



European Construction Sector Observatory

Country profile **Czech Republic**

October 2020



In a nutshell

Over the 2010-2019 period, Czech Republic's GDP increased by 22.6%, totalling CZK 5,182.8 billion (EUR 198.2 billion) in 2019. This is an annual growth of 2.4% compared to the 2018 levels.

Czech's economy performed well in 2019, primarily driven by strong private consumption and steady wage increase, partially offsetting weak exports growth and ongoing geopolitical tensions.

Likewise, the **number of enterprises** in the broad construction sector increased by 7.8% over the 2010-2019 period, totalling 306,477 in 2019. With regards to sub-sectors, the largest increment being reported by the architectural and engineering activities (+21.3%) sub-sector, followed by the real estate activities (+9.1%) and the narrow construction (+6.4%) sub-sectors over the same reference period, respectively.

Number of enterprises in the architectural and engineering activities sub-sector between 2010 and 2019  **21.3%**

In parallel, the **volume index of production** in the broad construction sector increased by 9.2% over the 2015-2019 period, mainly driven by a 17.6% increase in the production of construction of buildings partially offsetting an 8.4% decline in the production of construction of civil engineering between 2015 and 2019.

Production in the construction of buildings between 2015 and 2019  **17.6%**

The **total turnover** in the broad construction sector increased to EUR 55.8 billion in 2019, representing

an increment of 13.5% since 2010. This overall increase was primarily driven by growth in two sub-sectors – the manufacturing (+23.4%) and the real estate activities (+22.8%) sub-sectors over the 2010-2019 period.

Turnover in the manufacturing sub-sector between 2010 and 2019  **23.4%**

Similarly, the **gross operating rate** of the broad construction sector, an indicator of the sector's profitability, increased from 12.8% in 2011 to 16.2% in 2017. This is still lower than the EU-27 average of 16.6%. The real estate activities sub-sector remained the most profitable (+40.2%), followed by the architectural and engineering activities (+13.5%), the manufacturing (+13.1%) and the narrow construction (+11.1%) sub-sectors in 2017, respectively.

With regards to employment, there were 608,461 **persons employed** in the broad construction sector in 2019, representing a drop of 4.1% since 2010. This was primarily due to the fall in employment in the manufacturing (-6.1%) as well as the narrow construction (-7.1%) sub-sectors, offsetting the rise observed in the architectural and engineering activities sub-sector (+14.3%) during the same reference period.

Several initiatives launched by the government may affect positively the construction sector, by providing further business opportunities. This includes for instance the upcoming housing policy for the period post 2021. This policy is expected to be presented to the Czech cabinet by the end of 2020¹. The government is also drafting an **Affordable Housing Act**, under the Government Legislative Work Plan for 2020. The Act focuses on

supporting social housing with a view to provide housing for people².

The 'Social Housing Concept of the Czech Republic 2015–2025' is also being updated by the Ministry of Labour and Social Affairs (MLSA) under the changed title of 'Affordable Housing Concept of the Czech Republic 2020–2025'³.

Moving from the housing to the civil engineering market, the Czech government also approved in 2019 a National Investment Plan for 2020-2050, with an allocation of CZK 8.0 trillion (EUR 315.0 billion) and including 22,000 projects. Almost 77.0% of this allocation is earmarked for transport sector projects^{4,5}.

As per the National Investment Plan 2020-2050, about CZK 782.0 billion (EUR 29.9 billion) has been dedicated to motorway construction, CZK 878.0 billion (EUR 33.6 billion) for railway modernisation and CZK 769.0 billion (EUR 29.4 billion) for construction of high-speed railway lines⁶.

Pilot sections of various high-speed lines have already been selected for an accelerated project preparation regime, including Prague Běchovice – Poříčany, Brno – Vranovice and Přerov – Ostrava, Poříčany – Světlá nad Sázavou, etc. Moreover, as for railway infrastructure, the construction of the ETCS Petrovice u Karviné – Ostrava – Přerov – Břeclav line was recently completed on corridor II in the Kolín section, with trial operations scheduled to begin in 2020⁷.

While these policy initiatives will support the development of the construction sector, the latter faces two major issues. Firstly, the construction sector suffers from late payments, which worsened due to the outbreak of COVID-19. As a result, according to the European Payment Report 2020, 25.0% of the SME respondents expect late payments to have a high impact on liquidity squeeze. Secondly, the continuing shortage of skilled workforce continues to be a major concern for the sector.

Over 47.0% of businesses in the construction sector regarded labour shortages as the main factor limiting their production in Q3-2019⁸.

The COVID-19 pandemic had an important impact on the the Czech construction sector. The latter experienced an 8.2% decline in construction output fell by 8.2% year on year in September 2020. The decline is equally observable in the other branches of industrial production. If this trend continues, the *Svaz podnikatelů ve stavebnictví* (Union of Entrepreneurs in Construction) expects the output of the construction sector to decline by 10.0% (about CZK 500 billion – EUR 18.9 billion). This would mean coming back to approximately 2018 levels.

The sector is expected to grow from 2021 onwards. With the unlocking of the economy, stalled construction projects have already gained momentum, amidst the sector gearing up for the upcoming projects announced under the National Investment Plan 2020-2050.

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Key figures

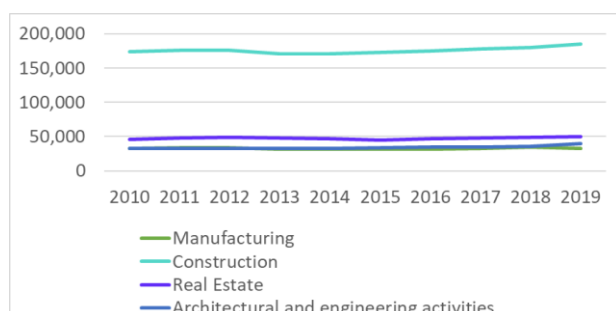
Construction market

The **number of enterprises** in the broad construction sector of Czech Republic totalled 306,477 in 2019⁹, with the narrow construction sub-sector accounting for 60.4% of the total (Figure 1). Overall, the number of enterprises in the broad construction sector increased by 7.8% over the 2010-2019 period, mostly driven by 21.3%, 9.1% and 6.4% increases in the architectural and engineering activities, the real estate activities and the narrow construction sub-sectors, respectively. In contrast, the number of companies in the manufacturing sub-sector dropped marginally by 0.7% over in the same reference period.

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

↑ 21.3%

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



Source: Eurostat, 2020.

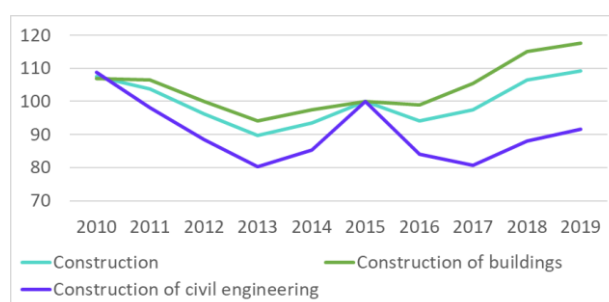
The **volume index of production in the broad construction sector** increased by 9.2% over the 2015-2019 period, primarily driven by a 17.6% increase in the production of construction of buildings partially offsetting an 8.4% decline in the production of construction of civil engineering over the same reference period.

Production in the construction of buildings between 2015 and 2019

↑ 17.6%

Following the COVID-19 outbreak, the total value of public procurement orders for the broad construction declined by 2.5% between October 2019 and 2020. This decline was driven by a drop of production in civil engineering (-11.3%), which was partly offset by an increase in the production of buildings of 26.4%¹⁰.

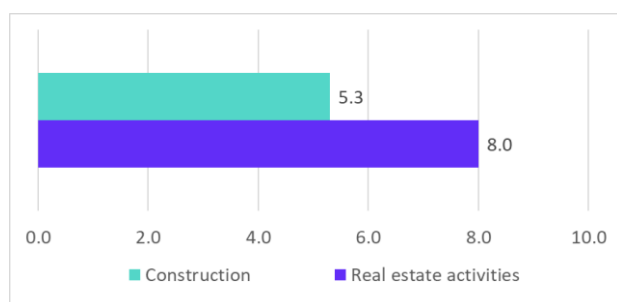
Figure 2: Volume index of production in the Czech construction sector between 2010 and 2019 (2015=100)



Source: Eurostat, 2020.

The total **value added at factor cost**¹¹ in the broad construction sector amounted to EUR 15.9 billion in 2019¹², with the narrow construction sub-sector contributing 47.7% of the total¹³, followed by real estate activities (+25.9%), manufacturing (+14.2%), and architectural and engineering activities (+12.2%) sub-sectors. The **share of gross value added** of the narrow construction and the real estate activities sub-sectors in the GDP amounted to 5.3% and 8.0% in 2019¹⁴, respectively (Figure 3).

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



Source: Eurostat, 2020.

Czech Republic is statistically divided into eight regions – Praha, Střední Čechy, Jihozápad, Severozápad, Severovýchod, Jihovýchod, Střední Morava and Moravskoslezsko. The **regional gross value added** in the narrow construction sub-sector decreased in all the regions except for Praha and Střední Čechy which recorded an increase of 2.1% and 4.4%, respectively over the 2010-2017¹⁵ period. In contrast, the **regional gross value added** in the real estate activities sub-sector increased in all the regions. Specifically, Praha recorded the highest increase of 18.5%, followed by Jihovýchod (+17.7%), Jihozápad (16.6%) and Střední Čechy (+15.6%) over the 2010-2017 period. Overall, the **gross value added by the top three regions** amounted to 51.6% and 56.4% in the narrow construction and the real estate activities sub-sectors in 2017, respectively.

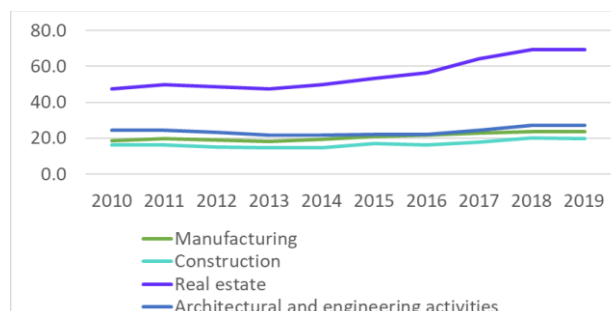
Productivity

Overall, the **apparent labour productivity**¹⁶ in the Czech broad construction sector increased from EUR 20,801 in 2010¹⁷ to EUR 23,960 in 2017¹⁸ (+15.2%), still considerably below the EU-27 average of EUR 50,079. The increase in apparent labour productivity is reflected across all construction sub-sectors. In fact, the largest increment was witnessed in the real estate activities (+46.1%) sub-sector, growing from EUR 47,400 in 2010 to EUR 69,232 in 2019. This was followed by the manufacturing and the narrow construction sub-sectors, rising from EUR 18,603 and EUR 16,224 in 2010 to EUR 23,622 and EUR 19,950 in 2019, respectively. Lastly, the architectural and engineering activities sub-sector increased by 11.0%, from EUR 24,300 in 2010 to EUR 26,978 in 2019¹⁹.

