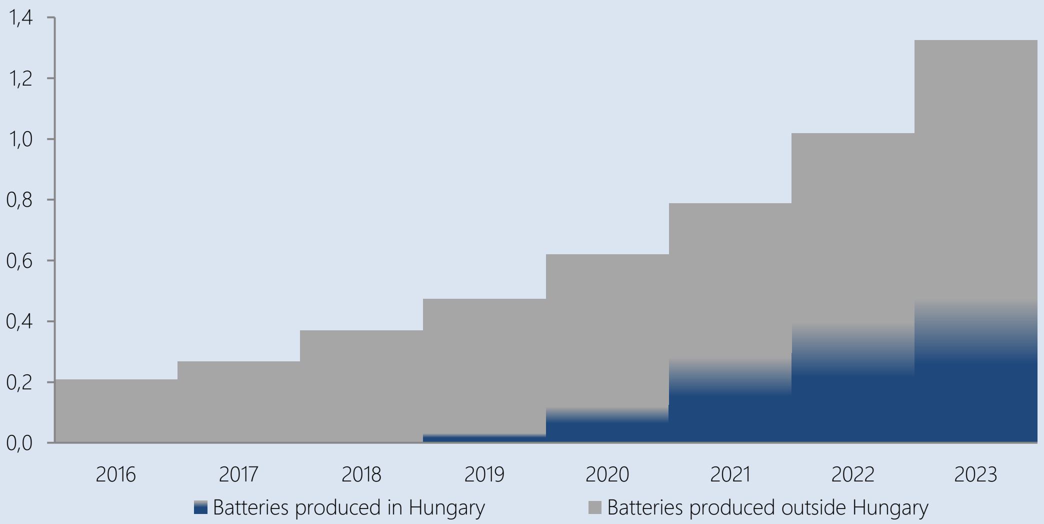
Box 3: Keeping up with technology – Developments of battery plants in Hungary

The recent years have seen the beginning of significant technological changes in the automotive industry, centred around the penetration of electrically propelled vehicles. The spread of electric vehicles, which provide an increasingly affordable alternative due to innovation, may mitigate oil dependency and the use of fossil energy and thereby, especially in the vicinity of residential areas, carbon-dioxide and other harmful emissions. The key and at the same time the most expensive element of the electric drive chain is the battery, demand for which is expected to boom.

As a favourable development in this regard, three major actors of the battery manufacturers with established and also dynamically expanding markets will, due to the active policy followed by the Hungarian Government to attract investments, build up and/or expand their production capacities in Hungary. GS Yuasa established its factory in Miskolc by way of a HUF 8.8 billion investment, where mass production is expected to start this July with a staff of over fifty people. The Japanese manufacturer plans to further expand the plant area. Samsung SDI is implementing a project in a total value of HUF 140 billion in Göd, creating 600 new jobs. The company is planning further significant investments for 2020, due to which the number of employees may grow to 1,500. The South Korea-based SK Innovation is implementing an investment of about HUF 240 billion in Komárom. From 2021, the plant will be able to meet the battery demand of 250 thousand electric cars per year and may create 1,000 new jobs.

Expected developments in sales in electric car batteries in Europe

(million pieces)



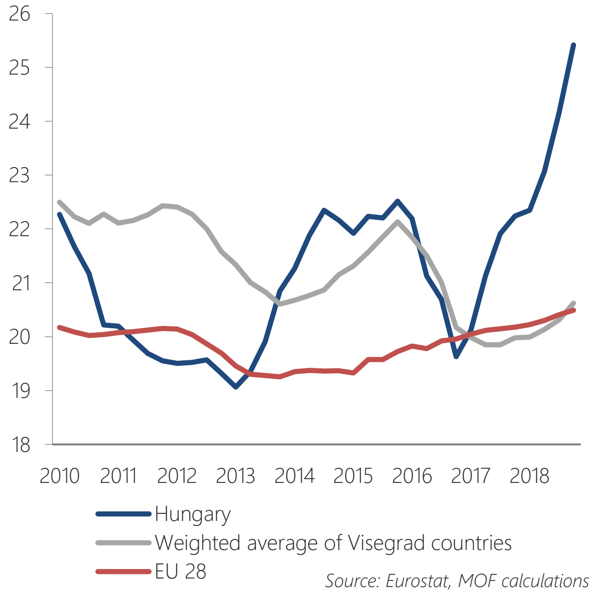
Source: Citi GPS, press information, MoF calculation.

According to certain analyses, the sales figures that were below 400 thousand in 2018 in the European electric car market could triple or quadruple in five years. Considering the production capacities announced by domestic and foreign manufacturers as well as the expected developments in battery performance, the plants producing in Hungary can cut a significant slice for themselves from European battery sales in the coming years. Although the exact volume of the capacities to be established is surrounded by uncertainties, the announcements made so far allow to conclude that Hungary, with its share amounting to even over one third of the market, will be a determinant factor among electric car battery manufacturers at a European level in the coming years.

2.2.2. Investment

In 2018, more than HUF 10,700 billion developments have been implemented in Hungary, thus investment activity increased by 16.5% year-on-year. As a result, Hungary's investment rate bounced up to 25.5% and now ranks second among the EU countries. This is favourable because based on international examples and historic domestic facts an investment rate of around 25% is required to ensure that the economic growth is persistently above 4%.

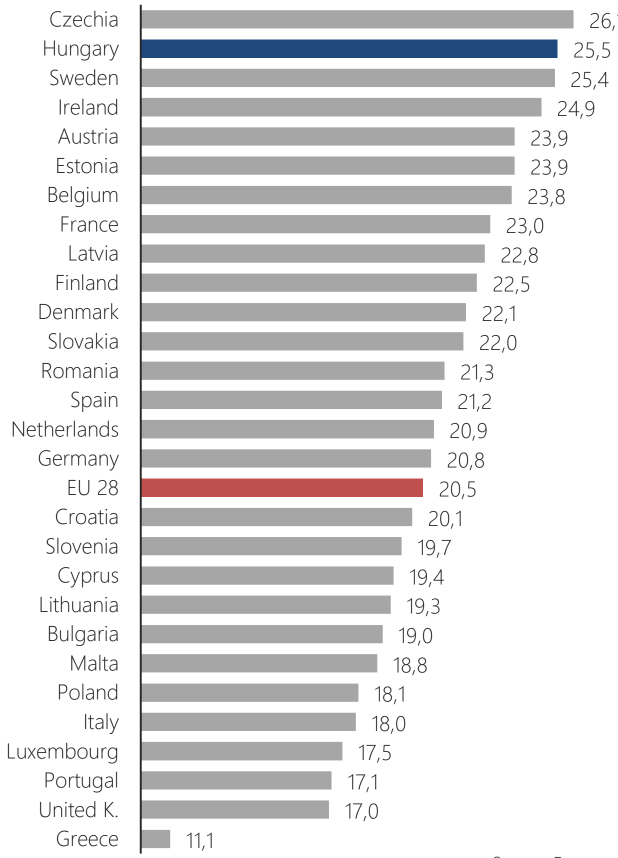
Chart 2.9: Development of investment rate
(in % of GDP; 4-quarter rolling data)



Source: Eurostat, MOF calculations

Nevertheless, not only the volume but also the composition of investments is significant for the economy's ability to grow. In this respect, corporate production investments, i.e. mostly machinery investments have primary importance with their positive impact on the country’s potential growth. It is therefore important that the recent growth of investments is balanced: a two-digit dynamic increase was registered in both construction-type and machinery-type developments relating to developments directly increasing production capacities. The expansion that affects every sector of the national economy strengthens favorable economic outlooks 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 rates in 2018
(in % GDP)



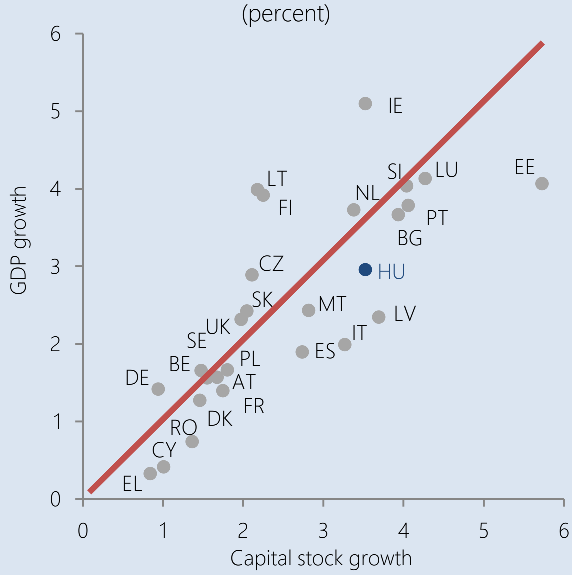
Source: Eurostat

It should be noted that the performance of all three sectors contributed to the outstanding expansion. On the one hand, developments in the private sector played an important role in the dynamic upswing of the recent period, as the total investment activities of households and companies grew nominally by 22% during last year. As a favourable development, investments of the manufacturing industry – this is the largest with its share of over one quarter – expanded by 6.3% in 2018, mostly as a result of the developments related to automotive industry and its supplier chains. Furthermore, thanks to the emerging dwelling constructions and developments for business purposes i.e. renting, the investment performance of the real estate sector also grew by 17% during the last year.

Box 4: Machinery-type investments as the driving force of long-term growth

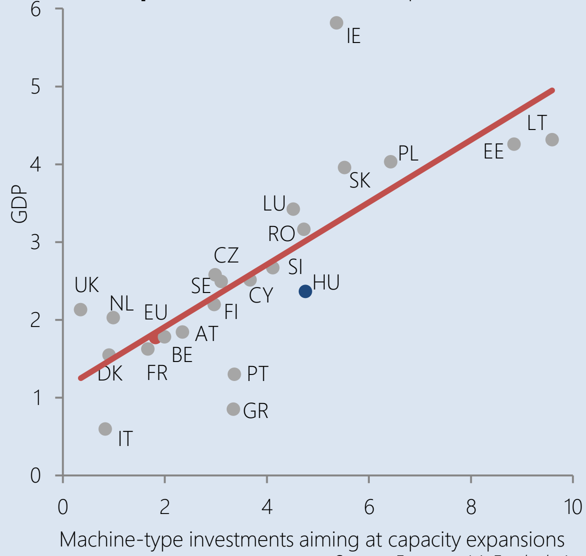
In recent years, the growth of employment has been pronounced in the Hungarian growth model, while the contribution of investments to economic performance has been fluctuating. At the same time, the continuous improvement of productivity is indispensable for economic growth to be sustainable on the long term. One of the most tangible ways to improve productivity is the expansion of capital stock, as the growth thereof almost completely appears in the growth of development as well. This allows for the conclusion that investments are important corner stones of sustainable growth. Experience shows that the value of investment rate – i.e. gross fixed capital formation in proportion of GDP – determines the economy's ability to grown on the longer term.

Relationship between capital stock growth and GDP growth in the period 2000-2018
(percent)



Source: Eurostat, Ameco, MoF calculation

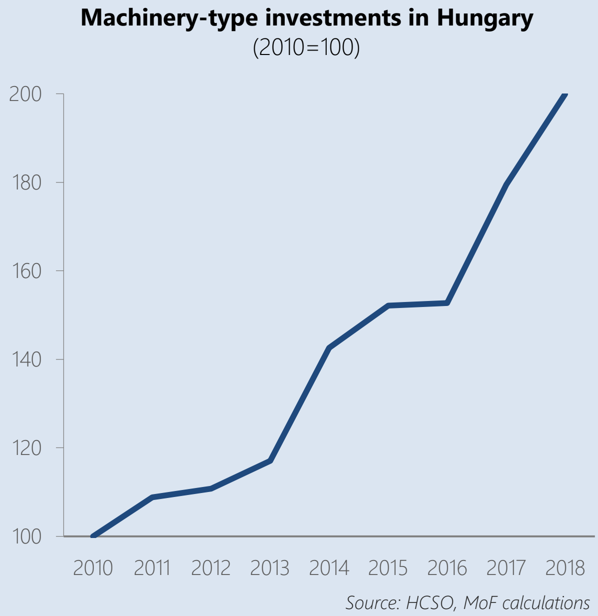
Relationship between GDP growth and increase in machine-type investments aiming at capacity expansions in 1996-2017 (percent)

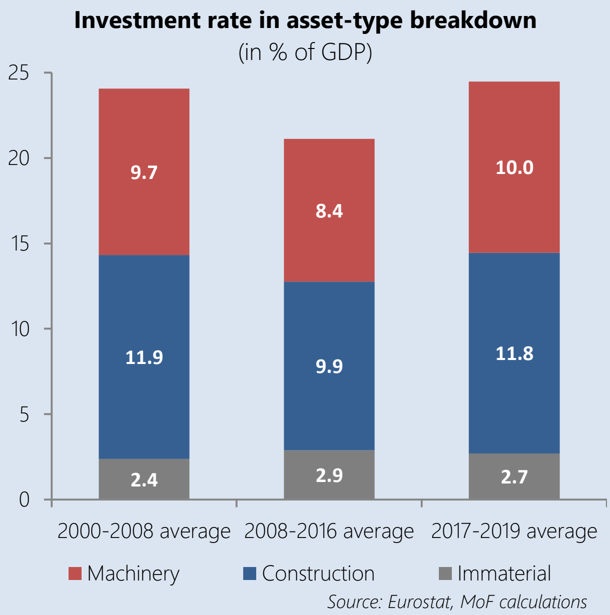


Source: Eurostat, MoF calculation

Nevertheless, the composition of investments is also significant for the economy's ability to grow. It is important for the increase in investment rate to be realised through capacity expansions related to corporate projects to as large a proportion as possible. It can ensure the improvement of the private sector's productivity through more efficient tools, such as machinery and automation. International data confirm that capacity expansion developments result in a stronger ability to grow, therefore it is a very favourable development that in the Hungarian economy machinery investments have been expanding for already eight years, resulting in a doubled volume since 2010. Thanks to that, Hungary's machinery investment rate is around 10% on average in the 2017-2019 period, which has been unprecedented since the early 2000s.

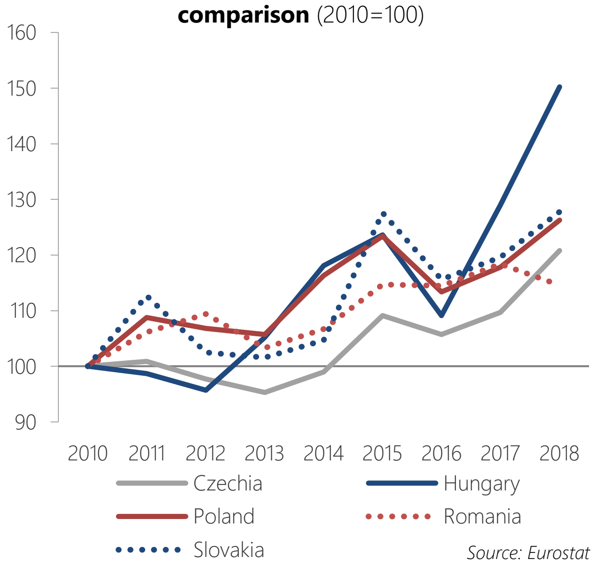
Within modern machinery investments, it is necessary to emphasise the highly efficient industrial robots whose number has dynamically grown all over the world in the past decade. The vast majority of these can be connected with the automotive industry, but their number is also significant in the electronic industry and metal manufacturing. To Hungary, most industrial robots arrived with the flagship investments realised in the automotive industry: to the Kecskemét unit of Mercedes in 2011-2012 and, in 2017, to Audi's plant in Győr constructed for the manufacturing of the Q3 models. According to the data of the International Federation of Robotics, the number of installed industrial robots more than tripled in 2017 in annual comparison, so in this regard Hungary, in spite of its relatively small size, ranks 18th on the global list. The domestic robot fleet is expected to expand further due to the investments in the automotive industry in the coming years, which, in addition to increasing productivity, will moderate the labour shortage in the manufacturing industry.





A dynamic expansion of investments in machinery is determinant regarding the next period as well, as a persistent and major efficiency increase in the Hungarian economy requires the modernisation of production processes in parallel to applying the most modern technological solutions. This includes automation and robotization as essential factors, which, while being able to mitigate the capacity restrictions resulting from the decreasing number of those who can be involved in employment, may also be one of the main drivers of the long-term and sustainable growth of Hungarian economy.

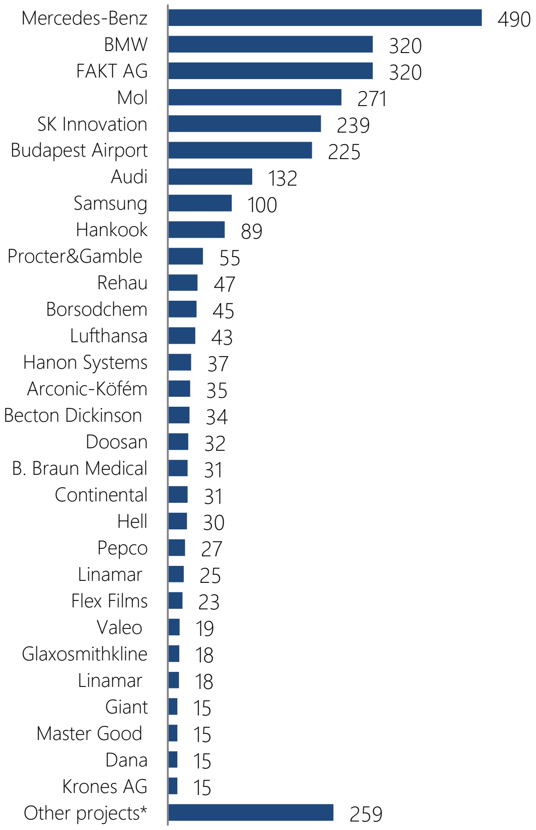
Chart 2.11: Gross fixed investments in regional comparison (2010=100)



Corporate capacity increases are strongly supported by corporate tax rate – reduced to 9% as of 2017 and being the lowest in the entire EU –, which substantially reduces capital costs and at the same time strengthens Hungary's ability to attract capital. Due to the implementation of large-scale developments announced recently, Hungary's export performance will also substantially improve through the significant extension of production capacities. The ongoing investments of these companies alone exceed HUF 3,000 billion, representing 7% of annual domestic GDP *(Chart 2.12)*. In the mid-term, following their gradual expansion, the additional capacities may raise Hungary's export performance by HUF 9,000-15,000 billion annually, which represents approximately 27-45% of country's annual export of goods. Overall, in the coming years, the above mentioned investments may give a one-time impetus of 9-12 percentage points for Hungary's economic growth.

The continuous strengthening of Hungary's ability to attract capital is illustrated by the projects managed by Hungarian Investment Promotion Agency (HIPA). These demonstrate the outstanding success of HIPA in 2018, resulting in 98 positive investment decisions regarding Hungary. As a result of these investment projects, the coming years will see capital investments in over EUR 4.3 billion, which is a 23% increase compared to 2017 and will lead to the creation of 17 thousand new jobs in Hungary. Significant investments of incumbent companies and new players appearing in the automotive, electronics and service industry aim to realise activities with high value added in Hungary. It should be highlighted that the investment trends of 2018 are also confirmed by international surveys: according to the Global Best to Invest 2018 report by Site Selection, a magazine specialised in investment topics, Hungary is among the 10 best investment target countries of the world.

Chart 2.12: Recently announced large investment projects (HUF billion)



* Hamburger Hungária (14), Bosch (14), Erbslöh (14), Mondi (13), AVL (13), Alföldi Tej (12), Siemens (10), Le Bélier (10), ECM-Clean (10), GS Yuasa (9), CooperVision (8), Árklub Kft. (8), Güntner (8), Egis (7), Leier Hungária (7), SAPA Profiles (7), Sanmina (7), Hauni (6), Ravaber (6), Qualitative Production (6), Bourgogne Gastronomie (6), Itron (6), Csaba Metál (6), Evosoft (5), Teva (5), ADA (5), Magnus Aircraft (5), F. Segura (4), Vestfrost (4), Ten Pao (4), Zalaco Sütőipar (4), Béres (3), Diehl Aviation (3), Eissmann (2)

Source: HIPA, Press information

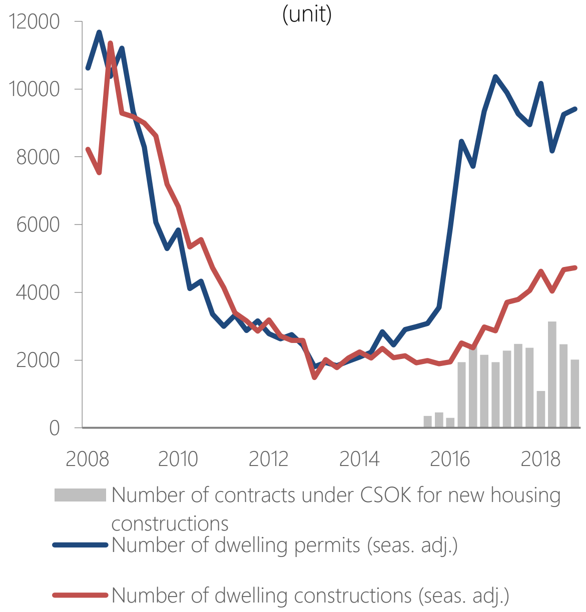
The growth of investments in private sector is expected to continue on the forecast horizon, as the several high-volume developments – affecting mostly the automotive industry and their supplier chain – recently announced for large companies are expected to gradually take off. Also, investment activity of small and medium-sized enterprises is supported by the accelerated allocation of EU funds intended for economic development, low yield environment, favourable business climate, and from 2019 by MNB's Funding for Growth Scheme (FGS fix).

Regarding households' investments, it can be established that after the turn in 2016, the vigorous expansion of housing market continued in 2017 and 2018. Beside the steadily low interest rate environment and the permanent improvement of employment trends and income position of households, Government measures also gave a considerable boost to 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 17.7 thousand dwellings were built in the country, which means a 23% increase year-on-year. The fact that the total value of new housing loans increased to HUF 850 billion in 2018, which means a 31% growth in annual comparison, confirms the recovery of demand side on the one hand, and reflects the households' confidence in a predictable and prospering future on the other.

The Family Housing Subsidy Scheme had a major contribution to the recovery of housing market. Until and including February 2019 the banks received the application of altogether 99 thousand households in the value of HUF 288 billion, which is close to 0.7% of the annual domestic GDP. Thanks to the applications received, the total value of subsidies paid to 80 thousand families under Family Housing Subsidy Scheme was over HUF 248 billion in the period from January 2016 to February 2019. Within that, contracts were concluded for the construction or purchase of new dwellings with more than 24 thousand families in the value of about HUF 168 billion.

Looking ahead, regarding households' investments, the number of dwelling construction is expected to further grow in 2019-2020, as a significant part of the constructions commenced in the last 3-4 years has not yet been completed. While in the 2015-2018 period a total of nearly 120 thousand permits were issued, only 50 thousand dwellings were constructed during this time, and therefore a catch-up can be expected in the number of dwelling constructions in the coming quarters. All this is also confirmed by housing market surveys, as at the beginning of 2019 the intention of households to build or purchase a home reached the pre-crisis level for the first time.

Chart 2.13: Trends of housing market indicators
(unit)



Source: HCSO, MoF calculation

The favourable processes are supported by the extension of Family Housing Subsidy Scheme as part of Family Protection Action Plan. Within that, in the small settlements covered by the programme, families can receive subsidies for buying used apartments and houses and/or for renovating, modernising and expanding the purchased real estate within the frameworks of the Rural Family Housing Subsidy Scheme. On the other hand, the preferential loan provided under Family Housing Subsidy Scheme is extended, meaning that from mid-2019 families with two or more children can use the loan to buy used real estates, too. As a further encouragement for dwelling constructions – as a result of the government's decision regarding the application of a reduced VAT rate for dwellings – construction companies facing capacity limitations can sell their dwelling projects that were granted a building licence before 1 November 2018 with a 5% VAT rate until the end of 2023, and so the construction of dwellings may contribute to grow in a more prolonged manner.

The dynamics of government investments is significantly determined both in the recent period and on the forecast horizon by the allocation of funds under the EU budget cycle for 2014-2020. From this financial framework, in Hungary more than HUF 5,700 billion were paid out by the end of March 2019, which contributed to the 40% nominal increase in public investments during 2018 year-on-year. Within that, investment volumes increased by 35% in public administration partially due to law enforcement and defence projects, by 31% in healthcare due to developments relating to inpatient care, and by 14% in education thanks to – among others – the projects realised in higher education last year. Furthermore, the investment activity of transportation and storage branch increased by 34% as a result of the dynamic public and railway infrastructure developments. It is particularly favourable, as these projects enhance the economy's ability to attract capital and are key in promoting labour mobility.

In the 2014-2020 EU budget period, funds from European Structural and Investment Fund (ESIF) are available to Hungary in the value of EUR 25 billion, which approximately equals 2.9% of domestic GDP for the whole seven-year period. These projects are supported by an additional EUR 4.6 billion in domestic co-financing. By the end of 2018, a total of EUR 30.8 billion were awarded for projects, which means 104% of the complete EUR 29.6 billion framework, but only EUR 8 billion were actually spent in the economy. As this amounts to 27% of the available funds, it can be established that nearly three quarters of EU transfers will be realised in the economic performance during the remaining five years, as, due to the so-called n+3 rule, the funds of 2014-2020 period can still be used until the end of 2023. This allows to conclude that the EU transfers will continue to strengthen the investment performance in the 2019-2023 period.

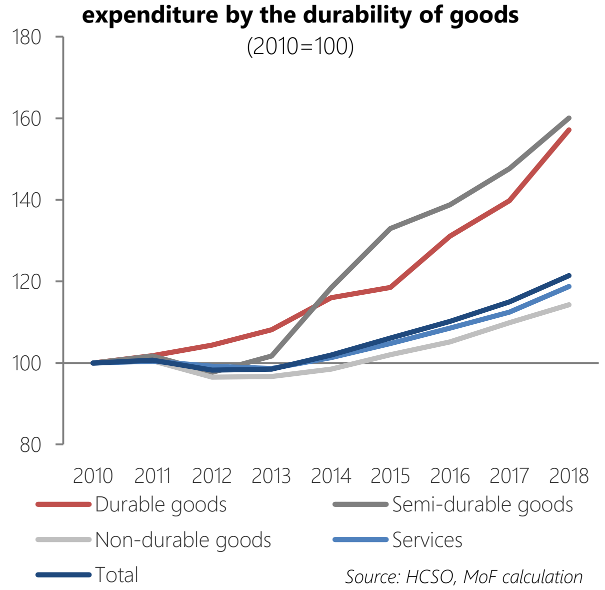
Favourable investment processes are also strengthened by growth supporting measures determined in the frameworks of 'For a More Competitive Hungary' Programme. Due to their positive external effects, competitiveness-boosting developments in the public sector could have a positive impact on Hungary's ability to attract capital. Actions aiming to improve business environment and supporting the reduction of tax administration could also promote corporate projects, which would induce additional investments. The developments realised this way would increase the volume of available working capital, which would result in a long-term increase in supply.

