European Commission

European Construction Sector Observatory

Country profile **Sweden**

November 2020

In a nutshell

Over the 2010-2019 period, Swedish GDP increased by 20.5%, totalling SEK 4,610.9 billion (EUR 443.1 billion) in 2019. This represents an annual growth of 1.2% compared to 2018 levels.

In 2019, Swedish economic growth slowed down primarily due to a deceleration in domestic demand, declining private consumption and rising unemployment rates amid unstable external demand.

Likewise, the **number of enterprises** in the broad construction sector experienced a slight increase of 0.9% over the 2010-2019 period, totalling 177,367 in 2019. With regards to sub-sectors, the largest increment was reported by the narrow construction (+9.3%) sub-sector, followed by the architectural and engineering activities (+4.1%) sub-sector, partially offsetting the decline experienced by the manufacturing (-17.9%) and the real estate activities (-13.9%) sub-sectors over the same reference period.

Number of enterprises in the manufacturing sub-sector between 2010 and 2019 ↓ **17.9%**

In contrast, the **volume index of production** in the Swedish broad construction sector increased by 17.9% over the 2015-2019 period, primarily driven by an 18.8% and 2.1% increase in the production of construction of buildings and construction of civil engineering over the same reference period, respectively.

Production in the construction of buildings between 2015 and 2019 ↑ **18.8%**

Total turnover in the broad construction sector increased to EUR 141.7 billion in 2018, representing an increment of 49.0% since 2010. However, it declined to EUR 138.8 billion in 2019, resulting in an overall 46.0% increment since 2010. This increase was primarily driven by growth in three sub-sectors – the narrow construction (+63.2%), the architectural and engineering activities (+60.5%) and the manufacturing (+33.1%) sub-sectors over the 2010-2019 period.

Turnover in the narrow construction sub-sector between 2010 and 2019 ↑ **63.2%**

Conversely, the **gross operating rate** of the broad construction sector, an indicator of the sector's profitability, decreased from 16.5% in 2010 to 15.6% in 2018. The real estate activities sub-sector remained the most profitable (40.4%), followed by the architectural and engineering activities (10.8%), the narrow construction (8.0%) and the manufacturing (7.7%) sub-sectors in 2018.

With regards to employment, there were 679,186 **persons employed** in the broad construction sector in 2019, representing an increase of 26.8% since 2010. This was primarily due to the rise in employment in the architectural and engineering activities (+35.4%), followed by the narrow construction (+28.8%), the real estate activities (+18.5%) as well as the manufacturing (9.7%) sub-sectors over the 2010-2019 period.

The Swedish government launched several initiatives aimed at supporting the development of the country's housing market along with the civil engineering sector.

Amendments were also introduced in the Planning and Building Act to ensure a better and more comprehensive planning. For instance, in March 2020 the Swedish government launched its new Larger Accessory Dwellings Bill, aimed at promoting the construction of accessory dwellings, and at the same time, allowing construction of buildings with higher residential quality.

In terms of the civil engineering market, the transport network was the particular focus of investment under the 2014-2025 national transport plan, with a budget of SEK 522.0 billion (EUR 50.2 billion). Additionally, in June 2018, the government adopted the National Infrastructure Plan 2018-2029, involving a total investment of SEK 700.0 billion (EUR 67.3 billion). Other priority investment projects also included a EUR 277.0 million subsidy for construction investments (the budget is allocated yearly).

Despite these favourable policy initiatives and investment plans, the Swedish construction sector continues to face difficulties on two fronts. Firstly, the construction sector suffers from deteriorating access to finance. There is an ongoing reluctance among banking institutions to provide loans to Swedish construction companies. Moreover, existing government regulations makes it difficult to grant loans to households. Secondly, the ongoing shortage of skilled workers continues to be a major concern for the sector, particularly in the infrastructure market. This is especially challenging since the infrastructure market is quite buoyant as compared to both residential and non-residential markets.

Despite the onset of the COVID-19 pandemic, the Swedish construction sector has a positive outlook in the medium and long-term. The residential market is much resilient compared to other sectors. But there is still a possibility that the aftereffects of the shock in the construction sector might show up later. The infrastructure market continues to perform better than both residential and non-residential markets, partly due to its longer planning period. Most of the projects have been postponed to future dates. Nonetheless, the sector is expected to grow from 2021 onwards. Investments in the civil engineering sector are expected to rise with the upcoming projects announced under the National Infrastructure Plan 2018-2029.

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Key figures

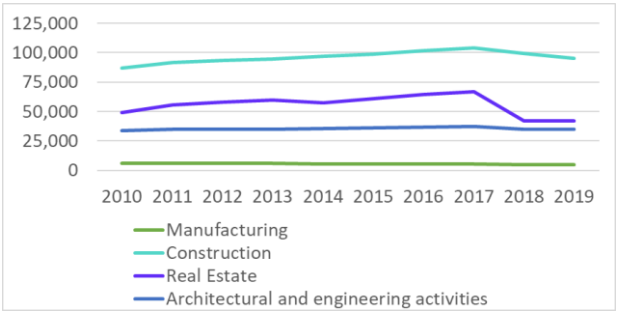
Construction market

The **number of enterprises** in the broad construction sector in Sweden totalled 177,367 in 2019 (Figure 1). Enterprises in the narrow construction sub-sector accounted for 53.7% of this total, followed by the real estate activities (23.8%), the architectural and engineering activities (19.7%) and the manufacturing (2.9%) sub-sectors.

Overall, the number of enterprises in the broad construction sector experienced a slight increase of 0.9% over the 2010-2019 period. This growth was primarily driven by the narrow construction (+9.3%) and the architectural and engineering activities (+4.1%) sub-sectors, partially offset by the decline in the manufacturing (-17.9%) and the real estate activities (-13.9%) sub-sectors over the same reference period.

Number of enterprises in the manufacturing sub-sector between 2010 and 2019 ↓ **17.9%**

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

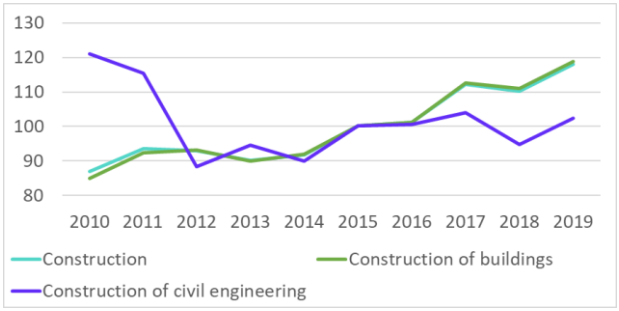


Source: Eurostat, 2020.

The volume index of production in the broad construction sector increased by 17.9% over the 2015-2019 period, primarily driven by an 18.8% and a 2.1% increase in the production of construction of buildings and construction of civil engineering over the same reference period, respectively.

Production in the construction of buildings between 2015 and 2019 ↑ **18.8%**

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

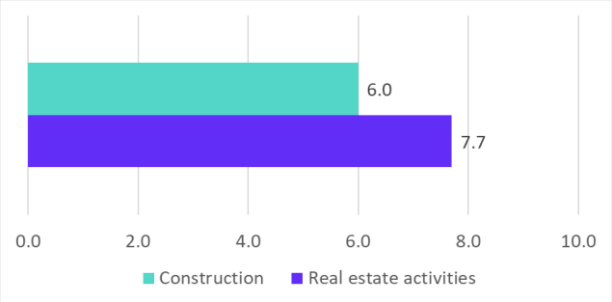


Source: Eurostat, 2020.

In 2019[1], the **total value added at factor cost**[2] in the broad construction sector stood at EUR 53.3 billion, with the narrow construction sub-sector having the largest share (47.6%), followed by the real estate activities (31.3%), the architectural and engineering activities (15.0%) and the manufacturing (6.0%) sub-sectors.

The **share of gross value added** of the narrow construction and the real estate activities sub-sectors in Swedish GDP[3] amounted to 6.0% and 7.7% in 2019, as compared to EU-27 average of 5.0% and 9.7%, respectively.

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



Source: Eurostat, 2020.

Sweden is divided into eight NUTS-2 statistical regions: Stockholm, East Middle Sweden (*Östra Mellansverige*), North Middle Sweden (*Norra Mellansverige*), Middle Norrland (*Mellersta Norrland*), Upper Norrland (*Övre Norrland*), Småland and the islands (*Småland med öarna*), West Sweden (*Västsverige*) and South Sweden (*Sydsverige*).

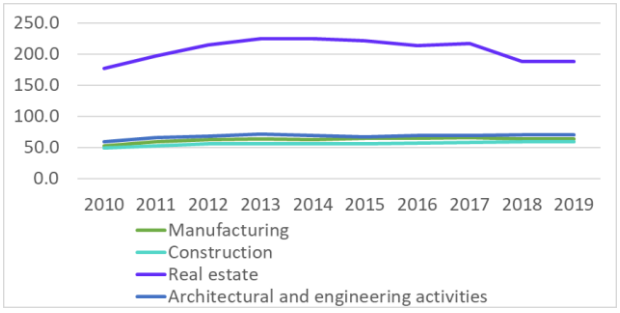
Looking at the geographic regions' contribution to gross value added, in 2017[4] the largest share came from the *Stockholm* area, followed by the *Västsverige* and *Östra Mellansverige* regions. This was the case for both the narrow construction (27.3%, 20.0% and 15.5%) and the real estate activities sub-sectors (35.1%, 20.8% and 13.5%), respectively. Overall, the top three regions contributed to 62.8% of the total gross value added of the narrow construction and 69.4% of gross value added of the real estate activities sub-sectors, totalling EUR 17.8 billion and EUR 24.6 billion in 2017, respectively.

Productivity

Overall, **apparent labour productivity**[5] in the Swedish broad construction sector increased by 13.9%, from EUR 68,545 in 2010 to EUR 78,046 in 2018[6]. Labour productivity in the narrow construction sub-sector experienced the largest increase of 21.9%, from EUR 48,900 in 2010 to EUR 59,626 in 2019. This was followed by the manufacturing (+21.6%), the architectural and engineering activities (+19.5%) and the real estate activities (+6.7%) sub-sectors, rising from EUR 52,463, EUR 58,600 and EUR 176,400 in 2010 to EUR 63,773, EUR 70,012 and EUR 188,162 in 2019, respectively.

Labour productivity in the narrow construction sub-sector between 2010 and 2019 ↑ **21.9%**

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



Source: Eurostat, 2020.

Turnover and profitability

The total **turnover** of the Swedish broad construction sector stood at EUR 141.7 billion in 2018[7], representing an increase of 49.0% compared to 2010 (EUR 95.1 billion). However, it declined to EUR 138.8 billion in 2019[8], resulting in a 46.0% increment since 2010. This growth was mainly driven by a 63.2%, 60.5% and 33.1% increase in the narrow construction, the architectural and engineering activities and the manufacturing sub-sectors over the 2010-2019 period, respectively. Similarly, the real estate activities sub-sector reported a moderate increase of 14.3% over the 2010-2019 period. Overall, in 2019, 57.5% of total turnover was generated by the narrow construction sub-sector, followed by the real estate activities (22.9%), the architectural and engineering activities (11.7%) and the manufacturing (7.9%) sub-sectors, respectively.

