European Commission

European Construction Sector Observatory

Country profile Italy

June 2018

In a nutshell

The Italian construction sector is a vital part of the national economy, with its gross value added accounting for 18.7% of GDP. Italy has experienced an 8.9% drop in the number of construction companies between 2010 and 2016, with negative repercussions on production which experienced a continuous decline and fell by 32.2% over the same period. Profitability and employment in the sector have also declined and the turnover and gross operating surplus dropped in 2016 by 17.3 and 17.2%, respectively, compared to 2010. The number of workers has also been declining over the same period of time by 22.4%.

Number of construction companies, 2010-2016 ↓ **8.9%**

Turnover change, 2010-2016 ↓ **17.3%**

Several specific issues are currently undermining the viability of the Italian construction industry. Firstly, access to finance has been particularly unfavourable, with outstanding loans to the construction sector declining by 21.8% between 2010 and 2016 (from EUR 170.6 billion to EUR 133.4 billion). Secondly, 69% of companies reported delays in payment from Public Administrations in 2016, thus having to wait an average of 172 days before being paid. Moreover the Italian construction sector reports one of the worst payment practices in the general economy, with only 5.7% of payments being settled by due date in 2016. As a consequence, the number of failures in construction is still at historically high levels, however the number of bankruptcies has declined over the past years, having in 2016, 11.1% less than the previous year.

On a positive note, although residential building permits and the house price index dropped by 54.0% and 14.0% over 2010-2016, respectively the housing market has been picking up since 2014, with the number of residential sale transactions increasing by 16.3%, from 444,636 in 2015 to 517,164 in 2016. This is spurred by low interest rates (2.4% compared to 3.6% in 2010) and improved mortgage lending to households. To offset the 15.1% drop in construction investment over 2010-2016, investment initiatives have been set up, and the investment has been slowly improving since 2014.

The Budget Law 2017 introduces important measures to stimulate public and private infrastructural investment. In particular it focuses on seismic safety measures (up to 85% deduction) and energy efficiency. Moreover, the Investment and Infrastructure Development has a budget of €47 billion of euros for the period 2017-2032. EU funds are also crucial, with EUR 3.4 billion from the European Regional Development Fund (ERDF) allocated for network infrastructures in transport and energy alone during 2014 -2020.

There has also been an improvement in innovation and sustainable construction among companies, with increasing R&D expenditure in some sub-sectors. The country's main innovative strengths lie in International scientific co-publications, and SMEs innovating in-house. Moreover the use of BIM technologies is growing in the sector, and they will be mandatory for all projects by 2022. The market for energy efficient renovation is also booming, spurred by the Renovation Bonus and Eco Bonus, offering tax deductions of up to 65% on eligible renovation interventions. Italian construction companies also fare remarkably well in foreign markets, both within the EU and internationally (Latin America, Africa and the Middle East).

After a period of sustained decline, during the next years there will be a modest recovery in the construction sector, mainly led by investment in infrastructure and by EU funds. However, the workers employed in construction will continue to decrease, and the suboptimal efficiency of the public administration may discourage private foreign investment in the future.

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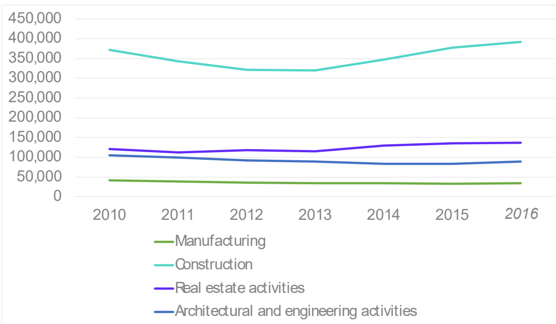
1
Key Figures

The **number of enterprises** in the broad construction sector in Italy totalled 1,025,687 in 2016[1] (Figure 1). Companies in the narrow construction sector accounted for 50.4% of the total, followed by real estate activities (23.6%), architectural and engineering activities (19.3%) and manufacturing (6.7%). The overall number of enterprises in the broad construction sector declined by 8.9% between 2010 and 2016, driven by the 14.9%, 10.2% and 9.7% decrease in the number of narrow construction, manufacturing companies, and architectural and engineering activities respectively. Conversely, the number of companies in real estate activities increased by 8.9%. During this period the overall number of enterprises has been decreasing gradually every year, except for 2016 when there was a small 1.6% increase. **Production in construction**[2] experienced a continuous decline, dropping by 32.2% between 2010 and 2016 (Figure 2).

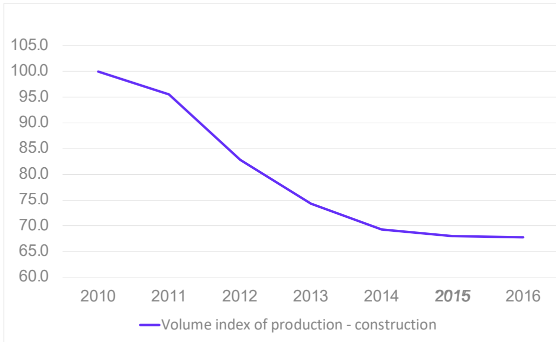
Production trends in construction, 2010-2016 ↓ **32.2%**

Figure 1: Number of enterprises in the construction sector in Italy over 2010-2016



Source: Eurostat, 2017.

Figure 2: Volume index of production in the construction sector in Italy, 2010-2016 (2010=100)

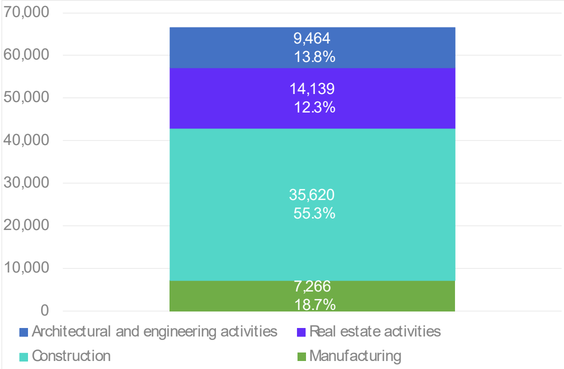


Source: Eurostat, 2017.

In 2016[3], the total value added of the broad construction sector was EUR 90.6 billion (Figure 3), with the narrow construction sub-sector having the largest share (52.9%, i.e. EUR 47.9 billion), followed by real estate activities (19.7%, i.e. EUR 17.8 billion), manufacturing (16.3%, i.e. EUR 14.8 billion) and architectural and engineering activities (11.4%, EUR 10.0 billion).

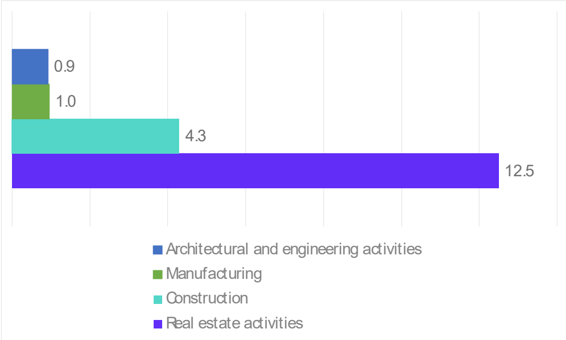
The share of gross **value added** of the broad construction sector in the GDP[4] reached 18.7% in 2015[5], with real estate activities having the largest contribution (12.5%) (Figure 4).

Figure 3: Value added in the construction sector in Italy in 2016 (EUR m)



Source: Eurostat, 2017.

Figure 4: Gross value added as a share of GDP in the construction sector in Italy, 2015 (%)



Source: Eurostat, 2017.

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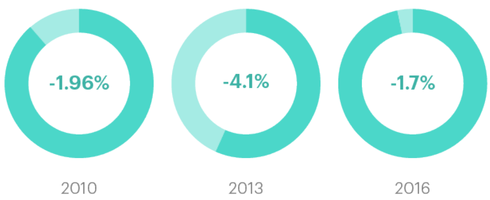
Macroeconomic Indicators

In 2016, Italy's **GDP** amounted to EUR 1,569 billion, representing a 0.9% increment since the previous year but 2.2% lower than in 2010. This trend started in 2014 and is expected to continue in the following years, supported by increasing employment. Nevertheless, this growth is slower compared to the EU-28 average, mainly due to weak productivity[6].

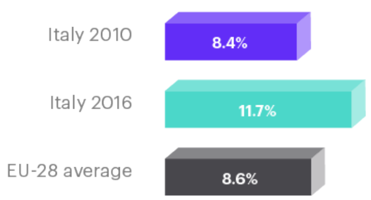
In addition, the **inflation rate** in Italy has been particularly volatile since 2010, falling from -1.96 in 2010 to -4.1 in 2013 and back to -1.7 in 2016.

Inflation rate in Italy

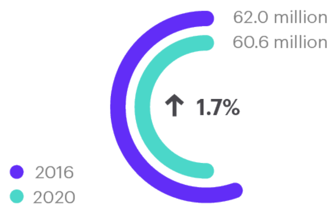


At the same time, the **unemployment rate** in Italy has also been improving. It stood at 11.7% in 2016, lower than the previous year (11.9%) but well above its 2010 level (8.4%) and the EU-28 average of 8.6% for 2016. Youth unemployment (below the age of 25) was at 37.8% in 2016, significantly above the EU-28 average of 18.7%[7].

Unemployment rate



In terms of demographics, the **total population** of Italy amounted to 60.6 million people in 2016. It is projected to increase to 62.0 million by 2020 (+1.7%) and to 64.1 million by 2030 (+5.2%). In parallel, the number of Italians living outside the country is increasing at a faster rate, reaching 5.4 million in 2016, compared to 4.1 million in 2010[8]. The employment rates, especially among youth, mentioned above, have contributed to this labour force outflow.



Total population

In 2016, the **working age population** (from 15 to 64 years) accounted for 64.3% of Italy's total population, while people over 65 years accounted for 22.0% of the total[9]. The life expectancy in Italy has increased by nearly three years from 2000 to 2015. As a consequence, the working age population is projected to decrease in the future, accounting for 56.5% of the total in 2050, while the proportion of the population over 65 will increase substantially (49.0%), exacerbating the issue of ageing population. This could drive an increased demand for hospitals and care homes in the future.

In 2016, general **government expenditure** as a share of GDP in Italy was 49.4%, above the EU-28 average of 46.3%[10]. The **general government deficit** as a share of GDP amounted to -2.5% in 2016, considerably above the EU-28 average (-1.7%)[11] but far below 2010's value of -4.2. Furthermore, the **general government gross debt** amounted to 132.0% in 2016, well above the EU-28 average of 83.2% and considerably higher than in 2010 (115.4%)[12]. **The government debt-to-GDP ratio** is at a very high level (132.8 in 2016) but it is expected to decline moderately over the next decade[13] , mainly due to higher nominal growth and primary surplus.

According to the Doing Business 2018 report[14], Italy has an overall position of 46th out of 190 countries in 2017. Nevertheless, Italy ranked 66th, in terms of ease of **starting a business**. This represents a worsening compared to the previous years, 2016 (63th) and to 2015 (57th). Registering a firm takes 6 procedures, above the OECD high-income average of 4.9, and 6.5 days, below the OECD high-income average of 8.5. Furthermore, the cost of starting a business represents 13.7% of income per capita, quite high compared to the 3.1% OECD high-income average. However, the paid-in minimum capital required is negligible (0.0), compared to the OECD high-income average (8.7% of income per capita).

> Italy performs below the EU average in all Small Business Act for Europe, which includes entrepreneurship, according to the SBA Fact Sheet.