2.2.3. Consumption

The dynamic expansion in household consumption continued in 2018. Thanks to the favourable income trends, consumption has contributed to the growth of Hungarian economy to an increasing extent in the recent period. The two-digit increase in wages – as a result of the wage and tax agreement of November 2016 – played an important role in this. On the other hand, the increasing employment – exceeding 4.5 million people – also raised labour income and had a positive impact on household consumption. Furthermore, the increase in consumption has also been supported by several government measures, such as the utility cost reduction in winter, the reduction of VAT on fish meat, edible offal of swine, Braille displays and printers, internet and certain restaurant services, as well as the wage increases targeting certain areas of the public sector. All this resulted in a 5.3% increase in household consumption expenditure in 2018.

Chart 2.14: Households' domestic consumption expenditure by the durability of goods

(2010=100)

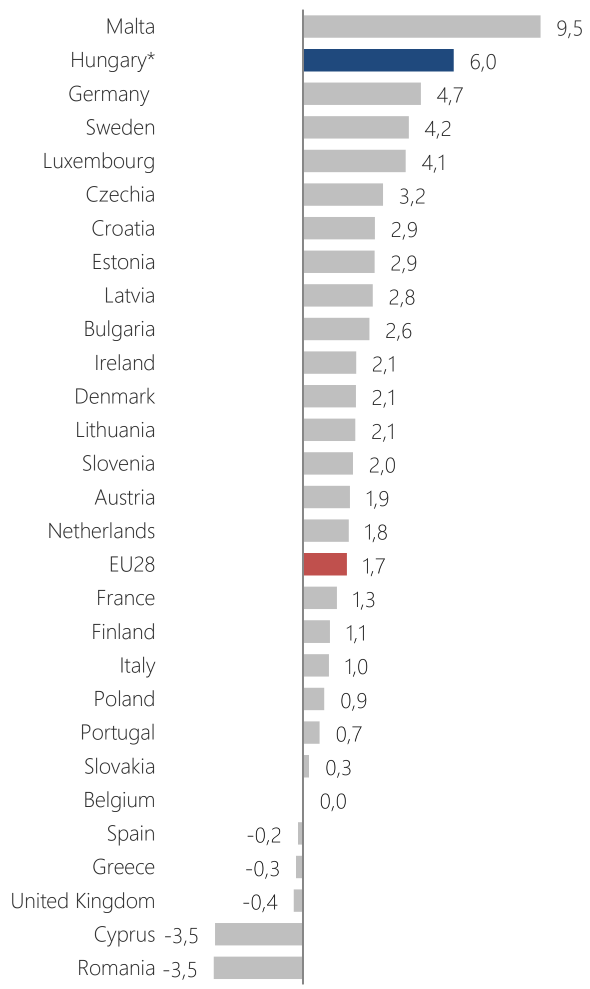


Source: HCSO, MoF calculation

The fact that an increasing proportion of domestic consumption expansion can be linked to durable and semi-durable products, in harmony with the upswing of the housing market, signifies strong consumer confidence and also the impact of rising income. In addition, the consumption of services also grew by 5.6% year-on-year, which has been unprecedented since the early 2000s *(Chart 2.14).*

Chart 2.15: Households' saving rate in the third quarter of 2018

(four quarterly averages, % of GDP)



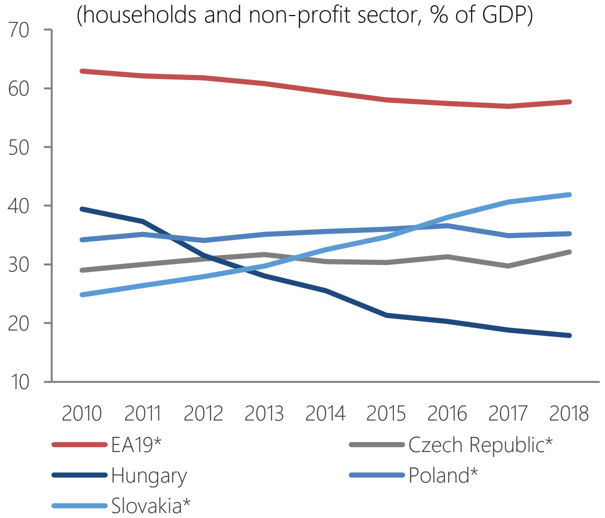
** data of 2018* *Soiurce: Eurostat, MoF calculation*

However, at the same time as the future growth reserve, the growth pace of consumption expenditures still lags behind the increase of real income in recent years. This is because the repayments of previously accumulated debts as well as precautionary savings – as a sign of increasing financial awareness – still play a determinant role in households' consumption decisions. As a result, the savings rate of households remains at a high level in international comparison, around 6 percent of the GDP *(Chart 2.15).*

Household loans grew by 7.3 percent in 2018 in line with the increasing real wages, favourable outlooks and low lending rates. The volume of new housing loans shows a 31 percent increase as compared to 2017, reaching the 2008 level on a nominal basis. However, in spite of the strong increase, the credit market remains a growth potential for the coming years, as the credit-to-GDP ratio falls short of the average of both the regional peer countries and the Eurozone. *(Chart 2.16)*

Chart 2.16: Household loans in regional comparision

(households and non-profit sector, % of GDP)



**data of 2018Q3* *Source: Eurostat, MoF calculation*

Looking ahead, there are several factors that support the further strengthening of household consumption. On the one hand, continued dynamic wage-catching and employment growth fuel consumption. On the other hand, the Family Protection Action Plan launched to achieve the turnaround in demographic trends may have a positive impact on household consumption. Thirdly, some of the measures of the Programme for a More Competitive Hungary also have positive effects on the increase in the households' disposable income. However, the savings rate of the sector, which may also contribute to the expansion of consumption, may slightly decrease but will still remain at a high level. Overall, 4.8% increase is expected in consumption in 2019, and this favourable trend will probably continue in the coming years as well.

2.3. LABOUR MARKET

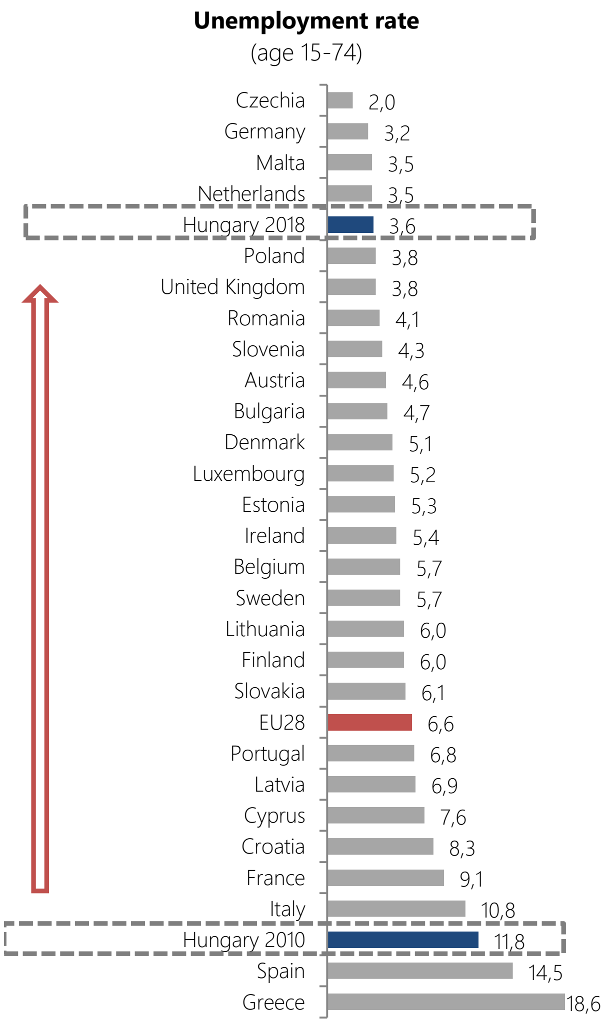
2.3.1. Employment

Thanks to the reforms undertaken since 2010 and the turnaround in growth in 2013, employment has been expanding for almost nine years. In recent years, the labour market has played an important role in economic growth. The increase in employment and activity is outstanding also in European comparison. As a result, the employment rate has reached 75% in the 20-64 age group according to the latest data of February 2019, which is a significant result and meets the target value determined in the Europe 2020 strategy. As another favourable development, the time-proportionate part of employment growth, determined in 1 million people for the next 10 years in 2010, has also been met. Moreover, the unemployment rate became the fifth most favourable in the European Union by the last quarter of 2018 *(Chart 2.17).*

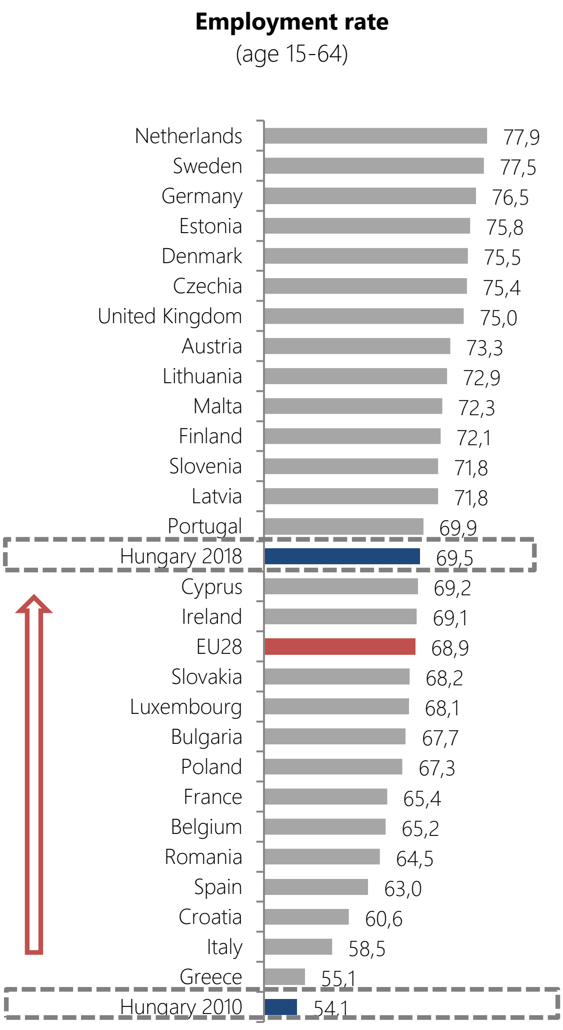
As a result of Government measures, the participation rate – following further increase – reached 71.9% in 2018, which took place in parallel with the expansion of employment and the moderation of the unemployment rate to 3.6%. In addition to the 48,000 increase of employment, the number of public workers declined by 46,000 in 2018. In consequence of this latter trend and the slight decrease in the number of people working abroad for less than 1 year, in continuation of the tendencies prevailing in recent years, employment in the domestic primary labour market – excluding fostered workers and frontier workers – increased significantly, by nearly 100,000 (2.4%) *(Chart 2.18).*

Chart 2.17: Labour market indicators in the EU

(Q4 2018, percent)



*Hungary ranked 21st in 2010 Q1



*Hungary ranked 28th in 2010 Q1

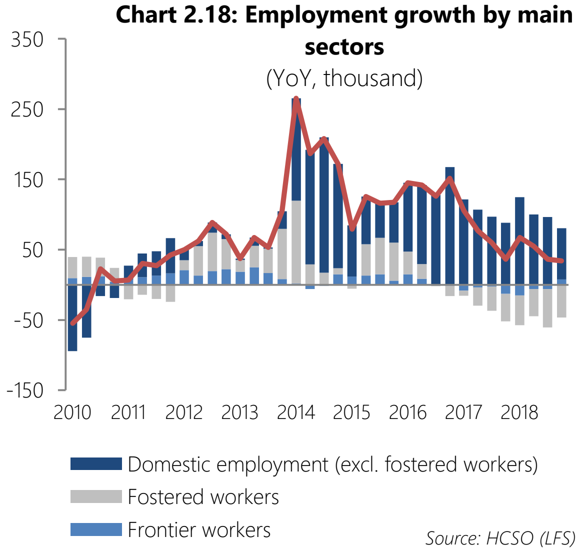
Thanks to the favourable tendencies, employment rose to a level not seen since the regime change, exceeding 4.5 million persons during the year.

Besides the fact that the economy has started to follow a stable growth trajectory which increased labour demand, these favourable trends were founded by a number of 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 Action, the changes in job-seeking subsidies, the tightening of the conditions of disability pensions, the rise of the effective retirement age, the 'Road to the Labour Market' programme, the Youth Guarantee programme, as well as the wage agreement concluded at the end of 2016.

Among the branches of the national economy, construction presented the highest employment growth last year, with nearly 30 thousand people. An employment growth amounting to 26 thousand people in industry – including a growth of 15 thousand in manufacturing – was experienced, primarily due to the rising employment in paper, metal, electronics and automotive industries. The headcount in public services grew significantly in education and healthcare, while employment decreased by 36 thousand in public administration due to declining public employment.

Chart 2.18: Employment growth by main sectors

(YoY, thousand)

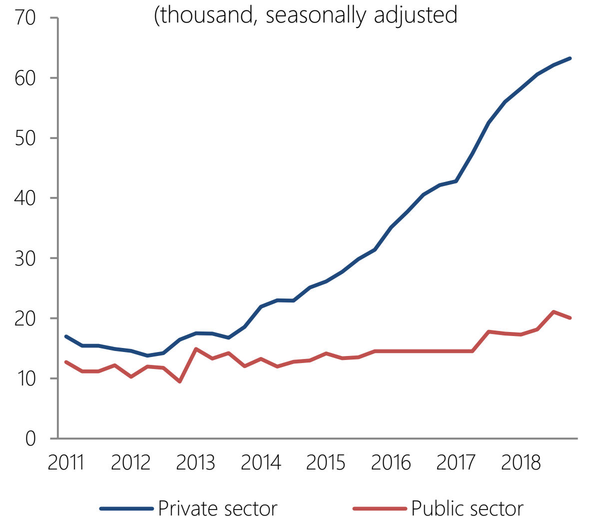


Source: HCSO (LFS)

Due to significantly expanding employment and a still strong economic growth, the labour market has become tighter. Although the number of vacancies is still high, its growth has somewhat slowed from the second half of 2018, possibly due to the efficiency increasing measures of businesses and higher wages *(Chart 2.19)*.

Chart 2.19: Number of vacancies

(thousand, seasonally adjusted

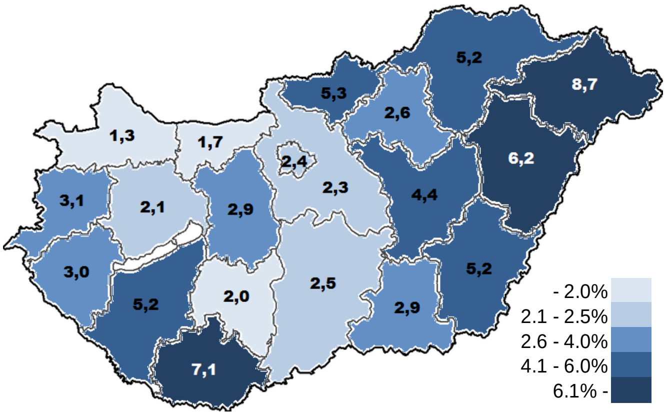


Source: HCSO, MoF calculation

The number of inactive people decreased to 2.79 million by 2018 from the nearly 3.46 million in 2010, which can be associated mostly with the favourable employment figures. A vast majority of this group are pensioners, whose participation in the labour market will be increased in the coming years due to the gradual raising of the retirement age by 2022 as well as the preferential taxes and contributions ensured for working pensioners from the beginning of this year. Moreover, a further increase in employment may, in a beneficial economic environment, be promoted by the implementation of the 'Programme for a More Competitive Hungary', which helps the employment of young people, mothers with small children, jobseekers, those living in less dynamic regions, i.e. the groups with significant labour reserves. In 2018, a new programme was launched with the involvement of the employment departments of the Government Offices, with the aim of increasing the efficiency of labour market placement by offering customised services, and thereby placing 78 thousand clients in two years in the primary labour market. Starting from the eastern counties, the programme will be expanded to the rest of the counties by 2020. The labour market activity of full-time students may strengthen due to the increase in the number of those participating in dual education 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; according to the government's target, the number of crèche places will increase to 70 thousand by mid-2022 from the 48 thousand in 2018. A further decrease in unemployment may be caused by the convergence of unemployment rates of, typically eastern and south-western, regions in a less favourable employment situation to those with more favourable employment indicators *(Chart 2.20).*

Chart 2.20: Unemployment rate by county

(percent)



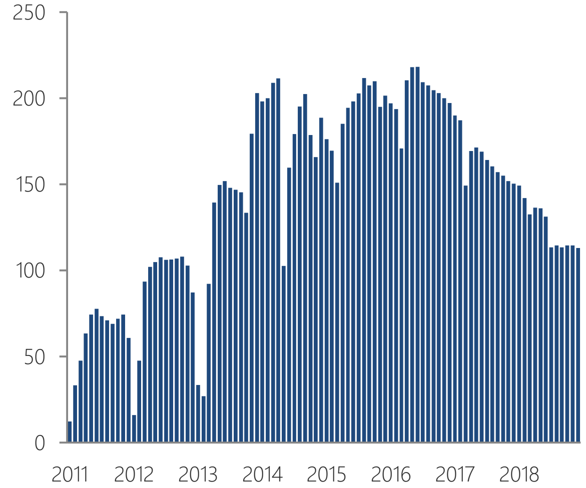
Source: HCSO, MoF calculation

Furthermore, increasing labour shortage encourages employers – in addition to increasing wages and improving efficiency – to loosen the recruitment conditions for individual positions and to pay more attention to organising in-house trainings to develop employee skills. Furthermore, higher wages may encourage regional mobility within the country; in addition, wage convergence reduces the attractiveness of taking a job abroad as well.

In the fourth quarter of 2018, the number of public workers decreased to approximately 120 thousand, which is even lower than the previously set target of 150 thousand. Consequently, the number of public workers decreased by approximately 100 thousand as compared to the peak in 2016 *(Chart 2.21).* The priority training programme for low skilled and public workers improves the chances of those completing the programme to find employment in the primary labour market. The number of persons involved in the programme has already exceeded the originally planned 85 thousand.

Chart 2.21: Number of people in the public employment scheme

(thousand)

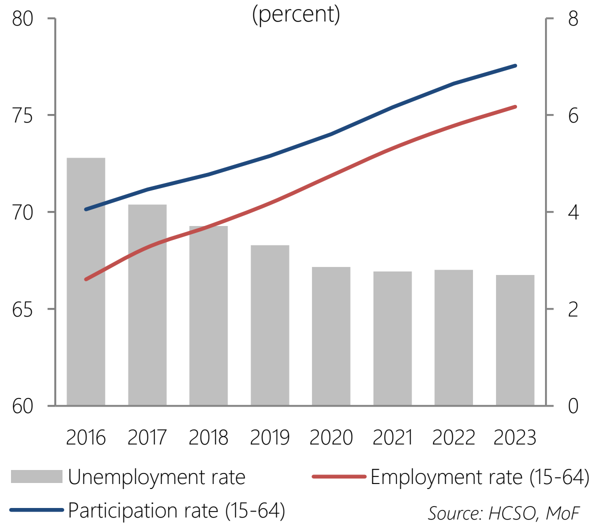


Source: HCSO, calculation of

Thanks to past Government measures and the 'Programme for a More Competitive Hungary', as well as the favourable cyclical position of the economy, employment is expected to continue to increase over the forecast horizon *(Chart 2.22).* 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 low Hungarian unemployment rate that is already among the most favourable in the European Union.

Chart 2.22: Participation, employment and unemployment rate

(percent)



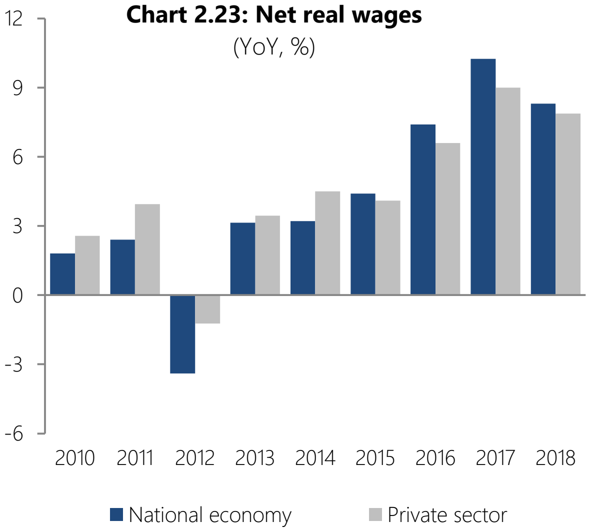
Source: HCSO, MoF

2.3.2. Earnings

The tight labour market and the raise of the minimum wage and the guaranteed wage minimum determined in the wage agreement at the end of 2016 resulted in a two-digit increase of private sector wages. The wage index of the public sector was elevated by career models as well as wage adjustments at certain state owned companies. Thanks to the dynamic growth in wages and moderate inflation, real wages increased by 8.3% in the national economy in 2018 *(Chart 2.23*).

Chart 2.23: Net real wages

(YoY, %)



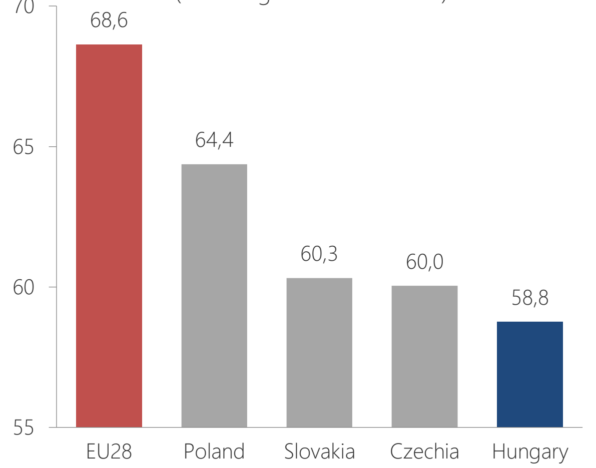
Source: HCSO, MoF calculation

Even in foresight, this currently strong wage dynamics will not change Hungary's competitiveness. This is because, on the one hand, the convergence of the minimum wages and wages of other regional peers has also accelerated. However, in spite of the wage increase of recent years, the domestic wage share is still moderate both in regional and European comparison, which is supported by the fact that the social contribution tax rate – reduced to 11.5% from 27% in multiple steps – decreases wage costs *(Chart 2.24).* This is confirmed by the corporate sector's ability to increase its profits in the last two years, parallel to the dynamic growth of wages. *(Chart 2.25).*

The significant labour demand of the private sector continues to result in a dynamic growth of wages in 2019, while the 8% increase in the minimum wage and the guaranteed wage minimum is more moderate than in the previous years. This year, the social contribution tax is expected to decrease by an additional 2 percentage points from the second half of the year, which will further mitigate the dynamics of the increase in wage costs. At the same time, the growth of wages – by encouraging the efforts of the companies to improve efficiency – contributes to the expansion of employment in positions creating higher value added. Given the persistently strong labour demand, the rapid wage convergence is expected to continue in the coming years as well.

Chart 2.24: Adjusted wage share at non-financial companies, 2018

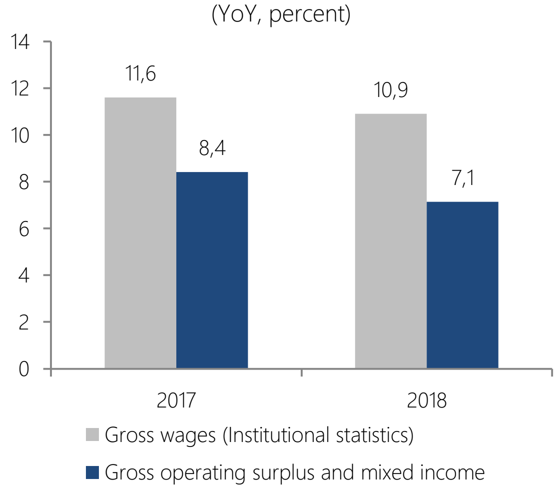
(in % of gross value added)



Source: Eurostat, MoF estimate

Chart 2.25: Development of gross average wage and gross operating results

(YoY, percent)



Source: HCSO, MoF calculation

Box 5: Accelerating the implementation of the labour market reform through transforming the employment departments of the Government Offices

Domestic labour market has recently become increasingly tighter. To bring an ease to the stifling points of tension, a labour programme was started in the autumn of 2018 based on a German model to transform the employment departments of Government Offices. Modern labour offices with up-to-date knowledge are client-oriented and provide the best quality services for jobseekers. The current labour programme is mainly based on strengthening the relationship of employment departments with businesses and on making their labour placement activities more effective.

The main elements of the programme include:

- The detailed mapping of labour supply
- Becoming familiar with exact needs corporates, strengthening communication with businesses
- Regular back-testing of the performance of employment departments

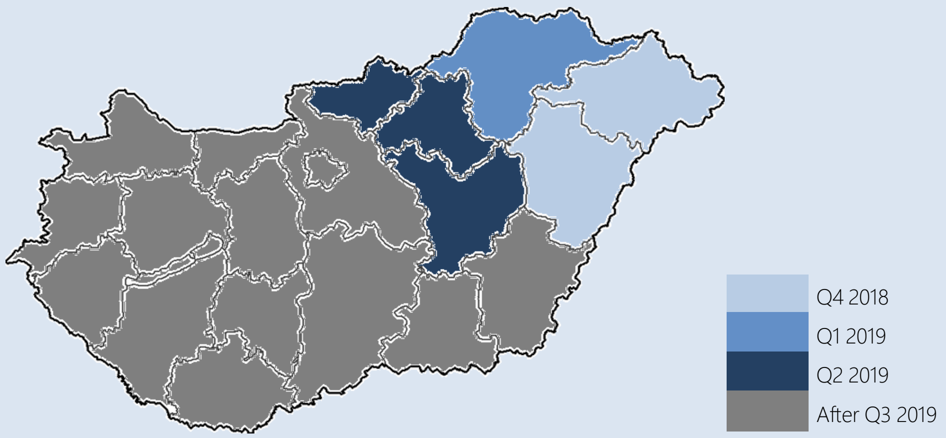
The deeper and organised mapping of labour supply is one of the fundamental pillars of more effective labour placement. In addition to fulfil their regular obligations relating to the administration of benefits, the staff members of the employment departments will – as a result of the transformation – place more emphasis on the deeper exploration of jobseekers' labour market situation and individual opportunities, and on the structuring of information: they will segment the affected persons. This way, collaboration with jobseekers is determined at an individual level, with a focus on placement on the primary labour market as soon as possible, which is achieved through counselling or career guidance.