Turnover in the narrow construction sub-sector between 2010 and 2019 ↑ **63.2%**

In parallel, the **gross operating surplus** of the Swedish broad construction sector amounted to EUR 22.1 billion in 2018[9], a 41.1% increase compared to 2010. In terms of its sub-sectors, the largest increase was reported by the architectural and engineering activities (+94.6%), followed by the narrow construction (+74.0%) and the manufacturing (51.5%) sub-sectors over the 2010-2018 period. Similarly, the real estate

activities sub-sector experienced a 23.8% increase over the same reference period.

Gross operating surplus of the architectural and engineering activities sub-sector between 2010 and 2018 ↑ 94.6%

At the same time, the **gross operating rate**[10] of the Swedish broad construction sector[11], an indicator of the sector's profitability, stood at 15.6% in 2018[12], lower than 16.5% in 2010. In terms of sub-sectors, all the sub-sectors reported an increase over the 2010-2018 period. Specifically, the real estate activities sub-sector remained the most profitable, with a gross operating rate of 40.4%, above its 2010 rate of 37.4%. This was followed by the architectural and engineering activities and narrow construction sub-sectors, which registered a gross operating rate of 10.8% and 8.0% in 2018, slightly above compared to their 2010 levels of 8.9% and 7.8%, respectively. Similarly, the manufacturing sub-sector registered a gross operating rate of 7.7% in 2018, slightly above its 2010 level of 6.6%.

Correspondingly, construction costs for residential buildings have been experiencing an increasing trend, with the **construction cost index** rising by 12.1% over 2015-2019 period. This increase has been spurred by a 14.4% increase in input prices for materials as well as a 9.1% increase in labour costs over the same reference period. Other factors affecting the rise in building costs relate to the suboptimal productivity growth in the construction sector[13]. The shortage of labour also contributed to exacerbating the issue of growing labour costs.

Construction cost index between 2015 and 2019 ↑ 12.1%

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

Source: Eurostat, 2020.

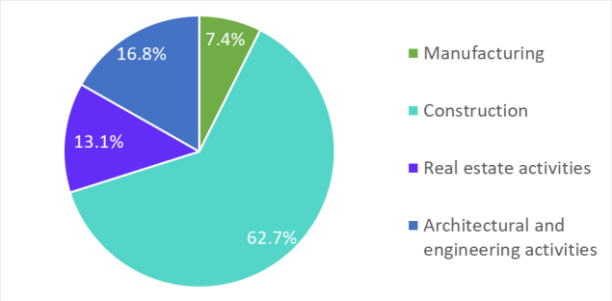
Employment

In 2019[14], the **number of persons employed** in the Swedish broad construction sector stood at 679,186, representing an increase of 26.8% compared to 2010 (535,817 persons). Specifically, the narrow construction sub-sector employed 62.7% of the total workforce in the broad construction sector in 2019 (425,811 persons). This was followed by the architectural and engineering activities (16.8%, 114,089), the real estate activities sub-sector (13.1%, 88,815) and the manufacturing sub-sector (7.4%, 50,472) (Figure 6).

Employment in the architectural and engineering activities sub-sector increased by 35.4% over the 2010-2019[15] period, followed by the narrow construction (+28.8%) and the real estate activities (+18.5%) sub-sectors. Likewise, the manufacturing sub-sector reported a modest increase of 9.7% over the same reference period.

Number of persons employed by the architectural and engineering activities sub-sector over 2010-2018 period ↑ 35.4%

Figure 6: Percentage of persons employed in construction in Sweden in 2019



Source: Eurostat, 2020.

In terms of employment by **specific occupations**, the biggest drop between 2010 and 2019 in the narrow construction sub-sector was registered in elementary occupations (-14.9%), followed by clerical support workers (-2.0%). Conversely, demand for technicians and associate professionals increased by 88.3% over the 2010-2019 period, followed by professionals (+31.6%). With regards to the real estate activities sub-sector, elementary occupations recorded a decline of 79.4% over the above reference period.

In contrast, all other occupations within the sub-sector registered a growth, with the largest increment being noted in service and sales workers (+1,192.3%), followed by professionals (+84.1%) over the 2010-2019 period. Last, in the case of the manufacturing sub-sector, the largest increase in demand was reported in technicians and associate professionals (+39.1%), followed by professionals (+29.3%) over the 2010-2019 period. On the other hand, the number of persons employed as plant and machine operators and assemblers declined by 51.0%, followed by elementary occupations (-24.6%) over the same reference period.

Number of service and sales workers in the real estate activities sub-sector over 2010-2019 period

↑ **1,192.3%**

The share of **self-employed workers** in the general economy working in the narrow construction sub-sector increased from 14.0% in 2010 to 15.7% in 2019. This is higher than the EU-27 average of 11.9%. In contrast, in the real estate activities sub-sector, the share of self-employed workers stood at 1.5% in 2019, marginally below its 2010 level (1.6%) while slightly above as compared to EU-27 average of 1.4%.

In parallel, **full-time employment** in the narrow construction sub-sector also increased by 19.7%, between 2010 and 2019. At the same time, a 4.1% decline was recorded in the real estate activities sub-sector during the same reference period. **Part-time employment** in the narrow construction sub-sector increased by 15.0%, between 2010 and 2019 while it decreased by 19.7% in the real estate activities sub-sector during the same reference period.

Full-time employment in the narrow construction sub-sector between 2010 and 2019

↑ **19.7%**

Looking at regional differences, in 2017[16], the Stockholm area employed the largest number of persons both in the narrow construction (24.7%) and the real estate activities sub-sectors (25.9%). Additionally, West Sweden employed 19.9% of workers in the narrow construction sub-sector followed by East Middle Sweden (16.4%) and South Sweden (13.7%), respectively. Likewise, in the real estate activities sub-sector, West Sweden employed 20.0% of persons, followed by East Middle Sweden (16.5%) and South Sweden (15.3%), respectively.

2

Macroeconomic indicators

Economic development

Swedish economic growth slowed down in 2019 due to deceleration in domestic demand, declining private consumption and rising unemployment rates amid unstable external demand[17].

In 2019, Swedish **GDP** amounted to SEK 4,610.9 billion (EUR 443.1 billion), representing an increase of 20.5% and 1.2% compared to 2010 and 2018 levels, respectively[18]. The 2019 **potential GDP** of Sweden amounted to SEK 4,576.0 billion (EUR 439.7 billion), resulting in a positive output gap of 0.8%.

In parallel, the **inflation rate** has been increasing over the 2015-2019 period, reaching 6.9% in 2019 as compared to 2015. In absolute terms, the **inflation** rate remained below the Riksbank (Sweden Central Bank) 2.0% target, partly due to rising energy prices and is expected to remain so even in 2021[19].

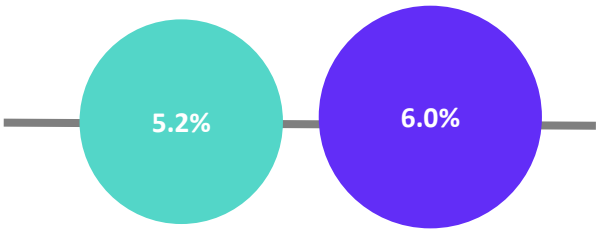
Demography and employment

In terms of demographics, the **total population** of Sweden amounted to 10.2 million people in 2019, a 9.5% increase as compared to 2010 levels. Population projections anticipate an overall 8.5% and 19.8% growth in the number of people living in Sweden reaching 11.1 million by 2030 and 12.3 million by 2050, respectively. These projections are partly driven by constantly increasing net migration to Sweden. Between 2010 and 2019, net migration increased by 44.1%, from 49,734 in 2010 to 71,647 in 2019.

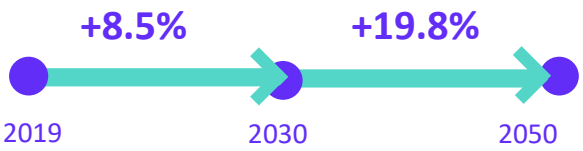
The **unemployment rate** in Sweden stood at 5.2% in 2019, slightly below the EU-27 average of 6.0%. This also marked a slight decrease from the 2010 level of 6.3%. Youth unemployment (below the age of 25) stood at 20.1% in 2019, well above the EU-27 average of 15.1%, yet an improvement as compared to its 2010 levels (24.8%)[20].

In 2019, Sweden's **working age population** accounted for 62.3% of the total population. It is projected to decline in the future, accounting for 61.9% of the total by 2030 and 60.2% of by 2050, respectively. Conversely, people over 65 years, accounting for 19.9% of the total in 2019, are expected to increase to 21.3% by 2030 and by 23.5% by 2050, respectively. The demographic trends in the country are expected to drive the demand for public sector construction, such as hospitals, old age institutions and other care facilities. This is also expected to drive demand for housing adapted to the needs of the elderly.

Unemployment rate in 2019



Projected population growth in Sweden

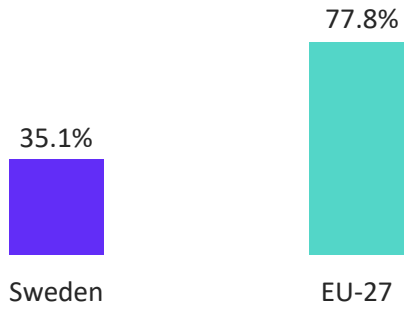


Public finance

In 2019, general **government expenditure** as a share of GDP in Sweden stood at 49.3%, slightly higher as compared to the EU-27 average of 46.7%. General **government deficit** as a share of GDP was -0.5%, slightly better when compared to the EU-27 average of -0.6%.

The Swedish government's general gross debt, as a percentage of its GDP, stood at 35.1% in 2019, significantly lower than the EU-27 average of 77.8%[21].

The debt-to-GDP ratio increased following the surge in government's deficit in 2020, partly explained by the COVID-19 impact. However, improved public finances are expected to stabilise the public debt-to-GDP ratio at just over 42%[22]. Additionally, it is also estimated that Sweden's national debt composition will shift with local governments and regions taking on more debt to finance investments in welfare provision facilities including schools, preschools, and elderly homes[23].



Government gross debt in 2019

Entrepreneurship and access to finance

As per the World Economic Forum Global Competitiveness Report 2019, Sweden ranked 18th out of 141 economies in terms of the financing of SMEs[24].