Its weaker areas concerning entrepreneurship are early stage entrepreneurial activity, early stage entrepreneurial activity for female population and opportunity driven entrepreneurial activity and entrepreneurship education, particularly at post-secondary level. Nevertheless, entrepreneurship as a desirable career choice and the high status given to successful entrepreneurs score above the EU average[15]. However, SMEs are faced with a considerable administrative and regulatory burden of bureaucracy, which has been estimated at EUR 4.4 billion for construction SMEs alone[16]. Progress towards the simplification of administrative procedures has been made through the implementation of the 'Do' Decree (*Decreto 'del Fare'*) and subsequent amendments, estimated to entail yearly savings of EUR 700 million, thus lifting a major barrier to entrepreneurship[17].

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Regarding the **financial market development,** Italy is also bellow the EU-average. Indeed, it ranked 126nd out of 138 with respect to this indicator, according to the World Economic Forum Global Competitiveness Report 2017-2018. This position is even lower than previous year (122nd). Indeed, access to finance is cited as the fifth most problematic factor for doing business. Financing through the local equity market ranks comparatively better (79th), followed by affordability of financial services (101st), Legal rights index (106th), Availability of financial services (111th) and soundness of banks (116th). Conversely, venture capital availability places the country at the 127st position[18].
Access to finance in the general economy has been experiencing a declining trend due to the crisis. The firms access to finance is still heavily influenced by bank loans, where some vulnerabilities persist[19]. Nevertheless facilitation of small and medium size firms' access to finance is being addressed in the 2014-2020 EU programmes. This measures mainly include, allowances for corporate equity, mini-bonds and the central guarantee fund for SMEs[20].

In February 2014, the government introduced a law converting the Destination Italy *(Destinazione Italia)* plan into legislation. This contains important measures in favour of entrepreneurship and SMEs, such as facilitated loans (75% at zero interest rate) to youth or women, SME Vouchers up to EUR 10,000 for IT material or training, and a further EUR 22.5 million to the "Fund for the promotion of trade and the internationalisation of businesses". An important instrument in this respect is the SME Guarantee Fund *(Fondo di garanzia PMI)*, which provides state-backed guarantees on loans taken out by SMEs (see Access to finance for construction enterprises). In 2016, the scheme issued guarantees worth EUR 11.6 billion covering loans worth EUR 16.7 billion (+11.4% compared to 2015), supporting over 70,000 SMEs[21]. The European Investment Fund (EIF) signed a guarantee agreement with the Italian government under the Competitiveness of Enterprises and Small and Medium-sized Enterprises (COSME) programme, allowing the Guarantee Fund to support over EUR 1 billion of financing to 20,000 SMEs[22]. The budget of the programme for 2017 amounts to EUR 895 million[23].

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3

Key economic drivers of the construction sector

Productivity

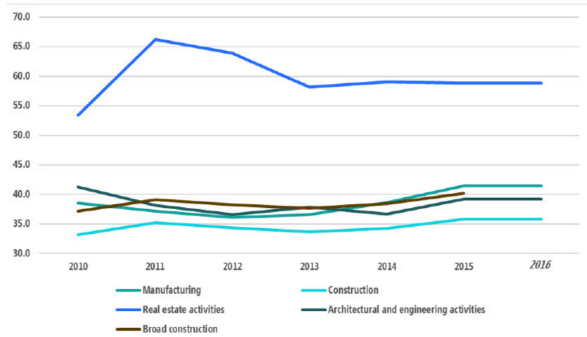
Labour productivity within the broad construction sector has shown a generally increase trend, nevertheless this growth remains weak. It has increased from EUR 37,223 in 2010 to EUR 40,168 in 2015[24], a 7.9% improvement. This was mainly led by the 10.1% increase in real estate activities, from EUR 53,400 in 2010 to EUR 58,7097 in 2016. This is followed by a 7.9% productivity improvement in narrow construction, from EUR 33,200 to EUR 35,831, the lowest across the sub-sectors. Productivity in the manufacturing sub-sector was similar, having a 7.7%, reaching EUR 41,452 in 2016. Conversely, productivity in architectural and engineering activities sub-sector experienced a 5.2% decrease in productivity between the same period, reaching EUR 39,173 (Figure 7).

> The biggest increase in productivity was found from 2014 to 2016. Productivity trends in construction are affected by the employment fluctuations.

During this period, the labour market improved the most having the headcount employment growing by 0.8% in 2015 and 1.2% in 2016. This increase is a consequence of the labour market reforms, the abolition of regional taxes on permanent employment, temporary tax incentives for new permanent hires, and also due to historically low investment levels[25].

> The improvement of labour market and the increase of employment are a consequence of the labour market reforms, the abolition of regional taxes on permanent employment, temporary tax incentives for new permanent hires, and also due to historically low investment levels.

Figure 5: Labour productivity in the construction sector in Italy over 2010-2016 (EUR k)

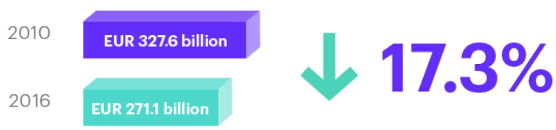


Source: Eurostat, 2017.

Profitability

The **turnover** of the broad construction sector experienced a 17.3% drop, falling from EUR 327.6 billion in 2010 to EUR 271.1 billion in 2016[26] due to the crisis. The decrease during this period was particularly pronounced in narrow construction (-21.1%) and in manufacturing (-21.0%), while architectural and engineering activities declined only by 3.2% and real estate activities experienced a small increase of 2.0%. The turnover had been decreasing from 2010 to 2015 by 18.6%, with the slight recovery in 2016 (1.7%).

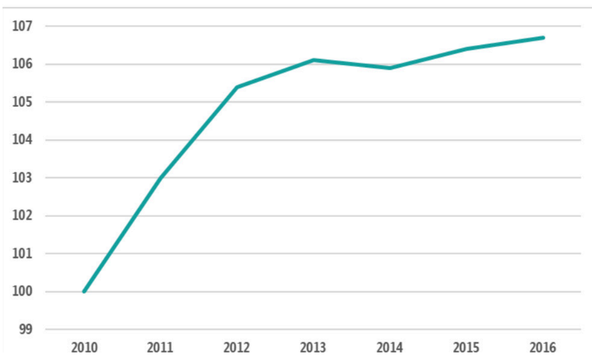
Turnover of the broad construction sector



Similarly, the **gross operating surplus** dropped by 17.2% between 2010 and 2015 , from EUR 57.6 billion to EUR 47.7 billion in 2015[27]. The gross operating rate of the broad construction sector[28], which gives an indication of the sector's profitability, was 17.9% in 2015, 0.3 percentage points above the 2010 value (17.6%). At the same time, the construction cost index rose by 6.7% over 2010-2016, fuelled by the 6.7% increase in labour costs between 2010 and 2013, although it has been stabilising then (Figure 8).

Despite the improvements, the low productivity and increased costs make it hard to close the competitiveness gap. In the first semester of 2017, the construction cost for residential buildings increased by 0.7%. Nevertheless, the small labour cost in§crease during 2014 and 2016 (0.4%), has helped to sustain the cost competiveness[29].

Figure 6: Construction cost index for residential buildings over 2010-2016 (2010=100)



Source: Eurostat, 2017.

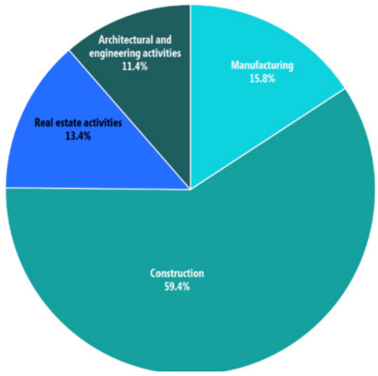
Employment

In 2016[30], the broad construction sector **employed 2,254,918 people**, a 22.4% decrease compare to 2010. There was a continuous decrease between 2010 and 2015 of 23.6% with a slight recovery in (1.6%). The broad construction sector employed 9.0% of persons in the total economy in 2015. Narrow construction employed 59.4% of the total workforce in the broad construction sector in 2016 (1,338,921 people), followed by manufacturing (15.8%), real estate activities (13.4%) and architectural and engineering activities (11.4%) (Figure 9). The decline in the construction workforce between 2010 and 2016 was mainly experienced in construction (-26.5%) and manufacturing (-20.8%) subsectors, as well as in real estate (-12.5%) and engineering/architectural (-10.7%) activities.

Number of people employed in the broad construction ↓ 22.4%

As for **employment by specific occupation**, the number of elementary occupation workers in the construction sub-sector saw the largest decline, from 140,000 in 2010 to 76,000 in 2016 (-45.7%), followed by managers, from 120,000 to 67,000 (-44.5%). In the real estate sub-sector, technicians and associate professionals had the highest decline, from 86,000 in 2010 to 80,000 in 2016 (-7.9%), being the single largest occupation in the sub-sector. Conversely, elementary occupation workers in real estate increased by 76.4%, from 11,000 in 2010 to 19,000 in 2016. On the other hand, elementary occupations and professionals in manufacturing activities presented a significant increase of 33.3% and 60.6% respectively. However, service and sales workers, and managers decreased by 33.9% and 28.7% respectively during the same period.

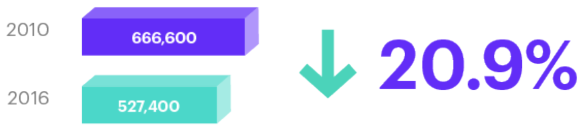
Figure 7: Percentage of people employed by construction sub-sectors in Italy in 2016



Source: Eurostat, 2017.

The number of **self-employed workers** in the construction sub-sector experienced a drop from 666,600 in 2010 to 527,400 in 2016 (-20.9%). Their share in the total number of self-employed persons in the general economy declined from 13.2% to 11.1% during this period of time. Self-employment in the real estate sector increased by 0.6% compared to 2010, accounting for 1.4% of the self-employed in the general economy. It had decreased during 2010-2015 but has slightly recovered in 2016.

Number of self-employed workers in the construction sub-sector

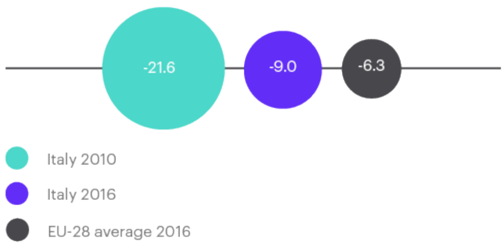


Finally, SMEs play a fundamental role in terms of employment, since they employed 95.1% of the total workforce of the broad construction industry in 2015.

Business confidence

The **consumer confidence** indicator, negative for the past decades, has improved from -21.6 in 2010 to -9.0 in 2016. The consumer confidence dropped to a bottom low of -38.5 in 2012 and, though subsequently improving, remained negative in 2016. Similarly, **industry confidence** dropped from -4.3 in 2010 to -15.4 in 2012 and then improved in the subsequent years, recording a value of -2.7 in 2016 which is expected to improve in the following years. The **construction confidence** indicator recorded the worst performance, being at -34.1 in 2010 and remaining in deep negative values since then. Nevertheless, it has been improving continuously, reaching -19.3 in 2016.

Consumer confidence



In parallel, the **investment ratio** declined from 19.9% in 2010 to 17.3% in 2016. However, it has recovered from 2014 to 2016, 0.5 percentage points. Conversely, the **investment per worker** has been increasing since 2010, reaching EUR 110,700 in 2015, which is 10.4% above the 2010 value (EUR 100,300).

According to the National Association of Building Contractors *(Associazione Nazionale Costruttori Edili – ANCE)*, the year 2016 has been disappointing for the construction sector in terms of investments and output. Nevertheless, ANCE is more optimistic about the next years due to the increased focus of the budget on the construction industry[31] (see TO 1 - Investment conditions and volumes).

