



European Construction Sector Observatory

Country profile **Hungary**

December 2020



In a nutshell

In 2019, Hungary's GDP reached HUF 40.9 trillion (EUR 114.5 billion), exhibiting a 4.9% growth as compared to the 2018 level.

Hungary's GDP performed well in 2019, mainly driven by supportive macroeconomic policies and domestic tailwinds including booming construction investment¹.

The **number of enterprises** in the broad construction sector in Hungary increased by 36.2%, from 129,409 in 2010 to 176,255 in 2019². This increase was primarily driven by growth in the number of enterprises in the architectural and engineering activities sub-sector (+52.0%) and the narrow construction (+48.2%).

Number of enterprises in the broad construction sector between 2010 and 2019

 **36.2%**

Similarly, the **volume index of production** in the broad construction sector grew by 53.9% over the 2015-2019 period. This was primarily driven by the growth in the volume index of production in the construction of buildings (+67.9%) and construction of civil engineering (+43.7%) over the same reference period.

Correspondingly, the **total turnover** of the broad construction sector reached EUR 34.3 billion in 2018, representing a growth of 49.1% as compared to its 2010 level (EUR 23.0 billion). It further increased to EUR 42.2 billion in 2019³, which represented a growth of 83.6% since 2010. This was mainly driven by the narrow construction (+114.4%), the architectural and engineering activities (+91.2%), the manufacturing (+54.1%),

and the real estate activities (+25.2%) sub-sectors over the 2010-2019 period, respectively.

Turnover in the narrow construction sub-sector between 2010 and 2019

 **114.4%**

Likewise, the **total gross operating rate** of the broad construction sector, which gives an indication of the sector's profitability, stood at 18.5% in 2018⁴, a 6.1 percentage points (pp) increase from 2010 (12.4%). This is also above the EU-27 average of 16.6%.

In terms of employment, there were 507,607 **persons employed** in the broad construction sector in 2019, representing 36.2% increase from 2010 level (372,684). This was driven by a growth in all the sub-sectors: the architectural and engineering activities (+56.0%), the narrow construction (+45.8%), the real estate activities (+14.4%) and the manufacturing (+9.0%) sub-sectors, respectively.

The **housing market** has witnessed continuous price increases since 2015. In fact, the house price index increased by 70.1% between 2015 and 2019. This was mostly driven by rising disposable incomes and low interest rates, backed by expansion of the government's homebuying subsidies. However, residential construction had been comparatively slower than the rising housing demand, predominantly due to capacity constraints. This in turn helps explain the housing price increase.

The Hungarian government continues to prioritise investments in **infrastructure**, as a means to foster economic growth. Supported by EU funds (the European Regional Development Fund – ERDF and

the Cohesion Fund), the government modernised 454.0 km of roads, both at the regional level and in connection with the TEN-T network by 2019. Apart from European Union (EU) funding, Hungary's inclusion on China's Belt and Road Initiative has also played an important role in the expansion and development of its transport infrastructure.

In April 2019, the Hungarian government announced its plans to invest EUR 11.0 billion in the road network over the next five years, primarily focusing on the expansion of the Hungarian motorway network.

Despite these developments, the Hungarian construction sector faces some major hindrances. The most important relates to labour and skill shortages, which have been aggravated by policies undermining migrants to enter and work in the country. In 2019, the Hungarian broad construction sector reported requirement of around 40,000 to 50,000 additional workers. Moreover, the lower proportion of education attainment, adult participation in learning and a high proportion of early leavers from education

and training, further impedes the issue of skill shortages in the sector.

The onset of the global pandemic COVID-19 also impacted the Hungarian construction sector. For instance, the issue of late payments aggravated, to the point where 64.0% of the Hungarian companies (including construction sector) considered the risk of a pan-European recession as serious. In addition, due to the travel bans, the immigration of foreign workers in Hungary also ceased, worsening the issue of skills and labour shortages.

However, while the sector may face impediments in the short-term (e.g. anticipated drops in housing prices by 9.0-10.0% in the capital city), the upcoming infrastructural projects backed by EU funding, such as the investment of HUF 1.2 trillion (EUR 3.6 billion) in railways by 2022, etc. paves the way for an optimistic outlook for the sector in the long run.

Table of Contents

In a nutshell	2
1 Key figures	5
Construction market.....	5
Productivity	6
Turnover and profitability	6
Employment	7
2 Macroeconomic indicators	9
Economic development.....	9
Demography and employment.....	9
Public finance	10
Entrepreneurship and access to finance	10
3 Key economic drivers of the construction sector	12
Business confidence	12
Domestic sales	12
Export of construction-related products and services	13
Access to finance in the construction sector.....	13
Access to housing	14
Infrastructure.....	16
4 Key issues and barriers in the construction sector	17
Company failure	17
Trade credit	17
Late payment.....	17
Time and cost of obtaining building permits and licenses	18
Skills shortage	18
Sector and sub-sector specific issues	19
5 Innovation in the construction sector	21
Innovation performance.....	21
Eco-innovation and digitalisation	22
6 National and regional regulatory framework	24
Policy schemes.....	24
Building regulations.....	25
Insurance and liability related regulations	25
7 Current status and national strategies to meet Construction 2020 objectives	26
TO 1 – Investment conditions and volumes	26
TO 2 – Skills.....	28
TO 3 – Resource efficiency / Sustainable construction	29
TO 4 – Single Market	29
TO 5 – International competitiveness	30
8 Outlook	32

1

Key figures

Construction market

The **number of enterprises** in the Hungarian broad construction sector totalled 176,255 in 2019⁵ (Figure 1), representing a 36.2% increase compared to the 2010 level (129,409). This increase was mainly led by the growth registered in the number of enterprises in the architectural and engineering activities sub-sector (+52.0%), followed by the narrow construction (+48.2%) and the real estate activities (+10.9%) sub-sectors. However, the manufacturing sub-sector experienced a 6.2% decline over the same reference period.

The narrow construction sub-sector accounted for more than half (56.6%, i.e. 99,798) of the total number of enterprises in the broad construction sector in 2019. This was followed by the real estate activities (20.9%, i.e. 36,827), the architectural and engineering activities (18.6%, i.e. 32,792) and the manufacturing (3.9%, i.e. 6,838) sub-sectors.

Number of enterprises in the architectural and engineering activities sub-sector between 2010 and 2019

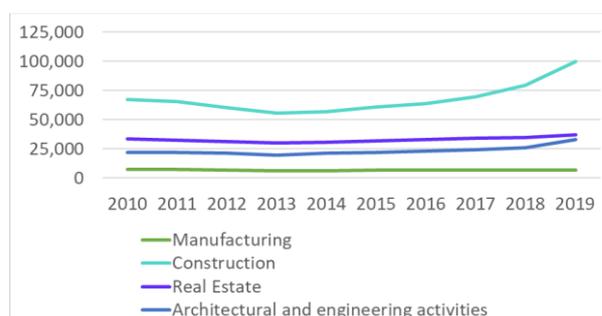
↑ 52.0%

Volume index of production in the broad construction sector recorded a 53.9% increase over the 2015-2019 period, with a 26.4 index points increase between 2018 and 2019. This was primarily driven by the growth in the volume index of production in the construction of buildings (+67.9%) and construction of civil engineering (+43.7%) over the same reference period (Figure 2).

Volume index of production in the construction of buildings between 2015 and 2019

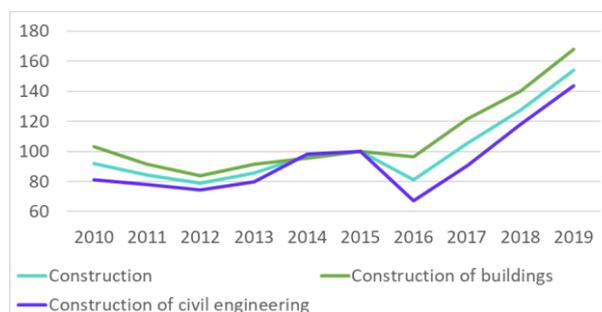
↑ 67.9%

Figure 1: Number of enterprises in the Hungarian broad construction sector between 2010 and 2019



Source: Eurostat, 2020.

Figure 2: Volume index of production in the Hungarian construction sector between 2010 and 2019 (2015=100)



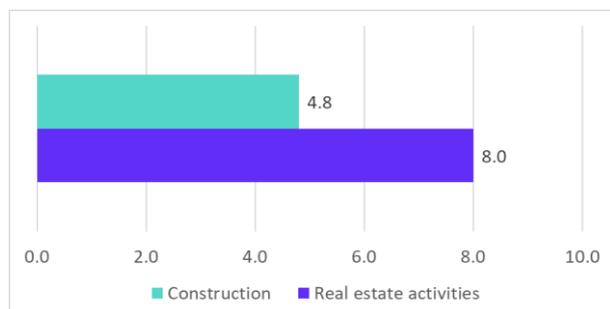
Source: Eurostat, 2020.

The **total value added at factor cost**⁶ of the broad construction sector amounted to EUR 12.1 billion in 2019⁷, representing a substantial 119.1% increase since 2010. Further, the narrow construction sub-sector accounted for 55.6% (EUR 6.7 billion) of the total added value in 2019, followed by the real estate activities (21.7%, i.e. EUR 2.6 billion), the architectural and engineering activities (11.5%, i.e. EUR 1.4 billion) and the manufacturing (11.1%, i.e. EUR 1.3 billion) sub-sectors.

The **share of the gross value added (GVA)** of the broad construction sector in the GDP stood at 14.1% in 2018⁸, slightly above the 2010 level (13.3%). Further, the share of GVA of the real

estate activities sub-sector in the GDP stood at 8.0% (EU-27 average 9.7%) in 2019, followed by the narrow construction sub-sector (4.8%), marginally below the EU-27 average of 5.0% (Figure 3).

Figure 3: Gross value added as a share of GDP in the Hungarian broad construction sector in 2019 (%)



Source: Eurostat, 2020.

While there are eight NUTS-2 statistical regions in Hungary, the **gross value added** was concentrated mainly in the regions of Budapest and Pest. The top three regions in terms of GVA in the narrow construction sub-sector were Budapest (23.7%, i.e. EUR 1.4 billion), Pest (14.3%, i.e. EUR 862.1 million) and Dél-Alföld (13.4%, i.e. EUR 807.2 million) in 2018⁹. Further, in the real estate activities sub-sector, the top three regions in terms of GVA were Budapest (44.3%, i.e. EUR 3.9 billion), Pest (13.0%, i.e. EUR 1.2 billion) and Nyugat-Dunántúl (8.5%, i.e. EUR 755.6 million) in 2018¹⁰.

Productivity

The **apparent labour productivity**¹¹ in the Hungarian broad construction sector registered a 36.6% increase over the 2010-2017 period, rising from EUR 14,771 to EUR 20,177, respectively. However, this was lower as compared to the EU-27 average of EUR 50,079 in 2017¹². Furthermore, the labour productivity rose to EUR 23,802 in 2018¹³, representing a significant increase of 61.1% over the 2010 level (Figure 4). With regards to sub-sectors, the narrow construction sub-sector reported the largest increase in labour productivity, from EUR 11,200 in 2010 to EUR 21,628 in 2019¹⁴ (+93.1%). It was followed by the manufacturing sub-sector, which increased by 61.7%, from EUR 15,358 to EUR 24,833 over the same reference period. The labour productivity in the architectural and engineering activities sub-sector increased by 53.4%, from EUR 14,200 in

2010 to EUR 21,788 in 2019. Lastly, the real estate activities sub-sector reported the lowest growth in labour productivity between 2010 and 2019, rising from EUR 25,600 to EUR 32,971 (+28.8%).

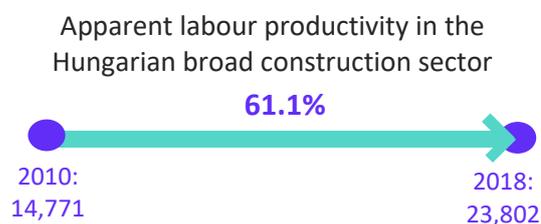
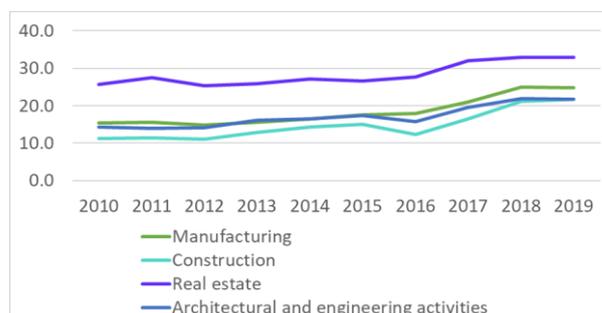


Figure 4: Labour productivity in the broad construction sector in Hungary between 2010 and 2019 (EUR k)



Source: Eurostat, 2020.

Turnover and profitability

The **total turnover** of the broad construction sector in 2018 amounted to EUR 34.3 billion, representing an increase of 49.1% as compared to the 2010 level (EUR 23.0 billion). Moreover, it increased to EUR 42.2 billion in 2019¹⁵, marking a growth of 83.6% over 2010. This was mainly driven by substantial increases in all the four sub-sectors, namely the narrow construction (+114.4%), architectural and engineering activities (+91.2%), manufacturing (+54.1%), and the real estate activities (+25.2%) sub-sectors over the same period.

In 2019, the largest share of the turnover came from the narrow construction sub-sector, which accounted for 64.0% (i.e. EUR 27.0 billion) of the total. It was followed by the real estate activities (16.0%, i.e. EUR 6.7 billion), manufacturing (10.8%, i.e. EUR 4.6 billion), and the architectural and engineering activities (9.2%, i.e. EUR 3.9 billion) sub-sectors.



The **gross operating surplus** of the broad construction sector amounted to EUR 6.3 billion in 2018¹⁶, 122.7% higher than the level registered in 2010 (EUR 2.8 billion). Notably, the highest growth was registered by the narrow construction sub-sector (+232.3%) during 2010-2018, followed by the architectural and engineering activities (+148.5%), manufacturing (+116.8%) and the real estate activities (+40.7%) sub-sectors, over the same reference period.