According to the 2019 Global Competitiveness Report, Sweden ranked 7th with regards to market capitalisation as a percentage of GDP, 15th in terms of venture capital availability and 17th as to domestic credit to the private sector. In relation to entrepreneurship, Sweden ranked 2nd in terms of willingness to delegate authority, 3rd with regards to growth of innovative companies, 6th in terms of attitudes towards entrepreneurial risk and 14th as to companies embracing disruptive ideas[25].

As per the 2019 SBA Fact Sheet, Sweden's overall score on 'Access to finance' is considerably above the EU-28[26] average, with eight indicators above and only two indicators below. Sweden's best performing indicators include access to public financial support including guarantees, bad debt loss, willingness of banks to provide a loan and venture capital investments. In contrast, indicators performing below EU-28 average included rejected loan applications and unacceptable loan offers, as well as the cost of borrowing for small loans relative to large loans[27].

In contrast, Sweden's performance on 'entrepreneurship' is well below the EU-28 average, with eight indicators below and only four indicators above. Sweden's worst performing indicators included entrepreneurship as a desirable career choice, as well as opportunity-driven entrepreneurial activity. Contrarily, its best performing indicators included entrepreneurship education at basic school, share of high growth enterprises and media attention given to entrepreneurship[28].

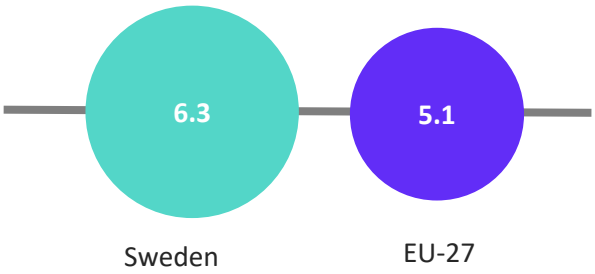
3

Key economic drivers of the construction sector

Business confidence

Over the 2010-2019 period, overall business confidence in Sweden has deteriorated. In fact, in 2019, the **consumer confidence** indicator stood at -1.1, below the 2010 levels of 9.3. However, it is well above the EU-27 average of -6.2. Similarly, **industry confidence** deteriorated significantly to -0.1 in 2019 in comparison to 5.5 in 2010. Still, this is well above the EU-27 average of -4.8. In contrast, the **construction confidence** indicator recovered substantially from -6.7 in 2010 to 6.3 in 2019. This is slightly higher than the EU-27 average of 5.1 in 2019.

Construction confidence indicator in 2019



The **investment ratio** stood at 24.8% in 2019, slightly higher as compared to 22.4% in 2010. This is well above the EU-27 average of 21.7% in 2019.

Likewise, **investment per worker** in the Swedish broad construction sector increased by 4.7%, from EUR 69,952 in 2010 to EUR 73,211 in 2018[29]. In terms of sub-sectors, investment per worker in the narrow construction sub-sector notably increased by 41.7%, from EUR 4,800 in 2010 to EUR 6,800 in 2018. Similarly, investment per worker in the real estate activities sub-sector also increased by 13.4%, from EUR 162,000 in 2010 to EUR 183,700 in 2018[30].

Domestic sales

The ranking of the **most domestically sold construction products** has remained the same since 2010 except for "Articles of cement" being replaced with "Other structures and parts of structures". The largest value increment over the 2010-2019 period was witnessed in the product category "Prefabricated structural components" (+326.9%), followed by "Towers and lattice masts of iron or steel" (+190.0%), "Windows, French windows and their frames" (+105.6%) and "Prefabricated buildings of metal" (+85.5%). Contrarily, the only decline in sales during the above reference period was recorded in "Quicklime, slaked lime and hydraulic lime" (-21.0%). The top five most domestically sold construction products, both in Sweden and the EU-27, made up 63.1% of all Swedish construction products sales in 2019.

Table 1: Five most domestically sold construction products in Sweden and in the EU in 2019

	Sweden			EU-27
	Product	**Value (EUR m)**	**Share in construction product domestic sales (%)**	**Product**
1	Prefabricated wooden buildings (group 162320)	1,315.7	22.4	Other structures (group 251123)
2	Windows, French windows, etc. (group 162311)	708.7	12.1	Doors, windows and their frames (group 251210)
3	Tiles, flagstones, bricks, etc. (group	598.3	10.2	Ready-mixed concrete (group 236310)

	Sweden			EU-27
	Product	Value (EUR m)	Share in construction product domestic sales (%)	Product
	236111)			
4	Other structures (group 251123)	552.8	9.4	Prefabricated buildings of metal (group 251110)
5	Ready-mixed concrete (group 236310)	535.8	9.1	Prefabricated structural components (group 236112)

Source: PRODCOM, 2020.

Export of construction-related products and services

The ranking of the five **most exported construction products** has remained the same since 2010 except for "Builders' joinery and carpentry" and "Doors, windows and their frames" being replaced with "Other structures and parts" and "Fibreboard of wood", respectively. Most of the product categories registered a high growth rate over the 2010-2019 period with the largest increment being recorded in "Towers and lattice masts of iron or steel" (+866.1%), followed by "Tableware and kitchenware, of wood" (+126.2%), "Tools, tool bodies, tool handles. etc." (+119.7%) and "Prefabricated structural components" (+87.6%). In contrast, "Tiles, flagstones, bricks, etc." saw the largest decline in any product category (-14.9%), closely followed by "Doors, windows and their frames" (-11.9%). The top five most exported construction products from Sweden and the EU-27, constituted 54.9% of all Swedish construction product exports in 2019.

Table 2: Five most exported construction products in Sweden and in the EU in 2019

	Sweden			EU-27
	Product	Value (EUR m)	Share in construction product export sales (%)	Product
1	Other structures (group 251123)	227.2	18.1	Ceramic tiles and flags (group 233110)
2	Assembled parquet panels (group 162210)	165.5	13.2	Other structures (group 251123)
3	Windows, French windows and their frames (group 162311)	117.0	9.3	Fibreboard of wood (group 162115)
4	Prefabricated wooden buildings (group 162320)	116.6	9.3	Doors, windows and their frames (group 251210)
5	Fibreboard of wood (group 162115)	63.1	5.0	Marble, travertine, alabaster (group 237011)

Source: PRODCOM, 2020.

In terms of the **cross-border provision of construction services**[31], Sweden **exported** services worth EUR 488.5 million worldwide in 2018, a decline of 22.1% since 2010. In 2018, about 70.2% of total exports (i.e. EUR 343.0 million) was made to the EU-28, well above the 56.7% of 2010 (EUR 355.1 million). Similarly, the value of exports to countries outside the EU decreased by 46.5%, from EUR 271.7 million in 2010 to EUR 145.4 million in 2018.

Export of construction services worldwide over 2010-2018 period ↓ **22.1%**

In contrast, Sweden **imported** a total of EUR 1.6 billion of construction services in 2018, representing a 84.3% increase since 2010 (EUR 847.4 million). Almost 88.5% of the total imports (i.e. EUR 1.4 billion) came from EU-28 countries while the remaining 11.5% came from the rest of the world (EUR 0.2 billion). Thus, Sweden reported a **trade deficit** of EUR 1.1 billion in 2018, significantly above than its 2010 levels of EUR 220.5 million.

Access to finance in the construction sector

According to the Survey on the Access to Finance of Enterprises (SAFE) 2019 results, on average, 8.7% of the Swedish respondent SMEs considered 'access to finance' as the most important issue, slightly above the EU-28 average of 7.2%[32].

As per the EIB Investment Survey 2019, almost 85.0% of firms in the Swedish construction sector reported investing adequately for their needs in

their business (against an EU average of 79.0%). However, according to the same survey, 25.0% of firms in the construction sector considered 'availability of finance' as a long-term barrier[33]. Additionally, about 60.0% of Swedish construction sector firms' investment needs were met through internal financing while about 35.0% were being covered through external financing sources. Almost 40.0% of this external financing was funded through bank loans, well below the EU average of 58.0%. Conversely, only 1.0% of Swedish construction sector firms were likely to be financially constrained as compared to the EU average of 5.0%[34,35].

There is an ongoing reluctance among banking institutions to provide financial assistance to Swedish construction companies. Coupled with this is the fact that existing government regulations makes it difficult to grant loans to households. As such, access to finance has worsened over the past years.

Access to housing

The **number of households** in Sweden increased by 19.6%, from 4,460,300 in 2010 to 5,335,100 in 2019. The share of the **total population living in cities and greater cities** increased moderately from 41.8% in 2010 to 49.9% in 2018[36]. Similarly, the share of the **population living in densely populated areas** also increased from 22.1% in 2010 to 40.3% in 2019.

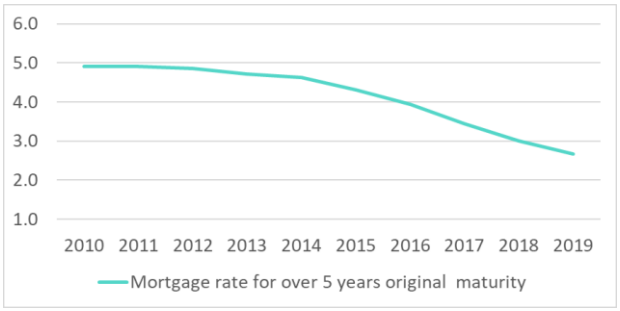
The **mean equivalised net income** increased by 38.0%, from EUR 20,070 in 2010 to EUR 27,703 in 2018. This is well above the EU-27 average of EUR 19,078 in 2018. In contrast, this decreased to EUR 26,356 in 2019, resulting in an overall growth of 31.3% over the 2010-2019 period.

Number of households between 2010 and 2019 ↑ **19.6%**

Moreover, housing loans to households picked up substantially, with **total outstanding residential loans** growing by 39.8%, from EUR 292.3 billion in 2010 to EUR 408.6 billion in 2018[37]. This increase is partly supported by the declining **interest rates on mortgages,** currently standing at 2.7% in 2019 as compared to 4.9% in 2010 (Figure 7).

Total outstanding residential loans to households between 2010 and 2018 ↑ **39.8%**

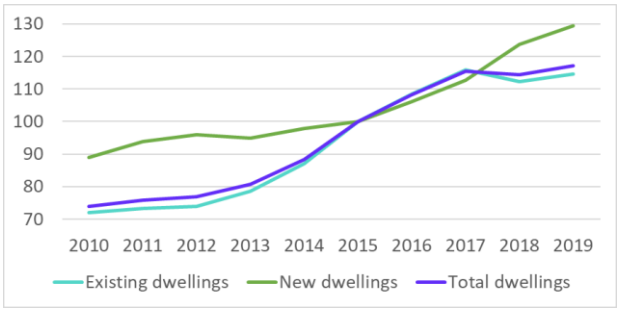
Figure 7: Mortgage rates for loans for over 5 years original maturity (%) between 2010 and 2019



Source: ECB MFI Interest Rate Statistics, 2020.