Domestic sales

Between 2010 and 2016, the ranking of the **most domestically sold construction products** by value has remained constant in Italy. Although the top domestically sold products remain the same during the last five years, the volume of their trade has changed considerably. During 2010 to 2016, the value of 'prefabricated building material', 'pallets and other load boards of wood', 'bridges and bridge-sections of iron or steel', and 'blocks, plates, sheets and other' have increased the most by 46.8%, 64.9, 95%, and 72.32% respectively. Contrarily, other products saw a drop in their domestic sale value, with 'Ready-mixed concrete' and 'Other structures' or 'Cement materials' falling by 39.6%, 43.8%, and 54.3% respectively. Table 3 presents the top 5 most domestically sold construction products, both in Italy and the EU-28, which made up 57.4% of all Italian construction product sales in 2016.

Export of construction-related products and services

The ranking of the **most exported construction products** has also kept the same products in the top 5 since 2010. Nevertheless, the value of the country exports varied significantly over the years. The biggest value increase between 2010 and 2016 was experienced in 'Plaster products for construction purposes' and 'Marble, travertine, alabaster, etc.' products with a 208.5% and 168.1% increase respectively. On the other hand, 'Other structures and other' and in 'Cement material', have dropped by -66.4% and -19.5% respectively. The five most exported construction products from Italy and the EU-28 are summarised in Table 4. Together, these made up 79.3% of all construction product exports in 2016.

Table 3: 5 most domestically sold construction products in Italy and in the EU in 2016

Italy			EU-28
Product	Value (EUR m)	Share in construction product domestic sales (%)	Product
Prefabricated buildings of metal (group 251110)	5,925.4	19.2	Other structures (group 251123)
Other structures (group 251123)	4,630.8	15.0	Ready-mixed concrete (group 236310)
Doors, windows, etc. (group 251210)	2,926.7	9.5	Doors, windows, etc. (251210)
Ready-mixed concrete (group 236310)	2,136.7	6.9	Prefabricated buildings of metal (group 251110)
Windows, French windows, etc. (group 162311)	2,077.2	6.7	Windows, French windows, etc. (group 162311)

Source: PRODCOM, 2017.

Table 4: the 5 most exported construction products in Italy and in the EU in 2015

Italy			EU-28
Product	Value (EUR m)	Share in construction product domestic sales (%)	Product
Ceramic tiles and flags (group 233110)	3,949.8	48.6	Ceramic tiles and flags (group 233110)
Marble, travertine, alabaster, (group 237011)	913.8	11.2	Other structures (group 251123)
Other worked ornamental or building stone (group 237012)	664.3	8.2	Marble, travertine, alabaster, etc. (group 237011)
Other structures (group 251123)	581.1	7.1	Prefabricated buildings of metal (group 251110)
Doors, windows, etc. (group 251210)	336.0	4.1	Builders' joinery and carpentry, of wood. (group 162319)

Source: PRODCOM, 2017.

> In terms of cross-border provision of construction services, Italy exported EUR 416 million worldwide in 2016, considerably above the 2010 value (EUR 93 million), but only 1.1% higher than in 2013.

Specifically, in 2016, 69.7% of exports (EUR 290 million) were made to countries outside the EU-28, compared to 51.8% (EUR 48 million) in 2010. The value of exports to countries within the EU-28 experienced an important increase, from EUR 45 million in 2010 to EUR 126 million in 2016. Moreover, the number of exports to the EU represented 22.8% in 2013 and has increased to 30.3% in 2016. In parallel, Italy imported a total of EUR 75 million in construction services in 2016, a 3.7% more than in 2010, and a 43.8 decrease compared to 2015. In 2016, EUR 31 million came from EU-28 countries and EUR 44 million from outside the EU-28. Italy therefore achieved a **trade surplus** of EUR 341 million in 2016.

Access to finance in the construction sector

The Italian construction sector has particularly suffered from the cut in bank financing during the past years. The total volume of **outstanding loans** advanced to the construction sector in Italy decreased since 2010, reaching EUR 133.4 billion in 2016 (-21.8%). In 2016, the construction and real estate sectors account for EUR 43.3 billion and EUR 20.8 billion worth of bad debt, i.e. 27.4% and 13.1% of the total bad debt in the economy (EUR 158.3 billion) and for over 40% of corporate non-performing loans (NPL)[32]. This has contributed to the risk-averse approach to lending and to the ensuing considerable reduction in the credit extended to the industry.

According to the European Semester Country Report, financing conditions in Italy remain particularly difficult for the construction sector[33]. Thus, in 2015, only 18% of all bank financing was granted to the construction sector (5% of which for investments in constructions and 13% for purchasing buildings), compared to 30% in 2007 (12% for investments in construction and 18% for purchasing buildings)[34].

In particular, the value of new loans granted to companies specialised in the construction of residential buildings amounted to EUR 8.2 billion in 2015, 10.6% lower than 2014 (EUR 9.1 billion) and 65.2% below 2010 (EUR 23.5 billion). This lack of financial support contributed to the pronounced increase in construction costs for residential buildings. Similarly, new loans to non-residential construction companies experienced a 32.0% drop between 2007 and 2015, from EUR 14.7 billion to EUR 10.0 billion. However, contrary to residential construction loans, these have shown a 67.3% growth from 2014 to 2015[35]. The loans for the first nine months of 2016 for both residential and non-residential sectors (5.7 billion and 6.1 billion respectively) suggest that the total amount will be similar to 2015.

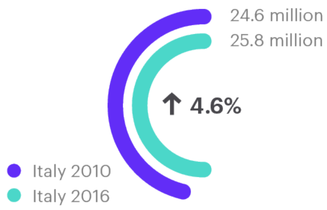
According to the National Construction Sector Association - ANCE *(Associazione Nazionale Costruttori Edili)* Italian construction companies are not sufficiently aware of their rating in terms of creditworthiness and of the criteria used by banks to assess them. ANCE thus believes that greater transparency and exchange of information between banks and companies could contribute to improving their relationship and facilitate access to finance for creditworthy businesses. To this end, an agreement between ANCE and the Italian Banking Association *(Associazione Bancaria Italiana)* was introduced. This foresees a working group to assess the relationship between banks and construction companies, identify solutions to financing issues, and promote private investments in public infrastructural projects. According to ANCE, the high risks associated with the sector stem from the undercapitalisation of Italian construction companies, as well as their inability to present their projects in a clear and structured manner when requesting financing. To this end, ANCE and Banca Intesa Sanpaolo signed a comprehensive agreement in 2016 aiming to facilitate access to finance for construction companies. Under the agreement, a rating system tailored to construction firms will be developed, based on both qualitative and quantitative indicators, and a checklist of all necessary documents required when requesting funding will be made available to construction firms, so as to shorten the financing approval time[36].

> For the construction sector, the need to diversify sources of funding has now become an urgent need, given the collapse of financing for construction companies.
> As an example, the National Construction Sector Association (ANCE) has monitored the minibond market, a financing instruments dedicated to SMEs, since their introduction, and it shows that 107 Italian SMEs have issued minibonds[37].

According to the report of Bank of Italy, companies should commit themselves to the activation of new financing channels, diversifying from the traditional bank loan.

Finally, the Ministry of Economic Development has put in place a construction sector-specific rating system to evaluate requests for guarantees under the SME Guarantee Fund, one of the main instruments in place to provide financial support to construction SMEs (see Access to finance in the national economy), since its selection criteria were not deemed to be appropriate for the assessment of construction companies. Thus, over 90% of construction and real estate firms could have direct access to the Fund, a considerably improvement considering that only 50 applications out of a total of 10,570 from the construction sector were approved for financing in 2014 under the scheme (i.e. only 0.5%)[38]. This new system was enforced in June 2017[39].

Access to housing



Number of households, 2010-2016

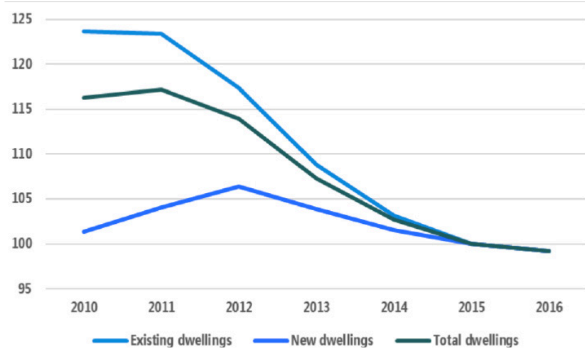
The **number of households** has been steadily growing since 2010, reaching 25.8 million in 2016 (+4.6%). Moreover, a growing proportion of the population lives in cities and greater cities (37.6% in 2014[40]). These factors, together with the lowest levels of granted building permits and the ensuing fall in the number of newly built housing units, are putting pressure on residential construction.

Household loans have remained quite stable since 2010. The main increase was registered in 2011 when the number of **granted building permits** increased by 4.4% with respect to 2010. Compared to 2010 value, 2015's housing loans are 2.8% higher (EUR 36, 8 million).

Housebuilding has been declining steadily since 2010, when the number of granted building permits were around 100,000. There was a big decrease, reaching 46,000 building permits issued in 2016, representing a 54.0% drop since 2010. Moreover, house prices in Italy have seen a continuously decreasing trend since 2010, with the **house price index** dropping by 14.6% over 2010-2016 (Figure 10). In 2017, it decreased by 0.2%[41]. This was even more pronounced for existing dwellings, with the corresponding price index experiencing a 19.7% fall, compared to the 2.1% decline for new dwellings.

Moreover, around 50% of Italian citizens report cases of corruption and abuse of power when issuing building permits[42].

Figure 8: House price index in Italy over 2010-2016 (2010=100)



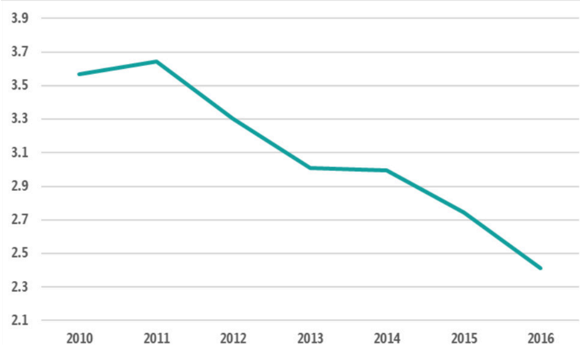
Source: Eurostat, 2017.

Nevertheless, the housing market has been on the recovery path since 2014. Indeed, the number of residential real estate transactions picked up in 2014, with about 417,524 housing units being sold (a 3.6% increment since 2013). This further increased to 444,636 in 2015, with major cities such as Rome, Milan and Turin reporting the highest values[43]. In 2016, the number of sale transactions is estimated to have amounted to 517,164, 16.3% higher than 2015[44].

The revival of the Italian housing market can be attributed to the significant decrease in house prices since the crisis and to the enforcement of a more favourable housing tax regime in January 2014, making purchasing residential properties more convenient, particularly from the secondary market. In addition, the **mortgage interest rates** reached the lowest value since the last decade. It fell to 2.4% in 2016, compared to 3.6% in 2010 (Figure 11) and is expected to continue to decrease (2.2% in 2017) Coupled with the increasing mean annual equivalised net income (EUR 17,890 in 2015) are also spurring the recovery of the residential property market. Indeed, total **outstanding residential loans** to households increased by 36.9% over 2008-2015, from EUR 264.3 billion to EUR 361.8 billion.

The revival of the Italian housing market can be attributed to the significant decrease in house prices since the crisis and to the enforcement of a more favourable housing tax regime in January 2014.