In line with this, the **gross operating rate**¹⁷ of the broad construction sector, which gives an indication of the sector’s profitability, stood at 16.0% in 2017, slightly below the EU-27 average of 16.6%. However, it rose to 18.5% in 2018¹⁸, a considerable 6.1 pps increase from the rate registered in 2010 (12.4%). All the four sub-sectors showed significant improvements in their respective profit margins when compared with the 2010 levels. In particular, the real estate activities sub-sector registered the highest profit margin in sales (29.9%) in 2018, followed by the architectural and engineering activities (20.6%), narrow construction (15.5%) and manufacturing (14.8%) sub-sectors.

In parallel, **construction costs** index increased by 25.7% during the 2015-2019 period, mainly driven by a 36.2% rise in the labour cost index (following the increase in wages). This was also spurred by a 18.0% increase in the input prices for materials in construction over the same reference period (Figure 5).

Labour cost index in construction between 2015 and 2019 **↑ 36.2%**

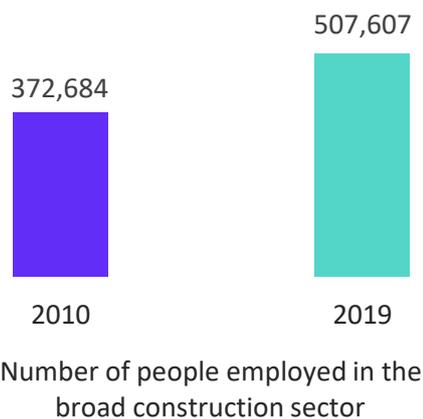
Figure 5: Construction cost index between 2010 and 2019 (2015=100)



Source: Eurostat, 2020.

Employment

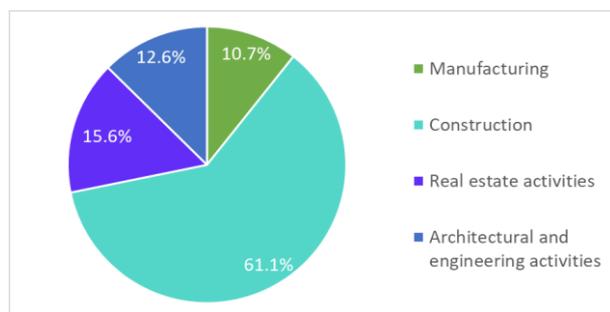
In 2019¹⁹, there were 507,607 **persons employed** in the Hungarian broad construction sector, registering a 36.2% increase compared to the 2010 level (372,684 persons). In 2019, the narrow construction sub-sector accounted for 61.1% (310,211 persons) of the total workforce in the broad sector, marking a growth of 45.8% between 2010 and 2019. This was followed by the real estate activities sub-sector employing 15.6% (79,338 persons), the architectural and engineering activities sub-sector employing 12.6% (63,911 persons) and the manufacturing sub-sector employing 10.7% (54,148 persons). Over the 2010-2019 period, the real estate activities sub-sector grew by 14.4%, the architectural and engineering activities sub-sector grew by 56.0% while the manufacturing sub-sector went up by 9.0% (Figure 6).



In 2018²⁰, **SMEs** in the broad construction sector employed as high as 91.7% of the total number of persons employed in the broad construction sector, highlighting its significance in the Hungarian construction sector. However, this was marginally below the 2010 level of 92.3%.

Number of persons employed in the architectural and engineering activities sub-sector between 2010 and 2019 **↑ 56.0%**

Figure 6: Percentage of people employed per construction sub-sectors in Hungary in 2019



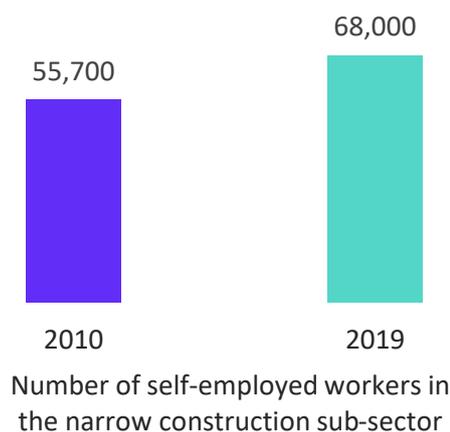
Source: Eurostat, 2020.

The employment opportunities in the Hungarian construction sector are mainly concentrated in the regions of Budapest and Pest. Budapest alone employed almost 27.2% and 56.0% of the total workforce in the narrow construction and real estate activities sub-sectors in 2018²¹, respectively. This was followed by Pest employing 12.8% and 9.0% of the total workforce in the narrow construction and real estate activities sub sectors in 2018, respectively.

As for the **employment by specific occupation**, the number of service and sales workers in the manufacturing sub-sector rose by 89.6% over the 2010-2019 period, followed by professionals (+73.9%), plant and machine operators (+64.5%) and technicians and associate professionals (+43.0%). On the contrary, the demand for managers declined by 20.0% while crafts and related trade workers recorded a slight downfall of 1.2% over the same period. In the narrow construction sub-sector, the demand for technicians and associate professionals registered a substantial increase of 86.8%, followed by a 75.5% and 37.7% rise in the number of professionals and elementary occupations between 2010 and 2019, respectively. However, the number of managers in the narrow construction sub-sector also registered a notable decline of 42.8% over the same reference period. The demand for technicians and associate professionals in the real estate activities sub-sector²² rose by 30.0% between 2010-2019.

Number of service and sales workers in the manufacturing sub-sector during 2010-2019 ↑ **89.6%**

Additionally, the number of **self-employed workers** in the narrow construction sub-sector represented 15.2% of the total self-employed persons in the general economy in 2019. This is well above the EU-27 average of 11.9% and the 2010 level of 12.8%. In the real estate activities sub-sector, the share of self-employed workers fell from 1.5% in 2018 to 1.2% in 2019, in line with the 2010 level. This was below the EU-27 average of 1.4% in 2019.



In parallel, **full-time employment** in the narrow construction and the real estate activities sub-sectors increased by 26.6% and 8.9% between 2010 and 2019, respectively. In the manufacturing sub-sector, this increase was 29.8% over the same period. **Part-time employment** in the narrow construction and the manufacturing sub-sectors grew by 24.3% and 0.6% respectively during the 2010-2019 period. Similarly, the real estate activities sub-sector recorded an increase of 15.6% between 2011²³ and 2019.

Part-time employment in the narrow construction sub-sector between 2010 and 2019 ↑ **24.3%**

With regards to **number of persons employed regionally** in the narrow construction sub-sector in 2018²⁴, the top three regions were Budapest (27.2%, i.e. 91,870 persons), Pest (12.8%, i.e. 43,340 persons) and Észak-Alföld (11.1%, i.e. 37,480 persons). For the real estate activities sub-sector, the top three regions in 2018 were Budapest (56.0%, i.e. 40,200 persons), Pest (9.0%, i.e. 6,470 persons) and Nyugat-Dunántúl (7.3%, i.e. 5,260 persons).

2

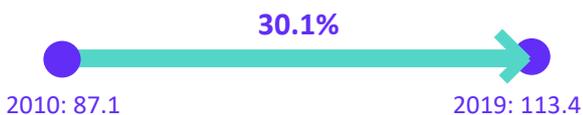
Macroeconomic indicators

Economic development

Hungary has experienced a strong economic expansion in recent years with one of the highest GDP growth rates in the EU, led by booming construction investments and the introduction of new models to the production lines of major automotive factories²⁵.

Over the period 2010-2019, the Hungarian GDP experienced a growth of 30.1%, reaching HUF 40,897.2 billion (EUR 113.4 billion) from HUF 31,428.8 billion (EUR 87.1 billion). The country's GDP has risen on an average by 4.0% each year since 2014 (annual growth rate of 4.9% in 2019), supported partly by the conducive macroeconomic policies. The potential GDP in 2019 amounted to HUF 39,274.4 billion (EUR 108.9 billion), resulting in a positive output gap of 4.1%.

Hungarian GDP over 2010-2019 (EUR billion)



In parallel, owing to a rise in demand and wage growth, the **inflation rate** has been continuously increasing since 2015, rising to 3.4% in 2019 from 0.1% in 2015.

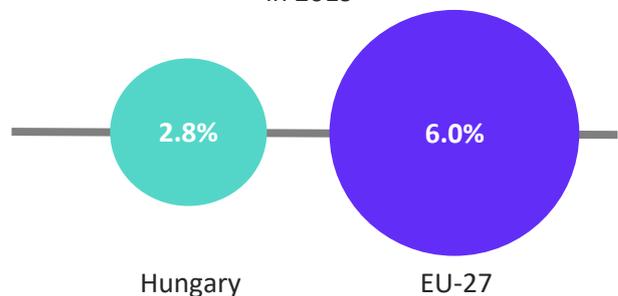
Demography and employment



In 2019, the average unemployment rate (between 25-64 years) in Hungary stood at 2.8%, 7.3 percentage points below the 2010 level and well below the EU-27 average of 6.0%.

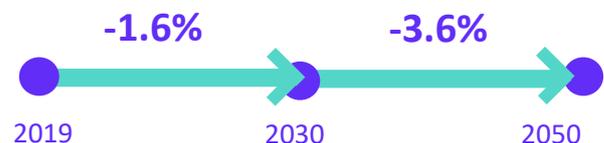
Similarly, the **youth unemployment rate** (below age of 25) stood at 11.4% in 2019, well below the 2010 level of 26.4% and the EU-27 average of 15.1% in 2019.

Unemployment rate in Hungary and the EU-27 in 2019



In terms of demography, the **total population** in Hungary amounted to 9.8 million people in 2019, declining slightly by 2.3% over the 2010-2019 period. It is expected to decline further by 1.6% by 2030 and 3.6% between 2030 and 2050, reaching 9.3 million people. Further, **net migration** stood at 33,562 in 2019, representing an increase of 191.4% as compared to the 2010 level (11,519) and a remarkable improvement as compared to the 2016 level (-1,187). The migration and labour mobility consequently helped fill the labour and skill shortages in the country.

Projected population evolution in Hungary



Meanwhile, the **working age population** in Hungary made up 66.1% of the total population in 2019, slightly above the EU-27 average of 64.6%. However, by 2050, the share of the working age population is expected to decline to 58.4% and people aged 65 or above will make up 27.7% of the overall population. This shift in population structure will result in an increased need for

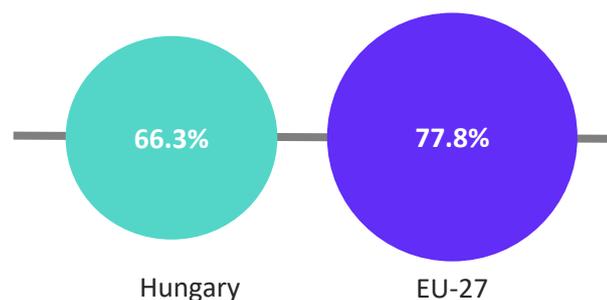
adequate elderly care buildings and infrastructures. This in turn may generate more opportunities for the Hungarian construction sector.

Public finance

In 2019, the general **government expenditures** represented 46.1% of GDP (49.2% in 2010), marginally below the EU-27 average of 46.7%. The **general government gross debt** amounted to 66.3% of GDP in 2019, below the EU-27 average of 77.8%. In the same year, the **general government deficit** stood at -2.0% of GDP (-4.5% in 2010), higher than the EU-27 average of -0.6% in 2019.

Additionally, the Hungarian Central Bank has adjusted its official interest rate downwards, from 5.5% in 2010 to 0.9% in 2019, in an effort to spur private consumption in the economy.

General government gross debt as a percentage of GDP (2019)



Entrepreneurship and access to finance

According to the 2019 Global Competitiveness Report by the World Economic Forum, Hungary ranked 66th out of 141 economies, in its financial system²⁶.

As per the report, the country ranked 47th in venture capital availability, 55th in soundness of banks, 56th in financing of SMEs and 90th in domestic credit to the private sector. While few challenges remain when it comes to access to finance, the situation is improving.

Loans to non-financial corporations increased by 54.7%, from HUF 5,608.4 billion (EUR 15.5 billion) in 2010 to HUF 8,674.5 billion (EUR 24.0 billion) in 2019.

With regards to entrepreneurship, Hungary ranked 105th and 122nd in growth of innovative companies and entrepreneurial culture, respectively. In the context of companies embracing disruptive ideas, the country was ranked 128th²⁷.

Hungary stood 52nd out of 190 economies in the World Bank 2020 Doing Business Report, with a relatively low rank, when it comes to the 'Starting a Business' indicator (87th²⁸).

According to the 2019 Small Business Act (SBA) Fact Sheet²⁹, Hungary's performance was in line with the EU-28³⁰ average in entrepreneurship. In fact, its performance on indicators, namely high job creation expectation rate and share of high growth enterprises, was well above the EU-28 average. On the contrary, the country's performance was poor in areas of media attention given to entrepreneurship, entrepreneurship as a desirable career choice and entrepreneurship education both at basic school and post-secondary levels.

To support entrepreneurship, the Hungarian government has already introduced several measures, such as *Innotrade*, *Golnno*, and other Startup Campus programmes and services. For instance, the *Golnno* programme provided start-ups with professional advice in the fields of market entry, marketing, research and communication strategy.

Owing to the COVID-19 crisis, a Startup Rescue Capital Programme was launched to provide rapid assistance to those successful start-ups that have stalled as a result of the crisis³¹.

In addition to the measures already in place, the Hungarian government introduced four new initiatives to boost entrepreneurship in the economy³²:

- The '**Startup Campus BME powered by Hiventures Programme**' (*BME Start-up Program a Hiventures támogatásában*), aimed at helping students and researchers at Budapest University of Technology and Economics to gain practical knowledge in setting up a business with HUF 9.0 million (EUR 24,947.3) being granted to the best ideas to achieve their goals and establish their companies. The initiative is planned to be expanded to other universities as well.

- The **‘National Entrepreneurship Mentoring Programme’** (*Országos vállalkozói mentor program*), to increase the competitiveness and efficiency of the SME sector by mentoring SMEs. Introduced by the Ministry of Innovation and Technology, the project provides access to a network of experienced entrepreneurs and professionals for 500 micro firms and SMEs, providing personal mentoring for entrepreneurs, companies and for SMEs in internationalisation.
- **‘Supporting young entrepreneurs and unemployed people to become entrepreneurs’** (*Fiatalok vállalkozóvá válásának támogatása és az álláskeresők vállalkozóvá válásának támogatása programok*), with an overall budget of EUR 125.0 million, involved helping 5,200 young people (aged 18-30) and 2,600 jobseekers (over the age of 30) to establish start-ups and complete their first year of operations.
- **‘Hiventure StartUpHer Programme’** (*Hiventures StartupHER program: fókuszban a jövő magyar vállalkozónői!*), aimed at facilitating women in developing businesses. Introduced by the Hiventures equity fund, the programme has an overall budget of EUR 1.8 million. After completing the training, selected participants were also eligible to receive financial support of HUF 9.0 million (EUR 28,125) to carry out their projects with the help of a mentor.

