



CIF | Davy Construction Industry Economic Update

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Real Economic Activity

Economic Activity	2017	2018	2019(f)	2020(f)
Gross Domestic Product (GDP)	7.2%	6.7%	4.2%	3.6%
Gross National Product (GNP)	4.4%	6.0%	4.0%	2.2%
Unemployment rate	6.7%	5.7%	5.4%	5.0%
Consumer Price Index (CPI)	0.3%	0.5%	0.7%	1.1%

- The Central Bank's estimate is that a disorderly Brexit could reduce the growth rate of the Irish economy by up to four percentage points in the first year.
- Over a 10 year period, the estimates suggest that a disorderly, no deal Brexit could reduce the overall level of Irish output by 6.1%, as compared to 1.7% in the case of a transition to a Free Trade Area-like arrangement.

Comparison of building & construction indicators

COMPARISON OF BUILDING AND CONSTRUCTION SECTOR INDICATORS

CSO Production in Building and Construction Series (base year 2015)

Other Indicators

	Annual Percentage Change in Volume of Production in Building and Construction ³	Annual Percentage Change in Volume of Production in Civil Engineering ³	Annual Percentage Change in Volume of Production in Residential Building ³	Persons Employed in the Construction Sector ¹	New Dwelling Completions	House Commencements ²
2007	-13.2	4.5	-21.1	240,000	-	48,876
2008	-28.9	-6	-44.7	214,000	-	22,852
2009	-36.8	-12.8	-58	132,800	-	8,599
2010	-30.0	-22.3	-37.8	104,400	-	6,391
2011	-17.1	-24	-27	86,800	6,994	4,365
2012	-2.3	16.6	-12.4	81,300	4,911	4,042
2013	11.1	5	10.7	86,200	4,575	4,708
2014	8.6	3.3	17	90,800	5,518	7,717
2015	8.0	-3.8	29.6	109,000	7,219	8,747
2016	12.3	3.3	34.2	119,400	9,916	13,234
2017	15.7	-1.3	26.6	128,000	14,407	17,572
2018	12.2	24	4	145,500	18,072	22,467