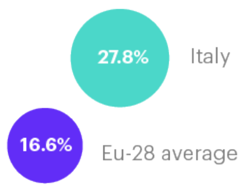
Figure 9: Mortgage rates for loans for over 5 years original maturity (%)



Source: ECB MFI Interest Rate Statistics, 2017.

Due to the ease of accessing mortgage loans and to various tax breaks and advantages, **homeownership** in Italy has been high since before the crisis, averaging at 73.2% over 2010-2015, peaking at 74.2% in 2012 but declining slightly to 72.9% in 2015[45]. This rate increases to 78.0% for the population whose income is above 60% of the median equivalised income, but drops to 52.4% for those below this threshold. Moreover, the **housing cost overburden rate**[46] was at 9.6% in 2016, below the EU-28 average of 11.1% but higher than the than the value recorded in 2010 (7.8%[47]) . Nevertheless, the **overcrowding rate**[48] was at 27.8% in 2016, well above the EU-28 average of 16.6%[49]. Similarly, the **severe housing deprivation rate**[50] reached 7.6% in 2016, above the EU-28 average of 4.8%[51] and also higher than in 2010 (7.0%).

Overcrowding rate, 2016



Infrastructure

> According to the Global Competitiveness Report, Italy ranked 27th out of 138 for its infrastructure in 2017, two positions higher than the previous year.

Italy ranked 19th for its available airline seat kilometre, 34st in terms of the quality of its railroad infrastructure, 45th for the quality of its roads and 60th for port infrastructures[52]. In general the investment and maintenance in Italy's infrastructure has decreased. Therefore, to offset this decline, the government's 2017 Budget Law allocates an increased amount of public resources to public infrastructure projects, through means such as the Infrastructural Investment and Development Fund and the special allocation for the earthquake affected regions (see TO 1 - Investment conditions and volumes).

In addition, the infrastructure density of Italy's road and rail has been constant since 2010, having negligible improvement between 2010 and 2015[53].

4

Key issues and barriers in the construction sector

Company failure

The business demography in the broad construction sector has generally seen a decrease in the number of company births and an increase in the number of deaths between 2010 and 2014[54], despite some fluctuations. **Company births** in the construction sub-sector dropped by 22.4%, from 50,255 in 2010 to 38,977 in 2014, whereas the number of **company deaths** increased by 23.0%, from 51,368 to 62,139. Similarly, real estate activities experienced a 24.4% fall in company births (from 11,092 in 2010 to 8,386 in 2014) and a 39.0% increment in deaths (from 9,491 to 13,192). Conversely, company births in the architectural and engineering activities sub-sector increased by 36.3%, from 13,200 to 14,968 over 2010-2014, whereas the number of company deaths also increased by 44.7%, from 10,201 to 17,931. Bankruptcies have been declining since 2014, with 2,900 construction companies filing for bankruptcy in 2016, 11.1% below the 2015 value[55].

> The first semester of 2017 recorded 19.7% less bankrupts than the previous year during the same period[56]. Despite the ongoing improvement, the number of failures in construction is still at historically high levels.

Bankruptcies can be ascribed to factors including increasing costs incurred, limited access to finance, as well as the difficulties of public clients in settling outstanding amounts within a reasonable timeframe (see Late Payment).

Trade credit

In Italy, 42.5% of the total **value of B2B sales** was transacted on credit in 2017, slightly above the average for Western Europe (38.8%). Specifically, 46.8% and 39.4% of the total value of domestic and foreign B2B sales were made on credit, respectively, highlighting the higher perceived risk associated with foreign transactions. Trade credit terms are mainly granted to B2B consumers in the construction, consumer durables and services industries[57].

Since 2010, a **trade credit network** *(Circuito di Credito Commerciale)* has been operational across 10 Italian regions. It consists of a complementary and supplementary currency, able to complement the traditional one, it is a circuit in which companies, through the use of a digital account unit, have the possibility to support and finance each other without interest. This scheme operates in parallel with traditional bank loans, complementing them and offering additional financing opportunities to SMEs. To date, over a hundred construction companies have adhered to Sardex, the regional network in Sardinia, as well as numerous professionals within the architectural and engineering activities sub-sector. This has led to increased construction and renovation activities for clients (small businesses), which would not otherwise have been able to afford such works. In 2014, 13% of the total value of Sardex transactions originated from the construction sector, and this is continuing to grow[58]. In 2016, Sardex closed with 67 million credits (one euro per credit). Its financial statements at 31 December 2016 amounted to €2.8 million (significantly higher than the €2.3 million in 2015). Moreover in 2017, the companies that joined the Sardex Circuit carried out an average of 600 transactions per day and it is expected to continue to increase and expand in 2018[59].

Late payment

> The Italian construction sector reports one of the worst payment practices in the general economy, with only 5.7% of payments being settled by due date in 2016, compared to 16.4% in the transport and distribution sector.

The Italian construction sector reports one of the worst payment practices in the general economy, with only 5.7% of payments being settled by due date in 2016, compared to 16.4% in the transport and distribution sector. Specifically, 12.4% of payments in the construction sector are carried out with a delay of up to 30 days, with 44.3% of payments occurring with a delay between 30 and 90 days and 14.7% with a delay between 90 and 120 days. Moreover, 24.9% of payments occur with delays of over 120 days, the highest in the general economy. The "D&B Paydex" indicator for construction increased by the 5 points over the last decade, suggesting a negative trend in the payment discipline[60].

Late payment from the Public Administration (PA) is a particularly problematic issue in the construction sector, with 69% of companies reporting delays in payment in 2016, although this is an improvement compared to 78% at the beginning of 2015. However, average payment terms remain unchanged from 2015 and well above the 60 day limit imposed by the EU Late Payment Directive (2011/7/EU). Indeed, despite its transposition in 2012 through the Legislative Decree 192/2012, the

Late Payment Directive is reported to be largely disregarded by many Public Administrations. According to ANCE, PAs often request that contractors delay the issuing of invoices, so as to postpone the deadline for repayment, which is a clear breach of the EU Directive. Thus, on average, contractors carrying out public works were paid 172 days (i.e. 5.5 months) after issuing the invoices in the second half of 2016 (comparable to 177 days in 2015), resulting in payment delays of 112 days. This is an improvement compared to the 160-day delays in 2013, but is worse than 2015[61]. The total value of delayed payments to these companies was estimated at EUR 8 billion[62]. As a result, in December 2017, the EU Commission referred Italy to the Court of Justice for failing to ensure suppliers are paid on time during the five years after the directive has entered into force[63].

The issue is further aggravated by the split payment practice, entered into force in January 2015, whereby PAs no longer reimburse the VAT on the received services directly to the contractors. Instead, contractors are only paid between 78% and 90% of their invoices by the PAs, with the remaining VAT amount being paid by the State[64]. Thus, full payment can be further delayed to up to 470 days, creating liquidity issues for construction companies estimated at EUR 1.3 billion per year[65].

The main reasons for payment delays by domestic B2B customers in Italy are insufficient availability of funds (77.7%), having the buyer using outstanding debts or invoices as a form of financing (21.8%), and formal insolvency of the buyer (14.9%)[66].

Time and cost of obtaining building permits and licenses

Italy ranked 96th out of 190 in terms of 'dealing with construction permits' in 2017, according to the World Bank's Doing Business 2018, significantly worse than the previous year (86nd)[67]. Completing administrative formalities to build a warehouse requires 12 procedures, below the OECD high-income average (12.5 procedures), but takes 227.5 days, well above the OECD high-income average of 154.6 (Table 5). Furthermore, the cost of building a warehouse represents 3.6% of the value of the warehouse, above the OECD high-income average of 1.6%. Namely, **obtaining a building permit** takes 135 days and costs EUR 38,661, being the most expensive procedure.

According to a public consultation on the efficiency of PAs launched by the Italian government in 2013, obtaining construction-related licences is the second most complicated practice to simplify out of the 100 analysed procedures. For instance, to comply with safety requirements, over 60 procedures are needed. Furthermore, many regulations constantly change throughout the construction works, such as landscaping authorisation, which has undergone five amendments only in a year[68].

Table 5: Construction procedures timing and costs in Italy

Procedure	Time to complete	Associated costs
Obtain nulla osta from the Regional Technical Office (Genio Civile)	30 days	EUR 1,275
Obtain geo-technical study of the land	15 days	EUR 2,000
Obtain topographic survey of the land plot	15 days	EUR 1,000
Obtain building permit	135 days	EUR 38,661
Hire an independent engineer to test structure	1 day	EUR 6,000
File certified notification of starting activity ("SCIA")	0.5 days	EUR 216
Receive on-site inspection by the Fire Department	1 day	no charge
Obtain occupancy certificate	30 days	EUR 468
Register the building	5 days	EUR 159
Apply for water and sewerage connection	1 day	no charge
Receive on-site inspection and estimation of water and sewer-	1 day	no charge
Obtain water and sewerage connection	29 days	EUR 600

Source: Doing Business overview for Italy, World Bank, 2017.

Skills shortage

There was a general increase of 71.7% in tertiary education in Engineering, manufacturing and construction between 2010 and 2012[69]. Specifically in architecture and building, it increased by 100.7% over 2010-2014, from 13,427 to 26,950. Moreover, **adult participation in education and training** in the construction sub-sector experienced an increasing trend, although from a very low basis, growing from 2.6% in 2010 to a peak of 4.2% in 2014, subsequently declining slightly to 4.5% in 2016, meaning a 73.1% increase. Similarly, adult participation in education and training in real estate activities decreased, despite some fluctuations, from 6.4% in 2010 to 6.0% in 2016.

> In parallel, the industry is facing a shortage of different skills mainly due to the high decrease of labour force after the crisis.

During the next few years the employment will stay flat and there will be a surplus in low skill occupations, mainly painters, building structure cleaners and related trades workers, and building frame and related trades workers[70]. On the other hand it is mainly needed high skill occupation construction managers, professionals that have both technical and management skills. This is particularly relevant given that construction projects are increasingly based on cooperation between several contractors. Better interaction between higher education institutions (imparting technical knowledge) and companies (providing practical and managerial experience) is thus necessary[71]. Furthermore, the quality of vocational education and training (VET) varies considerably across the country, since it is predominantly coordinated at the regional level. Typically, the skills demand in the North is better defined than in the South, and VET is tailored accordingly[72].

Recently, the Italian construction industry has been experiencing a 'substitution' effect, whereby the Italian workforce is declining, being replaced by a growing proportion of foreign workers. Despite being often as skilled as the local counterparts, they are typically hired for unskilled (and thus cheaper) work, constituting a suboptimal use of human capital[73]. Moreover, illegal labour is a recurring and worsening issue in the Italian construction sector with the rate of illegal work in the construction sector reaching 15.9% in 2014, higher than in the general economy (15.7%)[74].

In addition, in 2015, Italy was the sixth country that received more posted workers, with 21.4% of the total coming from the construction sector. On the other hand the sent posted workers doubled compared to 2010, on EU average 41.5% come from the construction sector nevertheless there are no figures specific to Italy[75].

Sector & sub-sector specific issues

Material efficiency and waste management

In Italy, **construction and demolition (C&D) waste** is classified as 'special waste', according to the Decree 152/06. C&D waste amounted to 51.8 million tonnes in 2014, accounting for 39.7% of the total special waste production in 2014 (130.6 million tonnes)[76]. This represents a 5.3% increase from the 49.2 million tonnes reported in 2013[77]. Of the total C&D waste production, 50.2 million tonnes were non-hazardous, compared to 47.9 million tonnes in 2013.

The current Italian regulation foresees the need to estimate the amount of construction waste that is likely to result from construction activities as a part of construction permit (licence).