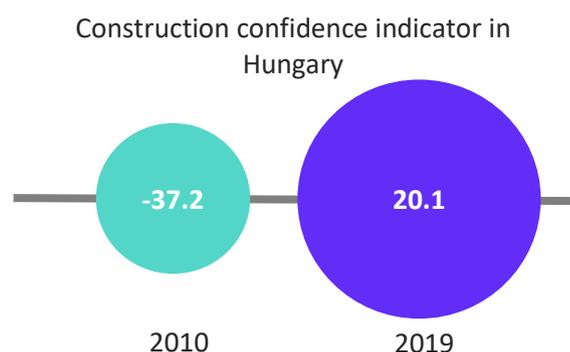
3

Key economic drivers of the construction sector

Business confidence

Over the 2010-2019 period, business confidence improved in the broad construction sector, with all three indicators (consumer confidence, industry confidence and construction confidence) showing signs of improvement over time.

The **consumer confidence** indicator increased from -26.5 in 2010 to -4.1 in 2019. This is higher than the EU-27 average of -6.2 in 2019. Similarly, the **industry confidence** indicator improved from -2.0 in 2010 to 5.4 in 2019. This is also well above the EU-27 average of -4.8 in 2019. Finally, the **construction confidence** indicator experienced the largest increase over the period, reaching 20.1 in 2019, up from -37.2 in 2010. This is a significant improvement, especially in comparison to the EU-27 average of 5.1.



Mirroring the increased confidence, the **investment ratio** improved from 19.9% in 2010 to 27.2% in 2019, reaching its peak in the decade.

In parallel, **investment per worker** increased by 19.0% in 2018³³, reaching EUR 21,374 as compared to EUR 17,964 in 2010. Following the uptrend, in terms of sub-sectors, investment per worker in the architectural and engineering activities sub-sector

registered the highest increase of 150.0% between 2010 and 2018³⁴, reaching EUR 3,500 from EUR 1,400 over the period. This was followed by the narrow construction and real estate activities sub-sectors, rising by 71.4% and 67.5% over the same period to reach EUR 3,600 and EUR 27,800, respectively, in 2018.

Domestic sales

The ranking of the **most domestically sold construction products** in Hungary has experienced quite a few changes since 2010. Out of the top five ranked products, two product groups showed an increase in their sales value over the 2010-2019 period, namely, 'Prefabricated buildings of metal' (+348.2%) and 'Tiles, flagstones, bricks and similar articles' (+126.5%). Notably, the largest increase in sales was recorded for the product category 'Boards, blocks and similar articles of vegetable fibre etc.' rising by 848.8% between 2010 and 2019, though it only accounted for EUR 38.5 million in 2019. This was followed by a 442.0% growth in 'Prefabricated wooden buildings' over the same period, accounting for EUR 24.4 million in 2019. Both these product groups together accounted for 3.0% of the total construction product sales value sold domestically.

The top five most domestically sold construction products, accounting for 53.8% of the total construction products sold domestically in 2019, are presented in the table below, including a comparison with the most sold products in the EU-27 region.

Table 1: 5 most domestically sold construction products in Hungary and in the EU in 2019

Hungary				EU-27
	Product	Value (EUR m)	Share in construction product domestic sales (%)	Product
1	Other structures and parts of structures, etc. (group 251123)	492.5	23.4	Other structures and parts of structures, etc. (group 251123)
2	Ready-mixed concrete (group 236310)	229.7	10.9	Doors, windows and their frames, etc. (group 251210)
3	Prefabricated buildings of metal (group 251110)	163.0	7.7	Ready-mixed concrete (group 236310)
4	Tiles, flagstones, bricks and similar articles, etc. (group 236111)	124.2	5.9	Prefabricated buildings of metal (group 251110)
5	Prefabricated structural components for building or civil engineering, etc. (group 236112)	123.7	5.9	Prefabricated structural components for building or civil engineering (group 236112)

Source: PRODCOM, 2020.

Export of construction-related products and services

The ranking of the **most exported construction products** experienced some fluctuations since 2010. During the 2010-2019 period, the largest increase was recorded in the product category 'Towers and lattice masts of iron or steel' (+1,387.2%), accounting for EUR 23.0 million in 2019, followed by 'Plaster products for construction purposes' which rose by 676.4% over the same period and accounted for EUR 9.0 million in 2019. Notably, both these product groups didn't make to the top five list and contributed to 3.5% of construction exports, taken together. The top five most exported construction products from Hungary and the EU-27 are summarised in Table 2. Together, these accounted for 52.7% of all construction products exports in 2019.

Table 2: 5 most exported construction products in Hungary and in the EU in 2019

Hungary				EU-27
	Product	Value (EUR m)	Share in construction product export sales (%)	Product
1	Other structures and parts of structures, etc. (group 251123)	202.3	22.2	Ceramic tiles and flags (group 233110)
2	Windows, French windows and their frames, etc. (group 162311)	103.6	11.4	Other structures and parts of structures, etc. (group 251123)
3	Fibreboard of wood or other ligneous materials (group 162115)	73.2	8.0	Fibreboard of wood or other ligneous materials (group 162115)
4	Oriented strand board (OSB) (group 162113)	54.5	6.0	Doors, windows and their frames, etc. (group 251210)
5	Particle board (group 162112)	46.5	5.1	Marble, travertine, alabaster, etc. (group 237011)

Source: PRODCOM, 2020.

In terms of **cross-border provision of construction services**³⁵, Hungary exported EUR 337.7 million of construction services worldwide in 2018³⁶, marking a 13.4% increase as compared to the 2010 level (EUR 297.9 million). Notably, 93.6% of total exports (EUR 316.1 million) in 2018 came from EU-27 countries, compared to 65.0% (EUR 193.5 million) in 2010³⁷. In parallel, Hungary imported a total of EUR 203.8 million in construction services from the world in 2018³⁸, a 17.3% decline since 2010 (EUR 246.4 million), with EUR 199.7 million (almost 98.0%) coming from the EU-27 countries and remaining EUR 4.0 million from outside the EU-27.0 countries. Overall, Hungary reported a **trade surplus** of EUR 133.9 million in 2018³⁹.

Access to finance in the construction sector

As per the Survey on the Access to Finance of Enterprises (SAFE) 2020 report, the rising macroeconomic uncertainty influenced the availability of external finance in the country. As a result, banks are less willing to provide loans; demand higher level of collaterals; and provide loans of smaller size. Further, between April and September 2020, 20.0% of the SMEs in Hungary applied for a bank loan (EU-28⁴⁰ average - 35.0%), while 2.0% did not apply because of fear of rejection (EU-28 average - 4.0%)⁴¹.

The EIB Investment Survey (EIBIS) for 2019 suggested that 8.0% of all Hungarian firms could be considered as financially constrained, which was higher than the EU-28⁴² average of 5.0%. In particular, the highest share of financially constrained firms was in the construction sector (16.0%). The report further showed that because of the constraints in availing external finance, around 82.0% of the construction firms relied mainly on internal funds⁴³.



The EIB Investment Survey (EIBIS) for 2019 showed that 13.0% of firms in the Hungarian construction sector were dissatisfied with the cost; while 7.0% and 5.0% were not satisfied with the collateral demanded and the maturity of financing⁴⁴.

To address these pressing issues, the Hungarian government developed several measures. The Ministry of Foreign Affairs and Trade in April 2020 announced a new HUF 50.0 billion (EUR 138.6 million) subsidy scheme to improve competitiveness in the face of the coronavirus pandemic. Medium-sized and large enterprises may apply for a subsidy from the Hungarian Investment Promotion Agency (HIPA) for investments worth over EUR 150,000, provided they undertake to maintain existing jobs and can prove that the pandemic has resulted in their economic difficulties⁴⁵.

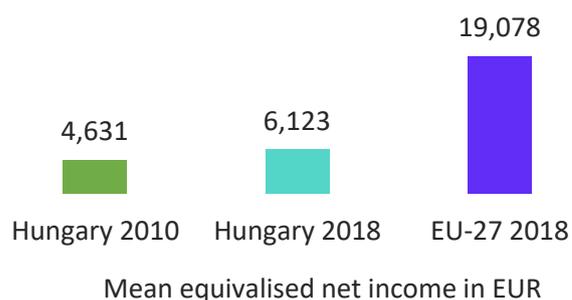
A new version of the Funding for Growth Scheme for micro, small and medium-sized enterprises was announced, providing a total of HUF 1,500.0 billion in funding, and a total of HUF 450.0 billion for the Bond Funding for Growth Scheme for large enterprises⁴⁶.

In addition, the Central Bank provided fresh funding of HUF 3.0 trillion (EUR 8.3 billion) to boost the liquidity of the banking system, which was turning down credit requests because of the financial crunch. Moreover, a financial package of HUF 1,490.0 billion (EUR 4.1 billion) is set to be made available to Hungarian businesses via harmonised loans, capital and guarantee programmes by the Hungarian Development Bank and its affiliates to offset the economic impact of the pandemic and relaunch the economy. Coming with an 80.0% state guarantee, the loan programme can be used to meet the short-, mid- as well as long-term needs of businesses⁴⁷.

The framework of the *Garantiqa Crisis Guarantee Programme* provides access to financing to domestic SMEs and large enterprises in the amount of HUF 500.0 billion (EUR 1.5 billion) with a 90.0% government guarantee⁴⁸.

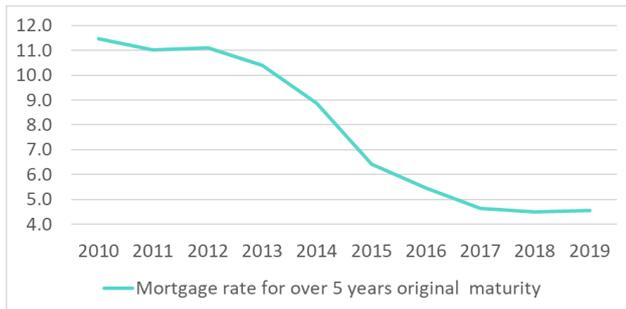
Access to housing

The **number of households** in Hungary increased by 2.7%, from 4.0 million in 2010 to 4.1 million in 2019. While in 2010, the share of population living in densely populated areas stood at 31.4%, it rose marginally to 32.8% in 2019. Similarly, the share of population living in intermediate urbanised areas went up to 33.9% from 20.4% over the same period. Meanwhile, the **mean equivalised net income** grew consistently since 2010, reaching EUR 6,123 in 2018, while the EU-27 average stood at EUR 19,078. It further increased to EUR 6,568 in 2019, marking a growth of 41.8% as compared to the 2010 level of EUR 4,631.



Furthermore, the **interest rate on mortgages** (for loans over five years of original maturity) also witnessed a decline of 6.9 percentage points between 2010 and 2019, reaching 4.6% in 2019, compared to 11.5% in 2010 (Figure 7). However, the total **outstanding residential loans to households** declined significantly by 44.8%, falling to EUR 13.6 billion in 2018⁴⁹ from EUR 24.7 billion in 2010.

Figure 7: Mortgage rates for loans for over 5 years original maturity between 2010 and 2019 (%)



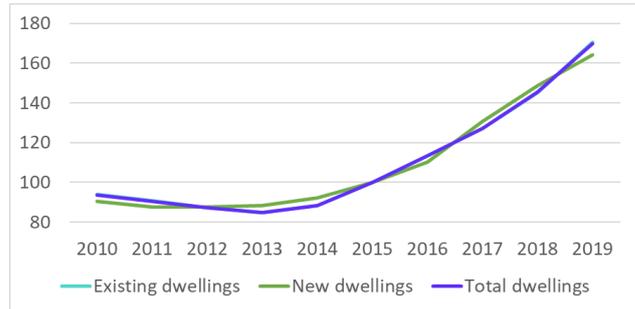
Source: ECB MFI Interest Rate Statistics, 2020.

In 2019, housing transactions in Hungary, particularly in cities, declined by almost 10% as compared to the previous year. This was mainly due to the introduction of the Hungarian Government Bond Plus (*Magyar Állampapír Plusz*) which made the yields on the housing market less appealing for investors⁵⁰.

The **house price index** of total dwellings has been increasing gradually since 2015, witnessing a 70.1% growth between 2015 and 2019. This was led by a 70.5% and 64.2% rise in the house price index of existing and new dwellings, respectively, over the same period. This increase was primarily driven by the rise in disposable incomes and low interest rates, backed by the expansion of the government’s homebuying subsidies. In parallel, the rental price index for housing experienced a gradual increase over the years, rising by 24.6% between 2015 and 2019. The price increase was mitigated by the increase in rental supply.

House price index for total dwellings between 2015 and 2019 **↑ 70.1%**

Figure 8: House price index⁵¹ in Hungary between 2010 and 2019 (2015=100)



Source: Eurostat, 2020.

Construction of houses has not kept pace with the rising housing demand, mainly owing to capacity constraints. The continuous rise in house prices has further led to concerns of overvaluation in the country’s capital, Budapest.

Residential property prices in Hungary have experienced the fastest growth in the EU region in the past five years, leading to shortage of affordable rental housing, which ultimately hinders mobility. While there is generous state support to buy a flat, which is mainly accessible to middle-income households, there is no scheme in place to improve the affordability of rent for the poor and lower-middle income households⁵².

The number of **building permits** for residential dwellings increased by 191.1% between 2015 and 2019. With regards to one-dwelling building permits, there was a 114.0% increase over the same period. Notably, the highest increase was seen in building permits for two or more dwelling buildings, rising by 251.2% between 2015 and 2019.

Even though the number of newly built houses has more than doubled in recent years, amounting to around 18,000 units by 2019, still at this level it stands at half of the pre-crisis average. Further, representatives of the industry foresee a decline in building activity from 2021 onwards, once the 2020 construction projects get finalised⁵³.

