EUROPEAN
COMMISSION

Brussels, 27.2.2019
SWD(2019) 1016 final

COMMISSION STAFF WORKING DOCUMENT

Country Report Hungary 2019

Accompanying the document

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN CENTRAL BANK AND THE EUROGROUP

2019 European Semester: Assessment of progress on structural reforms, prevention and correction of macroeconomic imbalances, and results of in-depth reviews under Regulation (EU) No 1176/2011

{COM(2019) 150 final}

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EXECUTIVE SUMMARY

Strong growth performance has created favourable conditions to carry out reforms to increase productivity and strengthen growth fundamentals, economic resilience and convergence capacity ([1]). The economic cycle is near its peak. Productivity growth has improved, but remains below pre-crisis rates, limiting the possibility for income convergence. Economic policy faces the dual task of withdrawing macroeconomic stimulus at the right time to prevent overheating, while improving education and training, and creating a business environment that attracts productivity-enhancing investment.

The Hungarian economy is enjoying a strong cyclical upswing. Households and companies are making up for years of postponed consumption and investment, which is rapidly lifting economic activity. A positive feedback loop is emerging between household income, the housing market and lending, adding to economic momentum. This is an opportunity for a generation of well planned investments. Employment has risen to a new historic peak, thanks to strong demand for labour and policy measures enabling a larger proportion of people to seek paid work. Labour shortages and large minimum wage increases are sparking rapid wage growth. Economic growth was also boosted by pro-cyclical fiscal expansion, entailing rising public investment from own sources and the absorption of EU funds. Monetary stimulus remained in place through record low real interest rates and a gradually depreciating currency.

The domestic recovery is nearing its limits amid external headwinds. Economic growth is set to level off after pent-up consumption unwinds, while investment is stabilising at a high level. The external environment is also providing less support to export growth, while the major role played by the car industry creates a vulnerability to trade disputes and to regulatory and technological change.

Loose macroeconomic policies are heating up the economy. Policy stimulus has supported productivity-enhancing investment, but as the economic cycle matures, it also risks creating new imbalances. Labour costs continue to outpace productivity growth, fuelling inflation. The external surplus of the economy is diminishing, as weakening exports cannot fully counterbalance dynamic import growth. The large increase in public investment is aggravating capacity shortages in construction, leading to cost overruns and project delays, and contributing to rapid house price increases. Persistently easy financing conditions are creating opportunities to invest, but present a challenge in terms of using ample financial resources efficiently. Macroeconomic policies now face the challenge of regaining their manoeuvring space before the next downturn.

Fiscal consolidation efforts are insufficient. The budget deficit is expected to peak at around 2 % of GDP, and only a moderate improvement is projected in the next years. The deficit is one of the highest in the European Union, while public debt also remains high for Hungary's level of development. The favourable economic cycle boosted tax revenues, but the structural deficit rose by 2 percentage points of GDP between 2016 and 2018. In 2018, the Council launched a significant deviation procedure addressed to Hungary ([2]). The structural deficit is expected to improve in 2019, although less than what is recommended by the Council. Further improvement is expected in 2020.

Stronger productivity growth will enable income to catch up with the EU average. In the course of the last decade, the mobilisation of labour market reserves has helped income per head catch up with the EU average, while output per worker has barely grown. Labour reserves have diminished and the working-age population is set to decrease in the medium term. Higher productivity is thus essential if living standards are to be brought closer to the EU average.

Increased investment in research, innovation, infrastructure and skills are important to improve productivity and long-term growth that benefits society as a whole. Public and private investment as a share of GDP is high, but

([1]) This report assesses Hungary's economy in light of the European Commission's Annual Growth Survey published on 21 November 2018. In the survey, the Commission calls on EU Member States to implement reforms to make the European economy more productive, resilient and inclusive. In so doing, Member States should focus their efforts on the three elements of the virtuous triangle of economic policy — delivering high-quality investment, focusing reforms efforts on productivity growth, inclusiveness and institutional quality and ensuring macroeconomic stability and sound public finance.

([2]) https://www.consilium.europa.eu/en/press/press-releases/2018/06/22/hungary-and-romania-called-on-to-correct-significant-budgetary-deviations/

its composition could be better geared to raise productivity. Research and innovation capacities need to be enhanced to improve moderate innovation performance. Territorial inequality could be alleviated by improving infrastructure and public services in deprived areas. Investment is crucially needed in skills, education and training to boost future economic growth in Hungary. Other relevant investment spending items are childcare, healthcare and social inclusion. Greening the economy requires investment in energy efficiency, climate change resilience and waste management. The institutional framework needs to improve to ensure that the economic and social benefits of these investments are maximised. Annex D identifies key priorities for support by the European Regional Development Fund, the European Social Fund Plus and the Cohesion Fund for the 2021-2027 period in Hungary, building on the analysis of investment needs and challenges outlined in this report.

Overall, Hungary has made limited progress in addressing the 2018 country-specific recommendations.

There has been some progress in the following areas:

- The complexity of the tax system has been reduced as several small taxes were abolished or merged. The number of participants in the Public Work Scheme has decreased further and the tax burden on employees after retirement has been cut, helping to unlock labour reserves.

There has been limited progress in the following areas:

- The public procurement framework improved as incentives were created to discourage less transparent tendering procedures. Some measures have been introduced to prevent the high concentration of disadvantaged pupils, in particular Roma pupils, in certain schools, with limited impact. The adequacy of social assistance improved modestly as some transfers were increased.

There has been no progress in the following areas:

- No measures have been put forward to reinforce the anti-corruption framework and strengthen prosecutorial efforts. The regulatory environment in services has not improved. The quality and transparency of decision making and social dialogue has not advanced.

Regarding the progress on reaching the national targets under the Europe 2020 Strategy, Hungary is performing well in reducing greenhouse gas emissions, increasing renewable energy use, boosting the employment rate and cutting poverty. More effort is needed to raise research and development spending and tertiary education attainment, and reduce early school leaving.

Hungary performs well on some indicators of the Social Scoreboard supporting the European Pillar of Social Rights, but challenges remain. The gender employment gap is high, partly explained by a scarcity of childcare facilities for children under 3 years of age. The share of early school leavers increased further from an already high level. While inequality is lower than in other Member States, it has increased since 2008, partly as a result of changes in the tax and benefit system. With social benefits at a low level, the good score on the impact of social transfers can be explained by generous parental leave benefits. On the positive side, the unemployment rate, including long-term, is below the EU average.

The main findings of this country report, and the related policy challenges, are as follows:

Productivity growth remains modest. It has been slow for a decade compared to Hungary's regional peers. Large productivity differences persist between larger, more capital-intensive foreign firms, and smaller, more labour-intensive domestic counterparts. Only few firms innovate, reflecting weaknesses in the entrepreneurial culture and product market competition. Low funding for public research and development is detrimental to the research and innovation system. The skills level of managers and workers are not high enough to secure the spread of efficient business practices such as digitalisation.

Limitations to product market competition hinders the selection process of efficient enterprises. Regulatory barriers and state involvement including new monopolies and ad hoc exemptions from competition scrutiny, inefficient insolvency procedures, targeted measures, and sector specific taxes prevent productive businesses

from starting up and growing. They also shield unproductive firms that might otherwise close down, especially in retail and other services. The complex tax system raises compliance costs, in particular for smaller firms. The absence of withholding taxes on interests, royalties and dividends appears to be used by multinationals engaged in aggressive tax planning structures, but Hungary is taking some steps to limit such practices, in particular by implementing European and internationally agreed initiatives.

Improved institutional capacity would contribute to faster economic convergence. The transparency of policy-making is limited due to the lack of appropriate involvement from employers' associations, trade unions and other stakeholders. The same applies to impact assessments. Fast and unpredictable changes in regulations can discourage high value added investments. The public procurement framework has improved in recent years, but it still fails to promote competition and productivity. Available indicators point to notable corruption risks. Determined action to prosecute corruption in high-level cases is missing. Weak accountability and obstacles in access to public information hinder the anti-corruption framework. The effectiveness of the justice system increasingly raises concerns, in particular as regards judicial independence. Corruption risks and favouritism distort the allocation of resources as these are not channelled to the most productive firms.

Both the education and healthcare systems are underperforming. Educational outcomes in basic skills and the tertiary attainment rate are well below the EU average. Disadvantaged children have little chance of acquiring appropriate basic skills and accessing higher educational tracks. Health outcomes lag behind most other EU countries reflecting unhealthy lifestyles and the limited effectiveness of healthcare provision. There are significant socio-economic disparities in access to quality care. Public spending on healthcare is below the EU average, and high earners rely on out-of-pocket payment to access quality provision. The system remains strongly hospital-centred, with weaknesses in primary care and prevention of chronic diseases. The exclusion of disadvantaged groups, in particular Roma, from quality education is a missed opportunity in human capital accumulation.

Employment policies face the challenge of creating a more inclusive labour market. Gaps in employment and salaries between genders and skills groups remain wide compared with the rest of the EU. The tax burden for single earners on low incomes remains high, despite recent cuts in employers' contributions. Labour market outcomes for vulnerable groups, including Roma and people with disabilities, are weak. The Public Works Scheme has decreased markedly, but it is still oversized and not effective in leading participants to the jobs in the primary labour market. Other policies to help unemployed or inactive people find work or training are insufficiently targeted. Recent measures are designed to get more retired workers back into jobs and to increase overtime.

Poverty has decreased with economic growth. The share of people at risk of poverty and social exclusion is falling, although it was still above the EU average in 2017, while social assistance and unemployment benefits have become less adequate. There has been a clear shift from social benefits towards work-related family support and in-kind benefits, which are not sufficiently targeted on the poor. While home-ownership subsidies have expanded, there has been no improvement in social housing.

Large regional disparities persist. The relatively well-developed capital stands in contrast to weak regional centres and a large number of very small settlements, which struggle with degrading infrastructure and depopulation. Territorial concentration of poverty and social exclusion is also significant. Recent policy initiatives aim to strengthen larger cities and improve quality of living in villages, but a more holistic approach to territorial development is needed.

Shortcomings in the management of natural resources hamper sustainable growth. Energy efficiency remains low, especially in residential buildings. The use of renewable energy sources is rising with potential for further increase. Air pollution and water quality remain concerns and waste recycling is underdeveloped. Hungary is exposed to climate change risks, notably droughts and floods. These issues require additional investment and institutional capacity building.

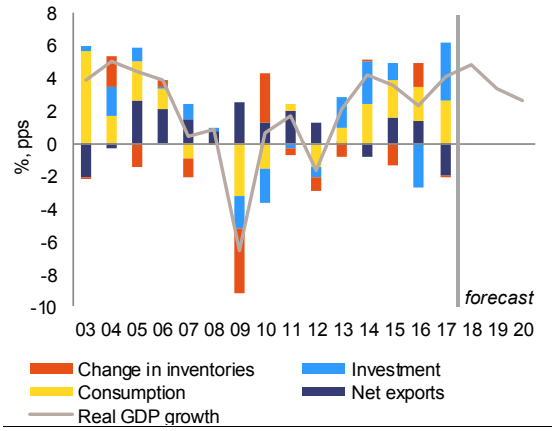
1. ECONOMIC SITUATION AND OUTLOOK

GDP growth

The Hungarian economy is near the peak of a strong cyclical recovery. Domestic consumption and investment are making up for lost years after the financial crisis and macroeconomic stabilisation. Policies that supported the recovery are now exacerbating the heating up of the economy as spare capacity has been absorbed while productivity growth remains modest.

Economic growth accelerated further in 2018, boosted by pro-cyclical fiscal and monetary stimulus. Fiscal expansion materialised through public investments, advance payments of EU funds and administrative wage increases. The monetary stimulus was maintained through negative real interest rates and a depreciating currency. The self-reinforcing dynamics of the labour market, the housing market and lending also added to economic momentum. At the same time, weaker external demand held back export growth.

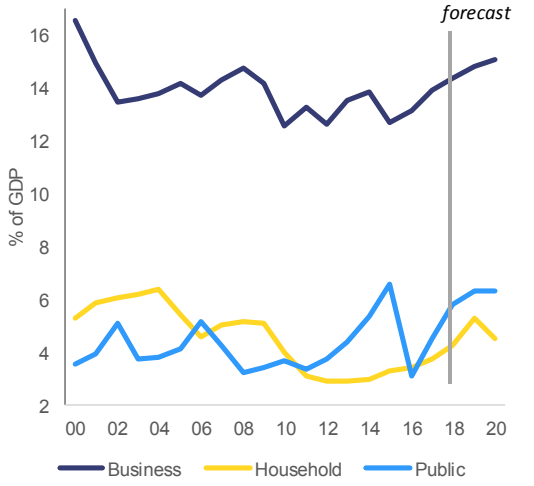
Graph 1.1: **Contributions to real GDP growth**



Source: European Commission, Winter 2019 Economic Forecast

Domestic demand remains the main driver of growth. Strong wage growth, the easing of precautionary saving motives and accessible financing are fuelling consumption and housing investment. Tightening capacity constraints, rising labour costs and easy financing conditions are encouraging corporate investment. Public investment as a share of GDP is set to stabilise at a high level (see Graph 1.2). The increased utilisation of EU funds, which amount to 4 % of GDP annually over the 2014-2020 cycle, is making a significant contribution to investment growth.

Graph 1.2: **Investment rate by sector (% of GDP)**



Source: Eurostat, European Commission Autumn 2018 Economic Forecast

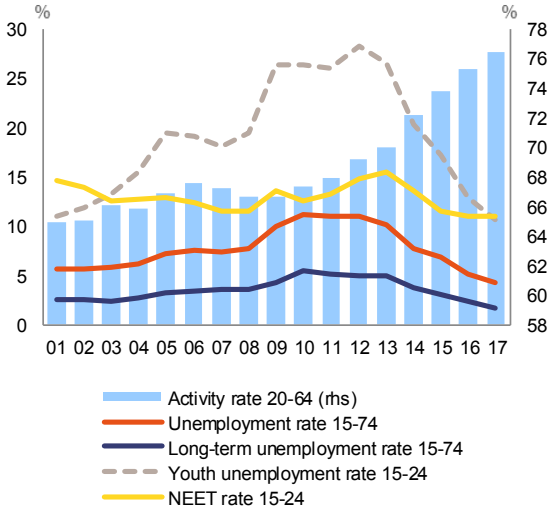
New export capacities are mitigating the impact of the international slowdown, but make Hungary more vulnerable to disruptions in trade flows. Headwinds from the global economy are slowing down export growth. The export market share continues to grow thanks to large capacity increases. However, new export capacities are concentrated in cyclically sensitive sectors such as chemicals, car manufacturing and transport. Therefore the timing of their phase-in, and the expected market share gains, may also depend on the state of the international business cycle. The motor vehicle industry already accounted for 4.9 % of gross value added in 2017, and even over 7 % taking into account input linkages. The increasingly important role of the car industry and its suppliers poses a risk for the Hungarian economy, because these sectors are particularly affected by global trade disputes, and by technological and regulatory change.

Labour market

Labour market performance in Hungary continued to improve in line with the generally good economic situation. The activity rate of those between 20 and 64 years of age reached a record 76 % in 2017, having been on a steadily increasing path since 2009 (see Graph 1.3). It may

continue to increase in the near term, supported by the gradual rise of the retirement age and tax incentives for employment after retirement (see Section 3.2, 3.3). Unemployment, including long-term and youth unemployment, has fallen below pre-crisis levels, and is forecast to decrease further.

Graph 1.3: **Key labour market rates: activity, unemployment, long-term unemployment, youth unemployment, NEET (%)**

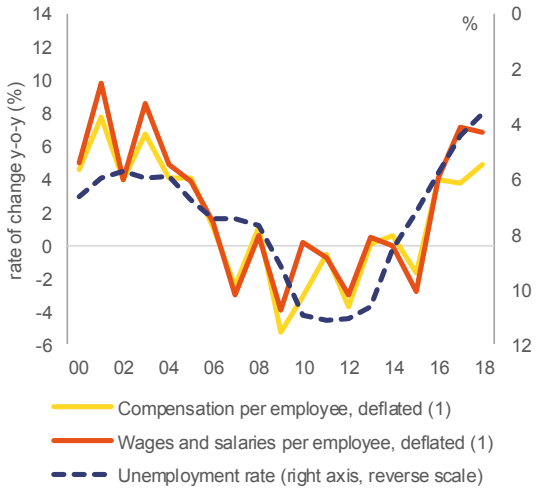


(1) NEET rate: Not in employment, education or training (% of population), total, ages 15-24
Source: Eurostat

The labour market continued to tighten. The number of job vacancies exceeded 87 000 in the third quarter of 2018, around 20 % more than in 2017. In parallel, labour reserves, including the numbers of part-time employees, unemployed people, participants in the Public Works Scheme and certain segments of the inactive population, are shrinking. In the fourth quarter of 2018, 89 % of manufacturing firms reported labour shortages compared with the EU average of 21 %. There are increasing skills and regional mismatches between those seeking work and the jobs on offer (see Section 3.3).

The tight labour market and government measures are fuelling real wage growth. After years of moderation, wage growth has been accelerating sharply since 2017. Nonetheless, average hourly wages in euro terms stood at just one-third of the EU average in 2017, and at 60% even after adjusting for differences in price levels. The government encourages wage convergence through minimum wage increases in a bid to slow down outward migration. Between 2016 and 2020, the minimum wage will have risen by 45% overall, while for skilled workers it will have increased by 63%. Real wage growth is forecast to remain rapid, given the tightness of the labour market and continuing minimum wage hikes (see Graph 1.4).

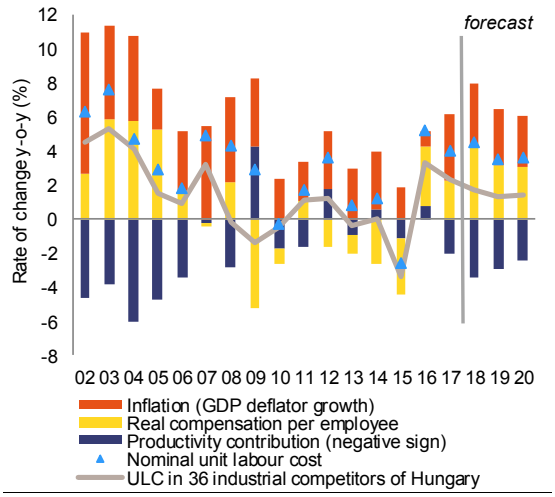
Graph 1.4: **Labour costs and unemployment**



(1) Deflated with HICP inflation
Source: Eurostat

Labour costs continue to outpace productivity gains. Although the impact of rapid wage growth on labour cost is mitigated by the ongoing reduction of employers' social contributions (see Section 3.1), real compensation still outpaces labour productivity gains. Unit labour costs are growing rapidly both in historical comparison and relative to trade partners (see Graph 1.5). Recovering sales volumes and the 2017 corporate income tax cut managed to offset the erosion of profit margins in past years. As these supporting factors wane, labour costs may add pressure on consumer prices and external competitiveness.

Graph 1.5: **Unit labour cost growth**



Source: AMECO

Social developments

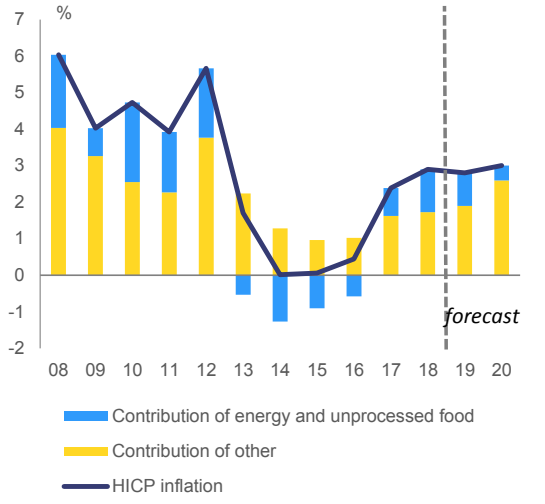
The benefits of growth have not been equally distributed. The growth rate of GDP per capita during 2010-2018 averaged about 2.4 %, which is slightly higher than the growth rate of per capita household income. At the same time, the share of income of the top 20 % has increased from 3.4 times that of the bottom 20 % in 2010 to 4.3 in 2017. This represents a significant increase in inequality, even though the ratio remains below the EU average of 5.1. There are further challenges related to the equality of opportunity. In particular, looking at the 2015 Programme for International Student Assessment (PISA) scores, the variation in Hungarian students' science results which could be attributed to differences in their socio-economic background was among the largest in the EU (see Section 3.3).

Inflation and monetary policy

Rising production costs and strong demand are stoking inflation. Driven by rising fuel and food prices, consumer price inflation in 2018 rose near the mid-value of the 3 % ±1 pp. target band of the central bank. Inflation excluding these volatile items is also on the rise, particularly in the more labour-intensive service categories. A broader set of measures confirms growing price pressure. The GDP deflator was rising by 5 % in the third quarter of 2018, while the annual growth rate of construction prices accelerated above 10 % in autumn 2018.

Inflation is forecast to remain around the central bank target. Although the impact of energy and raw food price increases is set to fade in 2019, administrative measures (most notably tobacco duty increases) will add to inflation. Furthermore, amid strong demand, the currency depreciation of 2018 and sustained labour cost growth can pass through to consumer prices (see Graph 1.6).

Graph 1.6: **Contribution to inflation**



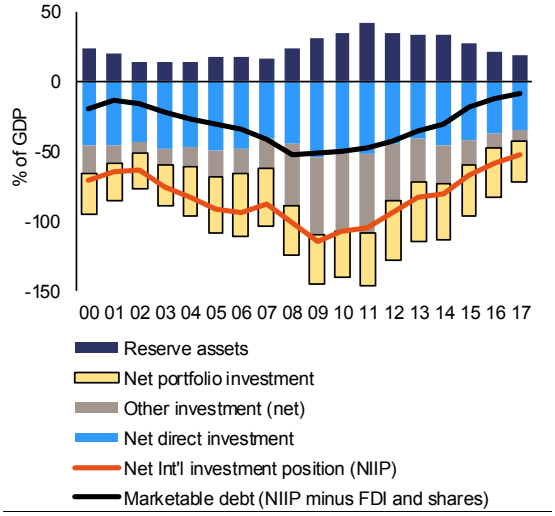
Source: Eurostat

Monetary policy remained loose in 2018, and stimulus is set to be withdrawn only gradually. The central bank kept interbank rates at very low levels through its liquidity operations. Although nominal interest rates increased somewhat in the course of the year, rising inflation kept real rates negative. Other policy measures taken by the central bank sent mixed signals. While the central bank abandoned tools designed to influence long rates, it renewed its Funding for Growth programme for small companies, which will supply them with cheap fixed-rate financing in the years to come (see Section 3.2). Increasing divergence between global and local interest rate expectations contributed to the depreciation of the currency in 2018.

External position

The current account surplus is melting away, but the net financing capacity remains positive thanks to the inflow of EU funds. The trade balance is decreasing on the back of rising import demand and weaker exports. The income balance is also set to worsen slightly, mostly driven by the profitability of foreign-owned companies operating within Hungary, and a deterioration of the labour income balance as the booming economy absorbs more cross-border workers from neighbouring countries. A nearly balanced current account is expected in 2019-2020, which is still higher than the medium-term position explained by economic fundamentals (European Commission, 2018a). From a sectorial perspective, the lower current account is driven by rising private investment, which is only partly offset by lower net public borrowing. As the rising utilisation of EU funds will continue to support the capital account, the external financing position will remain positive.

Graph 1.7: **Net international investment position**



Source: Eurostat

The net international investment position continued to improve on account of the external financing surplus. In the third quarter of 2018, the net position of the government including the central bank amounted to -8.4 % of GDP, while that of the private sector was -39.1 %. The aggregate position of the economy still exceeds prudential benchmarks, albeit to a lessening extent. In addition, the net position on defaultable instruments, the less stable forms of financing, was already nearly balanced at the end of 2017 (see Graph 1.7). Gross external debt fell to near 86 % of GDP by mid-2018, almost halving since its peak of 156 % in 2010. Besides the process of private and public deleveraging and strong nominal GDP growth, the increasing reliance of public debt management on domestic savers also played a role in reducing external debt (see also Section 3.1). The net inward stock of foreign direct investment continued to decrease in 2017, to 35 % of GDP.