¹ Labour Force Survey

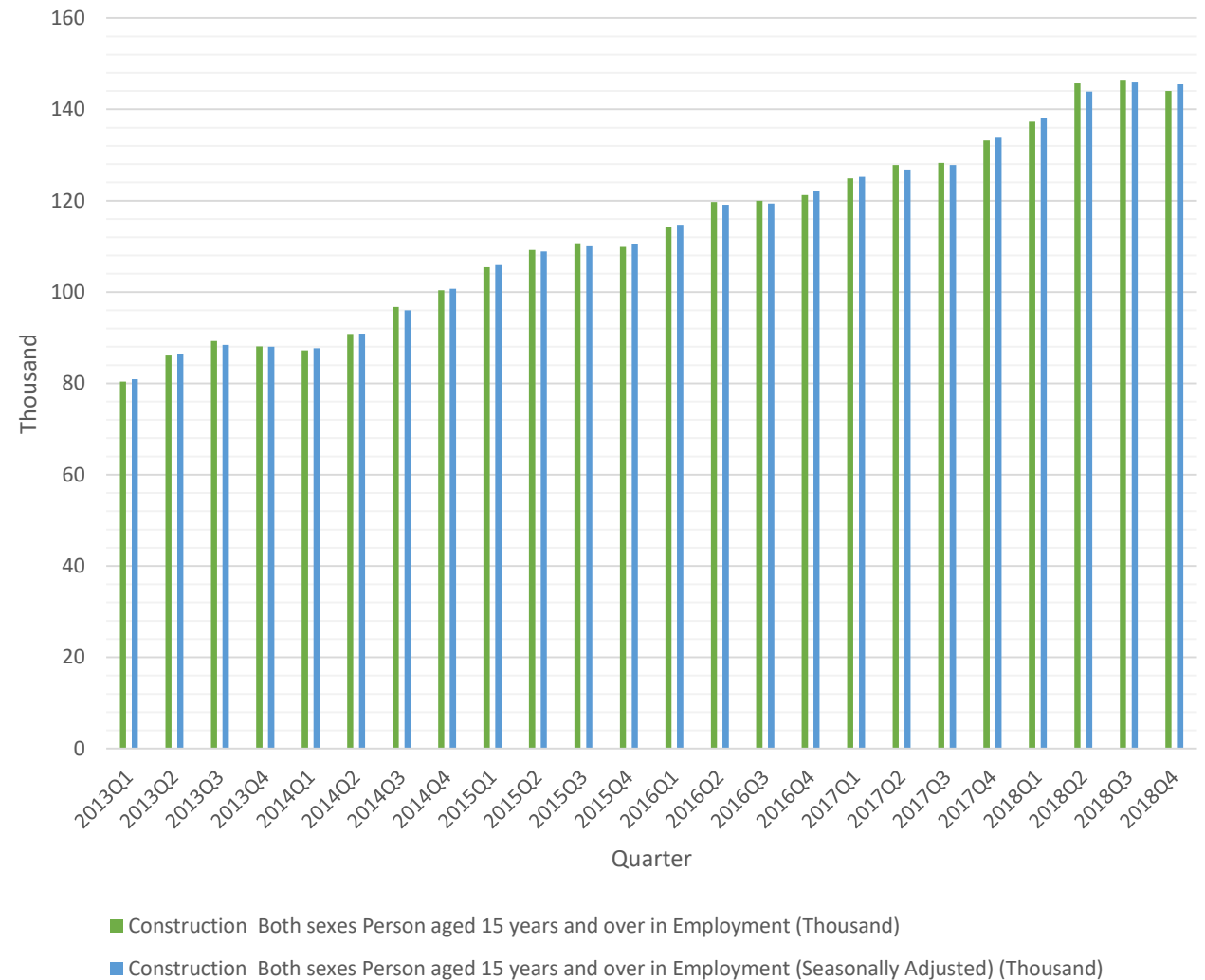
² Department of Housing, Planning and Local Government.

³ CSO Seasonally Adjusted series introduced in Q1 2015.

Employment

- The Irish construction output cycle has a tendency to be more volatile than in other European countries.
- Direct construction employment grew by +7.9% or 10,600 persons to 145,500 persons (seasonally adjusted figure) in the year to the end of Quarter 4 2018.
- The composition of employment/employment model across the construction sector continues to evolve with growth in the share of specialist contracting firms operating within the sector.

Persons aged 15 and over employed in construction



Employment

- Fragmented industry structure inevitably impacts on overall productivity.
- Skills gaps and shortages are now recognised across the construction sector.
- By creating better linkages between industry and the education and research sector, we can ensure that industry has the technical knowledge and the skills necessary to perform well into the future.

Persons aged 15 years and over in Employment (ILO) (Thousand) by detailed occupational group

2018 Q4 (non adjusted)	All occupational groups	144
	Managers, directors and senior officials	10
	Professional	14.7
	Administrative and secretarial	4.2
	Skilled trades	83.1
	Process, plant and machine operatives	13.6
	Elementary	15

New employment permits regulations



Following engagement by the CIF and a detailed submission in relation to employment permits regulations for non-EEA nationals, the following occupations will be added to the Critical Skills Occupations List and will be eligible for a Critical Skills Employment Permit from 22 April 2019:

Civil Engineers
Quantity Surveyors
Construction Project Managers
Mechanical and Electrical Engineers with BIM expertise



In addition, the following occupations will be removed from the Ineligible Occupations List and will be eligible for a General Employment Permit once a Labour Needs Test is carried out:

Sheet metal workers
Welding trades
Pipefitters
Air-Conditioning & Refrigeration Engineers
Shuttering Carpenters
Glaziers, window fabricators & fitters
Scaffolders, staggers & riggers
Crane drivers
Plasterers (subject to a quota of 250)
Bricklayers (subject to a quota of 250)

Construction Investment

The total value of Gross Fixed Capital Formation (GFCF)* investment in Building and Construction was estimated at €26 billion (current prices) in 2018.