Productivity in the real estate activities sub-sector between 2010 and 2019

↑ 46.1%

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



Source: Eurostat, 2020.

Turnover and profitability

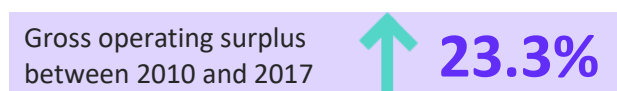
Total **turnover** of the Czech broad construction sector stood at EUR 49.2 billion in 2017²⁰, representing a decline of 5.0% compared to 2010 (EUR 51.7 billion). However, it further increased to EUR 55.8 billion in 2019²¹, a 13.5% increment since 2010. This growth was mainly driven by a 23.4% and 22.8% increase in the manufacturing and the real estate activities sub-sectors over the 2010-2019 period, respectively. In contrast, the narrow construction sub-sector reported a marginal increase of 2.8% over the 2010-2019 period while the architectural and engineering activities sub-sector totalled EUR 5.7 billion in 2019, same as compared to 2010. Overall, in 2019, 59.7% of the total turnover was generated by the narrow construction sub-sector, followed by the manufacturing (+15.2%), real estate activities (+14.9%) and architectural and engineering activities (+10.2%) sub-sectors.

Turnover in the manufacturing sub-sector between 2010 and 2019

↑ 23.4%

The **gross operating surplus** of the broad construction sector amounted to EUR 8.0 billion in 2017²², a 23.3% and 11.5% increase compared to 2010 and 2016, respectively. In terms of its sub-sectors, the largest increase was reported by the real estate activities (+45.1%), followed by the manufacturing activities (+25.1%) and the narrow construction (+12.3%) sub-sectors over the 2010-2017 period. In contrast, the architectural and

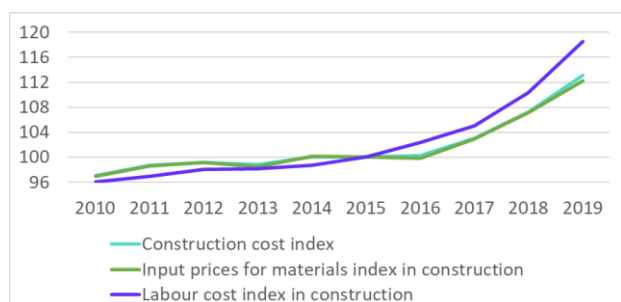
engineering activities sub-sector experienced a 2.5% decline over the same reference period.



At the same time, the **gross operating rate**²³ of the Czech broad construction sector²⁴, which indicates the sector’s profitability, stood at 16.2% in 2017²⁵, lower than 12.8% in 2011²⁶ as well as the EU-27. In terms of sub-sectors, all the sub-sectors reported an increase over the 2010-2017 period. Specifically, real estate activities remained the most profitable sub-sector, with the gross operating rate of 40.2%, well above its 2010 rate of 32.3%. This was followed by the architectural and engineering activities and the manufacturing sub-sectors, registering a gross operating rate of 13.5% and 13.1% in 2017, slightly above compared to their 2010 levels of 10.5% and 12.4%, respectively. Similarly, the narrow construction sub-sector registered a gross operating rate of 11.1% in 2017, slightly above its 2011²⁷ level of 8.7%.

The construction cost index has also been on an increasing trend since 2010. Over the 2015-2019 period, the construction cost index increased by 13.1%. This growth was mostly driven by a rise in labour costs (+18.6%) and input material prices (+12.2%) over the same reference period (Figure 5).

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



Source: Eurostat, 2020.

Employment

In 2019²⁸, there were 608,461 **persons employed** in the Czech broad construction sector, representing a decline of 4.1% since 2010 (634,648 persons). The majority of the persons employed in the sector work in the narrow construction sub-sector (+62.6%). The manufacturing, architectural and engineering and real estate activities sub-sectors accounted for 15.7% (95,572 persons), 11.8% (72,097 persons) and 9.8% (59,593 persons) of the

total employed in the broad sector in 2019 (Figure 6). Employment in the architectural and engineering activities sub-sector increased by 14.3% over the 2010-2019²⁹ period, followed by the real estate activities (+0.4%) sub-sector. In contrast, the manufacturing and the narrow construction sub-sectors reported a decrease of 6.1% and 7.1% over the same reference period, respectively.

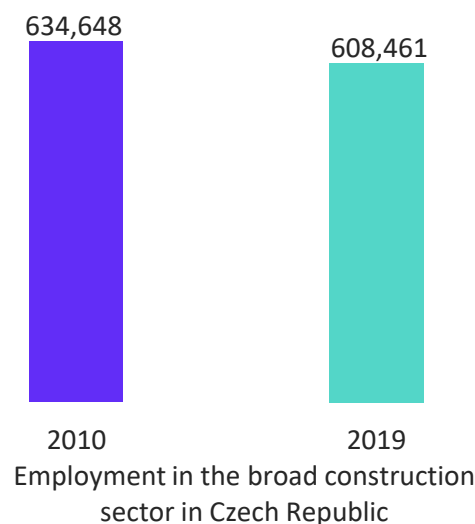
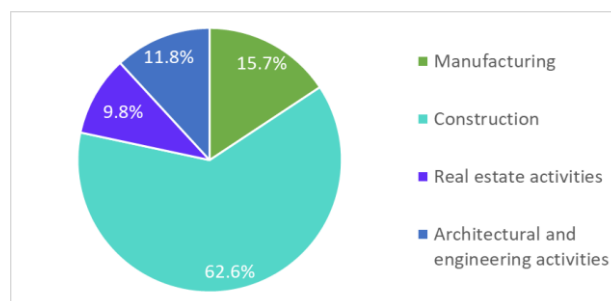


Figure 6: Percentage of people employed per construction sub-sectors in Czech Republic in 2019



Source: Eurostat, 2020.

In terms of employment by **specific occupations**, the biggest drops between 2010 and 2019 in the narrow construction sub-sector were registered for technicians and associate professionals (-47.5%), followed by plant and machine operators and assemblers (-25.4%) and craft and related trades workers (-19.5%). Conversely, demand for clerical support workers increased by 58.0% over the 2010-2019 period, followed by managers (+33.3%). With regards to the real estate activities sub-sector, the largest drop was recorded in elementary occupations (-64.7%), followed by plant and machine operators and assemblers (-41.2%). On the other hand, the demand for managers increased by 100.0% over the 2010-2019 period. Lastly, in the case of the manufacturing sub-sector, a large

increase in demand was reported for elementary occupations (+236.6%) as well as professionals (+145.2%) over the 2010-2019 period. In contrast, the number of persons employed as skilled agricultural, forestry and fishery workers declined by 57.1% over the same reference period.

Number of elementary occupations workers in the manufacturing sub-sector between 2010 and 2019  **236.6%**

The share of **self-employed workers** in the general economy working in the narrow construction sub-sector decreased from 22.2% in 2010 to 18.4% in 2019. This is higher than the EU-27 average of 11.9%. In the real estate activities sub-sector, the share of self-employed workers stood at 2.3% in 2019, slightly above its 2010 level (+1.8%) as well as the EU-27 average of 1.4%.

In parallel, **full-time employment** in the narrow construction sub-sector also decreased by 19.9%, between 2010 and 2019, while, a moderate

increase of 17.0% was recorded in the real estate activities sub-sector during the same period.

Conversely, **part-time employment** in both the narrow construction as well as the real estate activities sub-sectors increased by 32.9% and 42.9% between 2010 and 2019.

Part-time employment in the real estate activities sub-sector between 2010 and 2019  **42.9%**

In the case of the narrow construction sub-sector, Severozápad recorded the largest drop of 20.8% in the number of persons employed over the 2010-2019 period. This was followed by Severovýchod (-20.3%) and Moravskoslezsko (-18.0%) over the same reference period. With regards to the real estate activities sub-sector, the largest decline was registered in Severovýchod (-22.2%), followed by Střední Čechy (-12.5%) and Jihozápad (-11.1%) over the 2010-2019 period.

2

Macroeconomic indicators

Economic development

The Czech economy continued to grow at a moderate pace in 2019, primarily driven by strong private consumption and sustained by a steady wage increase amid tight labour market conditions and slowdown in external demand³⁰.

In 2019, the Czech Republic's **GDP** amounted to CZK 5,182.8 billion (EUR 198.2 billion), representing an increase of 22.6% and 2.6% compared to 2010 and 2018 levels, respectively³¹.

The 2019 **potential GDP** of the Czech Republic amounted to CZK 5,079.1 billion (EUR 194.3 billion), resulting in a positive output gap of 2.0%. This gap indicates that the Czech economy tends to overwork its resources, with actual outputs exceeding full capacity output. In parallel, the **inflation rate** has been increasing over the 2015-2019 period, reaching 7.8% in 2019. This increase is partly due to rises in food prices and regulated products³².

Demography and employment

In terms of the **total population**, the Czech Republic reached 10.6 million people in 2019. This increase in population is partly attributed to high net migration (a total positive net migration of 164,823 people over the 2010-2018 period). Migration towards richer regions is adding to further urbanisation, putting pressure on the housing stock and infrastructure networks³³. The population is projected to stabilise at 10.8 million in 2030 and then further decrease by 2.2% in 2050, reaching back 10.5 million.

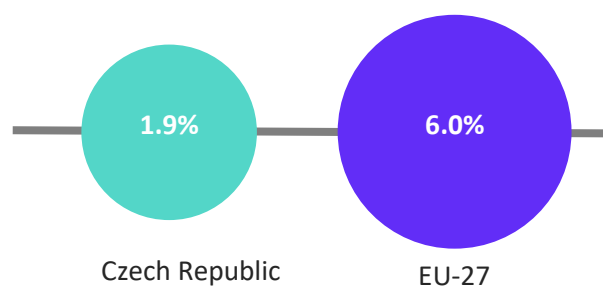
In parallel, the **working age population** (aged between 15 and 64 years or age) accounted for 64.5% of the total population of the Czech Republic in 2019. This is in line with the EU-27 average of 64.6% in 2019³⁴, whereas the elderly population (65 years or over) stood at 19.6% in 2019, slightly below the EU-27 average of 20.3%. Nevertheless, the

share of the working age population is expected to decline to 62.7% by 2030 and further to 56.7% by 2050. Additionally, the share of the elderly population is forecasted to reach 22.0% of the total population by 2030 and 28.2% by 2050. The increase in ageing population calls for an additional long-term care system and the need for an increase in public spending for the elderly. The demand for elderly infrastructures (hospitals, care home, access infrastructure), will also continue to rise gradually in the medium and long-term, providing potential opportunities for the construction sector.