Public finances

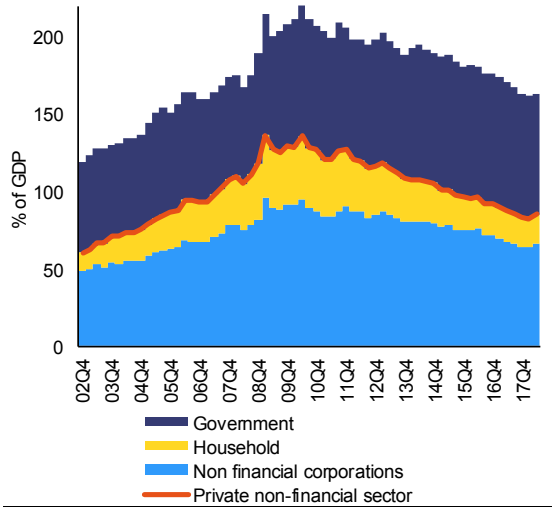
Fiscal policy turned pro-cyclical in recent years. Hungary registered one of the fastest GDP growth rates, above the estimated potential in 2017 and 2018. Instead of building public finance reserves for bad times, the budget deficit rose from 1.6 % of GDP in 2016 to around 2 % in 2018, among the highest in the EU. While major tax bases grew faster than GDP, government spending grew even stronger, mainly due to increased public investments. Part of the cyclical revenues was used to finance tax cuts on employers' social contributions. In addition, public investments grew rapidly, and are forecast to exceed 6 % of GDP in 2019-2020. The structural deficit is estimated to have risen from 1 ¾ % in 2016 to 3 ¾ % in 2018. In 2018 the Council launched a significant deviation procedure addressed to Hungary. The structural deficit is expected to improve by 0.5 % in 2019, although less than what is recommended by the Council. The public debt is high for a middle income economy, at above 70 % of GDP.

Financial sector and housing market

The credit cycle is gaining momentum, spurred by easing financing conditions. Loan demand increased amid robust economic growth. Banks reduced credit spreads and relaxed non-price credit conditions. New lending to corporations and households is accelerating briskly, exceeding the repayments of existing loans. However, after several years of deleveraging, indebtedness levels remain low, especially in the household sector (see Graph 1.8). The stock of outstanding mortgage loans has bottomed out at 7.8 % of GDP in 2017, the lowest level in the EU. The macro-prudential tools of the central bank have ensured prudent household lending practices so far. Policy initiatives in recent years have also borne fruit through shifting new mortgage lending towards loans with long interest rate fixation periods,

limiting interest rate risk in the short term (see also Section 3.2).

Graph 1.8: **Financial liabilities by sector (non-consolidated loans & debt securities, % of GDP)**



Source: Eurostat

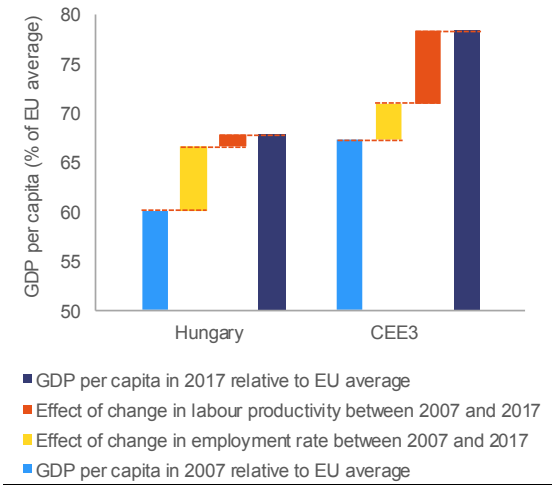
The rise in house prices accelerated in 2018, leading to overvaluation concerns in some market segments. Real house prices rose 6.9 % annually in the third quarter of 2018, up from an annual average 3.6 % in 2017. An alternative house price index by the central bank signals even higher real price increase of 11.7% in the third quarter of 2018. Sustained income growth and high consumer confidence are unwinding pent-up demand on the housing market. In addition, low interest rates raise the attractiveness of housing as an investment asset. Four out of ten property buyers report investment motives as the main reason for their purchase (MNB, 2018a). Against this background, the past undervaluation of housing disappeared after 2016 according to standard valuation metrics such as the price-to-income and price-to-rent ratios. The Budapest housing market has already become overvalued according to the central bank (see Box 3.2.1).

The housing cycle has been intensified by the temporary reduction of value added tax on new housing. Lowering this tax to 5 % from 27 % boosted construction activity. The number of completed apartments rose by 28 % in the first three quarters of 2018, compared to the same period of 2017. The tax reduction was initially due to expire in 2020, but it has been extended until 2023 for projects that had already received building permits by November 2018. The extension came after survey evidence showing delays at the majority of construction projects because of capacity constraints. These constraints are in turn aggravated by the simultaneous, rapid growth of public investments. Meanwhile, the uncertainty surrounding the future tax rate caused a 6 % drop in the number of new building permits in the first three quarters of 2018, foreshadowing a period of weaker housing investment after 2020.

Productivity and potential growth

Modest productivity growth limited income convergence in the last decade. In 2017, Hungarian GDP per capita stood at 67.8% of the EU average, just 7.7 pps higher than a decade earlier. Since the crisis, the rising employment rate has played a key role in the convergence of per capita income, while productivity gains have lagged behind regional peers (see Graph 1.9).

Graph 1.9: **Convergence of GDP per capita between 2007 and 2017 (PPS, EU=100)**

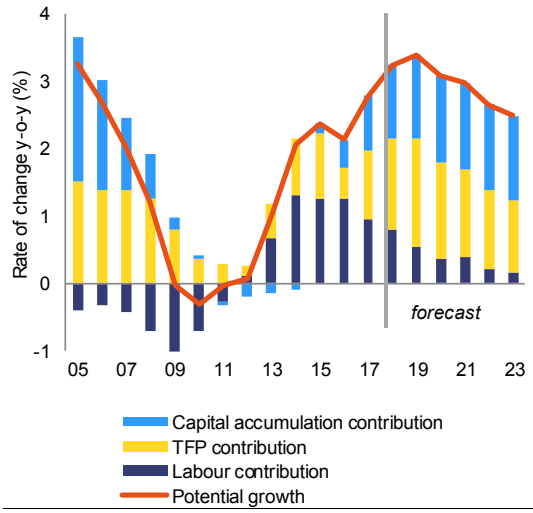


(1) CEE3: Czech Republic, Poland and Slovakia
Source: Eurostat

At the current stage of the economic cycle, high investment supports productivity growth. In the next few years, labour productivity is set to increase at its fastest rate since the financial crisis, albeit still somewhat more slowly than in the pre-crisis period (see Graph 1.10). Technological upgrading through investment can also boost estimated total factor productivity growth. The recovery of lending after a long deleveraging period should facilitate the expansion of

companies with a high growth potential (Duval et al., 2017). However, persistently easy corporate financing conditions also create risks, because credit tends to flow disproportionately to firms with more collateral, but not necessarily higher productivity, resulting in capital misallocation (Cecchetti-Kharroubi, 2015, Gopinath et al., 2017; see also Section 3.2).

Graph 1.10: **Contributions to potential growth**



Source: European Commission Autumn 2018 Economic Forecast

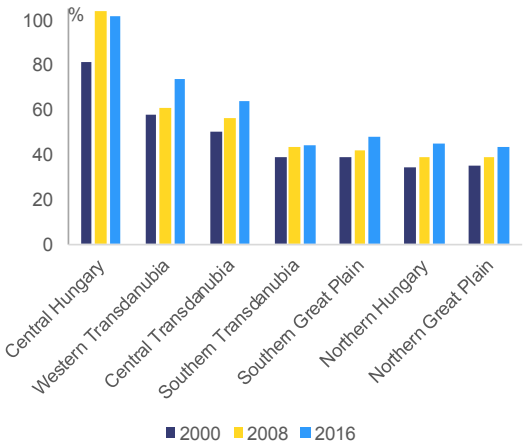
Microeconomic factors continue to constrain productivity growth and long-term convergence. Low innovation activity and inadequate management practices hold back productivity growth within individual firms. The regulatory environment slows down the reallocation of resources towards more productive companies (see Section 3.4). These structural factors are reflected in the moderate rate of estimated total factor productivity growth, and in relatively slow economic convergence over the longer term (see Graph 1.10).

In view of the ageing population, productivity is set to play an even more important role in long-term growth. Without new measures to encourage participation, the labour force is set to start shrinking in the next decade as a result of demographic trends (see Section 3.2).

Regional disparities

Regional disparities remain prominent despite some convergence. The capital city plays an extraordinarily important role in the economy, accounting for 18 % of population and 36 % of GDP. In fact, its income per capita even exceeds the EU average by 36 %. It is surrounded by the much less developed Pest county, whose income level remains at 54 % of EU average, and which is itself divided into a thriving commuting zone around the capital and a struggling hinterland. Among the remaining regions, Western and Central Transdanubia are relatively more developed. The more rapid income convergence they experienced over the last decade was a result of significant foreign direct investment into manufacturing. The remaining four regions are among the least developed regions in the entire EU, and have experienced virtually no convergence in the last decade (see Graph 1.11). Over 10% of their workforce is still employed in agriculture, while their industrial productivity lags significantly behind the national average. They are relatively poorly endowed with human capital and transport infrastructure. Income differences also persist between urban and rural territories. Income per capita is significantly lower in rural than in urban areas (45 % versus 141 % of the EU average) and the difference between them is high in European comparison (European Commission, 2017a).

Graph 1.11: **Regional GDP per capita based on purchasing parity (% of EU average)**



Source: Eurostat

Table 1.1: **Key economic and financial indicators - Hungary**

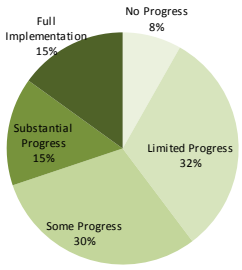
	2004-07	2008-12	2013-15	2016	2017	forecast 2018	forecast 2019	forecast 2020
Real GDP (y-o-y)	3,4	-1,1	3,3	2,3	4,1	4,8	3,4	2,6
Potential growth (y-o-y)	2,9	0,2	1,8	2,1	2,8	3,2	3,4	3,1
Private consumption (y-o-y)	2,0	-2,4	2,3	4,0	4,8	.	.	.
Public consumption (y-o-y)	-0,1	0,6	3,5	0,7	1,3	.	.	.
Gross fixed capital formation (y-o-y)	4,0	-4,3	8,9	-11,7	18,2	.	.	.
Exports of goods and services (y-o-y)	16,6	2,0	6,8	5,1	4,7	.	.	.
Imports of goods and services (y-o-y)	13,6	0,1	7,1	3,9	7,7	.	.	.
Contribution to GDP growth:								
Domestic demand (y-o-y)	2,0	-2,1	3,7	-0,5	6,2	.	.	.
Inventories (y-o-y)	-0,1	-0,5	-0,7	1,4	-0,2	.	.	.
Net exports (y-o-y)	1,5	1,6	0,3	1,4	-1,9	.	.	.
Contribution to potential GDP growth:								
Total Labour (hours) (y-o-y)	-0,4	-0,5	1,1	1,3	0,9	0,8	0,5	0,4
Capital accumulation (y-o-y)	1,4	0,6	0,8	0,5	1,0	1,4	1,6	1,4
Total factor productivity (y-o-y)	1,9	0,1	0,0	0,4	0,8	1,1	1,3	1,3
Output gap	2,5	-2,7	-1,2	0,4	1,7	2,8	2,9	2,4
Unemployment rate	7,1	10,2	8,2	5,1	4,2	3,6	3,3	3,2
GDP deflator (y-o-y)	4,1	3,4	2,7	0,9	3,8	3,7	3,3	3,0
Harmonised index of consumer prices (HICP, y-o-y)	5,5	4,9	0,6	0,4	2,4	2,9	2,8	3,0
Nominal compensation per employee (y-o-y)	7,3	2,4	0,3	4,4	6,2	8,1	6,6	6,2
Labour productivity (real, person employed, y-o-y)	3,6	0,0	0,5	-0,7	2,1	.	.	.
Unit labour costs (ULC, whole economy, y-o-y)	3,6	2,4	-0,2	5,2	4,1	4,5	3,5	3,6
Real unit labour costs (y-o-y)	-0,5	-1,0	-2,8	4,3	0,2	0,8	0,2	0,6
Real effective exchange rate (ULC, y-o-y)	2,7	-2,6	-3,4	3,9	4,1	0,1	0,9	1,4
Real effective exchange rate (HICP, y-o-y)	3,1	-0,8	-2,4	0,8	1,7	-0,4	0,4	0,8
Savings rate of households (net saving as percentage of net disposable income)	6,9	5,5	7,1	8,1	7,3	.	.	.
Private credit flow, consolidated (% of GDP)	13,3	0,8	-1,2	-3,0	0,9	.	.	.
Private sector debt, consolidated (% of GDP)	81,6	110,6	90,4	77,9	71,4	.	.	.
of which household debt, consolidated (% of GDP)	24,8	36,4	24,9	20,3	18,8	.	.	.
of which non-financial corporate debt, consolidated (% of GDP)	56,8	74,2	65,4	57,5	52,6	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (2)	.	9,8	13,1	8,1	5,6	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	-2,8	2,1	3,6	3,3	2,9	3,5	3,4	2,6
Corporations, gross operating surplus (% of GDP)	22,4	23,0	25,0	24,6	25,1	24,9	25,2	24,8
Households, net lending (+) or net borrowing (-) (% of GDP)	2,2	3,0	5,4	4,5	3,6	2,3	1,1	1,7
Deflated house price index (y-o-y)	.	-6,9	3,9	13,6	3,3	.	.	.
Residential investment (% of GDP)	4,4	3,1	2,0	2,4	2,8	.	.	.
Current account balance (% of GDP), balance of payments	-7,4	-1,0	2,7	6,2	3,2	1,3	1,2	1,1
Trade balance (% of GDP), balance of payments	-1,2	4,5	7,2	10,0	7,5	.	.	.
Terms of trade of goods and services (y-o-y)	-0,7	-0,5	0,7	1,1	0,0	-0,4	-0,7	0,0
Capital account balance (% of GDP)	0,5	1,9	4,0	0,0	1,0	.	.	.
Net international investment position (% of GDP)	-89,4	-104,9	-77,0	-58,5	-52,9	.	.	.
NIIP excluding non-defaultable instruments (% of GDP) (1)	-33,8	-49,0	-28,0	-11,9	-8,1	.	.	.
IIP liabilities excluding non-defaultable instruments (% of GDP) (1)	75,2	112,3	86,8	70,8	62,5	.	.	.
Export performance vs. advanced countries (% change over 5 years)	47,1	13,7	-12,2	-3,2	6,3	.	.	.
Export market share, goods and services (y-o-y)	.	.	2,0	5,4	-0,5	.	.	.
Net FDI flows (% of GDP)	-2,5	-1,6	-1,7	-2,3	-1,3	.	.	.
General government balance (% of GDP)	-7,2	-4,1	-2,4	-1,6	-2,2	-2,4	-1,9	-1,8
Structural budget balance (% of GDP)	.	.	-1,8	-1,8	-3,4	-3,7	-3,2	-2,9
General government gross debt (% of GDP)	62,3	77,7	76,8	75,9	73,3	72,9	70,3	68,6
Tax-to-GDP ratio (%) (3)	37,4	38,2	38,3	39,3	38,4	37,6	37,3	37,2
Tax rate for a single person earning the average wage (%)	35,6	35,5	34,5	33,5	.	.	.	.
Tax rate for a single person earning 50% of the average wage (%)	19,6	26,4	34,5	33,5	.	.	.	.

(1) NIIP excluding direct investment and portfolio equity shares
(2) domestic banking groups and stand-alone banks, EU and non-EU foreign-controlled subsidiaries and EU and non-EU foreign-controlled branches.
(3) The tax-to-GDP indicator includes imputed social contributions and hence differs from the tax-to-GDP indicator used in the section on taxation.
Source: Eurostat and ECB as of 31-1-2019, where available; European Commission for forecast figures (Winter forecast 2019 for real GDP and HICP, Autumn forecast 2018 otherwise)

2. PROGRESS WITH COUNTRY-SPECIFIC RECOMMENDATIONS

Since the start of the European Semester in 2011, 60 % of all Country Specific Recommendations addressed to Hungary have recorded at least 'some progress'. 40 % of the recommendations recorded 'limited' or 'no progress' (see Graph 2.1). Substantial progress has been achieved in the financial sector, for instance improving the asset quality of the banks and access to finance.

Graph 2.1: **Overall multiannual implementation of 2011-2018 CSRs to date**



(1) The overall assessment of the country-specific recommendations related to fiscal policy excludes compliance with the Stability and Growth Pact.
2011-2012: Different CSR assessment categories.
The multiannual CSR assessment looks at the implementation since the CSRs were first adopted until the 2018 Country Report.
Source: European Commission

Since 2011 the government has achieved considerable progress in strengthening public finances. It has implemented measures including structural reforms to reduce the budgetary deficit below 3 % of GDP. As a result, in 2013, the decision on the existence of an excessive deficit was abrogated. However, since 2016, the structural deficit has deteriorated and in 2018 the Council concluded that it deviated significantly from its medium-term budgetary objective.

The labour market situation has improved considerably since 2011 supported by the measures implemented by the government. Since the launch of the European Semester, a number of recommendations on labour taxation, tax compliance, active labour market policies, education and social assistance were issued. In the last eight years, the authorities have taken several measures to reduce the tax burden on labour. The tax wedge has been reduced, especially for families and selected groups. However, it remains high, in particular for single low-income earners. There has been some progress with active labour market policies. For years, the authorities' main focus was the Public Works Scheme, despite its limited efficiency. Recently, the number of participants in the Scheme has declined markedly, reflecting improving labour market conditions.

Digitalisation in taxes and public procurement has improved the business environment. Hungary has received recommendations to improve the business environment every year since the European Semester started**.** Recommendations cover several fields, including: administrative burden; public procurement; the legislative process; competition; the regulatory environment; and corruption. While the complex tax system and high compliance cost remains a challenge for firms, several promising measures were developed building on digitalisation. The authorities implemented an e-procurement system to improve transparency and boost competition in public procurement.

The quality of banking sector assets has greatly improved and lending activity has picked up. Between 2013 and 2015 Hungary received yearly recommendations to take measures to restore lending to the real economy, to reduce burdens on banks and to improve asset quality. Since then, the banking tax has been reduced significantly and the level of non-performing loans held by banks has dropped considerably.

Following the 2016 country report and the in-depth review, Hungary is no longer deemed to experience macroeconomic imbalances. Since 2016, the economy has experienced a strong recovery. External imbalances have been significantly reduced and the public debt ratio has declined since the beginning of the decade. The indicators of the net international investment position have rapidly improved. However, there have recently been indications that the economy is heating up, which warrants close monitoring.

Table 2.1: **Assessment of the implementation of 2018 country-specific recommendations (CSR)**

Overall assessment of progress with 2018 CSR:	**Limited progress**
CSR1: *In 2018, ensure compliance with the Council recommendation of 18 June 2018 with a view to correcting the significant deviation from the adjustment path toward the medium -term budgetary objective. In 2019, ensure that the nominal growth rate of net primary government expenditure does not exceed 3.9 %, corresponding to an annual structural adjustment of 0.75 % of GDP.*	CSRs related to compliance with the Stability and Growth Pact will be assessed in spring once the final data are available.
CSR2: *Continue simplifying the tax system, in particular by reducing sector-specific taxes. Improve the quality and transparency of the decision-making process through effective social dialogue and engagement with other stakeholders and by regular, adequate impact assessments. Reinforce the anti-corruption framework, strengthen prosecutorial efforts and improve transparency and competition in public procurement inter alia through further developing the e-procurement system. Strengthen competition, regulatory stability and transparency in the services sector, in particular in retail.*	**Limited progress** • Some progress has been made in reducing the complexity of the tax structure. • No progress made in improving the quality of decision making. • No progress has been made on strengthening anti-corruption framework and prosecution. • Limited progress has been made on strengthening transparency and competition in public procurement. • No progress has been made on improving the regulatory environment in the services sector.
CSR3: *Unlock labour reserves through improving the quality of active labour market policies. Improve education outcomes and increase the participation of disadvantaged groups, in particular Roma, in quality and inclusive mainstream education. Improve the adequacy and coverage of social assistance and unemployment benefits.*	**Limited progress** • Some progress has been made to unlock labour reserve. • Limited progress has been made to improve educational outcomes and to increase the participation of disadvantaged groups, in particular Roma, in inclusive mainstream education. • Limited progress has been made in improving the adequacy and coverage of social assistance and unemployment benefits.

Source: European Commission

Hungary has made limited progress in addressing the 2018 country-specific recommendations (see Table 2.1). Some progress has been made in reducing the complexity of the tax system and unlocking labour reserve. Progress has been limited in increasing the participation of disadvantaged groups, in particular Roma, in inclusive mainstream education and in improving the adequacy and coverage of social assistance and unemployment benefits. Limited progress has been made in improving transparency and boosting competition in public procurement. There has been no progress towards improving the anti-corruption framework and strengthening prosecutorial efforts, improving the regulatory environment in services or improving the quality and transparency of decision-making, including the social dialogue.

Box 2.1: EU funds and programmes contribute to addressing help overcome structural challenges and to fostering growth and competitiveness development in Hungary

Hungary is one of the main beneficiaries of EU solidarity. European Structural and Investment Funds (ESI Funds) aimed to support Hungary in facing development challenges, amount to EUR 25 billion under the current Multiannual Financial Framework, equivalent to around 2.9 % of GDP annually or around 53.6 % of all public investment per year on average. At the end of 2018, 104 % of the available budget was committed to specific projects. In addition, EUR 1.1 billion was allocated to projects on strategic transport networks through a dedicated EU funding instrument, the Connecting Europe Facility. Furthermore, a number of Hungarian research institutions, innovative firms and individual researchers benefited from other EU funding instruments, notably Horizon 2020 which provided EUR 212 million. The Fund for European Aid to the Most Deprived provides almost EUR 93 million to support the most vulnerable in Hungary.

EU funding has helped to address policy challenges also identified in previous CSRs. European Social Fund supported public education (including combatting early-school leaving and exclusion) and to the reduction of labour market mismatches (through enhancing the employability of disadvantaged groups, vocational education and training and lifelong learning). By October 2018, more than 88 000 adults had participated in dedicated trainings. Hungary received support from the Youth Employment Initiative to combat youth unemployment, benefitting over 40 000 young people to date. Early childhood care and social inclusion measures especially for Roma are further important areas for investment. By the end of 2018, the European Agricultural Fund for Rural Development (EAFRD) improved the competitiveness of 9 054 agricultural holdings. The European Regional Development Fund (ERDF) supported closer collaboration between business and research institutions, improved research infrastructures and R&D investments in the private sector. By the end of 2018, ESI Funds supported capacity building in over 16 000 firms and helped 700 firms introduce new products in their markets. By 2018, investments mainly driven by the ERDF and the Cohesion Fund have led to building or modernisation of 268 km of roads and 321 km of railways, and improved water supply for 700 000 people.

In addition, the Commission can provide tailor-made technical support upon a Member State's request via the Structural Reform Support Programme to help Member States implement growth-sustaining reforms to address challenges identified in the European Semester process or other national reforms. In Hungary, for example, the Commission is assisting the authorities in their efforts to contribute to the integration of capital markets by linking the Hungarian Central Securities Depository with other central securities depositories in Central and Eastern Europe. Additional support will soon start to improve the quality and cost-effective accessibility to primary care services and ambulatory surgeries.

EU funding contributes to the mobilisation of private investment. While private beneficiaries of EU grants pay a part of the investment and therefore mobilise additional funding, financial instruments are a useful tool for achieving higher leverage. ESI Funds allocate about EUR 2.3 billion in the form of loans, micro-loans, guarantees and equity, supporting investments on R&D, innovation, information and communication technology, energy efficiency, and social investments. In Hungary, financing under the European Fund for Strategic Investments (EFSI) amounts to EUR 548 million, and is set to trigger EUR 2.4 billion in additional private and public investments. Hungary ranks 10th as to the volume of approved operations as a share of GDP. Under the Infrastructure and Innovation window, 5 projects involving Hungary and financed by the European Investment Bank with EFSI backing were approved, worth about EUR 420 million and triggering EUR 1 billion investment. Under the window for small and medium sized enterprises, 9 agreements were approved with intermediary banks or funds financed by the EIF with EFSI backing, for a total of EUR 128 million. The latter has triggered EUR 1.4 billion in investments with some 12 000 companies expected to benefit from improved access to finance.