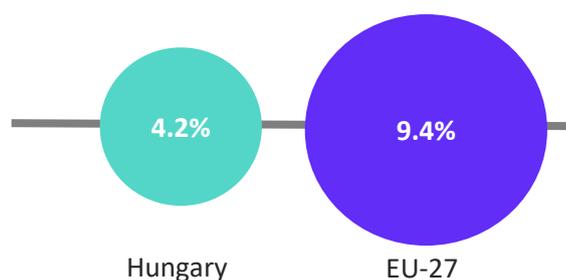
Number of building permits for residential dwellings between 2015 and 2019 **↑ 191.1%**

The expiry of the preferential value-added tax regime for new housing from 2020 backed by tighter environmental standards applicable from 2021 onwards is expected to further hold back the launch of new housing projects in the country⁵⁴.

Hungary has one of the highest home ownership rates in the EU region, with 91.7% of the **building stock** being owner-occupied in 2019, the highest in the decade (89.7% in 2010). In parallel, 8.3% of building stock was occupied by tenants in 2019, being the lowest in the decade (10.3% in 2010). This can be partly attributed to lower interest rates, homebuilding subsidies and other state policies favouring home ownership. At the same time, the home ownership rate for the population earning **above 60.0% of the median equalised income** reached to 91.8% in 2019 as compared to 90.5% in 2010. Even the home ownership rate for the population earning **below 60.0% of the median equalised income** stood as high as 91.0% in 2019, above the 2010 level of 84.2%.

In 2019, the **overcrowding rate**⁵⁵ in Hungary stood at 30.1%⁵⁶, surpassing the EU-27 average of 26.0%. Similarly, the **severe housing deprivation rate**⁵⁷ stood at 7.8%⁵⁸, almost double the EU-27 average of 4.0%. Lastly, the **housing cost overburden rate**⁵⁹ has been falling since its peak in 2012 (14.3%), standing at 4.2% in 2019, below the EU-27 average of 9.4%⁶⁰.

Housing cost overburden rate in 2019



Infrastructure

According to the 2019 Global Competitiveness Report⁶¹, Hungary ranked 27th out of 141 economies in infrastructure.

With an overall rank of 30th out of 141 economies, Hungary performed well in transport

infrastructure. In particular, it ranked 9th in railroad density, 37th in road connectivity and 46th in efficiency of train services. In contrast, the country lagged in airport connectivity (62nd), efficiency of air transport services (70th), quality of road infrastructure (71st)⁶².

With the launch of an upgrade programme for the lower-hierarchy road network, spending on road maintenance rose recently. However, 61.5% of the road network remains in an inadequate or bad condition (especially the ones managed by municipalities), according to state-owned company Hungarian Public Roads (*Magyar Közút*). The government aims at reducing the motorway congestion around the capital, which is the focal point for the entire Hungarian roads network. In order to do so, it has expanded the motorway network outside of Budapest: thanks to EU funding, roads M4⁶³ and M35⁶⁴ have been extended with new sections, redirecting international transit traffic between Hungary's eastern and western neighbouring countries. Similarly, the government has decided the expansion of road M81, connecting the M1 with the M6 and crossing the M7, creating an important connection crossing the western part of Hungary and avoiding the capital⁶⁵.

Hungary ranked among the lowest in the EU region in train services. However, increasing investments in rail connectivity and rolling stock are expected to bring improvements in this sphere.

Under the Cohesion Policy, Hungary has been allocated EU funding amounting to EUR 9.0 billion for sustainable growth and transport. By 2019, building or modernisation of 454 kms of roads, both at the regional level and in connection with the TEN-T network was completed with the help of investments driven by the European Regional Development Fund and the Cohesion Fund. Further, Hungary is a beneficiary of EU programmes such as **Connecting Europe Facility**, which allocated EUR 1,087.0 million of EU funding to specific projects on strategic transport networks⁶⁶.

4

Key issues and barriers in the construction sector

Company failure

The **business demography** in the Hungarian broad construction sector has changed significantly between 2010 and 2018. Specifically, the number of **company births** in the narrow construction sub-sector increased by 128.6%, from 6,156 in 2010 to 14,075 in 2018. This was followed by the real estate activities sub-sector, where company births increased by 51.6%, from 3,300 in 2010 to 5,002 in 2018. Lastly, company births in the architectural and engineering activities sub-sector increased by 156.0%, from 1,070 in 2010 to 2,739 in 2018.

In parallel, the number of **company deaths** in the narrow construction sub-sector declined by 38.3%, from 8,509 in 2010 to 5,251 in 2018. Similarly, the real estate sub-sector witnessed a decrease of 18.3% in company deaths, from 3,127 in 2010 to 2,555 in 2018. Contrarily, the architectural and engineering activities sub-sector experienced a 12.6% increase in company deaths from 1,203 in 2010 to 1,354 in 2018.

Company births in architectural and engineering activities sub-sector between 2010 and 2018

↑ 156.0%

Trade credit

As per the 2020 Survey on the access to finance of enterprises (SAFE) Report, 10.0% of SMEs reported **trade credit** as relevant to their businesses, lower than the EU-27 average of 28.0%. Around 2.0% of SMEs have reported using trade credit between April 2019 to September 2019, below 14.0% of the SMEs in the EU-27 average⁶⁷.

Furthermore, around 28.0% of Hungarian SMEs applied for trade credit in 2019, slightly below the EU-27 average of 31.0% while about 25.0% of SMEs did not apply due to sufficient internal funds (lower than the EU-27 average of 33.0%). In contrast, almost 5.0% SMEs did not apply out of fear of rejection⁶⁸.

Last, around 13.0% of SMEs concluded that the availability of trade credit in Hungary improved, whereas 46.0% of them regarded it to remain unchanged⁶⁹.

Late payment



According to SAFE Report 2020, around 44.0% of SMEs in Hungary were paid late in general, at par with the EU-27 average. However, this is lower than in 2019 (51.0%)⁷⁰.

As per the report, around 13.0% of SMEs have reported facing late payment issues regularly in 2020. This is at par with the EU-27 average, but less than 2019 (20.0%)⁷¹.

As per the **European Payment Report 2020**, around 64.0% of the companies in Hungary consider the risk of a pan-European recession (due to COVID-19 pandemic) as the primary factor explaining late payments of the customers. Around 78.0% of the companies in Hungary reported having adjusted to the late payment pattern of customers, in order to maintain a healthy client relationship.

As a consequence of late payments, 50.0% of Hungarian companies have a high impact on the liquidity squeeze⁷². According to the SAFE report

2020, 31.0% of SMEs reported that it affected payments to suppliers, while 24.0% of SMEs reported that it affected business operations. Around 16.0% of SMEs reported that it affected investments or new hiring and for 9.5% of the SMEs, repayments of loans were delayed⁷³.

As per the report, more than half of the companies in Hungary (53.0%) expect the authorities to take initiative to solve the problem of late payments. Hungarian companies wish to see the introduction of new legislation concerning late payment⁷⁴.

Time and cost of obtaining building permits and licenses

According to the World Bank's Doing Business Report 2020, in terms of 'Dealing with construction permits', Hungary stood 108th out of 190 countries in 2019. This is two positions better than the previous year (110th)⁷⁵. Completing the formalities to build a warehouse⁷⁶ requires 22 administrative procedures (much higher than the OECD high-income average of 12.7) and takes 192.5 days (compared to the 152.3 days for OECD high-income average) (Table 3). The estimated cost to complete the formalities is approximately 0.6% of the warehouse value, considerably lower than the OECD high-income average of 1.5%.

Table 3: Construction procedures timing and costs in Hungary

Procedure	Time to complete	Associated costs
Request and obtain certificate of site ownership and site map from the Földhivatal	1 day	HUF 9,250 (EUR 27.5)
Obtain a geodetic survey of the site	7 days	HUF 200,000 (EUR 594.0)
Request and obtain urban planning approval	30 days	No charge
Obtain a geo-technical report	14 days	HUF 100,000 (EUR 297.0)
Request and obtain a utility statement from Budapest Waterworks Ltd.	1 day	No charge
Request and obtain authorization from the water authorities	30 days	HUF 6,500 (EUR 19.3)
Request and obtain fire protection authorization	30 days	HUF 3,000 (EUR 8.9)
Request and obtain authorization from Public Health Department	15 days	HUF 8,700 (EUR 25.8)
Request and obtain authorization from the sewage authorities	15 days	No charge

Procedure	Time to complete	Associated costs
Request and obtain construction license	25 days	HUF 105,000 (EUR 311.8)
Receive on-site inspection from the Municipality	1 day	No charge
Set up e-construction log	0.5 days	HUF 7,860 (EUR 23.3)
Receive unscheduled inspection from Building Control Authority	1 day	No charge
Request and obtain water connection from Budapest Waterworks Ltd.	10 days	HUF 400,000 (EUR 1,188.0)
Request and obtain sewerage connection	21 days	HUF 33,500 (EUR 99.5)
Close e-construction log	0.5 days	No charge
Submit the new geodetic map to the land Registry	10 days	HUF 120,000 (EUR 356.4)
Receive on-site inspection to check on the quality of water	10 days	HUF 29,000 (EUR 86.1)
Receive final inspection from the Fire Protection Department	1 day	No charge
Receive final inspection from the Public Health Department	1 day	No charge
Receive final inspection from the Building Department	1 day	No charge
Obtain occupancy permit and register the building with the Land Registry	51 days	HUF 120,300 (EUR 357.3)

Source: Doing Business overview for Hungary, World Bank, 2020.

Skills shortage

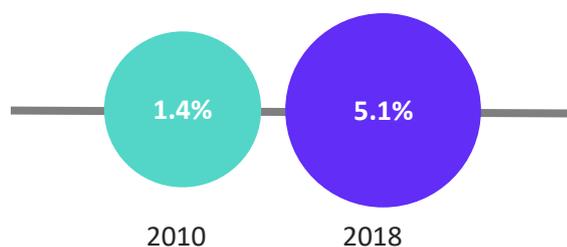
The **job vacancy rate**⁷⁷ in the narrow construction sub-sector increased from 0.8% in 2010 to 2.6% in 2019. However, it declined from its peak in 2018 (3.2%). Similarly, the job vacancy rate in the real estate activities sub-sector also increased from 0.3% in 2010 to 1.4% in 2019. This also represented a decrease from its peak in 2018 (1.6%).



Adult participation in education and training in the narrow construction sub-sector increased from 1.4% in 2010 to 5.1% in 2019. This is the highest rate of participation attained in the last decade.

Moreover, the number of **tertiary students** in engineering, manufacturing and construction increased by 45.5%, from 6,280 in 2010 to 9,139 in 2018⁷⁸. This was mostly driven by a 58.2% growth in the number of students in engineering and trade. The number of students in architecture and building, and manufacturing and processing also increased by 24.0% and 19.4% respectively over the 2010-2018 period⁷⁹.

Adult participation in education and training
in the narrow construction sub-sector



Labour shortages in Hungary remained significant, especially in sectors employing high-skilled workers. While the labour shortages increased rapidly during the first half of 2019, it slowed down by the end of 2019⁸⁰.



In 2019, the Hungarian broad construction sector reported requirements of around 40,000 to 50,000 additional workers⁸¹.

Generally, labour shortage in the construction sector in Hungary is compensated by migrant workers (coming mainly from Ukraine and Belarus)^{82,83}. However, the strict migration policies put in place by the government have aggravated the labour shortage in the economy as a whole⁸⁴.

In addition, Hungary struggles retaining its highly educated workforce. It is the only country in the EU-27 where the highly educated are more likely to emigrate than less-qualified groups. Young graduates are often attracted by higher wages⁸⁵.

The pre-existing labour shortage in the Hungarian construction sector and in the general economy has been further exacerbated by the disruptions caused by the global pandemic, COVID-19. In March 2020, the head of the Confederation of Hungarian Employers and Industrialists stated that Hungarian firms faced shortages because of COVID-19's impact on supply chains⁸⁶.

Sector and sub-sector specific issues

Material efficiency and waste management

In the European Union, construction and demolition waste (CDW) constitute as one of the biggest waste streams. In 2019, CDW accounted for around 25.0% to 30.0% of all waste generated in the EU. CDW mainly consists of several materials, including concrete, bricks, gypsum, wood, glass, metals, plastic, solvents, asbestos and excavated soil, many of which can be recycled⁸⁷. When it comes to waste from construction activities, in 2018⁸⁸ Hungary reported 621.0 kg per capita of non-hazardous waste and 3.0 kg per capita of waste classified as hazardous. This represents an increase of 53.3% in the total waste generation (non-hazardous and hazardous) compared to 2010 levels. Still, this figure is inconsequential when compared to the EU-27 average of 1,870.0 kg per capita. In addition, Hungary recycled the majority of (89.1%) CDW in 2016. Around 9.4% of waste were backfilled and the remaining 1.4% were landfilled⁸⁹.

The EU Waste Framework Directive (2008/98/EC) had set the CDW recycling rate for EU countries at 70.0% for 2020⁹⁰. The National Prevention Programme "*Országos Megelőzési Program 2014-2020*" as part of the National Waste Management Plan aimed at achieving this target by preventing generations of CDW and transforming the construction material classification system (including permitting materials intended for reuse)⁹¹.

Climate and energy

Emissions of greenhouse gases (carbon dioxide, methane and nitrous oxides) from activities in the narrow construction and real estate sub-sectors amounted to 1,155,357 tonnes and 413,429 tonnes in 2018⁹², respectively. The former has increased by 47.7% since 2010, whereas the latter has declined by 28.4%. In 2016, over 13,000 premature deaths in Hungary were attributable to bad air quality, mostly to particulate matter. Further in 2017, the emission of nitrogen dioxide (NO₂) and particulate matter (PM₁₀) exceeded the air quality standards of the EU in several air quality zones. Among others, main sources of air pollution include residential solid fuel combustion, but weak energy efficiency in the residential sector also adds to the problem⁹³.

Therefore, Hungary has committed to decrease **greenhouse gas emission** by 7.0% relative to its 2005 levels by 2030. This is being primarily done by phasing out coal-fired power plants. Greenhouse gas emissions from transport have also increased strongly over the last five years and these are projected to increase further under current policies. Therefore, the government intends to address transport emissions by promoting electromobility. EU Funds have also contributed to the reduction of emissions in Hungary. However, the national projections indicate that existing measures will deliver a shortfall of 3 percentage points relative to the 7.0% target of reduction of emissions by 2030⁹⁴.

5

Innovation in the construction sector

Innovation performance

According to the European Innovation Scoreboard 2020, Hungary is classified as a 'Moderate Innovator'. It has been consistently improving its performance since 2012⁹⁵.