As another pillar of more effective placement services, emphasis is placed on the fine-tuning of contact with businesses. Earlier, employment departments communicated with companies in relation to supported placements. With the implementation of the labour reform, however, the primary focus will be on getting to know the company's needs in more detail so that those jobseekers can be referred to them who match their demands the most. The segmentation of the affected persons plays a determinant role in this process. In addition, by establishing proactive and continuous contact with the companies, employment departments will be able to speed up the process of filling the vacancies.

In line with the new operation model, performance management ensures effective and rapid responses to emerging problems. Company relations, the active seeking of clients, as well as the monitoring of successful placements are assisted with weekly reports. The breakdown into districts allows for the identification of problems as well as the selection and application of the adequate solutions.

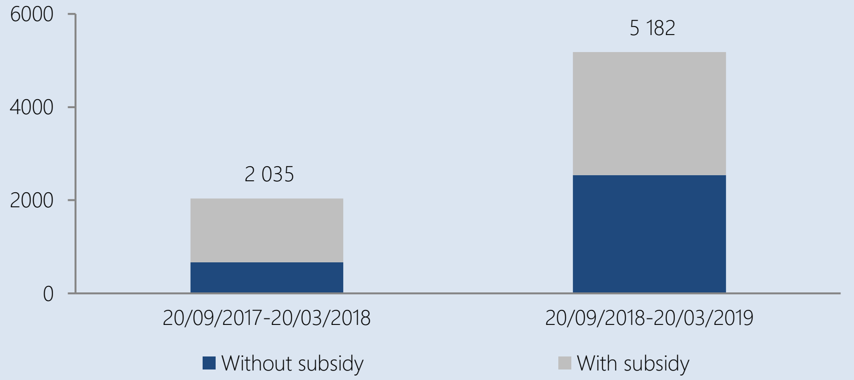
In Hungary, the client-oriented transformation of the employment departments first started in two counties, Szabolcs-Szatmár-Bereg and Hajdú-Bihar counties, and Borsod-Abaúj-Zemplén county joined the process in early 2019. The countrywide extension of the labour programme allows ensuring that the key elements of the new model function in a standardised manner at all employment departments in the whole country. With a view to more effective placement, the staff of employment departments receives support, for example administrators are assisted by a so-called navigator team with trainings or on-site instructions.

The transformation schedule of employment departments



Until the end of March 2019, more than 6,000 jobseekers and public workers were successfully placed in the three counties participating in the programme. This is a significant, more than two-and-a-half-fold expansion as compared to the value in the basis period preceding the transformation. As a favourable trend, placements without wage subsidy become increasingly frequent. All in all, it seems feasible for 35 thousand people by the end of 2019 and 78 thousand by the end of 2020 to find employment in the primary labour market thanks to the labour programme.

Employees placed by employment offices
(thousand persons)



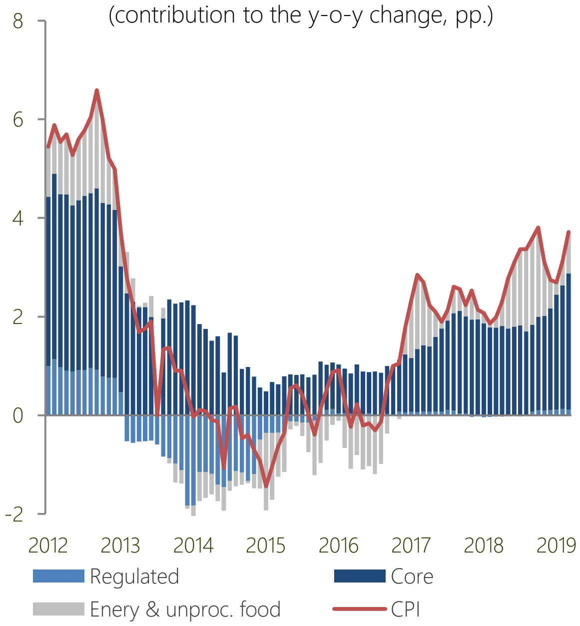
Source: NFSZ and progtram means

2.4. INFLATION TRENDS

The inflation amounted to 2.8% in 2018, which means that price dynamics slightly accelerated last year following the 2.4% value measured in 2017. The increase in fuel and food prices s, in particular vegetables, egg and certain dairy products, stands in the background of the higher price index. The inflationary pressures arriving from the continent as a consequence of European economic upswing have also strengthened, the price of new cars and various electronic equipment has significantly increased. Nevertheless, the tax cuts reduced inflation by about 0.4 percentage point in 2018, wherein in particular the VAT rate cut of internet services played a key role. Due to anchored expectations, the increasing demand by households, similarly to previous years, appeared in price increases only to a limited extent. The dynamic wage increase primarily affected labour-intensive products, resulting in higher prices for goods such as bakery products, firewood and certain services. In contrast, the price of used cars plummeted, probably in correlation with the diesel scandal, while telecommunication services fees also decreased.

Chart 2.26: Main factors affecting inflation

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



Looking ahead, the price impacts of the vivid domestic demand may persist. In addition to massive wage dynamics, the still supportive monetary policy and the gradually rising inflation expectations of households – although, historically, it is still low – also point in this direction. Unlike in previous years, the changes in indirect taxes also point to an approximately 0.2 percentage point higher price increase. Although the reduction of the VAT rate of UHT and ESL milk from 18% to 5% as well as the termination of the transaction duties on small amount transfers appeared in end-user prices, this is counterbalanced by the approximation of the excise duties on tobacco products to the EU level and the growth in the public health product tax.

By contrast, the external impacts forecast a temporary moderation in inflation in 2019. First, raw material prices may take a favourable turn as compared to those of the previous year, and second, it is important that the imported price pressure may – as a result of the slowdown of the EU – be weaker than earlier expected. All in all, in 2019 there may be a slight decrease in consumer price growth, and so inflation may amount to 2.7%. The inflation may rise following this year; however, with the factors causing a one-time price increase becoming integrated in the basis, and as a result of the more moderate price spill-over from the EU, this process may be gradual, which is also supported by the anchored expectations. Accordingly, the pace of general price increase may be 2.8% in 2020 and then 3% in line with the mid-term goals of the MNB.

2.5. Cyclical position of the economy

The performance of the Hungarian economy in the first half of the 2000s fluctuated around its potential level. However, prior to the crisis, economic growth was marked by a high budget deficit, excessive lending and rapid external indebtedness, which growth therefore turned unsustainable. With the outbreak of the global financial crisis in 2009, the focus shifted to the repayment of the accumulated debts, and in parallel, the performance of the economy fell well below its potential level. In the subsequent years the gradual closing of the negative output gap could be observed.

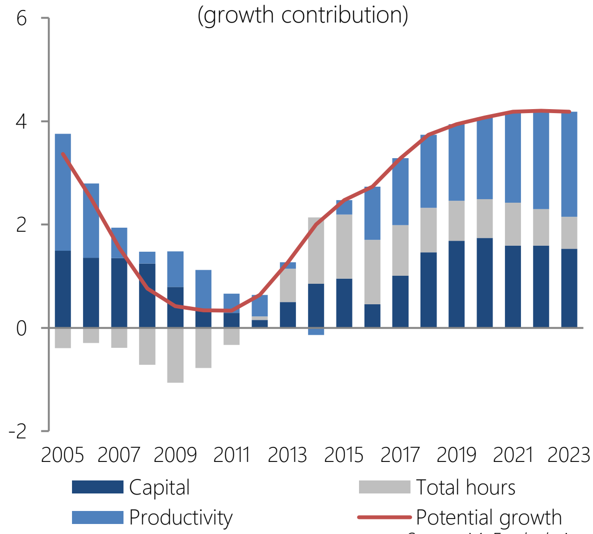
Since the structural reforms undertaken from 2010 put the Hungarian economy on a growth path from 2013 onwards and the potential growth has significantly accelerated as well. Nonetheless, owing to the continued phasing out of debts accumulated during the boom before the crisis, the economy's performance could fall short of the level induced by structural factors for many years, which means that as a result of the economic growth of about 4% in recent years, the economy could reached the structurally founded level. Therefore in 2018, the output gap might have turned slightly positive as the result of domestic demand-driven growth.

Looking ahead, the output gap may close in the mid-run since the expansion will be in line with the potential growth on the forecast horizon. Regarding the elements of potential growth, although the expansion of employment may slow down, this effect is far outweighed by the increase in productivity. First, a further boost in capital is supported by the fact that the investment ratio may remain over 25% on a longer term mainly owing to capacity expansions of large companies in the manufacturing industry as well as to the use of EU funds, due to which capital accumulation may exceed even the rate experienced in the early 2000s. Increase in productivity is supported by – in addition to the import of technology owing to foreign investments – the change of the relative price of labour and capital, as well as the fact that the persons recently involved in the labour market become increasingly experienced. Finally, the actions outlined in the summary of the 'For a More Competitive Hungary' Programme increase productivity as well.

As regards the factors of growth, the Hungarian economy is going through significant changes. This is because with the decrease in labour market reserves the emphasis will shift increasingly towards efficiency and capital accumulation, i.e. from labour intensive growth towards quality improvement. As a result of the former the contribution by total factor productivity may further expand reaching more than 2% by 2023. As a whole, the potential growth is expected to be around 4% on the forecast horizon.

Chart 2.27: Drivers of potential growth

(growth contribution)

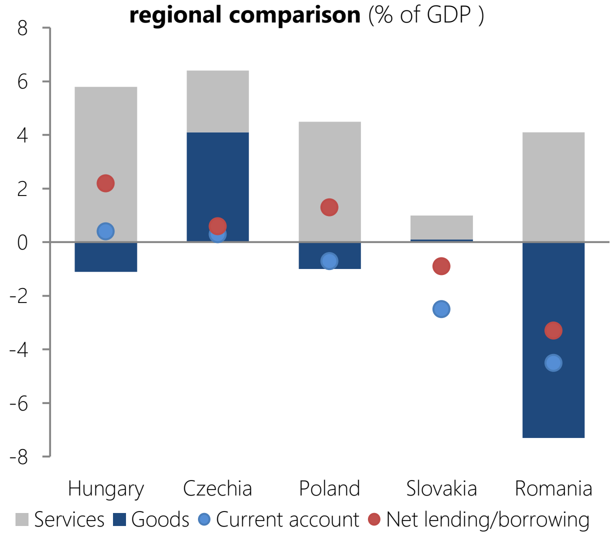


Source: MoF calculation

2.6. External balance

External balance deteriorated as the trade surplus decreased after the peak year of 2016 due to the realisation of previously postponed consumption and the massive increase in investments. As a result, the current account surplus amounted to 0.5% of the GDP. A similar trend can be seen in respect of lending vis-à-vis rest of the world, however, the decline has been counterbalanced by the inflow of larger EU funds. Nonetheless, balance indicators are still favourable in regional comparison.

Chart 2.28: Main external balance indicators in regional comparison (% of GDP)



FSurce: Eurostat, MoF calculations

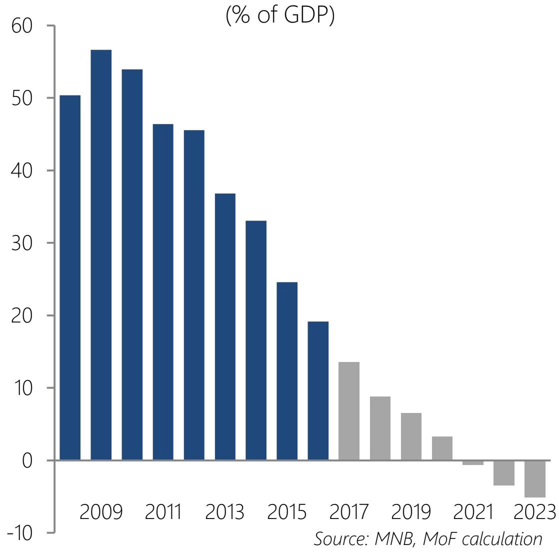
The main factor behind the decline in balance was the deterioration in goods surplus, which is basically the result of the additional import need of domestic demand. However, one-off factors such as the unfavourable terms of trade and, due to the shift to WLTP standards in the automotive industry, the weakening export at the end of the year also played a part in the decline. Nonetheless, thanks to services, the trade surplus remains high in international comparison. The fact that the profit of foreign companies could, in part owing to the weakened export, also decrease, which compensated for the decrease in balance through a lower income outflow, is also favourable. Regarding income, the balance of labour income declined, but this has been counterbalanced by the continuous reduction in the outflow of interest payable on debts.

Looking ahead, the current account balance may continue to decrease in 2019, as the still buoyant domestic demand mitigates foreign trade surplus. However, in the following years the capacity expansions of the export-oriented companies may counterbalance this effect, and so the second half of the forecast horizon may see a gradual improvement in the balance. The outflow of interest payments may further decrease owing to the mitigating debt service, although all in all the income balance may remain stable due to the growing profits of companies. The lending vis-à-vis the rest of the world may show a substantial surplus on the whole of the forecast horizon, which is also supported by the inflow of more EU funds compared to previous years.

Overall, Hungary's resistance against negative external shocks is also improved by its favourable financial indicators. Thanks to the permanently prevailing 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 the end of 2021 Hungary may become a net lender vis-à-vis the rest of the world after being a net borrower for half a century.

Chart 2.29: Net external debt

(% of GDP)



Source: MNB, MoF calculation

2.7. IMPACT ASSESSMENT OF GOVERNMENT MEASURES

This chapter sets out the macroeconomic impact assessment of key Government measures adopted since the publication of 2018 Convergence Programme. In part, the DYNAMO model of Ministry of Finance was used for the analysis.

The structure of DYNAMO model rests on neo-classical growth relationships in the long term, however, adjustment to this is slowed down by various frictions in the short term. The characteristics of the model make it suitable for the preparation of impact assessments of Government measures. On the one hand, this is explained by the fact that it uses a wide range of macroeconomic variables, thus modelling the behaviour of specific economic agents. On the other hand, it appears as a consistent representation of relations between the national accounts and the financial accounts of public finances. In addition, several such transmission channels have been incorporated in the model through which the fiscal variables exert their effects on the economy.

At the same time, beyond the direct cyclical stimulation effected by budgetary implications, the individual measures also target such structural changes that will result in additional growth pointing beyond the mechanisms integrated into Dynamo-model. This can be demonstrated with the example of increasing the number of crèche places, which, on one hand, impacts growth in the form of additional investments and operational expenditures. On the other hand, the growing number of places allows mothers to ensure daycare for their children, helping their employability. While Dynamo-model is able to demonstrate the impacts on growth resulting from the former, the assessment of effects linked to the latter required calculations outside of the model. In the above example, the increasing capacity of crèches was fully considered as a factor increasing labour supply (given the current strong demand for places).
The favourable development of macroeconomic fundamentals – beside keeping the budget balance – enables the Government to take a number of measures supporting economic upturn and enhancing the welfare of society. The impact assessment addressed the following Government actions *(Table 2.1)*:

- 'For a More Competitive Hungary' Programme: it contains comprehensive action plans for several areas (e.g. taxation, business environment, public sector, labour market, education, healthcare), which – if implemented – also contribute to the improvement of productivity and competitiveness.
- Family Protection Action Plan: within the Programme, the Family Housing Subsidy Scheme is renewed, as part of which the housing subsidy can be used in the villages covered by the programme in the framework of Rural CSOK, and the preferential loan provided under CSOK is extended, meaning that from mid-2019 families with two or more children can use the loan to buy used real estates, too. In addition, further measures also support the demographic processes, such as crèche constructions, the introduction of the Prenatal Baby Support, the exemption from PIT liability of women who give birth to four children, the support provided for secondary school students' language education abroad or the car purchase support for large families.
- Other measures: launch of Hungarian Village Programme, which supports the development of local public services and the realisation of various investments to improve the quality of life; extension of Home Care Fee.

The macroeconomic effects of measures quantified with DYNAMO model, the calculations presented in the above example and by taking the empiric results available in literature as a basis, can be seen in *Table 2.2.* From among the economic policy steps taken, the greatest effect (as a % of the GDP) comes with the competitiveness programme. A significant part of these economic policy measures support the cyclical processes through the improvement of productivity, investment activity and employment. Capacity extensions stimulate GDP growth through other channels as well, primarily through export and labour incomes.

In addition, the measures that support demographic trends also contribute to the growth of economy. Some of these steps contribute to the positive development of gross domestic products through investments (in particular the Family Housing Subsidy Scheme and the crèche construction programme), while others (e.g. the car purchase support) basically by stimulating consumption.

The government measures result in a moderate overall inflationary effect, while higher tax revenues from the GDP growth partly offset the negative effects of additional government measures on the budget balance. Regarding the quantified effects of the measures, GDP may exceed the 2019 level estimated in the baseline scenario (the one without the implementation of such measures) by 0.9%. In the long run, economic policy actions further improve economic performance, which results in a cumulative surplus effect of 4% of the GDP up to 2023 as compared to the baseline scenario – thanks to the above measures.

Table 2.1: Government measures modelled in % of GDP

	2019	2020	2021	2022	2023
Measures increasing expenditure	**0.89**	**2.14**	**2.19**	**2.09**	**1.83**
'For a More Competitive Hungary' Programme, including:	**0.33**	**0.85**	**1.10**	**0.98**	**0.88**
Taxation	0.02	0.28	0.28	0.25	0.25
Employment	0.07	0.10	0.36	0.33	0.31
Efficient state	0.03	0.02	0.02	0.02	0.02
Healthcare	0.04	0.06	0.16	0.14	0.13
Education	0.00	0.18	0.12	0.09	0.05
Entrepreneurial environment	0.16	0.20	0.16	0.15	0.11
Family Protection Action Plan, including:	**0.28**	**1.06**	**0.86**	**0.87**	**0.72**
Expansion of Home-creating subsidy	0.10	0.34	0.35	0.36	0.37
Prenatal baby support	0.17	0.34	0.18	0.21	0.13
PIT exemption of mothers with four or more children	0.00	0.05	0.05	0.05	0.05
Car purchase support for families with three or more children	0.01	0.03	0.02	0.01	0.00
Mid-term crèche development programme	0.00	0.09	0.06	0.06	0.00
Introduction of child care fee for grandparents	0.00	0.00	0.00	0.00	0.00
Foreign Language Strategy	0.00	0.20	0.19	0.18	0.17
Extension of Home-care fee	0.04	0.06	0.08	0.09	0.09
Hungarian Village (programmes other than the Rural Family Housing	0.24	0.17	0.16	0.15	0.14
Measures increasing revenues	**0.06**	**0.06**	**0.05**	**0.05**	**0.05**
E-toll, surplus from time-based toll increase	0.06	0.06	0.05	0.05	0.05
Total	**0.95**	**2.19**	**2.25**	**2.15**	**1.88**

Source: MoF calculation

Remark: Due to rounding, the summed data might differ from the sum of the detailed data

Table 2.2: Macroeconomic impacts of the measures

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

	2019	2020	2021	2022	2023
GDP	**0.93**	**2.08**	**2.70**	**3.49**	**4.16**
Households' consumption expenditure	0.64	2.22	2.62	3.17	3.66
Investments	3.23	6.05	7.79	9.96	11.25
Export	1.20	2.20	3.28	4.58	5.94
Import	1.49	2.89	4.00	5.37	6.70
Consumer price level	0.05	0.20	0.24	0.26	0.24
Private sector employment	0.41	1.19	1.46	1.61	1.79
Gross average wage in the private sector	0.29	1.05	1.81	2.55	3.09
General government deficit (% of the GDP*)	**-0.45**	**-0.99**	**-0.98**	**-0.67**	**-0.31**

** Change in percentage points over the basic trajectory*

Source: MoF calculation

2.8. Monetary and exchange rate policy

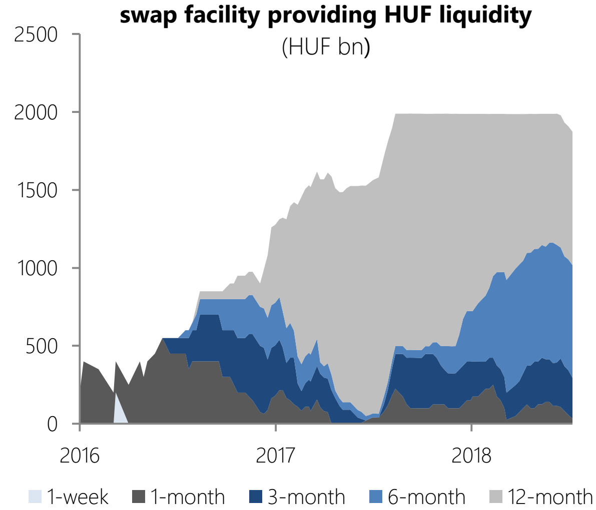
Similarly to the previous regulation, the current Act on the Central Bank of Hungary (MNB) sets out to achieve and preserve price stability as the primary objective. Since 2001 the MNB has been following an inflation-targeting monetary policy. Within the framework of this, the Monetary Council set a 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 eventual economic shocks. The monetary policy ensures inflation targeting by changing the base rate, exploiting the flexibility provided by the floating exchange rate, and using its non-conventional toolkit.

The MNB further formulated its monetary political toolkit in 2018-2019. September 2018 saw the commencement of the gradual phasing out of the non-conventional toolkit impacting the short side of the yield curve, making the fine-tuning foreign exchange swaps and the interest rate corridor as the main tools of the management strategy. By the end of 2018, the Central Bank phased out the three-month deposit policy instrument from its toolkit. The Central Bank narrowed the availability of the instrument for credit institutions in two phases in the summer and autumn of 2016 (thinning and then volume restriction), reducing the stock of HUF 1,600 billion in autumn 2016 to HUF 75 billion by the end of 2017 and to zero by December 2018.

After the phasing out of the 3-month deposit instrument, from 19 December 2018 the minimum reserves assumed the role of policy instrument with unchanged conditions. Accordingly, the mandatory reserve ratio prescribed for credit institutions in a standard manner remained 1%. The amount of the interest paid after the deposited reserves and the penalty interest payable by credit institutions in the event of under provisioning have been equal to the base rate since the 2004 EU accession. The MNB continues to inspect on a monthly average whether the reserve criterion is met.

The persistently low interest rates and the restricted key policy instrument have led to an increase in the significance of the swap facility providing HUF liquidity. This is because the MNB provides the bank system with considerable surplus liquidity through its fine-tuning swap facility. The volume of the non-conventional facility, completed with 6 and 12-month maturities, grew to HUF 1,987 billion by the beginning of 2019, and its maturity scheme was considerably restructured *(Chart 2.30)*. The one-month swap volume has significantly decreased as compared to the corresponding period of 2018, while the half-year volume has increased substantially and the one-year maturity remained around the HUF 1,000 billion range. The gradual increase by the MNB of the volume of swap instruments with longer maturity contributed to the ability of monetary loosening to appear over the longest possible section of the yield curve.

Chart 2.30: Volume of the Central Bank swap facility providing HUF liquidity
(HUF bn)



Source: MNB

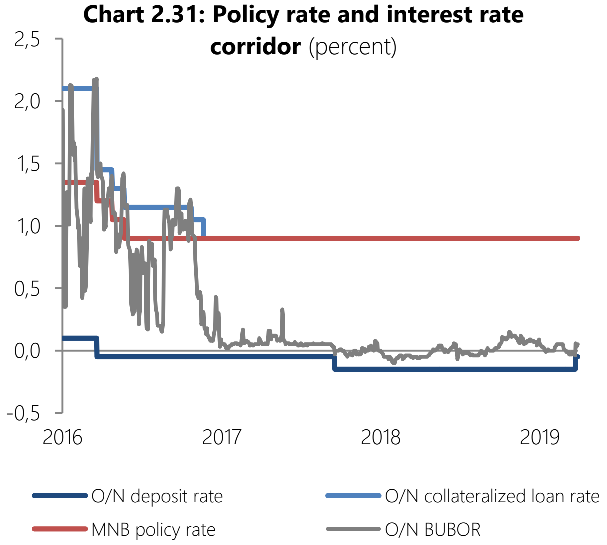
The non-conventional toolkit for moderating long-term yields also changed during 2018. The two new central bank instruments introduced at the beginning of the year with a loosening purpose are gradually phased out from the end of 2018, considering their lower than expected efficiency and the cutback on the loosening policy. One of the elements, the 5 and 10-year MIRS interest rate swap instrument aimed to mitigate the banks' interest risks by the Central Bank replacing fixed-rate instruments (government securities, loans) with instruments having floating interest rate. In the framework of the other instrument – a targeted central bank programme – the Central Bank intended to focus on purchasing mortgage bonds with a maturity of 3 or more years on the secondary or primary market.

The so-called FGS fix instrument with a framework amount of HUF 1,000 billion was launched in January 2019 as a plus element of the toolkit impacting long-term yields. This targeted programme aims to increase the ratio of the long-term fixed-interest loans of SMEs, and a preferential deposit construction is attached to it as well. In the framework of the new loan promotion programme, the Central Bank provides a 0 percent refinancing credit to banks, which they can use for lending with a maximum 2.5% margin.

In accordance with all this, the MNB took the first steps towards the slow, gradual tightening of the monetary policy as early as the autumn of 2018. Maintaining this stance, on 26 March 2019 the Monetary Council adopted a mixed package of measures with three elements.

As a cautious tightening measure linked to domestic inflation processes, it raised the overnight deposit rate by 10 basis points to -0.05%. Nonetheless, the 0.9% overnight collateralised loan has remained the upper limit of the interest rate corridor since November 2016. Thereby the interest rate corridor narrowed to 95 basis points *(Chart 2.31).*

Chart 2.31: Policy rate and interest rate corridor (percent)



Source: MNB

In addition, a moderate reduction in liquidity also commences through the gradual scaling down of foreign exchange swaps. The average amount of liquidity aiming to be crowded-out in the second quarter of 2019 was cut down by HUF 100 billion.