EU actions strengthen national, regional and local authorities and the civil society. EUR 523 million has been allocated for modernising public administrations at different levels. Additionally, with EUR 172 million the EAFRD through 103 Local Action Groups provide rural communities in Hungary with a method for involving local partners in steering the future development of their area.

https://cohesiondata.ec.europa.eu/countries/HU

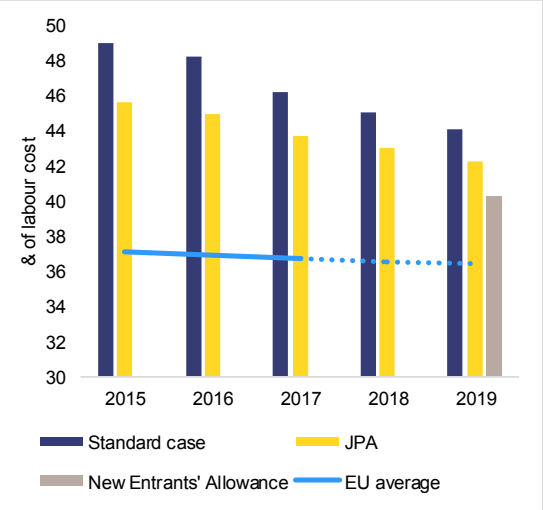
3. REFORM PRIORITIES

3.1. PUBLIC FINANCES AND TAXATION

3.1.1. TAXATION

Hungary's relatively high tax-to-GDP ratio has decreased. In 2017, it stood at 38.3 % of GDP, after dropping by 1 percentage point from 2016. It is 0.8 pps below the EU average, but well above the level of regional peers. In EU comparison, the share of revenues from labour taxation is low and decreasing, while the weight of consumption taxes is high and increasing further. Environmental tax revenues stood at 2.5 % of GDP in 2017, near the EU average. However, there is no CO_2 emissions-based vehicle tax, and the value added tax rate on energy has been cut. Revenues from recurrent property taxes and capital income tax are markedly below the EU average.

Graph 3.1.1: **Tax wedge of a single worker earning 67% of average wage**



(1) JPA: employees in jobs which required no qualifications and for agricultural workers
Source: European Commission based on OECD data

The high tax burden on labour has decreased. Employers' social contribution rates were lowered by a total of 7.5 pps in 2017-2018, reducing the tax wedge by about 3 pps. Despite these measures, the tax burden on labour remains high for low-income earners. In 2017, the tax wedge for singles without children at any income level stood at 46.2 %, which exceeded the EU average by 14 and 8 pps for those earning 50% and 67% of average wage respectively. The tax wedge for high-income earners is close to the EU average, reflecting the flat personal income tax rate. The flat design reduces work incentives for low wage earners and raises equity concerns. There are progressive elements for families with children. In particular, child tax credit substantially reduces the tax burden for low-income households with children. However, the tax wedge remains above the EU average for these households as well. Employers' social contribution is set to be reduced by additional 2 pps in 2019. In addition, the framework of social contribution allowances was renewed as of January 2019 in order to better target benefits towards new entrants and the low skilled (see Graph 3.1.1).

Sector-specific taxes and a large number of small taxes complicate the tax system. Sector-specific taxes raise concerns because they create distortions and weaken the investment climate in general. They also risk creating an uneven playing field for businesses. The tax system operates about 60 different taxes, many of which are small and generate administrative burden. Recently, some minor taxes, such as the cultural tax, were phased out, while others were merged. In 2019, the upper rate of the bank levy was lowered further from 0.21 % to 0.2 %, and it will cease to apply to investment companies.

Some goods and services are simultaneously subject to reduced value added tax rates and to additional sector-specific levies. This makes the tax system even more complex and has counterbalancing effects. The government justifies the use of reduced value added tax rates on the grounds of tax compliance and fairness considerations. However, these goals can be served more directly and in a more targeted way through other measures, including better tax collection and income redistribution (OECD, 2014).

Hungary is continuing its efforts to reduce high compliance costs. Medium-sized companies had to spend 277 hours a year to meet main tax obligations in 2017, which was among the highest in the EU. This represents a drop of 53 hours compared to 2007, mostly because of a reduction in the time spent on corporate income tax obligations (WB-PWC, 2019). The introduction of

group taxation for corporate income tax purposes from 2019 is likely to cut businesses' compliance costs further, particularly because it may be applied together with value added tax group and accounting consolidation to enhance centralisation.

Measures to reduce tax abuse produced significant revenue yields. The introduction of online cash registers from 2014 helped boost value added tax revenues. In addition, a system of online invoicing was introduced in 2018, which enables business-to-business invoices to be monitored in real time. Partly as a result of these measures, the value added tax gap (i.e. revenue loss relative to total tax liability) fell from 21 % in 2013 to 13 % in 2016, close to the EU average (CASE et al., 2018). This trend is set to continue, as the higher value added tax revenue figures for 2018 suggest.

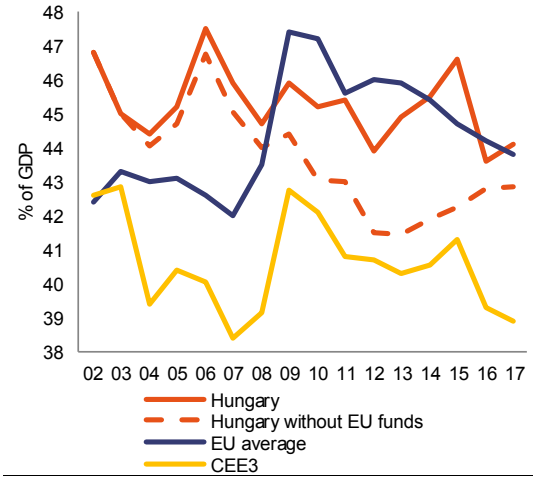
High capital flows through special vehicles, coupled with the absence of withholding taxes may indicate that Hungary's tax rules are used by companies that engage in aggressive tax planning. Hungary records relatively high capital inflows and outflows through special purpose entities, which have no or little effect on the real economy (OECD, 2016). The absence of withholding taxes on dividend, interest and royalty payments made by companies based in Hungary may lead to those payments escaping tax altogether, if they are also not subject to tax in the recipient jurisdiction, potentially facilitating aggressive tax planning (ZEW, 2016).

Hungary is acting to curb aggressive tax planning by implementing EU and internationally agreed initiatives. In 2019, some provisions of the Anti-Tax Avoidance Directive, such as interest limitation rules, have been introduced, while controlled foreign company rules have been extended. Other provisions like the anti-hybrid and exit tax rules will be introduced from 2020. In the context of the Base Erosion and Profit Shifting project, a minimum level of protection against treaty abuse has been developed and is embedded in the Multilateral Instrument articles. Hungary has signed this agreement in 2017, but has put reservations on many articles. It is still too early to assess the impact of the measures implemented. It remains important to assess the extent to which new measures will limit the scope for aggressive tax planning in Hungary.

3.1.2. QUALITY OF PUBLIC EXPENDITURE

Government expenditures remain higher than in regional peers. The primary expenditure-to-GDP ratio, excluding interest costs, remains closer to the EU average (see Graph 3.1.2). The underlying expenditure trend, which excludes EU transfers from primary spending, has followed an opposite pattern to that in the EU. It decreased by 5 pps between 2006 and 2012, primarily as the result of contained spending on social transfers and the public wage bill. However, the reduction of spending is being reversed and the underlying expenditures-to-GDP ratio has been rising since 2013. In contrast, other EU countries raised their expenditure ratio during the crisis, but reduced it in recent years as their economies recovered. With one of the highest economic growth rates in the EU, Hungary needs to build stronger fiscal buffers in order to prepare its economy for future potential risks stemming from lower economic growth.

Graph 3.1.2: **Trends in primary expenditure (% of GDP)**

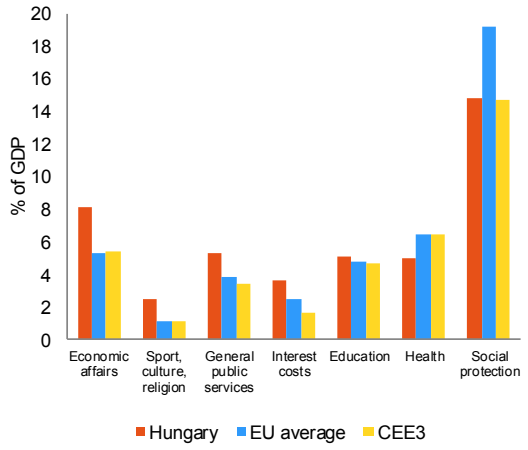


(1) CEE3: Czech Republic, Poland, Slovakia
Source: European Commission

Public spending on human capital accumulation is low. Health expenditures are markedly lower than the EU and regional average (see Graph 3.1.3), and even declined in the last decade, contrary to increasing trends across the EU. The largest fall occurred in the pharmaceutical budget, reflecting a series of cost-containment measures. Recent reviews of the State Audit Office have revealed the low efficiency of spending by public healthcare providers. Total spending on education

as a share of GDP is close to the EU and regional average. However, complementary statistics rank Hungary among the last in the EU on every education level, and also in terms of expenditure per student (OECD, 2018a). Low spending contributes to weak health and education outcomes, which are a key challenge to long-run economic growth (see Section 3.3).

Graph 3.1.3: **Breakdown of general government spending, three year average (2014-2016)**



(1) CEE3: Czech Republic, Poland, Slovakia
Source: Eurostat COFOG statistics

Spending on economic affairs, public administration, debt service, sport, culture and religion is comparatively high (see Graph 3.1.3). Expenditure on economic affairs has risen noticeably, well above the EU average since 2010. This development is linked to increased state involvement in the economy, the extension of the Public Works Scheme and high infrastructural investment. Spending on general public services is also well above the EU and regional average owing to the higher wage and operational costs of executive and legislative organs, external, financial and fiscal affairs. Spending on sport, culture, broadcasting and religion relative to GDP was more than three times as much as the EU average in 2016. Debt service costs have fallen markedly over the last decade, but remain high compared to other EU countries as the relatively high debt ratio is coupled with one of the highest implicit interest rates.

3.1.3. DEBT SUSTAINABILITY ANALYSIS AND FISCAL RISKS

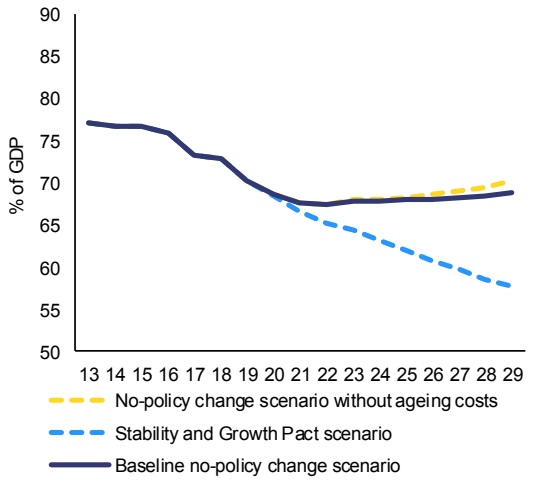
Hungary's public debt ratio has been declining since 2011, but remains high for a middle-income economy. In 2017, it further decreased to 73.3 %, having fallen by more than 7 pps from its peak in 2011. Debt reduction was initially driven by successive primary surpluses, but since 2017 it has been led mainly by high nominal GDP growth. The takeover of mandatory second-pillar private pension assets by the state, amounting to about 10 % of GDP, also supported the debt reduction. The revaluation of foreign-currency-denominated debt increased the debt ratio by 4.9 % of GDP between 2011 and 2017. Over the same period, the central bank made a cumulative profit of around 4 % of GDP on currency transactions, of which 0.2 % was used to reduce debt.

Domestic actors play an increasing role in debt financing. To reduce the adverse impact of currency depreciation on public debt, Hungary cut the proportion of foreign-currency-denominated debt from above 50 % to about 20 % between 2011 and 2017. In parallel, the share of domestic-owned debt also increased markedly. To facilitate this process, new types of bonds were issued for households, offering a higher interest of 200-300 basis points above the rates available for institutional investors. In 2018, these retail securities already accounted for 25 % of public debt, significantly adding to debt servicing cost.

The debt trajectory could deteriorate in the medium term without further fiscal adjustment. The debt ratio is projected to fall by more than 4 pps over 2018-2020 due to the continuing decline in interest outlays and fast nominal GDP growth. In the medium term however, the debt ratio is projected to stagnate just below 70 % in a no-policy-change scenario (see Graph 3.1.5) (European Commission, 2019). The closing of the positive output gap increases the primary deficit, which is only partly offset by declining age-related public expenditure, reflecting savings on the parametric pension reform. The debt-increasing impact of the primary deficit is calculated to be offset by a modestly favourable snowball effect. Using a higher deflator in the calculations, which would be more in line with the central bank's 3 % inflation target, would imply a faster reduction in the medium term. If the structural balance was

gradually improved to the Hungary's medium-term objective, the debt ratio would fall below 60 % by 2028 (see Graph 3.1.5).

Graph 3.1.4: **Gross government debt ratio: the baseline scenario and alternative trajectories**



Source: European Commission

No significant risks of fiscal stress are foreseen in the short term. However, some fiscal variables in the Commission's assessment framework point to possible short-term challenges, in particular the low primary balance, high share of short-term debt, gross financing needs and relatively high yield spreads, especially if there were to be a rapid change in the financial markets' perceptions, could deteriorate public finances in the future.

Fiscal sustainability risks are high in the longer term. The structural primary balance should improve by 1.1 pps of GDP over 5 years relative to the 'no-policy-change' scenario, in order to bring the debt ratio to the 60 % reference value by 2033. The upfront fiscal adjustment ensuring that the debt ratio would not move on an ever-increasing path, amounts to 4.1 % of GDP. This reflects the increasing ageing related costs in the long term. Spending on pensions and healthcare is projected to increase by 2.3 % of GDP between 2016 and 2070 (European Commission, 2018b). These indicators imply medium risks. The level of risks increases to high in alternative scenarios, in particular when considering a rise in interest rates.

3.1.4. FISCAL FRAMEWORK

The mandate of the Fiscal Council has been extended by recent measures, but its analytical remit remains narrow. In July 2018, the Economic Stability Act was amended, extending the Council's monitoring mandate to cover the domestic nominal and structural budget balance rules. This step means that the Fiscal Council is to check compliance with all national numerical rules, in line with the provisions of the Budgetary Frameworks Directive. Even before this legislative change, in June 2018, the Council had, for the first time, at its own initiative, issued an opinion on the 2017 budgetary execution, which included an ex post assessment of compliance with all domestic rules in force. Although these reforms are steps in the right direction, an imbalance persists between the narrow analytical remit of the Fiscal Council, in particular as regards fiscal issues outside the annual budget-making cycle, and its constitutionally enshrined veto right.

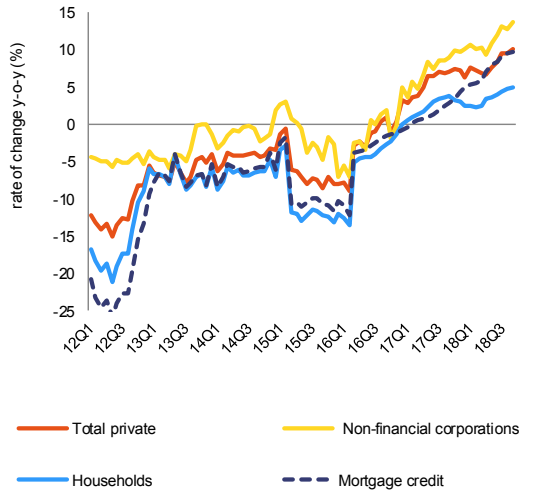
There has been noteworthy progress with the rollout of the medium-term budgetary framework, but it still does not genuinely guide fiscal planning. A key feature of the Hungarian mechanism is that differences between the medium-term expenditure and revenue plans for budgetary chapters (laid down in a government resolution by end-December in year t-1) and the draft budget for year t+1 must be formally justified in the budget documentation. Since the first application of this requirement in 2016, when the written justifications for such differences were often unavailable, there has been remarkable progress. The explanations that have been provided more recently are numerically detailed and the differences are generally smaller in most budgetary chapters. Still, even a rigorous implementation of this provision would imply that the controlling role of medium-term plans is limited as the explanatory requirement concerns only the appropriations for year t+1 and plans for later years can be revised freely in a new resolution ([3]).

([3]) In November 2018, the Public Finance Act was also amended. It now stipulates that national medium-term fiscal plans must include an assessment of the sustainability of any major policies envisaged. It must also cover their direct long-term budgetary impacts.

3.2. FINANCIAL SECTOR

Strong economic growth supports the resilience of the banking sector. New lending has picked up, backed by improved borrowers' confidence and demand on the part of borrowers, as well as banks increasing willingness to lend. Banks comfortably meet liquidity and capital adequacy requirements. Their profitability improved further up to the first half of 2018, albeit largely thanks to one-off items. While the ratio of non-performing loans continued to decrease last year, it remains high compared to the EU average, as do banks' operating costs. The state maintains a strong presence in the financial sector.

Graph 3.2.1: **Credit growth**



Source: ECB

Banking sector assets are expanding as new lending picks up. In the third quarter of 2018, the balance sheet of monetary financial institutions grew by 7.2% y-o-y. The loan stock of both large corporations and small and medium sized enterprises grew by 14 %, while household loans were up by 5 % (based on transactions; see also Chart 3.2.1). Banks have increased their exposure to state by expanding their holdings of government bonds. Their share in the sector's assets has risen from around 12 % in 2012 to 22 % in the third quarter of 2018, the highest in the EU. This process has been encouraged by various central bank programmes over the past years.

Lending conditions are easing, but credit standards have remained prudent overall. Loan to value ratios of new mortgage loans have been stable near 55 % while strong income growth keeps borrowers' payment-to-income ratio in check. The central bank considerably tightened the latter ratio for flexible rate loans from October 2018. Following the introduction of the Certified Consumer Friendly Housing Loans scheme in 2017, consumers chose fixed-interest rates housing loans more frequently than variable ones – in contrast to previous years – to lock in the currently low interest rate levels. Contrary to household lending, risks of foreign currency lending persist in the commercial real estate segment: 82 % of the portfolio is euro denominated, with similar shares registered in new lending. These projects continue to run unhedged currency risk because, even though rental fees are listed in euros, a large proportion of tenants earn revenues in forints (MNB, 2018b).

The widespread availability of financing eases investment barriers, but can also lower their efficiency. Both real borrowing costs and non-price lending conditions have eased. In addition, several public programmes offer financing on favourable terms from both EU and national sources. Despite the expiry of the Funding for Growth Scheme in 2017, the central bank decided to launch a fourth round of the scheme in January 2019 with a total budget of around EUR 3 bn to

Table 3.2.1: **Financial soundness indicators, all banks in Hungary**

(%)	2010	2011	2012	2013	2014	2015	2016	2017	2018Q2
Non-performing debt	10,9	12,8	14,1	14,0	14,2	11,0	8,1	5,6	5,0
Non-performing loans	-	-	-	-	19,4	15,2	11,9	8,4	6,7
Non-performing loans NFC	-	-	-	-	26,0	23,4	15,5	9,8	7,1
Non-performing loans HH	-	-	-	-	26,6	20,4	17,5	12,2	11,7
Coverage ratio	51,0	52,2	59,0	63,8	58,7	57,7	60,3	59,1	63,2
Loan to deposit ratio*	136,9	128,0	110,6	102,1	94,8	80,9	73,4	70,7	70,3
Tier 1 ratio	11,5	11,3	13,3	14,7	13,8	13,9	15,9	14,2	15,3
Capital adequacy ratio	14,1	13,8	16,3	17,4	17,0	16,9	18,0	16,2	17,2
Return on equity**	-0,3	-12,0	-5,1	-0,4	-21,9	0,3	11,7	14,5	-
Return on assets**	0,0	-0,9	-0,4	0,0	-2,0	-0,1	1,3	1,5	-

* ECB aggregated balance sheet: loans excl to gov and MFI / deposits excl from gov and MFI
** For comparability only annual values are presented
Source: ECB CBD

provide small firms with long-term loans (up to 10 years) at maximum fixed-interest rate of 2.5 %. In parallel, the central bank continues to run the Market-Based Lending Scheme, aiming to enhance banks' lending to small firms, while public development banks also offer financial support through loans and credit guarantees (see Box 3.4.1). Given the ongoing recovery of private lending, the extent of public intervention in the bank credit market appears excessive and may crowd out market lending. The abundance of competing financing schemes also creates incentives for firms to look for funds with the least strings attached, reducing demand for better-monitored programmes (Kállay, 2015). This concern is backed up by an analysis of EU funds in the 2007-2013 cycle, which found that non-refundable EU grants to small firms had less of an impact on firm level productivity than refundable ones (Banai et al. 2017).

Non-bank finance is modest and dependent on EU funds. Capital market financing has not grown much since 2017. EU funds are sponsoring a programme carried out by the Budapest Stock Exchange to help small and medium sized enterprises prepare for stock exchange listing. EU funds also play a major role in venture capital financing, whose size relative to GDP had grown to near the EU average by 2016.

Financial soundness indicators are not currently giving rise to any concerns about stability (see Table 3.2.1). Banks are maintaining adequate financial resilience and sound solvency ratios. Their capital position improved further in the first half of 2018. In the same period, the loan-to-deposit ratio fell further to around 70 % from 73 % at the end of 2016. The aggregated stock of non-performing loans fell to 5 % in the first half of 2018, while this share is still high among the households. The total decline was mostly due to sales of portfolios to debt and asset management companies, but it was also supported by the increase in lending stock and the improving repayment capacity of borrowers as a result of strong economic growth. Debt management companies have also reduced their non-performing loan stock. Their corporate holdings fell by over 30 % between 2015 and 2018. The average coverage ratio remained at around 60 %, with major variations between banks.

Record bank profits in 2017 and the first half of 2018 were boosted by one-off items. The average return on equity for all institutions was a record high 14.5 % in 2017, and remained strong in the first half of 2018. Nevertheless, the profitability is heterogeneous across the sector and is much lower in small institutions, among which seven still booked after-tax losses. The outstanding results were possible largely thanks to one-off items including dividend and to trading revenue, as well as the reversal of provisions. Return on equity without one-offs is estimated at 8 %. It is still high in comparison to the EU average, thanks to high net interest income. However, low interest rates and intensifying competition are gradually eroding margins, bringing operating efficiency into focus.

Hungarian banks' relative inefficiency weighs on their long-term profitability. Operating costs across the sector remain high in EU and regional comparison. Banks have made efforts to contain costs by keeping annual wage increases five percentage points below the national average since 2014, and by reducing the number of branches by one quarter between 2014 and 2018. Still, Hungarian banks – apart from the largest institutions – make slow progress in applying digital technology to banking. Hungary ranks among the last in the EU in terms of digital banking (MNB, 2018b). The central bank has recently launched an innovation hub and a regulatory sandbox to support the spread of financial technology in local institutions. Finally, the widespread use of cash in the economy drives up banks' operating costs. Currency in circulation has risen from about 8 % of GDP in 2010 to nearly 14 % by 2018, also encouraged by the introduction of the financial transaction tax in 2012. In July 2018, the government adopted a five-year action plan to reduce cash use in transactions with the public sector, and among businesses. As of January 2019, HUF 20 000 from every individuals' transaction is exempt from the transaction tax.

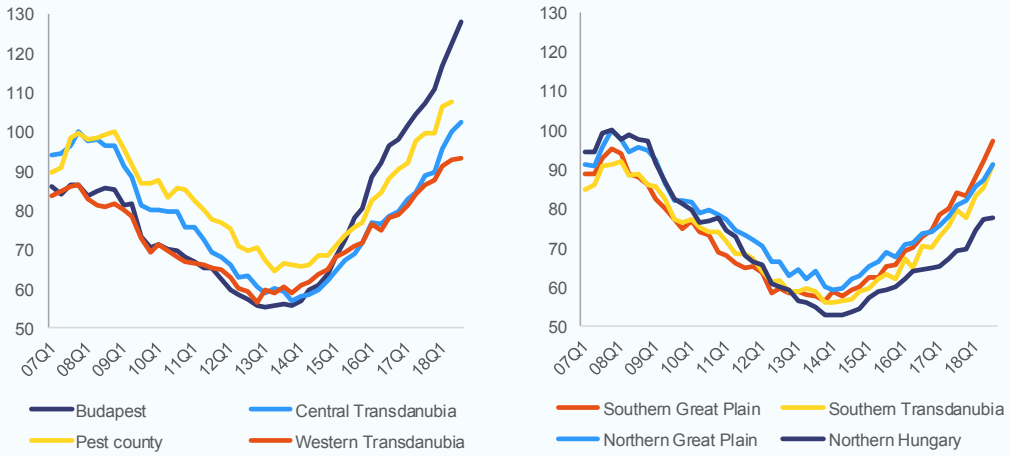
Divestment by the state in the sector progresses slower than planned. Despite earlier declarations and market demand, the government has not sold Budapest Bank (the eighth largest bank). It also maintains stakes in smaller institutions. The central bank remains a majority shareholder of the Budapest Stock Exchange, giving rise to a potential conflict of interest as it is also responsible for supervising the stock exchange.