Italy has not developed a national waste management plan since it is defined at regional level, which makes it vary considerably across the country. Nevertheless waste materials are regulated by the Ministerial Decree of 5 April 2006 no. 186, which establishes the procedure to be followed for the transformation, treatment and recycling of construction waste products.

> The main obstacles to sustainable waste management include the stakeholders apprehension in using products derived from waste[78]. Italy is at Level 2 (Developing) out of 4, in CDW management implementation[79].

Climate and energy

Emissions of greenhouse gases (carbon monoxide and dioxide, methane, nitrous oxides and particulate matter) from activities in the construction and real estate sub-sectors amounted to 5,250,595 tonnes and 263,006 tonnes in 2014, respectively. The former have experienced a 17.0% decrease since 2010 (6,326,245 tonnes), and the latter declined by 20.7% (331,519 tonnes in 2010).

In Italy sellers or lessors need to provide an **energy performance certificate** *(Attestato di Prestazione Energetica – APE)* when selling or renting a building specifiying the energy performance and energy class of the building, CO2 emissions. A new simplified APE was introduced in October 2015, to have a standard version throughout the country[80].

5

Innovation in the construction sector

Innovation performance

Italy is classified as a **Moderate Innovator**, according to the European Innovation Scoreboard 2017, with a 75.1 innovation index. The innovation performance has decreased a little from 2010 to 2016 (75.4 to 75.1) [81]. The country's main strengths lie in International scientific co-publications, SMEs innovating in-house, Intellectual assets in particular design applications, and employment in knowledge-intensive activities. Conversely, it performs below the EU average in terms of Venture capital investment, in private co-funding of public R&D expenditures, and License and patent revenues from abroad. The biggest improvements since 2010 have been in human resources and in research systems[82]. On the other hand, according to The Global Competitiveness Report , Italy is ranked 34th of 140 countries in 2017 in terms of Innovation, highlighting its 24th and 29th position in PCT patent applications and capacity for innovation, respectively[83].

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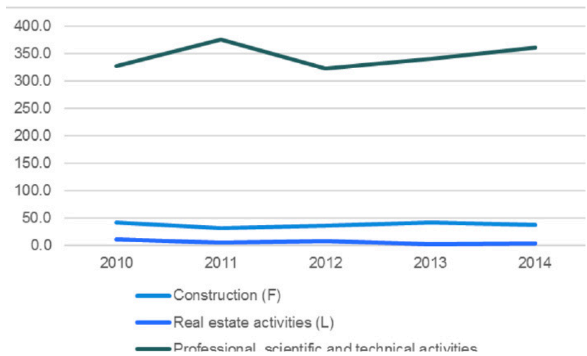
Business enterprise R&D expenditure (BERD) in the broad construction sector has shown some fluctuations over the past years (Figure 12). Namely, the construction sub-sector experienced a decline between 2010 and 2014 of 10.0%, decreasing from 41.8 million to EUR 37,600 in 2014. BERD in real estate activities declined the most between 2010 and 2014, by 71.6% from EUR 10.3 million to only EUR 2.9 million. On the other hand, professional, scientific and technical activities saw a 10.4% increase over 2010-2014, reaching EUR 360.7 million by 2014, the highest across the sub-sectors.

In parallel, the total **R&D personnel** (full-time equivalents – FTE[84]) in the broad construction sector mirrored the trend in BERD. In line with the evolution of the BERD, only the professional, scientific and technical activities sub-sector increased, growing by 23.31%, from 3,308 in 2010 to 4,079 in 2014. On the contrary, total FTE in the construction sub-sector declined by 14.4% during the same period, from 441 in 2010 to 679 in 2014. Real estate activities saw the highest decline, in parallel to the BERD, a 88.4% decrease in FTE, from 441 in 2010 to 51 in 2014[85].

Figure 10: Business enterprise R&D expenditure (BERD) per construction sub-sector in Italy over 2010-2014 (EUR m)



Source: Eurostat, 2017.

Moreover, there has been a small increase in the annual average number of **construction related patent applications** in 2016 compared to 2010 (1.1%). In fact, it has fluctuated over this period, 2010-2016 but it finally reached 2010 levels again. The European Patent Office (EPO) and United States Patent and Trademark Office (USPTO) filled in an average of 269 patents per year during these years, with the year 2011 reporting the highest number of applications (287).

There has been a decrease in the number of firms ranked within the top 1,000 EU companies by R&D in the construction sector. In 2012 there were six Italian construction firms and it has decreased to only three in 2016[87].

Between 2012 and 2014, 30.5% of Italian construction companies with more than 10 employees declared to have carried out innovation activities, although this figure is lower than the one recorded for 2010-2012 (37.6%)[88]. These activities are related to products, processes, organisation or marketing. Specifically, the share of construction companies carrying out product-process innovation amounted to 17.7% of the total, lower than the 20.3% reported in 2012. These figures remain lower than in the sectors of industry and services, where companies that undertook innovation activities over 2012-2014 accounted for 50.5% and 42.2% of the total, respectively[89].

The **use of Building Information Modelling (BIM)** technologies will become mandatory for all construction projects from 2025 in Italy in order to digitalise the construction industry and facilitate data sharing among stakeholders. This decree will implement art. 23 paragraph 13 of the new Code of Public Market, drafted by the Baratono Commission[90]. Such transition will be done in three phases. Firstly by 2019, works valued at more than 100 million euros will be mandatory to be performed with BIM. Furthermore, by 2022 the obligation will be extended to complex construction projects requiring particular safety standards[91]. The last phase is to make it mandatory for all project, by 2025.

> To boost the uptake of innovation in the sector, the Ministry of Economic Development funded the INNOVance research project, aiming to create a national construction database centralising all information related to products and works across the entire construction value-chain[92].

The project has now been completed and a prototype of the database has been developed[93]. At the regional level, Lombardy launched the **Smart Living** measure, aiming to support the revival of the industry by encouraging companies to cooperate to promote innovation and the uptake of digital and new construction technologies. A budget of EUR 15 million has been devoted to the measure to support R&D projects in the field of construction, materials, interior design, smart appliances, building automation, digital manufacturing and sustainable construction[94]. In order to apply for funding under the programme, beneficiaries must be consortia of at least three partners, one of which an SME and one university, so as to foster cooperation between industry and academia in the construction field, whilst promoting the R&I capacity of smaller firms[95].

6

National & Regional Policy & Regulatory Framework

Policy schemes

The Regional Law no. 20 of 14 July 2009 in Italy introduced a comprehensive **Housing plan** *(Piano casa)* aiming at improvement of existing residential buildings, and being able to expand or demolish buildings. With different regulations in each region, the plan applies differently depending on the region. This plan was designed for a duration of one year; however, since then almost all Italian regions have continued to extend it. Examples of Regions that have extended it up to 2018/2019 include Sardinia[96] and Puglia[97]. Some of the measures from this Law include extending detached homes by 20% to 30% depending on the region, if the energy efficiency of the building will be greater than the current legal requirement or if they incorporate clean energy systems[98].

Italy offers a number of housing aid initiatives, including:

- **National Fund to support access to rented properties** *(Fondo nazionale per il sostegno all'accesso alle abitazioni in locazione)*. The initial budget of EUR 100 million increased to EUR 200 million for the years 2014/2015. The fund supports families with difficulties in paying rent by providing a subsidy equal to the difference between social housing rent and the rent actually paid by the beneficiary for his/her dwelling. Under the new Budget Law 2017, EUR 90 million will be provided to the Fund for the years 2017-2019[99].
- **Home purchase and/or renovation fund** *(Plafond casa)*: Law No. 124 of 28 October 2013, allocated EUR 2 billion to support access to home buying loans, focusing on energy efficient housing[100].
- **Council estates recovery plan** *(Edilizia popolare - Piano di recupero alloggi dei comuni)*. With a budget of **EUR 568 million** until 2017, the plan finances the recovery of 14,300 condemned social housing units and their energy efficiency improvements. Namely, 2,300 of these units will be destined specifically to socially vulnerable categories (i.e. families with total annual revenues below EUR 27,000, households with elderly members, handicapped or terminally ill residents, etc.)[101].
- **The Fund supporting interests on mortgage loans** *(Fondo contributo agli interessi sui mutui ipotecari)*. With a total budget allocation of EUR 113.4 million for the period 2015-2020 (EUR 18.9 million per year), the Fund supports the purchase of social housing units by the tenants[102].

> The First Home Guarantee Fund (Fondo di Garanzia Prima Casa) was launched in early 2015 by the Ministry of Economy and Finance and offers a 50% state guarantee on the mortgage for the purchase and/or energy upgrade of the first home.

Moreover, the **First Home Guarantee Fund** *(Fondo di Garanzia Prima Casa)* was launched in early 2015 by the Ministry of Economy and Finance (MEF). With a triennial budget of EUR 670 million for 2014-2016, plus contributions from regional and public bodies up to a total of EUR 20 billion, it offers a 50% state guarantee on the mortgage for the purchase and/or energy upgrade of the first home[103]. This initiative was extended for the whole 2017[104]. Although the programme is open to anyone, priority is given to young couples (below the age of 35), single parents, social housing tenants and individuals with atypical work contracts[105] who are not credit worthy enough to qualify for a loan. The scheme has proved to be very successful up until now, with over 70% of Italian banks adhering to it. Between January 2015 and December 2016, 14,000 requests to access the guarantee have been made, with the value of issued mortgages guaranteed by the Fund amounting to EUR 1.6 billion. 63% of requests were made by beneficiaries' under 35 years old[106].

In 2018, a new housing loan guarantee fund was introduced offering citizens guarantees to obtain mortgage loans for the purchase of real estate, and for the renovation or energy efficiency improvement of buildings units to be used as first home[107].

Given the poor condition of Italy's extensive school building stock, the government introduced a comprehensive **School construction government strategy** *(Strategia del governo per l'edilizia scolastica)*, with a total budget of EUR 3.9 billion for a broad range of interventions, including renovation of schools, safety improvements, anti-seismic upgrades, energy efficiency and construction of new buildings, such as sports complexes and student accommodation[108]. The strategy includes various lines of financing through different programmes, such as the School Construction Plan. The Plan entails interventions that fall under three sub-programmes, namely #ScuoleNuove, #ScuoleSicure and #ScuoleBelle. These involve the construction of new schools and major renovation works, safety improvements, and small maintenance and décor interventions, respectively. The strategy has currently allowed the completion of over 12,000 interventions and is supported by the European Investment Bank (EIB), which granted EUR 905 million worth of loans in a first round, followed by an additional EUR 530 million in loans in November 2016[109]. Moreover the decree Law No. 104/2013 and the Economy and Finance Document (DEF) from aim to promote investments in public buildings, in particular in school buildings in Italy. It enables the different Italian regions to take out loans from banks including the EIB or the Cassa Depositi e Prestiti, with amortisation costs to be paid by the State. Regarding this initiative, the National Workers' Compensation Authority (INAIL) has budgeted from 2014 to 2016 EUR 100 million per year for projects to improve housing safety and energy efficiency[110].

In 2016, new tax measures were also launched by the government to boost the country's property market. These include the abolition of the TASI and IMU tax for principal homes and a 25% discount on the IMU tax for houses being let on an 'agreed rental' *(canone concordato)* contract - a contract with a minimum period of three years plus two years of automatic renewal, which also includes compliance to the local authorities' minimum and maximum rents[111].

Finally, the Budget Law 2017 also introduced a comprehensive set of measures under the **Housing Italy Plan** *(Casa Italia)* to finance both the reconstruction of the areas hit by the earthquakes in August 2016, as well as safety improvement interventions against seisms on existing buildings (see TO 1 - Investment conditions and volumes). For instance, the **Earthquake Bonus** *(Sisma Bonus)* entails a tax deduction of 50% for works carried out to make a dwelling earthquake-proof. The deduction goes up to 85% if the interventions improve the property by two risk classes. This incentive will be in place until 2021[112].