Overall building and construction investment continued to increase strongly, up 20% in 2018.

Housing investment increased by 24.1% in 2018, with strong increases in new dwellings and spending on home improvements.

Other building and construction, mainly commercial, increased by 12.1%.

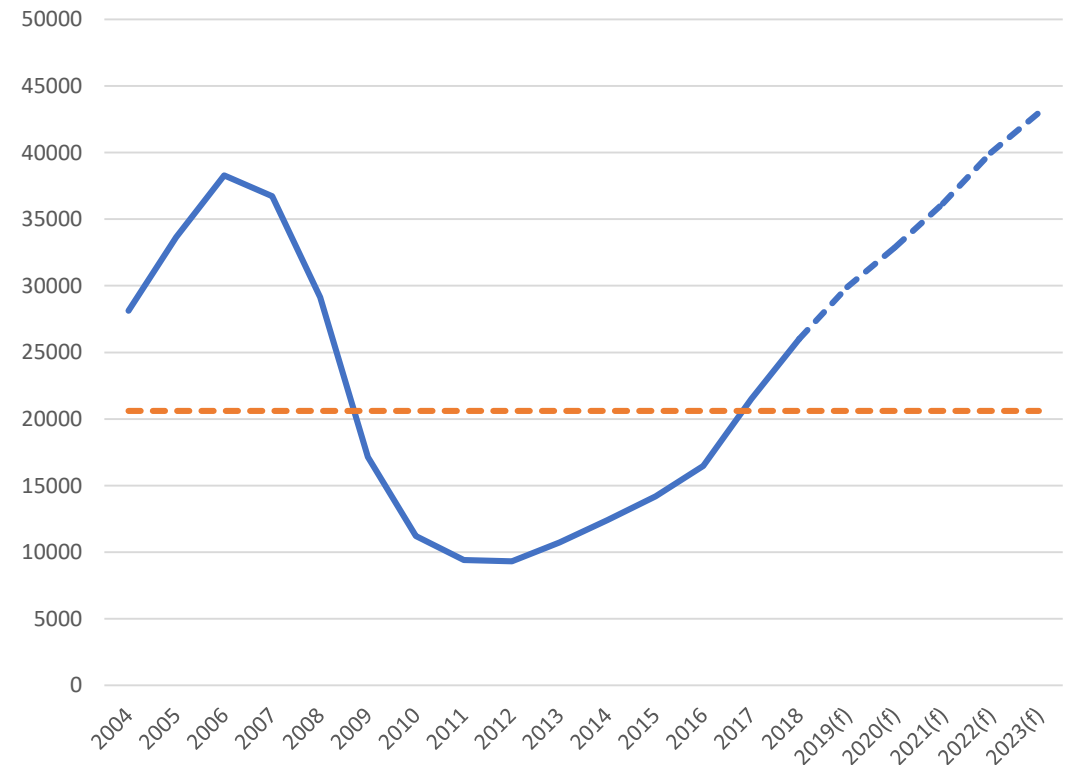
The Department of Finance predict that GFCF in the sector will increase to €41 billion by 2023.

Growth in overall building and construction investment is forecast to average 15.6% in 2019, before moderating to 10% in 2020.

*GFCF is defined as acquisitions less disposals of fixed assets (Department of Finance/CSO).

GFCF in Building & Construction (Euro Million)

----- Average over 2004-2017



Data Sources: CSO, Dept. Finance,

Production in Building & Construction (CSO)

The volume* of output in building and construction increased by 12.2% in 2018.

Volume increases 2018 by sector:

Civil engineering work (+24%),

Non-residential building work (+12%)

Residential building work (+4%)

There was an increase of 15.5% in the value of output in building and construction in 2018.