Box 3.2.1: **Regional disparities in house prices**

The Hungarian housing market is characterised by strong regional disparities. The regional house price indices published by the central bank show that individual regions are in different stages of the housing cycle. Prices in Budapest have already surpassed their last peak by 28 %, adjusted for changes in purchasing power. Two further regions have reached the high point of the last cycle, while the remaining regions remain 3-22 % percent below it.

Regional house prices largely reflect differences in socio-economic developments, such as income levels and growth rates, unemployment rates and internal migration flows. In addition, the legacy of foreign currency loans, which were the most prevalent in the least developed regions, may affect house prices persistently (Verner-Gyöngyösi, 2018).

Graph 1: **Real house prices in Hungarian regions (peak of previous cycle=100)**



Source: MNB Central Bank of Hungary

In the case of Budapest, standard economic fundamentals alone cannot account for all of the increase in prices (MNB, 2018a). Specific factors may stem from the unique role played by the capital, which is not just a centre for national economic activity, administration and education, but also a regional economic hub and a major tourist destination. All this has made the Budapest housing market more attractive to foreign investors. In 2017 non-native buyers accounted for 8.8 % of transactions in the capital, compared to 3.6 % in the rest of the country (HCSO, 2018a). Administrative data show that the share of buyers from outside the European Union rose from 1.7 % to 6 % between 2010 and 2016, largely on account of rising interest from China. Meanwhile, the share of non-EU buyers remained flat at 0.5 % outside the capital. International evidence suggests that economic and political developments in host countries can affect foreign demand for housing, making Budapest house prices more exposed to global factors ([1]). At the same time, rising tourism and hotel capacity shortages led to the rapid spread of Airbnb services in Budapest, which already involve 1 % of all apartments (Jancsik et al., 2018).

Budapest-specific factors can also accelerate suburbanization, which pushes up prices and boosts construction and economic activity in neighbouring municipalities. On the other hand, negative side-effects of suburban sprawl include road congestion, pollution, and rising spatial mismatches in the supply and demand of public services (Kovács-Tosics, 2014). Addressing these challenges requires coordinated effort and investments in the metropolitan area in several policy fields.

([1]) See Badarinza-Ramadorai (2018) for evidence on the London housing market.

3.3. LABOUR MARKET, EDUCATION AND SOCIAL POLICIES

3.3.1. LABOUR MARKET

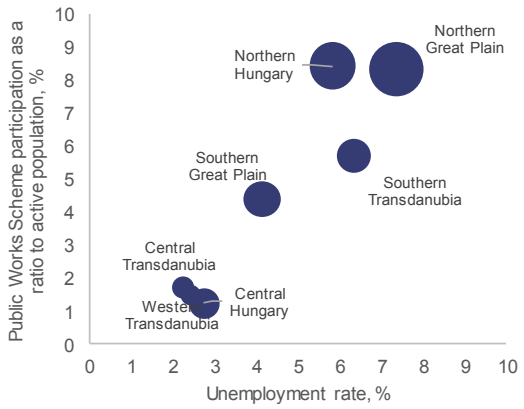
Employment and wages increased amid strong economic expansion, but did not benefit all groups equally. The employment rate for the 20-64 age group reached 74.6 % and the unemployment rate fell to 3.8 % in the third quarter of 2018. However, the gaps in employment and wages between genders and skills groups remain wide in EU comparison. Labour market outcomes for various vulnerable groups, including Roma and people with disabilities, are weak. Despite its reduction, the Public Works Scheme is still large.

Outward migration and demographic trends put pressure on the size of the workforce. At least 300 000 and possibly as many as 600 000 Hungarians are estimated to permanently live in other EU Member States (Portfolio, 2018) mostly in the United Kingdom and Germany. Within this group, the proportion of tertiary education graduates is higher than of any other educational segment (Hárs, 2018). The outflow has not been balanced by immigration, as the number of foreigners legally working in Hungary (including EU citizens) is estimated by the government at 45 000. According to projections made by the Hungarian Demographic Research Institute, by 2030 the working age population will shrink by around 11 %. Over the same period, the total population is projected to decrease by 6 %.

Policy responses to the labour shortage focus on prolonging working lives and working hours. Most early retirement possibilities have now been closed and the statutory retirement age is set to reach 65 years in 2022. As of 2019, no social security contributions are due for employees who have passed the retirement age. Recently the Parliament amended the Labour Code to allow more overtime work. The working week in Hungary (39.6 hours in the second quarter of 2018) is already longer than the EU average (37.0 hours). The possibility to further raise the working hours and defer compensation has been strongly opposed. Other means of addressing the labour shortage – e.g. more inclusive and higher quality education and training, further reduction of the Public Works Scheme – remain underutilised.

Regional labour market disparities remain significant. The difference in unemployment rates between the best and worst performing regions was more than threefold in 2017 with a rate of 2.2 % in Central Transdanubia versus 7.4 % in the Northern Great Plain. More than 260 000 people (ca. 5.7 % of the active population) migrated within Hungary in 2017. Since 2010, the population of Central Hungary increased by 2 %, while the population in the two regions in the north-west decreased by 2.6 % and in the four regions in east and south by 4.9 %. The decrease was particularly significant in rural areas. Poor public transport, deficient road infrastructure and high rental costs are barriers to further mobility (see Section 3.4).

Graph 3.3.1: **Regional unemployment rate and participation in the Public Works Scheme, 2017**



The graph plots the unemployment rate against Public Works Scheme participation (as a ratio to active population), by region. The size of the disks is proportional to the average number of participants in 2017.
Source: European Commission based on data from Eurostat and Hungarian Government

The participation in the Public Works Scheme has decreased. Between the first and third quarters of 2018 the number of participants fell by 40 000, or 22 %. Its budget for 2019 is lower by 20 % compared to 2018. The favourable economic cycle and targeted measures improved the efficiency of the scheme. In 2017, 18.1 % of participants were in regular employment six months after leaving the scheme compared to 15.6 % in 2016. The per capita cost of the scheme is higher and its efficiency is lower than that of active labour market policies (Fertig and Csillag, 2015). Despite plans, no measures were taken to convert participants into permanent municipality workers. Its budget is allocated roughly proportionally to the regional unemployment rate, so sizeable funds

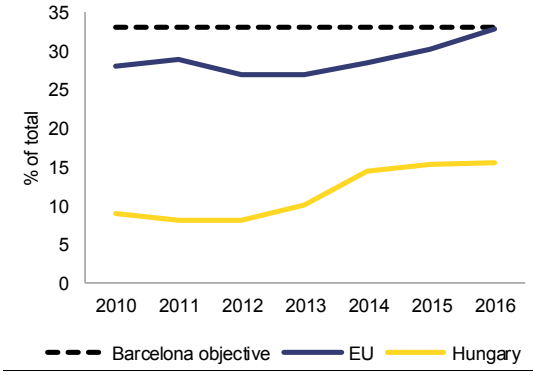
go to regions with very low unemployment rates (see Graph 3.3.1).

Active labour market policies have a wide reach but their targeting could be improved, pointing to an investment need. By the end of 2018, programmes aiming to improve jobseekers' employability and possibilities to enter the labour market, funded by the European Social Fund and the Youth Employment Initiative covered more than 230 000 people. While on average 34 % participated in trainings, a reliable quality assurance and rating system accessible to jobseekers is still lacking. The better skilled unemployed are well served, but there is not enough support targeting the less employable groups, such as the long-term unemployed, the inactive, Roma and people with disabilities. Coordination with social and health services is insufficient.

The efficiency of public employment services could be improved. The caseload for many jobcentres exceeds their capacity and caseworkers are overloaded with administrative duties (Hétfa, 2018), leaving less time for individualised assessment. The institutional structure of the public employment services is fragmented. Using quotas for active labour market policies still greatly influences profiling outcomes, which impairs the efficiency of job matching. The monitoring of the quality of training programmes remains limited.

The gender employment gap is high and the availability of childcare remains low. Although the employment rate for women has increased, the gender employment gap remained high at 16 pps in the first quarter of 2018, well above the EU average of 11.7 pps. The gap is the widest (20 pps) in the 25-39 age group, due to significantly lower employment rates for young mothers. The impact of parenthood on the employment rate of women with a child under 6 years old was the second highest in the EU (at 42.6 pps). This is also related to the fact that men are not encouraged to take up parental leave. The number of children who are under 3 years old and in childcare is increasing but remains below the EU average and the Barcelona objective (see Graph 3.3.2). In 2017, childcare was not available in 2610 settlements inhabited by about 70 000 children (26 %) under the age of 3, which points towards a significant need for investment. New types of crèche facilities are becoming more widespread but their coverage remains low. Family crèches accounted for 13 % of total available places and mini-crèches and workplace crèches for less than 1 % (HCSO, 2018b). Projects co-financed by the EU support the creation of more crèche places and contribute to lowering childcare costs.

Graph 3.3.2: **Childcare under 3 years age (%)**



Source: Eurostat

The duration of unemployment benefits is the shortest in the EU, at a maximum of 3 months. This is below the average time needed to find a job. Although the ratio of people staying unemployed for less than three months slightly improved in recent years, the average duration of unemployment is still close to 12 months (European Commission 2018c, p. 34). This shows a substantial mismatch with the benefit provision.

Low-skilled workers continue to face low employment rates and lower wages. The gaps between the employment rates and average wages of low-, medium- and high-skilled workers have been higher in Hungary than in most other EU Member States. The tax wedge for low incomes remains among the highest in the EU despite recent cuts to employer contributions (Section 3.1). Due to the concentration of high-skilled workers in cities, this is a particular problem in rural areas.

Box 3.3.1: **Monitoring performance in light of the European Pillar of Social Rights**

The European Pillar of Social Rights is designed as a compass for a renewed process of upward convergence towards better working and living conditions in the European Union ([1]). It sets out twenty essential principles and rights in the areas of equal opportunities and access to the labour market; fair working conditions; and social protection and inclusion.

SOCIAL SCOREBOARD FOR HUNGARY		
Equal opportunities and access to the labour market	Early leavers from education and training (% of population aged 18-24)	To watch
	Gender employment gap	To watch
	Income quintile ratio (S80/S20)	Better than average
	Risk of poverty or social exclusion (%)	On average
	Youth NEET (% of population aged 15-24)	On average
Dynamic labour markets and fair working conditions	Employment rate (% of population aged 20-64)	On average
	Unemployment rate (% of population aged 15-74)	Better than average
	Long-term unemployment rate (% of population aged 15-74)	Better than average
	GDHI per capita growth	Better than average
	Net earnings of a full-time single worker earning AW	Critical situation
Public support / Social protection and inclusion	Impact of social transfers on poverty reduction	Best performer
	Children aged less than 3 years in formal childcare	No data for 2017
	Self-reported unmet need for medical care	Better than average
	Individuals' level of digital skills	To watch

Member States are classified according to a statistical methodology agreed with the EMCO and SPC Committees. The methodology looks jointly at levels and changes of the indicators in comparison with the respective EU averages and classifies Member States in seven categories (from "best performers" to "critical situations") For instance, a country can be flagged as "better than average" if the level of indicator is close to the EU average, but it is improving fast. For methodological details please consult the draft Joint Employment Report 2019, COM (2018) 761 final.

NEET: not in employment, education or training

GDHI: gross disposable household income

Hungary performs relatively well on some indicators of the Social Scoreboard supporting the European Pillar of Social Rights, but challenges remain. Employment and unemployment outcomes compare well with EU averages and inequality is lower than in many other Member States. Challenges related to human capital formation include a high rate of early school leaving and the level of digital skills. The gender employment gap is high. With social benefits at low level, the good score on the impact of social transfers can be explained by generous parental leave benefits.

The Pillar principle of housing and assistance for the homeless states that adequate shelter and services shall be provided to the homeless in order to promote their social inclusion. A recent change in the Hungarian constitution outlawing living on the street attempts to tackle homelessness but does not address its root causes. More action is needed as regards provision of social housing and other inclusion measures.

In line with the Pillar principle on inclusion of people with disabilities, in 2018 the Hungarian government revised the nursing allowance for home care: it committed to 30 % increase of the amount in four years, and introduced higher amount for care by parents. At the end of the four-year period, the allowance for care by parents will reach the minimum wage, recognising care similar to employment. The decision is a significant step in preventing institutional care.

([1]) The European Pillar of Social Rights was proclaimed on 17 November 2017 by the European Parliament, the Council and the European Commission. https://ec.europa.eu/commission/priorities/deeper-and-fairer-economic-and-monetary-union/european-pillar-social-rights/european-pillar-social-rights-20-principles_en

Adult participation in learning remains low. The proportion of adults participating in education and training was 6.2 % in 2017, well below the EU average of 10.9 %. This affects in particular the unemployed, who are about four times less likely to participate in learning than people in employment. In order to address this disequilibrium, more investment in adult learning is necessary.

The employment of Roma has increased, but challenges remain. Between 2014 and 2017 the employment rate of Roma increased from 33 % to 45 %, but a large share of those in employment (36.6 %) work in the Public Work Scheme (HCSO, 2018c). With only 36 % of Roma women in paid work, the gender employment gap among Roma reaches 19 pps. Apart from the lower education level, geographical factors also contribute to the

disadvantage as a significant share of Roma live in areas where employment possibilities are scarce. The security of employment is also lower for Roma as only half of those in employment have open-ended contracts compared to 90 % among non-Roma.

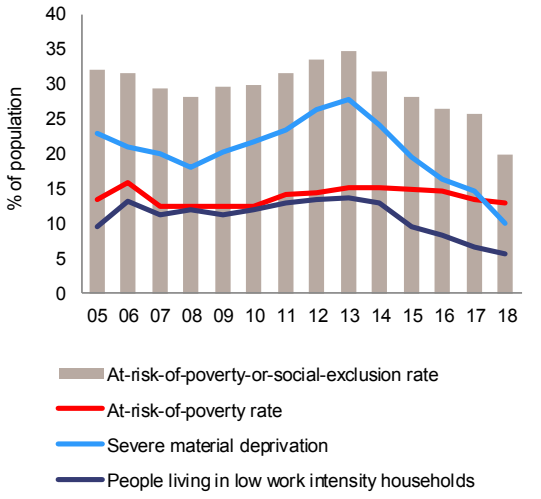
People with disabilities are still under-represented on the labour market. Their participation in employment has slightly increased but is still one of the lowest in the EU (41.6 % vs. the average of 48.1 %). The disability employment gap is wider than the EU average (32.2 vs. 25.8 pps). The government attempts to integrate people with disabilities in the labour market by limiting eligibility conditions, while also encouraging companies to employ them. The public services for jobseekers with disabilities are operated in isolation from the Public Employment Service and funding for non-governmental service providers continues to be limited. This hampers access to personalised vocational rehabilitation, job matching and workplace adjustment services, pointing to an investment need.

Social dialogue structures and processes are not developed enough. The National Economic and Social Council (NGTT) is a broad civil dialogue body operating without the participation of the government and has an advisory role. The Permanent Consultation Forum of the Private Sector and the Government (VKF) is a tripartite body with members selected by the government and operating in a non-transparent manner (Pásztóy, 2018). It has only a narrow scope of competences and the agreements it concludes are not legally binding. The Sectoral Dialogue Committees have a weak institutional background, which impairs their efficiency. All in all, the current setup fails to meet the principle of social dialogue and involvement of workers, which is included in the European Pillar of Social Rights. Social partners continue to have very limited influence on national decision-making.

3.3.2. SOCIAL POLICIES

Hungary's overall poverty situation has been improving since 2013, but challenges remain. In 2018, one in five (19.6 %) Hungarians was at risk of poverty or social exclusion. In absolute numbers this represented 908 000 people fewer than in 2008 (the national Europe 2020 goal is 450 000). The number of people facing severe material deprivation and living in low work intensity households has halved since 2013. The severe material deprivation rate was still the fourth highest in the EU in 2017 (see Graph 3.3.3). Income mobility across generations is lower than in most other Member States (Tóth and Szelényi, 2018). Poverty risks faced by children, families with three or more children and single parent families are decreasing, but remain higher than the EU average. In 2018, they amounted to 23.8 %, 25.5 % and 40.0 %, respectively. The adequacy and coverage of tailored early childhood development services for disadvantaged families, such as the Sure Start Children Centres do not meet all demand.

Graph 3.3.3: **Main poverty indicators, 2005-2018**



Source: Eurostat

Poverty and social exclusion are concentrated in certain areas. The share of population at risk of poverty or social exclusion in Northern Hungary was 10.5 pps and in rural areas 5.7 pps above the national average in 2017 (HCSO, 2017a). In the least developed districts, where one in ten Hungarians lives, the average income per taxpayer reached only 69.8 % of the national average in 2016, hardly above the minimum wage (HCSO, 2017b). The concentration of social exclusion is confirmed by a mapping ([4]) that found neighbourhoods with high share of low educated and unemployed people (segregated areas) in 22 %

([4]) The mapping was done by the Hungarian Central Statistical Office, based on census data.

of the localities. Nationwide, the share of people living in segregated areas is 2.8 %, but reaches as much as 11.9 % in the least developed districts. Residential separation also contributes to educational segregation (see Section 3.3.3), and is often accompanied by severely limited access to basic public infrastructure and services. EU co-funded development projects addressing those challenges have been implemented in over 200 localities, but more investment might be needed.

The majority of Roma face poverty or social exclusion. The share of Roma at risk of poverty or social exclusion was 67.8 % in 2018. While the estimated share of Roma in the national population is around 7 %, among people at risk of poverty or social exclusion it reaches 20-25 %.

The supply of social housing is not sufficient to address demand from those in need. The share of the population that face severe housing deprivation was 15.9 % in 2017, the second highest in the EU, and 3.5 times the EU average. It was particularly high among children (27.3 %). The supply of affordable rental housing is low and shrinking. Between 2010 and 2016, rental prices grew by 75 %, while the average net wage in the lowest income decile grew by only 11 % (Habitat, 2018). The share of municipal flats rented with social purposes was at only 1.1 % of the housing stock in 2017 (HCSO, 2018d). Increasing the supply of social housing would help address homelessness.

The provision of long-term care for people with disabilities is improving but requires further attention. In 2016, some 26 600 people with disabilities and mental health problems lived in long-term residential social institutions, and some 54 900 benefited from a nursing allowance for home care, ranging from 23.6 % to 42.5 % of the minimum wage (HCSO, 2017c). This allowance is set to rise significantly (see Box 3.3.1) (Government, 2018). While Hungary committed to investing EU funds to transit 10 000 people from institutional to community-based care by 2023, the conditions for independent living could still be improved. The supply of support services for community and home care is strongly limited.

While, thanks to generous parental leave benefits, the impact of non-pension social transfers on poverty reduction is one of the highest in the EU, key elements of the social safety net can be improved. In parallel to the expansion of employment, the number of recipients of the minimum income benefit fell from 237 600 in 2012 to 99 800 in 2017. As the minimum income benefit has not risen since 2012 and is now below one-third of the national poverty threshold, it puts Hungary among the lowest performers in terms of adequacy. The public works wage decreased relative to the minimum wage, from 77.2 % in 2013 to 59.1 % in 2018. In-work poverty has increased from 5.2 % in 2010 to 8.4 % in 2018. Social security does not provide full coverage for all people in employment, such as casual and seasonal workers (European Commission, 2018d).

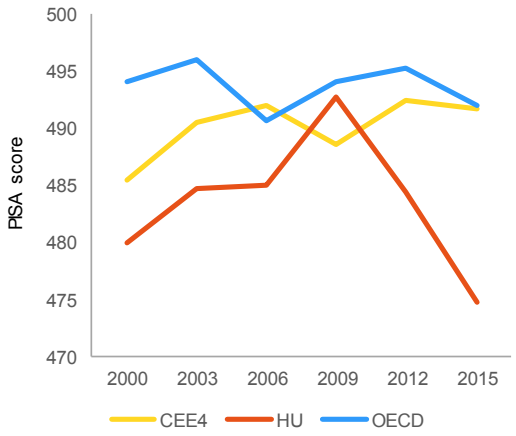
3.3.3. EDUCATION AND SKILLS

Educational outcomes are below the EU average and there is great variation between schools. The 2016 Progress in International Reading Literacy Study shows improvements in reading among fourth graders but large performance gaps remain between schools and school types. By the age of 15, basic skills are significantly below the EU and regional averages (PISA, 2015) and have decreased in the last decade (see Graph 3.3.4). Students' achievement shows strong correlations with their socio-economic background. The study shows that 37 % of Hungarian students go to schools where disadvantaged students are the majority, meaning that disadvantaged students are more separated from non-disadvantaged peers in Hungary than in other countries. Disadvantaged students have low chances of entering the higher educational tracks as the scholarship scheme for them offers more favourable conditions for entering the lower vocational track, acting as an additional factor preventing upward educational mobility. Inequality in education narrows the possibility for social mobility. Low-income families in Hungary have the poorest chances of approaching the mean income in the EU (OECD, 2018b).

The separation of disadvantaged pupils, including Roma, has accelerated in the last decade. The education system has become more segregated in recent years, which is only partly explained by residential separation. The share of primary schools with 50 % or higher Roma

participation increased from 10 % in 2008 to 15 % in 2017. Improved participation of Roma children in early childhood education and care and recent measures (including anti-segregation officers and working groups and new rules defining school catchment areas) are meant to prevent segregation. However, their impact is limited by the exemption of non-state schools from the requirement to take disadvantaged pupils (Ercse 2018, Ercse-Radó 2019).

Graph 3.3.4: **Programme for International Student Assessment (PISA) results, 2000-2015**



(1) Average of mathematics, reading and science (2) CEE4: Czech Republic, Poland, Slovakia, Slovenia
Source: OECD

In 2017, the early school leaving rate increased to 12.5 %, which is above the EU average of 10.6 %. While early school leaving has been decreasing steadily across the EU, it has not fallen in Hungary since 2010. Schools with high rates of pupils at risk of dropping out are required to offer more personalised support to the pupils concerned, indicating a possible investment need. Early school leaving rate is particularly high among Roma (65.3 %). Participation of 17 and 18 year-olds in secondary education dropped sharply between 2011 and 2016 (from 98 % to 85 %), after the ending age of compulsory education was lowered from 18 (the age of completing secondary education) to 16 in 2012. The share of students concerned varies greatly by school type and region (EA, 2018a). In the three most affected counties, 14-16 % of students are at risk of dropping out. In the lower track of vocational education and training, this figure is 21 %.

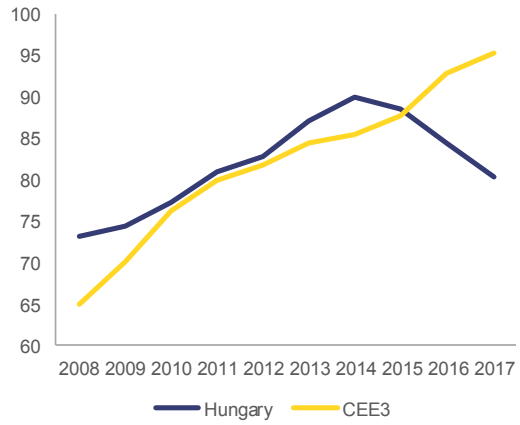
The two tracks of vocational education and training differ strongly in terms of career perspectives for their graduates. Vocational education and training has two regular pathways: vocational grammar school (szakgimnázium) with more general education content and vocational secondary school (szakközépiskola) with less. Students in vocational secondary schools have a significant and growing deficit in basic skills compared to those in vocational grammar schools and grammar schools (gimnázium) (EA, 2018b). Moreover, vocational secondary schools have much higher drop-out rates (15.3 % per school year in 2016) than vocational grammar schools (6.5 %) and grammar schools (1.1 %). Vocational secondary school graduates earn 24 % less than vocational grammar school graduates (HAS, 2018a). The wage disadvantage of vocational secondary school graduates increases by age, indicating the lack of transferability of skills acquired in these schools (Fazekas and Köllő, 2018). Recent legislative changes aim to improve the labour market relevance of vocational education and training. However, switching between professions or pathways is made more difficult by the reduced general education content starting in the first year of vocational secondary schools.

The shortage of teachers remains a challenge. The teaching workforce is ageing, and according to forecasts some 50 000 teachers will retire within 10 years (Government, 2016a). The number of applicants for initial teacher education rose in 2017, but dropout rates are high and the number of graduates who actually enter the profession remains low. Teachers' salaries rose in recent years but are still 25 % lower than those of other tertiary education graduates, compared to an OECD average deficit of 4-19 % (OECD, 2018c). The low effectiveness and equity in the school system are likely to be linked with the low level of curricular autonomy, the lack of socioeconomic diversity within schools and low teacher salaries (European Commission, 2018e, 98p.).