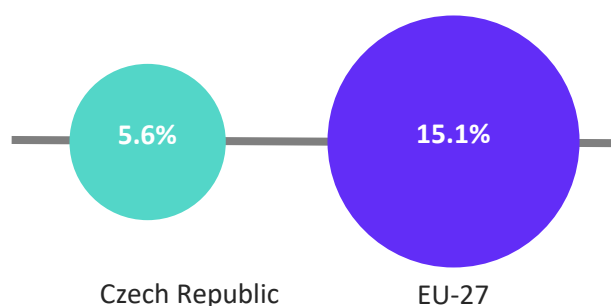
The overall unemployment rate in Czech Republic stood at 1.9% in 2019, significantly below the EU-27 average of 6.0%.

Unemployment rate in 2019



Youth unemployment in the Czech Republic has strongly decreased from 18.3% in 2010 to 5.6% in 2019, noticeably below the EU-27 average of 15.1%. Such a low unemployment rate is explained by two main factors: (i) labour is relatively cheap; and (ii) the presence of manufacturing industries (which are traditionally labour-intensive industries) in the country, representing more than one-third of all employment³⁵.

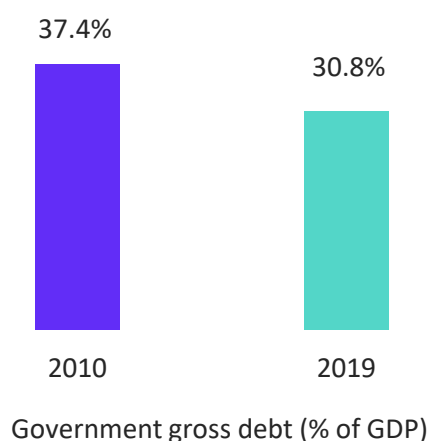
Youth unemployment rate in 2019



Public finance

In 2019, **general government expenditure** in the Czech Republic accounted for 41.9% of GDP, a level slightly lower than the EU-27 average of 46.7%. Similarly, the **general government deficit** stood at 0.3% of GDP, considerably better compared to the EU-27 average of -0.6%. Last, **general government gross debt** accounted for 30.8% of GDP in 2019 as compared to the EU-27 average of 77.8%. This represents a continuous decline since 2013 when it stood at 44.9%.

Nonetheless, public expenditure is expected to grow rapidly, followed by a similar increase in public investment with the current programming period for EU funding entering its last years³⁶. In addition, the long-term sustainability of public finance is worsening primarily due to the higher pension costs related to the country's ageing population.³⁷



Entrepreneurship and access to finance



As per the **Global Competitiveness Report 2019** by the World Economic Forum, Czech Republic ranked 35th out of 141 economies in terms of financing of SMEs³⁸.

According to the 2019 Global Competitiveness Report, the Czech Republic ranked 32nd with regards to venture capital availability, 69th as to domestic credit to private sector and 71st in terms of market capitalisation as a percentage of GDP. In relation to entrepreneurship, the Czech Republic ranked 30th in terms of willingness to delegate authority, 49th with regards to growth of innovative companies, 50th as to companies embracing disruptive ideas and 102nd in terms of attitudes towards entrepreneurial risk³⁹.

As per the 2019 SBA Fact Sheet, the Czech Republic's overall score on 'Access to finance' is well above the EU-28⁴⁰ average, with seven indicators above while the rest three indicators below the EU-28 average^{41,42}.

During the 2018-2019 period, some significant measures were implemented by the government to boost access to finance and entrepreneurship within the country⁴³:

- the '**Guarantee Fund VADIUM 2018-2023**', aimed at providing subsidised guarantees to SMEs for public procurement contracts.
- the **IX. Call of the Technology – Industry 4.0** programme, aimed at supporting SMEs in the purchase of machinery, equipment, licenses, technology, software and hardware to modernise production.
- the new '**EXPANSION – Guarantees**' programme, providing SMEs access to loans from commercial banks through loan guarantees ranging from CZK 4.0-25.0 million.
- the '**CzechStarter**' programme, providing early stage start-ups with mentoring and training services while launching new calls.

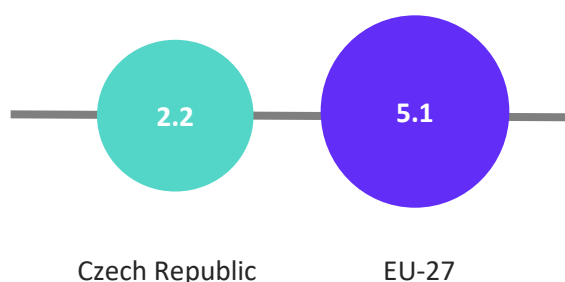
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Key economic drivers of the construction sector

Business confidence

Over the 2010-2019 period, both the consumer confidence indicator as well as the construction confidence indicator improved significantly. The **consumer confidence indicator** stood at 1.3 in 2019, well above its 2010 level of -13.7 as well as the EU-27 average of -6.2. Similarly, the **construction confidence indicator** also improved significantly from -36.0 in 2010 to 2.2 in 2019, though it remains lower than the EU-27 average of 5.1. In contrast, the **industry confidence indicator** declined over the years, going from 3.4 in 2010 to -3.2 in 2019. Yet, this is higher than the EU-27 average of -4.8.

Construction confidence indicator in 2019



The Czech **investment ratio** declined slightly to 26.1% in 2019 compared to 26.4% in 2010. Still, this is well above the EU-27 average of 21.7% in 2019.

Likewise, **investment per worker** in the broad construction sector increased by 30.4%, from EUR 33,788 in 2010 to EUR 44,045 in 2017⁴⁴. In terms of sub-sectors, investment per worker in the real estate activities sub-sector increased by 40.6%, from EUR 43,100 in 2010 to EUR 60,600 in 2017. Similarly, investment per worker in the narrow

construction sub-sector increased by 28.2%, from EUR 3,900 in 2011⁴⁵ to EUR 5,000 in 2017⁴⁶.

Domestic sales

Over the 2010-2018 period, the ranking of the five **most domestically sold construction products** has remained unchanged in the Czech Republic.

Table 1 presents the top five most domestically sold construction products, both in the Czech Republic and the EU-27, which made up 55.3% of all Czech domestic construction products sales in 2018.

Table 1: Five most domestically sold construction products in Czech Republic and in the EU-27 in 2018⁴⁷

| | Czech Republic | | | EU-27 |
|---|--|---------------|---|---|
| | Product | Value (EUR m) | Share in construction products domestic sales (%) | Product |
| 1 | Other structures (group 251123) | 583.7 | 16.8 | Other structures (group 251123) |
| 2 | Ready-mixed concrete (group 236310) | 440.0 | 12.7 | Doors, windows and others (group 251210) |
| 3 | Prefabricated buildings of metal (group 251110) | 342.5 | 9.9 | Ready-mixed concrete (group 236310) |
| 4 | Portland cement, aluminous cement, etc. (group 235112) | 299.7 | 8.6 | Prefabricated buildings of metal (group 251110) |
| 5 | Tiles, flagstones, bricks, etc. (group 236111) | 257.6 | 7.4 | Prefabricated structural components for building, etc. (group 236112) |

Source: PRODCOM, 2020.

Export of construction-related products and services

Table 2 presents the top five **most exported construction products** both in the Czech Republic and in the EU-27 in 2018. Over the 2010-2018 period, the Czech Republic continued to be a major exporter of “Other structures (group 251123)” and “Prefabricated buildings of metal (group 251110)”. Since 2010, the ranking of the most exported products has remained relatively stable, with the exception of “Ceramic tiles and flags (group 233110)” which were replaced by “Particle board (group 162113)”. The top five most exported products represent 47.6% of total export value.

Table 2: Five most exported construction products in Czech Republic and in the EU-27 in 2018⁴⁸

| | Czech Republic | | | EU-27 |
|---|---|---------------|--|--|
| | Product | Value (EUR m) | Share in construction products exports (%) | Product |
| 1 | Other structures (group 251123) | 527.0 | 19.9 | Ceramic tiles and flags (group 233110) |
| 2 | Prefabricated buildings of metal (group 251110) | 260.6 | 9.8 | Other structures (group 251123) |
| 3 | Pallets, box pallets and other (group 162411) | 174.2 | 6.6 | Fibreboard of wood, etc. (group 162115) |
| 4 | Oriented strand board (group 162113) | 154.4 | 5.8 | Doors, windows and others (group 251210) |
| 5 | Particle board (group 162112) | 147.3 | 5.6 | Marble, travertine, alabaster, etc. (group 237011) |

Source: PRODCOM, 2020.

With regards to cross-border provision of construction-related services⁴⁹, the Czech Republic exported services amounting to EUR 367.3 million worldwide in 2018⁵⁰ (including EUR 286.9 million to the EU-27). Worldwide exports declined by 50.1% as compared to 2010 (EUR 736.8 million).

In 2018, the Czech Republic imported EUR 134.0 million of construction services from the world, wherein EUR 120.9 million were from the EU-27,

generating a worldwide **trade surplus** of EUR 233.3 million. These numbers also indicate a certain reliance on the EU Single Market.

Access to finance in the construction sector

Over the 2010-2019 period, loans from non-financial corporations in the general economy increased by 43.5%, from CZK 780.4 billion (EUR 29.9 billion) in 2010 to CZK 1,120.0 billion (EUR 42.8 billion) in 2019. This does not mean that access to finance is not an issue anymore in the country.

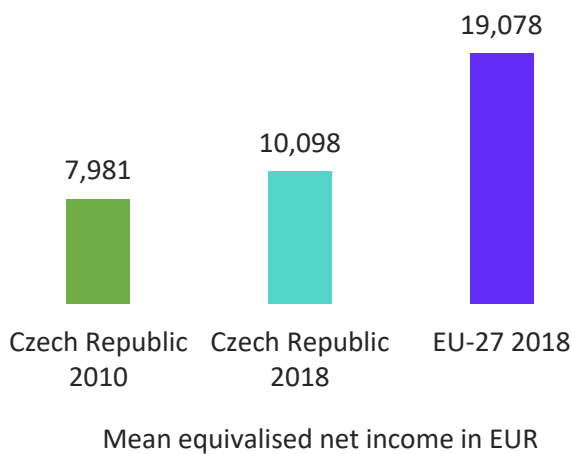
According to Survey on the Access to Finance of Enterprises (SAFE) 2019 results, on average, only 7.6% of the Czech respondent SMEs consider ‘access to finance’ as the most important issue, in line with the EU-28 average of 7.2%⁵¹.

As per the EIB Investment Survey 2019, almost 24.0% of the firms in the Czech construction sector report investing too little in comparison to their needs (against an EU average of 15.0%). According to the same survey, 41.0% of the firms in the construction sector consider ‘availability of finance’ as a long-term barrier. Furthermore, about 79.0% of the construction firms’ investment needs were met through internal financing while only 21.0% were being covered through external financing sources. Last, more than 80.0% of the external financing in the construction sector is done through bank loans, which is considerably higher than the EU average of 58.0%⁵². All in all, these indicators tend to show that access to finance is one of the key issues preventing the construction sector to expand and invest in its (sustainable) growth.