Insurance and liability related regulations

The **Civil Code** defines the liability framework applicable to the Italian construction sector. Specifically, article 1662 obliges the contractor to carry out works according to professional standards, with any defects constituting a breach of the legal requirement. Article 1669 outlines the liability for flaws affecting the stability and resulting in the destruction of the building. Building contractors alone have civil liability towards the client while other parties like architects are only marginally liable under the Civil Code[113].

Responsibility for the stability of constructions is also dictated by the 1971 law related to buildings with metal or concrete structures *(Legge del 5 novembre 1971, n. 1086)*, and the 1974 law concerning buildings located in seismic areas *(Legge del 2 febbraio 1974 n. 64)*[114].

According to the Civil Code, in case of breach of the construction contract, the limitation period is ten years from the date of the contractual breach, with both the buyer and the subsequent owners of the final construction being legally entitled to take action against the building contractor. However, in case of hidden defects, the contractor is liable for two years from the date of delivery of the works, provided the client has notified him of such defects within 60 days of their discovery. As for serious defects, the client has a year to notify the contractor of their discovery and file a claim[115].

> The insurance framework of the Italian construction sector is structured around a series of compulsory policies, covering financial risks and risks intrinsic to construction sites and activities (the so-called C.A.R. – Contractors' All Risk).

The contractor has to have a decennial insurance policy (Copertura decenniale postuma), protecting the future buyer of the building against any damages resulting from defects and destruction of the building, as stipulated by the Decree n. 122/2005 and by article 1669 of the Civil Code[116].

Additional optional insurance policies, related for instance to waterproofing flaws, are also available. However, to cut down costs, contractors generally limit their coverage to the compulsory requirements[117].

Building regulations

The main regulations and legislations regulating the design and carrying out of private building works are the Civil Code (specifically article 1655), the Urban Planning Law 1150/1942 (*Legge urbanistica)* and the Presidential Decree n. 380 of June 6th 2001 *(D.P.R. 6 giugno 2001, n. 380)*. The latter specifies technical standards for buildings and defines the scope of action of regions and municipalities[118]. Indeed, Italy follows a regional approach to building regulations, with local health agencies and municipalities being responsible for building requirements. For instance, health requirements of dwellings, such as air ventilation and orientation, are governed by regulations at the local level.

In November 2014, the **Unlock Italy decree** *(Decreto Sblocca Italia)* officially came into force. It contains a **'Housing Package'** *(Pacchetto casa)* encompassing a number of measures for the revival of the Italian construction sector[119]. Namely, a **standard construction permit** *(Regolamento edilizio unico)* for all municipalities has been introduced to simplify administrative procedures, standardise the performance requirements of buildings and put an end to over 8,000 existing regulations which vary substantially between municipalities. This will reduce the cost and time of building procedures. Moreover, a building permit is no longer required for renovation and alteration works that do not change the volume of a dwelling, being instead replaced by a simple communication to the municipality.

> In November 2014, the Unlock Italy decree (Decreto Sblocca Italia) officially came into force. It contains a 'Housing Package' (Pacchetto casa) encompassing a number of measures for the revival of the Italian construction sector.

Also the 'Protocol for evaluation of environmental sustainability' has been set up by the government body ITACA *(Istituto per la Trasparenza L'aggiornamento e la Certificazione degli Appalti)* and is applied regionally in the corresponding building regulations. Other building regulations such as ensuring the reuse of locally valued building, or regulation regarding indoor air quality also exist in the country[120].

7

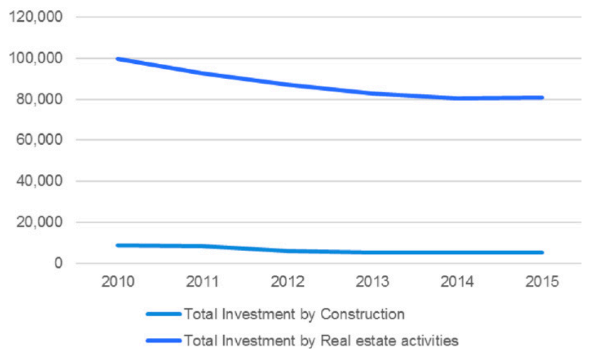
Current Status & National Strategy to meet Construction 2020 Objectives

TO 1 - Investment conditions and volumes

Total **investment by the broad construction sector**[121] has generally declined since 2010 (Figure 13). Investment by real estate activities experienced an initial 19.1% drop between 2010 and 2015, from EUR 99.7 billion to EUR 80.6 billion. Similarly, investment by the construction sub-sector fell by 37.6% over 2010 to 2015, from EUR 8.7 billion to EUR 5.5 billion. In terms of investment in intangible assets, the construction sub-sector invested EUR 297.8 million in intellectual property products in 2015, 8.2% lower than 2010, whereas the real estate sub-sector invested EUR 186.2 million, 16.3% below 2010.

Total investment by the sub-construction sector, change 2010-2015 ↓ **37.6%**

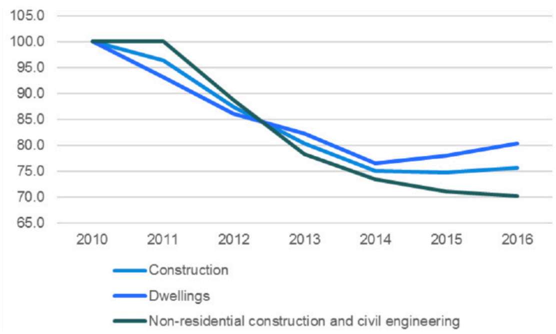
Figure 11: Investment by the Italian broad construction industry between 2010-2015 (EUR m)



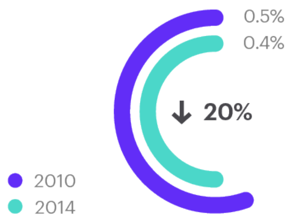
Source: Eurostat, 2017.

Total investment in construction sector, change 2010-2016 ↓ **15.1%**

Figure 12:Investment in the Italian construction sector between 2010-2016 (2010=100)



Source: AMECO, 2017.



Total inland infrastructure investment as a share of GDP

Total **investment in construction**[122] in 2016 is 15.1% lower than in 2010. It dropped between 2010 and 2014 by 18.8%, and has been increasing steadily since then. Investment in dwellings decreased continuously by 30.0% over 2010-2015, and started to recover in 2016 (3.0% compared to the previous year). Investment in non-residential construction and civil engineering saw the hardest hit between 2016 and 2010, decreasing by 24.4% and 29.7% respectively. In absolute terms, investment in the construction sector totalled EUR 133.8 billion in 2015[123], out of which EUR 72.8 billion was invested in dwellings and EUR 61.0 billion was devoted to non-residential and civil engineering[124].

Total **inland infrastructure investment** as a share of GDP fell from 0.5% in 2010 to 0.4% in 2014. Investment in rail infrastructure in Italy dropped by 14.0% between 2010 and 2013, from EUR 4.8 billion to EUR 4.1 billion, but increased during 2013-2014 and reached again 2010 levels. Contrarily, the country saw a 13.9% increase in its road infrastructure investment over 2010 and 2014, from EUR 3.4 billion to EUR 3.9 billion.

In parallel, investment in **rail infrastructure maintenance** declined by 8.82% between 2010 and 2014, from EUR 7.8 billion to EUR 7.2

billion. On the other hand, road infrastructure maintenance increased by 48.6% over the same period, from EUR 6.4 billion to EUR 9.6 billion.

Household renovation spending has seen a decreasing trend since 2010. Indeed, it fell by 9.8%, from EUR 8.2 billion in 2010 to EUR 7.4 billion in 2015, 10.3% lower. However, it accounted for 0.7% of household disposable income, as in 2010. In addition, the total volume of investment renovation in residential and non-residential buildings have increased by 9.0% between 2010 and 2014.

> To boost investments in large public infrastructure, particularly transport, the Italian government introduced a Programme for Strategic infrastructure 2014-2016 (Programma delle Infrastrutture Strategiche – PIS), aiming to align the government's logistical and infrastructural investment priorities with the EU vision and strategy.

The programme focuses especially on the integration of Italy's main port, airport and urban hubs with the 4 TEN-T Core Network Corridors throughout the country, and has identified 25 priority projects for a total value of EUR 70.9 billion[125].

Nevertheless according to the Italian Construction contractors Association (ANCE) 2016 was "the year of missed opportunities" for the construction sector: some important measures of the Stability Law for 2016 did not produce the expected results, mainly due to the sharp slowdown in the public works sector. 2016 ended with a disappointing results for investments in construction: +0.3%, compared to the 1.0% forecast a year ago. Moreover, in the first nine months of 2016, banks' funding flows were down by 4.3% in the residential sector and -14.1% in the non-residential sector. Investments in new residential construction continued to decline during 2016, and fell by 3.4%. Some positive signs for investments could be found in the non-residential private sector (+0.8%), as well as a slight increase in investments in public works (+0.4%)[126].

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The Budget Law 2017 has contributed to the improvement of forecasts, and paid great attention to construction with measures related to the relaunch of infrastructure investments and the strengthening of existing fiscal incentives. In particular, it focuses on seismic safety measures (up to 85% deduction) and energy efficiency. Among the measures contained in the Budget Law, great expectations come from the increase in resources allocated to new infrastructure: +23.4% (EUR 16.8 billion) in 2017 compared to the previous year (EUR 13.5 billion). The greatest contribution to this increase comes from the measures included in the Casa Italia programme and the resources allocated to the reconstruction of the earthquake areas in Central Italy[127]. The increase in resources available for public infrastructural projects is due to various measures and programmes. For instance, the **Infrastructural Investment and Development Fund** *(Fondo investimenti e sviluppo infrastrutturale)* was set up under the 2017 Budget Law to finance infrastructure investments in transport, water and wastewater infrastructure, environmental rehabilitation, public construction, prevention of seismic risks and urban rehabilitation. The Fund has a budget of EUR 1.9 billion for the year 2017, EUR 3.15 billion for 2018, EUR 3.5 billion for 2019 and EUR 3 billion per year between 2020-2032 (i.e. a total of EUR 47.6 billion, EUR 8.5 of which for the 2017-2019 period alone). Casa Italia will also be able to benefit from the opening of financial spaces provided for by the Budget Law, mainly in favour of expenditure made by local and regional authorities for investments for seismic real estate adjustment and hydro-geological risk prevention, as well as tax measures for the seismic safety of homes[128].

Aside from the Fund, the Casa Italia Plan also includes EUR 9.8 billion to address hydrogeological instability, EUR 6.8 billion for school construction interventions, EUR 7 billion for the reconstruction of public and private buildings in the Central Italian regions affected by the earthquakes and EUR 11.6 billion to fund incentives for private households for anti-seismic upgrades (e.g. Earthquake Bonus – see Policy schemes) and energy efficient renovation (see TO 3 - Resource efficiency / Sustainable construction)[129].

Moreover, the **Investment and Infrastructure Development Facility** *(Fondo investimenti e sviluppo infrastrutturale)*, has a budget of EUR 47 billion for the period 2017-2032. During 2017-2019, it will invest 8.5 billion, and will finance, among other things, transport and road infrastructure, soil protection and hydrogeological instability, public housing and seismic risk prevention. It will contribute to the national plan for securing the territory and real estate assets in Italy, called "Casa Italia"[130].