As the third element of the package of measures, the MNB is launching a new bond programme as a supplement to the non-conventional monetary policy toolkit. The framework amount of the Bond Funding for Growth Scheme (BGS) effective as of 1 July 2019 will be HUF 300 billion. The aim of the corporate bond purchase programme is to increase the efficiency of monetary political transmission and to increase the liquidity of the corporate bond market. The MNB will purchase the bonds of companies with good rating. In addition, the Central Bank also encourages the 'packaging' of corporate loans so as to promote securitisation in Hungary. At the same time, surplus liquidity is set off by the preferential deposit having a base interest rate.

What can be observed at international level is that, as an effect of increasing world economy risks, the leading central banks started to gradually loosen their tightening measures. The reason behind their cautious policy is probably their 'wait-and-see' approach as regards the developments of the coming months. Keeping up its 2017 direction, in 2018 the Fed carried out gradual interest rate increases four times since Powell is Fed Chair, who has served in that office since February 2018. As a result of the 25-basis point steps, the benchmark interest range has changed to 2.25-2.5%. By today, the performance of the world economy has entered a more uncertain period. Given the more unfavourable macroeconomic figures, there was no further interest rate increase in March 2019, what is more, Fed's decision-makers do not expect any such further measure during the whole of 2019. With the moderation of the tightening, they stepped on the path of wait-and-see.

With the increasing economic risks, the ECB turned into a more cautious direction as well. According to its decision taken in March 2019, it did not change its interest conditions but announced to take loosening monetary measures. One of the elements of this is the launching of the new TLTRO programme, the aim of which programme is to stimulate lending. Through that, the ECB offers long-term credits to banks to stimulate their lending activities. In the loan promotion programme, the credit institutions, in addition to a more buoyant lending activity, benefit from more favourable refinancing conditions. Furthermore, this year, the date of the first interest rate increase as scheduled by the ECB was put off from the summer to the end of the year, which means that the launching of the tightening measures is subject to some more delay.

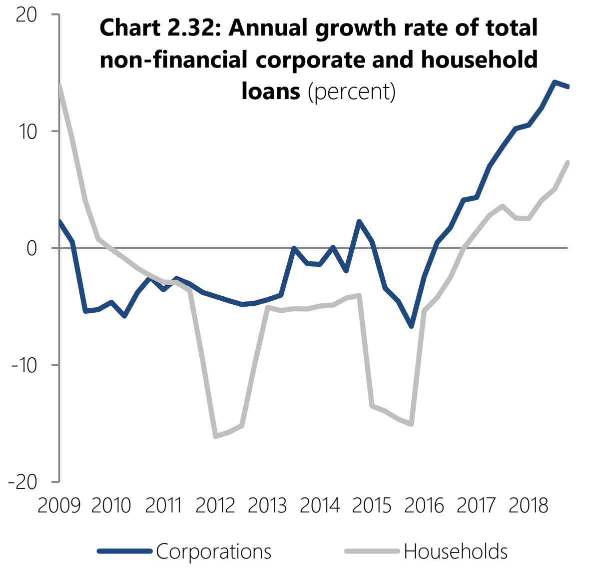
2.9. FINANCIAL SECTOR

The transaction-based change in the loan portfolio of non-financial corporations has improved in 2018. The unadjusted annual growth rate cleared from exchange rate effects was 13.8% regarding the entire corporate sector, while in the SME sector the indicator reached 11.1%. The share of the SME sector showed a decreasing trend, as only 47% of the transactions (HUF 423 billion) were linked to them in 2018.

The Central Bank's Market-based Lending Scheme (MLS) proved to be successful again, in which credit institutions undertook to increase their SME lending by HUF 230 billion in 2018. The lending incentive programme was so popular that, eventually, the amount of new loans exceeded twice the commitments of the credit institutions participating in the programme. The MLS was phased out in December 2018 after three years of successful operation, but also a new lending incentive programme was launched in January 2019 (FGS fix). In the mid-term, it is the FGS fix that is expected to have a more significant impact on corporate lending. Its aim is to increase the share of long-term and fixed-rate loans.

Portfolio quality has continued to improve last year both at sectoral level and in respect of SME loans, however, the pace of portfolio cleaning substantially slowed down compared to the previous period. Nevertheless, the NPL ratio showed a more favourable picture than in the previous year: in 2018 the ratio of the non-performing loans in the corporate segment has shrunk by some HUF 53 billion (i.e. by 1.6 percentage points) to 5.5%. At the same time, it is worth highlighting that this can be fully attributed to SMEs, considering that as a result of the HUF 66 billion reduction in the non-performing loans of the SME sector the NPL ratio dropped by 2.4 percentage points to 6.9%. Both the decrease in non-performing loans and the dynamic expansion of corporate lending had a reducing effect on the NPL ratio. The change in the non-performing portfolio in itself (without the effect of the expansion of the loan portfolio) reduced the NPL ratio by 0.83 percentage points, while the change in loan portfolio (assuming that non-performing stock remains unchanged) reduced it by 0.81 percentage points.

Chart 2.32: Annual growth rate of total non-financial corporate and household loans (percent)



Source: MNB

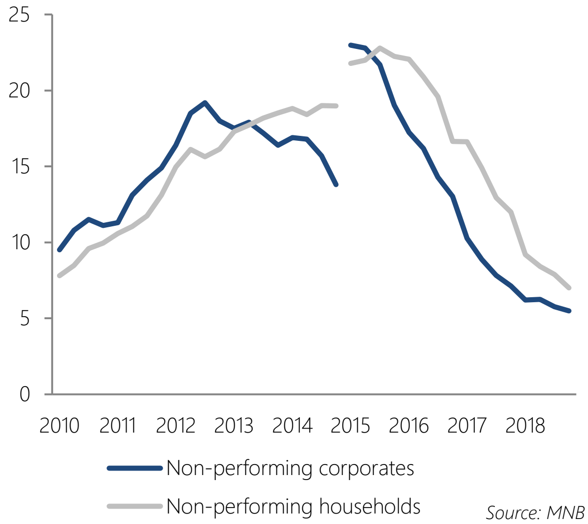
The loans of households also show positive trends. Interest rates continue to be low, while real wages are increasing and the real estate market is expanding. These factors created favourable lending conditions and thus led to a further rise in the loan portfolio of households in 2018.

In spite of the increasing amount of repayments, in 2018 the overall volume of loans belonging to households witnessed the largest increase in the past 10 years by HUF 425 billion, indicating a 7.3% growth rate.

In 2018, credit institutions disbursed HUF 1,617 billion in new loans to households, which is 27% more than the HUF 1,274 billion in 2017. Principally as an effect of the continued expansion of the real estate market the amount of housing loans disbursed increased by HUF 200 billion, but the CSOK also had a positive influence on lending. The disbursement of loans for consumption has increased by HUF 199 billion, mostly driven by the growth of retail sales.

At the end of 2018, the proportion of non-performing debtors at credit institutions was 7%, which is a significant, 5 percentage points decrease compared to 2017, almost fully explained by the reduction in the non-performing portfolio.

Chart 2.33: Changes in the NPL ratio of the private sector* (percent)



Source: MNB

* The regulations for rating defaulting loans changed in 2015. The chart always shows data based on the relevant rating

The Government has also launched several programmes to ease the situation of non-paying debtors, with the most important programme being the National Asset Management Company. 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. The deadline for applications to the National Asset Management Company's programme expired on 21 November 2018, and a total of 42,633 real estates were offered, 36,053 of which were certified to meet all requirements and have already been settled financially. Until the end of December 2018, the National Asset Management Company used budgetary sources in an amount of HUF 154 billion to cut the volume of insolvent receivables owed to financial institutions by HUF 326 billion.

2018 proved to be a successful year in terms of profitability as well. Both the interest income and net commission, fee income, also the other revenues have strengthened the profitability of the Hungarian banking sector, and a further expansion could be expected due to the rising interest rate environment and the further upswing in lending. Although there is a warning sign, that even the steadily rising revenues could not counterbalance the impact of the record high operating costs. Although a substantial part of the increase in the costs can be linked to the recent regulatory and technological changes (GDPR, PSD2, instant payment system) and the preparations. To sum up, enhancing lending activity and the reduction of operating costs (at both individual and sectoral levels) will be the key factors of maintaining profitability.

The capitalisation and liquidity of the Hungarian banking sector are excellent even in international comparison. The total capital adequacy ratio is 19.7%, the CET1 ratio also exceeds 17%, the systemic liquidity coverage ratio is close to 200%, whereas the long-term net stable funding ratio was 124% at the end of September.

Compared to the previous period, the Hungarian banking system provides a more favourable background for the economic growth. The dynamic expansion has been subsidised by the stable, profitable and even more active banking system.

3. General government deficit and debt

3.1. Budget policy objectives

The fiscal consolidation implemented in recent years has proven to be successful and sustainable. The general government deficit has been under 3% since 2012, and the medium-term budgetary objective (MTO) has been outdone every year except for two, moreover, it has been significantly surpassed also with regard to the average of the last 7 years. Consequently, the general government debt-to-GDP ratio has been continuously decreasing year by year. The general government deficit has been under the set 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 2018, 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 that contributes to the realisation of economic and social policy priorities.

The international and Hungarian experiences accumulated regarding the management of global financial and economic crisis show that while monetary policy had a significant role in steering the economy to a growing trajectory, 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 trajectory, deficit levels will start to decrease in 2019 and will be in balance by the end of the forecast horizon. Due to the enhanced growth potential of the Hungarian economy induced by the adopted and planned measures, the cyclically adjusted balance will improve significantly, and overachieve the MTO from 2022.

Save for 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 what is required by the EU's debt reduction benchmark. This is largely due to that both the outstanding 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 70.8% by the end of 2018. The debt ratio may fall by further 15 percentage points, and drop well under the 60% reference value on the time horizon of the convergence programme.

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

	2018	2019	2020	2021	2022	2023
General government balance	-2.2	-1.8	-1.5	-1.2	-0.5	0.0
Structural balance	-2.3	-1.9	-1.6	-1.3	-0.5	0.0
Gross government debt	70.8	69.2	66.7	62.8	59.3	55.9

Source: HCSO, MNB, MoF calculation

3.2. THE 2018 BUDGETARY OUTCOME

Similarly to previous years, in 2018 fiscal developments once again were better than planned. The ESA2010 general government deficit was 2.2% of the GDP, as compared to the deficit target of 2.4% set by the Government.

In 2018, the central government deficit (in terms of cash deficit) amounted to HUF 1446 billion, which is HUF 388 billion lower than that of the preceding year. This is driven by the accelerating economic growth on the one hand, and, on the other hand, by the tax and wage agreement concluded at the Standing Consultation Forum of the Private Sector and the Government at the end of 2016. Both factors caused substantial increases in wages and consumption. Due to these, fiscal revenues were able to increase in spite of the tax cuts. The revenues linked to EU projects fell short of previous year's level and of EU payments, covering only 70% of it. It means that, like in the previous year, the budget paid to EU grants to the beneficiaries of the programmes in advance in 2018 as well. Nonetheless, this does not affect the balance as per the EU methodology, as the ESA methodology allows for the immediate recognition of the revenues from EU co-funding against the budget expenditure, irrespective of whether the transfer has actually been received in the form of a payment.

Revenues

2018 saw tax reliefs again: the family tax allowance increased further (the amount of the monthly available tax discount grew to HUF 17.5 thousand per child), the healthcare contribution on revenues from property leasing was abolished, the VAT rate was decreased for certain basic foodstuffs such as fish and swine offal as well as for restaurant and internet services. On the other hand, by strengthening the effects of those listed above to improve the quality of life even further, the implementation of the measures undertaken in the wage agreement at the end of 2016 continued: the social contribution tax rate was reduced to 19.5% in parallel to a further significant increase in the minimum wage and the guaranteed wage minimum. In line with the reduction of the social contribution tax, the rate of small business tax also decreased by one percentage point to 13%.

As a result of the wage agreement, the rebounding labour market and rising consumption increased tax bases. The government measures serving the 'whitening' of the economy, such as the mandatory online invoice data supply from 1 July 2018 and the connection of the foodstuff selling machines to the NTCA, also significantly contributed to the increase in fiscal revenues.

This way, in accordance with the EU methodology, 2018 saw the collection of approximately HUF 1125 billion more taxes and contributions than in 2017. The effects of tax and contribution cuts were offset by the favourable economic developments. In consequence of the larger wage development, nearly HUF 250 billion higher revenues could be realised on personal income tax than in 2017. Value added tax revenues increased by HUF 503 billion. Corporate tax revenues fell short of previous year by nearly HUF 200 billion.

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.

Previously launched career models for teachers, government office, NTCA, law enforcement, defense and social workers continued in 2018. The basic salary of judges and prosecutors as well as the salary of those working in higher education and healthcare continued to increase, and, as early as from January, a wage improvement took place also for employees working in a healthcare role in the social sector.

In 2018, the housing programme which aims to provide families with housing and improve housing conditions got further boost. Several major changes have been made to the forms of subsidisation associated with the programme, therefore the scope of the subsidy extended. The process of application for Family Housing Subsidy Scheme was simplified as of March 2018 and several restrictions were abolished as regards the purchase of used dwellings and the expansion of dwellings. The Government's decision adopted in October extended the availability of the HUF 10 million loan with preferential interest-rate subsidy also to families with two children and raised the available loan amount to HUF 15 million for families with three children. The future source of the measures will be ensured by the phasing out of state subsidies granted for housing savings.

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 has been remitted. The duration of child-care pay for graduate was extended by 1 year. HUF 1-1 million can be written off from mortgages of families for the third and further children. 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.

In line with the favourable labour market situation, the expenditures of the *public work programme* amounted to HUF 173 billion, HUF 93 billion lower than in the previous year, which shows that those employed as public workers continue to flow to the labour market. The average number of public workers reduced from 165 thousand in 2017 to 126 thousand in 2018.

For the *maintenance of the real value of pensions and certain income replacement allowances*, in 2018 the budget again covered the funds needed for the preservation of this value with the given inflation rate. Beyond that, pensioners also could benefit from the rapid economic growth: at Easter they received Erzsébet voucher in the value of HUF 10,000, and in November they received a pension premium, for which the budget provided HUF 41 billion.

The funds allocated for medical and preventive care exceeded the previous year's levels by HUF 110 billion due to the wage increases in the healthcare sector and the increase in the funding of general practitioner and dental care.

As compared to the initial targets, approximately HUF 35 billion savings were achieved in net interest expenditures calculated with the EU methodology.
As in previous years, the *facilitation of the quick absorption of EU funds* and the scheduled implementation of investments supporting economic development was a task in 2018. The scale of payments in 2018 remained under the previous year's record level and amounted to UF 1,892 billion. A total of HUF 1,054 billion in subsidies was received from the EU in relation to this expenditure, which means that the budget continued to advance the payments. However, as a result of the closure of the previous EU financial cycle, the budget generated more than HUF 260 billion in cash terms (not affecting the ESA balance).

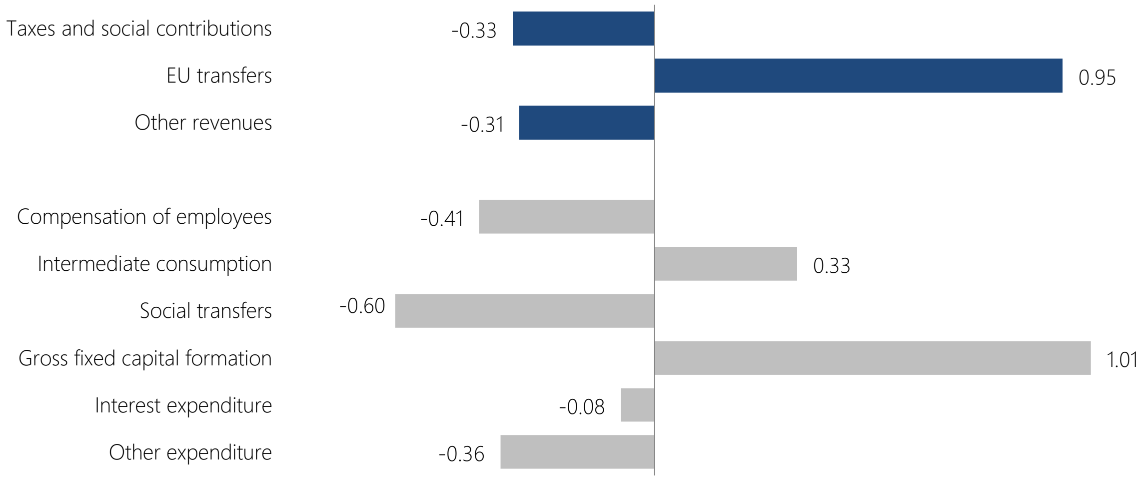
Investments realised from domestic sources also accelerated. The government continued to allocate a significant amount to transport developments in 2018: HUF 259 billion to priority public road projects and HUF 98 billion to the renovation of the public road network, both mostly covered by non-EU funds. In the scope of the Modern Cities Programme, HUF 116 billion was paid for a number of improvements modernising the major provincial cities and increasing competitiveness, attractiveness for tourists and quality of life.

At the end of the year, savings appearing on expenditure appropriations created the opportunity for the government to reallocate HUF 184 billion. The beneficiaries of these funds were – among others – the churches (HUF 45 billion) and organisations beyond the national borders (HUF 32 billion). In addition, extra resources were allocated to the development of the sports infrastructure, sports activities, tourism and other cultural purposes (HUF 27 billion), supporting Erzsébet camps (HUF 13 billion), economic development (HUF 30 billion), to the armed forces (HUF 10 billion), for healthcare purposes (HUF 6 billion), to local governments (HUF 8 billion) and other purposes (HUF 10 billion). About HUF 40 billion of the reallocated amount was used to relieve the 2019 budget.

The majority of the tax revenue surplus at the end of the year was used to finance additional expenditures and the other part to achieve lower deficit target than envisaged.

Chart 3.1: Main expenditure and revenue changes 2019–2018

(% of GDP)



Source: MoF calculation

3.3. The 2019 budget

The 2019 budget, in addition to the continuation and widening of the current priorities, takes into account new measures as well. Wages continue to grow 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. Housing subsidies are increasing and the tax reduction programme started in 2017 pursuant to the wage agreement concluded at the Standing Consultation Forum of the Private Sector and the Government at the end of 2016 continues.

The Government set the deficit target for 2019 at 1.8% of the GDP. Similarly to the budgets of the past years, in the 2019 budget the appropriations for the Country Protection Fund and for the extraordinary government measures serve to counter unexpected risks. The amount of the security reserves (Country Protection Fund and Extraordinary Government Measures) have increased as compared to the previous years, and the use of the larger part of the reserves is linked to the feasibility of the deficit target.

The favourable developments in the labour market, the wage agreement and different wage measures in the public sector are expected to result in a substantial increase in tax revenues, exceeding the budget appropriation by HUF 255 billion.

In 2019, further tax cuts were introduced. 1 January saw a further decrease in the bank tax and, with the exception of the personal income tax, the taxes encumbering the employment of pensioners were abolished. In line with the wage agreement, the rate of social contribution tax is expected to decrease by additional 2 percentage points as from 1 July 2019. The eligibility limit of the small business tax (with Hungarian abbreviation: ‘KIVA’) has also been increased: instead of HUF 500 million, this simpler taxation form can be chosen up to a revenue limit of HUF 1 billion.

Several changes have taken place in the taxation system from 2019, some of which reduce tax administration duties (for example, mandatory mileage records have been abolished, group registration can be chosen also for corporate income tax), whereas others are to promote the developments of companies. The latter group includes that, in corporate income tax, the requirements relating to the limit of the development reserves have been loosened to encourage investments, and that the allowance helping start-up companies access to equity capital has also been expanded.

The increased family tax allowances served the betterment of the situation of families. For families with two children, the amount of the available monthly family allowance increased to HUF 20,000 per child from 2019.

2019 sees the continuation of the VAT reductions regarding basic foodstuffs, which has been ongoing since 2014.

The VAT rate of UHT and ESL milk decreased from 18% to 5%, making it possible for families to save nearly HUF 20 billion. In addition, every retail wire transfer is exempted from the payment of financial transaction duty up to a transfer value of HUF 20,000 per transaction. The action also contributes to the tackling of the black economy by reducing cash use and promoting the further spreading of electronic payments.

Adjusted to the favourable conditions in the labour market, *expenditures on the public work 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 pensions and certain income replacement allowances*, in 2019 the budget is again putting in place the funds needed for the preservation of this value with the given inflation rate. The budget appropriated HUF 25 billion for pension premium payments.

For the sake of the proper recognition of public employees, certain measures are taken in 2019 as well in the framework of the teachers' career model and the law enforcement and military career model. The allowance due to teachers in national minority schools has further increased. 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 2019. From 2019, civilians working at the defence forces are employed as defence employees in a new category, and they benefit from a uniform wage raise of 35 percent in four years. The basic salary of prosecutors has increased. Healthcare professionals and district nurses receive their 8% wage increase, which is due from 1 November 2019, as early as from 1 July 2019. From 2019, the salaries of those working in the central public administration, i.e. the government officials employed in ministries and background institutions, rises by 30 percent on average, in parallel to the rationalisation of the operation of the government and the reduction of headcount. In comparison with the previous year, the overall wage bill in the government sector will, in spite of the reduced rate of the social contribution tax, rise by HUF 170 billion.

The scale of EU payments in 2019 is expected to remain under the previous year's level (and will be around HUF 1,620 billion). Although the payment of EU grants is slowing down, the use of the advance payments disbursed in the previous years is accelerating.

The government continues to commit a significant amount to transport developments, the statutory appropriation for priority public road projects in 2019 amounts to HUF 314 billion. The main objective of the *Irinyi Plan*, adopted with a purpose to develop the domestic industry, is that the share of domestic industry should reach 30 percent by 2020. The Supplier Development Programme allows to involve a significant number of Hungarian small and medium-sized companies in the supplier chains. The Industry 4.0 programme, by way of realising the integrated Industry 4.0 technology development, supports the utilisation of the results built on the innovation collaborations between large and small companies as well as the development and introduction of industrial digital technologies and new business models.

In addition to investments promoting economic development, the 2019 budget provides funds for numerous health, higher education and cultural investments. The improvement of the specialised healthcare services in the capital continues in the framework of the Healthy Budapest Programme. Funds have been allocated for continuing the swimming pool and school gym programmes and the developments started in higher education (e.g. University of Physical Education). Investments for youth and sports life also continue. In addition to the Modern Cities Programme, which is to modernise large rural cities and increase competitiveness and touristic attractiveness, 2019 sees the launching of the Hungarian Village Programme with the aim to strengthen the capacity of rural areas to keep their population. The programme provides central subsidies for the development of public services of rural settlements, for housing subsidies in small settlements ('Rural Family Housing Subsidy Scheme'), and for the development of the byway network.

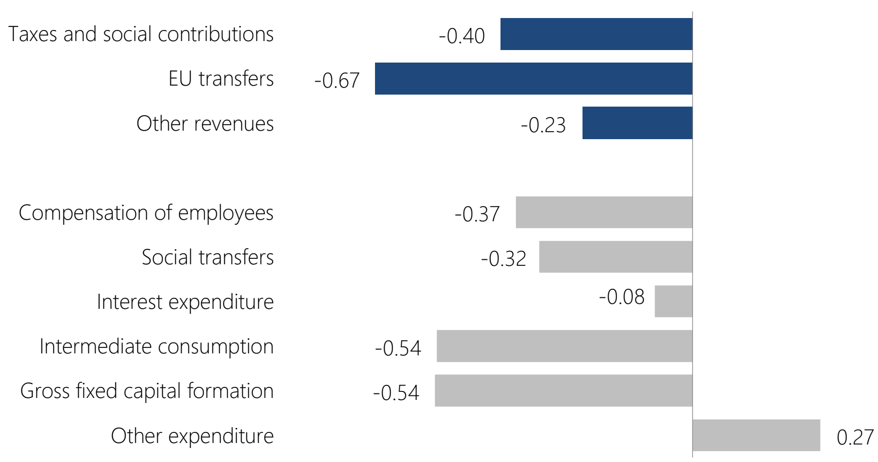
The Family Protection Action Plan was announced in the beginning of 2019, and certain elements of it are also launched as early as this year. The young married couples who lack the sufficient own funds for buying a dwelling may take out an interest-free loan through the Prenatal Baby Support of up to HUF 10 million, which may be used for any purpose. Eligibility is conditioned upon the wife being between the age of 18 and 40, and one of the spouses having been insured for at least 3 years. The repayment of the loan is suspended for three years upon the birth of the first child born after the taking out of the loan, and for additional three years upon the birth of the second child. 30% of the loan is waived upon the birth of the second child, whereas the loan is waived completely upon the birth of the third child. From 1 July 2019, those bringing up three or more children are eligible for a support of HUF 2.5 million for purchasing a new passenger car for seven or more passengers. From July, for families with mortgage credit, HUF 1 million is waived as soon as upon the birth of the second child, and HUF 4 million upon the birth of the third child.

The significant expansion of the housing programme expected to start on 1 July 2019 has been also designed to strengthen the demographic trends. The preferential loan with a guaranteed interest rate of maximum 3% can now be taken out for used dwellings as well, and the limit of HUF 35 million is abolished when purchasing used property. Families raising or having two children are eligible for interest-supported loan up to an amount of HUF 10 million, whereas this amount is HUF 15 million for families having three or more children. This loan can be used for purchasing or building a new dwelling or also for purchasing a used apartment or house. The housing subsidies are also available for single-parent families. Within the framework of the Hungarian Village Programme, the government decided to introduce a rural family housing subsidy scheme ('Rural Family Housing Subsidy Scheme') at settlements with a population of less than 5,000 persons where the number of inhabitants has decreased since 2003 or which are among the most disadvantaged settlements. The allowance, conditional upon the number of children, can also be used to buy, extend or modernise used dwellings at the small settlements covered by the programme. To avoid unjustified price increases, up to a half of the amount of HUF 10 million, due after 3 or more children, can be used for purchasing a dwelling, and the other half for renovation or expansion.

The funds for the programmes announced since the adoption of the budget for 2019 are ensured by the slower than expected realisation of the developments launched earlier, the tax revenues realised over the planned levels in the base period, as well as the payments brought forward to 2018. In February, the Government decided to reallocate almost HUF 100 billion. From the savings and remaining funds generated in 2019 due to funding brought forward at the end of 2018, as well as from reserves, the Government ensured HUF 29 billion for economic development objectives in addition to the Hungarian Village Programme mentioned above, an additional HUF 10 billion for relating infrastructural developments, and HUF 26 billion for supporting international sports competitions, public collections and cross-border cultural development, heritage protection and other tasks.