The **house price index** for total dwellings also increased by 17.2% over the 2015-2019 period, mostly driven by a 29.5% and 14.6% increase in new dwellings and existing dwellings over the same reference period, respectively. This rapid price growth is partly driven by a combination of structural bottlenecks to housing supply, especially in the main urban areas, combined with favourable tax treatment of home ownership and mortgage debt[38].

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



Source: Eurostat, 2020.

Housing market is a big concern for the Swedish economy. With the market being tight, it is difficult to find affordable housing. Sweden continues to face housing shortages primarily due to insufficient new housing construction and inefficient use of the existing housing stock. In fact, new construction does not meet the country's housing needs, especially of affordable housing. This is also coupled with other structural deficiencies including limited competition in the sector and inefficient use of existing housing stock. Additionally, with the housing supply lagging behind and a stable rental

market, house prices have hiked resulting in market overvaluation. Moreover, persistent distortions in housing supply and demand, growth of nominal disposable income and low interest rates will likely continue the trend of rising house prices in the coming months[39].

According to the Swedish National Board of Housing, Building and Planning, the country needed 93,000 new home constructions for the 2018-2020 period. Additionally, for the 2021-2025 period, Sweden still has an estimated annual requirement for 51,000 new homes[40].

The number of **new construction building permits** issued for **residential buildings** increased by 3.6%, from 8,137 in 2010 to 8,434 in 2019. In the case of non-residential construction, the number of new buildings permits issued increased by 11.5%, from 2,434 in 2010 to 2,713 in 2019[41].

Number of building permits for new residential buildings between 2010 and 2019 ↑ **3.6%**

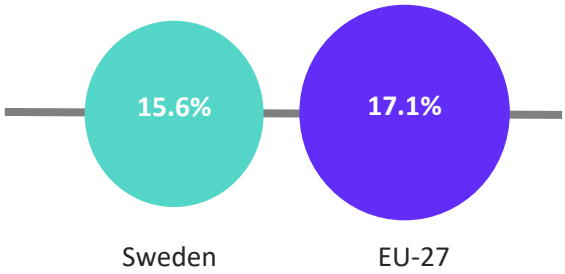
Number of building permits for new non-residential buildings between 2010 and 2019 ↑ **11.5%**

Furthermore, the distribution of residential building stock between owners and tenants has steadily declined since 2010. Over the 2010-2019 period, the **home ownership** rate in Sweden has remained above 63.0%, being at 64.1% in 2018 (lower as compared to EU-27 average of 69.9%). This rate decreased to 63.6% in 2019. Conversely, for the population earning **above 60.0% of the median equivalised income**[42], the home ownership rate increased to 71.0% in 2019 (slightly lower than EU-27 average of 74.0%) whereas it substantially declined to 27.3% (well above the EU-27 average of 49.8%) for the population earning below 60.0% of the median equivalised income.

Sweden's **overcrowding rate**[43] stood at 15.6%[44] in 2019, below the EU-27 average of 17.1%. The **severe housing deprivation rate**[45] stood at 2.6% in 2019, slightly below the EU-27 average of 4.0%.

Lastly, the **housing cost overburden rate**[46] stood at 9.4% in 2019, almost in line with the EU-27 average of 9.3%.

Overcrowding rate in 2019



Infrastructure

According to the 2019 Global Competitiveness Report, Sweden ranked 19th out of 141 economies in terms of its overall infrastructure quality[47].

Overall, Sweden ranked 23rd with regards to its transport infrastructure. More specifically, Sweden ranked 8th among the 141 economies in terms of its road connectivity, 13th for the efficiency of its air transport services, 17th with regards to the efficiency of seaport services and 20th in terms of quality of road infrastructure. Further, Sweden ranked 26th for its linear shipping connectivity, 35th with regards to its airport connectivity, 37th in terms of railroad density and 40th in relation to the efficiency of its train services[48].

There is an urgent need to renovate the existing infrastructure and plan additional investments in the sector. In this context, the Swedish government, under its National Infrastructure Plan 2018-2029, aims to invest SEK 700 billion (EUR 67.3 billion) in improving transport infrastructure, including the maintenance of rail tracks and investments in new railways. In the coming twelve years, the country plans to invest three times more in new rail infrastructure than in new roads. This could also beneficially shift Sweden's transport regime from roads (currently 86.0%) to railways (currently 10.0%)[49].

4

Key issues and barriers in the construction sector

Company failure

Over the 2010-2018 period, the number of **company deaths** in the real estate activities sub-sector grew by 19.9%, from 1,700 in 2010 to 2,038 in 2018[50]. Similarly, the number of company deaths in the narrow construction sub-sector also increased by 16.3%, from 5,206 in 2010 to 6,057 in 2018. In contrast, in the case of the architectural and engineering activities sub-sector, the number of company deaths registered a negligible decline of 0.2%, from 1,959 in 2010 to 1,956 in 2018.

Company deaths in the real estate activities sub-sector between 2010 and 2018 ↑ **19.9%**

Likewise, the number of **company births** in the real estate activities, as well as the architectural and engineering activities sub-sectors, increased by 18.3% and 9.7%, from 2,814 and 2,299 in 2010 to 3,328 and 2,523 in 2018, respectively. In contrast, in the narrow construction sub-sector, company births deteriorated by 12.9%, from 7,956 in 2010 to 6,929 in 2018.

Company births in the real estate activities sub-sector between 2010 and 2018 ↑ **18.3%**

Statistics Sweden reported 1,351 bankruptcies in the construction sector[51] in 2019, a marginal increase of 1.0% as compared to the 1,338 bankruptcies in 2018[52].

Trade credit

In 2019, Sweden reported an increased use of trade credit with 66.9% of the total value of Swedish respondents' B2B sales made through the use of credit. This is well above its 2018 level of 51.2%. as well as the western European average of 60.4%[53].

Almost 28.4% of Swedish SMEs applied for trade credit in the last six months of 2019, and 11.1% of them obtained trade credit from business partners in the last six months. Additionally, out of all the respondents who applied and negotiated trade credit financing, 86.3% of respondents received everything they requested (against the EU-28 average of 73.5%). As per the survey, 65.5% of Swedish respondent firms believe that the availability of trade credit will remain unchanged in the future, marginally above the EU-28 average of 64.7%[54].

Late payment

According to the European Payment Report 2020, about 52.0% of Swedish respondent firms expect late payments to have a high impact on their liquidity, well above the EU average of 45.0%[55].

As per the report, about 82.0% Swedish respondent firms in the general economy have agreed to accept longer payment terms to maintain client relationships, considerably above the 69.0% EU average[56].

In 2019, Swedish respondent firms offered longer repayment periods averaging 43 days from invoicing, as compared to 40 days in 2018[57].

Late payment continued to be an issue for Swedish respondents. To safeguard their interests against defaulting customers, the Swedish respondent firms use various credit management techniques including an assessment of the creditworthiness of prospective buyers (33.0% of respondents apply

such a technique against a western European average of 35.0%), as well as dunning activities (outstanding invoice reminders – by 24.0% against a western European average of 28.0%)[58].

In 2019, Swedish B2B customers benefitted from longer payment terms, standing at 28 days as compared to 26 days in 2018. This is partly due to liberal trade policies adopted by Swedish businesses over the last year. Nonetheless, this is still lower as compared to western European average of 34 days[59].

Despite improvements in payment practices from B2B customers resulting in increased timely payments (72.4% of total invoices in 2019 paid on time as compared to 70.9% in 2018), the average payment duration increased by 3 days in 2019 as compared to 2018. In fact, about 24.6% of the total B2B invoice value issued by Swedish respondents remained unpaid at its due date[60].

About 31.0% of Swedish respondents (against the western European average of 25.0%) expected their B2B customers' payment behaviour to deteriorate over time. Moreover, about 2.0% of the total value of B2B receivables in 2019 were uncollectable, higher than the 2018 levels of 1.0%[61].

As such, 40.0% of Swedish respondents plan on reducing their reliance on a single buyer over coming months, well above the western European average of 28.0%[62]. Sector wise, Swedish respondents from the construction sector provided comparatively longer payment terms of 32 days from invoicing to their B2B customers[63].

In terms of good payment practices, in 2019 the construction sector saw about 56.7% of enterprises make payments by the due date, while only 0.3% of total firms paid over 90 days past the due date. Likewise, in the real estate activities sector, 66.7% of total firms paid outstanding amounts by the due date while 0.5% of the total firms paid after over 90 days past the due date[64].

Time and cost of obtaining building permits and licenses

According to the World Bank's Doing Business Report, 2020, Sweden ranked 10th out of 190 countries in terms of "Ease of doing business" and 31st in "Dealing with construction permits" in 2019.

Eight **procedures** and 117 **days** are required to complete the administrative formalities to build a warehouse[65], well below the OECD high-income average of 12.7 procedures and 152.3 days, respectively. Nevertheless, in 2019, the **cost of completing the formalities** to build a warehouse represented 1.9% of the value of the warehouse, slightly above the OECD high-income average of 1.5%. Specifically, **obtaining a building permit** takes 60 days and costs SEK 88,680 (EUR 8,521) (Table 3). It is important to note that there is sub-procedures named "obtain a building permit", which is a part of the overall procedure needed to obtain a building permit. This sub-procedure account for over 50% of the time needed to complete the administrative formalities to build a warehouse.

Table 3: Construction procedures timing and costs in Sweden

Procedure	Time to complete	Associated costs
Hire an external certified supervisor	1 day	SEK 180,000 (EUR 17,296)
Hold technical consultation meeting with Building Committee of the Municipality	15 days	No charge
Obtain building permit	60 days	SEK 88,680 (EUR 8,521)
Receive decision to commence construction	5 days	No charge
Receive inspection from the Building Committee	1 day	No charge
Submit supervisor's report and hold final consultation meeting	10 days	No charge
Obtain water and sewerage connection	25 days	SEK 190,000 (EUR 18,257)
Obtain final certificate	10 days	No charge

Source: Doing Business overview for Sweden, Word Bank, 2020.

Skills shortage

In 2019, there were 6,138 and 1,402 **job vacancies** in the Swedish narrow construction and the real estate activities sub-sectors, respectively. This, in turn, represented a significant increase of 135.6% and 103.8% as compared to the 2010 levels of each of the sub-sectors, respectively. Likewise, the **job vacancy rate** for both the narrow construction as well as the real estate activities sub-sectors increased from 1.1% and 1.3% in 2010 to 1.8% and 1.9% in 2019, respectively.

Number of job vacancies in the narrow construction sub-sector over 2010-2019 ↑ 135.6%

Over the 2010-2019 period**, adult participation in education and training** in the broad construction sector experienced an increasing trend. With regards to sub-sectors, the adult participation rate increased from 15.1% and 24.7% in 2010 to 22.0% and 38.7% in 2019 for the Swedish narrow construction and the real estate activities sub-sectors, respectively.