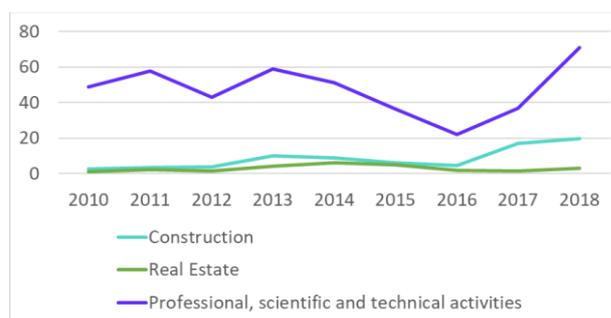
According to the report, Hungary's main strengths, in the context of innovation, include Employment impacts, Sales impacts and an Innovation-friendly environment. The country scores high in employment fast-growing enterprises, medium and high-tech product exports, and Broadband penetration. However, its weakest dimensions are Innovators, Human resources and Finance and support. Hungary's low scoring indicators include New doctorate graduates, R&D expenditure in the public sector, SMEs innovating in-house and SMEs with marketing or organisational innovations⁹⁶.

This **business enterprise R&D expenditure (BERD)** in Hungary has been fluctuating since 2010 (Figure 9). Specifically, in the narrow construction sub-sector it reached EUR 19.6 million in 2018⁹⁷, representing an increase of 621.2% since 2010. In the real estate activities sub-sector, it reached its peak at EUR 6.3 million in 2014 but dropped to EUR 3.1 million in 2018. This represented an overall growth of 133.9% over the 2010-2018 period. The BERD in the professional, scientific and technical activities sub-sector reached EUR 71.0 million in 2018, representing a growth of 45.6% since 2010.

BERD in the narrow construction sub-sector between 2010 and 2018

↑ 621.2%

Figure 9: Business enterprise R&D expenditure (BERD) per construction sub-sector in Hungary between 2010 and 2018 (EUR m)



Source: Eurostat, 2020.

In parallel, the total **R&D personnel** (full-time equivalents – FTE⁹⁸) in the narrow construction sub-sector substantially increased by 524.7% from 89 in 2010 to 556 in 2018⁹⁹. Similarly, the FTE in the real estate activities sub-sector increased by 61.4%, from 57 in 2010 to 92 in 2018. Lastly, the FTE in the professional, scientific and technical activities sub-sector reached 2118 in 2018 from 1375 in 2010, marking an increase of 54.0%.

Moreover, the number of **construction-related patent applications** remained at the same level between 2010 and 2019 (eight patents) with an exception in 2018, when the number of patent applications stood at four. Nevertheless, no Hungarian construction-related firm ranks within the top 1,000 EU companies by R&D investments (industrial sector ICB-3D) in 2018/19¹⁰⁰.

As per the Small Businesses Act (SBA) Fact Sheet 2019, Hungary scored below the EU-28¹⁰¹ average in the majority of the innovation indicators. It scored below the EU-28 average in the share of SMEs introducing product or process/marketing or organisational innovations, share of SMEs innovating in-house, sales to new to market and new to firm innovations and share of SMEs transacting online. This points to lower innovative capacities of Hungarian SMEs in comparison with the EU-28 average. In order to boost the

innovation capacities of the SMEs, several measures were introduced by the Hungarian government during 2018 and the first quarter of 2019¹⁰² including:

- The **‘Industry 4.0 sample factories programme’** (*Ipar 4.0 mintagyárak program*) was introduced to support the government’s Industry 4.0 strategic plan. This measure has three implementation phases, that all collectively aim at supporting automation, digitalisation development of SMEs, and increasing their openness towards Industry 4.0 technologies¹⁰³.
- The **‘New calls of National Research, Development and Innovation Office in 2018-Q12019’** (*NKFIH új pályázati forrásai 2018-2019Q1-es időszakban*), containing four sub programmes has an overall budget of EUR 219.4 million. These programmes can support around 1,200-4,000 SMEs¹⁰⁴.
- The **‘Technology Loan Programme’** (*Technológiai korszerűsítési célú hitelprogram*) aims to modernise the technology used by MSMEs (micro, small and medium-sized enterprises); create and expand modern product and service development capabilities; and increase SMEs’ technological readiness¹⁰⁵.
- The **‘Digital Welfare Financial Programme’** (*Digitális Jólét Pénzügyi Program*) which was implemented by the Hungarian Development Bank, provides financing to innovative businesses that look for a source of digital development, in line with the strategic objectives of the digital welfare programme¹⁰⁶.

Eco-innovation and digitalisation

According to the EU Eco-Innovation Index 2019, Hungary stood at the 27th position with a score of 54, below the EU-28¹⁰⁷ average score of 100¹⁰⁸.

As per the report, Hungary has been categorised under **‘countries catching up with eco-innovation’**.

The country’s performance has continued to decline over the years. It scored below the EU-28¹⁰⁹ average on all five indicators namely; eco-innovation inputs, eco-innovation activities, eco-innovation outputs, resource efficiency outcomes and socio-economic outcomes. However, amongst these five, the best performing indicator is eco-innovation activities (score of 82.0). Eco-innovation outputs (such as patents, publications and media coverage related to eco-innovation) is the weakest area with a score of 9.0, the lowest of all Member States¹¹⁰.

According to the **European Commission Digital Economy and Society Index (DESI) 2020**, Hungary ranks 21st, with a score of 47.5 out of the EU-28¹¹¹ countries (average score: 52.6). As compared to the previous year, Hungary improved its score in connectivity, use of internet services, integration of digital technology, digital public services¹¹². Despite these improvements, the pace of integration of digital technologies among Hungarian companies is slow and the adoption rate of digital business solutions and Industry 4.0 technologies is the lowest among other EU member states¹¹³. The country’s score in human capital also dropped from the previous year. In term of digital skills, its score remains below the EU-28 average (49.0% compared to 58.0% in the EU-28 average)¹¹⁴.

As per the European Investment Bank (EIB) Investment Survey 2019, the number of firms reporting ‘no innovation’ are the highest in the construction sector in Hungary. In terms of implementation of digital technologies, the Hungarian construction sector performed below other economic sectors with 22.0% respondents applying digital technologies¹¹⁵.

Specific to the construction sector, around 10.0% of the firms in Hungary use internet of things in comparison with 26.0% of the firms in the EU-28¹¹⁶ average. Similarly, drones and 3D printing are used by around 9.0% and 8.0% of the construction firms in Hungary, respectively, in comparison with 21.0% and 11.0% of the firms in the EU-28 average. Lastly, augmented or virtual reality is used by 2.0% of the construction firms in Hungary, whereas in the EU-28 average it is 12.0%¹¹⁷.

In terms of the building information modelling (BIM) in Hungary, there are no set laws or binding obligation on public authorities for using the technology. The contracting authorities in the country still have the option of imposing BIM on tenderers, but this has not been done yet. Moreover, despite clients wishing to use BIM, they face considerable practical challenges, such as the standardisation of terminology, processes, and interfaces¹¹⁸.



Amongst the recent projects that have used BIM used in Hungary is the *Prologis Park Budapest Harbour* built by Logistics real estate firm *Prologis* in 2020. It is a is a modern logistics centre consisting of ten buildings totalling more than 154,800 square meters of industrial space^{119,120}.

6

National and regional regulatory framework

Policy schemes

Since 2016, the Hungarian government has been implementing the **Home Purchase Subsidy Scheme for Families (CSOK)**, a comprehensive scheme aimed at supporting families and boosting the construction sector. The programme provides a family with housing allowance of HUF 10.0 million (EUR 27,719), for couples with at least three children, for the purchase of a newly built property¹²¹. Families are also eligible to apply for loans of up to HUF 10.0 million (EUR 27,719) at a preferential interest rate of 3.0%¹²². With regards to construction of a new property, beneficiaries could benefit from a VAT refund on related construction costs of up to HUF 5.0 million (EUR 13,860)¹²³. In November 2018, the Hungarian Parliament approved a proposal to extend the implementation of the 5.0% VAT rate up to end 2023. However, the proposed extension would only be applicable to properties that have a final building permit by November 1, 2018¹²⁴.

The CSOK Programme had a considerable impact on the recovery of the housing market. Given the high volume of applications, over HUF 248.0 billion (EUR 0.7 billion) were disbursed as subsidies under the Family Housing Subsidy Scheme to over 80,000 households between January 2016 and February 2019¹²⁵. By August 2019, around 114,000 families had applied for the family allowance under the programme, with 50.0% of recipients having two children and 37.0% having three¹²⁶.

Over the 2019-2020 period, the Hungarian government introduced various measures to support the housing market. The eligibility criteria for subsidised housing loans and CSOK were eased to broaden the scope of potential applicants. Since July 2019, subsidised housing loans (with a

maximum 3.0% interest rate) were also made accessible for applicants looking to buy second-hand homes (limited to HUF 10.0 million or EUR 27,719 for two children and HUF 15.0 million or EUR 41,579 for three children). Additionally, the previous value threshold for second-hand homes (HUF 35.0 million or EUR 97,017) was abolished, resulting in any social security insurance relationship earned in any foreign country being acceptable in the application¹²⁷.

The scope of the subsidised family housing loan and family housing scheme was also expanded to cover disadvantaged villages of less than 5,000 inhabitants to buy second-hand homes that require extensive renovation. Housing support was also provided through family planning schemes. For instance, the outlook of mortgage reduction subsidies was extended. Now debt reduction amounting to HUF 1.0 million (EUR 2,772) can be applied at the birth of the second child, which further increased to HUF 4.0 million (EUR 11,088) at the birth of the third child¹²⁸.

In October 2020, the Hungarian government announced its plans to re-introduce a lower VAT rate of 5.0% for housing projects until end 2022 to help stabilise the construction sector. Moreover, families with at least one child will be allowed a deduction of almost half of their home renovation costs restricted to HUF 3.0 million (EUR 8,316)¹²⁹.

Furthermore, the Hungarian government also launched a long-term programme called “**Convergence/Emerging settlements**” in order to reduce territorial disparities. Through this programme, the government has also promoted the development of housing model programmes, including the testing of one such programme in *Tarnabod* village currently in the pipeline¹³⁰.

According to the Habitat for Humanity's 2019 annual housing report, the Hungarian housing crisis is severely affecting the middle-class population with almost two-third (62.7%) of the population aged 18-34 years still living with their parents¹³¹.

Building regulations

The primary regulations dealing with the design and implementation of building projects are detailed in the Civil Code (Act V of 2013). However, parties are allowed to deviate from such rules. Other important legislation includes the **Construction Act** (Act LXXVIII of 1997), which is supplemented by the simple application procedure, as well as **Government Decrees** No. 191/2009, 194/2009, 312/2012 and 266/2013¹³². The Government Decree 191/2009 (IX 15) on works in the construction sector included detailed provisions related to the content of the construction contract.

In 2016, the government introduced a revised law on the construction of buildings, simplifying the lengthy building permit procedure. As such, the construction of residential buildings (not more than 300 square meters) can take place without an immediate building permit but by simple notification to the building authorities followed by application afterwards¹³³.

Insurance and liability related regulations

In 2017, the Hungarian government introduced a compulsory professional liability insurance of designers and contractors under the Government Decree (353/2016 XI.18.) for the construction of buildings under 300 m². Liability insurance is also available for construction companies covering any

material or personal injury caused to a third party¹³⁴. The Decree stipulates that the construction and the design contract must contain a declaration of the contractor or the designer stating that he/she is covered by the required professional liability insurance. Without this declaration, no construction works could be initiated¹³⁵.

Furthermore, in accordance with the construction contract, contractors may be required to take out voluntary insurances at their own expense. These may include:

- Construction All Risk (CAR) insurance, to provide coverage to construction works;
- Liability insurance to cover losses, damages and injuries to the employees of the contractor, and/or to third parties;
- Professional indemnity insurance to cover losses and damages originating from errors or omissions by the contractor throughout the duration of the works.

Liabilities related to the provision of professional, construction and installation services are governed by the Civil Code, as well as the Act LXXVIII of 1997 on the Formation and Protection of the Built Environment (the "Construction Act")¹³⁶. The general limitation period is five years. The time limit within which a claim for damages and defects can be filed is six months, although it can be extended up to one, three or ten years, according to the circumstances¹³⁷. For newly built residential dwellings specifically, Government Decree 181/2003 (XI 5) stipulates a mandatory guarantee period of three years¹³⁸.

7

Current status and national strategies to meet Construction 2020 objectives

TO 1 – Investment conditions and volumes

Total investment by the broad construction sector¹³⁹ has generally increased over the past several years (Figure 10). Particularly, investment by the narrow construction sub-sector increased by 154.4% over the 2010-2019 period, reaching EUR 1.0 billion. Similarly, investment by the real estate activities sub-sector increased by 34.8% over the same period, reaching EUR 4.9 billion.

Investment by the narrow construction sub-sector between 2010 and 2019

↑ 154.4%

In terms of investment in **intellectual property products**, the narrow construction sub-sector invested EUR 54.4 million in 2019, representing a 428.2% growth since 2010. On the contrary, the investment in intellectual property products by the real estate activities sub-sector amounted to EUR 11.5 million in 2019, a 50.2% decline compared to the 2010 level. The investment in **machinery and equipment** has also risen substantially at the back of high capacity utilisation, easy financing conditions and foreign direct investment inflows¹⁴⁰.

Investment in intellectual property products by the narrow construction sub-sector between 2010 and 2019

↑ 428.2%

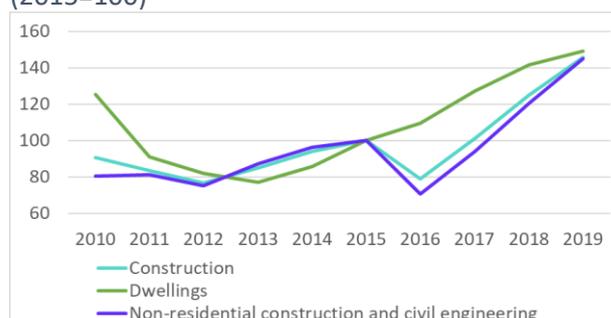
Figure 10: Investment by the Hungarian broad construction industry between 2010 and 2019 (EUR m)



Source: Eurostat, 2020.