Access to housing

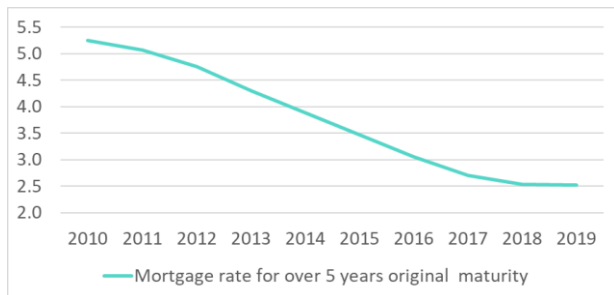
The **number of households** in the Czech Republic increased by 9.2%, from 4,423,200 in 2010 to 4,828,400 in 2019. The share of **total population living in cities and greater cities** slightly fluctuated from 30.5% in 2010 to 30.3% in 2017⁵³.

The **mean equivalised net income** increased by 26.5%, from EUR 7,981 in 2010 to EUR 10,098 in 2018⁵⁴. This is well below the EU-27 average of EUR 19,078.



Moreover, housing loans to households picked up considerably, with the total **outstanding residential loans** growing by 82.3%, from EUR 24.1 billion in 2010 to EUR 44.0 billion in 2018⁵⁵. This increase in residential loans is partly supported by the declining **interest rates on mortgages**, currently standing at 2.5% in 2019 as compared to 5.2% 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.

The **house price index** for total dwellings also increased by 41.9% over the 2015-2019 period, mostly driven by a 45.5% and 41.3% increase in new dwellings and existing dwellings over the same reference period, respectively.

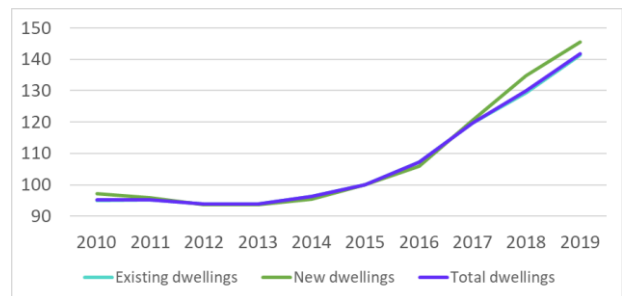
Housing affordability has become a serious issue for the Czech Republic, with high variations in price growth between regions. An increased demand in cities due to internal migration and strong pressure for prime properties by foreign buyers has resulted in inflated house prices, primarily in instances where cities face supply constraints. For instance, there is a higher property overvaluation in Prague as almost two-third of all the transactions in the Czech Republic take place in Prague. This is also supplemented by a continued rise of ‘Airbnb’ and

other rental accommodations within cities facing housing supply constraints⁵⁶.



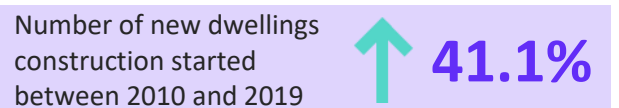
According to the Czech National Bank, by mid-2019, there was a 15-20% mismatch between the transaction and fundamental prices in the housing sector, primarily due to an undersupply of residential houses in cities⁵⁷.

Figure 8: House price index in Czech Republic between 2010 and 2019 (2015=100)



Source: Eurostat, 2020.

Correspondingly, the number of **new dwellings construction started** increased by 41.1%, from 23,973 in 2010 to 33,828 in 2019. This was primarily driven by a 44.8% rise in the number of new residential dwellings (32,438 in 2019 as compared to 22,409 in 2010), partially offsetting an 11.1% decline in the number of new non-residential dwellings (1,390 in 2019 as compared to 1,564 in 2010) over the above reference period⁵⁸.



Similarly, the number of **dwellings completed** slightly decreased, from 36,442 in 2010 to 36,406 in 2019. The number of dwellings completed in non-residential buildings declined by 16.2% (from 786 in 2010 to 659 in 2019), partly offsetting a 4.2% increase in the number of residential dwellings completed, from 30, 672 in 2010 to 31,945 in 2019⁵⁹.

In contrast, the number of **building permits** granted deteriorated over the 2010-2019 period, from 105,743 in 2010 to 86,283 in 2019 (-18.4%). This was partially due to a similar decline in the number of permits granted for both residential (-19.3%) as well as non-residential (-21.3%) buildings over the

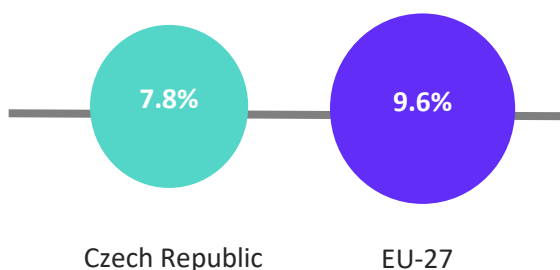
same reference period. Additionally, the number of building permits granted for new non-residential construction also decreased by 9.9% over the 2010-2019 period, from 7,279 in 2010 to 6,555 in 2019⁶⁰.

Number of building permits granted for non-residential buildings between 2010 and 2019

↑ 21.3%

Over the 2010-2018 period, the **home ownership** rate in the Czech Republic has remained almost stable at 78.7%. This further increased to 81.3% in 2018 (compared to EU-27 average of 74.0%) for the population earning **above 60% of the median equivalised income**,⁶¹ whereas it declined to 54.6% (compared to EU-27 average of 49.8%) for the population earning below 60% of the median equivalised income. The **overcrowding rate**⁶² stood at 15.7%⁶³ in 2018⁶⁴, slightly below the EU-27 average of 17.1%. The **severe housing deprivation rate**⁶⁵ stood at 2.3%⁶⁶, still below the EU-27 average of 4.3%. Last, the **housing cost overburden rate**⁶⁷ stood at 7.8%⁶⁸ as compared to the EU-27 average of 9.6%.

Housing cost overburden rate in 2018



Infrastructure



According to the 2019 Global Competitiveness Report, Czech Republic ranked 20th out of 141 economies in terms of its overall infrastructure quality⁶⁹.

Broadly, the Czech Republic ranked 22nd with regards to its transport infrastructure. More specifically, the Czech Republic ranked 3rd among the 141 economies in terms of its railroad density, 17th for its road connectivity and 25th with regards to the efficiency of its train services. Further, the Czech Republic ranked 47th in terms of efficiency of air transport services, 54th in relation of its airport connectivity and 78th for the quality of its road infrastructure.

In this context, the Czech government approved a National Investment Plan for 2020-2050 in December 2019, with a total budget of CZK 8.0 trillion (EUR 315.0 billion) and including 22,000 projects. Out of this, almost 77.0% of the allocation is to be spent to transport^{70,71}. Other projects will also include investment in, cybersecurity, digitalisation and healthcare. Moreover, energy has also been confirmed as a priority sector, with the National Investment Plan including projects for the construction of two new blocs in the Temelín and Dukovany nuclear power plants⁷².

The administrative burden continues to be a barrier to effective implementation, but the Czech Republic is developing a new construction law which is expected to become effective as of 2021 (more details in the section 6 National and Regional Regulatory Framework)⁷³.

4

Key issues and barriers in the construction sector

Company failure

Over the 2010-2017 period, the number of **company deaths** in the narrow construction sub-sector grew by 10.4% between 2010 and 2017⁷⁴, from 14,301 to 15,794. Similarly, the number of company deaths in the real estate sub-sector slightly increased by 1.1%, from 4,180 in 2010 to 4,225 in 2017. In the case of the architectural and engineering activities sub-sector, the number of company deaths registered a negligible growth of 0.4%, from 2,257 in 2010 to 2,267 in 2017.

Company death in the narrow construction sub-sector between 2010 and 2017

 **10.4%**

In contrast, the number of **company births** in the narrow construction sub-sector decreased by 12.4%, from 16,423 in 2010 to 14,387 in 2017. Likewise, the real estate sub-sector reported a decline of 38.6% over the 2010-2017 period, from 6,869 in 2010 to 4,219 in 2017. Conversely, in the architectural and engineering activities sub-sector, company births increased by 15.0%, from 2,365 in 2010 to 2,720 in 2017.

Company births in the real estate sub-sector between 2010 and 2017

 **38.6%**

The Czech Republic has one of the lowest fear of failure rates within the EU region. Its insolvency framework index is also stronger than the EU average. In fact, the time taken to resolve an insolvency case in the Czech Republic has reduced from 6.5 years in 2008 to 2.1 years in 2019. However, the cost of resolving insolvency continues

to remain one of the highest in the EU region, being at 17.0% of the debtor's estate value⁷⁵.

With the outbreak of the **COVID-19 pandemic**, the Czech government adopted statutory changes with regards to insolvency proceedings. The most notable measure involved an extraordinary moratorium open to all companies in relation to COVID-19 until August 31, 2020. Additionally, a general restriction was also placed on creditors' insolvency petitions that will also affect creditor-driven insolvency resolutions of debtors already insolvent prior to the COVID-19-outbreak. Furthermore, the statutory obligation to file for insolvency for the insolvent debtor has been suspended until six months after the end of emergency measures, but not beyond 31st December 2020. Finally, insolvency petitions filed by creditors will not be considered until August 31, 2020 with no exceptions⁷⁶.

Trade credit

In 2019, the Czech Republic reported an increased use of trade credit with 87.6% of the total value of Czech respondents' B2B sales through the use of credit, more than double compared to 43.3% in 2018. This is also well above the Eastern European average (EEA) of 67.2% and is ranked second highest in the EU region just behind Slovakia (with 91.5% of total B2B sales on credit)⁷⁷.

According to SAFE 2019, 17.5% of the Czech Republic respondent SMEs consider trade credit as a relevant source of financing, considerably below the EU-28⁷⁸ average of 31.0% in 2019⁷⁹.

Around 17.1% of Czech SMEs applied for trade credit in the last six months in 2019, below the EU-28 average of 31.7%. Likewise, only 6.1% of the respondent SMEs applied for trade credit from their

business partners in the last six months, compared to 16.7% in the EU-28, while 81.1% of the respondents did not consider it relevant for their enterprise, compared to the EU-28 average of 66.6%. According to the survey, 69.2% of Czech respondent firms believed that availability of trade credit will remain unchanged in the future, slightly above the EU-28 average of 64.7%⁸⁰.

Late payment



As per the European Payment Report 2020, 25.0% of the Czech Republic respondent firms expect late payments to have a high impact on their liquidity. This is below the EU average of 45.0%⁸¹.

According to the report, about 63.0% of the Czech respondent firms in the general economy have agreed to accept longer payment terms to maintain client relationships, in line with the 69.0% EU average⁸².

In 2019, 76.0% of Czech respondent firms offered relaxed payment terms averaging 31 days from invoicing, as compared to 26 days in 2018⁸³.