In parallel, the **number of tertiary students** enrolled in engineering, manufacturing and construction increased by 17.7% from 11,746 in 2010 to 13,830 in 2018[66]. In particular, 4,189 tertiary students were enrolled in architecture and building in 2018, representing a considerable increase of 52.2% as compared to 2010 level of 2,753 students.

Despite Sweden having one of the highest employment rates in the EU region, the European Commission's autumn 2019 forecast expected an increase in unemployment up to 2021. This was primarily due to large scale labour shortages and skill mismatches in the Swedish economy, particularly in the case of high-skilled jobs. In the case of low-skilled workers, notably non-EU migrants, finding a job itself is rather difficult in the current economic environment[67].

With regards to the construction sector, Sweden is experiencing higher labour and skills shortages, both for blue and especially white-collar workers (including site managers, civil engineers and technicians). This labour shortage is also affected by Sweden's housing market situation. Existing housing shortages makes it difficult for workers to move to other locations for new jobs, thus augmenting the labour shortages crisis[68].

About 19.0% of Swedish employers stated that difficulties in finding suitable accommodation affected the responsiveness of potential candidates to recruitment offers[69].

According to the Swedish construction federation (BI), this also prevented construction companies from exploring further market opportunities. The skills shortage is expected to increase in the coming years, due to growing investments in construction, coupled with high retirement rates in the sector. This is more evident in the infrastructure market as compared to residential and non-residential markets. The Construction Industry Association has assessed that 50,000 new employees will be needed over a five-year term solely due to aging. Additional labour requirements are expected, driven by the projected construction of 600,000 new dwellings by 2025 and the infrastructure projects outlined in the national transport plan 2018-2029[70].

Furthermore, to tackle the labour shortage problem, the Swedish government, in its Budget Bill 2020, proposed initiatives worth approximately SEK 1.3 billion (EUR 124.9 million) to get more people into work. The allocated amount will be used to help equip more people for work and for better integration, continued expansion of the Adult Education Initiative[71].

Sector and sub-sector specific issues

Material efficiency and waste management

In 2018[72], Sweden reported a total of 12.4 million tonnes of **construction and demolition waste (CDW)**, representing a growth of 32.0% as compared to the 2010 level (9.4 million tonnes). Of the 2018 total, only 0.6 million tonnes (i.e. 5.2%) were hazardous, with the remaining 11.8 million tonnes (i.e. 94.8%) being non-hazardous waste[73].

As per Statistics Sweden, around 35.2% of all waste generated in Sweden in 2018 was produced by the construction sector (excluding mining waste)[74].

Additionally, the Swedish Environmental Research Institute's 2018 report on waste stated that the amount of CDW has remained constant over the past few years[75]. The report concluded that CDW treatment facilities' methods diverged largely according to municipality size, location and type of customer etc. Waste facilities also used differentiated gate fees for incoming material as a tool to encourage good CDW sorting practices. The report offers recommendations to improve recycling including; better information flow upstream and downstream, incentives for businesses to sort waste, more user-friendly recycling centres and strategic work making use of waste as a resource[76].

Moreover, the Swedish Construction Federation has published updated guidelines to improve the management of resources and CDW during construction and demolition activities. In 2019, new guidelines backed by the Swedish Property Federation were also issued, aimed at improving the quality of CDW.

Climate and energy

Emissions of greenhouse gases (carbon monoxide and dioxide, methane, nitrous oxides) from activities in the narrow construction and the real estate sub-sectors amounted to 1,969,608 tonnes and 196,374 tonnes in 2018[77], respectively. This represented a slight 0.2% increase in the narrow construction sub-sector, but a considerable 36.9% reduction in the real estate activities sub-sector, as compared to 2010 levels, respectively[78].

In the context of the European Union's burden sharing agreement, Sweden has adopted climate policy targets well beyond its obligations. The country's target is to reduce domestic greenhouse gas (GHG) emissions (mostly CO_2 emissions), by 85% by 2045, yielding zero net GHG emissions, including emission reductions abroad. The intermediate targets of reducing overall emissions by 63% and transport sector emissions specifically by 70% (compared to 1990 levels) by 2030 have been set. To achieve these targets, in addition to the carbon tax and blending obligation for biofuels, the government has introduced steps such as increased government subsidies for solar cells, electric vehicles and charging points, and support for company and municipal investments reducing climate impact[79].

5

Innovation in the construction sector

Innovation performance

According to the 2020 European Innovation Scoreboard, Sweden is classified as an Innovation Leader[80].

The strongest dimensions of the Swedish innovation system include human resources, attractive research systems and an innovation-friendly environment. The country also demonstrated strong performance on public-private co-publications, lifelong learning, international scientific co-publications and foreign doctorate students.

Conversely, innovation dimensions in which Sweden's performance was relatively weak include sales impacts, sales of new-to-market and new-to-firm product innovations, private co-funding of public R&D expenditure, enterprises providing ICT training, and venture capital expenditure[81].

In parallel, the total **R&D personnel** (full-time equivalents – FTE[82]) in the narrow construction sub-sector also experienced a growing trend. The number increased by 116.2%, from 117 in 2011[83] to 253 in 2017[84]. Likewise, the number of researchers in the sub-sector rose from 76 to 255 between 2011[85] and 2015[86,87].

Similarly, the number of **construction-related patent applications** has been on an increasing trend, from 84 in 2010 to 118 in 2019 (+40.5%), averaging at 97.8 over the 2010-2019 period.

Construction-related patent applications between 2010 and 2019 ↑ **40.5%**

According to the 2019 EU Industrial R&D Investment Scoreboard, in terms of R&D spending, there were 78 Swedish firms amongst the top 1000 EU companies, including two firms in construction related activities[88].

In the context of the construction sector, industry operators, along with the Swedish Energy Agency, run a series of **innovation clusters**: LÅGAN is for buildings with very low energy consumption; BELOK is a cluster for non-residential premises; BeBo is an innovation cluster for owners and managers of apartment buildings; and BeSmå groups together house builders. Three innovation clusters were set up including the *Innovationskluster för energieffektiv sjukvård* [Innovation Cluster for Energy-Efficient Medical Care]; *Innovationskluster Hållbart samhälle* [Innovation Cluster Sustainable Society] and the Smart Housing Smaland. The first two innovation clusters focus on the energy efficiency of the building stock by promoting the development of new solutions and applying and demonstrating new knowledge and technology. Smart Housing Smaland aims to create smart housing and a sustainably built environment based on glass and wood[89].

Additionally, the Swedish Energy Agency continues to invest in research in the field of buildings in the energy system through a range of programmes focusing on energy-efficiency, heat pump research and district heating research[90]. Furthermore, the new Swedish research bill is also scheduled to be presented by end-2020[91].

Eco-innovation and digitalisation

According to the 2019 Eco-Innovation Index, Sweden scored 143, considerably above the EU-28[92] average of 100[93].

Sweden scored a higher rating than the EU-28 average in four out of the five components with the exception being the socio-economic outcomes. This is also the indicator in which Sweden had the least success between 2010 and 2019, with results above the EU-28 average only achieved in 2013[94].

Eco-innovation continues to be a focus point in Sweden's national environmental policy strategy. The country has been at the forefront in developing new technologies in areas like bioenergy, smart grids, green building, waste and recycling, water resource management, etc. Over the past years, emissions of carbon dioxide have declined in Sweden. It is the EU-28 leader in renewable energy in gross final energy use as well as the first member state to meet its 2020 EU-set renewable energy targets, eight years ahead of schedule. Sweden plans to achieve zero-emissions of greenhouse gases by 2045[95].

As per the European Commission Digital Economy and Society Index (DESI) 2020, Sweden ranked 2nd out of 28 EU Member States with a 69.7 score, notably above the EU-28 average score of 52.6[96].

With the adoption of a digitisation strategy in 2017, Sweden intends to become the global leader in harnessing the opportunities offered by digitisation. As such, it continues to formulate specific policy instruments and action plans in accordance with its goals. Presently, Swedish companies integrate digital technologies relatively well (ranking 6th) compared to other EU member states, although their progress is slowing and other states are catching up. Furthermore, there is also a big difference between the adoption rate of large companies and SMEs. The Swedish public sector is also digitally mature (ranking 10th) in the EU, but other member states are making faster progress[97].

The Swedish **smart industry strategy**, adopted in 2016, focused on four key areas: digitalisation, sustainable and resource-efficient production, creation of industrial talent and innovation. The strategy consisted of 45 concrete measures for technology development, connectivity, automation, new business and production model creation, and increased competitiveness. In late 2017, the second phase of the strategy a '**Roadmap for Smart Industrialisation**', was launched. While, the key focus areas of the strategy remained the same, the government added 37 new measures including automation and robotics programs for SMEs, national test labs for electric vehicle production and zero emission programs and incentives for energy intensive industries, etc.[98].

The Swedish smart industry strategy supports SMEs' digital transformation through various mechanisms, such as vouchers for consultancy services (EUR 10.7 million), etc. The Swedish government has also allocated EUR 1.5 million to assist in the upgrade of digital skills of SME management teams[99].

The Swedish Research Council (*Formas*) handles funding research under Sweden's National Research Program for Sustainable Spatial Planning[100] and the strategic innovation programme Smart Built Environment. **Smart Built Environment** is a plan embracing digitalisation and promoting the development of intelligent, sustainable cities, efficient resource management and reduced carbon emissions[101]. The plan's implementation started in 2016 and is expected to continue until 2028[102].

Furthermore, the adoption of **BIM** (Building Information Modelling) in Sweden is also on the rise and some best practices have emerged in the country. Currently, the Swedish government is taking measures to facilitate nation-wide implementation, and public organisations like the Swedish Transport Administration have made the use of BIM mandatory since 2015[103]. This includes the development of the **CoClass**[104], a Swedish classification system for the built environment adapted to BIM. However, according to the Swedish construction association BI, more needs to be done to fully integrate BIM in the construction value chain.

6

National and regional regulatory framework

Policy schemes

The main policy schemes introduced by the Swedish government in recent years are aimed at addressing structural barriers to the efficient functioning of the housing market. In particular, they target the undersupply of dwellings, the shortage of rental apartments, lack of developable land, cumbersome zoning and building regulations, and differing standards at a municipal level. These reforms have supported investment in the construction of dwellings. However, a housing shortage remains, despite a significant rise in new constructions over the past five years[105].

In order to enhance the implementation of the requirements of the Planning and Building Act (PBL) in 2017, the National Board of Housing, Building and Planning presented revised guidelines for municipal structure planning, focused on reducing greenhouse gas emissions[106]. The changes were approved by the Construction Federation in the same year. The amendments in the Act came into force on 21st April 2018.