The investment index in the broad construction sector¹⁴¹ experienced a 45.7% increase between 2015 and 2019 (Figure 11). Similarly, investment in dwellings; and non-residential construction and civil engineering increased by 49.2% and 44.8%, respectively, over the 2015-2019 period. In absolute terms, investment in the broad construction sector totalled EUR 16.7 billion in 2018¹⁴², out of which EUR 4.1 billion was invested in dwellings and EUR 12.6 billion was devoted to non-residential and civil engineering¹⁴³.

Figure 11: Investment in the Hungarian construction sector between 2010 and 2019 (2015=100)



Source: AMECO, 2020.

Investment index in dwellings by the whole economy between 2015 and 2019

↑ 49.2%

Total **inland infrastructure investment** as a share of GDP reached 1.9% in 2018¹⁴⁴, higher than the 2010 levels of 1.1%. Investment in **rail infrastructure** in Hungary experienced a surge of 195.3%, from EUR 272.0 million in 2010 to EUR 803.1 million in 2018¹⁴⁵. Similarly, the country experienced a 111.9% increase in its **road infrastructure** investment over 2010-2018¹⁴⁶, from EUR 840.2 million to EUR 1.8 billion. The investment in **inland waterways infrastructure** increased from EUR 0.7 million in 2010 to EUR 1.0 million in 2018¹⁴⁷, representing a growth of 40.3%. Lastly, the investment in **air infrastructure** increased by 7.2%, from EUR 50.6 million in 2010 to EUR 54.3 million in 2018¹⁴⁸.

Investment in rail infrastructure between 2010 and 2018

↑ 195.3%

In parallel, investment in **air infrastructure maintenance** increased from EUR 8.2 million in 2010 to EUR 22.9 million in 2018¹⁴⁹ (+178.3%). Similarly, investment in **rail infrastructure maintenance** increased from EUR 439.7 million in 2010 to EUR 636.1 million in 2018¹⁵⁰ (+44.7%). The investment in **road infrastructure maintenance** increased from EUR 328.6 million in 2010 to EUR 379.7 million in 2018¹⁵¹ (+15.5%). However, the investment in **inland waterways infrastructure maintenance** decreased from EUR 3.1 million in 2010 to EUR 2.1 million in 2018¹⁵² (-35.1%).

Investment in air transport infrastructure maintenance between 2010 and 2018

↑ 178.3%

The **household renovation spending** reached EUR 229.1 million in 2019, representing a 51.4% increase from 2010 level. This also represents 0.3% of total household disposable income, the same as in 2010.

Household renovation spending between 2010 and 2019

↑ 51.4%



In 2019, the European Investment Bank (EIB) Group invested almost EUR 109.0 million in infrastructure in Hungary¹⁵³.

In parallel, Hungary also benefitted from investments from the **European Fund for Strategic Investments** (EFSI). As of September 2020, the financing under EFSI amounted to EUR 774.0 million and is set to trigger additional investments of EUR 4.6 billion. Under the infrastructure and innovation window, eight projects have been approved, amounting to EUR 561.0 million and are set to trigger EUR 1.8 billion in total investments. Under the SMEs window, 10 agreements have been approved with intermediary banks or funds financed by European Investment Fund (EIF) with EFSI backing. This involves a total financing of EUR 213.0 million, and is set to trigger investments of up to EUR 2.8 billion¹⁵⁴.

EU funding continues to play a key role in financing public investment in Hungary. In 2019, the country had been allocated EUR 25.4 billion (around 2.9% of the Hungary's annual GDP), by the **European structural and investment funds (ESIF)** in the current multiannual financial framework¹⁵⁵ (MFF). By the end of the year, EUR 26.7 billion was allocated to specific projects, while EUR 10.3 billion was reported as spent, showing a level of implementation in line with the EU-28¹⁵⁶ average.

The EU Cohesion Policy programmes for Hungary have allocated EU funding of EUR 4.9 billion for smart growth. It has also allocated EUR 9.0 billion for sustainable growth and sustainable transport and EUR 7.3 billion for inclusive growth¹⁵⁷.

In April 2019, the government also declared its plans of investing EUR 11.0 billion in road network over the next five years, primarily focusing on the expansion of the motorway network. The EU has also pledged EUR 552.6 million under its Cohesion Fund for the financing of the extension of the M30 motorway, to connect *Miskolc* in Hungary with *Tornyosnémeti* near the Slovakian border by February 2022¹⁵⁸.

In addition to EU funding, Hungary's inclusion in the China's Belt and Road Initiative also played an important role in the development of the country's transport infrastructure. For instance, China helped Hungary finance one of the largest ever infrastructure project for rail modernisation worth

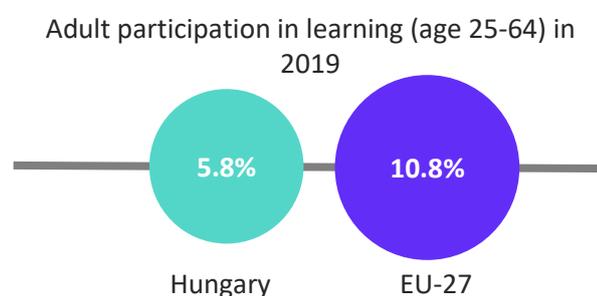
EUR 2.3 billion. The high-speed line will upgrade an existing link between the Hungarian and Serbian capitals – Budapest and Belgrade respectively. Under the agreement signed with China's state-owned Exim Bank, Hungary will finance 85.0% of the investment costs estimated to be at least EUR 2.0 billion from credit and the remaining 15.0% from its own funds^{159,160}.

The Hungarian government is expected to invest around HUF 1.2 trillion (EUR 3.6 billion) in railways by 2022¹⁶¹.

Major rail projects funded under this investment include the electrification and upgrading of the *Szombathely-Nagykanizsa* line as well as *Budapest-Esztergom* line, the modernisation of the *Vámosgyörk-Mezőnyárad* section of the *Budapest-Miskolc* line, the *Szeged-Hódmezővásárhely* tram-train project, etc¹⁶².

TO 2 – Skills

While Hungary educational performance has improved, it remains below the EU-27 average. This is the case of the share of **early leavers from education and training** in Hungary, which is higher (11.8%) as compared with the EU-27 average (10.2%) in 2019. However, the rate of early leavers from education and training decreased for the first time in three years in 2019. The **tertiary educational attainment** in Hungary in 2019 stood at 33.4%. Though this shows an improvement from 2009 (24.0%), it lies below the EU-27 average (40.3%). Hungary's **adult participation in learning** in 2019 (5.8%), was also below the EU-27 average (10.8%)¹⁶³.



Nevertheless, the **employment rate of recent graduates** by educational attainment in Hungary, which stood at 85.6% in 2019, above the EU-27 average of 80.9%. This reflects a strong demand for highly skilled workers in the country. The **public**

expenditure on education as a percentage of GDP in Hungary in 2019 stood at 5.1%, higher than the EU-27 average of 4.6%¹⁶⁴.

Regarding **vocational education and training (VET)**, the employment rate among recent graduates stood at 86.3% in 2019 (against an EU-27 average of 79.1%). This also corresponds to the overall high share of employment among the youth population in Hungary. The higher employment rate among recent VET graduates is also the result of government efforts to prioritise and support VET – making it more attractive¹⁶⁵.

Recognising the technological transformations of the Industry 4.0 revolution, Hungary has shaped its VET strategy to respond to the challenges and future labour market trends¹⁶⁶. Introduced in 2019, the programme is a mid-term nationwide initiative to renew all state-owned VET institutions, to respond to the challenges posed by digitalisation and 4.0 technologies¹⁶⁷.

The VET 4.0 strategy aims to ensure that all VET learners leave school with the right set of skills and competences (including basic competences), and that they successfully pass a final exam granting a state-recognised VET qualification¹⁶⁸.

The programme, coordinated by the local network of cohesive VET centres, focuses on two main areas, renovating buildings and modernising school laboratories, equipment and teaching methods¹⁶⁹. The measure is funded from the budget of the national project Comprehensive development of the VET institutional system, aiming to train VET learners to acquire 21st century skills using smart technologies¹⁷⁰.

Furthermore, the 2019 VET law introduces shorter and more flexible training for ‘basic qualifications’ for adults. The participation in training provided by VET institutions to obtain two basic qualifications and one short cycle vocational qualification will also become free. This aims to promote adult learning in Hungary. The 2020 national reform programme includes measures to further train unemployed people, or those employed in short-term working schemes, via distance learning. All these initiatives jointly aim to promote **adult learning** in Hungary¹⁷¹.

TO 3 – Resource efficiency / Sustainable construction

Hungary's 2020 energy efficiency target includes 24.2 Mtoe and 14.4 Mtoe expressed in primary and final energy consumption, respectively. As such, Hungary is at risk of failing to meet its 2020 targets unless stringent additional measures are taken by the country¹⁷². This is partly due to its high household energy consumption per capita despite considerably lower income levels. Additionally, regulated energy prices can decrease the incentive to improve existing energy efficiency.

In early 2020, the Hungarian government adopted a new National Energy Strategy along with a National Energy and Climate Plan, aimed at redefining its national energy and climate policy priorities until 2030 with an outlook until 2040. Underneath this strategy, Hungary's primary objective is to reduce its greenhouse gas emissions by at least 40.0% by 2030 as compared to the 1990 level. The government also adopted a national climate neutrality target for 2050, which is defined in its National Clean Development Strategy¹⁷³.

With regards to the construction sector, the Hungarian government has introduced favourable loan schemes for household investments.

In 2019, the Hungarian Development Bank (MFB) offered 8,069 loan contracts within the framework of the household energy efficiency investment loan scheme¹⁷⁴.

Further, under the National Energy and Climate Plan, the government has stipulated that an energy efficiency obligation scheme will be introduced by 2021 to end-users through a specific scheme, based on and in line with the respective EU Directive. This is even more relevant in the context where there exists a large potential for renovating the existing housing supply, public buildings and district heating networks¹⁷⁵.

With regards to buildings regulations related to achieving zero energy need requirements, they have been revised to include a rating system based on the individual energetic assessment of district heating systems. This, in turn, will help in enlarging the system of efficient district heating systems¹⁷⁶. Since 2017, **Section 11/A of the Energy Efficiency Act** requires the head of an organisation in charge of operation and maintenance of a building

involved in public services owned and used by public institutions to prepare an energy savings action plan according to a relevant template every five years¹⁷⁷. Energy efficiency standards for new buildings have been significantly strengthened. However, the urgent requirement to renovate the existing old housing stock and public buildings keeps the overall energy efficiency of the residential sector at a weak level¹⁷⁸.

TO 4 – Single Market

Hungary's overall performance in the Single Market Scoreboard 2020 has deteriorated from the previous year, especially in terms of transposition and infringements¹⁷⁹.

Hungary's performance in **transposition deficit** stood at 0.5%, slightly below the EU-28¹⁸⁰ average (0.6%). This also marked an improvement by 0.4 percentage point from the previous year report. The **overdue directives** also dropped to five, representing an improvement from nine in the previous year report. However, the **average delay** increased to 21.7 months, above the EU-28 average (11.5 months) and the previous report (9.3 months). The **conformity deficit** also deteriorated to 1.5%, from 1.2% in the previous report. This was also worse than the EU-28 average (1.2%). The deteriorated performance in the transposition is due to the limited use of the EU Pilot tool because of which the number of directives presumed to have been incorrectly transposed has increased¹⁸¹.

In terms of **infringements, pending cases** have increased to 36 in comparison with 29 in the last year. It is also much higher than the EU-28¹⁸² average (29). This is also due to the limited use of the EU Pilot tool, as a result of which Hungary has seen an increase in the number of infringement proceedings. The **average case duration** has also risen to 32.2 months, from 31.6 months in the last report. The **compliance with court rulings** also increased to 24.5 months, higher than the last report (20.8 months) and EU-28 average (29.5 months)¹⁸³.

Hungary's performance in the **Internal Market Information System** has continued very well. Its performance was above the European Environment Agency (EEA) average in all five indicators. The country also has the highest **trade**

integration in the single market for goods. The integration for services is also above the EU-28¹⁸⁴ average¹⁸⁵.

As per the SBA Fact Sheet 2019, Hungary witnessed deteriorations in three key metrics – intra-EU online exporters, public contracts secured abroad by SMEs and easy market access for new and growing firms. The only area marking improvement was SMEs' intra-EU exports of goods¹⁸⁶.

Nonetheless, the country's performance in the public procurement field was satisfactory but could be further improved¹⁸⁷. In fact, the country had low scores in the single bidder, cooperative procurement, decision speed and missing seller registration numbers indicators¹⁸⁸.

In December 2018, an amendment in the Public Procurement Act (*a közbeszerési törvény változása*) was made by the Hungarian Parliament. It introduced changes in several areas, mainly related to improving the operation of the electronic public procurement system. Under another important amendment, contracting authorities can no longer restrict the right of tenderers to involve subcontractors in the tender. This is particularly important in the case of construction tenders¹⁸⁹.

Despite the measures above, corruption risks in the public procurement sector are very high. Companies report that irregular payments and bribes are a common practice. Moreover, favouritism in decisions of government officials and diversion of public funds are also very common in Hungary. A significant amount of funds has been reportedly diverted to the individuals with close ties to the ruling elite, particularly in large infrastructural projects¹⁹⁰.

Finally, regarding the implementation of **Eurocodes**, all EN Eurocode parts are published as National Standards, with National Annexes being published on 38 Parts. Although they are not compulsory and no regulatory framework enforces their use in public procurement, Eurocodes are the only means of structural design in Hungary. No other national standards are used in parallel with them¹⁹¹.

TO 5 – International competitiveness

According to the Global Competitiveness Index 2019 report, Hungary ranks 47th out of 141 economies. This is an improvement by one position from last year's ranking (48th out of 140 economies in 2018)¹⁹².

According to the index, in trade openness, Hungary ranked best in trade tariffs (7th) and border clearance efficiency (27th). However, its performance in rank was worse in prevalence of non-tariff barriers (70th) and complexity of tariffs (113th)¹⁹³.

The **internalisation of construction products** in the Hungarian construction sector has shown signs of growth for the past few years. The export values of all construction-related products increased from EUR 760.8 million in 2010 to EUR 911.7 million in 2019, representing an increase of 19.8%. However, the share of exports of all construction-related products dropped to 40.3% in 2018 from 55.6% in 2010. This is still above the EU-27 average of 11.4%. In 2019, it further increased to 42.8%.