A continuing low level of participation in higher education is likely to further restrain tertiary attainment rates. The employment rate of recent tertiary graduates is 88.7 %, well above the EU average of 84.9 %, reflecting strong demand for highly skilled workers. Tertiary graduates also enjoy the highest wage premium across the EU

(OECD, 2017). However, current enrolment and completion trends are not aligned with demand. The tertiary education attainment rate among 30-34 year olds decreased to 32.1 % in 2017, against an increasing EU and regional average (see Graph 3.3.5). As of 2020, a foreign language certificate of proficiency level B2 will be an entry requirement for all but short-cycle tertiary education programmes. This may further exacerbate the long-term downward trend in the pool of applicants, as only 48 % of applicants currently hold a B2 level certificate (HAS, 2018a). The Ombudsman found that the language requirement would need to be accompanied by a greater allocation of human and other resources to language teaching to avoid infringing constitutional rights (Ombudsman 2017). The share of disadvantaged students among all students admitted into tertiary education was very low, at 1.4 % in 2016, and the share of Roma was only 0.8 % (HAS, 2018a; HCSO, 2018e).

Graph 3.3.5: **Tertiary education attainment rate among 30-34 years, 2008-2017, relative to EU average**



(1) EU=100
Source: Eurostat

3.3.4. HEALTHCARE

Although gradually improving, the health status of Hungarians lags behind that of most other Europeans and significant socio-economic health disparities persist. Over the last five years, the gap in life expectancy between Hungary and the EU has narrowed by about 15 weeks. However, large differences remain: in 2016, life expectancy for men and women was lower than the EU average, by 5.6 and 3.9 years respectively. Differences based on socio-economic status are particularly significant, with highly educated Hungarians living up to 12.8 years longer than those with a lower education level. These differences are partially explained by a higher prevalence of risk factors among people living in lower socio-economic groups, as well as by inequalities in access to care services.

Many people lead an unhealthy lifestyle. Daily smoking rates among adults remained flat between 2006 and 2016 at around 26 %, one of the highest figures in the EU. In recent years, the Hungarian authorities have put in place a series of policies against smoking, which have proven effective in reducing juvenile smoking. The prevalence of alcohol use disorders in Hungary is the highest in the EU, affecting 21.2 % of the total population and 36.2 % of men (WHO, 2018). Obesity rates have increased over the past decade, affecting an alarming 30 % of the population in 2016. The high prevalence of risk factors makes cardiovascular diseases the leading cause of death in Hungary, accounting for 49.5 % of all mortality in 2016, i.e. around double the EU average. Cancer incidence and mortality rates are also among the highest in the EU. Partly due to unhealthy lifestyles, the proportion of live births weighing less than 2500 g was among the highest in the EU (8.5 % in 2015)([5]). The risks of unhealthy lifestyles and related mortality are especially high among the lower educated (Wood-Bellis, 2017). The impact of health promotion and disease prevention policies in recent years has been limited.

The timely provision of quality care remains a challenge, impacting life expectancy. Although relatively few of the surveyed Hungarians report unmet health needs (see Box 3.3.1), the number of amenable deaths remains almost twice the EU average. While progress is being made to improve take-up of cancer screenings by target groups, participation is still relatively low, and geographical inequalities in access remain sizeable. Improving access to and the quality and cost-effectiveness of cancer care may require more investment in prevention and early detection.

A high reliance on out-of-pocket payments in healthcare raises concerns about equality of access. Hungary spends 2 % of GDP less on health

([5]) WHO https://gateway.euro.who.int/en/hfa-explorer/

care than the EU average and relies more on end-user financing. In 2017, household out-of-pocket payments accounted for 30 % of all health expenditure, a much higher proportion than the EU average (18 %). This figure includes gratuity payments to physicians, which have historically played a non-negligible role in healthcare delivery in Hungary. Survey data (Eurobarometer, 2017) show that the number of Hungarians who reported having made an informal payment to a practitioner increased by 7 pps to 17 % between 2013 and 2017. This ratio is more than fourfold the EU average (4 %). In 2015, 11.5 % of Hungarian households faced health expenditure above 40 % of their income available after basic needs, mainly on outpatient medicines.

Structural changes to the hospital sector are required to improve the efficiency and quality of inpatient care. While some positive steps have been taken to limit excess in-patient capacity in the past decade, in 2016 the ratio of hospital beds per 1000 population was 37 % above the EU average, while the bed occupancy rate was one of the lowest in the EU at 68.5 %. In contrast to the general EU trend, the average length of time that patients stay in hospital has increased and is now among the highest in the EU. The hospital network is very fragmented, which hinders efficiency and quality of care. EU funds have contributed to positive developments that have modernised the infrastructure of about 70 hospitals between 2007 and 2017. Further efficiency gains require a hospital network structure that reduces and concentrates hospital capacity both regionally and functionally.

Improving primary care and care coordination would significantly increase efficiency. Evidence of the intensive use of hospital services, together with high rates of ambulatory sensitive admissions, points to a weak gatekeeping system. General practitioners operate mainly in solo practices and are not equipped to provide effective, person-centred care. There is a room for improvement as regards clarity of guidelines, care pathways for chronic disease management and investments in primary care services, especially in under provisioned areas.

There has been some progress on training and retaining health professionals, but future supply and regional disparities are still an issue. Although the number of physicians in Hungary has increased over the last five years and is now only slightly below the EU average (3.2 compared to 3.6 per 1000 people), the number of nurses is still low (6.4 compared to 8.4 per 1000 people). The government has made staff retention a priority in response to the mass emigration of health professionals and the expansion of the private sector over the last decade. The salaries of doctors and nurses have been raised, and existing training and support programmes have been enhanced and extended. Despite the success of these measures, vacant posts remain hard to fill, especially for general practitioners and maternal child health nurses. Health infrastructure and capacities are distributed unevenly, with significant shortages in rural and deprived areas. There are large differences in waiting times across regions for elective procedures, for example cataract surgery, knee and hip replacement.

3.3.5. INVESTMENT NEEDS

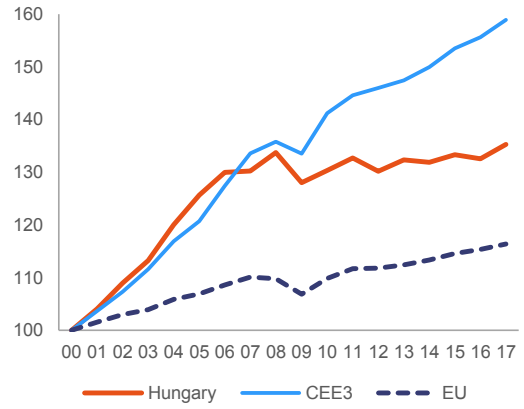
Increased investment in skills, education and training and social inclusion of disadvantaged groups are important for improving Hungary's productivity and long-term inclusive growth. Shortage of skilled labour is among the main obstacles to business investment, pointing at the need to invest more in bringing unused or under-used reserves to the primary labour market. This requires comprehensive policy responses, including improving quality and inclusiveness of education and training, addressing disadvantages by strengthened social and healthcare services, promoting social and geographical mobility also by social housing, and paying due attention to geographical disparities in the availability of the services. The gender dimension needs to be addressed, among others by improving the availability of child and long-term care services.

3.4. COMPETITIVENESS REFORMS AND INVESTMENT

3.4.1. PRODUCTIVITY AND INVESTMENT NEEDS

Productivity differences between firms remain large. Company-level data reveal that the dispersion of productivity across firms in any given sector is relatively large in international comparison. Foreign-owned firms on average tend to be larger, use more capital, and be more productive than domestic-owned ones. They also enjoy a productivity advantage over similarly sized domestic firms (Muraközy et al. 2018).

Graph 3.4.1: **Labour productivity (total economy, 2000=100)**



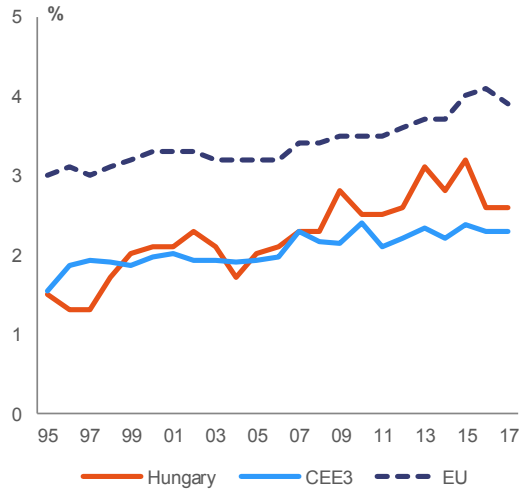
(1) CEE3: average of Czech Republic, Poland and Slovakia
Source: Eurostat

Productivity growth is picking up with the favourable economic cycle, but it remains sluggish in historical and regional comparison. Although Hungary's productivity kept pace with that of regional peers until the financial crisis, it increasingly fell behind in subsequent years (see Graph 3.4.1). This divergence is explained by the weak performance of market services (see also Graph 3.4.5), while the productivity of the manufacturing sector increased further. Contrary to private companies, the productivity of state-owned enterprises failed to increase since 2012 (Muraközy et al. 2018).

Thanks to the cyclical economic upswing, investment is rising in every sector, supporting productivity gains. The investment rate had climbed above its historic average by 2018. In the early phase of the cycle, business investment was subdued apart from large-scale projects in manufacturing financed by foreign direct investment. This was because rising demand could still be satisfied with existing capacities. As capacity utilisation rose steadily, investment picked up in recent years. Household investment is reviving after several years of subdued activity, thanks to the improving labour market and pent-up housing demand. Public investment is also accelerating, driven both by the accelerated spending of EU funds and rising investment from own financing (see Graph 1.2).

Although aggregate investment is robust, its composition reflects some structural weaknesses in the economy. The recent rise in the investment rate was driven by construction and machinery; the accumulation of intellectual property stagnated at 2.6 % of GDP in 2017, about 1 percentage point below the EU average, albeit slightly exceeding regional peers (see Graph 3.4.2). The proportion of non-investing firms is also higher than the EU average (24 % compared to 13 %; EIB, 2018).

Graph 3.4.2: **Investment in intellectual property (% of GDP)**



(1) CEE3 is the average of Czech Republic, Poland and Slovakia
Source: Eurostat

Box 3.4.1: **Investment challenges and reforms in Hungary**

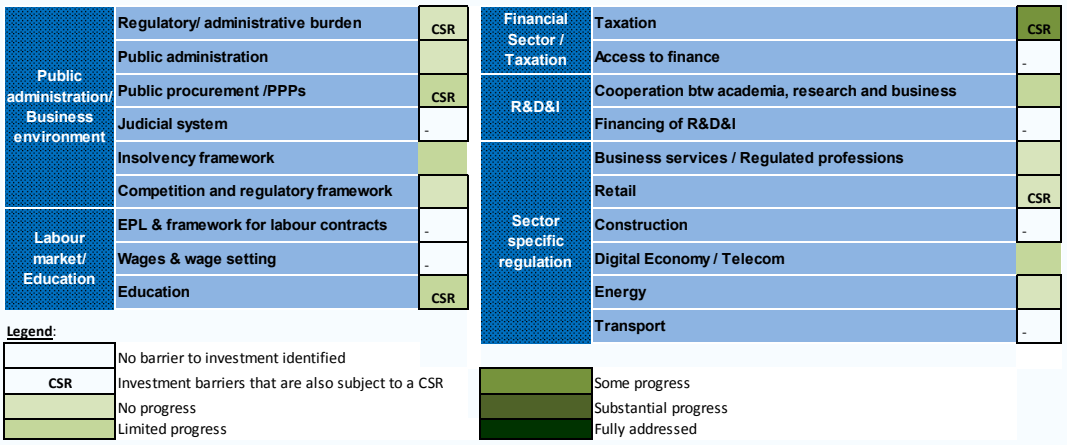
Investment staged a strong recovery in recent years, rising from its trough of 19.3 % of GDP in 2012 to about 25 % of GDP in 2018. The favourable economic cycle and the utilisation of EU funds have been the key drivers of broad-based investment growth (see Section 1). Access to investment finance improved markedly with the inflow of EU funds and record low interest rates (see Section 3.2).

National development banks also contributed to easing financing constraints. Eximbank supports export activity and export-related investment, while Magyar Fejlesztési Bank plays a role in disbursing refundable EU funds, and finances infrastructure projects and market niches. Their combined balance sheet rose from 5.2 % of GDP in 2010 to 5.8 % in 2017. In addition, investment loans refinanced by the central bank's Funding for Growth scheme averaged nearly 1 % of GDP in 2013-2017.

While the macroeconomic environment supports investment growth, structural barriers persist including:

1. Limited availability of skilled labour, which leads to project delays in construction, and can discourage investment in new manufacturing capacity. Recent policy initiatives aim to postpone workers' retirement and increase the number of working hours (see Section 3.3).

2. Several aspects of the business environment, including regulatory uncertainty, weaknesses in competition and the insolvency framework. In this area, the planned review of insolvency procedures could improve the allocation of existing capital (see Section 3.4).



Increased investment in innovation, transport infrastructure and resource management are important for sustainable and inclusive growth. R&D spending is well below the EU average and the Europe 2020 target, holding back innovation performance and contributing to the large productivity gap between foreign and domestic firms. Low accessibility of disadvantaged areas entrenches territorial inequality. Environmental challenges negatively affecting the quality of life, including low energy efficiency, low renewable energy use, air pollution, and weaknesses in water and waste management.

Research and innovation

Hungary's overall innovation performance is moderate and has declined relative to the EU. The low level of intellectual asset accumulation is also reflected in the low number of patent, trademark, and design applications, the small number of innovative businesses and the low level of internationalisation by small and medium sized enterprises. This fact is also reflected in the European Innovation Scoreboard (European Commission, 2018f). Smaller firms are especially reluctant to innovate, hindering their involvement in global value chains. According to the 2016 Community Innovation Survey, only 17.9 % of small firms introduced new products or processes,

which is less than half of the EU average. The main self-reported causes for failing to innovate were the lack of ideas, the perceived lack of demand for innovation, and low market competition.

R&D investment remains below the EU average, and is dependent on EU funds. In 2017, R&D spending intensity increased by 0.15 percentage points to 1.35 % of GDP, partly due to the accelerated advance payments of EU funds. This is still well below the Europe 2020 target of 1.8 %. Business R&D, which amounts to 0.99 % of GDP, is concentrated in a few large, mainly foreign-owned companies, and benefits from generous government support. Public funding of private R&D is among the highest in the EU. At the same time, public sector R&D expenditure declined from 0.49 % of GDP in 2006 to 0.35 % by 2017, well below the EU average of 0.7 %.

The quality of public science suffers due to underfunding. The shortage of financial resources is detrimental to the career opportunities of researchers in the public sector and their number fell by 1.5 % since 2010. This trend is accompanied by a decrease in the number of research units, and a falling proportion of highly cited publications. The proportion of science and engineering graduates has also declined since 2014 and is among the lowest in the EU. Science-business cooperation remains below the EU average due to the traditional divide between research, education and innovation entities in Hungary. In 2017, eight university-business cooperation centres were set up with EU co-financing to foster collaboration. The centres should develop sustainable institutional operations and to run innovation projects. Scientific performance and technology transfer would benefit from investment in public research capacities, which are a key source of knowledge and human resources for innovation in domestic companies.

The smart specialisation strategy would benefit from being updated, reinforced and more focused. Hungary introduced its national smart specialisation strategy in 2014 as a precondition to accessing European Structural and Investment Funds, in order to increase the performance of its scientific, technological and innovation system. In 2018, the National Research, Development and Innovation Office started revamping the monitoring system of the strategy and drafting its first monitoring report.

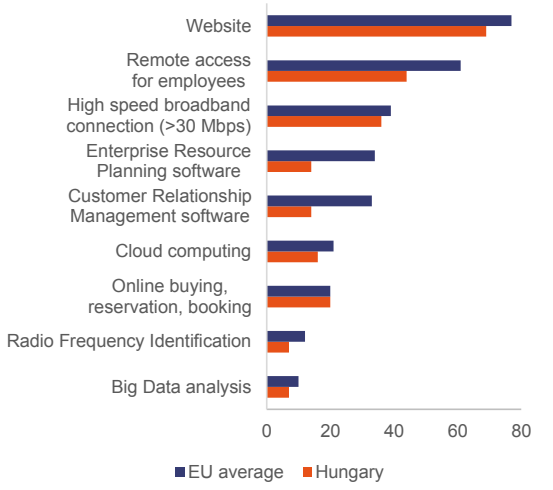
Recent policy measures create uncertainty in academic and research fora. Hungarian higher education institutions have the lowest financial autonomy in the EU according to a recent evaluation (EUA, 2017a). In addition, the April 2017 amendment of the Higher Education Act raised further concerns regarding academic freedom (EUA, 2017b). The Central European University, the largest higher education beneficiary under Horizon 2020, signalled its intention to leave Hungary because of the regulatory uncertainty created by this amendment. More recently, the government has announced that it plans to reform R&D financing to boost innovation performance. The Hungarian Academy of Sciences has rejected the proposed changes to its financing (HAS, 2018b) and closing its selected institutions for fear of breaching academic independence. It now faces financial difficulties as the funding of non-wage expenditure by the central budget has been cut from January 2019. These policy-related uncertainties may result in losing top research talent to abroad and risk a persistent decline in research quality.

Digitalisation and business organisation

Only a fraction of small businesses adopt good organisational practices, and information and communication technologies. According to the 2016 Community Innovation Survey, just 18.5 % of small Hungarian firms introduced marketing or organisational innovations, compared to 38.4 % in the EU on average. Hungary ranks among the last in the EU when it comes to businesses integrating digital technology. While the broadband infrastructure is developed in Hungary (82% of homes are covered by at least 30 Mbps), half of the population lacks basic digital skills, which is 7 pps more than the EU average. Only few SMEs use digital technologies (see Graph 3.4.3) including management support software, suggesting that state-of-the-art management practices are seldom adopted. The most basic aspects of business planning are missing in most small companies: only three out of ten make annual business plans and only two out of ten have any marketing and sales strategy (MNB, 2018b). Surveys indicate that family ties and connections play an important role while education and merit are less relevant in

awarding managerial positions than in most other Member States (WEF, 2018).

Graph 3.4.3: **Use of IT solutions by businesses (% of companies in 2017)**



Source: Eurostat

Connectivity

Weak transport connectivity contributes to unemployment in disadvantaged areas. Transport networks are centred on Budapest, while local networks and transversal connections through the country are not well developed. Local unemployment in remote, mostly rural areas is significantly increased by high commuting costs (Bartus, 2011) and weak local public transport connections (Pogonyi, 2014). Until 2018, employers could offer workers a tax-free contribution to public transport season tickets; this benefit has been abolished from 2019 even though it could support commuting in low-mobility areas (Alpek et al. 2016).

The poor condition of road and rail networks hampers mobility and reduces travel safety. More than half of the road network is in bad condition (Magyar Közút, 2018). The situation is particularly acute in disadvantaged regions. Road congestion is a growing challenge and a barrier to productivity in Hungary's urban areas, which are among the most congested in Europe (Christidis-Nicolás, 2012). Plans for a road access charge in Budapest have nonetheless stalled. The completion of the Trans-European core rail transport network according to standards is below the respective EU averages. Even though the backbone of the Trans-European Transport Networks is electrified, the 39 % electrification ratio in the entire rail network is rather low. The Danube bridge in Budapest is a major bottleneck of the rail network. The poor quality of transport infrastructure and aging vehicle fleets contribute to the high number of road and rail fatalities, which exceed the EU average. The government launched a rehabilitation programme of lower class roads and plans investment in the rail network to address these challenges.

Inland navigation on the Danube is suffering from low water conditions as well as restrictive regulation. Multimodal transhipment possibilities may be improved for some main ports. Enhanced cooperation with Slovakia on the Danube would be important.

Energy sector and climate

Energy efficiency in the residential sector remains weak. Hungary is at risk of failing to reach its 2020 energy saving target, largely because household energy consumption per capita remains 12 % higher than the EU average even though income levels are considerably lower. Energy efficiency standards for new buildings have been strengthened considerably, but there remains a large potential in refurbishing the existing housing stock, public buildings and district heating networks; as well as in small firms.

The electricity sector faces new challenges, with significant investment needed in generation and the network. Hungary imports around one third of its electricity needs, and about half of its domestic electricity generation comes from nuclear sources. Coal, lignite and gas cover around 40 % of electricity production. The share of renewable sources remained around 10 % in 2017. Although investments in solar generation facilities doubled to 500 MW between 2016 and 2018, and are expected to quadruple until the end of 2020, there are still investment opportunities in solar, wind and geothermal energy, especially if coal were to be phased out from electricity generation. The network also needs to be prepared for the rising role of decentralised renewable electricity generation, along with more balancing and power storage capacities.

Retail energy price regulation discourages investment in the sector. Retail electricity and gas prices in the household sector are low in EU comparison. However, this is largely owing to end-user price regulation, which does not recognise some cost elements in the final prices. This results in higher prices for non-household customers, as utilities try to recover costs in this latter segment. Hungary's wholesale electricity market prices are higher compared to those of their neighbours, primarily due to higher domestic electricity generation costs. Implementing all planned cross-border interconnection projects would improve access to electricity imports with competitive prices from Western Europe. Gas supply sources are still highly concentrated, underlining the need to implement all regional gas infrastructure projects, as this would make it possible for Hungary to import gas from alternative sources.

Hungary is on track to meet its climate goals, but there remain challenges in decarbonisation and climate change adaptation. Emissions not covered by the EU Emissions Trading System are allowed to increase by a maximum of 10 % by 2020 compared to 2005 levels. Instead, they fell by 9 % until 2017, and are forecast to decrease by 19 % until 2020. Despite this improvement, air pollution remains a problem. The transport sector, which is a large contributor to air pollution in cities, increased its greenhouse gas emissions by 24 % from 2013 to 2016. The further decarbonisation of the economy will require investments. In addition, half of Hungary's territory is significantly exposed to climate change risks including drought and floods, which create the need for investment in water management on main rivers.

In its National Energy and Climate Plan to be adopted by 31 December 2019 in line with the Regulation on the Governance of the Energy Union and Climate Action ([6]), Hungary will provide an overview of its investment needs until 2030 for the different dimensions of the Energy Union, including renewable energy, energy efficiency, security of supply, and mitigation and of and adaptation to climate mitigation. The information provided, including in the draft plan submitted on 31 January 2019, will further contribute to identifying and assessing Hungary's energy and climate-related investment needs. Hungary's Second National Climate Change Strategy for 2018-2030, with an outlook to 2050 was adopted by the Hungarian Parliament on 30 October 2018.

Environment policy

Air pollution and water quality remain a concern. In 2015, around 15 000 premature deaths in Hungary were attributable to bad air quality (EEA, 2018). The main sources of pollution are residential solid fuel combustion, agriculture and transport emissions. Water supply and sanitation is still not fully compliant with the Drinking Water Directive, and water affordability remains an issue for the low-income population. Regulated tariffs for water and wastewater services might not cover the maintenance costs of many operators.

Hungary is at the initial phase of moving towards a circular economy. Despite the recent major reform of the waste management system Hungary is at risk of failing to achieve the 2020 target of 50 % preparation for re-use/recycling of municipal waste (European Commission, 2018g). In 2016, the proportion of recycled municipal waste remained 11 pps below the EU average, while the proportion of landfilling exceeded it by 23 pps. Progress is slow due to a lack of incentives for households to participate in separate collection, and insufficient economic instruments. The Ombudsman of Future Generations has criticised the funding system of waste collection, questioning its financial sustainability (AJBH, 2018).

Environmental challenges require a series of investments and institutional capacity building. Investments would best target the main sources of air pollution, as well as waste collection and recycling. Key measures under specific sectoral policies (e.g. energy, transport) also need to be aligned with air quality objectives. Institutional capacity is hampered by frequent changes in environmental administration; significant staff reductions carried out in 2018 raise concerns.

([6]) Regulation (EU) 2018/1999 of the European Parliament and of the Council

Box 3.4.2: **Zombie firms in Hungary**

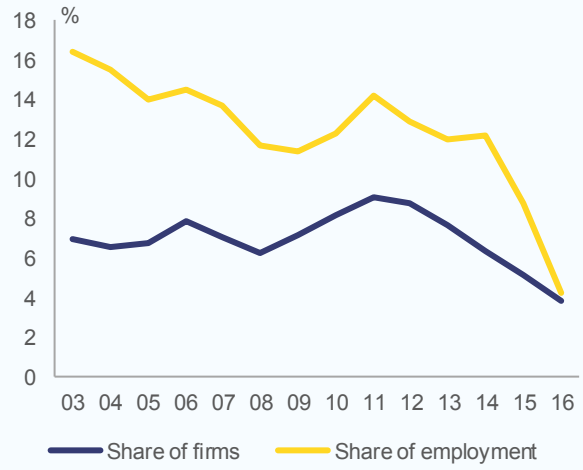
Recent research shows that the survival of unproductive, financially unviable ('zombie') firms can account for a part of the global productivity slowdown since the millennium. The share of these firms increased in several countries, and their presence is associated with lower productivity growth and investment (Adalet McGowan et al. 2017). Following the financial crisis, banks in a weak financial position were particularly reluctant to cut lending to these companies. This reduced lending to healthy firms and raised barriers to the entry of new firms (Andrews-Petroulakis, 2017).