In 2017, Sweden's financial supervisory authority Finansinspektionen proposed a new amortisation requirement for new housing loans. The so-called "**debt ratio brake**" (*skuldkvotsbroms*) required households that borrow more than 4.5 times their gross income to amortise their debt at a faster pace. The authority estimates that about 15.0% of new borrowers will be affected by the tightening of amortisation requirements[107]. The Swedish Construction Industry Association warned that the measure would lead to a slowdown in housing construction[108]. In 2018, the amortisation regulation was further amended by Finansinspektionen so as to be also applicable on companies subject to the Mortgage Business Act. This was done to ensure that the same amortisation requirements are applied to loans secured by homes irrespective of whether the loan is given by a company subject to the Mortgage Business Act or a credit institution[109].

To improve the availability of dwellings for the elderly in response to the predicted ageing population, as of 1st January 2018, the government increased the housing allowance available to those pensioners with pension and other income of less than SEK 15,000 (EUR 1,441) per month after tax[110].

In 2019, the Swedish government announced some of its main priorities for the housing market, including support for the rental market through rental subsidies and enforcing market rents for new constructions.

In 2019, the Swedish government also appointed an Inquiry on **better competition in housing construction** (*Bättre konkurrens I bostadsbyggandet*). This is currently known as **the Model Homes Inquiry**. The purpose of this inquiry is to draft a proposal of supporting information that can be utilised in public procurement of housing construction at a predetermined rent. Additionally, this would also assist in analysing how action by municipalities affects the ability of enterprises to develop their countrywide operations. The underlying objective of the inquiry is to favour development in which lower production costs are reflected in lower housing costs and in which companies with low-cost business models are given better operating

conditions. The Inquiry is expected to submit its final report by 14 December 2020[111].

In 2020, the Swedish government further introduced various measures to improve the situation of the country's housing market. For instance, effective from 1st February 2020, investment support for rented housing and student accommodation was reformed so that at least 10.0% of new flats have to be small (i.e. not larger than one room and a kitchen or equivalent). This amendment (under **SA.56305** to **Ordinance 2016:881**[112]) was made to increase the mix of flat sizes and to make it easier for young and vulnerable people to enter the housing market. In order to further improve the functioning of the rental housing market, other relevant initiatives were also introduced including tougher penalties for illegal sales, criminalisation of the purchase of rental contracts and tighter rules in relation to the regulations concerning exchanges of rented homes[113].

Building regulations

Sweden's National Board of Housing, Building and Planning (*Boverket*) is the regulatory body governing all building works. The main regulations and legislation in the construction sector are detailed in the **Boverket's Building Regulations** (BBR)[114], as established in the government's 22 measures to increase housing construction. These cover mandatory requirements for accessibility, dwelling design, ceiling height and utility rooms, as well as general rules for buildings, mechanical resistance and stability, fire safety, hygiene, health and environment, noise protection and energy performance. The **design regulations** (BKR) deals with areas such as load bearing structures, geo-structures, timber, masonry, concrete, steel, aluminium structures and fire resistance requirements.

The BBR set mandatory performance requirements for both residential and non-residential buildings, depending on their location and the type of heating system involved[115]. The BBR requirements are related to the thermal transmittance of the building envelope and encourage the efficient design of the energy consuming systems, including HVAC (heating, ventilation, air conditioning), hot water, lighting, auxiliary systems, as well as materials and products. Compliance with the requirements is verified through measuring the actual energy use of the finished building and showing it to be less than or equal to the allowable energy frame predicted at the design stage. Enforcement of the BBR is ensured by on-site inspections during construction and, to a lesser extent, at post-occupancy stage. The building's energy consumption should be measured over a continuous period of 12 months, to be completed within 24 months after the building is put in use[116]. Through these measurements, any gap between the designed and as-built performance of the building can be identified and corrected. In general, in Sweden the awareness of performance issues at the construction site level is relatively high[117].

The government has also proposed the Planning and Building Act on **temporary building permission** for portable building for housing purposes (proposal 2016/17:137). This would see building permits issued (with a validity of up to 15 years) that would allow for the use of temporary housing to augment permanent constructions when housing needs cannot be fully met through ordinary planning and building processes.

In 2020, the Swedish government introduced a new model for agreements on the standards in flats. These agreements expand the freedom of contract allowing landlords to offer more flexible adaptations. This will also give people more freedom of choice about the design of their own home[118].

Moreover, amendments have also been made to the Planning and Building Act to ensure better continuity in comprehensive planning and that the regulations provided support good applications. For instance, under its new **Larger Accessory Dwellings** Bill**,** effective from 1st March 2020**,** the Swedish government proposed an amendment that increased the building area permitted for the erection of an accessory dwelling in the vicinity of a one or two dwelling building without the need of a building permit. This proposal is aimed at increasing the construction of accessory dwellings and allowing construction of buildings with higher residential quality[119].

Insurance and liability related regulations

The liabilities of the different parties involved in a construction project are principally defined in a contractual arrangement. The standard forms of contracts are drafted by the **Construction Contracts Committee BKK** (*Byggandets Kontraktskommitte*). A large percentage of contracts in Sweden are based on General Conditions of Contract for Building and Civil Engineering and Installation Work (AB04), or the General Conditions of Contract for Building, Civil Engineering and Installation Work Performed on a Package Deal Basis (ABT06). The liability covers the design, planning, building and guarantee period, which is usually five years for non-conformity to the contract and ten years for important defects if it is proved to be negligent[120].

Additionally, the **Law on Construction Coverage** requires contractors to be covered through an insurance or a bank guarantee. It applies to small buildings intended for permanent habitation. Furthermore, there are other securities and warranties offered on a voluntary basis.

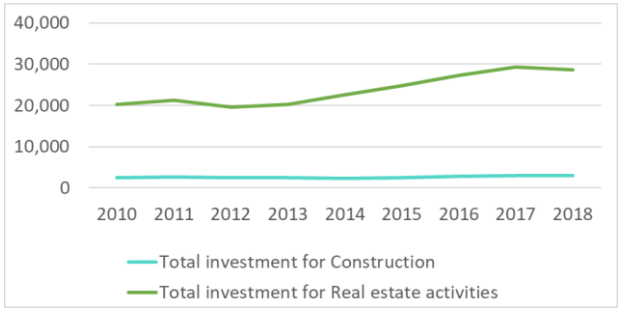
7

Current status and national strategies to meet Construction 2020 objectives

TO 1 – Investment conditions and volumes

Total investment by the broad construction sector[121] has increased moderately since 2010. Investment by the narrow construction sub-sector increased by 18.3%, from EUR 2.4 billion in 2010 to EUR 2.9 billion in 2018[122]. This was mostly driven by a 124.6% and 41.1% increment in investments in intellectual property and in machinery, going from EUR 68.7 million and EUR 1.1 billion in 2010 to EUR 154.3 million and EUR 1,5 billion in 2018, respectively. Likewise, investment in the real estate activities sub-sector increased by 41.9%, from EUR 20.2 billion in 2010 to EUR 28.7 billion in 2018. This was slightly influenced by a 2.4% increase in investments in intellectual property, from EUR 88.7 million in 2010 to EUR 90.8 million, marginally offsetting a 24.4% drop in investments in machinery amounting to EUR 692.1 million in 2018, respectively.

Figure 9: Investment by the Swedish broad construction industry between 2010 and 2019 (EUR million)

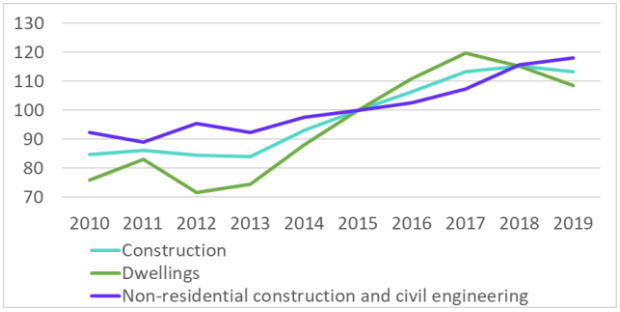


Source: Eurostat, 2020.

The investment index in the broad construction sector[123] has experienced a steady growth since 2015, rising by 13.2% over 2015-2019 (Figure 10). This trend was mainly driven by investment in dwellings by the whole economy, rising by 8.5% between 2015 and 2019. In parallel, investment in non-residential buildings and civil engineering increased at a higher pace by 18.1% over the same reference period. In absolute terms, investment in the broad construction sector totalled EUR 52.7 billion in 2018[124], with EUR 25.5 billion invested in dwellings and EUR 27.2 billion in non-residential and civil engineering[125] (Figure 10).

Investment in non-residential construction and civil engineering between 2015 and 2019 ↑ **18.1%**

Figure 10: Investment index in the Swedish construction sector between 2010 and 2019 (2015=100)



Source: AMECO, 2020.

Total **inland infrastructure investment**[126] as a share of GDP amounted to 0.8% in 2018, marginally lower than the 2010 level of 0.9% of GDP. Despite some fluctuations, annual investment in rail infrastructure in Sweden declined by 18.3%, from EUR 1.7 billion in 2010 to EUR 1.4 billion in 2018. In contrast, investments in air transport infrastructures increased substantially by 335.6%, from EUR 78.8 million in 2010 to EUR 343.1 million in 2018. Similarly, investments in road

infrastructure also increased by 49.9% over the 2010-2018 period, totalling EUR 2.5 billion in 2018.

Investment in air transport infrastructure over the 2010-2018 period ↑ **335.6%**

Investment in road infrastructure over the 2010-2018 period ↑ **49.9%**

Annual investment in rail and road **infrastructure maintenance** increased by 42.8% and 24.7%, from EUR 499.7 million and EUR 873.8 million in 2010 to EUR 713.7 million and EUR 1.1 billion in 2018, respectively. In contrast, maintenance of air transport infrastructure registered a drop of 47.9% in investment volumes over the 2010-2018 period, amounting to EUR 13.7 million in 2018.

Investment in rail infrastructure maintenance over the 2010-2018 period ↑ **42.8%**

Household renovation spending experienced an increasing trend between 2010 and 2018, growing by 8.6% up to 2018. In real terms, it amounted to EUR 877.6 million in 2018. Household renovation spending as share of GDP remained almost constant since 2010, standing at 0.4% in 2018.

The Swedish government is actively investing in the civil engineering field. In particular, the transport network was the focus of investment under the **2014-2025 National Transport Plan**, with a budget of SEK 522.0 billion (EUR 50.2 billion)[127]. This constitutes a 20.0% increase compared to the previous plan. Of the total amount, SEK 86.0 billion (EUR 8.3 billion) has been allocated for the maintenance and operation of the rail infrastructure and SEK 155.0 billion (EUR 14.9 billion) for the operation and maintenance of roads. The remaining SEK 281.0 billion (EUR 27.0 billion) was allocated for new transport projects, including a high-speed rail line between Stockholm and Linköping, and the expansion of other railway tracks[128].