Exports value of all construction-related products between 2010 and 2019  **19.8%**

Similarly, the export value of architectural services boomed, growing by 222.3%, from EUR 46,969.0 in 2010 to EUR 151,368.0 in 2019.

Exports value of architectural services between 2010 and 2019  **222.3%**

In the context of **inward FATS** (Foreign affiliates statistics)¹⁹⁴, **value added at factor cost** in the manufacturing and the real estate activities sub-sectors increased by 49.9% and 3.5% respectively, over the 2010-2017¹⁹⁵ period. However, in the narrow construction sub-sector, it decreased by 9.5% over the same period. The **turnover** in the manufacturing sub-sector increased by 33.2% over the same period. The narrow construction and the real estate activities sub-sectors witnessed a decline in turnover by

29.8% and 2.6% respectively, over the same period.

In terms of **outward FATS**¹⁹⁶, **turnover** and **number of persons employed** in the manufacturing sub-sector decreased by 24.4% and 44.4% over the 2010-2017¹⁹⁷ period. Similarly, turnover and number of persons employed in the real estate activities sub-sector decreased by 27.8% and 22.7% over the 2012-2017¹⁹⁸ period.

The **Foreign Direct Investment** in Hungary for the broad construction sector has increased in recent years. Specifically, in the manufacturing sub-sector, the **direct investment abroad (DIA)** and **direct investment in the reporting economy (DIRE)** increased by 190.7% and 76.9%, respectively, over the 2014-2017¹⁹⁹ period. Similarly, in the narrow construction sub-sector the DIA and DIRE increased by 25.3% and 13.7%, respectively, over the 2013-2017²⁰⁰ period. Lastly, in the real estate activities sub-sector, the DIA increased by 103.4% over the 2013-2016²⁰¹ period and DIRE increased by 3.6% over the 2013-2017²⁰² period

In 2019, the performance of Hungary in internationalisation of its SMEs was below the

EU-28²⁰³ average. It scores below the average for all indicators except for involvement of trade community and advance rulings. In addition, Hungary has one of the lowest ranks in the EU-28 in information availability²⁰⁴.



Internationalisation of SMEs in Hungary has been the primary aim of the government's 2014-2020 SME strategy. It has set a target of boosting trade and increasing the export activity of SMEs to 50.0% of total exports by 2030²⁰⁵.

To strengthen the international competitiveness of the Hungarian SMEs, the **Hungarian Export Promotion Agency (HEPA)** (*HEPA workshopjai és tanácsadásai kkv-knak*) was established between 2018 and first quarter of 2019. As a partner of the Enterprise Europe Network, HEPA organised a workshop entitled 'Public Procurement in Austria — Business Expansion Opportunity in the Austrian Market'. This workshop aimed at providing information on public procurement opportunities in Austria for Hungarian SMEs²⁰⁶.

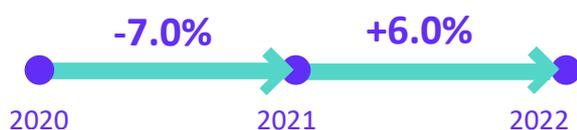
8

Outlook

The Hungarian economy is forecasted to contract in 2020, before witnessing a revival in 2021. This is mainly due to the COVID-19 pandemic and associated restrictions²⁰⁷.

The Hungarian GDP is expected to decline by 7.0% in 2020 and then increase by 6.0% in 2021, reaching HUF 40,278.5 billion (EUR 112.9 billion).

Expected GDP growth between 2020 and 2022



The **volume index of production** in the broad construction sector is projected to decline by 22.7 ip in 2020 annually. This is expected to come from annual declines of 21.4 ip and 22.0 ip in index of construction of buildings and construction of civil engineering respectively. In 2021, the volume index of production in the broad construction sector is expected to witness an annual increase of 6.3 ip.

As a result, the **turnover** of the broad construction sector is projected to annually decline by 19.7% in 2020 before rising by 20.2% in 2021, reaching a value of EUR 40.7 billion. Likewise, the **total value added** of the broad construction sector is expected to annually decrease by 19.4% in 2020 and then increase by 18.7% in 2021 respectively, reaching EUR 11.5 billion in 2021.

In parallel, the number of **persons employed** in the broad construction sector is also expected to annually decrease by 20.0% to 406,129 in 2020 and then increase by 19.5% to 485,193 in 2021. Most of this decline is forecasted to come from the manufacturing (-26.2%) and the narrow construction (-21.5%) sub-sectors.

Number of persons employed in the broad construction sector between 2020 and 2021

↑ 19.5%

The Hungarian **housing market** partly supported the growth of the construction sector in 2019, with increasing housing demand and house price²⁰⁸. However, with the onset of the COVID-19 pandemic, and the associated lockdown restrictions, the housing market activities in the country declined drastically. To help stabilise the construction sector, in October 2020, the Hungarian government, announced its plans to re-introduce a lower VAT rate of 5.0% for housing projects until the end of 2022. It is expected that the housing market will recover from 2021 onwards.

Investment in **non-residential construction and civil engineering** is one of the key strategies of Hungary to support the economic growth of the construction sector. The government's plan to invest around HUF 1.2 trillion (EUR 3.6 billion) in railways by 2022 will provide a boost to the sector²⁰⁹.



The Hungarian construction sector was less affected by the initial lockdown measures. However, the second-round effects from the recession may result in further output declines²¹⁰.

In conclusion, the outlook for the Hungarian construction sector is positive in the long-term, particularly due to the planned investment by the government in railway and roads, and EU-funded infrastructure projects. The housing segment is also expected to play a role in driving such a growth – between the demand for new housing and the energy efficient renovation of existing housing.

References

- 1 European Commissions Country Report Hungary 2020, https://ec.europa.eu/info/sites/info/files/2020-european_semester_country-report-hungary_en.pdf
- 2 Please note that this 2019 data is a nowcast - please refer to the methodology notes for further details.
- 3 Please note that this 2019 data is a nowcast - please refer to the methodology notes for further details.
- 4 Data unavailable for 2019.
- 5 Please note that this 2019 data is a nowcast - please refer to the methodology notes for further details.
- 6 Please note that the share of each sub-sector in the value added of the broad construction sector should not be compared to the shares of the Gross Value Added in the GDP, since the GDP also includes taxes and excludes subsidies.
- 7 Please note that this 2019 data is a nowcast - please refer to the methodology notes for further details.
- 8 Data unavailable for 2019.
- 9 Data unavailable for 2019.
- 10 Data unavailable for 2019.
- 11 Apparent labour productivity refers to the gross value added per person employed.
- 12 Data unavailable for subsequent years.
- 13 Data unavailable for 2019.
- 14 Please note that this 2019 data is a nowcast - please refer to the methodology notes for further details.
- 15 Please note that this 2019 data is a nowcast - please refer to the methodology notes for further details.
- 16 Data unavailable for 2019.
- 17 The gross operating rate is the ratio of Gross Operating Surplus to Turnover, and is an indicator of profitability.
- 18 Data unavailable for 2019.
- 19 Please note that this 2019 data is a nowcast - please refer to the methodology notes for further details.
- 20 Data unavailable for 2019.
- 21 Data unavailable for 2019.
- 22 Data on employment by occupation is not available for the architectural and engineering activities sub-sector.
- 23 Data unavailable for 2010.
- 24 Data unavailable for 2019.
- 25 European Commission, Country Report Hungary 2020, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0516&from=EN>
- 26 World Economic Forum, The Global Competitiveness Report 2019. http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf
- 27 Ibidem.
- 28 World Bank Group, Doing Business 2020, Economy Profile for Hungary. <https://www.doingbusiness.org/content/dam/doingBusiness/country/h/hungary/HUN.pdf>
- 29 European Commission, 2019 SBA Fact Sheet Hungary. <https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/>
- 30 As the EU-27 average data was not available, the EU-28 average was used for comparative purposes.
- 31 European Commission, National Reform Programme of Hungary 2020. https://ec.europa.eu/info/sites/info/files/2020-european-semester-national-reform-programme-hungary_en.pdf
- 32 Ibidem.
- 33 Data unavailable for 2019.
- 34 Data unavailable for 2019.
- 35 According to Eurostat, construction services comprises Construction Abroad (code 250) and Construction in the Compiling Economy (code 251). They do not include architectural services, or engineering services.
- 36 Data unavailable for 2019.
- 37 Since EU-27 data was not available for 2010, EU-28 data has been taken for comparison.
- 38 Data unavailable for 2019.
- 39 Data unavailable for 2019.
- 40 As the EU-27 average data was not available, the EU-28 average was used for comparative purposes.
- 41 European Commission, SAFE Report, 2020- <https://ec.europa.eu/docsroom/documents/43869>
- 42 As the EU-27 average data was not available, the EU-28 average was used for comparative purposes.
- 43 EIBIS 2019 - Hungary overview 2019. https://www.eib.org/attachments/efs/eibis_2019_hungary_en.pdf
- 44 Ibidem.
- 45 European Commission, National Reform Programme of Hungary 2020. https://ec.europa.eu/info/sites/info/files/2020-european-semester-national-reform-programme-hungary_en.pdf
- 46 Ibidem.
- 47 Ibidem.

48	Ibidem.
49	Data unavailable for 2019.
50	Daily News Hungary, The already cooling Hungarian housing market expects further decline, September 2020. https://dailynewshungary.com/the-already-cooling-hungarian-housing-market-expects-further-decline/
51	The trend of existing dwellings is similar to total dwellings, and therefore not visible in the chart.
52	Ibidem.
53	European Commission, Country Report Hungary 2020, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0516&from=EN
54	Ibidem.
55	The overcrowding rate is defined as the percentage of the population living in an overcrowded household
56	Eurostat, Overcrowding rate. http://ec.europa.eu/eurostat/product?code=ilc_lvho05a&language=en&mode=view
57	Eurostat, Severe housing deprivation rate is defined as the percentage of population living in the dwelling which is considered as overcrowded, while also exhibiting at least one of the housing deprivation measures. Housing deprivation is a measure of poor amenities and is calculated by referring to those households with a leaking roof, no bath/shower and no indoor toilet, or a dwelling considered too dark.
58	Eurostat, Severe housing deprivation rate by age, sex and poverty status - EU-SILC survey. http://ec.europa.eu/eurostat/product?code=ilc_mdho06a&language=en&mode=view
59	The housing cost overburden rate is the percentage of the population living in households where the total housing costs represent more than 40% of disposable income
60	Eurostat, Housing cost overburden rate by age, sex and poverty status - EU-SILC survey. http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_lvho07a&lang=en
61	World Economic Forum, The Global Competitiveness Report 2019. http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf
62	Ibidem.
63	European Commission, Hungary's M4 motorway to improve international road links (2020) https://ec.europa.eu/regional_policy/en/projects/Hungary/hungary-s-m4-motorway-to-improve-international-road-links
64	European Commission, New sections of Hungary's M35 motorway completed (2020) https://ec.europa.eu/regional_policy/en/projects/Hungary/new-sections-of-hungarys-m35-motorway-completed
65	Daily News Hungary, Growing traffic requires the expansion of Hungarian motorway M1 (2020) https://dailynewshungary.com/growing-traffic-asks-for-the-extension-of-hungarian-motorway-m1/
66	European Commission, Country Report Hungary 2020, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0516&from=EN
67	SAFE Report 2020, https://ec.europa.eu/docsroom/documents/43869
68	Ibidem.
69	Ibidem.
70	SAFE Report 2020, https://ec.europa.eu/docsroom/documents/43869
71	Ibidem.
72	Ibidem.
73	SAFE Report 2020, https://ec.europa.eu/docsroom/documents/43869
74	European Payment Report 2020, https://www.intrum.com/media/8279/epr-2020-special-edition-white-paper_final.pdf
75	World Bank Group, Doing Business 2020, Economy Profile for Hungary, https://www.doingbusiness.org/content/dam/doingBusiness/country/h/hungary/HUN.pdf
76	The warehouse in this example is defined as a structure for general storage activities, with two stories, above ground and with total constructed area of approx. 1,300 square meters. The ground, on which the warehouse is built is owned by the company that will use it and valued at 50 times income per capita. There are architectural and technical plans prepared for the warehouse, which are also taken into account and counted as procedures if their preparation requires obtaining further documentation or getting prior approvals from external agencies. Finally, in this example the warehouse takes 30 weeks to construct, excl. all delays due to administrative and regulatory requirements.
77	Data regarding the number of job vacancies is not available for any time period.
78	No data available for 2019.
79	No data available for 2019.
80	European Commissions Country Report Hungary 2020, https://ec.europa.eu/info/sites/info/files/2020-european_semester_country-report-hungary_en.pdf
81	Romania, Hungary recruit in Asia to fill labour shortage, https://www.rfi.fr/en/contenu/20191028-romania-hungary-recruit-asia-fill-labour-shortage
82	Hungary – Critical labour shortage in the construction industry, https://dailynewshungary.com/hungary-critical-labour-shortage-in-the-construction-industry/
83	Hungary construction sector eyes Belarus, Ukraine to tackle labour shortage, https://br.reuters.com/article/hungary-construction-belarus-idUSL5N1GG3RB
84	The Continuing Labor Shortage In Hungary, https://hungarianspectrum.org/2020/03/06/the-continuing-labor-shortage-in-hungary/
85	European Commissions Country Report Hungary 2020, https://ec.europa.eu/info/sites/info/files/2020-european_semester_country-report-hungary_en.pdf