Late payment continues to be a key issue in the Czech Republic. To safeguard their interests against defaulting customers, the Czech respondent firms focus strongly on dunning activities i.e. timely outstanding invoice reminders to customers. Almost 68.0% of the respondent firms resort to such activities as compared to the Eastern European average of 39.0%. Czech firms also prefer performing credit checks on prospective customers prior to undertaking trade activities. In 2019, about 52.0% of the Czech respondents undertook credit checks, well above the Eastern European average of 39.0%. Despite these initiatives, 23.5% of the total value of B2B Czech respondent invoices remained outstanding past their due date, with 1.7% of the total invoice value becoming uncollectable in 2019 as compared to 0.9% in 2018⁸⁴.

Time and cost of obtaining building permits and licenses

According to the Doing Business 2020 Report, the Czech Republic ranked 157th (out of 190) in “Dealing with Construction Permits”⁸⁵. In 2019, completing the formalities to build a warehouse⁸⁶ took on average 246 days, significantly above the OECD high

income countries’ average of 152.3 days. It also involved 21 administrative procedures as compared to the OECD average of 12.7 procedures (Table 3). Nonetheless, most of these procedures are free of charge, and thus the cost of obtaining these construction permits is 7.5 times lower than the OECD high income average (0.2% of the warehouse value compared to 1.5%).

Table 3: Construction procedures timing and costs in Czech Republic in 2019

| Procedure | Time to complete | Associated costs |
|--|------------------|----------------------|
| Hold a preliminary meeting with the Environmental Department | 1 day | No charge |
| Obtain a preliminary clearance and technical conditions from the Public Health Office of Prague | 30 days | No charge |
| Obtain a preliminary clearance and technical conditions from the local provider of water and sewerage services | 30 days | No charge |
| Obtain a consent of the project from the Environmental Department of the Municipality | 30 days | No charge |
| Obtain a preliminary clearance and technical conditions from the local electricity provider | 20 days | No charge |
| Obtain preliminary clearance and technical conditions from the transport office | 20 days | CZK 500 (EUR 19) |
| Obtain project clearance from Fire Department | 10 days | No charge |
| Obtain zoning permit | 60 days | CZK 20,000 (EUR 765) |
| Obtain a clearance from the Public Health Office | 30 days | No charge |
| Obtain a clearance from the Transport Office | 30 days | No charge |
| Obtain a clearance for the connection from local water and sewerage services | 30 days | No charge |
| Obtain technical conditions from Fire Department | 20 days | No charge |
| Obtain technical conditions from local electricity provider | 20 days | No charge |
| Obtain building permit | 37 days | CZK 10,000 (EUR 383) |
| Request and receive water and sewerage connection with "Prazske Vodovody a Kanalizace" | 30 days | CZK 5,500 (EUR 210) |
| Request private geodesist to survey the land after building is constructed | 30 days | CZK 15,000 (EUR 574) |

| Procedure | Time to complete | Associated costs |
|--|------------------|--------------------|
| Request final inspection and occupancy permit | 1 day | CZK 1,000 (EUR 38) |
| Receive final inspection | 1 day | No charge |
| Receive occupancy permit | 15 days | No charge |
| Request and obtain evidence number of the building from municipality | 7 days | No charge |
| Register the building with the Real Estate Registry | 30 days | No charge |

Source: Doing Business overview for Czech Republic, World Bank, 2020⁸⁷.

Skills shortage

In 2019, there were 39,760 **job vacancies** in the Czech narrow construction sub-sector and 8,376 vacancies in the real estate sub-sector. This represented a significant increase of 834.9% and 433.0% as compared to 2010 levels, respectively. As such, the Czech Republic's **job vacancy rate** for both the narrow construction as well as the real estate sub-sectors increased from 1.5% and 6.0% in 2010 to 15.3% and 25.5% in 2019, respectively.

Number of job vacancies in the narrow construction sub-sector between 2010 and 2019

↑ 834.9%

Number of job vacancies in the real estate activities sub-sector between 2010 and 2019

↑ 433.0%

Over the 2010-2019 period, **adult participation in education and training** in the broad construction sector decreased. In the case of the narrow construction sub-sector, the adult participation rate slightly decreased from 6.4% to 6.3% in 2019. On the other hand, the adult participation rate in the real estate activities sub-sector deteriorated significantly from 9.6% in 2010 to 5.2% in 2019.

In parallel, the **number of tertiary students** enrolled in engineering, manufacturing and construction decreased by 19.2% from 14,579 in 2010 to 11,778 in 2018⁸⁸. In particular, 3,779 tertiary students were enrolled in architecture and building in 2018,

representing a drop of 2.9% as compared to 2010 level of 3,891 students.

The Czech construction sector continues to face a critical shortage of skilled labour. In fact, persistent labour shortages and demographic changes have resulted in a shift in policy focus towards automation and robotisation⁸⁹.

Considering the ongoing high job vacancy rate, 47.0% of businesses in the construction sector regarded labour shortages as the main factor limiting their production in Q3-2019⁹⁰.

To support its economy and meet the increasing demand, the Czech Republic started to open its borders to foreign workers. However, according to the Czech Chamber of Commerce, the processing of work applications for foreign workers is very long, undermining such a measure.

Sector and sub-sector specific issues

Material efficiency and waste management

In 2018, the Czech Republic recorded the production of 11.6 million tonnes of **construction waste**, representing a 24.0% growth compared to 9.4 million tonnes in 2010 levels⁹¹. In order to combat rising construction waste, the Czech Republic is already implementing the Waste Management Plan 2015-2024 that considers quality recycling and maximum recovery of suitable waste from industrial segments, such as construction, as one of its four priorities⁹².

For the Czech Republic, achieving the set 2030 EU targets of recycling 65% of municipal waste, 75% of packaging waste and reducing landfilling to a maximum of 10% of municipal waste is quite difficult. Czech's municipal waste landfilling rate is well above EU average; however, its recycling rate still remains relatively low. The Czech Republic has already postponed its goal to ban landfilling from 2024 to 2030 in light of the new waste legislation adopted by the Czech government in December 2019⁹³.

Despite sufficient government funding, the energy efficiency of buildings in Czech Republic is improving slowly as compared to the EU average. This is mainly due to the lack of widespread awareness of benefits from energy efficient homes and political leadership. Moreover, there is a

reduced motivation to utilise energy subsidies due of long payback duration and the administrative burden⁹⁴.

Climate and energy

Emissions of greenhouse gases (carbon dioxide, methane and nitrous oxides) from the narrow construction and real estate activities sub-sectors in Czech Republic amounted to 2,843,365 tonnes and 73,661 tonnes in 2018⁹⁵, respectively. Over the 2010-2018 period, emissions in the narrow construction sub-sector have increased by 7.0%. In contrast, emissions have declined by 80.7% in the

real estate activities sub-sector over the same reference period.

Air emissions continues to be a problem for most of the Czech regions, primarily driven by increasing particulate matter emissions from residential solid fuel combustion. The Czech Republic has one of the highest greenhouse gas emissions per capita among the EU Member States, at 12.2 tonnes in 2018 compared to the EU average of 8.5 tonnes. This may incentivise the government to develop further schemes and instruments fostering energy efficient renovations for both public and private buildings (Refer chapter 7 TO 3).

5

Innovation in the construction sector

Innovation performance

According to the 2020 European Innovation Scoreboard, the Czech Republic is classified as a Moderate Innovator, similar to its rank in 2019⁹⁶.

The strongest innovation dimensions of the Czech innovation system include employment impacts, innovators and sales impacts. The country also demonstrated strong performance on employment in fast growing enterprises of innovative sectors, innovative SMEs collaborating with others, medium and high-tech product exports and enterprises providing ICT training.

Conversely, innovation dimensions in which Czech performance was relatively weak include intellectual assets, finance and support and innovation-friendly environment. The country also scored low on indicators such as venture capital expenditures, most cited publications, PCT patent applications, and exports of knowledge intensive services⁹⁷.

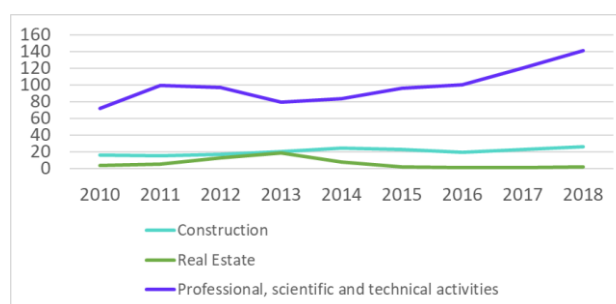
Over the 2010-2019 period, Czech Republic business R&D intensity increased from 0.8% of GDP in 2010 to 1.2% in 2018, slightly lower compared to the EU average of 1.4%. In parallel, public R&D expenditure also slightly increased from 0.6% in 2010 to 0.7% in 2018 – a level below Czech's 2020 target of 1.0% of GDP. Overall, the total R&D expenditure stood at 1.9% of GDP in 2018, as compared to the EU-28 average of 2.1%⁹⁸.

In 2018⁹⁹, **Business Enterprise R&D Expenditure (BERD)** in the Czech narrow construction sub-sector amounted to EUR 26.2 million, representing a 63.5% growth compared to EUR 16.0 million in 2010. Likewise, BERD in the professional scientific and technical activities sub-sector increased from EUR 71.6 million to EUR 140.5 million over the same reference period (+96.2%). This increment is mainly driven by the European Structural Funds¹⁰⁰. In

contrast, the real estate activities sub-sector experienced a 44.3% drop in BERD over the 2010-2018 period.

Business enterprise R&D expenditure in the narrow construction sub-sector between 2010 and 2018  **63.5%**

Figure 7: Business enterprise R&D expenditure (BERD) per construction sub-sector in Czech Republic between 2010 and 2019 (EUR m)



Source: Eurostat, 2020.

In parallel, total **R&D personnel** (full-time equivalents – FTE¹⁰¹) in the broad construction sector experienced an increasing trend, in line with the positive trend in BERD. Total R&D personnel FTE in the narrow construction sub-sector amounted to 486 in 2018, a 46.4% increment compared to 2010 (332 FTE). Similarly, the professional, scientific and technical activities sub-sector recorded a 60.3% increase in FTE since 2010, reaching 3,012 in 2018, the highest among all sub-sectors. In contrast, the real estate activities sub-sector remained constant, standing at 36 in 2018, in line with the 2010 level.

Over the 2010-2019 period, the number of annual **construction-related patent applications** averaged 10, reaching 13 in 2019, as compared to seven in 2010. Additionally, no Czech construction-related firm ranks within the top 1,000 EU companies by R&D (industrial sector ICB-3D), according to the 2019 EU R&D Scoreboard¹⁰².

Eco-innovation and digitalisation



As per to the **2018 Eco-Innovation Scoreboard (Eco-IS)**, Czech Republic scored 100, in line with the EU-28¹⁰³ average of 100¹⁰⁴.

As per the report, the Czech Republic reported weak performance in eco-innovation outputs and resource efficiency outcome. Compared to western European Member States, eco-innovation and circular economy are still emerging areas in the country and require further research and investment commitment both from the government and private sector. The fields in the Czech economy wherein eco-innovation and circular developments have most traction relate to energy efficiency, renewable energy, waste management, sustainable transport, material and resource efficiency (reuse, recycling), new technologies, bio and nanotechnologies¹⁰⁵.