For the purpose of this analysis, 'zombie' firms are defined as relatively old companies (over 10 years) whose interest expenses have exceeded operating income for the last three years (Adalet McGowan et al. 2017). According to this definition, their regular business operations do not generate enough income to finance their debt burden. They were identified among the universe of Hungarian firms using double bookkeeping, based on company tax statements for 2003-2016 (Muraközy et al. 2018).

The share of 'zombie' firms in Hungary was already high before the financial crisis, and rose even further until 2011. Their peak share was similar to Spain and even higher than Italy, while their weight in employment surpassed both countries. Their persistent large share suggests that they were not responsible for slower reallocation after the crisis; rather, they held back productivity growth throughout the period.

In recent years, the share of 'zombie' firms has fallen, helped by banks' restructuring of nonperforming loans, the improving macroeconomic environment and loose monetary policy, which suppressed borrowing costs. The Funding for Growth programme, launched by the central bank in 2013, was expressly designed to reduce the debt burden of small and medium sized enterprises by refinancing their existing loans at preferential terms. This policy may have negative side effects: although it buys companies time to raise productivity, past Japanese experience shows that the ever greening of loans only increased inefficient investment among small firms (Imai, 2016).

Graph 1: **Share of financially unviable ('zombie') firms in the Hungarian business sector**



Classification based on Adalet McGowan et al. (2017)
Source: Muraközy et al. (2018), based on company level data

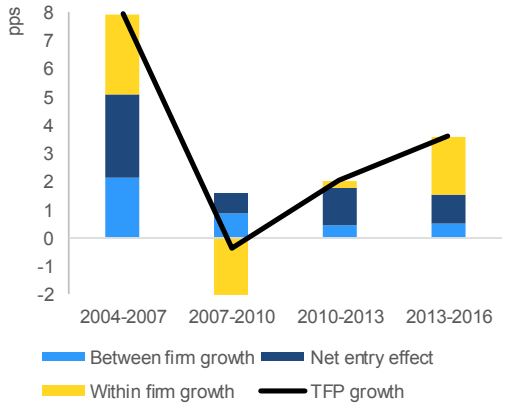
According to international evidence, the presence of 'zombie' firms is associated with inefficient insolvency regimes, low bank capitalisation and a low share of non-bank financing (Adalet McGowan et al. 2017). Hungary underperforms compared to other EU members in all of these areas (see also Section 3.2), suggesting that despite recent improvements, conditions for the re-emergence of 'zombie' firms have not disappeared altogether.

3.4.2. MARKET FUNCTIONING

Business dynamics

The reallocation of resources towards more efficient firms slowed down persistently, hindering aggregate productivity growth. While productivity growth within individual firms is already nearing pre-crisis values, the contribution of business dynamics remains weak (see Graph 3.4.4). The entry of new firms kept falling even after the economic recovery started (Bauer-Endrész, 2018). While this trend fits with international experience, it was potentially exacerbated by rising outward migration from Hungary, because it involved a particularly high share of younger and better-educated individuals (see Section 3.3.1).

Graph 3.4.4: **Decomposition of business sector productivity growth (%)**



The within effect is the average productivity growth of individual companies. The between effect is due to changing market shares between existing firms with different productivity levels. The net entry effect results from differences in the productivity levels of new entrants, continuing and exiting firms.
Source: Muraközy et al. (2018)

The culture of entrepreneurship is weak, reducing the pool of enterprises with high growth potential. The Global Entrepreneurship Monitor (Horváth-Szerb, 2016) and the Global Competitiveness Report (WEF, 2018) both reveal a low level of entrepreneurial activity in Hungary. The share of entrepreneurs out of necessity is relatively high, near 28 %; these individuals tend to have lower ability and manage low-productivity businesses (Poschke, 2013). Start-up skills and the willingness to take risks are weak in the population (Falk et al. 2018). The high cost of business failure may also increase risk aversion and set back entrepreneurship.

Weak competition hampers reallocation. More productive firms do not grow larger due to weak competition and financing constraints (Muraközy et al, 2018), albeit access to finance is already improving (see Section 3.2). A large number of old, small, low-productivity firms persist on the market, preventing the realisation of economies of scale (MNB, 2018c). After the crisis banks have kept afloat less productive firms to limit their credit losses, slowing the process of creative destruction (see Box 3.4.2).

Insolvency procedures remain inefficient. Evidence for their shortcomings arises in a still-high rate of non-performing loans, the assessment of the World Bank Doing Business survey, and an elevated fear of failure by potential entrepreneurs (European Commission, 2018h). The insolvency procedure does not create sufficient incentives to reorganise viable businesses (Pálinkó-Tóth, 2017), while the cost of resolving insolvency is high.

A review of the insolvency framework is ongoing. In 2017 and early 2018 the government introduced a new pre-insolvency procedure to restructure viable companies and rescue honest entrepreneurs. Starting from 2019, further reforms are planned with the support of the European Commission and EBRD, including increasing the importance of early restructuring in the law, as well as training judges and insolvency administrators.

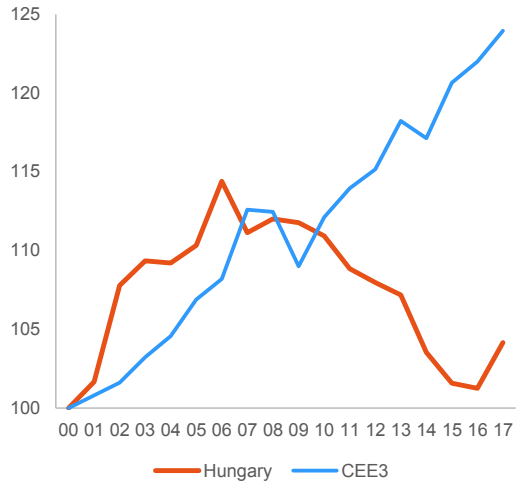
Regulation in the services sector

Productivity and competitiveness of the services sector are relatively weak. Contrary to what happened in regional peer countries, the performance of services declined sharply over the past decade (see Graph 3.4.5.). The Global Competitiveness Index ranks Hungary at the bottom in the EU in terms of product market functioning (WEF, 2018). The ranking is particularly weak on the extent of market dominance, competition in services and services trade openness.

Competition and productivity in the services sector is hindered by regulatory barriers and

state involvement. The authorities continue to entrust certain services to state-owned or private firms specifically created for these purposes (e.g. textbook publishing, waste collection, mobile payments, tobacco wholesale and retail, golden visas etc.). The government can exempt certain mergers and acquisitions from the competition scrutiny. Over the last five years, the government used this power more than 20 times in a wide range of sectors including energy, banking, broadcasting, tobacco and media. The lack of competition in these sectors may become detrimental to innovation and efficiency. Exemptions to competition law increase regulatory uncertainty, as market participants in affected sectors do not know what forces are shaping future market structures (OECD, 2016).

Graph 3.4.5: **Labour productivity in the market service sector relative to the EU average (2000=100)**



(1) CEE3: Czech Republic, Poland, Slovakia, (2) Based on chain linked volume, normalised to 2000
Source: Eurostat

Unpredictable retail regulations may limit investment and competition. The government introduced new legislation envisaging an additional special authorisation for retailers wishing to expand operations. This is on top of the 2015 legislation, requiring players to file for special authorisation for new retail outlets bigger than 400m^2. The unclear application of the new legislation remains a source of uncertainty for retailers and can deter investment in the sector. Frequent introductions and subsequent repeals of measures have been distorting the functioning of the sector over the past years.

There remains a strong growth potential for the collaborative economy. Around a third of respondents from a recent Eurobarometer survey have used services offered via collaborative platforms. Also in the use of services related to accommodations, Hungary has the second most users in the EU from 1000 people. At the same time, Hungary is last in the EU regarding the usage of shared transport services among users of collaborative platforms. This could be linked to the highly restrictive regulation in the sector, as indicated in the 2018 Country Report. While only 8 % of respondents from Hungary have ever offered services via collaborative platforms, 20 % would consider offering services occasionally as private individuals.

Regulation of professions remains restrictive. According to the new OECD Services Trade Restrictiveness Index, the level of regulatory restrictiveness in Hungary vis-à-vis service providers from other Member States is higher than the Single Market average in sectors such as accounting, architecture, engineering, legal and computer services. Recently revised regulations maintain provisions such as recommended prices that limit competition. The government is working on a proposal to decrease the high number of regulated professions in Hungary.

3.4.3. REGIONAL DIFFERENCES

Geographic structures contribute to spatial inequality. Spatial disparities are significant in terms of economic development, labour market and education outcomes, and demographic trends (see Sections 1 and 3.3). 94 out of 175 districts are classified as having a disadvantaged status. The capital plays a disproportionately large role in the economy while regional economic centres are weak. Urbanisation is relatively low, as 30 % of the population lives in villages. Large areas are populated with very small settlements: one-third of all municipalities have fewer than 500 inhabitants. Due to these spatial features, agglomeration benefits are mostly seen in Budapest but remain weak in the rest of the country.

Deficiencies in local infrastructure reinforce spatial differences. Rural areas suffer from shortages and degradation of infrastructure and public services including local education and

health care. A clear East-West demarcation exists in the access and subscription of households to fixed broadband internet. The Eastern regions have an access rate of 75-80%, while the access rates in Western and Central regions are 80-85% and 85-90%, respectively. Rural areas lag significantly behind in the coverage of fast broadband connections (European Commission, 2018i). In cities, uncoordinated suburban sprawl has not been followed by investment in infrastructure, and city centres are often losing function. Deficiencies in infrastructure degrade the quality of life, hinder local market integration and ultimately contribute to the depopulation of disadvantaged areas.

Significant geographical differences in public services and infrastructure underline the need for distinct investment. Significant regional disparities exist in terms of innovation performance within Hungary (European Commission, 2017b). The urban-rural divide could be alleviated by improving the connectedness of remote rural communities and by improving public services, including education and healthcare, which would slow the population decline.

Regional policies would benefit from geographic and thematic differentiation and coordination. Despite the existence of the integrated territorial programmes (co-financed by EU funds) that build on local needs and potentials, interventions are not sufficiently differentiated. Although budget allocations reflect the economic strength of Hungary's regions, the available portfolio and the distribution of investment priorities do not. Moreover, the system is not tailored to reflect different territorial needs or to accommodate individual thematic choices. Regarding the lack of coordination, the recently launched national territorial development programmes (the Modern Cities Programme and the Modern Villages and Small Municipalities Programme) target the development of 23 larger cities and villages, respectively. The majority of spending is dedicated to improving transport infrastructure, but investment in regional innovation infrastructure also features prominently. However, coordination between the two flagship programmes appears weak. This creates the risk that smaller cities – which host 30 % of population and are not covered by either programme – may lose functions to larger cities, which would lead to their decline. In addition, the regional aspect of the Smart Specialisation Strategy is still at an early stage, with priorities defined in broad terms without regional differentiation, and with insufficiently harmonised implementation measures.

3.4.4. INSTITUTIONAL CAPACITY

Business environment and institutional performance

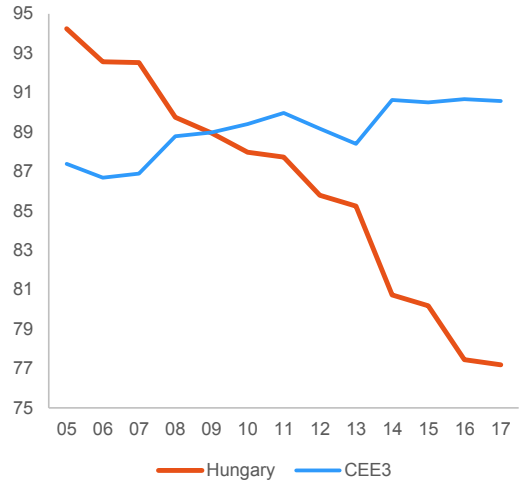
Hungary continued to rank relatively low on business environment scoreboards. In 2018, internationally collated indicators ranked Hungary in the bottom quartile of EU Member States (WEF, 2018; IMD, 2018; DUIHK, 2018). This is consistent with Hungary's position based on income level. The country's ranking has not improved over the past decade. Although sub-indicators on macroeconomic performance and taxation improved, Hungary performed weakly on competition in services, business dynamics and institutional quality. In October 2016, Hungary set up a Competitiveness Council, which reviews barriers to businesses. In 2018, the Council discussed several comprehensive proposals to improve the business environment, prepared by various stakeholders.

Weak and declining quality of institutional governance limits competition. The Worldwide Governance Indicators show that over the past decade, Hungary's performance declined in five broad dimensions of governance, but improved in political stability (WGI, 2018). The deterioration in international comparison is particularly notable in the areas of voice and accountability, and control of corruption (see Graph 3.4.6.). Institutions are key to a well-functioning economy (Acemoglu-Robinson, 2010; Bruinshoofd, 2016). Corruption risks and weak accountability distort the allocation of resources as these are not necessarily channelled to the most productive firms. They also slow down business dynamics and productivity growth in general (Akcigit et al., 2018).

Digital public services remain a challenging area for Hungary's digital economy and society. Hungary ranks among the last in the EU on the re-use of information across administrations to make life easier for citizens (pre-filled forms) and on the

sophistication of services (online service completion). However, several digital solutions have been recently implemented, such as eHealth, automatic online filling of the tax statement and an e-procurement system.

Graph 3.4.6: **Average of the voice and accountability and control of corruption indexes in Worldwide Governance Indicator (EU average=100)**



(1) Figures refer to the average scores of two indicators on a scale of 0-5 (2) CEE3: Czech Republic, Poland and Slovakia
Source: World Governance Indicators 2018

The effectiveness of the legal framework hinders the business environment of smaller enterprises. In the everyday business operation, how rules are applied is just as important as the formal rules themselves. Perception indicators tend to show poorer results than assessments of formal rules and measurable statistics. This points to a discrepancy between the formal framework and the actual application of the rules (Jakab-Gajduschek, 2018). Small firms tend to have worse perceptions than large companies, suggesting that smaller companies operate in a less favourable business environment (DUIHK, 2018). Investment projects by large firms also benefit from significant government support (Éltető-Antalóczy, 2017). The government concluded strategic agreement with 79 firms between 2012 and 2018. However, such arrangements are not accessible to smaller firms. Differences in the business environment firms actually face contribute to the significant productivity gap between small and large firms.

Weaknesses in the transparency of policy-making process may affect business environment. Available indicators point to weaknesses in the transparency of policy-making (Bertelsmann, 2018; WJP, 2015). The Hungarian Parliament continues to adopt legislation that has substantial societal and economic impact within a very short time for public consultation. Between 2011 and 2014 on average seven days were available to discuss a piece of legislation (Vértesy, 2016). Regulatory impact assessments are not available for a significant number of laws (CRCB, 2015, 2016, 2017). Lack of meaningful consultation and impact assessment leads to a learning-by-doing approach, which contributes to frequent changes in the legal framework. In 2017, the Parliament adopted 208 Acts, which also amended around 1 200 existing laws. Fast track legislation combined with the increased number of new laws worsens the stability of the legal framework. For businesses, it leads to higher costs and discourages innovation and high value-added investments. Selective regulations have proliferated. Over the last decade, more than 70 pieces of legislation targeted specific people or institutions. Sometimes, such targeted legislations penalise actors (e.g. sector-specific taxes); in other cases, they grant benefits (e.g. easing conflict of interest rules for a specific public office) or monopolies.

The effectiveness of the justice system

Recent developments in Hungary give rise to concerns on judicial independence. The rule of law, including the independence, efficiency and quality of the justice system, are crucial to attracting business and enabling economic growth (European Commission, 2018j). Over the last year, perceived judicial independence among businesses decreased in Hungary (2019 EU Justice Scoreboard, forthcoming).

Checks and balances within the ordinary courts system have been further weakened. The National Judicial Council (the Council) ([7]) faces increasing difficulties in counter-balancing the powers of the President of the National Office for

([7]) The 15-member Council is composed of the president of the *Kúria* (Supreme Court) *ex officio* and 14 judges-members (and 14 substitute members) elected by their peers. It is tasked with supervising the central administration of the judiciary.

the Judiciary (the Office) ([8]). The situation, which was already flagged by the Council of Europe's Group of States against Corruption (GRECO, 2015) and the Venice Commission (Venice Commission, 2012a) has further deteriorated since January 2018. According to the Council, five of its new judges-members have resigned following pressure from the Office President. In addition, according to the Council, the Office President has called for the initiation of disciplinary proceedings against four remaining members. Only one substitute member out of 14 has remained. The absence of effective control over the Office President increases the possibility of arbitrary decisions in the management of the judicial system. The Office President's decisions to declare calls for application to managerial posts 'unsuccessful' ([9]) have been criticised by the Council (NJC, 2018; see also Venice Commission, 2012a). According to the applicable legislation, these decisions are not subject to judicial review ([10]).

In December 2018, the Hungarian Parliament adopted two legislative acts establishing an administrative courts system, without waiting for the opinion of the Venice Commission, requested by the Hungarian Minister of Justice and scheduled for March 2019. The Council of Europe Commissioner for Human Rights expressed concerns as to their compliance with the requirements of judicial independence (Council of Europe, 2018). The new administrative courts system – composed of eight regional administrative courts and a Higher Administrative Court – is to be set up as of 2020. It will be responsible for reviewing administrative decisions affecting the business environment (including public procurement, taxation, administrative permits and decisions by competition and media authorities) and for hearing other, sensitive cases (such as on the civil service and elections). The Commission is analysing the new administrative courts system as regards the existence of effective safeguards to protect judicial independence, including the appointment of judges and court presidents, the powers of and the procedure for the appointment of the President of the Higher Administrative Court, the central administration of the new courts, the transfer and the evaluation of judges, the supervisory role of judicial bodies, and the uniformisation of case law. The forthcoming opinion of the Venice Commission will feed into this analysis.

Administrative judges are increasingly being recruited from the public administration. A new points system for assessing judicial applications, which favours the recruitment of senior civil servants, was introduced by a ministerial decree (IM, 2017). As a result, the ratio of civil servants among new judges ([11]) appointed to the bench to review administrative decisions rose from 4.8 % to 43.6 % (NOJ, 2018). Further appointments under this scheme will fill the newly envisaged administrative judicial posts, the number of which remains to be determined at the discretion of the Minister of Justice.

The effective functioning of the prosecution service remains a concern. The Group of States against Corruption (GRECO) concluded that the level of compliance with its 2015 recommendations remains "globally unsatisfactory" (GRECO, 2018). The possibility to re-elect the Prosecutor General and the possibility to maintain them in office after the expiry of their mandate by a minority blocking the election in Parliament of a successor, as well as the strict hierarchical structure of the prosecution service, has been criticised by both GRECO (GRECO, 2015) and the Venice Commission (Venice Commission, 2012b) as these considerably increase the potential for political influence over this office.

([8]) The Office President is an administrative authority nominated by the President of the Republic and elected by the Parliament with a two thirds majority from among judges with at least a five-year experience as a judge to carry out the central administration of the judiciary.

([9]) (Vice) presidents and heads of divisions *(kollégium)* of the regional courts of appeal, (vice) presidents and heads of divisions of the regional courts, (deputy) heads of regional administrative and labour law divisions (Section 128(2) of Act CLXI of 2011).

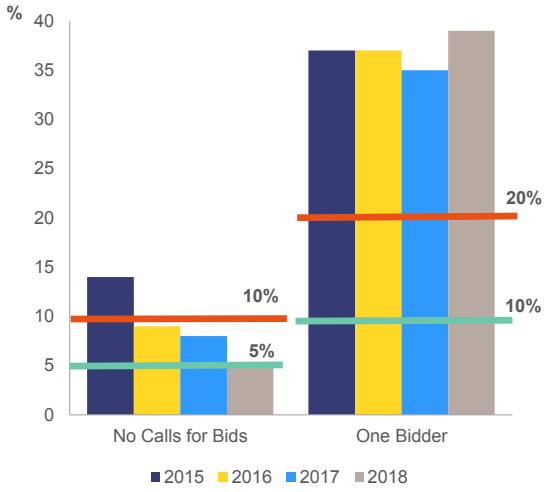
([10]) In cases where the Office President declares a call for application 'unsuccessful', the Office President has a discretionary power to appoint a court manager *ad interim* after a repeated call for application and for a maximum period of one year.

([11]) Administrative judicial posts created in 2017 were filled in in two batches; the new points system was applicable to the second batch only.

Public Procurement

Introduction of e-procurement improved efficiency in public procurement but there is a scope to further improve transparency. Hungary made the e-submission for all contracting authorities and all procurement procedures mandatory as of April 2018, before the deadline in the Directive. E-procurement facilitates the submission of tenders and saves costs for bidders. The wider use of the e-procurement could further increase the efficiency and transparency of public projects, improving the perception of a lack of fairness of the procurement procedure in Hungary. However, the effectiveness of the Hungarian e-procurement and its impact on competition is still to be seen particularly through the specific indicators that can be extracted from the system.

Graph 3.4.7: **Share of tenders without prior publication and award of contracts with only a single bidder above EU threshold**



(1) Lines refer to the Single Market Scoreboard reference values. Values above the red line are evaluated as "unsatisfactory", below the green line as "satisfactory" and between the two lines as "average" performance.
Source: European Commission (2019)

While recent data show some improvements in using less transparent procedures, there is still a considerable scope to enhance competition. The share of contracts, concluded after negotiation without prior publication for tenders above the EU threshold, has been decreasing markedly year-on-year and reached 5 % in 2018 (see Graph 3.4.7). The amendment to the Public Procurement Act adopted in November 2018 tightens further the rule to launch negotiated procedures without prior publication. However, the share of tenders with a single bid remained stably high over the last years and increased in 2018 to 39 % for tenders above the EU threshold (Graph 3.4.7). This high figure suggests that the legislative amendment of January 2017 aiming to reduce this figure did not bring substantial results. Other statistics covering all procedures (CRCB, 2018a, PPA, 2018) show that the share of single bidding below the EU threshold was somewhat lower. The Public Procurement Authority publishes statistics on tender level data, showing substantial improvements in single bidding since 2015. However, the methodology underlying these statistics was not agreed with the Commission, and they cannot be verified as no access is granted to a downloadable and easily searchable database.

Some areas remain unaddressed and anti-competitive practices are still a challenge. The majority of the public procurements under EU thresholds are organised via special procedures, which allow only limited publicity for potentially interested parties. While horizontal collusion between bidders in public procurement is punishable, there are legal gaps in criminalisation of illegal agreements between certain bidders and the advisors to the contracting authorities. In the past, several Commission audits on management verifications identified systemic irregularities, in particular related to inadequate selection and award criteria and to unequal treatment of tenderers. The remedial system may not be effective, as the relatively high fees seem to be one of the main contributing factors to the low number of remedy requests initiated by economic operators. All these factors may have a dissuasive effect on bidders and limit competition, thus creating social losses. In a study carried out for Hungary, weak competition in construction tenders was estimated to increase contract prices by 20 % compared to a situation of intense competition (CRCB, 2018b).

Fight against corruption

Corruption remains an important concern. Hungary's scores on most corruption indicators have deteriorated or stagnated in recent years (WGI, 2018; TI, 2019). In particular, Hungary's score on favouritism is weak (WEF, 2017), which may suggest a lack of merit-based appointments in public administration. An amendment to the Law

on National Assets grants national asset ownership rights to any person appointed by an individual government decision. The State Audit Office found that this provision, coupled with widespread discretionary appointments, magnifies the risk of abuse of state property. It also found that there have been no steps to address shortcomings in the whistle-blower protection framework and the asset declaration systems of officials, nor have effective measures been introduced to curb gratitude payments in healthcare (SAO, 2018).

The anti-corruption framework mainly focuses on the integrity of public services, while determined action on prosecuting high-level corruption is lacking. Each year between 2015 and 2017, Hungary received one of the highest number of recommendations in the EU from the European Anti-Fraud Office. Hungarian authorities reportedly launch investigations following recommendations of European Anti-Fraud Office and their indictment rate has increased in 2017. However, there are still no signs of determined action to prosecute corruption involving high-level officials or their immediate circle when serious allegations arise. Accountability for decisions to close investigations is a matter of concern as there are no effective remedies ([12]) against decisions of the prosecution service not to prosecute alleged criminal activity detrimental to the public interest, including corruption, fraud affecting the EU's financial interests and embezzlement of public funds. Perceptions of effectiveness of the judiciary in tackling high-level corruption are very low, with only 15 % of the surveyed population believing that bribery to senior officials is appropriately sanctioned in Hungary compared to 30 % on the average in the EU (European Commission, 2017c). Some changes have been introduced in the criminal procedure law in July 2018 to clarify the competences of the prosecution vis-à-vis the police. An increase in resources is also foreseen.