In 2018, the new Swedish government announced a 73 point programme, confirming the National Plan for Infrastructure 2018-2029 with a total investment of SEK 700.0 billion (EUR 67.3 billion)[129]. This national investment plan also includes allocations for the maintenance of rail tracks and investment in new railways. The allocated financing will be distributed through three main channels: (i) operation and maintenance of state-owned railways; (ii) roads and; (iii) the development of the transport system. Overall, 77.0% of the total budget will be dedicated to the railways, which is 32.0% more than in the previous planning period[130]. In the next twelve years, Sweden is planning to invest three times more in new rail infrastructure as compared to new roads. This would beneficially shift Sweden's transport regime from roads (currently 86.0%) to railways (currently 10.0%)[131].

The 2020 Budget Bill includes concrete measures for housing in the National Negotiation on Housing and Infrastructure with municipalities. Local governments have committed to the construction of 193,130 housing units, in particular between Uppsala and the county border with Stockholm[132]. Other priority investment projects for the Swedish government include an investment subsidy for construction (with a total investment of EUR 277.0 million per year), as well as a trade and investment strategy (with a total investment budget of EUR 48.0 million)[133].

Sweden is a beneficiary of various EU funds and programmes. For instance, under **the European Structural and Investment Funds (ESIF)**, Sweden has been allocated EUR 644.3 million for smart growth, EUR 244.5 million for sustainable growth and transport as well as EUR 783.8 million for inclusive growth. These programmes are aimed at promoting growth and employment through investments, primarily in research, technological development and innovation, sustainable transport, employment and labour mobility, etc. Furthermore, under the **Connecting Europe Facility**, Sweden was allocated EUR 347.1 million for specific projects on strategic transport networks. **Horizon 2020** also contributed EUR 1.6 billion in 2019, including about EUR 248.1 million to 485 SMEs[134].

In 2019, the European Investment Bank (EIB) Group invested almost EUR 595.0 million in infrastructure[135].

In parallel, Sweden has also benefitted from investments from the **European Fund for Strategic Investments (EFSI)**. As of September 2020,

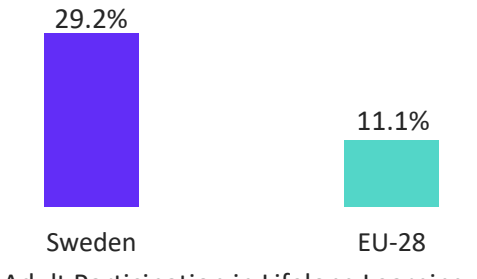
financing under EFSI amounted to EUR 3.9 billion and is set to trigger additional investments of EUR 14.3 billion. Under the infrastructure and innovation window, 41 projects have been approved, amounting to EUR 3.2 billion, and are set to trigger EUR 12.6 billion in total investments. Under the SME window, 15 agreements have been approved, involving total financing of EUR 715.0 million, and are set to trigger investments of up to EUR 2.2 billion[136].

TO 2 – Skills

Sweden has one of the highest employment rates for recent vocational education and training (VET) graduates in the EU. The employment rate of recent VET graduates stood at 88.7% in 2019, well above the EU-27 average of 80.9%[137].

The Swedish government has taken several measures to make VET more attractive. Some notable measures include the creation of VET courses that prepare for tertiary education, and the development of new apprenticeships by the Apprenticeship Centre. National and regional coordinators have also been established to help schools successfully collaborate with local enterprises. Since January 2018, a pilot project has also been initiated involving ten trade schools that can obtain a state grant of up to SEK 50,000 (EUR 4,670) per learner[138].

Correspondingly, Sweden's overall **participation in lifelong adult learning** is well above the EU-28[139] average (29.2% in 2018 versus 11.1% in the EU-28). Adult participation in education and training in the narrow construction sub-sector stood at 22.0% in 2019, notably higher as compared to the EU-27 average of 8.7%. Similarly, adult participation in education and training in real estate activities stood at 38.7% for 2019, well above the EU-27 average of 16.4%.



Adult Participation in Lifelong Learning in 2018

Boosting the rate of adult learning in Sweden is one of the major objectives of the new Swedish government's coalition agreement. As such, the government is taking appropriate steps to provide additional opportunities to adults to participate in further education and training, including improvements in the conditions of study loans made available[140].

In order to boost the development of regional support structures for work-based learning placements, the Swedish government has allocated a state grant amounting to SEK 10.0 million (EUR 935,000) per year for social partners and stakeholder organisations[141].

Additionally, the productivity growth rate also varies significantly across different market segments – higher in residential markets while lower in renovation and labour-intensive works. To develop students' knowledge and skills in the building and construction of new buildings, conversions and renovation, Sweden offers the **Building and Construction Programme** (*Bygg- och anläggningsprogrammet*). About 12,400 students are enrolled in this programme, accounting for roughly 12.0% of all VET students in upper secondary school in 2018[142,143].

Ongoing efforts for upskilling in the construction workforce are carried out by **Swedish Construction Industry Training Board (BYN)**, the national body for construction vocational training[144]. BYN works in close collaboration with European organisations to ensure that Swedish VET has a degree of uniformity within the various branches of the industry across different countries. This will eventually result in the cross-border recognition of skills and qualifications of construction workers in Europe, in their increased mobility and in uniformly high-quality constructions.

The Swedish Construction Federation also plays an active role in the training of the construction workforce through its **Entrepreneurship School** (*Entreprenörsskolan*). It offers training courses and e-learning in areas such as health and safety, construction law, construction management and energy and the environment, as well as e-learning modules and seminars[145].

To develop the energy efficiency skills of the construction workforce, the Swedish Construction Federation together with other industry

stakeholders launched Energy Builders (**Energibyggare**). This is a four-hour interactive web-based training in the field of energy-efficient construction and renewable energy tailored to all parties active on a construction site, including builders, installers, supervisors and managers. The programme includes areas such as thermal insulation, airtightness, moisture control and installations[146].

Other similar initiatives to improve the energy efficiency skill-base in the sector are also in place, including the Swedish Construction Industry Training Board's Purchaser Skills Scheme (BeställarKompetens). It aims to impart methods and tools for energy efficient renovation among clients, developers and property owners[147]. The Swedish Energy Agency's **Energy Boost** (*Energilyftet*) provides training in energy efficient construction for architects, clients, construction managers and consultants[148].

In 2017, Sweden's construction sector associations and trade unions introduced a new joint venture called **Professional Introduction** (*Yrkesintroduktionsanställning*) aimed at addressing the skills shortage in the construction industry and the obstacles for new arrivals (persons with refugee background who have recently been granted a residence permit) to enter the labour market. With the help of so-called Professional Introductory Appointments, linked to the established Vocational Training Agreement, companies in the construction sector can broaden the skills supply available to them by employing people without previous experience and vocational training. In the case of newly arrived refugees, the education will be free of charge for the company and will instead be financed by promotional funds from the state[149].

TO 3 – Resource efficiency / Sustainable construction

Under the fourth **National Energy Efficiency Action Plan (NEEAP)**, Sweden reaffirmed its energy efficiency targets as a 20% reduction in energy intensity between 2008 and 2020, i.e. the input energy per unit of GDP must decrease by 20%. Furthermore, Sweden's primary energy consumption target for 2020 is 43.4 Mtoe, with a final energy consumption of about 30.3 Mtoe[150]. Regarding buildings specifically, the target is for energy consumption per square metre to fall by 20% to 30% by 2050 relative to 1995. Results by 2016 show that the planned energy savings in the housing sector have been reached.

Sweden's total building stock accounts for 30% of its energy consumption. In line with its energy efficiency targets, Sweden is planning to cut the energy consumption in buildings by 50.0% by 2050. Additionally, it is also planning to make all new constructions nearly zero-energy buildings from 2021[151].

The 4th NEAAP also contains Sweden's second **National Strategy for Renovations** to increase energy efficiency. The document presents further analysis of barriers to renovation and possible instruments to remove those barriers to attain the objectives of the strategy.

In 2017, the Swedish Energy Agency and the National Board of Housing, Building and Planning (*Boverket*) completed the procurement of an **information centre for sustainable construction**. This information centre has been operational since 2018, and is aimed at promoting energy-efficient renovation and construction using sustainable and low climate-impact materials from a lifecycle perspective[152].

In 2019, Swedish firms had a high percentage of investment in energy efficiency (14.0% against the EU-28 average of 10.0%). As such, almost 31.0% of the existing building stock met high energy efficiency standards, up by 2pps in comparison to 2018 levels. Energy audits also increased with about half of the total firms having completed an energy audit in the last three years[153].

Likewise, the European Investment Bank (EIB) supports the construction of sustainable and energy efficient housing. For instance, in September 2019, the EIB signed a SEK 3.0 billion (EUR 288.3 million) financing facility agreement with Heimstaden Bostad AB, a Sweden-based residential company. Under the agreement, Heimstaden will develop eight residential properties in five cities in Sweden, which will result in about 3,300 new affordable homes to rent. The project is backed by the European Fund for Strategic Investments (EFSI). It also supports national and European targets for energy efficiency and contributes to CO_2 emission reduction[154].

Similarly, in May 2019, the EIB signed a SEK 1.0 billion (EUR 96.1 million) loan agreement with Rikshem AB, the Swedish property developer and owner. Under this agreement, Rikshem will use the long-term financing facility to renovate the housing stock to higher energy efficiency standards[155].

In July 2019, an EU Council decision recommended that Sweden introduce more flexibility in rental prices and revise its capital tax gains design to improve the efficiency of the country's housing market[156].

Additionally, **near-zero energy regulations** (*nära-nollenergiregler*) were introduced to the Building Regulations on 1 July 2017. The background is that, from 2021, all new completed buildings in Europe will be close to zero-energy buildings according to the EU's Energy Performance Directive. The aim of the new rules is to push the pace of development towards energy-efficient construction in Europe through high energy requirements[157]. More can be expected with the transposition of the recent EU Directive on Energy Performance of Buildings, in 2020.

Similarly, the Swedish government has introduced an energy efficiency programme to industry called the **Energy Step**. Under this programme, large companies carrying out an energy audit can apply for a state grant for an in-depth study of energy efficiency measures or investment support for the additional cost of investing in an energy efficiency proposal[158].

Furthermore, the Swedish Government also intends to introduce a climate declaration requirement when buildings are constructed, which will become effective from 1 January 2022. To implement the steps required to achieve this in an efficient and effective manner, the National Board of Housing, Building and Planning will receive SEK 10.0 million (EUR 1.0 million) per year up to 2022[159].

TO 4 – Single Market

According to the 2020 EU Single Market Scoreboard, Sweden performed in line with the EU average. In particular, it performed better in two metrices - IMI and Your Europe[160].

In relation to 2020 EU Single Market Scoreboard metrices, Sweden's performance was average particularly in case of Transposition of Law, Infringements, EU Pilot, e-Certis, EURES and SOLVIT. In parallel, Sweden performed above average in terms of Internal Market Information System (IMI) and Your Europe metrices – EU's single digital gateway aimed at providing access to information, procedures, assistance and problem-solving services[161].