Italy will also benefit from substantial EU investment. For the 2014-2020 period, EUR 3.4 billion has been allocated from the European Regional Development Fund (ERDF) for Network Infrastructures in Transport and Energy[131]. Moreover, the European Commission provided EUR 1.2 billion under the Connecting Europe Facility for the Brenner Base railway Tunnel project, linking Italy to Austria[132], in the most heavily funded infrastructure project in Europe. Additional EU investments amounting to EUR 1.51 billion will support a series of 13 projects deemed to be strategic for the development of trans-European transport networks (TEN-T)[133]. These concern predominantly railway upgrades, highways and maritime works.

As part of the Investment Plan for Europe, EUR 2 billion have been allocated to the financing of two transport infrastructure projects, one of the key sectors supported by the European Fund for Strategic Investment (EFSI). Namely, the projects entail the extension of the Autovie Venete and Pedemontana highway networks[134]. Moreover, the EFSI will finance the upgrade and modernisation of the production processes and products of Arvedi, an Italian steel manufacturer, with a loan of EUR 100 million under the Plan. This will benefit the construction industry, since the company's products also have applications in this sector[135].

Despite the fact that the crisis occurred a decade ago, the investments in infrastructure remain at the lower levels. The reasons of slow recovery include fear of enterprises on the conditions of the demand, difficulties of access to finance, growth prospects, and problems related to individual companies[136].

TO 2 – Skills

The employment rate of recent upper secondary graduates in Italy is the second lowest in the EU, standing at 52.9% in 2016. Even if it has improved from previous years (i.e 40.7% in 2015), it remains very low. This is due to the limited work-based learning approach in the Italian education system. Indeed, only 10.4% of upper secondary students took part in practical apprenticeships in 2014-2015. In addition, the early leave from education in Italy in 2016 is well above the EU average. To this end, the school reform introduced compulsory traineeships for students in the last three years of secondary school, and three- and four-year apprenticeships entailing a dual cooperation between schools and companies will be included in the vocational education and training (VET) system, so as to better impart practical skills to students, in line with the labour market requirements[137].

To offset the significant number of redundancies in the construction sector following the crisis, the Ministry of Labour set up a **National Fund for Labour Policies** *(Fondo nazionale per le politiche attive del lavoro)* in 2014. With its initial budget of EUR 15 million, the fund aims to facilitate the reintegration of the unemployed workforce. In particular, EUR 3.6 million were granted to the Emilia-Romagna region to fund its **Action plan for the professional reintegration of construction workers** *(Piano di intervento per il reinserimento lavorativo dei lavoratori dell'edilizia e delle costruzioni)*, encompassing measures to reskill unemployed construction professionals through apprenticeships and training courses. The Plan also seeks to provide the required knowledge to support those wishing to start their own construction activity[138]. In addition, the National Fund agreed to finance similar projects in other Italian regions, namely Lazio (granted EUR 3.4 million), Lombardy (EUR 1.7 million), Marche (EUR 2.2 million) and Sardinia (EUR 3.9 million).

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Ongoing efforts with regard to skilling up the construction workforce are carried out by **Formedil,** the national body for professional construction training. To respond to the changing requirements of the sector brought about by new technologies and materials, Formedil organises yearly **National Days of Construction Training**. The 2016 edition focused on the need to keep up with innovation in an evolving market[139]. The last edition focused was dedicated to the theme "We form the territory", focusing at Industry 4.0, and the recovery path of the construction sector[140].

In addition, Formedil recently introduced two sectorial training plans, namely **Safe and Sustainable – Construction of the future** *(SICURO E SOSTENIBILE – l'Edilizia del futuro)* and **Reskilling Opportunity for Construction Professions** *(O.R.M.E. – Opportunità di Riqualificazione per le Mansioni Edili)*. The first programme was financed through a EUR 377,721 allocation for the period June 2016-May 2017, and entailed activities based on the energy efficiency needs of construction companies, sustainable construction and innovation, as a follow up of the finding of the Build Up Skills I-Town project. The second programme had a budget of EUR 397,619 for the period May 2016-April 2017[141].

Moreover, during 2016, 12,514 courses (298,503 hours of training), intended for about 150,000 students, of which more than 120,000 workers (14.3% of the total construction workforce) and 25,697 technicians, were carried out. Formedil course number increased in 2016 by 147% compared to 2009[142].

> With regard to digitisation, there is a serious delay in the construction sector, being the second least digitised, after agriculture.

Therefore future actions will be taken by Formedil to start a strategic path on training in the digital skills of the entire supply chain: from project planning, construction and use of the building product[143].

In addition, in order to increase the skills before the introduction of BIM technologies in construction a BIM Manager Master Programme has been created by the Polytechnic School of Milan[144].

In order to improve employment prospects for young construction professionals and unemployed workers and help them access the construction labour market, the **Italian Federation of Construction and related Workers** *(Federazione Italiana Lavoratori Costruzioni e Affini – FILCA)* launched **Amico Lavoro**. This is an online service aiming to match demand and supply in the construction labour market. It offers advice and guidance to potential candidates, helping them identify the most appropriate jobs, to improve the skills and knowledge through good training, create CVs and prepare for selection processes[145].

TO 3 - Resource efficiency / Sustainable construction

> The national government is responsible for implementing and monitoring the broader energy policy. However regions have the jurisdiction over environmental, planning and building control matters, therefore regional governments are still responsible for building energy codes[146].

The energy efficiency strategies in Italy are governed by the national **Decree 102/2014** *(Decreto Legislativo 102/2014)*, the Energy Performance in Buildings Directive (EPBD), and implementing the EU Energy Efficiency Directive (2012/27/EU). The Decree defines the main lines of action to be taken in order to achieve the 2020 energy saving targets[147]. The most relevant to the construction sector are:

- The establishment of a yearly energy upgrade plan for central government buildings by the Ministries of Economic Development and Environment. The plan will be supported by the **National fund for energy efficiency** *(Fondo nazionale per l'efficienza energetica)* and has a total budget of EUR 350 million for 2014-2020.
- In the medium-long term, ENEA, the national agency for new technologies, energy and sustainable economic development, will be responsible for improving the energy performance of both public and private buildings, and increase the number of Nearly Zero-Energy Buildings (NZEB). Indeed, by January 2019, all new public authority buildings should be NZEB.

According to the last EIB EIBIS Survey in Italy, currently the situation regarding building stock meeting energy efficient standards is slightly above the average. Around 42% of the companies surveyed consider that building stock meets high energy efficiency standards, in line with the EU average of 40%[148].

In line with the Decree, the national **Action Plan for Energy Efficiency 2014** *(Piano d'Azione per l'Efficienza Energetica 2014 – PAEE)* defines Italy's energy efficiency objectives for 2020 and suggests ways to strengthen and improve currently existing measures to achieve them. Namely, Italy set the goal of achieving total primary energy savings of 20.1 Mtoe by 2020, of which 5.1 Mtoe from the residential sector, and total final energy savings of 15.5 Mtoe by 2020, of which 3.7 Mtoe from the residential sector[149].

In addition, the **National Energy Efficiency Fund**, aims to support energy efficiency projects and will receive resources amounting to EUR 490 million during 2014-2020. Its goal is to improve the buildings energy efficiency, industrial installations and production processes and to improve efficiency of public services and infrastructure[150]. From 2007 to 2016, the energy savings of the construction sector amounted to 1.08 MTOE (Million Tonnes of Oil Equivalent), which corresponds to 12,886 Gwh (Gigawatt Hour). This outweighs the energy savings in the food sector (12,148 in 2015).

In parallel, the **Law 90/2013**, amending the decree implementing the EU Directive on the energy performance of buildings (2010/31/EU), defines:

- The concept of Nearly-Zero Energy Buildings, and the 2019 target.
- The methodology for calculating energy performance in buildings.
- The minimum energy performance requirements.
- The obligation for sellers or lessors to provide an **energy performance certificate** *(Attestato di Prestazione Energetica – APE)* when selling or renting a building. The document specifies the energy performance and energy class of the building, CO2 emissions and recommendations for the improvement of its energy performance. A new simplified APE was introduced in October 2015, identical throughout the entire country and with a standard calculation methodology[151].

Fiscal incentives in the form of tax deductions are the most common measures supporting the energy efficient renovation of buildings. Namely, the 2017 Budget Law has confirmed and extended such deductions until 2021, which are valid for renovations, energy efficiency upgrades and purchase of furniture and energy efficient appliances. Thus, a 50% deduction from the Irpef (income tax), up to a maximum of EUR 96,000, applies to renovation works. This **Renovation bonus** is applicable to interventions such as maintenance, renovations and rehabilitations, including costs incurred for planning, hiring professionals and expert reports[152].

Moreover, in order to strengthen the sector's recovery and provide further support to innovative construction market, the measure concerning the deduction of 50% VAT for the purchase of houses in energy class A or B, introduced by the Law of Stability 2016 and expiring on 31 December will most probable be extended[153].

Moreover, the **Eco Bonus** allows a 65% detraction of the costs incurred for energy efficiency upgrades from the income tax. The detraction amounts to a maximum of EUR 30,000 for the replacement of heating systems, EUR 40,000 for interventions such as the rehabilitation of the building envelope and installation of solar panels for hot water production, and EUR 100,000 for global energy improvements. The **Eco Bonus for apartment buildings** *(Eco Bonus 2017 – condominio)* allows for a greater tax deduction on energy efficiency improvements on communal spaces in apartment blocks. Deductions can amount to 70% for the rehabilitation of the building envelope and 75% for interventions that improve the summer and winter energy performance[154]. The Eco Bonus is an important instrument, with about 1.7 million interventions being carried out under it in 2016 alone and for a total investment of EUR 29.2 billion (+16% compared to 2015)[155].

TO 4 - Single Market

Italy reports a moderate performance with respect to the metrics of the EU Single Market Scoreboard 2016. It has particular improvements observed in terms of Transposition of Law (it is among the top five Member States with the smallest transposition delays) and has improved compared to last year. Regarding Internal Market Information System, its performance is moderately well but could improve in responding to requests by the agreed deadline. Nevertheless, it performs less well with regard to Infringements and trade integration in the single market for goods and services, which is very low, the lowest in the EU. It also performs unsatisfactorily with respect to public procurement. Indeed, it scores poorly in terms of the one bidder (i.e. proportion of contracts awarded where there was just one bidder), decision speed (i.e. the time between the deadline for receipt of offers and the award of the contract) and reporting problems (i.e. the proportion of contracts awarded containing no information about the value of the contracts awarded) indicators[156].

One of the areas that Italy should address to improve its Single Market Strategy is corruption.

In Italy the risk of corruption for businesses is considered high. In particular, public procurement, has a very high risk since it involves large amount of resources and it exposes companies to organized crime[157].

Italian construction companies boast a **strong presence within the EU Single Market**. Indeed, 23.9% of the total value of new contracts abroad won by Italian construction firms in 2015 (EUR 17.2 billion in 2015, i.e. 63.5% above the EUR 10.5 billion in 2014) originated from the EU[158] (slightly below the 26.4% recorded in 2014), corresponding to EUR 4.1 billion (compared to 2.8 billion in 2014). Non-EU European countries accounted for 24.1% of the total value of new contracts in 2015. Thus, 48.0% of the total value of new contracts is concentrated in Europe (compared to 40.7% in 2014)[159]. High-value projects such as railways, roads, bridges and hydraulic infrastructures, were secured in EU countries such as Denmark, France, Germany, Poland, Romania, Slovakia, Hungary and Sweden in 2015. These figures reflect important progress compared to 2013, when only 10% of the total value of new contracts won by Italian companies was localised in Europe (EU and non-EU countries).