Chart 3.2: Main expenditure and revenue changes 2020-2019

(% of GDP)



Source: MoF calculation

3.4. Budgetary developments from 2020 to 2023

In the last four years of the programming period, the forecasts of the convergence programme, in addition to the decisions already taken by the government, also take into account the impacts of the actions of 'For a More Competitive Hungary' Programme.

The key elements of the revenue side are tax payments, social security contributions and the absorption of EU transfers. Considering the gradual decrease of the social contribution tax and the steps planned in the competitiveness programme and helping the SME sector (the possible reduction of the small business tax rate and raising the eligibility threshold), tax centralisation may be reduced by 1.6 percentage points between 2020 and 2023. Further measures can be expected with a view to 'whitening' the economy, such as the expansion of the use of cash registers and online invoicing, promoting the spreading of e-invoicing, as well as continuing the labour-friendly restructuring of taxes (i.e. lowering the taxes on labour income, in parallel to raising the taxes on the consumption of products with adverse health effects). 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 will have been utilised by 2019 and, after 2020, an amount gradually decreasing year by year should be anticipated in the calculation. Therefore, EU transfers will not counterbalance the impact of tax revenues increasing at a slower pace than the GDP, and the centralisation ratio will reduce significantly. The total revenue-to-GDP ratio could be reduced in the last four years by nearly 4 percentage points and could drop to below 40%.

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

	2020	2021	2022	2023
Taxes and social contributions	36.8	36.4	35.7	35.2
Other revenues without EU transfers	4.2	4.0	3.8	3.6
Total revenue without EU transfers	41.0	40.4	39.5	38.7
EU transfers	2.3	1.5	0.7	0.7
Total revenue	43.3	41.9	40.2	39.4

Remark: Due to rounding, the summed data might differ from the sum of the detailed data *Source: MoF calculation*

In the period from 2020 to 2023, without the EU subsidies the total revenue-to-GDP ratio may be reduced by 2.3 percentage points, while expenditures without EU subsidies may drop by 3.8 percentage points. The forecast takes into account the following:

- in the framework of the Family Protection Action Plan launched in 2019, as from 1 January 2020 mothers raising four or more children benefit from personal income tax exemption until they retire, and the grandparents not yet under retirement age become eligible for child care fee,
- the crèche development programme is extended, raising the number of crèche places to 70 thousand by 2022 and ensuring the availability of professionals in the crèches,
- as for the programmes launched in 2019, a significant upswing is expected due to the increasing awareness of the Prenatal Baby Support and the Rural Family Housing Subsidy Scheme,
- in the framework of the foreign language education strategy, from the 2020/2021 school year the budget will provide support for two-week intensive language courses abroad for students in the 9th and 11th grades of secondary school to help them pass a language exam and study the foreign language in a realistic situation,
- an SME strategy, aimed to help the creation of higher corporate added value, is developed in the framework of the competitiveness programme, the complete digitalisation of tax returns may take place to reduce tax administration tasks and, from 2021, the tax authority may prepare the tax returns also for companies,

- the public health measures planned in the competitiveness programme, the development of general practitioner care, the methods ensuring the funding of real costs, and the subsidy of cost effective types of care may be adopted,
- in education, progress is made towards education for equal opportunities, employers' needs are represented more strongly than before, and the scope of foreign-language and bilingual trainings may expand,
- steps may be taken to further develop the types of education supporting competitive corporate environment (vocational training, dual education, knowledge centres at universities),
- new infrastructural developments may be launched to promote mobility.

The wage increasing effect of the career models introduced in the public sector can be seen in expenditures on employees' income, however, the social contribution tax cuts agreed on in the six-year wage agreement have a mitigating effect on these expenditures. Beyond the multiple-year wage increase programme for law enforcement and health workers, the fiscal path also envisages that the career model introduced for government officials in 2019 will continue in 2020-2021.

The development of social benefits is still influenced by the structural reforms implemented earlier. Monetary benefits decrease in proportion of the GDP while the real value of pensions is maintained and pension premium is paid if the economic growth is higher than 3.5%, and in spite of the fact that the amount of certain monetary benefits (sick pay and child care fee) may grow more rapidly owing to the dynamic wage increase. The in-kind transfers provided through market producers may show an increase below the projected inflation rate. Between 2020 and 2023, total social transfers as a percentage of the GDP may decrease by 1.1 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 2020 due to the expected increase of yield levels, however, it is expected to be lower by 0,3 percent in terms of GDP. Although the doubling of the volume of government securities held by the public raises interest expenditures as the interest rate of residential securities is higher than that of other securities, the interest income obtained by Hungarian households also contribute to the increase in GDP and, indirectly, to rising tax revenues.

Investments funded using domestic funds only are expected to remain stable at a high level. While in 2020 67 percent of all government investments is expected to be implemented from purely domestic sources, by 2023 this proportion may grow to 87 percent. The Paks 2 investment is not included in this ratio, as statistics take this project into account as cumulated transfer.

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

	2020	2021	2022	2023
Balance	-1.5	-1.2	-0.5	0.0
Total revenue	43.3	41.9	40.2	39.4
Total expenditure	44.8	43.1	40.7	39.4
Total expenditure without EU transfers	42.5	41.6	39.9	38.7
of which:				
compensation of employees	9.8	9.3	8.9	8.5
purchases of goods and services from purely domestic resources	6.0	6.1	6.0	5.7
investments financed from domestic resources	4.2	4.8	4.1	4.2
social transfers	12.5	12.2	11.8	11.4
interest expenditure	2.4	2.2	2.2	2.1

Source: MoF calculation

3.5. STRUCTURAL BALANCE

Structural balance is defined as the cyclically-adjusted general government balance net of one-off and other temporary measures. The medium-term budgetary objective (MTO) is the target of fiscal policy in term of structural balance. Between 2020 and 2022 Hungary's MTO is a structural deficit of 1.0% of GDP in line with the methodology outlined in the 'Code of Conduct'.

To calculate the structural balance, a coefficient of 0.45 was used regarding the cyclically adjusted balance, which is in line with the methodology adopted by the Output Gap Working Group. This coefficient means that the general government balance changes by 0.45 percentage points as a result of a 1% difference between actual and potential GDP (assuming constant composition). For 2019, one-off item is not planned.

In recent years, the Government's growth-stimulating measures, the intensified domestic demand, the rising volume of investments and the accelerated absorption of EU transfers have acted as drivers towards the closing of the negative economic cycle. In 2018, the output gap closed and slightly turned into the positive. On the forecast horizon, economic growth will virtually be in line with potential GDP growth, and the output gap is expected to be around zero (see Chapter 2.5).

The structural balance diverged from the MTO twice in the past 7 years and the MTO was overachieved on several occasions, and the 7 year average of structural balance also met the MTO. The structural deficit temporarily increased between 2017 and 2018, but from 2019 it will gradually in line with the target, and by the end of the forecast horizon will overachieve the MTO. Meanwhile, the fiscal policy will gradually create countercyclical buffers due to the decreasing deficit levels, which buffers will promote the medium and long-term stability of public finances and strengthen the resistance to economic shocks. The expenditure aggregate is expected to temporarily exceed the reference benchmark in 2019, and to remain at a lower level afterwards.

Box 6: The uncertainty surrounding structural balance

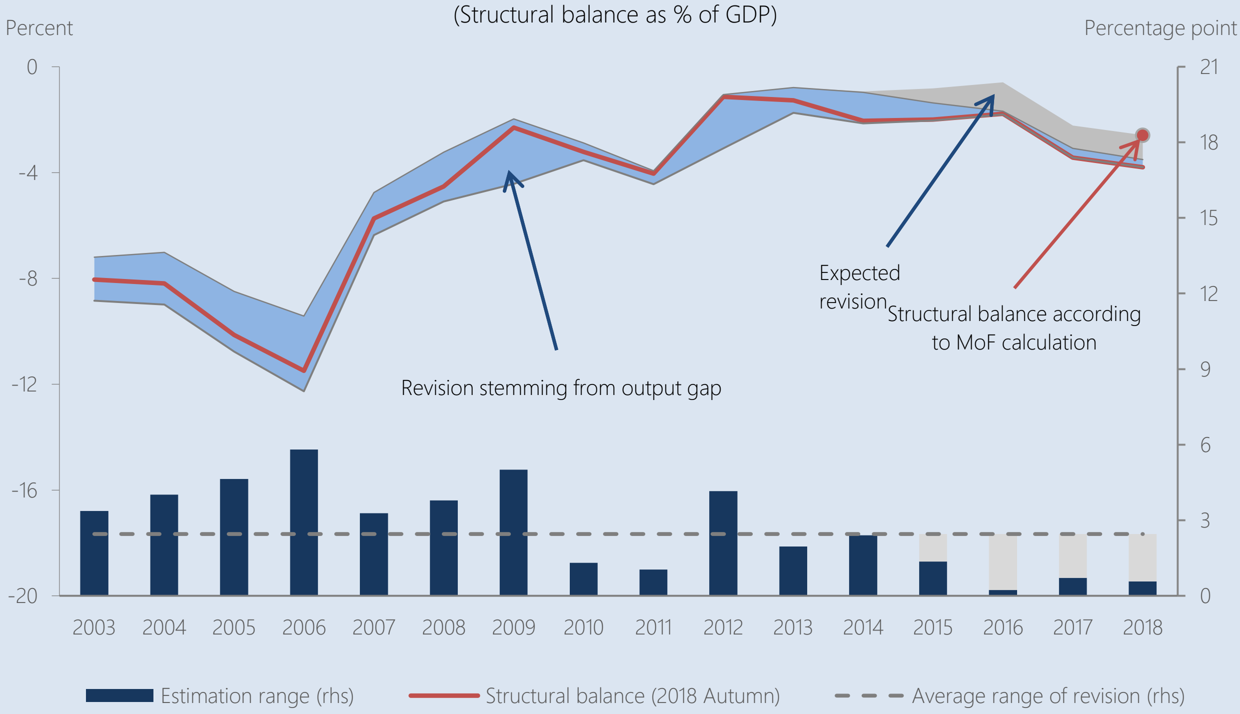
In 2012, the excessive deficit procedure (EDP) against Hungary was lifted and in the next years yielded fiscal policy that is in compliance with the Maastricht criteria. Nevertheless, the so-called 'significant deviation procedure' (SDP) was launched against Hungary in 2018 in line with the rules of the preventive arm. The preventive arm aims to ensure a sound fiscal path that can, without threatening an EDP procedure, provide sufficient room for manoeuvre even in the event of a possible deterioration of the economic situation. In the preventive arm, the structural balance of the Member States is compared to country-specific MTO for each Member State. If, in the Commission's assessment, a Member State's fiscal path does not sufficiently approach the MTO, the SDP procedure is launched and, based on the Commission's proposal, the Council of Finance Ministers calls upon the Member State to implement fiscal adjustments. For countries that are not part of the Eurozone, the SDP procedure entails no sanctions.

The calculations made with the methodology used in the SDP procedure involve significant uncertainties due to the fact that the criteria – as opposed to Maastricht requirements – is partly based on indicators that are not directly observable. The uncertainty surrounding the Commission's estimate regarding the structural balance, and the substantial past revision of the results are problematic in terms of economic policy as the inaccurate assessment of the situation may lead to improper economic policy proposals. This is why it can happen that the Commission proposes such excessive adjustment measures time after time the implementation of which would cause unnecessary austerities and severe losses of growth.

It is important to consider at the assessment of the substantiation of the recommendations that both the country-specific MTOs based on long-term projections, and the structural balance describing the current fiscal situation can only be calculated with uncertainties. The structural balance is based on the Maastricht balance adjusted with one-off items and the effects resulting from the economy's cyclical situation. The problem consists in the fact that even if the relationship between the changes in revenues and expenditures and the cyclical position of the economy can properly be explored, the latter can only be quantified in real time with substantial measurement uncertainty. This is because output gap estimates are characterised by significant revisions. For Hungary, the average absolute revision by the European Commission regarding the output gap for the period between 2004 and 2015 is 2.4 percentage points. At the level of the structural balance as a proportion of GDP this results in a 1.2 percentage point difference, which is well over the 0.5% adjustment considered as the main rule in the preventive arm.

Uncertainty around the structural balance figure implied by the European Commission's output gap revisions

(Structural balance as % of GDP)



Source: European Commission, MoF

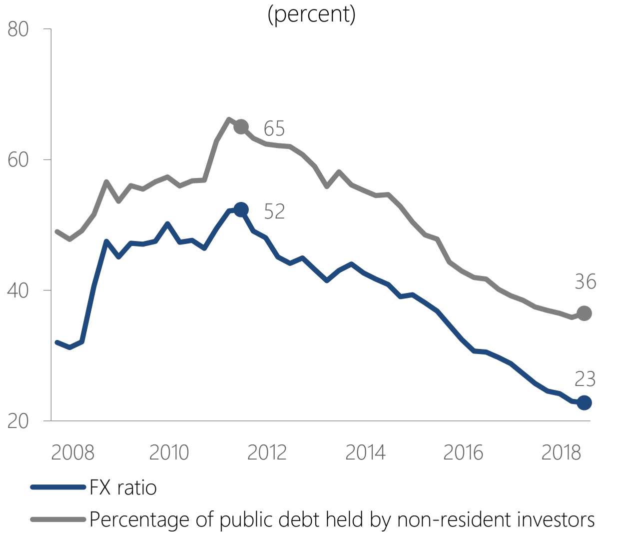
Nonetheless, several recent analyses have demonstrated that the consideration of financial variables may help to tackle the endpoint uncertainty when cyclical positions are calculated. Therefore, in 2014 the Ministry of Finance started to use a potential growth estimation method that takes into account financial balance as well. According to that, the output gap of the Hungarian economy was around 0.2 percent in 2018, which means that the structural balance was -2.3% in 2018. This value is well below the -3.8% value estimated by the Commission, however, considering the historic revisions, it is within the uncertainty range of Commission estimates. In addition, as far as rules are concerned, although the structural balance falls short of the MTO, looking ahead, the decrease in the output gap and the planned deficit path ensures sufficient convergence for achieving it. All this confirm that through the macroeconomic and fiscal path outlined in the convergence programme, the Government is realising an economic policy that supports growth and maintains fiscal balance at the same time.

3.6. General government debt

The main strategic priority of the Hungarian government debt management remains the decrease of debt ratio while turning the structure of the general government debt sounder and reducing the share of FX debt. The foreign currency ratio decreased to 23% from the 52% at the end of 2011, while the foreign share decreased to below 36% from 65% (*Chart 3.3*), which resulted in the further 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)



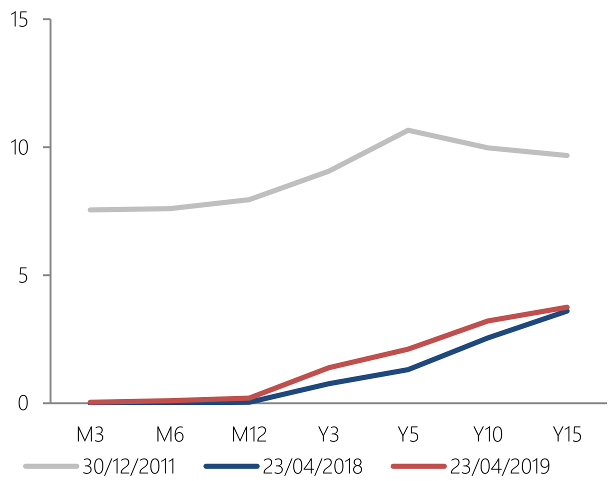
Source: MNB

In 2018, all three credit rating agencies preferred to follow a 'wait-and-see' policy, probably mainly because of the money and capital markets turbulence surrounding the emerging region and because of the election period. In line with our expectations, in 2019 both S&P and Fitch rated Hungary one category up: S&P raised Hungary's rating to 'BBB' on 15 February 2019, whereas Fitch did the same on 22 February 2019.

Looking back on the past five years, the five-year CDS spread is currently around 90 basis points as compared to the level exceeding 600 basis points recorded in 2012, and remained stable at this level during the last year. Partly due to the decreasing country risk premium, the yields of both short- and long-term government securities have decreased significantly, by around 7-8 percentage points since 2012: 3-month yields decreased from 7.5% to 0.03%, while five- and ten-year yields decreased from 10% to 2.1–3.2% *(Chart 3.4).* As regards the past one year, the complete yield curve slightly shifted upwards, which means that the yield environment started to move from the valley levels of the previous period. The three-month yield went up by mere 3 basis points, while the long-term yields covering 5–10 years grew by 66-80 basis points over the entire period, making the yield curve steeper. Risk-free yield levels have started to rise also in the international scene during the past one year.

Chart 3.4: Shift of the yield curve

(percent)



Source: ÁKK

Similarly, the primary market and auction yields largely followed the secondary market trends. Nonetheless, in the still favourable yield environment debts can still be financed at apparently low costs: while in 2012 the implicit interest rate for the debt was 5.3%, this average interest burden decreased to 3.9% by 2017 and 3.7% by 2018.

As part of the efforts to further moderate external vulnerability, the improvement of the debt structure can be implemented with reliance on the domestic investment sectors and with the mitigation of the FX exposure of the government debt. The Hungarian Debt Management Agency supports the efforts of the Government aiming at the gradual shrinking of the foreign currency ratio by negative net foreign currency issue, i.e. by refinancing a significant part of the maturing foreign currency debt via HUF-denominated instruments. Thanks to the increased amounts of funds involved from the HUF market, the issue of international FX-denominated bonds was not an absolute necessity in 2018 either, but considerations in relation to potential savings on interests (due to the favourable yield environment), the longer-term fixing of cheap debt financing and the diversification of the investor base justified the issue also in 2018, targeting presence both in the European and Asian market.

Accordingly, in September 2018 the Hungarian State, repeating the successful transaction of 2017, issued eurobonds and placed bonds on the market in the nominal value of EUR 1 billion with 7-year maturity and with a favourable interest rate of 1.25%.

In the Asian market, following the earlier practice, the market entry took place in Japanese yen. The so-called samurai bond was issued in March 2018 with a duration of 3 years and in an amount of EUR 0.23 billion. As the closing phase of the issue programme of the so-called Panda bond, i.e. the onshore renminbi-denominated bond launched in 2017, the issue of the second Panda bond took place at the end of 2018 with 3-year maturity in similar magnitude.

Beside the reduction of FX-based debts, the debt structure has positively been influenced by the fact that the Hungarian Debt Management Agency strongly encourages the financing of government 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 ever since been supported by the HDMA's ongoing measures (prolongation of the duration, improvement of accessibility). 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 foreign security holders has decreased substantially, while the holdings of domestic actors in the government securities market have risen substantially, from 43% in 2011 to 68% to date. The portfolio of government bonds held by retail customers has been steadily growing, and increased by more than HUF 5,200 billion until February 2019, which means that the share of the households in the government securities market increased from 5% to 21%.

Table 3.4: Sovereign debt market share of certain sectors

(%, February 2019)

Investor groups	
Foreigners	32
Credit institutions	31
Households	21
Insurance companies, pension funds	8
Other	8

Source: MNB, MoF calculation

In conclusion, the market has long recognised the success of the debt management strategy with the significantly decreased country risk premiums and favourable yield levels, and the analyses of credit rating agencies regularly confirm the reduction of external vulnerability as a notably positive factor.

Box 7: Increasing the stock of government bonds held by households

Debt financing became more stable thanks to the more significant participation of households, as the retail sector is a reliable type of investor and, unlike foreign investors in the event of market turbulence, it typically does not want to abruptly get rid of its government bond holdings. Furthermore, a healthier debt structure decreases Hungary's external exposure and vulnerability.

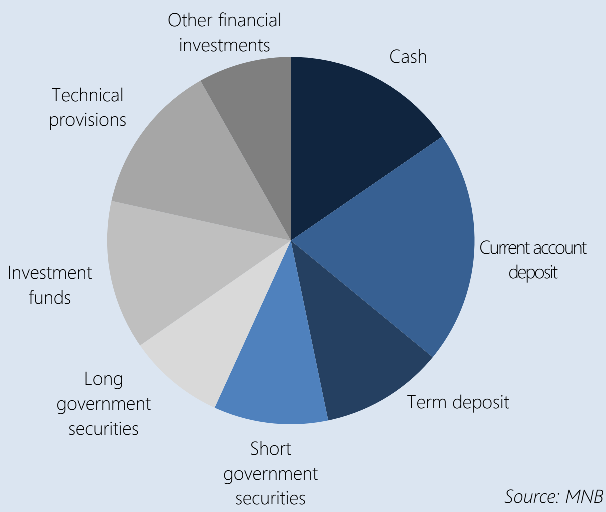
That is why credit rating agencies also consider the rising share of domestic financing as a favourable development and took it into account as a particularly positive factor at the rating uplifts in February this year. This supportive feedback also points out that the population's role in debt financing must be maintained and, what is more strengthened.

The increase in domestic forint-based sources may decrease the exchange rate risk of the government debt, and it may become possible to replace a vast majority of foreign currency debt with forint, virtually leading to the termination of the exchange rate risk on the long haul.

The population's participation in the financing of the government debt has already substantially grown in the past 7 years, and during this period more than 40% of the new savings of the households were invested into government securities. Thereby the population's share in the government securities market, after increasing their stocks to 8 times the basic value, has jumped from 5% to over 20% and therefore currently being around HUF 6,000 billion.
In light of all this, the government considers it important to increase the population's participation in debt financing and thereby to raise the households' willingness to create long-term savings, and as a primary tool to achieve this – in light of other advantages as well – it has chosen to promote the purchase of retail government securities. The objective consists in increasing the population's government securities stock to HUF 11 billion by 2023.

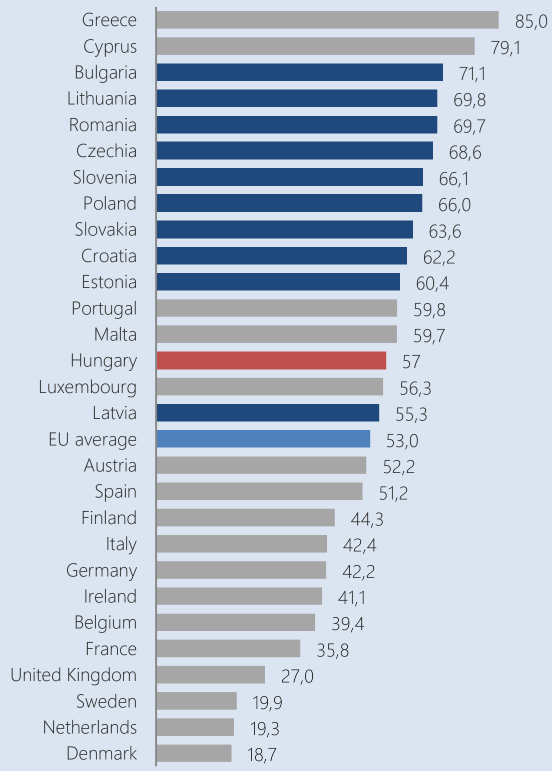
Currently, the households prefer short-term savings: 57% of their financial instruments serving for savings purposes mature within the year. It must be noted that the Hungarian population keeps some 15% of the classical savings in cash (it is the highest figure in the EU), causing substantial harm to the economy: this money is not in circulation, makes it easier to avoid taxes, and entails high manufacturing and transportation costs.

The ratio of the individual forms of financial savings within the classical savings of the population (percent)



Source: MNB

The share of short-term savings within the classical savings of households
(percent)



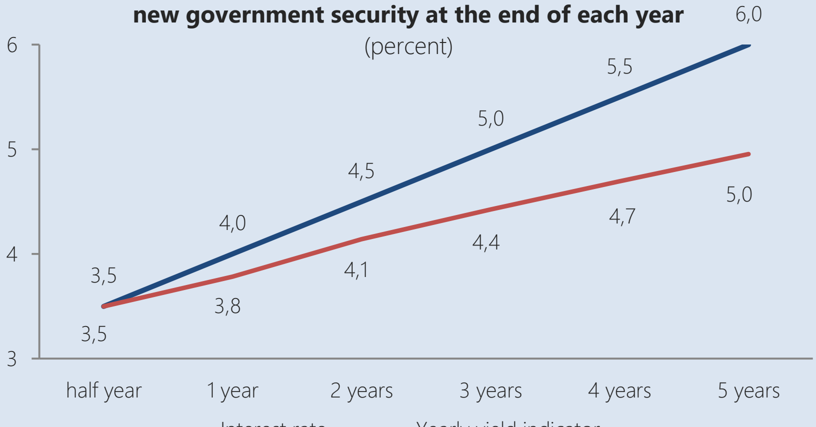
Source: Eurostat

Furthermore, it should be noted that the population typically invests on the short term even if it does not expect to need its money for years, probably to maintain its liquidity. It is a remarkable fact that the share of short-term instruments is traditionally higher in former socialist countries than in other parts of the EU. Therefore, it is time for Hungary to be able to break away from the old habits and approach the top-level countries of Europe also in this regard.

With a view to attaining the desired objective, the government decided to introduce three measures. First, a simple government security that is easily comprehensible for the population will be introduced from 1 June 2019. The government security will have fixed interest in increasing ranges, and it will offer higher yields on each term than the current government securities. The maturity of the government security is 5 years, and it can be accessed before maturity with much more favourable conditions than the current government securities: after half a year and at the end of each year, it can be redeemed without loss, by keeping the interests accumulated so far. The investment has the further advantage that it will be quoted weekly, and can continuously be purchased at nominal value. In addition, as a further simplification for investors, credited interests are automatically capitalised in government securities, and so the security practically pays compound interest.