As per the **European Commission Digital Economy and Society Index (DESI) 2020**, the Czech Republic ranked 17th out of EU-28 Member States with a 50.8 score, marginally below the EU-28 average score of 52.6¹⁰⁶. According to the Index, in 2019, the Czech Republic's performance improved in three dimensions – human capital, integration of digital technology and in the use of internet services. This

is partially driven by strong performance in e-commerce along with the introduction and implementation of national strategy for digitalisation and for artificial intelligence¹⁰⁷.

The Czech government has recognised the importance of adopting technologies such as **Building Information Modelling (BIM)** is gaining traction in the construction sector as a way to improve its competitiveness at the international level. In September 2017, the Czech government approved the concept of the implementation of BIM. Developed by the Ministry of Industry and Trade, the concept outlined the state of implementation of BIM in Europe and in the Czech Republic, listing the key BIM issues that need to be addressed and contained a schedule for the phasing-in of BIM over the 2018-2027 period. Specifically, the document stated that the Czech government planned to make the use of BIM mandatory for public procurement and public works contracts by 2022 (including during the preparation and project documentation phase)¹⁰⁸. The Czech Agency for Standardisation (CAS) is responsible for its implementation. Within the CAS, the BIM Strategy Division was established as an expert governmental platform for standardisation and methodological support for the digitalisation of construction sector¹⁰⁹.

6

National and regional regulatory framework

Policy schemes

The Ministry of Regional Development¹¹⁰ (MoRD) is responsible for the overall implementation of the **'Housing Policy of the Czech Republic until 2020'**¹¹¹. This key policy document was revised in July 2016 to outline the three top priorities of Czech housing policy: affordability of adequate housing; stability of the housing market; quality of housing. Since 2019, work has started on drafting a new housing concept for 2021+ period. This new policy is expected to be presented to the Czech cabinet by the end-2020¹¹².

With regards to housing support, the MoRD supports the housing policy primarily through two programmes – **'Housing Support'** and **'Housing Support in Areas with a Strategic Industrial Zone' (SIZ)**. The Housing Support programme, in turn, is divided into three sub-programmes – **'Assisted Flats, Residential Homes without Barriers'** and **'Technical Infrastructure'**¹¹³.

The Assisted Flats sub-programme focuses on providing social housing for persons that are at an economically inactive age (seniors), as well as persons with special needs facing difficulty in accessing housing. For 2020, two additional subsidies were announced under this sub-programme – **'Nursing Flat'** and **'Community Retirement Home (KoDuS)'**, with an allocated budget of CZK 260 million (EUR 9.9 million). Through these subsidies, an applicant can avail up to CZK 600,000 (EUR 22,950) in assistance for construction of a single flat having regulated rent. The Nursing Flat subsidy is aimed at senior citizens facing an unfavourable social situation and persons who are dependent (for health reasons) on the assistance of another natural person. The KoDuS subsidy focuses on helping persons (aged over 60)

to maintain self-sufficiency and independence through a community life based on the principle of neighbourly assistance and shared home spaces¹¹⁴.

Both the Residential Homes without Barriers and the Technical Infrastructure sub-programmes are directed towards assisting people undertake structural modifications and expansion of existing building lots for subsequent construction activities. For 2020, Residential Homes without Barriers was allocated CZK 165 million (EUR 6.3 million). Moreover, under Technical Infrastructure, a municipality can avail a subsidy up to CZK 80,000 (EUR 3,060) for construction of roads, water lines or sewers at each development lot¹¹⁵.

To improve law enforceability and housing co-ownership functionality, the MoRD and the Ministry of Justice (MJ) jointly prepared an **amendment to the Civil Code**, specifically related to the transfer of ownership rights to units and group houses of certain housing cooperatives. With the objective to simplify and speed up the creation of owners' associations, it is proposed to transfer a unit owner's debts when transferring the unit. Additionally, it is also proposed that pre-emption right be abolished. In this regard, an amendment to the Civil Code and the Corporation Act along with other related acts has been approved and came into effect from 1 July 2020¹¹⁶.

The Czech government is also drafting an **'Affordable Housing Act'**, incorporated under the Government Legislative Work Plan for 2020. The Act focuses on supporting social housing with a view to provide housing for people at large, in addition to regulating short-term rentals through online platforms¹¹⁷.

The MoRD is responsible for drafting the Affordable Housing Act, expected to be submitted by end-2020. Additionally, the Social Housing Concept of the Czech Republic 2015–2025 is also being updated by the Ministry of Labour and Social Affairs (MLSA) under the changed title of Affordable Housing Concept of the Czech Republic 2020–2025. However, the proposal is still under discussion¹¹⁸.

In January 2020, the Czech government approved a new 'Insulation Programme' aimed at providing interest-free loans for energy modernisation of apartment buildings under the condition of achieving overall energy consumption savings of at least 20% compared to pre-modernisation. The programme has an allocated budget of CZK 150.0 million (EUR 5.7 million) for 2020¹¹⁹.

For 2020, allocation under the 'Rental Houses Programme', 'Housing Estate Regeneration Programme', 'Programme for Young People and Construction for Municipalities Programme' stood at CZK 400 million (EUR 15.3 million), CZK 120 million (EUR 4.6 million), CZK 830 million (EUR 31.7 million) and CZK 340 million (EUR 13.0 million), respectively¹²⁰.

Furthermore, an update of the 'Social Housing Concept of Czech Republic 2015 – 2025' is presently being worked upon. Initially approved in October 2015, the Housing Concept aimed at identifying challenges in social housing and defining measures to be implemented until 2025 in order to solve these challenges and improve access to affordable housing for vulnerable groups. By June 2020, the updated proposal has been submitted to the government and is currently awaiting final approval from all ministries. Additionally, a change in the concept name has also been proposed, from 'social' to 'affordable' housing¹²¹.

Likewise, an amendment to the **Act No 169/2018** (Act on accelerating the construction of transport and other infrastructures) has been approved by the Czech government. The amendment allows for transport construction in joint proceedings with a lesser detailed documentation by removing the need to issue separate administrative acts as required by the Nature and Landscape Conservation Act. In turn, it would be replaced with a single binding opinion, which would help in avoiding the multiple administrative challenges while planning the transport infrastructure¹²².

Lastly, in response to the COVID-19 pandemic outbreak, the Czech government introduced a supportive measure wherein half (50.0%) of the rent payment for non-residential premises closed under government steps related to COVID-19, shall be paid by the Government retrospectively for the period from April to June 2020, provided that the landlord gives a 30.0% rent discount to the tenant¹²³.

Building regulations

The Building Act (**Act No. 183/2006** Coll. on Spatial Planning and Building Regulations) is the main legal regulation in construction in the Czech Republic. It deals with the duties and responsibilities of the participants in the construction process, territorial planning, construction permits or other necessary rules and actions needed for the realisation of construction works¹²⁴.

The amended Building Act was adopted in July 2017, after a year of revisions and discussions, and became effective from January 2018¹²⁵. The purpose of the amendment was to accelerate the procedure for issuing building permits. This was particularly the case for the construction of dwellings, since in some cases it was no longer necessary to apply for a building permit while in other cases simply announcing the building to the local Building Authority was sufficient¹²⁶.

In June 2019, the Czech government approved the plan for the new Building Act. This new Act is expected to become valid from spring 2021 and become effective from 1st July 2023¹²⁷.

Additionally, the ongoing discussions about **recodification of public construction law** foresees organisational changes in building authorities to accelerate and streamline the construction agenda performance in the Czech Republic. Firstly, it is expected that the number of bodies concerned will be reduced and selected agendas will be integrated into the decision-making of building offices. Secondly, the permit approval process will be further accelerated by combining the existing conditions into a single set of procedures. Lastly, the consolidation of substantive construction requirements into (possibly) a single legal regulation valid for the entire Czech Republic¹²⁸.

Furthermore, the documentation required for buildings is governed by the **decree 499/2006**,

general requirements for land used in construction is governed by the **decree 501/2006** and the technical requirements for construction are governed by the **decree 268/2009**¹²⁹.

Insurance and liability related regulations

General construction law in Czech Republic is divided into several main bodies. These include civil, administrative, environmental and criminal law, as well as other subordinate legislation, such as orders, ministerial, etc. Contractual liabilities among parties are defined in the **Civil Code**, as stipulated in art. 106, 651, 645 and 646. However, provisions related to the duties of parties developing a business activity under various types of contractual engagements are defined in the **Commercial Code**, and therefore the Civil Code is only applied when at least one of the contractual parties is not a business entity¹³⁰.

Specifically, art. 106 of the Civil Code stipulates that for construction services injured parties can seek compensation for two years from the identification of the damages, but only three years after their occurrence. For intentional damage, on the other hand, there is a liability period of up to 10 years.

Furthermore, a statutory warranty period of three years is defined for building defects, while the warranty lasts 18 months for repair works (art. 646)¹³¹. Under the Commercial Code, the limitation period lasts five years from the moment the injured party learned about the damage, but maximum 10 years from their occurrence¹³².

Czech law does not require builders and construction service providers to obtain any specific building insurance. The contractors are statutorily insured for any work-related injuries of their employees. Moreover, they are also required to have a third-party liability insurance for any vehicles used by them¹³³.

However, architects, consulting civil engineers and technical surveyors carrying out special contracting service are required to have a “third party professional insurance policy” for damage caused by their activities¹³⁴. Although not compulsory, a construction contract may require that the contractor is insured for the following: equipment and employment; insurance against liability for damage caused by third parties; insurance covering construction risks related to natural disaster¹³⁵. Indeed, a contractor’s All Risk insurance is widely used and may be required by the client (often in the case of public procurement contracts)¹³⁶.

Current status and national strategies to meet Construction 2020 objectives

TO 1 – Investment conditions and volumes

Total investment by the broad construction sector¹³⁷ has shown different trends since 2010. Investment by the narrow construction sub-sector decreased by 3.5% between 2010 and 2018¹³⁸, reaching EUR 1.5 billion. This is partly driven by a 34.7% drop in investments in machinery, going from EUR 651.2 million to EUR 425.2 million, while investments in intellectual property increased from EUR 59.1 million in 2010 to EUR 62.3 million in 2018. Investment in the real estate activities sub-sector increased by 15.3%, from EUR 8.3 billion in 2010 to EUR 9.6 billion in 2018. While investments in machinery follow a trend similar to the narrow construction sub-sector (-30.3%), they largely increased in intellectual property (+53.7%).

Figure 8: Investments by the Czech broad construction industry between 2010 and 2019 (EUR million)



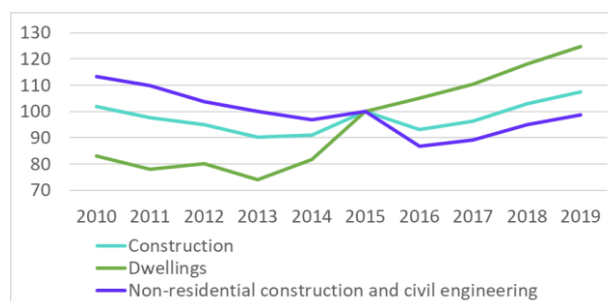
Source: Eurostat, 2020.