As for the total portfolio of ongoing construction projects, EU and non-EU countries accounted for 12.9% and 19.1% of their value in 2015 (EUR 87.2 billion, 19.5% above the EUR 72.9 billion reported in 2014), respectively[160].

Despite the encouraging cross-border activity, the current situation with respect to competition and transparency in the domestic market does not allow Italian construction companies to fully leverage on the advantages of the Single Market. National legislations are often in violation of EU directives related to public procurement. For instance, the obligation to subject the entirety of public works by concession-holding companies to standard public procurement procedures was recently amended, reducing it to 80% (amendment to the **Public Procurement Code** – *Codice degli Appalti)*. Thus, concession-holding companies, particularly those in charge of highways, will be allowed to carry out 20% of works "in house", i.e. granting works and services to a preferred subcontractor without issuing a call for tender[161]. This hinders healthy competition and keeps the market closed.

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In addition, cross-border service providers wanting to temporarily carry out their activities in Italy are subject to mandatory certification schemes. For instance, for contracts with a value of EUR 500,000 or more, cross-border contractors are legally required to hold the EN:ISO 9001:2008 quality management system certification. Furthermore, the **Certificate of Undeclared Work** *(Documento Unico di Regolarità Contributiva - DURC)* which demonstrates that construction companies have complied with their tax and social security obligations, must be submitted as part of the application for a building permit. These authorisation schemes are deemed to be stricter for temporary foreign service providers than for contractors seeking to permanently establish their operations in Italy. Since the DURC authorisation and the ISO certification schemes are valid for 90 days and 3 years, respectively, their limited duration means that temporary cross-border providers have to restart the application procedure with all associated fees. Moreover the procedure for DURC authorisation lasts for 30days. In addition, in view of the type of requirements to be met by the construction service providers, the mutual recognition is not applicable[162].

A step forward in the removal of technical barriers between Italy and other Member States, and thus in the strengthening of the construction Single Market, has been achieved with regard to structural safety and stability standards. In 2013, the Italian Ministry of Infrastructure and Transport approved the National Annexes containing the technical parameters for the application of Structural Eurocodes, which thus formally entered into force in the Italian construction sector[163].

TO 5 - International competitiveness

Italy ranks 43th out of 138 economies in the 2017-2018 Global Competitiveness Index, a position above the previous year (44rd)[164]. However, its performance in terms of the internationalisation of its SMEs is generally above the EU average, especially in automated procedures and information availability.

Nevertheless it has excellent formality procedures in place. Namely, the cost of export-related document compliance was negligible, compared to the EU average and taking 1 day (against the EU average of 1.4)[165]. Moreover, in order to improve the SME internalization, a major national Export Plan was launched, 'Plan for the extraordinary promotion of the Made in Italy', with EUR 232 million for the 2015-2017 period[166].

The exports value of the broad construction related products has been increasing over the last years, reaching EUR 8.1 billion in 2016, 12.8% higher than in 2010.

In addition, the international turnover of the Italian Construction Companies (648 companies taking part in ANCE's Annual Survey) has had an average annual growth of 13.5%, reaching EUR 14.1 billion in 2016. The three top construction companies, Salini Impregilo, Astaldi, and Condotte, have more than 50.0% of their total revenues coming from outside of Italy, having EUR 5,585.0 million, EUR 2,524.7 million and EUR 803.0 million of international revenues in 2016. The top one business of Italian companies abroad is complex infrastructures, such as roads, power stations, bridges, hydroelectric plants, railways, etc.[167].

Moreover, 23.1% of the total value of the global portfolio of 2016 construction projects (EUR 87.2 billion) originates from projects in the Middle East (especially Saudi Arabia, Qatar, Kuwait and Israel), other European countries (16.0%), South America (15.0%), followed by north America (9.9%) and North Africa (9.1%). Moreover, the contracts average of Italian companies amount in Oceania is the highest among all geographical areas, EUR 341 million compared to the average of EUR 131 million[168].

In terms of the typology of works carried out by Italian construction firms abroad, railway infrastructure accounts for 24.2% of the total value of the global portfolio of ongoing projects in 2015, with Venezuela being the single largest market (EUR 8 billion), followed by Argentina (EUR 2.5 billion) and Algeria (EUR 2 billion). Road infrastructure accounts for 22.3% of the total, with major projects in Russia, Algeria, Libya, Australia and Colombia, whereas hydraulic infrastructure works account for 14.7% of the total. Residential and non-residential construction are also acquiring increasing importance, representing 8.3% of the total value of the global portfolio, with projects including construction of healthcare facilities, business centres, hotels research infrastructure and other social infrastructures[169].

However, ANCE notes that the growth in foreign revenues is generally limited to the largest players. It is equally important to push SMEs to aggregate and thus improve their competitiveness in international markets. Indeed, for construction SMEs with a turnover below EUR 100 million, foreign revenues account for about 27-44% of the total.

In 2016, the Ministry of Economic Development, together with ANCE and ICE (Agency for the internationalisation of Italian enterprises), has been supporting missions abroad for construction firms in foreign markets, through financial measures such as the SME funding for participation in fairs in non-EU markets. The measure covers up to 100% of the costs incurred up to a maximum of EUR 100,000[170].

Despite the high number of participating firms, many entrepreneurs are often insufficiently aware of the regulatory environments, social context and suitable contacts to be made to successfully launch a business activity in a third country. To overcome this, ANCE published a guide to the internationalisation of Italian construction SMEs. This elucidates the financial and insurance instruments supporting internationalisation projects (e.g. export credit, feasibility studies financing, financing of market penetration programmes, soft loans for setting up joint ventures in developing countries, etc.), the available sources of financing and risk/insurance coverage, as well as the regulatory framework and public procurement procedures to bid in international tenders[171].

In addition, the Ministry of Economic Development introduced the so-called Internationalisation Vouchers which, with a budget of EUR 17.8 million grant SMEs EUR 10,000 to hire a temporary Export Manager to help them enter and grow in international markets[172]. As of May 2016, 1,790 companies benefited from the vouchers[173].

Further progress in supporting internationalisation comes with the **Stability Act 2016** *(Legge di Stabilità)*, which will increase the share of Italy's GDP dedicated to public aid to development and cooperation, from 0.17% to 0.3% over the next 4 years[174]. Thus, EUR 240 million and EUR 360 million will be available in 2017 and 2018 for this purpose, respectively[175].

8 Outlook

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The Italian economy was badly hit by the crisis, and still has not recovered. However, since 2013/2014 the marked is showing a modest return to growth, which is predicted to continue in the coming years. Indeed, GDP is expected to by 1.5% in 2018 led by exports and investment, reaching EUR 1,594.8 billion, and a further 1.2% in 2019, and will start to reach 2010 value[176]. In 2020, it has been forecasted that the GDP from construction could reach EUR 1,770.0 billion[177]. However, **the recovery is expected to remain modest.** The Commission forecasts that the recovery of Italy to continue to increase slowly during the next few years, supported by an accommodative monetary policy and a still-supportive fiscal stance[178].

GDP growth forecast

Similarly, after experiencing a continuous decline since 2010, the year 2016 marked the stabilisation and the start of a slow return to positive growth for the Italian construction sector, and prospects for the industry are predicted to be relatively positive going forward. Indeed, the sector is expected to be among the first four countries in terms of contribution to the total output of the European construction sector until 2019[179]. Thus, growth for the Italian construction industry is forecast at 2.2% in 2017, 1.8% in 2018 and 2.2% in 2019[180].

Number of workers employed in the broad construction sector forecast 2015-2025 ↓ **1.2%**

In parallel, the **number of workers employed** in the broad construction sector is projected to continue its downward trend, some forecasts believe that the future employment growth in the construction sector until 2025 will decrease by 1.19% compared to 2015 value[181]. In the short term, in 2018 it is expected to decrease to 2,156,237, 4.4% below the 2016 level and 25.8% lower than in 2010. Similarly, the number of enterprises in the broad construction sector is forecast to fall to 992,266 in 2018, 3.3% lower than 2016 and 11.8% below the 2010 level. This decrease will be mainly in manufacturing and narrow construction subsectors, while the real estate is expected to show a slight grow. The value added of the broad construction sector is also expected to keep decreasing, reaching EUR 87.2 billion in 2018, 3.8% and 19.4% lower than in 2016 and 2010, respectively. These developments will be accompanied by a further drop in turnover, expected to decline by 4.5% in 2018, by 31.0% in 2010, relative to 2016, reaching EUR 271.1 billion. Nevertheless, new residential construction is the only segment that is predicted to continue its negative trend with regard to investments, although at a slower pace than previous years[182].

There is a general uncertainty about the future in Italy, which is having an effect in the country. Around 70% of the companies cite this uncertainty to be a major obstacle to investment[183].

> The positive developments in the housing market started in 2014 are expected to continue in the coming years, spurred by low interest rates and ease of access to mortgage loans.

Indeed, house prices are projected to rise, the housing index is expected to start increasing again, from 98.6 in 2017 to 108 at the end of 2018, and to 116 in 2020[184]. However the residential sale transactions increased by 37.4% from 2012 to 2017 (406,000 in 2012 and 558 in 2017). They will reach 579,751 in 2018 (+3.8% above the 2017 value) and 612,318 in 2019 (+5.3%)[185]. The private non-residential construction market will also experience some growth in investments in 2017, although modest, at 0.3% compared to 2016[186].

Maintenance and renovation of the existing building stock represented 37% of the total investments in the construction sector in 2016[187]. In this respect, fiscal incentives and tax deductions (See TO 3 - Resource efficiency / Sustainable construction) are seen as particularly effective measures, preventing industry stagnation and increasingly steering investments in the construction sector towards the renovation and energy efficiency markets. These are regarded as the way forward for the revival of the sector. Indeed, investment in this area is predicted to continue increasing in the future. This will in turn open up the market of urban regeneration as a whole, entailing the renovation and upgrade of the entire existing building stock, as opposed to individual interventions on single housing units. The shift towards this new market will also have positive repercussions on skills and overall productivity in the national construction sector[188].

The Italian Association of Construction sector identified three aspects in the implementation of future urban regeneration measures. First, to have a comprehensive and effective programme of available public funds, second, to have fiscal measures that support economic growth and finally having a stronger regulation.

The **civil engineering sector** is set to be the best performer and the main driver of the revival of the construction sector over the coming years. Investments in public infrastructure are predicted to grow supported at the national level through the considerable resources destined to the sector under the Budget Law 2017, namely the EUR 47.6 billion Infrastructural Investment and Development Fund and the substantial resources of the Casa Italia Plan (see TO 1 - Investment conditions and volumes). At the EU level, the EFSI-backed investments under the 'Investment Plan for Europe' will also contribute to the relaunch of infrastructural investments in Italy. However, the intricate Italian regulatory context and the suboptimal efficiency of the public administration may deter private foreign investment, on which the Investment Plan for Europe relies.

> Due to the reduced domestic activity as a result of the economic crisis, Italian construction companies have increasingly been focusing on exports and turning towards foreign markets, which have offered fertile ground and encouraging demand for their know-how and quality of services.

ANCE expressed the concern that excessive and sustained focus on external markets would result in a complete delocalisation of construction activities from the national to the international level, thus potentially depriving the Italian economy of one of its key pillars. Therefore, in order to create a sound basis for healthy and successful internationalisation, it is first crucial to ensure the existence of favourable conditions in the domestic market.

Moreover, the transition towards the implementation of BIM systems in the construction sector, which will be mandatory for all projects in the sector for 2022. This introduction will have significant effects on the construction sector in the coming months and years. It will bring about major changes in the labour market and in the life of companies themselves since new skills be needed and employments will be created. In addition, the introduction of new technologies in construction expected to attract young people to work in the sector[189].

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