The interest rate and annual single yield indicator of the new government security at the end of each year

(percent)

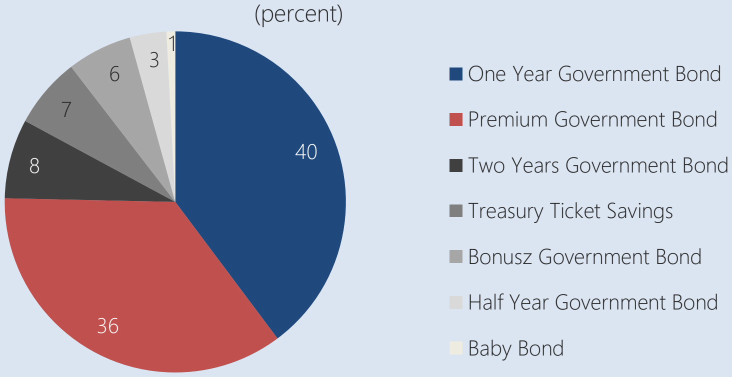


Source: MoF calculation

The average remaining maturity of the population's government securities stock is currently 1.6 years. A new universal 5-year government security is expected to increase not only the volumes but also the duration, improving therefore the stability and predictability of government debt financing. The favourable conditions of the new government security (high interest rate, accessibility, security) may even convince those keeping their money in cash to choose a more advanced type of saving.

Second, the government has set the objective of simplifying the range of retail products. Currently 12 types of HUF retail government securities are available. This abundant offer is hard to comprehend and rather complicates decision-making for investors, which may scare off potential clients. Currently 75% of the retail government securities is kept in 1-year Hungarian Government Security and Premium Hungarian Government Security, and the rest of the stock is fragmented. Therefore, the Hungarian Debt Management Agency is phasing out 6 types from the current range (Treasury Savings Certificate Plus, Half-year Hungarian Government Security, 2-year Hungarian Government Security, 4, 6 and 10-year Bonus Hungarian Government Security) in parallel to introducing the new government security. The Government considers the new government security a flagship product that can fulfil all demands, yet it deems it important to maintain those government securities that target a substantial (1-year Hungarian Government Security, 3 and 5-year Premium Hungarian Government Security) or special audience (paper-based 1-year and 2-year Treasury Savings Certificate, Baby Bond). In addition, the only FX-based retail government security, the Premium Euro Hungarian Government Security also remains available.

Distribution of the individual HUF-denominated retail government securities by stock
(percent)



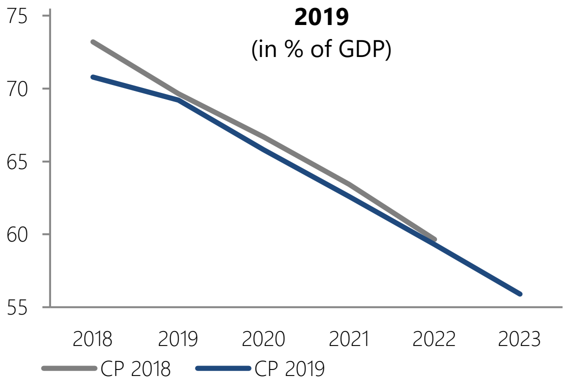
Source: ÁKK

Third, the government intends to increase the number of sales points. Currently, retail government securities can be purchased at about 80 government securities sales points of the Hungarian State Treasury, at commercial banks and the client offices of the Hungarian Post. The Government aims to bring the advantages offered by retail government securities to even more people, therefore the range of sales points will be extended from 1 June 2019 to the home savings funds network. With the help of the several thousand employees of the home savings funds, anyone can open a securities account and buy retail government securities personally, even in their home. What is more, from 1 June 2019 it will be possible to open a securities account with the Hungarian State Treasury even through the Ügyfélkapu (state client portal).

It can therefore be said that the government is committed to strengthening domestic financing, reducing the exchange rate risk of government debt, and raising the population's financial awareness, and has decided to realise these objectives by means of increasing the stock of retail government securities. It is also an important aspect that this way the paid interest adds to the income of the Hungarian population and strengthens the Hungarian economy.

The government debt-to-GDP ratio has been sliding steadily since 2011. At the end of 2018, the debt ratio was 70.8% at a 321.51 HUF/EUR exchange rate. The 10-percentage-point debt reduction implemented in the past seven years was one of the most significant achievements among the EU Member States. After last year's strong dynamics, 2019 is expected to bring about a more moderate downward trend in the debt ratio (69.2%), and then by the end of the planning horizon, i.e. 2022, the debt ratio (59.3%) is foreseen to drop under the 60% Maastricht requirement *(Chart 3.5).*

Chart 3.5: Public debt ratio in Convergence Programmes for 2018 and 2019
(in % of GDP)



Source: MfNE calculation

The current convergence programme reckons with a debt trajectory that is approximately 0.4-0.9 percentage point lower than the one recorded for the last year. The deficit trend is virtually identical to that of the previous year; however, the more favourable growth has a moderating effect, whereas the impact of the other factors has an increasing effect on the debt trajectory.

Table 3.5: Difference between public debt trajectory forecasts for 2018 and 2019 (percentage point)

2019	2020	2021	2022
-0.5	-0.8	-0.9	-0.4

Source: MNB, MoF calculation

(1) Nominal GDP: Set higher than in the convergence programme for 2018, the nominal GDP values will substantially push the debt trajectory lower in comparison to last year's forecasts.

Table 3.6: Effect of nominal growth developments for the debt path (percentage point)

2019	2020	2021	2022
-2.4	-2.4	-2.1	-2.1

Source: MNB, MoF calculation

(2) Numerator effect: Being higher in comparison to the convergence programme of 2018 over the entire time horizon, the debt forecast for the period 2019-2022 itself modifies the debt trajectory projected for 2018 as follows:

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

2019	2020	2021	2022
+1.8	+1.5	+1.2	+1.6

Source: MNB, MoF calculation

This shift can be attributed to the combined effect of a number of factors, one of the most significant being the much weaker exchange rate used for planning as compared to the previous year.

(2a) Gross interest expenditure and primary deficit: From 2019, the key deficit figures correspond to the deficit trend presented in the convergence programme for 2018. While the primary balance projections basically remain unchanged, interest expenditure projections have been pushed slightly higher (0.1 percentage point of GDP) on the 2019-2022 time horizon due to the tightening of global market conditions that used to be favourable for a long period of time.

(2b) Other items: The change of the debt trajectory is almost entirely caused by the different balance of other items (the so-called SFA, stock-flow adjustments). The technical exchange rate assumption used for debt prediction (HUF/EUR 321.51) is 3.7% weaker than the HUF/EUR exchange rate of 310.14 in the Convergence Programme for 2018. The assumed exchange rate is 11 point higher than last year’s figure and in itself pushed up the debt trajectory by 0.2-0.5 percentage points. In addition, the change in cash reserves (Single Treasury Account and the foreign currency deposit at the MNB), the advance payment of EU transfers, and the fact that the values of the difference between cash flow and accruals based balance of the budget deviate significantly from the projections of the previous convergence programme also cause a major divergence.

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 percentage points by 2022.

(B) Exchange rate: The share of foreign currency denominated gross Maastricht debt may drop below 10% by 2023 as a result of the Government's endeavours. Owing to the decreasing foreign currency share, the foreign exchange exposure of the debt will also decline, which is clearly reflected by that a 1 percentage point shift will change the debt ratio by 0.04 in 2019 and by merely 0.02 percentage point at the end of the time horizon. Therefore, a nominal exchange rate that is 1% weaker than the exchange rate assumption specified in the convergence programme (HUF/EUR 323.2) would result in a 0.12 and only 0.06 percentage point higher gross debt ratio in 2019 and in 2022, respectively.

(C) Economic growth: Should nominal GDP growth be 1 percentage point higher in 2019, the debt trajectory would see a 0.6 percentage point downward shift over the entire time horizon.

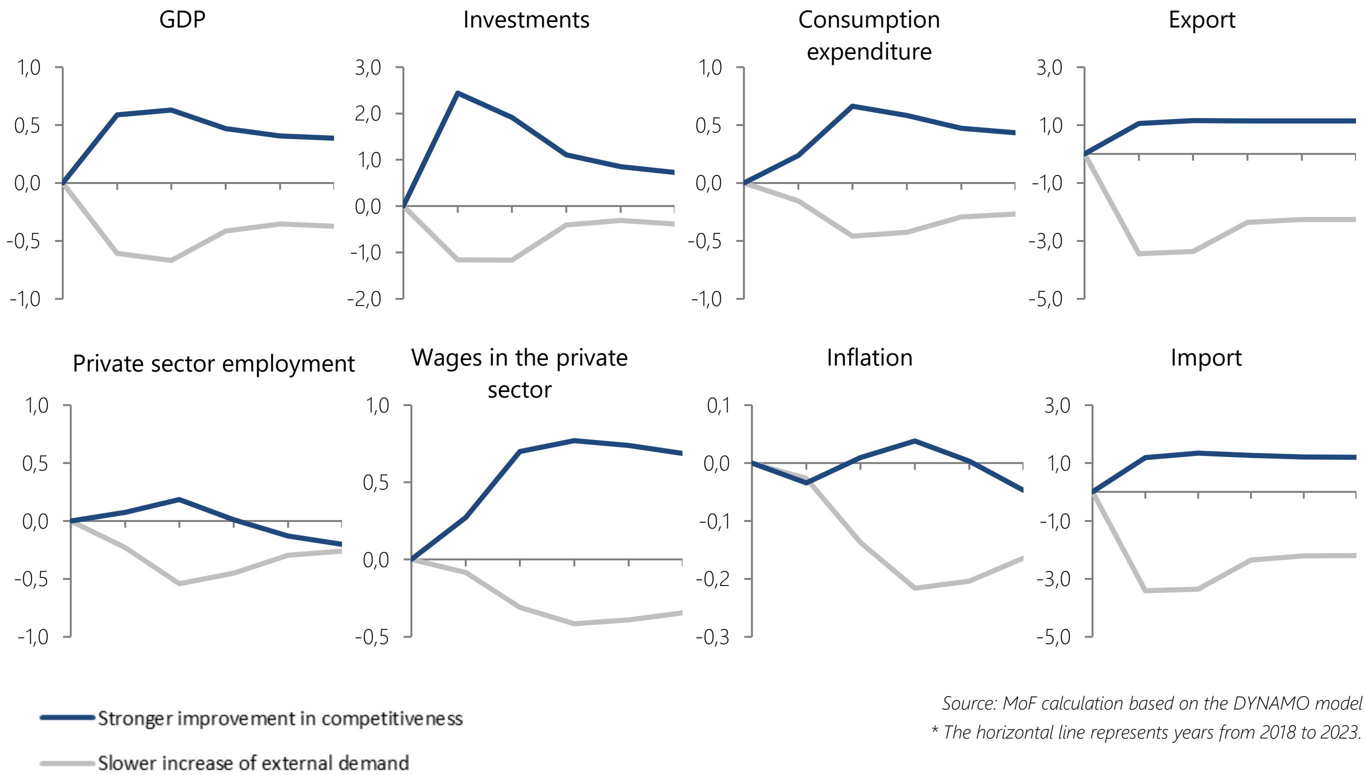
On the whole, both factual data of the previous years and current projections reflect a permanent improvement in the debt trajectory and the debt structure. Figures show that Government efforts aimed at debt management have taken a proper course in the past few years. The consistent implementation of the strategy in the past gives credibility and also builds the evident trust in investors that the positive processes will continue in the future.

4. Sensitivity analyses

The macroeconomic baseline scenario of the convergence programme could also be influenced by the potential realisation of risks. From among the main risk factors, two alternative scenarios and their economic outcomes are discussed here. The first is based on the acceleration of productivity which is tied in with the improvement of competitiveness, and the second scenario is based on the effects of an external conjuncture weaker than anticipated in the macroeconomic baseline. Prepared with the DINAMO model of the Ministry of Finance, the sensitivity analyses quantify the extent by which the levels and growth rates of macroeconomic variables would deviate from the baseline scenario as a consequence of shocks *(Chart 4.1 and Table 4.1).*[1]

Chart 4.1: Alternative scenarios

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



Source: MoF calculation based on the DYNAMO model

** The horizontal line represents years from 2018 to 2023.*

'For a More Competitive Hungary' Programme includes various measures that support the acceleration of potential growth through increasing productivity and competitiveness. The baseline scenario assumes that economic policy measures contribute primarily to long-term growth. However, synergetic boosting effects may appear sooner and in greater measure than expected; therefore Scenario 1 is based on the assumption that productivity will increase faster than expected.

Stronger competitiveness supports the growth outlook primarily through increased investments. Capacity increase also entails a boost in exports. A more buoyant conjuncture also results in higher wages and consumption. As for employment, there is a double effect: on the one hand, a more buoyant conjuncture has a positive influence on the demand for labour; on the other hand, the significant wage development and the shift to a more capital-intensive growth structure moderates this positive effect. On the whole, GDP would see a 0.5% increase, and the budget balance would also see an improvement as a result of higher tax and contribution revenues.

Potential negative risks to the world economy have significantly risen recently. In the fourth quarter of last year, the economy of the European Union slowed down considerably, while international organisations are also lowering growth prospects. Therefore, Scenario 2 assumes that the external conjuncture will deteriorate significantly in the short term, and long-term prospects also remain moderate.

The slowdown of external demand mitigates the demand for Hungarian export. Any deceleration of export dynamics would result in a more moderate expansion of domestic production capacities than expected, i.e. the dynamics of employment and investments would also be subdued. Restrained demand would moderate inflation rate. In line with the cyclical developments, the general government deficit would also be higher than projected in the baseline.

Table 4.1: Risk scenarios

(difference in growth rates of the variables from the baseline scenario, in percentage points)

Scenario 1: Stronger improvement in competitiveness	**2019**	**2020**	**2021**	**2022**	**2023**
GDP	0.61	0.04	-0.16	-0.06	-0.02
Households' consumption expenditure	0.26	0.46	-0.08	-0.11	-0.04
Gross fixed capital formation	2.69	-0.54	-0.85	-0.27	-0.13
Export	1.01	0.11	-0.01	-0.01	0.01
Import	1.18	0.16	-0.08	-0.05	-0.02
Inflation	-0.03	0.04	0.03	-0.04	-0.05
Private sector employment	0.07	0.11	-0.18	-0.14	-0.07
Gross average wage in the private sector	0.29	0.46	0.07	-0.03	-0.05
Income taxes*	0.03	0.08	0.07	0.06	0.05
Employer contributions*	0.02	0.06	0.06	0.04	0.04
Turnover taxes*	0.02	0.06	0.06	0.05	0.04
Taxes levied on companies*	0.06	0.02	0.01	0.01	0.01
Interest expenditure of the general gov.*	0.00	0.00	0.00	0.00	0.00
General government balance*	0.10	0.17	0.13	0.10	0.08

Scenario 2: Slowdown of external conjuncture	**2019**	**2020**	**2021**	**2022**	**2023**
GDP	-0.61	-0.07	0.27	0.06	-0.02
Households' consumption expenditure	-0.17	-0.33	0.03	0.14	0.03
Gross fixed capital formation	-1.24	-0.01	0.82	0.11	-0.08
Export	-3.30	0.09	1.08	0.12	0.00
Import	-3.33	0.05	1.10	0.16	0.01
Inflation	-0.03	-0.11	-0.08	0.01	0.04
Private sector employment	-0.23	-0.32	0.09	0.16	0.04
Gross average wage in the private sector	-0.09	-0.24	-0.11	0.03	0.05
Income taxes*	-0.02	-0.07	-0.07	-0.06	-0.05
Employer contributions*	-0.02	-0.05	-0.06	-0.04	-0.04
Turnover taxes*	-0.02	-0.06	-0.06	-0.05	-0.05
Taxes levied on companies*	-0.07	-0.05	-0.01	-0.02	-0.02
Interest expenditure of the general gov.*	0.00	0.00	0.00	0.00	0.00
General government balance*	-0.12	-0.20	-0.17	-0.13	-0.13

Source: MoF calculation based on the DYNAMO model

** Difference in the main fiscal items in the baseline and the alternative shock scenario, in % of the estimated baseline nominal GDP.*

Remark: Due to rounding, the summed data might differ from the sum of the detailed data.

[1] *The description of the Dynamic National Accounts Based Model (DINAMO) is accessible via the following link: http://2010-2014.kormany.hu/download/5/34/41000/Dinamo%20NGM%20El%C5%91rejelz%C3%A9si%20M%C3%B3dszertan.pdf*

5. Long-term sustainability of public finances

The sustainability of public finances basically depends on the current fiscal stance (budget balance, general government debt and debt-to-GDP ratio), the size of future budgetary expenditures related to ageing and the demographic trends.

The Government promotes the long-term sustainability of public finances through a series of complex and targeted measures. The Government has set the reduction of the debt ratio as a key policy objective and has been implementing disciplined fiscal policy. Lower government debt level and budget deficit create more favourable conditions to tackle the challenges posed by ageing population in the long run. Furthermore, a number of parametric changes have been introduced in the pension system reducing substantially the long-term pension expenditures and other age-related public spending. Additionally, the Government has introduced family-friendly incentives that could mitigate the budgetary impact of an ageing population projected in Hungary through demographic changes.

The Fundamental Law stipulates that the general government debt-to-GDP ratio shall constantly be reduced until it reaches 50%. In order to meet the target, the Government follows disciplined fiscal policy.

The parametric changes that have been introduced in multiple steps and that are subject to gradual implementation have already reduced the pension expenditures considerably in recent years, and due to those measures relatively lower expenditures are expected long-term. In line with international best practices, the main direction of the measures is to raise retirement age in the context of rising life expectancy, significantly increase the effective retirement age and change the indexation rules. By 2022, the statutory retirement age will have been gradually increased to 65 years. The considerable rise in the actual retirement age is facilitated by regulations introduced in 2011 for the termination of benefits under the retirement age, as well as for 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 long-term expenditures. These trends envisage an ageing of the population for the future. The ageing population increases age-related expenditures, which have an upward pressure on public debt on the long run. One reason underlying the unfavourable demographic developments is the low fertility rate in Hungary, which, despite an increase in recent years, is still below the average in Europe, standing at 1.54 according to the latest Eurostat statistics (for 2017), while the EU28 figure is 1.59.

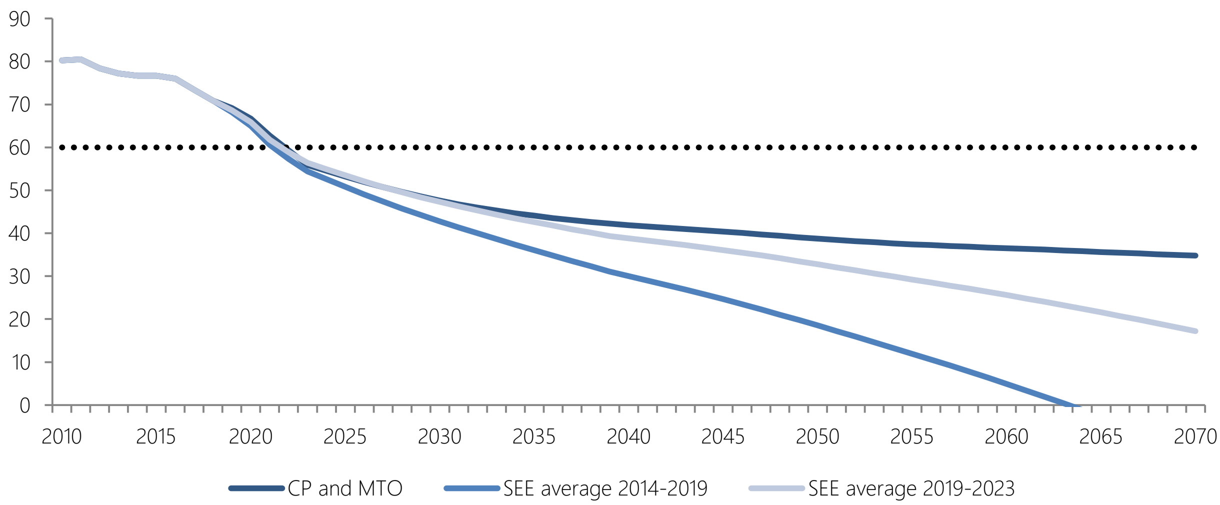
In order to encourage families to have children, the Government has strengthened the family incentive system. The main elements of the measures include various forms of pecuniary support to families, such as child-care allowance, infant care allowance, child care fee, the family tax allowance introduced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

The measures include better conditions of employment while using the child-care and child-raising benefits, parallel disbursement of benefits for families with several children, eligibility for child care fee 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. In addition, to promote the employment of women raising small children, a reform of nursery institutions has also been implemented, and as a result, capacities have been increased to 49,000 by today. At the end of 2015, the CSOK, which grants more support to families having or raising more children, saw an increase in subsidy amount, and the scheme was expanded in several steps. All of these measures are expected to mitigate the projected ageing of the Hungarian population.

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, pension expenditures are expected to increase from 9.7% in 2016 to 11.2% of GDP by 2070, which is considered an average result in the evolution of long-term pension expenditure across 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% in 2016 to 5.7% of GDP by 2070, elderly care expenditures will rise from 0.7% to 1.1%, and expenditures on education will be up from 3.6% to 3.8% in the same period in Hungary.

With the moderate increase in expenses associated with the ageing population and with the fiscal discipline implemented recently, the continuous reduction of the debt ratio since 2011 is foreseen to be continued, and the ratio will fall under the reference value of 60% in proportion to the GDP already in the medium term. Thereafter, the debt trajectory is expected to continue to be sustainable in the long run, based on both the fiscal path presented in the convergence programme and the budgetary policy implemented in recent years.

Chart 5.1: General government debt developments
(% of GDP**)**

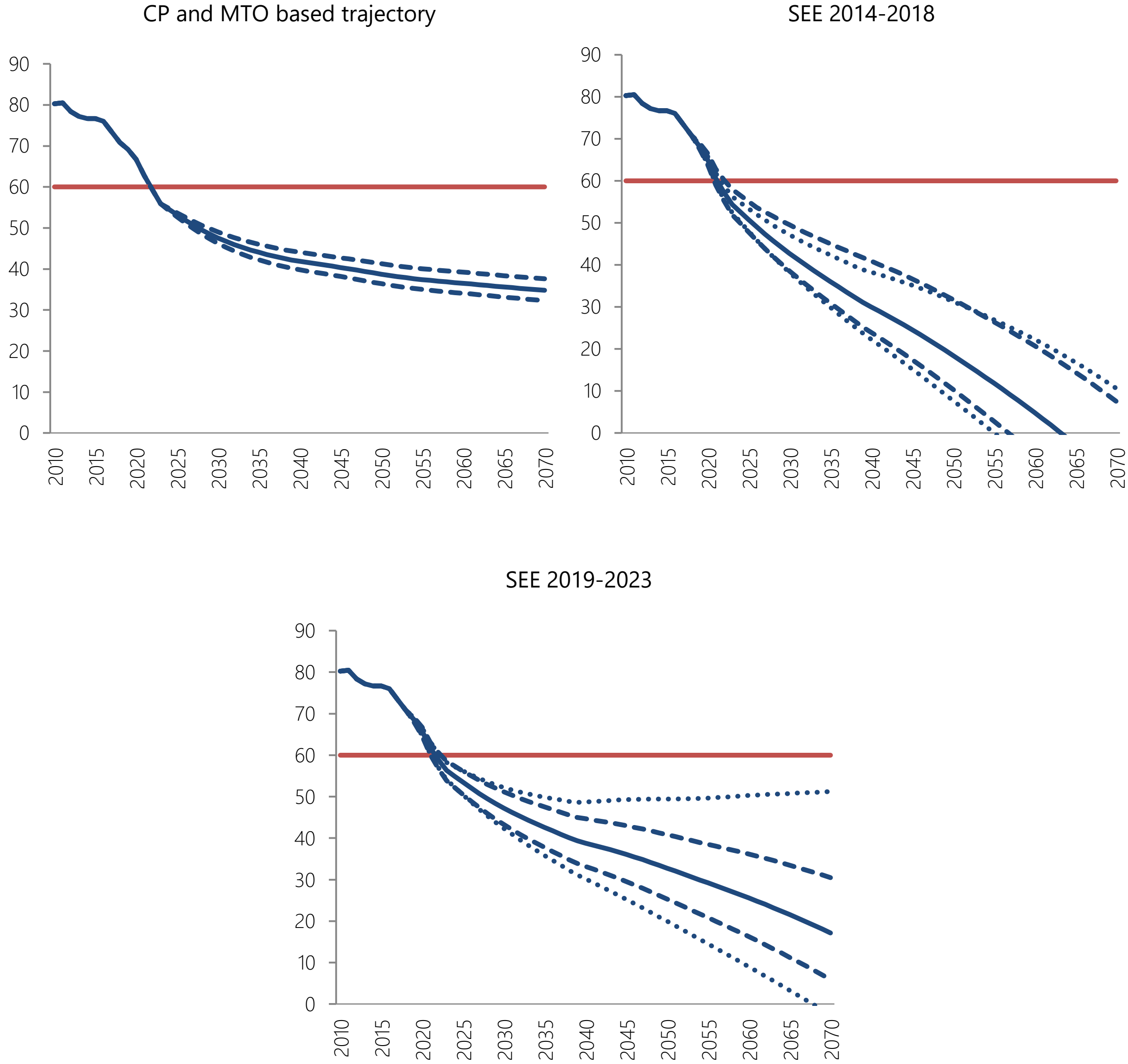


Remark: until 2023 the macroeconomic trajectory is based on the assumptions described in the CP, and thereafter on the macroeconomic assumption presented in the 2018 Ageing Report, while the structural balance data are based on the estimations of the CP

Source: MoF calculation

Chart 5.2: Sensitivity analysis of the different scenarios

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



Source: MoF calculation

Scenarios:

CP and MTO based trajectory: Structural balance from 2023 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, if the structural balance meets the current MTO in long term. (i.e. it deteriorates to that level)

SEE 2019–2023: from 2023, the average levels of the structural primary balances of the period between 2019 and 2023 frozen over the entire time horizon

underlying consideration: the predictable fiscal policy of recent years gives credibility to the prediction, based on which the scenario demonstrates the long-term trends of government debts provided that the trajectory described in the convergence programme is realised

SEE 2014–2018: from 2019, the average levels of the structural primary balances of the period between 2014 and 2018 frozen over the entire time horizon

underlying consideration: relying on the average levels of the budget results arising from the unchanged governance of fiscal policy having been observed lately, the impacts of the freezing of certain selected, non-recurrent values can be moderated, which would then serve as an appropriate basis for the assumption relating to unchanged economic policy.

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 this prudence, the Government continues the structural improvement of government expenditures and revenues.

6.1. Structure and efficiency of the expenditure of public finances

Several labour market measures originally adopted to improve the efficiency of budgetary expenditures contribute indirectly to attaining a higher level of quality. In view of this, the convergence programme describes the steps taken and planned by the Government in the field of public employment scheme and vocational training.

Furthermore, the reorganisation of the public administration institution system as well as the new system of labour market placement serves the rationalisation of expenditures.