As per the 2019 SBA Fact Sheet, Sweden scored above the EU-28 average, notably in terms of number of single market directives not yet transposed, average transposition delay for overdue directives, early market access for new and growing firms, number of pending infringement proceedings as well as intra-EU online exporters. The transparency of Sweden's public procurement system has also improved over the past years. For instance, the proportion of contract award notices without the contract value information has significantly decreased over the past years. Nonetheless, Sweden can further improve its performance under metrices such as public contracts secured abroad by SMEs, SMEs with intra-EU exports and imports of goods. In fact, the professionalisation of public procurers in the municipalities could further reduce the existing irregularities in public procurement[162].

The overall administrative burden for companies in Sweden is low and SMEs get a stable regulatory environment. As part of the national export strategy, coordination of export support services is offered at regional level to SMEs who want to export their goods and services[163].

In line with this effort, Sweden has set up an e-business portal (www.verksamt.se). Through this portal, more than 45 different government agencies provide information, targeted support and offer services such as company registrations and tax calculation. Further, in September 2018, a new agency for digital government was also set up to develop, coordinate and support public sector digitisation at both a central and local level[164].

During 2018, one policy measure was taken aimed at fostering regional growth (*Uppdrag respektive erbjudande att redovisa prioriteringar avseende det framtida regional tillväxtarbetet, inklusive sammanhållningspolitiken*). The policy measure addresses challenges in sustainable regional growth. It seeks advice concerning cross-border (county and national) cooperation in view of the

proposed EU regulation for cohesion policy 2021-2027[165].

The European Commission is also assisting Swedish authorities in preparing a study to digitalise the issuance of import as well as export permits and re-export certificates in compliance with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)[166].

Finally, regarding the implementation of **Eurocodes**, all EN Eurocode parts have been published as National Standards, with 46 Parts being the obligatory means for structural design, as stipulated in the BFS 2011:10 regulation. In addition, these Parts are enforced in public procurement by the Public Procurement by Law (2007:1091). National Annexes are published on all 46 compulsory Parts, but not on the remaining 13 non-compulsory ones, and are available in English. No other national standards are used in parallel with Eurocodes[167].

TO 5 – International competitiveness

According to the 2019 Global Competitiveness Index, Sweden ranked 8th out of 141 economies in terms of its performance[168].

In terms of **trade openness**, out of 141 economies, Sweden ranked 2nd with respect to border clearance efficiency, 7th with regards to trade tariff percentage and 11th in relation to prevalence of non-tariff barriers, while 113th when it comes to complexity of tariffs[169].

With regards to the **internationalisation of construction SMEs**, the export value of all construction-related projects in Sweden stood at EUR 1.3 billion in 2019, almost in line with its 2010 level of EUR 1.2 billion. Sweden's share of exports of all construction-related products in 2018 stood at 25.0% of the total production value, well above the EU-27 average of 11.4% for 2018. Sweden's share of exports decreased to 24.1% in 2019.

In the context of **inward FATS (Foreign Affiliates Statistics)[170],** value added at factor cost in the narrow construction sub-sector increased by 47.2% between 2010 and 2017[171]. Similarly, turnover in the narrow construction sub-sector increased by 74.2% over the 2010-2017 period. In contrast, value added at factor cost, as well as turnover in the real estate activities sub-sector, decreased by 1.2% and 11.5% between 2010 and 2017. Correspondingly, turnover in the Swedish narrow construction and the real estate activities sub-sectors, in terms of **outward FATS[172],** increased by 29.9% and 107.4 % over the 2010-2017[173] period, respectively.

Conversely, Sweden performed in line with the EU-28[174] average in relation to **internationalisation**. As per the 2019 SBA Fact Sheet, Sweden performed well in six indicators including involvement of trade community, formalities/procedures, SMEs with extra-EU exports and imports of goods, extra-EU online exporters and border agency co-operation. With regards to the remaining three indicators, the country performed slightly below the EU average, particularly in terms of advance rulings, information availability and formalities/automation[175].

Sweden has taken several measures to further strengthen its competitiveness. By the end of 2018, Regional Export Centres were formed in all regions and the online import/export information at verksamt.se/utland was further developed. It also included an updated matching tool to find regional export support and the launch of a guide on export. Other measures include the innovation collaboration with India in the field of Smart Cities. It covers in-depth cooperation between Swedish and Indian companies, researchers and relevant public institutions[176].

To support the internationalisation of Swedish SMEs, and particularly micro-SMEs, the Swedish Agency for Economic and Regional Growth offers **Internationalisation Cheques** (*Checkar för internationalisering*) to companies with less than fifty employees having a product or service they wish to bring to foreign markets. The checks are used to hire external expertise to help businesses draft an internationalisation strategy, carry out market research, identify potential partners abroad and understand legislative and insurance requirements in the foreign country of interest. Companies can receive a maximum of EUR 250,000 over three years[177]. The total budget available for the scheme is SEK 50 million (EUR 4.8 million)[178].

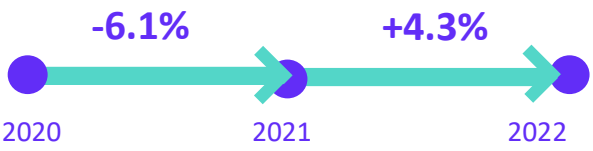
8

Outlook

Over the 2020-2022 period, the Swedish GDP is forecast to decrease by 2.0%, primarily due to weak export performance, lower fixed capital formation and subdued domestic demand.

Swedish **GDP** is forecast to annually decrease by 6.1% in 2020 and then increase by 4.3% in 2021, totalling SEK 4.5 trillion (EUR 434.0 billion) in 2021.

Expected GDP growth between 2020-2022

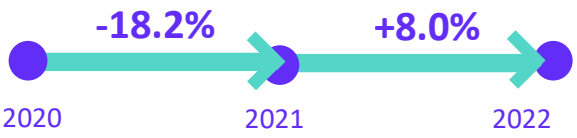


Likewise, the **volume index of production** in the broad construction sector is estimated to decline by 7.3 index points (ip) in 2020, mainly due to a 9.5 ip and 4.7 ip decline in the construction of buildings and civil engineering sub-sectors in 2020, respectively. In contrast, the volume index of production in the broad construction sector is expected to increase by 4.7 ip in 2021, mostly driven by a similar rise in the construction of buildings and civil engineering sub-sectors by 2.9 ip and 5.5 ip over the same reference period, respectively. This further highlight that a sector revival is expected to start in 2021.

Moreover, the **total value added of the broad construction sector** is expected to drop by 16.2% in 2020 before increasing by 9.0% in 2021. Likewise, the **turnover of the broad construction sector** is estimated to decline by 17.3% in 2020 and then rise by 8.8% in 2021.

Similarly, the **number of persons employed** in the broad construction sector is also expected to decrease by 18.2% to 555,615 in 2020 and later increase by 8.0%, reaching 599,955 in 2021. Most of this decline over the 2020-2022 period is anticipated to come from the narrow construction (-15.2%), the architectural and engineering activities (-11.4%) and the manufacturing (-6.1%) sub-sectors, partially offsetting a 1.6% increase in real estate activities sub-sector.

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



The Swedish government is already undertaking several initiatives to promote the **housing market** and the construction sector. Recent measures undertaken by the government include new inquiry initiatives like the Model Homes Inquiry, reforms in rented housing and student accommodation investment support, amendments to the Planning and Building Act along with introduction of tougher penalties for illegal sales, criminalisation of the purchase of rental contracts and tighter rules in relation to the regulations concerning exchanges of rented homes.

With regards to civil engineering, the Swedish government has already announced the National Investment Plan 2018-2029 amounting to SEK 700.0 billion (EUR 67.3 billion), including separate allocations for the maintenance of rail tracks and investments in new railways. Other priority investment projects also included a EUR 277.0 million subsidy for construction investments (yearly allocated) and a trade and investment strategy (total investment budget of EUR 48.0 million), etc.

Overall, the Swedish construction sector is forecast to witness a sharp deceleration in 2020, followed by limited growth and market correction from 2021 onwards.

References

1 Please note that this 2019 data is a nowcast - please refer to the methodology notes for further details.
2 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.
3 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.
4 Regional data is unavailable for sequent years.
5 Apparent labour productivity refers to the gross value added per person employed.
6 No data available for subsequent years.
7 No data available for subsequent years for the productivity in the broad construction sector.
8 Please note that this 2019 data is a nowcast - please refer to the methodology notes for further details.
9 No data available for subsequent years.
10 The gross operating rate is the ratio of gross operating surplus to turnover, and is an indicator of profitability
11 The gross operating rate is the ratio of Gross Operating Surplus to Turnover, and is an indicator of profitability.
12 No data available for subsequent years.
13 European Commission, Country Report Sweden 2019. February 2019. https://ec.europa.eu/info/sites/info/files/file_import/2019-european-semester-country-report-sweden_en.pdf
14 Please note that this 2019 data is a nowcast - please refer to the methodology notes for further details.
15 Please note that this 2019 data is a nowcast - please refer to the methodology notes for further details.
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29 No data available for subsequent years.
30 No data available for subsequent years.
31 According to Eurostat, construction services comprises Construction Abroad (code 250) and Construction in the Compiling Economy (code 251). They do not include architectural services, or engineering services.
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43 The overcrowding rate is defined as the percentage of the population living in an overcrowded household

44 Eurostat, Overcrowding rate. http://ec.europa.eu/eurostat/product?code=ilc_lvho05a&language=en&mode=view

45 Eurostat, Severe housing deprivation rate is defined as the percentage of population living in the dwelling, which is considered as overcrowded, while also exhibiting at least one of the housing deprivation measures. Housing deprivation is a measure of poor amenities and is calculated by referring to those households with a leaking roof, no bath/shower and no indoor toilet, or a dwelling considered too dark.

46 The housing cost overburden rate is the percentage of the population living in households where the total housing costs represent more than 40 % of disposable income

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61 Atradius Payment Practice Barometer 2019, Sweden: navigating through challenging economic times, October 2019. https://group.atradius.com/publications/payment-practices-barometer-sweden-2019.html

62 Ibidem.

63 Ibidem.

64 CRIBIS D&B Payment Study 2020 - Sweden. https://www.dnb.co.uk/content/dam/english/business-trends/DNB_Payment_Study_2020.pdf

65 The warehouse in this example is defined as a structure for general storage activities, with two stories, above ground and with total constructed area of approx. 1,300 square meters. The ground, on which the warehouse is built is owned by the company that will use it and valued at 50 times income per capita. There are architectural and technical plans prepared for the warehouse, which are also taken into account and counted as procedures if their preparation requires obtaining further documentation or getting prior approvals from eternal agencies. Finally, in this example the warehouse takes 30 weeks to construct, excl. all delays due to administrative and regulatory requirements.

66 No data available for subsequent years.

67 European Commission, Country Report Sweden 2020. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0526&from=EN

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