Restrictions on access to information hinder corruption prevention. Breaches of obligations by public institutions and the application of dissuasive fees for access may discourage members of the public from exercising their rights. In its annual report, the National Authority for Data Protection and Freedom of Information confirmed that there were instances where public institutions illegally charged fees for requested documents. While the situation has so far been remedied by courts and the Authority, existing obstacles and misapplication of the rules may hinder transparency in the long run. The Authority registered an increased number of requests (220 per year for 2017-2018, up from around 150 in the previous period) and notes that in 81 % of cases access was granted. An independently run platform shows divergent figures, however, and this may point to deficiencies in the reporting of statistics by public institutions.

([12]) Substitute private prosecution is not available if the victim is the state or an organ vested with public power (Section 787(3)(d) of Act XC of 2017).

ANNEX A: OVERVIEW TABLE

Commitments	**Summary assessment ([13])**
2018 country-specific recommendations (CSRs)	
CSR 1: In 2018, ensure compliance with the Council recommendation of June 2018 with a view to correcting the significant deviation from the adjustment path toward the medium -term budgetary objective. In 2019, ensure that the nominal growth rate of net primary government expenditure does not exceed 3,9 %, corresponding to an annual structural adjustment of 0,75 % of GDP.	**The compliance assessment with the Stability and Growth Pact will be included in Spring when final data for 2018 will be available.**
CSR 2: Continue simplifying the tax system, in particular by reducing sector-specific taxes. Improve the quality and transparency of the decision-making process through effective social dialogue and engagement with other stakeholders and by regular, adequate impact assessments. Reinforce the anti-corruption framework, strengthen prosecutorial efforts and improve transparency and competition in public procurement inter alia through further developing the e-procurement system. Strengthen competition, regulatory stability and transparency in the services sector, in particular in retail. Continue simplifying the tax system, in particular by reducing sector-specific taxes.	Hungary has made **Limited Progress** in addressing CSR 2 **Some Progress** In 2019, the government continued simplifying the tax system. The upper rate of the bank levy was lowered further from 0.21 % to 0.2 % and it will stop being applicable for investment companies. The financial transaction tax was

([13]) The following categories are used to assess progress in implementing the country-specific recommendations (CSRs):
No progress: The Member State has not credibly announced nor adopted any measures to address the CSR. This category covers a number of typical situations to be interpreted on a case by case basis taking into account country-specific conditions. They include the following:
-no legal, administrative, or budgetary measures have been announced
-in the national reform programme,
-in any other official communication to the national Parliament/relevant parliamentary committees or the European Commission,
-publicly (e.g. in a press statement or on the government's website);
-no non-legislative acts have been presented by the governing or legislative body;
-the Member State has taken initial steps in addressing the CSR, such as commissioning a study or setting up a study group to analyse possible measures to be taken (unless the CSR explicitly asks for orientations or exploratory actions). However, it has not proposed any clearly-specified measure(s) to address the CSR.
Limited progress: The Member State has:
-announced certain measures but these address the CSR only to a limited extent; and/or
-presented legislative acts in the governing or legislative body but these have not been adopted yet and substantial further, non-legislative work is needed before the CSR is implemented;
-presented non-legislative acts, but has not followed these up with the implementation needed to address the CSR.
Some progress: The Member State has adopted measures
-that partly address the CSR; and/or
-that address the CSR, but a fair amount of work is still needed to fully address the CSR fully as only a few of the measures have been implemented. For instance, a measure or measures have been adopted by the national Parliament or by ministerial decision but no implementing decisions are in place.
Substantial progress: The Member State has adopted measures that go a long way towards addressing the CSR and most of them have been implemented.
Full implementation: The Member State has implemented all measures needed to address the CSR appropriately.

	abolished for the first HUF 20 000 in individuals' transactions from 2019. The tax system operates around sixty different taxes, many of which are small and generate administrative burden. Recently, some smaller taxes, such as the cultural tax, were phased out, while others were merged.
Improve the quality and transparency of the decision-making process through effective social dialogue and engagement with other stakeholders and by regular, adequate impact assessments.	**No Progress** No substantial changes have been introduced for the system of social dialogue, thereby this still remains underdeveloped and ineffective. In consequence, social partners continue to have very limited influence on national decision-making. Regulatory impact assessments are not available for a significant number of laws. Lack of meaningful consultation and impact assessment leads to a learning by doing approach, which contributes to frequent changes in the legal framework. Fast track legislation combined with the increased number of new laws worsens the stability of the legal framework and leads to higher costs for businesses, discourages innovation and high value added investments. Sometimes targeted legislations penalise actors (such as the sector specific taxes); in other cases they grant benefits or monopolies.
Reinforce the anti-corruption framework, strengthen prosecutorial efforts and	**No Progress** Corruption remains a major concern. Hungary's scores on most corruption indicators have deteriorated over the past years based internationally collated indicators. In particular the score on favouritism is weak. The anti-corruption framework mainly focuses on integrity of public services, while determined action on prosecuting high level corruption is lacking. No steps were taken to reinforce the anti-corruption framework. No measures have been taken to reduce favouritism and ensure merit-based appointments at all levels in public administration. Restrictions on access to information hinder corruption prevention. Public institutions continued to illegally charge fees for requested documents. Some changes have been introduced in the criminal procedure law in July 2018 to clarify the competences of the prosecution against the police and an increase of resources is also foreseen.
Improve transparency and competition in public procurement inter alia through further developing the e-procurement system.	**Limited Progress** Efforts have been made by Hungary in 2018 to introduce full electronic public procurement, but there is still a wide scope to further improve transparency in tendering processes. The public procurement data are currently not published in a structured form. The Hungarian e-procurement system does not offer access to the system's data in

	an open machine-readable format, and there are no searchable functions allowing for listing call for tenders or bids in different categories. Furthermore, there are no functionalities for making aggregate data easily understandable to citizens (e.g. visualisations, statistics).
Strengthen competition, regulatory stability and transparency in the services sector, in particular in retail.	**No Progress** Certain services continue to be entrusted to state-owned or private firms specifically created for these purposes. The government continues to exempt certain mergers and acquisitions from competition scrutiny. Short-term regulatory measures with immediate impact on the business environment are being discussed; once adopted, their impact is still to be measured. The legislation imposing a ban on loss-making has been withdrawn, but a new legislative act on authorisation requirements for the transformation of buildings dedicated to retail has been introduced. This legislation is likely to unnecessarily increase the administrative burden on retail companies.
CSR 3: Unlock labour reserves through improving the quality of active labour market policies. Improve education outcomes and increase the participation of disadvantaged groups, in particular Roma, in quality and inclusive mainstream education. Improve the adequacy and coverage of social assistance and unemployment benefits.	Hungary has made **Limited Progress** in addressing CSR 3
Unlock labour reserves through improving the quality of active labour market policies.	**Some Progress** The strong economic expansion in Hungary raises employment and wages. The employment rate for the age group 20-64 increased to around 75 % and the unemployment rate fell below 4 % in 2018. However, the gaps in employment and wage outcomes between genders and skills groups remain wide in an EU comparison. Labour market outcomes for various vulnerable groups, including Roma and people with disabilities, are weak. The Public Works Scheme is still disproportionally large. Since 2016 several programmes co-financed by the European Social Fund have been running and facilitating the transition from Public Works Scheme to the primary labour market. Other European Social Fund funded programmes supporting traineeships and entrepreneurship have also been launched and are currently ongoing. The Training of Low-skilled and Public Workers programme targets mostly public workers. Other European Social Fund (and Youth Employment Initiative) supported active labour market programmes initiated in 2015/2016 are being

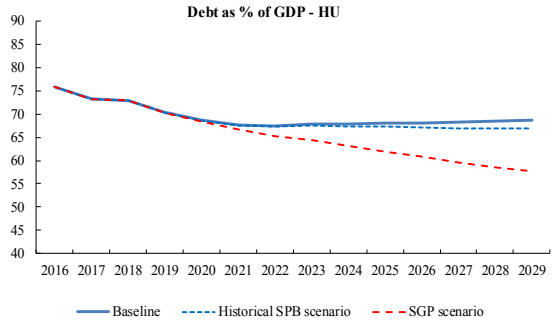
	continued. A specific project was also launched to support non-governmental organisations to provide labour market services (such as counselling, mentoring, psychological counselling etc.) for disadvantaged jobseekers. In parallel, participation in the public works scheme is set to decrease, along with the decrease of the budget allocated for the scheme.
Improve education outcomes and increase the participation of disadvantaged groups, in particular Roma, in quality and inclusive mainstream education.	**Limited Progress** Some measures such as the modification of school catchment areas and establishing anti-segregation officers were taken to prevent segregation. However, their impact is limited by the exemption of non-state schools from the requirement to take disadvantaged pupils, combined with the effect of free school choice. 300 schools showing high rates of drop-out risk are involved in a targeted EU-funded project.
Improve the adequacy and coverage of social assistance and unemployment benefits.	**Limited Progress** No substantial change in the level and coverage of social benefits, with a few minor in kind benefits have been expanded. No change in the duration of unemployment benefits, however, the ratio of people staying unemployed for less than three months slightly improved recent years.
Europe 2020 (national targets and progress)	
Employment rate target set in the NRP: 75 %.	The employment rate of the 20-64 age group continued to improve and reached 73.3 % in 2017 and 74.6 % in the third quarter of 2018. It is above the EU average (72.2 % in 2017).
R&D target set in the NRP: 1.8 % of GDP	Expenditure on R&D increased by 0.15 percentage points to 1.35 % of GDP in 2017. Hungary needs to make further, significant efforts to meet the national target. In 2017, R&D intensity in Hungary was composed of 73% private investment (0.99% of GDP) and 26% public investment (0.35% of GDP).
National greenhouse gas (GHG) emissions target: +10 % in 2020 compared with 2005 (in sectors not included in the EU emissions trading scheme)	By 2017, emissions fell by 9 % compared with 2005. According to the latest projection, the 2020 target is expected to be met by a wide margin.
2020 renewable energy target: 13 %	Although in 2017 the preliminary renewable share (13.3%) was higher than the 2020 target, it decreased

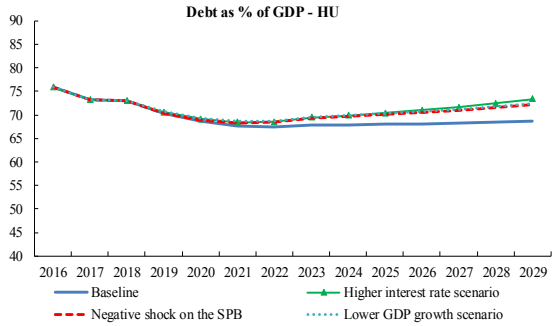
	from the last year (14.3%), owing to lower share of renewables in heating and cooling, and transport.
Energy efficiency, 2020 energy consumption targets: Hungary's 2020 energy efficiency target is 24.1 Mtoe expressed in primary energy consumption (14.4 million tons of oil equivalent expressed in final energy consumption)	Both primary and final energy consumption rose amid strong economic growth for the third consecutive year in 2017, respectively reaching 24.5 and 18.5 million tons of oil equivalent. These values are above the respective 2020 targets, implying that more efforts need to be done in the remaining three years. Final energy consumption target will be difficult to meet without additional measures.
Early school/training leaving target: below 10 %.	In 2017, the early school leaving increased to 12.5 %, above the EU average of 10.6 %. It has been getting farther from the national target since 2014.
Tertiary education target: 34 % of population aged 30-34.	The tertiary education attainment rate for 30-34-years olds fell to 32.1 %, significantly below the EU average of 39.9 %.
Target for reducing the number of people at risk of poverty or social exclusion, expressed as an absolute number of people: 450 000.	In 2018, the population at risk of poverty or exclusion was 908 000 lower than in 2008. At this point, Hungary significantly overachieves its national target.

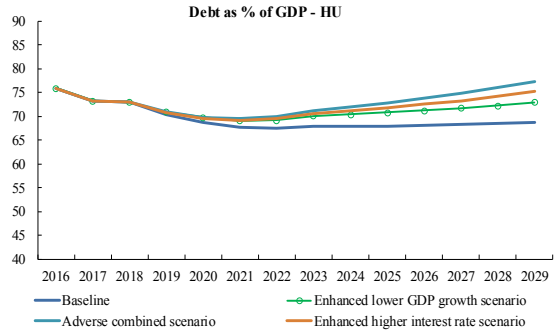
ANNEX B: COMMISSION DEBT SUSTAINABILITY ANALYSIS AND FISCAL RISKS

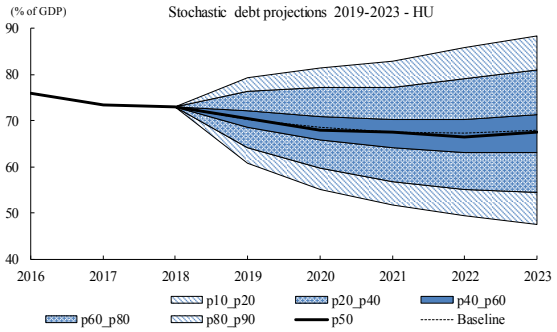
General Government debt projections under baseline, alternative scenarios and sensitivity tests

HU - Debt projections baseline scenario	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gross debt ratio	**73.3**	**72.9**	**70.3**	**68.6**	**67.6**	**67.4**	**67.9**	**67.9**	**68.0**	**68.1**	**68.2**	**68.4**	**68.7**
Changes in the ratio (-1+2+3)	*-2.6*	*-0.3*	*-2.6*	*-1.7*	*-1.0*	*-0.2*	*0.5*	*0.0*	*0.1*	*0.1*	*0.1*	*0.2*	*0.3*
of which													
(1) Primary balance (1.1+1.2+1.3)	**0.6**	**0.1**	**0.5**	**0.6**	**0.2**	**-0.1**	**-0.5**	**-0.5**	**-0.4**	**-0.4**	**-0.3**	**-0.3**	**-0.3**
(1.1) Structural primary balance (1.1.1-1.1.2+1.1.3)	***-0.7***	***-1.3***	***-0.9***	***-0.6***	***-0.6***	***-0.5***	***-0.5***	***-0.5***	***-0.4***	***-0.4***	***-0.3***	***-0.3***	***-0.3***
(1.1.1) Structural primary balance (bef. CoA)	*-0.7*	*-1.3*	*-0.9*	*-0.6*	*-0.6*	*-0.6*	*-0.6*	*-0.6*	*-0.6*	*-0.6*	*-0.6*	*-0.6*	*-0.6*
(1.1.2) Cost of ageing					*0.0*	*0.0*	*-0.1*	*-0.1*	*-0.1*	*-0.2*	*-0.3*	*-0.3*	*-0.3*
(1.1.3) Others (taxes and property incomes)					*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
(1.2) Cyclical component	***0.9***	***1.4***	***1.4***	***1.2***	***0.8***	***0.4***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***
(1.3) One-off and other temporary measures	***0.4***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***
(2) Snowball effect (2.1+2.2+2.3)	**-2.9**	**-3.0**	**-2.3**	**-1.4**	**-0.8**	**-0.4**	**0.0**	**-0.5**	**-0.4**	**-0.3**	**-0.2**	**-0.1**	**0.1**
(2.1) Interest expenditure	*2.8*	*2.5*	*2.4*	*2.4*	*2.3*	*2.3*	*2.4*	*2.5*	*2.5*	*2.6*	*2.7*	*2.8*	*2.9*
(2.2) Growth effect	*-2.9*	*-2.9*	*-2.3*	*-1.7*	*-1.4*	*-1.2*	*-1.1*	*-1.6*	*-1.6*	*-1.6*	*-1.6*	*-1.6*	*-1.5*
(2.3) Inflation effect	*-2.8*	*-2.6*	*-2.3*	*-2.0*	*-1.8*	*-1.5*	*-1.3*	*-1.3*	*-1.3*	*-1.3*	*-1.3*	*-1.3*	*-1.3*
(3) Stock-flow adjustments	**0.9**	**2.8**	**0.2**	**0.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**









Short term	Medium term	S1	Debt sustainability analysis (detail)						DSA	S2	Long term
				Baseline	Historical SPB	Lower GDP growth	Higher interest rate	Negative shock on SPB	Stochastic projections			
			Risk category	MEDIUM	MEDIUM	MEDIUM	HIGH	MEDIUM	MEDIUM			
			Debt level (2029)	68.7	67.0	72.4	73.4	72.2				
			Debt peak year	2018	2018	2018	2029	2018				
			Percentile rank	67.0%	66.0%							
			Probability debt higher						36.3%			
			Dif. between percentiles						40.8			
LOW (S0 = 0.3)	HIGH	MEDIUM (S1 = 1.1)								HIGH	MEDIUM (S2 = 4.1)	HIGH

Note: For further information, see the European Commission Fiscal Sustainability Report (FSR) 2018.

[1] The first table presents the baseline no-fiscal policy change scenario projections. It shows the projected government debt dynamics and its decomposition between the primary balance, snowball effects and stock-flow adjustments. Snowball effects measure the net impact of the counteracting effects of interest rates, inflation, real GDP growth (and exchange rates in some countries). Stock-flow adjustments include differences in cash and accrual accounting, net accumulation of assets, as well as valuation and other residual effects.

[2] The charts present a series of sensitivity tests around the baseline scenario, as well as alternative policy scenarios, in particular: the historical structural primary balance (SPB) scenario (where the SPB is set at its historical average), the Stability and Growth Pact (SGP) scenario (where fiscal policy is assumed to evolve in line with the main provisions of the SGP), a higher interest rate scenario (+1 pp. compared to the baseline), a lower GDP growth scenario (-0.5 pp. compared to the baseline) and a negative shock on the SPB (calibrated on the basis of the forecasted change). An adverse combined scenario and enhanced sensitivity tests (on the interest rate and growth) are also included, as well as stochastic projections. Detailed information on the design of these projections can be found in the FSR 2018.

[3] The second table presents the overall fiscal risk classification over the short, medium and long-term.

a. For the short-term, the risk category (low/high) is based on the S0 indicator. S0 is an early-detection indicator of fiscal stress in the upcoming year, based on 25 fiscal and financial-competitiveness variables that have proven in the past to be leading indicators of fiscal stress. The critical threshold beyond which fiscal distress is signalled is 0.46.

b. For the medium-term, the risk category (low/medium/high) is based on the joint use of the S1 indicator and of the DSA results. The S1 indicator measures the fiscal adjustment required (cumulated over the 5 years following the forecast horizon and sustained thereafter) to bring the debt-to-GDP ratio to 60 % by 2033. The critical values used are 0 and 2.5 pps. of GDP. The DSA classification is based on the results of 5 deterministic scenarios (baseline, historical SPB, higher interest rate, lower GDP growth and negative shock on the SPB scenarios) and the stochastic projections. Different criteria are used such as the projected debt level, the debt path, the realism of fiscal assumptions, the probability of debt stabilisation, and the size of uncertainties.

c. For the long-term, the risk category (low/medium/high) is based on the joint use of the S2 indicator and the DSA results. The S2 indicator measures the upfront and permanent fiscal adjustment required to stabilise the debt-to-GDP ratio over the infinite horizon, including the costs of ageing. The critical values used are 2 and 6 pps. of GDP. The DSA results are used to further qualify the long-term risk classification, in particular in cases when debt vulnerabilities are identified (a medium / high DSA risk category).

ANNEX C: STANDARD TABLES

Table C.1: **Financial market indicators**

	2013	2014	2015	2016	2017	2018
Total assets of the banking sector (% of GDP)[1)]	113,9	107,6	101,4	103,0	97,7	95,1
Share of assets of the five largest banks (% of total assets)	51,9	49,3	49,4	49,8	49,6	-
Foreign ownership of banking system (% of total assets)[2)]	55,5	47,6	47,0	47,7	46,3	47,3
Financial soundness indicators:[2)]						
- non-performing loans (% of total loans)	-	19,4	15,2	11,9	8,4	6,7
- capital adequacy ratio (%)	17,4	17,0	16,9	18,0	16,2	17,2
- return on equity (%)[3)]	-0,4	-21,9	0,3	11,7	14,5	15,6
Bank loans to the private sector (year-on-year % change)[1)]	-4,1	-3,5	-8,1	3,3	6,3	10,0
Lending for house purchase (year-on-year % change)[1)]	-5,4	-6,1	-10,3	-0,8	4,9	9,8
Loan to deposit ratio[2)]	-	89,1	78,6	74,5	71,8	71,3
Central Bank liquidity as % of liabilities[1)]	3,1	3,8	4,9	5,1	3,9	3,3
Private debt (% of GDP)	95,2	91,4	84,6	77,9	71,4	-
Gross external debt (% of GDP)[2)] - public	47,2	46,6	41,6	37,0	30,1	26,7
- private	75,3	79,4	73,0	69,4	57,2	56,5
Long-term interest rate spread versus Bund (basis points)*	435,3	364,6	293,7	305,3	264,5	263,5
Credit default swap spreads for sovereign securities (5-year)*	269,8	179,2	139,1	131,3	98,6	80,2

Notes:
1) Latest data Q3 2018. Includes not only banks but all monetary financial institutions excluding central banks.
2) Latest data Q2 2018.
3) Quarterly values are annualised.
* Measured in basis points.
Source: European Commission (long-term interest rates); World Bank (gross external debt); Eurostat (private debt); ECB (all other indicators).

Table C.2: **Headline Social Scoreboard indicators**

	2013	2014	2015	2016	2017	2018 [6]
Equal opportunities and access to the labour market						
Early leavers from education and training (% of population aged 18-24)	11,9	11,4	11,6	12,4	12,5	:
Gender employment gap (pps)	12,4	13,3	13,7	14,0	15,3	15,3
Income inequality, measured as quintile share ratio (S80/S20)	4,3	4,3	4,3	4,3	4,3	4,4
At-risk-of-poverty or social exclusion rate[1] (AROPE)	34,8	31,8	28,2	26,3	25,6	19,6
Young people neither in employment nor in education and training (% of population aged 15-24)	15,5	13,6	11,6	11,0	11,0	:
Dynamic labour markets and fair working conditions†						
Employment rate (20-64 years)	63,0	66,7	68,9	71,5	73,3	74,3
Unemployment rate[2] (15-74 years)	10,2	7,7	6,8	5,1	4,2	3,7
Long-term unemployment rate[3] (as % of active population)	4,9	3,7	3,1	2,4	1,7	1,5
Gross disposable income of households in real terms per capita[4] (Index 2008=100)	97,4	101,2	103,5	109,8	114,4	:
Annual net earnings of a full-time single worker without children earning an average wage (levels in PPS, three-year average)	10934	11256	11480	11712	:	:
Annual net earnings of a full-time single worker without children earning an average wage (percentage change, real terms, three-year average)	0,0	2,7	3,4	4,5	:	:
Public support / Social protection and inclusion						
Impact of social transfers (excluding pensions) on poverty reduction[5]	44,4	43,6	42,0	43,8	46,4	48,8
Children aged less than 3 years in formal childcare	10,0	14,4	15,4	15,6	:	:
Self-reported unmet need for medical care	2,6	2,5	2,6	1,3	1,0	:
Individuals who have basic or above basic overall digital skills (% of population aged 16-74)	:	:	50,0	51,0	50,0	:

1 People at risk of poverty or social exclusion (AROPE): individuals who are at risk of poverty (AROP) and/or suffering from severe material deprivation (SMD) and/or living in households with zero or very low work intensity (LWI).
2 Unemployed persons are all those who were not employed but had actively sought work and were ready to begin working immediately or within two weeks.
3 Long-term unemployed are people who have been unemployed for at least 12 months.
4 Gross disposable household income is defined in unadjusted terms, according to the draft Joint Employment Report 2019.
5 Reduction in percentage of the risk of poverty rate, due to social transfers (calculated comparing at-risk-of poverty rates before social transfers with those after transfers; pensions are not considered as social transfers in the calculation).
6 Average of first three quarters of 2018 for the employment rate, unemployment rate and gender employment gap. Data for unemployment rate is seasonally adjusted.
Source: Eurostat

Table C.3: **Labour market and education indicators**

Labour market indicators	**2013**	**2014**	**2015**	**2016**	**2017**	**2018** [4]
Activity rate (15-64)	64,7	67,0	68,6	70,1	71,2	:
Employment in current job by duration						
From 0 to 11 months	14,5	14,4	13,8	14,0	13,2	:
From 12 to 23 months	9,1	9,0	9,2	9,5	10,3	:
From 24 to 59 months	18,4	19,7	18,6	19,1	20,0	:
60 months or over	57,9	56,6	58,2	57,4	56,4	:
Employment growth* (% change from previous year)	1,1	4,8	2,4	3,1	2,0	2,3
Employment rate of women (% of female population aged 20-64)	56,9	60,2	62,1	64,6	65,7	66,7
Employment rate of men (% of male population aged 20-64)	69,3	73,5	75,8	78,6	81,0	82,1
Employment rate of older workers* (% of population aged 55-64)	37,9	41,7	45,3	49,8	51,7	54,0
Part-time employment* (% of total employment, aged 15-64)	6,4	6,0	5,7	4,8	4,3	4,3
Fixed-term employment* (% of employees with a fixed term contract, aged 15-64)	10,9	10,8	11,4	9,7	8,8	7,4
Participation in activation labour market policies (per 100 persons wanting to work)	37,0	35,2	40,7	51,1	:	:
Transition rate from temporary to permanent employment (3-year average)	37,0	38,0	38,5	37,2	:	31,2
Youth unemployment rate (% active population aged 15-24)	26,6	20,4	17,3	12,9	10,7	10,1
Gender gap in part-time employment	4,8	4,2	3,7	3,7	3,6	3,8
Gender pay gap[1] (in undadjusted form)	18,4	15,1	14,0	14,0	:	:
Education and training indicators	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Adult participation in learning (% of people aged 25-64 participating in education and training)	3,2	3,3	7,1	6,3	6,2	:
Underachievement in education[2]	:	:	28,0	:	:	:
Tertiary educational attainment (% of population aged 30-34 having successfully completed tertiary education)	32,3	34,1	34,3	33,0	32,1	:
Variation in performance explained by students' socio-economic status[3]	:	:	21,4	:	:	:

* Non-scoreboard indicator

1 Difference between the average gross hourly earnings of male paid employees and of female paid employees as a percentage of average gross hourly earnings of male paid employees. It is defined as "unadjusted", as it does not correct for the distribution of individual characteristics (and thus gives an overall picture of gender inequalities in terms of pay). All employees working in firms with ten or more employees, without restrictions for age and hours worked, are included.