The public employment scheme

The public employment scheme has proven to be an extremely efficient way of activating the domestic labour force reserves since 2010. People being in unemployment for years or even decades have returned to the labour market in great numbers, especially in economically less developed, disadvantaged regions.

The public employment scheme aims to ensure the return to work of long-term unemployed people or people excluded from the labour market through employment programmes that create value and bring benefits to the local community, and to help participants preserve their capacity to work and gain a working routine, which, in turn, facilitates their employment in the primary labour market. The Government continues to view public employment as a temporary employment that provides work and salary instead of social benefits to jobseekers. It aims to foster integration and reintegration into the primary labour market.

Steering the economy to a path of long-term, stable economic growth has been driving up the private sector's demand for labour, and the employment chances of people in public employment has therefore increased; thus the Government intends to decrease the number of people in public employment, while it promotes their employment by the private sector by granting subsidies to companies for hiring them.

According to the data of the National Employment Service, the average number of participants in the public employment scheme was 122,000 in December 2018 (this is the average number for that month). According to the survey of the HCSO for November-December 2018, the number of people in public employment dropped by 47,000 on a year-to-year basis, while the number of people employed in the primary labour market grew by 73,000. In recent years, the ratio of transferring from public employment to the private sector has improved significantly. The intensive increase in demand for labour will probably continue to help even more people find a job in the private sector.

The Government's aim is to reintegrate a certain proportion of people in public employment - following adequate preparation - into the primary labour market. As a matter of fact, meeting the private sector's labour demand is a fundamental condition of future economic growth and the improvement of Hungary's competitiveness. By improving the situation of the Hungarian economy, the Government creates opportunity for the market-based employment of public workers, which is in line with the country specific recommendations.

In order to satisfy the labour demand more efficiently, the Government limits the public employment possibilities of people with vocational training and of people below the age of 25. Those under the age of 25 can only be involved in the public works scheme if no other suitable employment or re-training opportunity is offered to them by the labour market programmes launched within the framework of the Youth Guarantee System.

In 2019, the wage of public workers was the same as 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.

Furthermore, the Government offers other different subsidies in order to foster the return of public workers to the private sector. The 'From Public Employment to the Private Sector' programme aims to help motivated, skilled, willing and capable to work people to find a job in the private sector rather than remaining in public employment, thereby contributing to achieving full employment.

The programme offers an incentive bonus to encourage public workers to find employment in the private sector. The amount of this subsidy doubled to a monthly HUF 45,600 as of 1 November 2018. Public workers employed in seasonal agricultural work are also entitled to the incentive bonus. So far more than 13,000 people have received this subsidy and managed to find a job in the primary labour market.

The programme also provides labour market services (psychological and job seeking counselling, employment counselling, etc.), which boost the self-confidence and motivation of public employees. These are indispensable for a successful job seeking. In 2018, 59,000 people participated in group counselling and 68,000 people attended individual counselling. The programme has been extended until 31 December 2019, and is financed by the National Employment Fund (hereinafter referred to as: NEF) in the amount of HUF 7.5 billion.

Using funds provided by the NFA, a HUF 5 billion job creation tender has been announced, in which the employment of a public employee is defined as a category enjoying primary support. The amount of subsidy granted for every job created is HUF 1.5 million. If the tenderer hires a jobseeker, a further HUF 700,000 may be granted for every new job. If the tenderer wishes to hire a person who has exclusively been in public employment for the past year, a subsidy of HUF 1.5 million may be granted per new job.

From the launch of the Road to the Labour Market programmes (EDIOP 5.1.1 és CCHOP 8.1.1) in autumn 2015 to the end of December 2018, more than 135,000 jobseekers were included in the project. Through the subsidies granted within the framework of the programme, 96,000 people found or were offered a job, and almost 42,000 people participated in trainings to obtain skills or qualifications aimed at increasing their employment chances.

Within the framework of the Youth Guarantee System, an amount of HUF 253.93 billion from the EU funds available in the period 2014-2020 was used to implement a complex package of measures promoting the employment of persons under the age of 25 who are neither in education nor in work.

In the period between 2016 and 2019, the trainings related to public employment are implemented under the "Training of Low Skilled and of Public Workers" (EDIOP-6.1.1-15) priority project within the framework of the Economic Development and Innovation Operational Programme.

The aim of the priority project is to encourage the adult population (in particular public workers) characterised by a low level of educational qualification and lack of competence or qualification demanded in the labour market to take part in education or training, as well as to provide them with the opportunity to obtain qualifications, knowledge, skills, competences that are relevant from a labour market perspective. As of 31 January 2019, the number of participants in the priority project was 85,197 and 74,042 people passed their exams.

Vocational training

In 2018 – adapting to the rapid changes witnessed in the labour market – the transformation of vocational training and adult education as well as their more efficient adjustment to economic needs continues. For the enhancement of the competitiveness of economic players, interventions aim to elaborate and launch the system of corporate trainings in the short run. In the medium run, the school-based vocational training capable of ensuring sufficient labour supply and built on corporate interests continues to be transformed. All in all, the previously supply-driven training system is replaced by a demand-driven training system. In line with that, the following changes characterise the vocational and adult training policy:

1. Continuous adult training becomes an integral part of working life.
2. Adult training regulations are made more flexible so as to increase efficiency without impairing quality. *(This includes making, for example, National Qualification Register partial contents accessible within a shorter period of time in a so-called modular system, which allows for acquiring knowledge in several stages. This approach adapts more aptly to employees' circumstances and also allows employers to complement training materials with special contents that are indispensable from their perspective.)*
3. The role of employers is strengthened and becomes decisive in relation to the performance of training-related tasks. Economic development is increasingly carried out along sectoral policies, thus resulting in the establishment of new sectoral cooperation. As part of this, for example, the content specification of sectoral trainings will be ensured through the so-called "sectoral skill councils" in line with international trends. Currently there are 19 sectoral skill councils, which closely monitor the structure of vocational education and training as well as the economic, labour market and technical-technological developments in their respective sectors. They can propose changes to the NQR as well as propose the modernization of training contents, and they can prepare forecasts in order to plan and determine the training policy either in the short- or long-term.
4. The continuous development of training contents is being established; the focus will be on the competences necessary for successful employment and on 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 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 vocational training. This includes, for example, ensuring more flexible, career-like student paths; further improving the dual student contract system, and setting up a career tracking system.
6. The training system of vocational grammar schools becomes more flexible and varied: The so-called minor vocational qualification so far acquired as part of the matriculation will be separated from matriculation, and students will be able to choose to learn them in grades 9-12. Students will also be able opt to take part in those training sessions provided by the school that are not related to the contents of their minor vocational training – the overall number of lessons taken remaining unchanged. Such training sessions are aimed at sharpening competences or vocational contents related to a subject not appearing in the curriculum of their minor, or even at enhancing practical knowledge. Changes to the student contract system aim to further strengthen the dual education system, which is gaining in popularity. As a result, student contracts may be signed by students of vocational grammar schools in grades 11-12 as well. In order or make dual practical training more efficient and successful, employees of business entities responsible for the training of students may receive a new special training focused particularly on student training.

The Hungarian Chamber of Commerce and Industry (HCCI) has a significant responsibility in the operation of dual 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 students involved in dual training by placing students during their practice in a real business working environment, thereby promoting the training of professionals who 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 (possible reimbursement of investment costs 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 payable by SMEs).

It is necessary to improve the professional and teaching work of teachers providing practical training. Therefore, new measures stipulate that in order to become a practical teacher a certificate issued by HCCI has to be obtained, which certifies that the person has successfully passed the practical teacher exam organised by the chamber. Economic chambers and national economic representative organisations cooperate to draw up the assessment criteria for practical teacher trainings and exams they organise. Trainings and exams for practical teachers are organised by the chambers and at the end participants sit an exam and are issued a certificate. In order to become a certified practical teacher, applicants must complete a training course and pass an exam, except if they have a master's degree or a higher education degree, or if they are aged over 60. Qualification by the chamber as a practical teacher will, in line with an interim provision of the respective legislation, become a compulsory criterion from the 2019/2020 academic year.

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. However, the organisational and operational layout of central offices and background institutions was not uniform, which made the transparency and supervision of the activities of 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 completed in 2017. The measure resulted in the reorganisation or termination of 37 budgetary organisations. This may result in significant savings in tangible and personnel expenditures, and the transparency of the organisational system will also be improved. A significant part of the responsibilities and competences belonging to the central budgetary organisations 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). Another aim of the measures is 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.

2018 saw a downsizing at ministries and central offices, which resulted in greater operational efficiency, while the savings attained by the downsizing contributed to the financing of wage increase in the new remuneration system.

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 major structural changes, and was followed by the enhancement of the efficiency of tax collection, by considerable cuts in taxes imposed on labour and incomes and by the broadening of the system of targeted incentives promoting economic growth. The Government continues to give priority to lowering the tax and contribution burden of the economy, while changes of the tax system have to strengthen its employment and business friendly nature. To this end, in the upcoming years, tax policy will continue to focus on the reduction of payroll taxes, the tax and administrative burdens of businesses, the improvement of the efficiency of tax collection and the streamlining of the tax system.

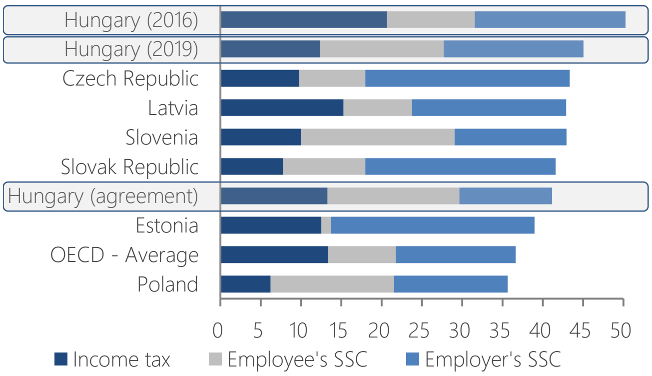
Measures for tax reduction

Taxes on labour

The Government continues to regard the reduction of payroll taxes as an economic policy priority. The reforms launched in 2010 created a tax system that offers maximum support for employment, remunerates extra work, and provides more favourable circumstances to the most disadvantaged segment of the labour force. As a result of the flat-rate personal income tax introduced in several stages between 2010 and 2013, and of the abolition of the pension contribution ceiling, a completely linear tax and contribution system was put in place. At the same time, in order to reduce the tax burden of small businesses, a new optional form of taxation was introduced in 2013, which replaces regular employer taxes with a single tax type of a lower rate. By 2016, fast growth resulting from more favourable economic processes and the successful fight against black economy created enough financial basis to implement a 1 percentage point reduction of the personal income tax, bringing the rate down from 16 percent to 15 percent. In the same year, the Government and the private sector signed an agreement that outlines the lowering of employer tax and contribution burdens in several stages. As a result, the social contribution tax was cut by 5 percentage points in 2017, and by another 2.5 percentage points in 2018. Parallel to these two measures, the small business tax rate was also reduced. The next step is expected in July 2019, when the social contribution tax is scheduled to diminish to 17.5 percent, and based on the agreement and depending on wage developments, an additional 2 percentage point decrease can be granted on three occasions. As a result of the announced employer tax reduction, the proportion of tax deducted from additional incomes, both from the employer and employee side, decreases in all income categories. In light of the announced measures, the tax burden of a single employee earning an average wage can potentially drop to the regional level even without job protection allowances.

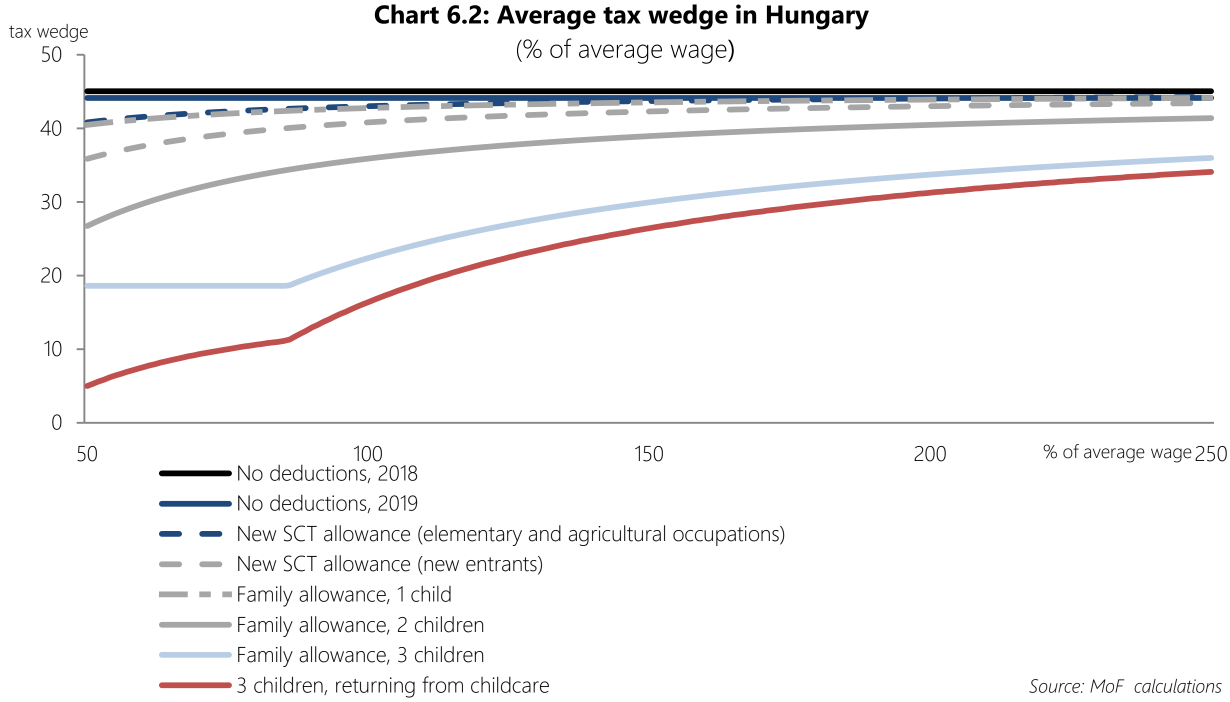
Chart 6.1: Tax wedge

(single earner, no children, average wage 100%)



Source: MoF calculation, OECD

Chart 6.2: Average tax wedge in Hungary
(% of average wage)



Source: MoF calculations

The system of allowances available from certain labour taxes has also been transformed in several steps. With the introduction of the family tax allowance in 2011, the tax system now also takes into consideration the number of dependent persons in the household. The family tax allowance for families with two children doubled from 2016 in four equal stages, with the monthly allowance per child increasing from 10,000 HUF in 2015 to 20,000 HUF as of January 2019. The measure improves the living standards of almost 360,000 families. The support for people married for the first time – introduced in 2015 – provides further help to families, and it can be claimed concurrently to the family tax allowance from 2017. The Government continues to view its family policy objectives as a priority, and has developed a detailed action plan in order to achieve them. As part of the action plan, women raising at least four children will be exempted from paying personal income tax as of 1 January 2020.

Another key element of the benefit system is helping the most disadvantaged groups to find a job and remain in employment. For this purpose, the Job Protection Act was launched in 2013, which offers targeted tax deduction from employer taxes (social contribution tax and small business tax). This measure aims to improve the employment figures of groups whose economic activity rate is lower in Hungary than in other countries of the region, and of groups that are more sensitive to the changes of the economic conjuncture according to domestic and international studies.

The system of employer tax allowances has been transformed in an attempt to adapt it to the changing labour market. Allowances became more targeted from 2019, and the primary aim is to foster the employment of new entrants, long-term unemployed, people not in permanent employment or loosely connected to the labour market. The new allowance is available for every employee who was unemployed for at least 6 months of the 9 months preceding their hiring. This allowance replaces other allowances previously available for career starters, long-term unemployed and maternity benefits, while preserving the extended entitlement period of big families. The new allowance also comes with reduced administrative burdens for businesses, as for newly registered employees the NTCA automatically examines the eligibility for tax deduction and notifies the companies of its availability.

From 2019, employers may receive a 50 or 100 percent allowance up to the statutory minimum wage (for disabled entrepreneurs and employees, the maximum allowance may reach the double of the minimum wage) instead of the previous maximum amount of HUF 100,000 if they hire people in agriculture or unskilled work, new entrants, women returning to the labour market who raise three or more children, entrepreneurs or employees with disabilities, as well as people in public employment. Another positive change is that from 2019 employers are exempted from paying taxes after employees receiving pension in their own right, while private individuals are also exempted from paying any contributions.

A new system of cafeteria benefits has been put in place in 2019. The cafeteria benefits system became overly complicated and badly targeted over the past years, which gave an unfair advantage to big, economically strong companies in competing for skilled employees with higher wage expectations. The overall aim of the reform was to replace the segmented, inefficient benefits system with a more focused scheme, to reduce the related administrative burden in order to allow smaller companies to take advantage of the remaining benefits. The reform of the cafeteria system helps to achieve another goal, namely to encourage employers to give higher wages that employees may spend at their own discretion, instead of offering benefits that can only be used for specific purposes.

In order to stimulate households' purchase of government securities, securities issued after 1 June 2019 will be exempted from taxation.

In order to streamline and make the tax system more transparent, five taxes are abolished from 2019. In relation to this abolishment, changes affecting the tax burden of employment include the merging of the health care contribution into the social contribution tax (the aim of this merging is to cut administrative burdens) as well as the abolishment of a 75 percent special tax levied in relation to the termination of an individual's employment relationship.

Company taxes

In 2017, the corporate income tax was reduced to a flat-rate 9 percent, and several measures were implemented to boost investments. Now, the main focus has shifted to fine-tuning, promoting and increasing the competitiveness of tax types available to SMEs, namely the small business tax (KIVA) and the small business lump sum tax (KATA).

The regulations of KIVA have considerably been simplified since 2017, and its rate went down from 16 to 14 percent and also the eligibility criteria were expanded. In line with the reduction of the social contribution tax, the rate of KIVA was lowered by another 1 percentage point to 13 percent in 2018. In 2019, eligibility criteria were further expanded, thus the upper revenue threshold for applying this tax type is currently HUF 1 billion, and the limit from which this tax payer status cannot be applied was increased from HUF 1 billion to HUF 3 billion. A further cut in the rate of KIVA is expected in the future in line with the scheduled reduction of the social contribution tax. Due to the above outlined measures, as well as to the campaigns at the end of 2017 and 2018 targeted at promoting this tax type, the number of taxpayers opting for KIVA more than sextupled between 2016 and 2019. The tax authority recorded more than 40,000 KIVA taxpayers in March 2019.

As of 2017, the revenue limit of KATA increased from HUF 6 million to HUF 12 million in order to cut administrative burdens of micro businesses and sole proprietors. The individual exemption for VAT was increased from annual HUF 8 million to HUF 12 million in 2019, therefore administrative burdens were further reduced. As a result of these measures, the revenue limit for KATA is the same as the upper threshold for the VAT exempt status. In February 2019 the number of KATA taxpayers exceeded 325,000.

In 2019, by introducing the possibility of group taxation in corporate income tax, the administrative burdens were rolled back not only for SMEs but also for big companies. This measure may boost Hungary's competitiveness, may make the country more attractive for investors, it brings a significant relief for groups of companies, and may result in additional tax savings. With the aim of encouraging bigger companies to make investments, the upper limit of development reserves was raised from HUF 500 million to HUF 10 billion from 2019. A new possibility was introduced, according to which municipalities may grant exemption or relief from the local business tax to entrepreneurs in relation to investments installed in the year concerned.

Sectoral taxes

In the aftermath of the economic crisis, a series of sectoral taxes (levied on wealth and income) and new turnover taxes were introduced on certain services to balance the budget. Consumption taxes have a less distorting effect; therefore, they can remain an element of the tax system in the long-term. Weight of sectoral direct taxes; on the other hand, have been declining due to measures put in place in the previous years. Sectoral taxes represented only 0.4 percent of GDP in 2018 as opposed to 0.9 percent in 2013. The Government signed an agreement with the EBRD in February 2015 committing itself to cut the special tax levied on financial organisations. Consequently, the upper limit of the tax rate of credit institutions saw a significant cut in previous years, and was further curtailed in 2019 from 0.21 percent to 0.20 percent. Moreover, from 2019 investment firms are excluded from the scope of special tax levied on financial organisations, while the special tax of credit institutions is abolished.

Consumption and turnover taxes

The Government maintains its policy direction of increasing the weight of consumption and turnover taxes in the tax system. The favourable economic processes of the previous years along with the successful measures introduced in order to combat the shadow economy made possible targeted VAT rate reductions for several services and products. Pressure has been mounting to apply a reduced VAT rate instead of the general rate for certain services and products strongly affected by the grey economy. The VAT rate on pork meat and the construction of houses was lowered to 5 percent in 2016, while the VAT rate on poultry meat, eggs and fresh milk was cut to 5 percent in 2017. The VAT rate on restaurant meals and internet access was reduced in two stages to 18 percent in 2017, and to 5 percent in 2018. As of 2018, a 5 percent VAT rate applies to edible offal of swine, fish meat, Braille printers and screens. As of 2019, in line with the simplification of the tax system, UHT ad ESL milk are reclassified to the 5 percent VAT rate, bringing all types of milk to the reduced rate of 5 percent.

In an attempt to increase the weight of consumption and turnover taxes within the tax system, the rate of the public health product tax increased by 20 percent for all products subject to tax as of 1 January 2019, parallel to that fruit spirits and herbal liqueurs being taxed as well. In addition, the criteria for receiving subsidies related to health preservation programmes also became more stringent. In order to get closer to the EU tax minimum on cigarettes, the rate of the excise duty charged on cigarettes and fine cut smoking tobacco gradually increases from September 2018, in three steps (September 2018, January and July 2019).

In order to simplify the tax system and make it more transparent, two types of turnover taxes are abolished from 2019. As of 1 January 2019, in order to moderate tax administration, accident tax and insurance tax were merged, while the cultural tax, which generated very modest revenues, was abolished.

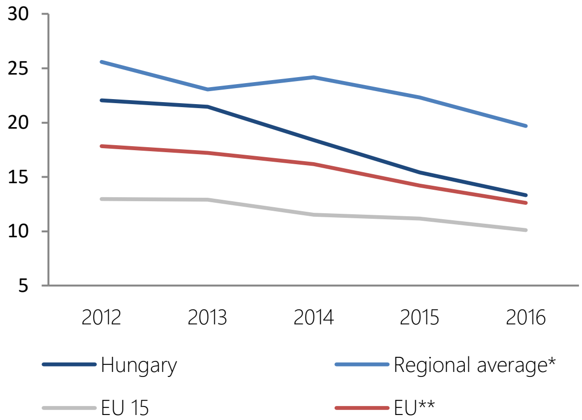
Measures for combating tax avoidance

In recent years, measures aimed at the whitening of the economy have principally focused on the collection of consumption taxes. 2014 saw the introduction of online cash registers, followed by the introduction of the Electronic Public Road Trade Control System in 2015. In 2016, a POS terminal installation program was launched to encourage electronic payments, and then online invoicing data reporting became mandatory as of 1 July 2018 in order to combat VAT fraud related to transactions between taxable persons.

The key feature of the online invoicing system is that it provides real-time data to the tax authority in relation to the details of invoices with at least HUF 100,000 VAT content issued between taxpayers instead of the earlier, follow-up data disclosure on the level of the individual invoices, thereby enabling more efficient risk analysis and control. Another advantage of the new system is the reduction of administrative burdens on invoice issuers, as it has replaced follow-up data disclosure on the level of individual invoices.
From 1 July 2018 unmanned, automated vending machines that sell food are connected to the National Tax and Customs Administration (NTCA). Until 30 June 2019, all automated equipment (such as parking ticket vending machines, car washes) shall be registered with the NTCA and the key data thereof required to be reported.

As a result of the measures taken in recent years, the amount of uncollected VAT in Hungary significantly decreased, which is also confirmed by the latest CASE study[2] on the estimation of the VAT gap. In 2012–2013, the VAT gap amounted to 21–22% of the theoretical VAT liability, but since 2014 it has decreased by 2-3 percentage points a year, and by 2016 it dropped to about 13%. Therefore, the domestic VAT gap is now significantly lower than in other countries of the region, and in fact it is only slightly above the EU average.

Chart 6.3: Value added tax gap
(percent of VAT theoretically collected)



**Bulgaria, Czech Republic, Poland, Romania, Slovakia, Slovenia,*
***excl. Cyprus and Croatia*

Source: CASE (2018), MF calculations

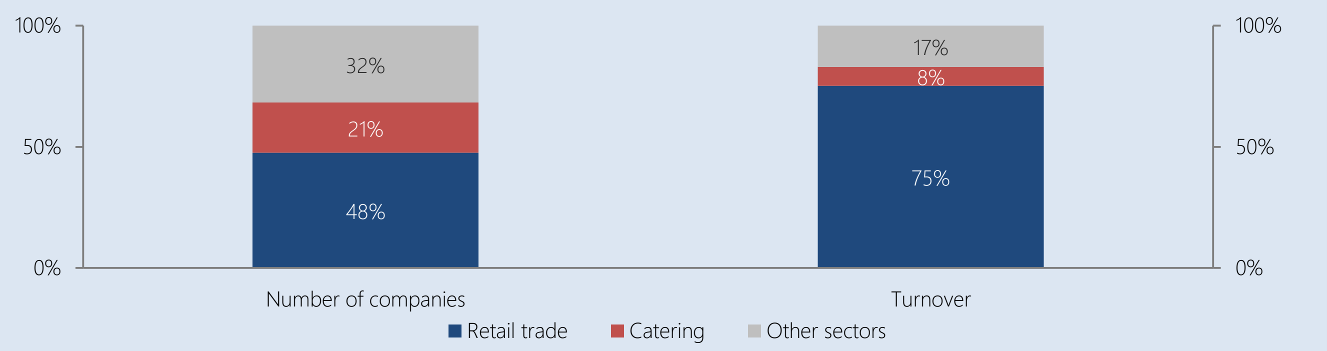
Besides, Hungary is actively involved in the international fight against aggressive tax evasion. In this respect, in 2017 Hungary signed the OECD's Multilateral Convention to Implement Tax Treaty Related Measures, therefore a general tax evasion provision can be incorporated into most domestic tax conventions. In addition, Hungary has transposed the general tax evasion provisions of the EU's Anti-Tax Avoidance Directive (ATAD), and the rules concerning controlled foreign companies and interest deduction limitations. The other provisions of the Directive, including the rules pertaining to the handling of hybrid securities and capital withdrawal will be transposed during 2019. Apart from establishing rules to prevent tax evasion and artificial redistribution of profits, Hungary is also seeking to build up extensive cooperation in the field of tax information exchange, among others in the field of financial account information and country-based reporting. The new EU regulations on cross-border tax constructions are expected to be transposed in 2019.