Total investment index in the broad construction sub-sector¹³⁹ increased by 7.5% over the 2015-2019 period. Investment in dwellings by the whole economy followed a similar trend, rising by 24.6% in comparison to the 2015 value. In contrast, investment in non-residential construction and civil engineering slightly decreased by 1.3% over

2015-2019. In absolute terms, investment in the construction sector totalled EUR 21.2 billion in 2018¹⁴⁰ with EUR 8.4 billion invested in dwellings and EUR 12.9 billion in non-residential and civil engineering¹⁴¹ (Figure 11).

Total investment in dwellings by the whole economy between 2015 and 2019 **↑ 24.6%**

Figure 9: Investment index in the Czech construction sector between 2010 and 2019 (2010=100)




Source: Eurostat, 2020.

The share of **total inland**¹⁴² **infrastructure investment** in the GDP reached 0.8% in 2017¹⁴³ as compared to the 1.5% in 2010. Investment in air infrastructure and rail infrastructure increased by 53.7% and 31.6% over the 2010-2018¹⁴⁴ period, totalling EUR 125.1 million and EUR 741.1 million, respectively. In contrast, investment in road and inland waterways infrastructure decreased by 39.2% and 95.2% over the 2010-2018 period, from EUR 1.8 billion and EUR 57.8 million in 2010 to EUR 1.0 billion and EUR 2.8 million in 2018, respectively.

Air infrastructure investment between 2010 and 2018 **↑ 53.7%**

Inland waterways
infrastructure
investment between
2010 and 2018

 **95.2%**

Conversely, **investments in infrastructure maintenance** have increased for most of the transport infrastructures. Investments in the maintenance of rail, road and inland waterways infrastructure increased by 86.9%, 30.1% and 388.1% over the 2010-2018 period. In contrast, investment in air infrastructure maintenance slightly declined by 0.8% over the same reference period. Yet, investments in maintenance focuses mainly on road and rail infrastructures (98.6%).

In collaboration with four large commercial banks, the Czech government created the National Development fund in September 2019. In December 2019, the government announced that investments under the Fund would be linked to the National Investment Plan wherein it lists more than 20,000 projects to be implemented over the 2020-2050 period with a total budget allocation of CZK 8.0 trillion (EUR 315.0 billion) financed from various public, private and EU sources. In terms of allocation, the transport sector accounted for more than 75% of the total planned projects, particularly road and rail transport¹⁴⁵.

Currently work on several large TEN-T railway projects is ongoing including upgrading of the Prague railway junction and railway lines connecting the Czech Republic to the German and Slovak borders. Due to some unavoidable delays, these projects are estimated to be complete in the next two to three years. Additionally, over the 2018-2019 period, pilot sections of various high-speed lines were selected for an accelerated project preparation regime, including the Prague Běchovice – Poříčany, Brno – Vranovice and Přerov – Ostrava, Prague – Lovosice/Litoměřice, Ústí nad Labem – German border, Poříčany – Světlá nad Sázavou and Velká Bíteš – Brno. In fact, a feasibility study for several lines including the Prague – Ústí nad Labem – Dresden high-speed railway line as well as the Prague – Brno – Břeclav high-speed line are expected to be completed by end-2020. However, the construction of these pilot sections is not expected to start in 2025-2028 period at the earliest¹⁴⁶.

The feasibility study with regards to the modernisation of the Prague railway node is scheduled to begin in 2020. Similarly, work on the modernisation of the Brno railway node into a high-speed railway line is expected to begin in 2028¹⁴⁷.

With regards to road transport construction, projects are currently being worked upon including projects related to motorway connections to the Austrian and Polish borders. Major road construction projects include construction of separate additional sections on the D6 and D48 motorways as well as linking the D56 to the D48 motorway through a separate section. Additionally, work on the D55 and the D7 motorways is also underway. Overall, the Czech Republic expects to complete its motorway network construction by 2030¹⁴⁸.

In relation to rail transport construction, the Czech Republic is currently extending the railway line for automatic train operation on the Správa železnic lines. Moreover, the construction of the ETCS Petrovice u Karviné – Ostrava – Přerov – Břeclav line was recently completed on corridor II in the Kolín section, with trial operations scheduled to begin in 2020¹⁴⁹.

According to the National Investment Plan 2020-2050, about CZK 782.0 billion (EUR 29.9 billion) has been dedicated to motorway construction, CZK 878.0 billion (EUR 33.6 billion) for railway modernisation and CZK 769.0 billion (EUR 29.4 billion) for construction of high-speed railway lines. The plan estimates a CZK 6.0 trillion (EUR 229.5 billion) investment in transport infrastructure by 2050, including CZK 3.0 trillion (EUR 114.8 billion) investment by 2030¹⁵⁰.

The Czech Republic is one of the key beneficiaries of EU funding. Under the **EU Cohesion Policy funds**, the Czech Republic has been allocated EUR 29.0 billion in the current Multiannual Financial Framework. Out of this, by end-2019, about EUR 23.8 billion was allocated to specific projects while €10.7 bn was reported to have been spent on selected projects. The country also receives funding from various other EU programmes such as the **Connecting Europe Facility** (EUR 970.0 million for projects focused on strategic transport networks) and the **Horizon 2020** programme (EUR 341.0 million)¹⁵¹.

In 2019, the EIB Group invested almost EUR 823.0 million in infrastructure¹⁵².

In parallel, the Czech Republic also benefitted from investments from the **European Fund for Strategic Investments** (EFSI). As of July 2020, the financing under EFSI amounted to EUR 1.2 billion and is set to trigger additional investments of EUR 7.0 billion. Under the infrastructure and innovation window, 13 projects have been approved, amounting to EUR 254.0 million and are set to trigger EUR 1.2 billion in total investments. Under the SMEs window, 17 agreements have been approved, involving a total financing of EUR 987.0 million, and are set to trigger investments of up to EUR 5.8 billion¹⁵³.

Renovation spending by household has increased by 27.5% over 2010-2018 period, going from EUR 662.6 million to EUR 844.9 million. The share of renovation spending out of the total household's disposable income stood at 0.8% in 2018, almost same as the EU-27 average of 0.9%.

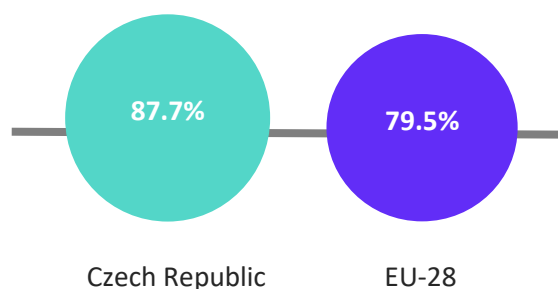
TO 2 – Skills

The Czech Republic continues to make vocational education and training (VET) more relevant to the market needs¹⁵⁴. As a result, the **employment rate of recent VET graduates** for the Czech Republic stood at 87.7% in 2018¹⁵⁵, well above the EU-28 average of 79.5%¹⁵⁶.

Conversely, overall **adult participation in learning** is lower than the EU-28 average (8.5% in 2018 versus 11.1% in the EU). Adult participation in lifelong education and training in the narrow construction sub-sector stood at 6.3% in 2019 as compared to the EU-27 average of 8.7%. Similarly, adult participation in lifelong learning in the real estate activities stood at 5.2% for 2019 as compared to the EU-27 average of 16.4%.

As such, employers find it difficult to fill vacancies in the Czech Republic. Despite the high employment rate, they complain about skills mismatches and misalignments with the requirements of the labour market. Nevertheless, there is still no system for forecasting labour market needs in the country.

Employment rate of recent VET graduates in 2018



The Czech Republic is still adjusting its VET programmes to be more flexible and relevant to current market needs. For instance, under the 2018 Amendment of the School Act, schools are obligated to cooperate with employers in designing relevant curricula by providing practical training and participating in final examinations, along with providing placements in companies for teaching staff.

Over the 2019-2022 period, the Ministry of Labour and Social Affairs will be coordinating the Mapping Future Skills project to determine the labour market's requirements (i.e. Skills 4.0). The objective of the project is to set up mechanisms for advance identification of new skills that will be in demand and assigning them to existing or new professions and qualifications. In 2020, the methodology for mapping future skills will be analysed and further developed, followed by careful selection of target sectors. Additionally, expert communication platforms will also be set out, i.e. ten sectoral and cross-cutting working groups to form a foundation for mapping future skills¹⁵⁷.

The Association of Building Entrepreneurs (SPS) considers the revitalisation of VET as one of its main priorities and is very active in this domain. Notably, it has developed a **strategy of further measures for building trades** and is cooperating with business for delivering internships in construction¹⁵⁸.

TO 3 – Resource efficiency / Sustainable construction

The third **National Energy Efficiency Action Plan (NEEAP)**, launched in 2014 as per the requirements of Directive 2012/27/EU on energy efficiency, details the energy saving targets in final energy consumption (47.78 petajoule - PJ) to be reached by 2020, as well as policy measures to achieve them¹⁵⁹.

An update of the NEEAP was subsequently carried out and approved in 2016, raising the target to 50.67 PJ. It also includes additional measures in areas such as residential construction, industry and transport to ensure the fulfilment of the target¹⁶⁰.

Backed by EU funding, the Czech government is presently implementing a replacement scheme for obsolete and inadequate heating sources in households. In fact, out of the target 100,000 heaters to be replaced by 2020, 80,000 heaters had already been replaced by 2019. Investment in buildings in line with the EU's Smart Finance for Smart Building Initiative can be seen as an opportunity to increase investment in smart building systems. However, the milestones of a long-term renovation strategy are still not well defined. More clarity is required on milestones for renovation of national housing stock into high, energy-efficient and decarbonised building stock by 2050¹⁶¹.

According to current findings, the Czech Republic's renovation rate stands at 1.4%. In this regard, it is expected that the government will finalise its 'Long-Term Strategy for Renovating Buildings' blueprint, as required under Directive (EU) 2018/844 amending previous Directive 2010/31/EU on energy intensity of buildings¹⁶².

Instances of the schemes adopted to specifically improve the energy efficiency of buildings include:

- **PANEL 2013+:** under the programme, a continuation of the previous PANEL and New PANEL schemes, the State Housing Development Fund (SHDF) provides low-interest loans for energy efficiency renovation and modernisation of residential buildings, covering up to 90% of the eligible costs¹⁶³.
- **New Green Savings Programme 2014-2021:** the grant programme is administrated by the SHDF and has a total allocation of CZK 27.0 billion (EUR 1.0 billion). Specifically, CZK 4.7 billion (EUR 179.8 million) is allocated annually between 2017 and 2021. Grants under the scheme cover up to 50% of the eligible costs. Eligible areas of intervention include the improvement of the energy performance of existing residential buildings, construction of residential buildings with very low energy consumption, and efficient use of energy sources¹⁶⁴.