Country Fact Sheet Hungary

- 86 Hungary's Orban warns the country faces 'bankruptcy' over COVID-19, <https://newseu.cgtn.com/news/2020-03-11/Hungary-s-Orban-warns-the-country-faces-bankruptcy-over-COVID-19-OKWjYzq33W/index.html>
- 87 Construction and Demolition Waste (CDW), https://ec.europa.eu/environment/waste/construction_demolition.htm
- 88 No data available for subsequent years.
- 89 Construction and demolition waste: challenges and opportunities in a circular economy, <https://www.eea.europa.eu/themes/waste/waste-management/construction-and-demolition-waste-challenges>
- 90 European Commission, Construction and Demolition Waste management in Hungary. 2015. http://ec.europa.eu/environment/waste/studies/deliverables/CDW_Hungary_Factsheet_Final.pdf
- 91 European Environment Agency, Waste prevention in Europe, 2016. <https://www.eea.europa.eu/themes/waste/waste-prevention/waste-prevention>
- 92 No data available for sequent years.
- 93 European Commissions Country Report Hungary 2020, https://ec.europa.eu/info/sites/info/files/2020-european_semester_country-report-hungary_en.pdf
- 94 Ibidem.
- 95 European Innovation Scoreboard 2020, Hungary, <https://ec.europa.eu/docsroom/documents/41878>
- 96 Ibidem.
- 97 No data available for 2019.
- 98 A full-time equivalent (FTE) is a unit to measure employed persons in a way that makes them comparable, although they may work a different number of hours per week. The unit is obtained by comparing an employee's average number of hours worked to the average number of hours of a full-time worker. A full-time person is therefore counted as one FTE, while a part-time worker gets a score in proportion to the hours worked.
- 99 No data available for 2019.
- 100 The 2019 EU Industrial R&D Investment Scoreboard, http://iri.jrc.ec.europa.eu/sites/default/files/contenttype/scoreboard/2019-12/SB2019_main%20stats_EU1000.xlsx
- 101 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose
- 102 Hungary - 2019 SBA Fact Sheet, <https://ec.europa.eu/docsroom/documents/38662/attachments/14/translations/en/renditions/native>
- 103 Ibidem.
- 104 Ibidem.
- 105 Ibidem.
- 106 Ibidem.
- 107 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose
- 108 The Eco-Innovation Scoreboard And The Eco-Innovation Index, https://ec.europa.eu/environment/ecoap/indicators/index_en
- 109 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose
- 110 The Eco-Innovation Scoreboard And The Eco-Innovation Index, Hungary, https://ec.europa.eu/environment/ecoap/hungary_en
- 111 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose.
- 112 Digital Economy and Society Index (DESI) 2020 Hungary, <https://ec.europa.eu/digital-single-market/en/scoreboard/hungary>
- 113 European Commissions Country Report Hungary 2020, https://ec.europa.eu/info/sites/info/files/2020-european_semester_country-report-hungary_en.pdf
- 114 Digital Economy and Society Index (DESI) 2020 Hungary, <https://ec.europa.eu/digital-single-market/en/scoreboard/hungary>
- 115 EIB Investment Survey 2019, Hungary, https://www.eib.org/attachments/efs/eibis_2019_hungary_en.pdf
- 116 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose.
- 117 Ibidem.
- 118 How Long Does BIM Have to Wait in Hungary?, February 2020. <https://ceelegalmatters.com/hungary/12594-how-long-does-bim-have-to-wait-in-hungary>
- 119 Prologis builds BIM-designed facility, https://bbj.hu/real%20estate/prologis%20builds%20bim-designed%20facility_173401
- 120 Prologis, <https://www.prologis.com/warehouse-space-for-lease/park/prologis-park-budapest-harbor>
- 121 Bloomberg, OTP Bank May Gain on Hungary's Housing Subsidy, Concorde Says. January 2016. <http://www.bloomberg.com/news/articles/2016-01-05/otp-bank-may-gain-on-hungary-s-housing-subsidy-concorde-says>
- 122 Ministry for National Economy, A stable budget and predictable economic policy enable the Family Housing Programme. February 2016. <http://www.kormany.hu/en/ministry-for-national-economy/news/a-stable-budget-and-predictable-economic-policy-enable-the-family-housing-programme>
- 123 Ibidem.
- 124 Hungary's housing market boom continues. October 2019. <https://www.globalpropertyguide.com/Europe/Hungary/Price-History>
- 125 Convergence Programme of Hungary 2019-2023. https://ec.europa.eu/info/sites/info/files/2019-european-semester-convergence-programme-hungary_en.pdf
- 126 CSOK family allowance scheme for a family-friendly Hungary, October 2019. <https://hungarianinsider.com/cso-k-family-allowance-scheme-for-a-family-friendly-hungary-2320/>
- 127 2020 National Reform Programme of Hungary, April 2020. https://ec.europa.eu/info/sites/info/files/2020-european-semester-national-reform-programme-hungary_en.pdf
- 128 2020 National Reform Programme of Hungary, April 2020. https://ec.europa.eu/info/sites/info/files/2020-european-semester-national-reform-programme-hungary_en.pdf
- 129 Hungary offers nearly \$10,000 for home renovations in latest housing measure, October 2020. <https://www.devdiscourse.com/article/business/1261171-hungary-offers-nearly-10000-for-home-renovations-in-latest-housing-measure>

- 130 2020 National Reform Programme of Hungary, April 2020.
https://ec.europa.eu/info/sites/info/files/2020-european-semester-national-reform-programme-hungary_en.pdf
- 131 Hungary urged to adopt new housing policies, January 2020.
<https://emerging-europe.com/news/hungary-urged-to-adopt-new-housing-policies/>
- 132 DLA Piper, General construction law.
<http://www.dlapiperrealworld.com/law/index.html?t=construction&s=legal-framework&q=general-construction-law&c=HU>
- 133 Mixin.hu, Építési engedélyeztetési eljárás szabályai 2018, December 2017,
<https://www.mixin.hu/magyarorszag/epitesi-engedelyeztetes-szabalyai>
- 134 Piacessprofit, Drágállották a kötelezőt, csináltak egyet maguknak, February 2017,
http://www.piacessprofit.hu/kkv_cegblog/dragallottak-a-kotelezot-csinaltak-egy-et-maguknak/
- 135 Építési jog, Kötelező tervezői és kivitelezői felelősségbiztosítás: kinek kell megkötnie?. February 2017.
<https://epitesijog.hu/1961-ktelez-tervezi-es-kivitelezi-felelsosegbiztositas-kinek-kell-megktnie>
- 136 ELIOS, Liability and insurance regimes in the construction sector: national schemes and guidelines to stimulate innovation and sustainability. April 2010.
<http://www.elios-ec.eu/sites/default/files/pdf/Eliospecialreporton27MemberStates.pdf>
- 137 DLA Piper, Limitation period.
<http://www.dlapiperrealworld.com/law/index.html?t=construction&s=liability&q=limitation-period&c=HU>
- 138 Balázs T., Klee L., and Gulyás D., FIDIC Contracts and Hungarian Law or the Most Important Aspects of Using FIDIC Contracts in Hungary. July 2015. The International Construction Law Review, Pt 2, 2014.
- 139 This includes total investment by the construction and real estate sub-sectors, defined as gross fixed capital formation, i.e. acquisitions minus disposal, of total fixed assets (e.g. machinery and equipment, vehicles, dwellings and other buildings).
- 140 European Commissions Country Report Hungary 2020, https://ec.europa.eu/info/sites/info/files/2020-european-semester-country-report-hungary_en.pdf
- 141 This includes total investment (i.e. gross fixed capital formation) in dwellings and non-residential construction and civil engineering by investors in the general economy (e.g. industry, financial and non-financial services, households, agricultural sector, etc.).
- 142 Data unavailable for 2019.
- 143 The indicator gross fixed capital formation in non-residential and civil engineering refers to the Eurostat indicator «Other buildings and structures»
- 144 Data unavailable for 2019.
- 145 Data unavailable for 2019.
- 146 Data unavailable for 2019.
- 147 Data unavailable for 2019.
- 148 Data unavailable for 2019.
- 149 Data unavailable for 2019.
- 150 Data unavailable for 2019.
- 151 Data unavailable for 2019.
- 152 Data unavailable for 2019.
- 153 Czech Republic and the EIB. <https://www.eib.org/en/projects/regions/european-union/czech-republic/index.htm>
- 154 Investment Plan: Hungary - September 2020.
https://ec.europa.eu/commission/strategy/priorities-2019-2024/jobs-growth-and-investment/investment-plan-europe/investment-plan-results/investment-plan-hungary_en
- 155 The Multiannual Financial Framework (MFF) is the total budget the European Union has at its disposal to implement its internal and external policies for a seven-year period. The current one, which amounts to just under 1.1 trillion Euros, will expire in 2020, [https://ecdpm.org/dossiers/multiannual-financial-framework-mff/#:~:text=The%20Multiannual%20Financial%20Framework%20\(MFF,Euros%2C%20will%20expire%20in%202020.](https://ecdpm.org/dossiers/multiannual-financial-framework-mff/#:~:text=The%20Multiannual%20Financial%20Framework%20(MFF,Euros%2C%20will%20expire%20in%202020.)
- 156 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose.
- 157 European Commissions Country Report Hungary 2020, https://ec.europa.eu/info/sites/info/files/2020-european-semester-country-report-hungary_en.pdf
- 158 Ibidem.
- 159 Hungary to keep details of Beijing-funded rail link secret, <https://www.ft.com/content/251314b5-8d6a-4665-a14b-0110dd88754c>
- 160 Hungary Classifies Details Of China-backed Rail Project, <https://www.barrons.com/news/hungary-classifies-details-of-china-backed-rail-project-01589904906>
- 161 Fitch Solutions. Hungary Infrastructure Report. Q1 2020.
<https://store.fitchsolutions.com/all-products/hungary-infrastructure-report>
- 162 Ibidem.
- 163 Education and training monitor – Hungary, 2020, <https://op.europa.eu/en/publication-detail/-/publication/63aabc75-2496-11eb-9d7e-01aa75ed71a1/language-en/format-PDF/source-171316678>
- 164 Ibidem.
- 165 Ibidem.
- 166 ReferNet Hungary: digital community creative workshops– increasing VET attractiveness through innovation, <https://www.cedefop.europa.eu/en/news-and-press/news/refernet-hungary-digital-community-creative-workshops-increasing-vet-attractiveness-through>

Country Fact Sheet Hungary

- 167 Hungary: modernising vocational schools to meet 21st century sectoral skill needs, <https://www.cedefop.europa.eu/en/news-and-press/news/hungary-modernising-vocational-schools-meet-21st-century-sectoral-skill-needs>
- 168 Hungary: vocational education and training in the digital era, <https://www.cedefop.europa.eu/en/news-and-press/news/hungary-vocational-education-and-training-digital-era>
- 169 Hungary: modernising vocational schools to meet 21st century sectoral skill needs, <https://www.cedefop.europa.eu/en/news-and-press/news/hungary-modernising-vocational-schools-meet-21st-century-sectoral-skill-needs>
- 170 ReferNet Hungary: digital community creative workshops– increasing VET attractiveness through innovation, <https://www.cedefop.europa.eu/en/news-and-press/news/refernet-hungary-digital-community-creative-workshops-increasing-vet-attractiveness-through>
- 171 Education and training monitor – Hungary, 2020, <https://op.europa.eu/en/publication-detail/-/publication/63aabc75-2496-11eb-9d7e-01aa75ed71a1/language-en/format-PDF/source-171316678>
- 172 European Commissions Country Report Hungary 2020, https://ec.europa.eu/info/sites/info/files/2020-european-semester-country-report-hungary_en.pdf
- 173 2020 National Reform Programme of Hungary, April 2020.
https://ec.europa.eu/info/sites/info/files/2020-european-semester-national-reform-programme-hungary_en.pdf
- 174 2020 National Reform Programme of Hungary, April 2020.
https://ec.europa.eu/info/sites/info/files/2020-european-semester-national-reform-programme-hungary_en.pdf
- 175 European Commissions Country Report Hungary 2020, https://ec.europa.eu/info/sites/info/files/2020-european-semester-country-report-hungary_en.pdf
- 176 2020 National Reform Programme of Hungary, April 2020.
https://ec.europa.eu/info/sites/info/files/2020-european-semester-national-reform-programme-hungary_en.pdf
- 177 Ibidem
- 178 European Commission, 2019 SBA Fact Sheet Hungary.
<https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/>
- 179 Single Market Scoreboard 2020, Hungary, https://ec.europa.eu/internal_market/scoreboard/docs/2020/07/member-states/hu_en.pdf
- 180 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose
- 181 Single Market Scoreboard 2020, Hungary, https://ec.europa.eu/internal_market/scoreboard/docs/2020/07/member-states/hu_en.pdf
- 182 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose
- 183 Single Market Scoreboard 2020, Hungary, https://ec.europa.eu/internal_market/scoreboard/docs/2020/07/member-states/hu_en.pdf
- 184 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose
- 185 Single Market Scoreboard 2020, Hungary, https://ec.europa.eu/internal_market/scoreboard/docs/2020/07/member-states/hu_en.pdf
- 186 European Commission, 2019 SBA Fact Sheet. Hungary. <https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/>
- 187 Ibidem.
- 188 European Commission, EU Single Market Scoreboard. Hungary.
https://ec.europa.eu/internal_market/scoreboard/performance_per_policy_area/public_procurement/index_en.htm
- 189 European Commission, 2019 SBA Fact Sheet. Hungary. <https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/>
- 190 Hungary Corruption Report, <https://www.ganintegrity.com/portal/country-profiles/hungary/>
- 191 JRC Report EUR 27511 EN, State of implementation of the Eurocodes in the European Union. 2015.
<http://eurocodes.jrc.ec.europa.eu/showpublication.php?id=537>
- 192 World Economic Forum, The Global Competitiveness Report 2019.
http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf
- 193 Ibidem.
- 194 Inward FATS describe the overall activity of foreign affiliates resident in the compiling economy. A foreign affiliate within the terms of inward FATS is an enterprise resident in the compiling country over which an institutional unit not resident in the compiling country has control.
- 195 Data not available for subsequent years.
- 196 Outward FATS explains the activity of foreign affiliates abroad controlled by the compiling country.
- 197 Data not available for subsequent years.
- 198 Data not available before 2012 and after 2017.
- 199 Data not available before 2013 and after 2017.
- 200 Data not available before 2013 and after 2017.
- 201 Data not available before 2013 and after 2016.
- 202 Data not available before 2013 and after 2017.
- 203 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose.
- 204 European Commission, 2019 SBA Fact Sheet Hungary. November 2019, <https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/>
- 205 Ibidem.
- 206 Ibidem.
- 207 ECFIN_forecast_summer_2020_Hungary,
https://ec.europa.eu/economy_finance/forecasts/2020/summer/ecfin_forecast_summer_2020_hu_en.pdf

- 208 Hungarian real estate market – Forecast for 2020! <https://dailynewshungary.com/what-can-be-expected-for-2020-in-the-hungarian-real-estate-market/>
- 209 Fitch Solutions. Hungary Infrastructure Report. Q1 2020.
<https://store.fitchsolutions.com/all-products/hungary-infrastructure-report>
- 210 ECFIN_forecast_summer_2020_Hungary,
https://ec.europa.eu/economy_finance/forecasts/2020/summer/ecfin_forecast_summer_2020_hu_en.pdf