[2] *CASE (2018): Study and Reports on the VAT Gap in the EU-28 Member States: 2018 Final Report, Warsaw, September 2018*

Box 8: A surge in the declared turnover figures of small companies following the installation on online cash registers

In order to whiten the economy, it has become mandatory for businesses in certain sectors to install online cash registers (OCR). These online cash registers are different from traditional ones in the way that they contain a tax control unit that registers and transfers via mobile internet the contents of invoices and receipts issued by them to the tax authority. Between September 2013 and 2014, some 100,000 companies installed almost 200,000 online cash registers. 70% of businesses bought only one online cash register but there were more than 4,000 companies that replaced more than five cash registers. Although retail commerce dominates in terms of sales turnover, but half of the OCR-using companies actually belong to this sector based on their principal activity. The number of restaurants is also significant; therefore, the research team of the MNB, the MoF and the Hungarian Central Statistical Office (HCSO) put these two sectors in the focus of their analysis. These two sectors represent 83% of the total turnover registered by OCRs.

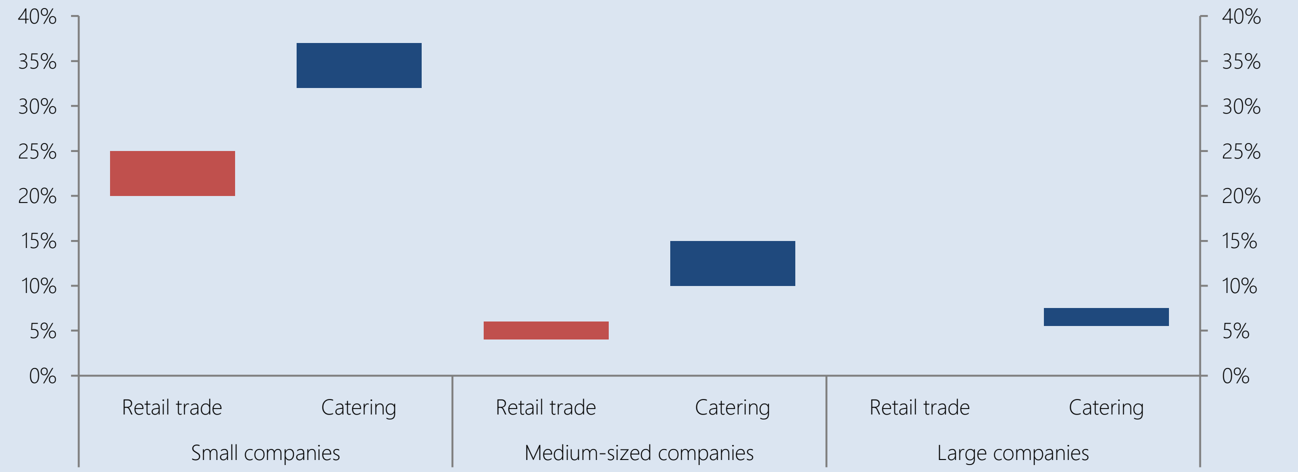
Distribution of companies using online cash registers based on registered sales turnover (2015)



Source: MNB-MoF-HCSO calculations based on NTCA data

The econometric analysis of panel data, excluding any other effects, quantified the effect of the installation of online cash registers on sales turnover in these two sectors. The analysis relied on individual monthly and quarterly VAT declarations, complemented by certain lines of corporate tax declarations as well as by information supplied by online cash registers. Results show an increase in declared turnover following the installation of online cash registers, which means that the measure represented a significant contribution to whitening the retail and catering sector, excluding the turnover of fuels. The effect was stronger in the catering than in retail, and stronger for smaller businesses than for bigger companies. The following chart shows the estimated degree of increase for the different groups.

Effect of the installation of OCRs on turnover based on sector and size



Source: MNB-MoF-HCSO calculations based on NTCA data

In the estimate, small businesses account for the bottom quintile of turnover, medium-sized companies represent the second quintile, while big companies make up 60 percent of the population.

However, estimates obtained for the magnitude of growth in total turnover do not give reliable results due to the limitations of the methodology applied. A significant portion of total sales is generated by a few dozen really big companies whose behaviour might be different from the behaviour of much smaller but still big companies, and due to the small number of elements, the estimation is not capable of giving reliable results.

Tax procedure and tax administration

In terms of tax procedure, primary aims include improving tax compliance, improving the relationship between the tax authority and taxpayers, as well as encouraging cooperation and voluntary compliance. To this end, recent years have seen the restructuring of the tax authority's organisational structure, and a number of measures have been introduced in order to strengthen the service provider profile of the tax authority. In 2016 a rating system of taxpayers was introduced with the goal to encourage compliance. In the context of the so called 'supporting procedure' introduced in 2017, the tax authority recommends self-revision if any risk on the part of the taxpayer is perceived, and also provides direct professional guidance in eliminating any errors and deficiencies.

As of 1 January 2018, the legislative background of tax procedures has been 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 new legislation 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.

From 2018, start-ups may receive tax-related professional support from the tax authority within the framework of a mentoring scheme. Participation is voluntary. Within 30 days from issuing a new tax number, the tax authority provides oral or written information free of charge about tax obligations, the availability of information on taxation related to the activity of the taxpayer, and initiates personal contact.

Based on international experiences, an efficient reduction of administrative burdens can be achieved by introducing the electronic submission of tax returns, enlarging the scope of pre-filled tax return forms, reducing the frequency of reporting, simplifying forms, and eliminating or merging certain tax types. It is important to note, however, that electronic tax administration can only reach its full potential if the services provided by the tax authority exploit the advantages of digitalisation in the widest possible range. The NTCA already provides a number of sophisticated services: draft income tax return to a wide scope of taxpayers, integrated electronic interface for contact (easy to access, up-to-date documents, information about eligibility and obligations, balances), online form-filling and checking programs, personalised tax calendar, calculators, mobile applications, one-stop-shop contact, etc.

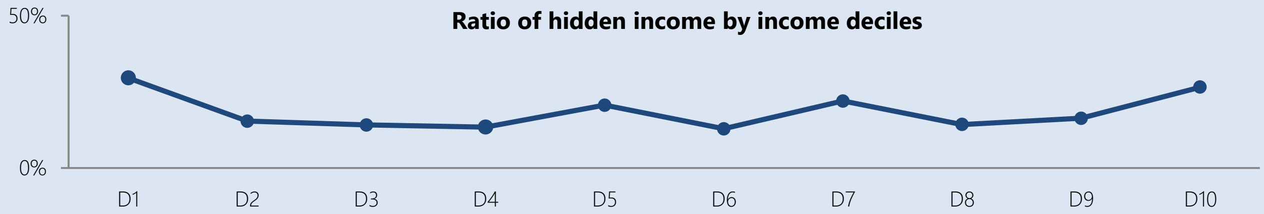
One of the most spectacular steps to making the tax authority more client-oriented is the introduction of the system of electronic income tax return (eSZJA), with the help of which the NTCA generates a draft income tax return for more than 5 million private individuals, taking over the burden of preparing the income tax return for the majority of taxpayers. Relying on experiences acquired through using the eSZJA and due to the gradual integration of data reporting, the tax authority may become capable and willing to suggest draft declaration for an increasing number of tax types and for a bigger scope of taxable entities. For the smallest businesses, i.e. for private entrepreneurs, the tax authority has prepared a draft tax return for the first time in this year, and draft tax returns have also been made available for taxpayers subject to the excise duty which affects a group of taxpayers easy to define.

The overall goal is to rid the widest possible range of businesses from the most prevalent administrative burdens (e.g. VAT), and to make available drafts for reporting obligations of employers as well.

Box 9: Households hide about 20% of their income

Employees hide a significant part of their income from the tax authority, but the ratio of hidden incomes may be different for different social groups. We prepared estimation about the ratio of concealed incomes, and identified those factors that considerably influence its scale. We relied on the data of the Survey on Income and Living Conditions prepared in 2015. The correlation between the income and consumption of households that are assumed not to have undeclared income (e.g. civil servants) is taken as the basis for estimating other household's actual income based on their consumption.

Based on the model we considered to be the most reliable, those people who only partially declare their income hide an average 20.3% of their earnings. One of the most important factors affecting the ratio of income households keep in the dark is the income situation of the particular household. Results suggest that the ratio of hidden incomes is the highest in the bottom and top income deciles, producing an overall U-shaped graph for the different income deciles.



Source: MoF calculation based on HCSO data

The place of residence was another important factor. Our calculations suggest that households in Budapest conceal a smaller ratio of their income than people living elsewhere: in the capital an average 10% of wages is hidden, while the average in other places is almost 25%. Based on a territorial comparison, the highest rates of wages kept in the dark can be observed in the West-Transdanubia region and in Hajdú-Bihar county. The former can probably be explained by the great number of commuters to Austria, while the latter might have a similar background in relation to Oradea. In terms of occupation, managers are the most likely to hide a part of their income. As far as different age groups are concerned, the picture is quite mixed but the overall trend suggests that older employees are less likely to conceal their income. This can be put down to the fact that obtaining eligibility for pension, which requires paying contributions, becomes more important as the retirement age is drawing nearer.

Modernisation of payment infrastructure, increasing the transparency of financial processes

The volume of electronic payments has dynamically gone up in recent years and has significantly contributed to the whitening of the economy. E-commerce and its share in total retail turnover also witness dynamic growth. In parallel, the number of people using online banking services, as well as the number and amount of such transactions are also on the rise. The Government has introduced positive incentives to use electronic payment in an attempt to reduce the high level of cash in hand that favours the functioning of the black economy. Therefore, from 2017 the Government provides budgetary support to increase the number of POS terminals by, thereby promoting card payments. Currently Hungary has one of the highest pay-pass card ratios in the total card stock in Europe, which results in dynamically growing card use. With a view to bolstering electronic payments and at the same time rolling back cash payments, from 2019 the Government exempts every retail wire transfer from the financial transaction tax until a transfer value of HUF 20,000 per transaction beginning. The Government adopted a 7-year strategy to promote financial consciousness. The primary aim of the strategy is to strengthen, promote and encourage non-cash payment methods and channels.

Different mobile payment applications have also appeared and are becoming more widespread. Such applications are developed both by FinTech companies and commercial banks. The widespread deployment of the instant payment system, which has tremendous potential to roll back cash payments in the future, is in the pipeline.

7. Institutional characteristics of public finances

7.1. Budgetary framework system

The regulation 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 execution thereof.

In 2018, for the purpose of ensuring compliance with Council Directive 2011/85/EU, the Economic Stability Act and the Public Finances Act were amended. Amendments mostly concerned the following areas: i) expanding the scope of merit of the Fiscal Council to examine the fiscal rules related to the balance of the government sector and the achievement of MTOs;[3] ii) the use of the so-called "comply or explain" principle has been introduced in the budget process. It basically means that if the Council notifies the Government of its disagreement with the draft budget bill, the Government has to renegotiate the bill and explain the rejection of the comments of the Council;[4] iii) from 2019 onwards the annual budget bill shall include a long-term sustainability analysis of the main government policies as part of the medium-term budget planning.[5]

In light of the experiences of recent years, the existing rules are sufficiently helpful in fostering the disciplined execution of fiscal policy and thereby ensure the stability and sustainability of public finances. Legislative changes enhance the strength and institutional embeddedness of fiscal rules and encourage responsible public finance management with regard to long-term effects.

In Hungary fiscal rules are based on three pillars: i) the general government deficit may not exceed 3% of the gross domestic product; ii) structural balance needs to be in line with the MTO specified in the convergence programme; iii) and pursuant to the Fundamental Law, the Parliament may only adopt an act on the central budget if that act results in the reduction of the government debt-to-GDP ratio. The prior endorsement of the Fiscal Council is required for the adoption of the budget act. The Council provides its endorsement if the reduction of the government debt ratio fulfils the criterion set in the Fundamental Law. The government debt target is 50%.

In order to reach the target value more quickly, the Economic Stability Act sets out that if both the rate of inflation predicted for the budget year and the real growth rate of the gross domestic product exceed 3%, then the annual growth rate of nominal government debt shall not exceed the difference between the anticipated inflation and half of the real GDP growth. If either the inflation rate predicted for the budget year or the real growth rate of gross domestic product does not exceed 3%, the government debt ratio shall decrease by at least 0.1 percentage point as set forth by the Fundamental Law.

[3] Section 58 of Act XL of 2018
[4] Section 59 of the above Act
[5] Section 243 of Act LXXXII of 2018

7.2. STRUCTURE OF DATA REPORTING ON THE STATISTICS OF PUBLIC FINANCES

In Hungary, statistics related to the general government sector are prepared by the HCSO and the MNB. According to the current division of labour, the HCSO is responsible for the non-financial accounts and the MNB for the financial accounts. Concerning data reporting in the context of the Excessive Deficit Procedure (EDP Notification), the above division of labour prevails in compiling the actual figures up to the period before the reported year, whereas the calculation of government balance and debt anticipated for the reported year is the task of the Ministry of Finance. A statistics working committee consisting of delegates of the HCSO, the MNB and the Ministry of Finance operates at the level of executives and experts; data flow, division of work and procedures related to methodology are set out in a memorandum of understanding that was updated in 2015. The key data sources of government sector statistics include the public finances information system, the annual and interim reports of budgetary entities supplemented by the 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 upon the report's submission to Eurostat. After the three-week consultation period with the Eurostat, the HCSO also publishes, together and simultaneously with the Eurostat press release, the approved EDP Notification tables. In addition, it publishes the description of the methodology ("EDP Inventory") that is related to the compilation of the report, is regularly updated and has most recently been extended in 2016 by the Hungarian statistical authorities. In accordance with the established practice, the Ministry of Finance, as part of the general explanation attached to the annual budget and the final accounts submitted to the Parliament, dedicates a separate chapter to the explanation of the difference between the official national and the Maastricht deficit and debt indicators.

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

TABLES

Table 1a. Macroeconomic prospects

	ESA Code	2018 HUF billion	2018	2019	2020	2021	2022	2023
			rate of change					
1. Real GDP	**B1g**	**40.250.0**	**4.9**	**4.0**	**4.0**	**4.1**	**4.2**	**4.0**
2. Nominal GDP	B1g	42.072.8	9.7	8.0	7.3	7.2	7.3	7.1
Components of real GDP								
3. Private consumption expenditure	P.3	20.001.6	5.4	4.6	4.7	4.6	4.5	4.5
4. Government consumption expenditure[1]	P.3	7.723.3	-0.5	1.1	1.8	1.0	1.1	0.6
5. Gross fixed capital formation	P.51	9.931.2	16.5	10.3	3.8	3.5	4.6	3.1
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52+ P.53	272.1	0.2	0.0	0.3	0.0	0.0	0.0
7. Exports of goods and services	P.6	35.454.6	4.7	5.1	5.2	6.0	6.3	6.6
8. Imports of goods and services	P.7	33.132.8	7.1	6.5	5.4	5.5	6.1	6.0
Contribution to real GDP growth								
9. Final domestic demand		37.656.1	6.2	5.1	3.7	3.4	3.7	3.2
10. Changes in inventories and net acquisition of valuables	P.52+ P.53	272.1	0.2	0.0	0.3	0.0	0.0	0.0
11. External balance of goods and services	B.11	2.321.9	-1.5	-1.0	0.1	0.7	0.5	0.8

[1]Including government and NPISHs as well

Table 1b. Price developments

	2018	2019	2020	2021	2022	2023
	rate of change					
1. GDP deflator	4.5	3.8	3.2	3.0	3.0	3.0
2. Private consumption deflator	3.2	2.7	2.8	3.0	3.0	3.0
3. HICP	2.9	2.7	2.8	3.0	3.0	3.0
4. Public consumption deflator	4.0	4.4	5.8	4.7	3.4	3.7
5. Investment deflator	7.9	5.5	4.5	4.0	3.5	3.0
6. Export price deflator (goods and services)	2.7	2.1	1.9	2.0	2.0	2.0
7. Import price deflator (goods and services)	3.8	1.9	1.8	2.0	2.0	2.0

Table 1c. Labour market developments

	ESA Code	2018 level	2018	2019	2020	2021	2022	2023
			rate of change					
1. Employment, persons ('000; 15-74)[1]		4.469.5	1.1	1.1	1.3	1.2	1.0	0.9
2. Unemployment rate (%; 15-74)		-	3.7	3.3	2.9	2.8	2.8	2.7
3. Labour productivity, persons		-	3.8	3.0	2.7	2.9	3.2	3.1
4. Compensation of employees (HUF bn)[2]	D.1	18.405	11.7	9.2	8.1	7.9	8.0	8.3
5. Compensation per employee (HUF million)[3]		4.4	9.6	8.1	6.7	6.7	6.9	7.4

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

Table 1d. Sectoral balances

	ESA Code	2018	2019	2020	2021	2022	2023
		% of GDP					
1. Net lending/borrowing vis-a-vis the rest of the world	B9.	2.2	1.5	2.1	2.5	2.0	1.5
of which:							
- Balance of goods and services		4.7	3.8	3.7	4.2	4.5	5.0
- Balance of primary incomes and transfers		-4.2	-4.4	-4.5	-4.5	-4.6	-4.7
- Capital account		1.8	2.1	2.5	2.8	2.2	1.2
2. Net lending/borrowing of the private sector including statistical discrepancy	B9.	4.4	3.3	3.6	3.7	2.5	1.5
3. Net lending/borrowing of general government	B9.	-2.2	-1.8	-1.5	-1.2	-0.5	0.0

Table 2a. General government budgetary prospects

	ESA Code	2018 HUF billion	2018	2019	2020	2021	2022	2023
			% of GDP					
Net lending (EDP B.9.) by sub-sector								
1. General government	S.13	-943.3	-2.2	-1.8	-1.5	-1.2	-0.5	0.0
2. Central government	S.1311	-986.0	-2.3	-1.3	-1.6	-1.1	-0.3	0.1
3. State government	S.1312							
4. Local government	S.1313	-42.4	-0.1	-0.2	0.0	-0.1	-0.1	0.0
5. Social security funds	S.1314	94.1	0.2	0.3	0.1	0.0	-0.1	-0.1
General government (S.13)								
6. Total revenue	TR	18616.9	44.2	44.6	43.3	41.9	40.2	39.4
7. Total expenditure	TE	19551.2	46.5	46.4	44.8	43.1	40.7	39.4
8. Balance	B.9	-934.3	-2.2	-1.8	-1.5	-1.2	-0.5	0.0
9. Interest expenditure	D.41	1066.2	2.5	2.5	2.4	2.2	2.2	2.1
10. Primary balance		131.9	0.3	0.6	0.8	1.0	1.7	2.1
11. One-off and other temporary measures[1]			0.0	0.0	0.0	0.0	0.0	0.0
Selected components of revenue								
12. Total taxes (12=12a+12b+12c)		10634.0	25.3	25.1	25.1	24.9	24.7	24.4
12a. Taxes on production and imports	D.2	7714.1	18.3	18.2	18.0	17.8	17.4	17.2
12b. Current taxes on income. wealth etc.	D.5	2901.2	6.9	6.9	7.0	7.1	7.2	7.3
12c. Capital taxes	D.91	18.7	0.0	0.0	0.0	0.0	0.0	0.0
13. Social contributions	D.61	5141.2	12.2	12.0	11.7	11.4	11.0	10.7
14. Property income	D.4	181.0	0.4	0.4	0.3	0.3	0.3	0.2
15. Other		2660.7	6.3	7.0	6.2	5.2	4.3	4.0
16=6. Total revenue	TR	18616.9	44.2	44.6	43.3	41.9	40.2	39.4
Tax burden[2] (D.2+D.5+D.61+D.91-D.995)		15853.7	37.7	37.3	36.9	36.6	35.9	35.3
Selected components of expenditure								
17. Compensation of employees + intermediate consumption	D.1+P.2	7435.8	17.7	17.6	16.7	15.9	15.1	14.5
17a. Compensation of employees	D.1	4430.6	10.5	10.1	9.8	9.3	8.9	8.5
17b. Intermediate consumption	P.2	3005.2	7.1	7.5	6.9	6.6	6.3	6.0
18. Social payments (18=18a+18b)		5659.4	13.5	12.8	12.5	12.2	11.8	11.4
of which: Unemployment benefits[3]		93.5	0.2	0.2	0.2	0.2	0.2	0.2
18a. Social transfers in kind supplied via market producers	D.6311. D.63121. D.63131	767.8	1.8	1.8	1.7	1.6	1.5	1.5
18b. Social transfers other than in kind	D.62	4891.6	11.6	11.1	10.8	10.6	10.3	10.0
19=9. Interest expenditure	D.41	1066.2	2.5	2.5	2.4	2.2	2.2	2.1
20. Subsidies	D.3	527.0	1.3	1.2	1.3	1.4	1.1	1.1
21. Gross fixed capital formation	P.51	2439.9	5.8	6.8	6.3	6.1	4.8	4.9
22. Capital transfers	D.9	871.1	2.1	2.0	2.2	1.8	2.3	2.4
23. Other		1551.8	3.7	3.5	3.5	3.5	3.3	3.1
24=7. Total expenditure	TE	19551.2	46.5	46.4	44.8	43.1	40.7	39.4

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 2b. No-policy change projections

	2018 HUF billion	2018	2019	2020	2021	2022	2023
		% of GDP					
1. Total revenue at unchanged policies	18616.9	44.2	44.6	43.3	41.9	40.2	39.4

The table contains revenue projections based on measures till 30 April 2019.

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

	2018 HUF billion	2018	2019	2020	2021	2022	2023
		% of GDP					
1. Expenditure on EU programmes fully matched by EU funds revenue	842.6	2.0	3.0	2.3	1.5	0.7	0.7
1a. of which investment fully matched by EU funds revenue	609.7	1.4	2.0	1.6	1.1	0.5	0.5
2. Cyclical unemployment benefit expenditure	-14.5	0.0	0.0	0.0	0.0	0.0	0.0
3. Effects of discretionary revenue measures [1]	-413.5	-1.0	-0.5	-0.4	-0.4	-0.6	-0.4
4. Revenue increases mandated by law							

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

Table 3. General government debt developments

	ESA Code	2018	2019	2020	2021	2022	2023
		% of GDP					
1. Gross debt		70.8	69.2	66.7	62.8	59.3	55.9
2. Change in gross debt ratio		-2.6	-1.7	-2.5	-3.9	-3.5	-3.4
Contributions to changes in gross debt							
3. Primary balance		0.3	0.6	0.8	1.0	1.7	2.1
4. Interest expenditure	D.41	2.5	2.5	2.4	2.2	2.2	2.1
5. Stock-flow adjustment		1.7	1.8	0.7	-0.7	0.3	0.5
Implicit interest rate on debt (%)		3.7	3.6	3.6	3.6	3.7	3.7

Table 4. Cyclical developments

	ESA Code	2018	2019	2020	2021	2022	2023
		% of GDP					
1. Real GDP growth (%)		4.9	4.0	4.0	4.1	4.2	4.0
2. General government balance	B.9	-2.2	-1.8	-1.5	-1.2	-0.5	0.0
3. Interest expenditure	D.41	2.5	2.5	2.4	2.2	2.2	2.1
4. One-off and other temporary measures[1]		0.0	0.0	0.0	0.0	0.0	0.0
of which: on the revenue side: general government		0.0	0.0	0.0	0.0	0.0	0.0
on the expenditure side: general government		0.0	0.0	0.0	0.0	0.0	0.0
5. Potential GDP growth (%)		3.7	3.9	4.1	4.2	4.2	4.2
contributions: - labour		0.9	0.8	0.7	0.8	0.7	0.6
- capital		1.5	1.7	1.7	1.6	1.6	1.5
- total factor productivity (TFP)		1.4	1.5	1.6	1.8	1.9	2.0
6. Output gap		0.2	0.3	0.2	0.1	0.1	0.0
7. Cyclical budgetary component		0.1	0.1	0.1	0.1	0.1	0.0
8. Cyclically-adjusted balance (2-7)		-2.3	-1.9	-1.6	-1.3	-0.5	0.0
9. Cyclically-adjusted primary balance (8+3)		0.2	0.5	0.7	1.0	1.6	2.1
10. Structural balance (8-4)		-2.3	-1.9	-1.6	-1.3	-0.5	0.0

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	2018	2019	2020	2021	2022	2023
Real GDP growth (%)							
1. April 2018 Convergence Programme		4.3	4.1	4.0	4.2	4.1	-
2. April 2019 Convergence Programme		4.9	4.0	4.0	4.1	4.2	4.0
3. Difference		0.6	-0.1	0.0	-0.1	0.1	-
General government net lending (% of GDP)							
1. April 2018 Convergence Programme	EDP B.9	-2.4	-1.8	-1.5	-1.2	-0.5	-
2. April 2019 Convergence Programme	B.9	-2.2	-1.8	-1.5	-1.2	-0.5	0.0
3. Difference		0.2	0.0	0.0	0.0	0.0	-
General government gross debt (% of GDP)							
1. April 2018 Convergence Programme		73.2	69.6	66.7	63.4	59.7	-
2. April 2019 Convergence Programme		70.8	69.2	66.7	62.8	59.3	55.9
3. Difference		-2.4	-0.4	0.0	-0.6	-0.4	-

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

	2016	2020	2030	2040	2050	2060	2070
	% 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 6a. Contingent liabilities

% of GDP	2018
Public guarantees	5.2

Table 7. Basic assumptions[1]

	2018	2019	2020	2021	2022	2023
Hungary: Short-term interest rate (annual average, %)	0.3	0.9	1.7	1.9	2.0	2.0
Hungary: Long-term interest rate (annual average, %)	3.0	2.9	3.3	3.5	3.6	3.6
HUF/EUR	318.8	320.2	320.9	320.9	320.9	320.9
World excluding EU, GDP growth	3.9	3.6	3.8	3.8	3.8	3.8
EU28 GDP growth	2.1	1.6	2.0	2.0	2.0	2.0
Growth of relevant foreign markets	4.1	3.5	4.1	4.0	4.0	4.0
World import volumes, excluding EU	4.7	3.0	3.6	3.6	3.6	3.6
Oil prices (Brent, USD/barrel)	71.5	68.9	67.6	67.6	67.6	67.6

[1]Based on common external assumptions used by the Commission in its spring forecast

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