- **EFEKT Programme 2017-2021:** the state scheme aims to contribute to increasing energy savings, reduction of energy consumption and utilisation of renewable and secondary energy sources. Aside from supporting investments, the programme also entails support for energy consulting, implementation of energy management and preparation of energy efficiency projects, among others¹⁶⁵.

The Czech government is preparing to launch the EFEKT III programme in 2020. The comprehensive renovation of apartment buildings also includes reducing their energy intensity under the national Panel 2013+ programme¹⁶⁶.

The Czech Republic also developed the **Joint Boiler Replacement Scheme** and the **Reasonable Energy Saving Programmes**¹⁶⁷. Further measures may be introduced, such as support for the construction sector in the Czech Republic aiming to improve energy efficiency and environmental protection in line with the EU 2020 environmental strategy; the **Energy Savings Fund**; or tax incentives, carbon tax and other instruments to promote investment in increasing energy efficiency¹⁶⁸.

Furthermore, financial instruments are also in place in the Czech Republic to foster the renovation of the building stock. For instance, the **Building Society Saving Schemes** entails a saving phase by households, followed by the opportunity to obtain affordable loans with low interest rates (between 3% and 6%) to invest in housing, often specifically for the reconstruction, renovation and energy-saving measures of residential buildings¹⁶⁹.

TO 4 – Single Market

According to the 2020 EU Single Market Scoreboard, Czech's performed in line with the EU average. Notably, it performed better in metrics such as EU Pilot, IMI, e-Curtis and Your Europe¹⁷⁰.

In relation to 2020 EU Single Market Scoreboard metrics, the Czech Republic's performance was average particularly in case of Infringements, EURES and SOLVIT. In parallel, the Czech Republic performed below average in terms of Transposition of law. Nonetheless, the country performed above EU average with regards to EU Pilot, Internal Market Information System (IMI) and Your Europe metrics – EU's single digital gateway aimed at providing

access to information, procedures, assistance and problem-solving services¹⁷¹.

As per the 2019 SBA Fact Sheet, the Czech Republic performed mostly below the EU average, especially in terms of SMEs with intra-EU exports and imports of goods, as well as number of pending infringement proceedings. In contrast, the country scored well above the EU average in terms of intra-EU online exporters. Nonetheless, the Czech Republic can further improve its operations under the average transposition delay for overdue directives, as well as in market access for new and growing firms without being unfairly blocked by established firms¹⁷².

The Czech construction sector suffers from public procurement corruption and competition issues. Public contracts in the Czech Republic are often subject to abuse of EU funds, bribery and manipulation, particularly in sectors such as healthcare and construction¹⁷³. However, the country performs better than the EU average in terms of the state aid and public procurement.

Regulatory restrictiveness in the country remains high for certain professions, including architects and civil engineers, creating an anti-competitive environment along with hindering innovation and long-term growth in the Czech Republic. The business churn rate (turnover) in the architectural sector is also lower than the EU average, hinting at the relatively low dynamism and low competition in this sector. Nonetheless, the business churn rate in the real estate sector is almost at par with the EU average. Additionally, the regulatory restrictiveness for real estate agents is lower than the EU average^{174,175}.

Conversely, compared to other Member States, the Czech Republic has more complicated health and safety regulations for construction works to deal with, thus creating a more burdensome regulatory environment for the provision of cross-border services. Moreover, according to the Association of Building Entrepreneurs, the single market is not benefiting Czech companies exporting building materials. Countries such as Germany, Austria, France and Switzerland have a well-developed and complex certification system for construction materials, which deters imports and acts as a barrier to export for Czech companies¹⁷⁶.

Finally, regarding the implementation of **Eurocodes**, all Parts are published as National Standards, and National Annexes are published to all Parts and translated in English. There are no other national standards used in parallel. In fact, Eurocodes are compulsory in structural design, and their use is enforced in public procurement through Law 137/2006 on Public Procurement¹⁷⁷.

TO 5 – International competitiveness

According to the 2019 Global Competitiveness Index, the Czech Republic ranked 32nd out of 141 economies in terms of its performance¹⁷⁸.

In terms of **trade openness**, out of 141 economies, the Czech Republic ranked 7th with regards to trade tariff percentage, 30th with respect to border clearance efficiency and 32nd in relation to prevalence of non-tariff barriers, while 113th when it comes to complexity of tariffs¹⁷⁹.

With regards to the **internationalisation of construction SMEs**, the export value of all construction-related projects in the Czech Republic stood at EUR 2.7 billion in 2018¹⁸⁰, representing an increase of 31.2% compared to its 2010 level of EUR 2.0 billion. The Czech Republic's share of exports of all construction-related products in 2018 stood at 57.7% of the total production value, considerably above the EU-27 average of 11.4% for the same reference period.

Exports value of all construction-related products between 2010 and 2018  **31.2%**

In the context of **inward FATS (Foreign affiliates statistics)**¹⁸¹, value added at factor cost in the narrow construction sub-sector decreased by 29.2% between 2010 and 2017¹⁸². Similarly, turnover in the narrow construction sub-sector declined by 1.9% over the 2010-2017 period¹⁸³.

Conversely, the Czech Republic performed well below the EU average in relation to **internationalisation**. As per the 2019 SBA Fact Sheet, it has performed better than the EU average in only two indicators – involvement of trade community and advance rulings. With regards to rest of the seven indicators, the country performed significantly below the EU average, especially in

terms of formalities – procedure and automation, information availability, as well as SMEs with extra-EU exports and imports of goods¹⁸⁴.

Exports are supported by national organisations such as **CzechTrade**, a trade promotion agency aimed at fostering the internationalisation of Czech companies by facilitating cooperation with entrepreneurs from foreign countries¹⁸⁵. CzechTrade provides a range of business support and networking services, such as participation in trade fairs abroad and the **Czech Exporters Directory**. The latter is an online database of Czech companies focusing on penetrating foreign markets, across many areas including construction, building materials and components, as well as steel constructions¹⁸⁶.

The construction sector faces specific obstacles when it comes to exports and internationalisation,

including complex logistics and the heavy weight of some building components. However, according to the Association of Building Entrepreneurs, exports in the sector have been increasing over the years, with Czech construction companies being involved in the construction of transport infrastructure abroad, and specifically in the construction of tunnels, roads and motorways as well as in industrial and residential buildings. Typically, some of the most favourable export markets include Norway, Poland, Russia and Iceland. New opportunities can also open up in the Gulf countries, particularly in the context of the Expo 2020 in Dubai, which will give Czech construction companies the chance to apply for contracts awarded in greenfield construction and associated development projects¹⁸⁷.

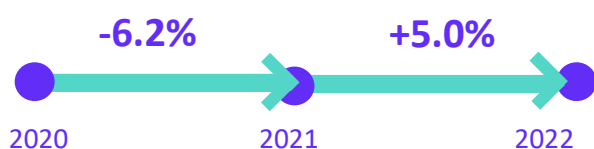
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Outlook

Over the 2020-2022 period, the Czech Republic's GDP is forecasted to decrease by 1.5%, primarily due to weak export performance and slower investment pace, partially offset by moderate domestic demand.

The Czech Republic's **GDP** is forecast to annually decrease by 6.2% in 2020 and then increase by 5.0% in 2021, totalling CZK 5.1 trillion (EUR 195.2 billion) in 2021.

Expected GDP growth between 2020-2022



Subsequently, the **volume index of production** in the broad construction sector is estimated to decline by 7.0 index points (ip) in 2020, mainly due to an 8.3 ip and 5.5 ip decline in the construction of buildings and civil engineering sub-sectors in 2020, respectively. In contrast, the volume index of production in the broad construction sector is expected to slightly increase by 1.1 ip in 2021, mostly driven by a similar rise in construction of buildings and civil engineering sub-sectors by 1.1 ip and 1.0 ip over the same reference period, respectively. This further reiterates that the sector will start growing again in 2021.

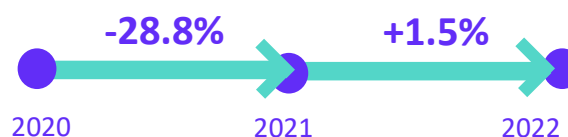
Moreover, the **total value added of the broad construction sector** is expected to drop by 27.0% in 2020 and then increase by 1.5% in 2021, respectively. Likewise, the **turnover of the broad construction sector** is estimated to initially decline by 28.8% in 2020 before rising by 1.0% in 2021, respectively.

Turnover of the broad construction sector between 2019 and 2021

↓ 28.1%

As such, the **number of persons employed** in the broad construction sector is also expected to decrease by 28.8% to 433,306 in 2020 and later increase by 1.5% to 439,846 in 2021. The majority of this decline in 2020 is anticipated to come from three sub-sectors: the narrow construction (-33.4%), the manufacturing (-30.8%) and the real estate activities (-20.8%) sub-sectors.

Number of persons employed in the broad construction sector between 2020 and 2022



The Czech government is already undertaking several measures to promote the construction sector. It is currently drafting an 'Affordable Housing Act' while updating the existing 'Social Housing Concept of the Czech Republic 2015–2025' to accelerate provision of housing for the Czech people. Furthermore, under the 'National Investment Plan 2020-2050', over 22,000 projects have been announced with a total allocation of CZK 8.0 trillion (EUR 315.0 billion). Out of this, almost 77.0% will be dedicated to transport construction activities. Under the Investment Plan, the government also allocated CZK 782.0 billion (EUR 29.9 billion) for motorway construction, CZK 878.0 billion (EUR 33.6 billion) for railway modernisation and CZK 769.0 billion (EUR 29.4 billion) for construction of high-speed railway lines.

Above all, the Czech broad construction sector is forecasted to witness a 10.0% deceleration in construction output in 2020, followed by a limited growth and market correction from 2021 onwards. Despite the quick resumption of existing construction projects after the lockdown, the sector continues to face challenges in the existing economic environment.

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- 12 Please note that this 2019 data is a nowcast - please refer to the methodology notes for further details.
- 13 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.
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- 15 Data for subsequent years not available
- 16 Apparent labour productivity refers to the gross value added per person employed
- 17 No data available for 2010 for the productivity in the broad construction sector.
- 18 No data available for subsequent years for the productivity in the broad construction sector.
- 19 Please note that this 2019 data is a nowcast - please refer to the methodology notes for further details.
- 20 No data available for subsequent years for the productivity in the broad construction sector.
- 21 Please note that this 2019 data is a nowcast - please refer to the methodology notes for further details.
- 22 No data available for subsequent years.
- 23 The gross operating rate is the ratio of gross operating surplus to turnover, and is an indicator of profitability
- 24 The gross operating rate is the ratio of Gross Operating Surplus to Turnover, and is an indicator of profitability.
- 25 No data available for subsequent years.
- 26 No data available for 2010.
- 27 No data available for 2010.
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