2 PISA (OECD) results for low achievement in mathematics for 15 year-olds.

3 Impact of socio-economic and cultural status on PISA (OECD) scores. Values for 2012 and 2015 refer respectively to mathematics and science.

4 Average of first three quarters of 2018. Data for youth unemployment rate is seasonally adjusted.

Source: Eurostat, OECD

Table C.4: **Social inclusion and health indicators**

	2012	2013	2014	2015	2016	2017
Expenditure on social protection benefits* (% of GDP)						
Sickness/healthcare	5,0	4,9	4,8	5,1	5,2	:
Disability	1,6	1,5	1,4	1,3	1,2	:
Old age and survivors	10,9	10,8	10,2	9,6	9,5	:
Family/children	2,6	2,5	2,3	2,3	2,3	:
Unemployment	0,6	0,5	0,4	0,4	0,3	:
Housing	0,3	0,3	0,3	0,3	0,4	:
Social exclusion n.e.c.	0,1	0,1	0,1	0,1	0,1	:
Total	21,1	20,5	19,6	19,1	18,9	:
of which: means-tested benefits	0,9	0,9	0,7	0,8	0,7	:
General government expenditure by function (% of GDP, COFOG)						
Social protection	16,7	16,4	15,3	14,8	14,3	:
Health	5,1	5,0	4,8	5,2	4,8	:
Education	4,7	4,6	5,1	5,1	4,9	:
Out-of-pocket expenditure on healthcare (% of total health expenditure)	29,4	28,4	28,3	28,9	29,7	:
Children at risk of poverty or social exclusion (% of people aged 0-17)*	41,9	43,9	41,8	36,1	33,6	31,6
At-risk-of-poverty rate[1] (% of total population)	14,3	15,0	15,0	14,9	14,5	13,4
In-work at-risk-of-poverty rate (% of persons employed)	5,7	7,0	6,7	9,3	9,6	10,2
Severe material deprivation rate[2] (% of total population)	26,3	27,8	24,0	19,4	16,2	14,5
Severe housing deprivation rate[3], by tenure status						
Owner, with mortgage or loan	15,2	14,8	13,9	11,9	17,2	14,1
Tenant, rent at market price	26,6	30,9	24,2	32,2	23,7	22,0
Proportion of people living in low work intensity households[4] (% of people aged 0-59)	13,5	13,6	12,8	9,4	8,2	6,6
Poverty thresholds, expressed in national currency at constant prices*	607544	564058	577231	605976	636370	665923
Healthy life years (at the age of 65)						
Females	6,4	6,1	6,1	5,9	6,4	:
Males	6,4	6,2	6,0	5,9	6,7	:
Aggregate replacement ratio for pensions[5] (at the age of 65)	0,6	0,6	0,6	0,6	0,7	0,6
Connectivity dimension of the Digital Economy and Society Inedex (DESI)[6]	:	:	43,7	53,5	59,6	63,6
GINI coefficient before taxes and transfers*	51,0	50,9	52,5	49,9	49,8	48,8
GINI coefficient after taxes and transfers*	26,9	28,0	28,6	28,2	28,2	28,1

* Non-scoreboard indicator

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

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

3 Percentage of total population living in overcrowded dwellings and exhibiting housing deprivation.

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

5 Ratio of the median individual gross pensions of people aged 65-74 relative to the median individual gross earnings of people aged 50-59.

6 Fixed broadband take up (33%), mobile broadband take up (22%), speed (33%) and affordability (11%), from the Digital Scoreboard.

Source: Eurostat, OECD

Table C.5: **Product market performance and policy indicators**

Performance indicators	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Labour productivity per person[1] growth (t/t-1) in %						
Labour productivity growth in industry	-1,35	2,64	2,78	9,91	-2,07	0,17
Labour productivity growth in construction	-6,00	6,04	7,17	0,60	-12,94	12,15
Labour productivity growth in market services	-0,81	0,11	-3,31	-0,42	-0,53	3,93
Unit Labour Cost (ULC) index[2] growth (t/t-1) in %						
ULC growth in industry	4,87	4,13	0,81	-5,41	7,27	5,71
ULC growth in construction	5,46	-3,39	-7,64	-13,66	16,28	-4,65
ULC growth in market services	2,29	0,98	0,26	-2,85	3,44	1,25
Business environment	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Time needed to enforce contracts[3] (days)	605	605	605	605	605	605
Time needed to start a business[3] (days)	7,0	7,0	7,0	7,0	7,0	7,0
Outcome of applications by SMEs for bank loans[4]	:	0,67	1,01	0,39	0,38	0,82
Research and innovation	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
R&D intensity	1,26	1,39	1,35	1,36	1,20	1,35
General government expenditure on education as % of GDP	4,70	4,60	5,10	5,10	4,90	:
Number of science & technology people employed as % of total employment	36	37	36	36	36	36
Population having completed tertiary education[5]	19	20	20	21	21	21
Young people with upper secondary education[6]	83	84	85	84	84	84
Trade balance of high technology products as % of GDP	0,94	0,46	0,28	-0,04	0,24	0,27
Product and service markets and competition				**2003**	**2008**	**2013**
OECD product market regulation (PMR)[7], overall				2,11	1,54	1,33
OECD PMR[7], retail				0,79	1,44	2,06
OECD PMR[7], professional services				2,86	3,02	3,05
OECD PMR[7], network industries[8]				3,31	1,87	1,73

1 Value added in constant prices divided by the number of persons employed.
2 Compensation of employees in current prices divided by value added in constant prices.
3 The methodologies, including the assumptions, for this indicator are shown in detail here: http://www.doingbusiness.org/methodology.
4 Average of the answer to question Q7B_a. "[Bank loan]: If you applied and tried to negotiate for this type of financing over the past six months, what was the outcome?". Answers were codified as follows: zero if received everything, one if received 75% and above, two if received below 75%, three if refused or rejected and treated as missing values if the application is still pending or don't know.
5 Percentage population aged 15-64 having completed tertiary education.
6 Percentage population aged 20-24 having attained at least upper secondary education.
7 Index: 0 = not regulated; 6 = most regulated. The methodologies of the OECD product market regulation indicators are shown in detail here: http://www.oecd.org/competition/reform/indicatorsofproductmarketregulationhomepage.htm
8 Aggregate OECD indicators of regulation in energy, transport and communications (ETCR).
Source: European Commission; World Bank — Doing Business (for enforcing contracts and time to start a business); OECD (for the product market regulation indicators); SAFE (for outcome of SMEs' applications for bank loans).

Table C.6: **Green growth**

Green growth performance		2012	2013	2014	2015	2016	2017
Macroeconomic							
Energy intensity	kgoe / €	0,25	0,24	0,23	0,23	0,23	0,23
Carbon intensity	kg / €	0,61	0,57	0,55	0,56	0,55	-
Resource intensity (reciprocal of resource productivity)	kg / €	0,87	0,98	1,21	1,15	1,10	1,13
Waste intensity	kg / €	0,17	-	0,16	-	0,14	-
Energy balance of trade	% GDP	-6,3	-6,3	-6,2	-4,2	-3,2	-3,8
Weighting of energy in HICP	%	16,8	17,0	17,0	16,0	15,4	14,7
Difference between energy price change and inflation	%	0,3	-11,7	-10,9	-2,7	-0,5	-1,6
Real unit of energy cost	% of value added	19,5	17,8	17,1	18,0	19,0	-
Ratio of environmental taxes to labour taxes	ratio	0,15	0,15	0,15	0,15	0,15	-
Environmental taxes	% GDP	2,6	2,5	2,5	2,6	2,6	2,5
Sectoral							
Industry energy intensity	kgoe / €	0,13	0,15	0,15	0,14	0,15	0,15
Real unit energy cost for manufacturing industry excl. refining	% of value added	19,8	17,7	16,4	16,5	16,6	-
Share of energy-intensive industries in the economy	% GDP	8,5	7,9	7,9	8,0	8,2	8,2
Electricity prices for medium-sized industrial users	€ / kWh	0,10	0,10	0,09	0,09	0,08	0,08
Gas prices for medium-sized industrial users	€ / kWh	0,05	0,04	0,04	0,04	0,03	0,03
Public R&D for energy	% GDP	0,01	0,04	0,00	0,01	0,01	0,01
Public R&D for environmental protection	% GDP	0,01	0,02	0,01	0,01	0,01	0,01
Municipal waste recycling rate	%	25,5	26,4	30,5	32,2	34,7	35,0
Share of GHG emissions covered by ETS*	%	35,4	33,2	32,9	32,4	31,6	-
Transport energy intensity	kgoe / €	0,76	0,70	0,77	0,82	0,81	0,82
Transport carbon intensity	kg / €	2,12	1,94	2,12	2,29	2,23	-
Security of energy supply							
Energy import dependency	%	50,1	50,1	59,8	53,9	55,8	62,6
Aggregated supplier concentration index	HHI	59,2	63,8	75,5	51,1	57,0	-
Diversification of energy mix	HHI	0,23	0,22	0,21	0,21	0,22	0,23

All macro intensity indicators are expressed as a ratio of a physical quantity to GDP (in 2010 prices)
Energy intensity: gross inland energy consumption (in kgoe) divided by GDP (in EUR)
Carbon intensity: greenhouse gas emissions (in kg CO2 equivalents) divided by GDP (in EUR)
Resource intensity: domestic material consumption (in kg) divided by GDP (in EUR)
Waste intensity: waste (in kg) divided by GDP (in EUR)
Energy balance of trade: the balance of energy exports and imports, expressed as % of GDP
Weighting of energy in HICP: the proportion of 'energy' items in the consumption basket used for the construction of the HICP
Difference between energy price change and inflation: energy component of HICP, and total HICP inflation (annual % change)
Real unit energy cost: real energy costs as % of total value added for the economy
Industry energy intensity: final energy consumption of industry (in kgoe) divided by gross value added of industry (in 2010 EUR)
Real unit energy costs for manufacturing industry excluding refining : real costs as % of value added for manufacturing sectors
Share of energy-intensive industries in the economy: share of gross value added of the energy-intensive industries in GDP
Electricity and gas prices for medium-sized industrial users: consumption band 500–20 00MWh and 10 000–100 000 GJ; figures excl. VAT.
Recycling rate of municipal waste: ratio of recycled and composted municipal waste to total municipal waste
Public R&D for energy or for the environment: government spending on R&D for these categories as % of GDP
Proportion of GHG emissions covered by EU emissions trading system (ETS) (excluding aviation): based on GHG emissions (excl land use, land use change and forestry) as reported by Member States to the European Environment Agency.
Transport energy intensity: final energy consumption of transport activity (kgoe) divided by transport industry gross value added (in 2010 EUR)
Transport carbon intensity: GHG emissions in transport activity divided by gross value added of the transport industry
Energy import dependency: net energy imports divided by gross inland energy consumption incl. consumption of international bunker fuels
Aggregated supplier concentration index: covers oil, gas and coal. Smaller values indicate larger diversification and hence lower risk.
Diversification of the energy mix: Herfindahl index covering natural gas, total petrol products, nuclear heat, renewable energies and solid fuels
* European Commission and European Environment Agency
Source: European Commission and European Environment Agency (Share of GHG emissions covered by ETS); European Commission (Environmental taxes over labour taxes and GDP); Eurostat (all other indicators).

ANNEX D: INVESTMENT GUIDANCE ON COHESION POLICY FUNDING 2021-2027 FOR HUNGARY

Building on the Commission proposal for the next Multi-Annual Financial Framework for the period 2021-2027 of 2 May 2018 (COM (2018) 321), this Annex presents the preliminary Commission services views on priority investment areas and framework conditions for effective delivery for the 2021-2027 Cohesion Policy. These priority investment areas are derived from the broader context of investment bottlenecks, investment needs and regional disparities assessed in the report. This Annex provides the basis for a dialogue between Hungary and the Commission services in view of the programming of the cohesion policy funds (European Regional Development Fund, Cohesion Fund and European Social Fund Plus) ([14]).

Policy Objective 1: A Smarter Europe – Innovative and smart industrial transformation

Hungary's overall innovation performance remains moderate relative to that of the EU, while investment in research and development and science-business cooperation are below the EU average. High priority investment needs ([15]) are identified to **enhance research and innovation capacities and the uptake of advanced technologies** in the smart specialisation areas and in particular to:

- support the inter-institutional links and cooperation among stakeholders of research/academia and business, build critical research mass and attract talent in the strategic smart specialisation areas in order to turn research and development results into business applications, especially in cities with university capacity;
- build on the existing research capacities as knowledge centres of smart economic transformation, support knowledge transfer and strategic partnerships;
- support networking, cooperation and exchange of experience beyond national boundaries, including joint cross-regional, transnational and interregional projects.

High speed broadband coverage will be sufficient by 2021 in Hungary, however it still belongs to the low-performing countries in terms of Information and Communications Technology uptake and the use of data-driven technologies. Priority investment needs are identified to **reap the benefits of digitalisation for citizens and companies**, by:

- increasing Information and Communications Technology uptake in small and medium-sized enterprises, including supporting infrastructures and services, taken into account the territorial differences;
- improving digital skills, special attention needed in the education of both sides – consumers and business.

([14]) This Annex is to be considered in conjunction with the Proposal for a Regulation of the European Parliament and of the Council on the European Regional Development Fund and on the Cohesion Fund COM(2018) 372 and in the Proposal for a Regulation of the European Parliament and of the Council on the European Social Fund Plus COM(2018) 382 and in particular the requirements for thematic concentration and urban earmarking outlined in these proposals.

([15]) The intensity of needs is classified in three categories in a descending order – high priority needs, priority needs, needs.

Hungarian small and medium-sized enterprises suffer from low productivity and innovation activity, hindering their involvement in global value chains. High priority investment needs are identified to **enhance growth and competitiveness of small and medium-sized enterprises**, including in rural areas and in particular to:,

- raise productivity and the value added of the economy by increasing the number of innovative firms, invest in firms' capacity to apply new technologies in order to rank up in global value chains;
- encourage the entrepreneurial ecosystem, foster the creation of start-ups/scale-ups, accelerators, develop new business models for small and medium-sized enterprises, in particular through investment in intangible;
- raise competitiveness and internationalisation of small and medium-sized enterprises, also through participation in industry led and research driven international clusters and cooperation among the Central and Eastern European and Danube Strategy countries.

Human capital represents a bottleneck to productivity gains. High priority investment needs are identified to **develop skills for smart specialisation, industrial transition and entrepreneurship**, and in particular through:

- specific trainings in re- and upskilling in smart specialisation areas, innovation management, entrepreneurship and innovative business models within firms, with attention to the need to address industrial transition and circularity; adjust skills development to the business needs.

Cooperation actions in the context of the EU Strategy for the Danube Region and the Thematic Smart Specialisation Platforms would be beneficial. To strengthen innovation performance and foster productivity growth, smart specialisation areas should be identified on the basis of national and regional needs and potential.

Policy Objective 2: A low carbon and greener Europe – Clean and fair energy transition, green and blue investment, circular economy, climate adaptation and risk prevention

As Hungary's economy is relatively energy intensive, energy efficiency gains are as vital as an increase of the share of renewables. High priority investment needs are identified to **increase energy efficiency** and **use of renewable energy**, and in particular to:

- reduce energy consumption levels in residential buildings such as renovation of multi-apartment buildings and improving energy efficiency in small and medium-sized enterprises;
- improve energy efficiency in public buildings and district heating networks;
- decrease greenhouse gas emissions and air pollution by replacing fossil-fuelled boilers with installations based on renewable or on low carbon-intensive energy sources accompanied by energy efficiency renovation of buildings;
- support transition to renewables in heating and cooling, including through joint initiatives under the EU Strategy for the Danube Region, such as geothermal and biomass.

In Hungary, the main disaster risks are the floods along the Danube and Tisza river and drought periods. High priority investment needs are identified to **promote climate change adaptation, risk prevention and disaster resilience**, and in particular to:

- address risks as identified in the national risks assessment, with the focus on prevention;
- increase cross-border and transnational co-operation to identify the most suitable climate adaptation and risk prevention measures and management measures, including sharing of best practices and developing harmonized data systems.

Even though the improvement of drinking water infrastructure is ongoing, the need for protection of water sources and leaking related losses remain high. Priority investment needs are identified to **promote sustainable water management**, and in particular to:

- improve drinking water supply following the water hierarchy, including leakage reduction of water networks, and other efficiency measures; water reuse, for purposes other than drinking water (e.g. urban irrigation); improve drinking water access in public spaces and for vulnerable and marginalised groups; protection of water sources.

Waste management is still inefficient and Hungary is struggling to meet important EU targets. High priority investments are needed to **promote the transition to circular economy**, in particular:

- support shifting towards highest steps of the waste management hierarchy: waste prevention, reuse and recycling as well as expanding separate collection system;
- invest in capacity-building for all stakeholders involved in the transition to circular economy, and promote circular economy in small and medium-sized enterprises;
- develop alternatives to raw materials and promote the use of recycled materials (e.g. actions to increase the demand for recycled content, promotion of 'urban mining').

Although Hungary is making efforts to preserve its rich natural heritage and improve its air quality, environmental implementation is still a challenge. Priority investments needs are identified to **enhance biodiversity, green infrastructure in urban environment and reducing pollution**, and in particular to:

- improve air quality and related monitoring and modelling;
- support for biodiversity and the Natura 2000 network in urban areas.

Policy Objective 3: A more connected Europe – Mobility and regional ICT connectivity

Although Hungary is developing the transport infrastructure, gaps still remain in ensuring modal shift from road to more sustainable forms of transport as well as safety and security. High priority investment needs are identified to develop a **sustainable, climate resilient, intelligent, intermodal Trans-European Networks for Transport, including improved access to Trans-European Networks for Transport, national, regional and cross border mobility**, and in particular to:

- continue investments in Trans-European Networks for Transport to meet EU standards and promote a shift towards sustainable and accessible modes of transport, such as railways, inland waterways, in particular Danube navigability in line with the objectives of the EU Strategy for the Danube Region, and multi-modal transport,
- investments into infrastructure safety and security, in particular road safety;
- investments in Integrated Transport Systems;
- investments into making the transport system smarter, more connected and cleaner.

Based on sustainable multimodal urban mobility plans and bad air quality levels, high priority investments need are identified to **promote sustainable urban mobility**, in particular to:

- investments in low-carbon public transport and active modes of transport, like biking and walking;
- investments reducing the negative externalities of transport, in particular congestion, emissions, and traffic accidents by fostering sustainable and accessible modes like regional/light railways, multi-modal transport, cycling, including cycle transportation on public transit services).

Policy Objective 4: A more social Europe – Implementing the European Pillar of Social Rights

Targeted investment in employment, social, educational and healthcare including infrastructure in lagging regions([16]) and for disadvantaged groups will be key to foster development in Hungary.

Persistent skills mismatches are coupled with weak labour market prospects for the low skilled and less employable cohorts. Priority investment needs are therefore identified to **improve access to employment, in particular for youth, long-term unemployed and inactive people**, and notably to:

- support active and preventive labour market measures, including skills anticipation, personalised services, coordination with other services, including for persons with disabilities;
- devise outreach measures to the inactive;
- foster bipartite social dialogue and support social partners in capacity building.

A high gender employment gap is coupled with low availability of early childcare. Priority investment needs are therefore identified **to promote women's labour market participation and a better work/life balance**, and in particular to:

- promote access to affordable, sustainable and high-quality childcare, including through infrastructure, with focus on rural areas; promote sharing responsibilities among parents and flexible working arrangements.

([16]) Especially in the disadvantaged territories as defined by the 311/2007 Government Decree.

Educational outcomes are relatively low and characterised by high inequalities, prospects for vocational education and training graduates are weak and participation in adult learning is inadequate. High priority investment needs are therefore identified **to improve the quality and labour market relevance of education and training and equal access to it**, and in particular to:

- prevent early school leaving and support young people not in education or training;
- reduce exclusion and support access to, and completion of, higher levels of education and training among disadvantaged groups, including Roma;
- strengthen basic skills, including digital skills in vocational education and training and general education, key competences and smooth transition to work;
- promote adult learning via upskilling and reskilling;
- support infrastructure development in education and training.

Material deprivation among certain groups and in certain regions remains high. High priority investment needs are therefore identified to **promote the integration of marginalised communities and to address material deprivation,** and in particular to:

- develop social and educational measures, including infrastructure, in disadvantaged districts;
- tackle housing exclusion and regenerate deprived urban and rural areas;
- design measures to overcome discrimination against marginalised communities, such as Roma;
- improve services for people with disabilities, and physical accessibility to public institutions.

The health status of the population shows high levels of inequalities. Priority investment needs are identified **to enhance access to services, including health- and long-term care,** in particular to:

- foster access to affordable healthcare, reducing inequalities, especially in disadvantaged districts;
- provide infrastructure, including primary care facilities, and healthcare equipment;
- support the transition from institutional care to independent living community-based services.

Policy Objective 5 – A Europe closer to citizens by fostering the sustainable and integrated development of urban, rural and coastal areas and local initiatives

There are high priority territorial disparities (across regions and urban-rural) affecting various policy areas requiring a more tailor made and differentiated approach. High priority investment needs are identified to **foster the integrated social, economic, cultural and environmental development in urban areas, and in particular to**:

- investing in the specific potentials of selected functional urban areas as university centres, places of innovation, science and technology, and tackle the specific urban challenges, differentiated based on the local needs;
- in case of small and medium sized cities, polycentric development and urban-rural linkages should

be more heavily supported to tackle depopulation, accessibility of jobs, infrastructure and services;

- support for cooperation activities both inside the country and also cross-border.

High priority investment needs are identified to **foster the integrated social, economic, cultural and environmental development, including in rural areas, and in particular to**:

- investing in the rural areas of the regions lagging behind by addressing their infrastructure gap and other identified development needs, by paying special attention to the most deprived areas and ensuring the adequate access to basic services (e.g. health, education, social services) and jobs;
- support the non urban areas by focusing on endogenous local development based on existing assets and creating the conditions for the inhabitants for self-realisation (including investments in depopulating areas and nationally recognized tourism regions) through integrated approaches;
- support for cooperation activities both inside the country and cross-border.

Factors for effective delivery of Cohesion policy

- strengthened capacity of all beneficiaries (including regional and local authorities), social partners (including through more meaningful social dialogue), and civil society organisations and development of a partnership based model to implementation;
- improved public procurement performance, in particular increased competition and transparency;
- improved measures to prevent and address conflict of interest, fraud and corruption;
- development and implementation of a roadmap on administrative capacity building necessary for the effective administration and implementation of the Funds in the field of public procurement, transparency and fight against corruption;
- use of financial instruments and/or contributions to Hungary's compartment under InvestEU for revenue-generating and cost-saving activities;
- effective delivery of the policy objectives through innovative actions, including social innovation.

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