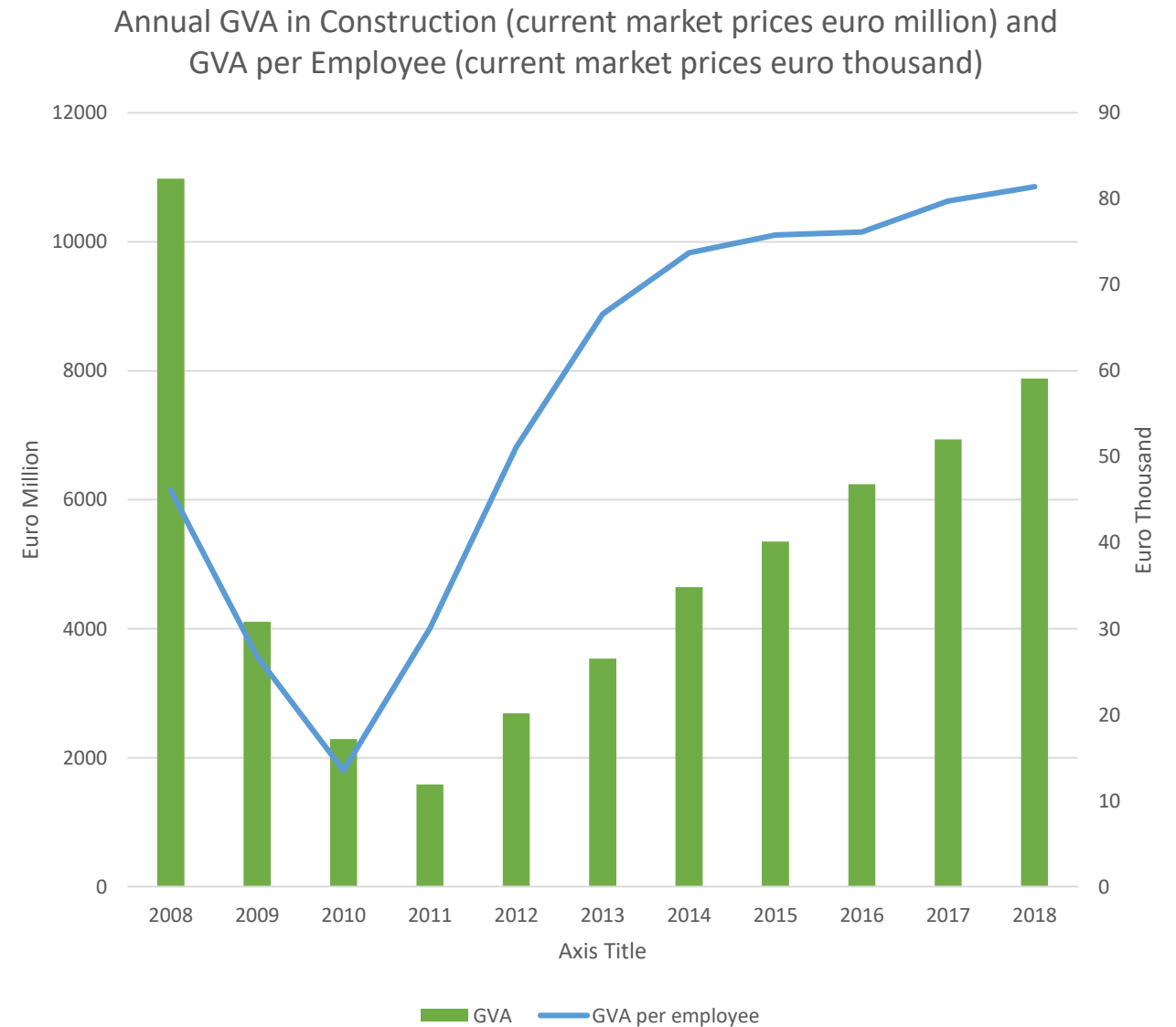
*The principal difference between the value and volume indices is that the value index measures changes in the value of work done while the volume index tracks the quantitative volume of production by excluding the effect of price changes.

GVA

Gross Value Added per hour or per employee is a key measure of labour productivity in construction.

GVA in construction was €6.9 billion in 2017: an increase of 11% in comparison to 2016, which was the sixth straight year of growth.

GVA is estimated at €7.8 billion in 2018, which would equate to a 13% increase yoy.



House Building

Housing investment increased by 24.1% in 2018, with strong increases in new dwellings and spending on home improvements.

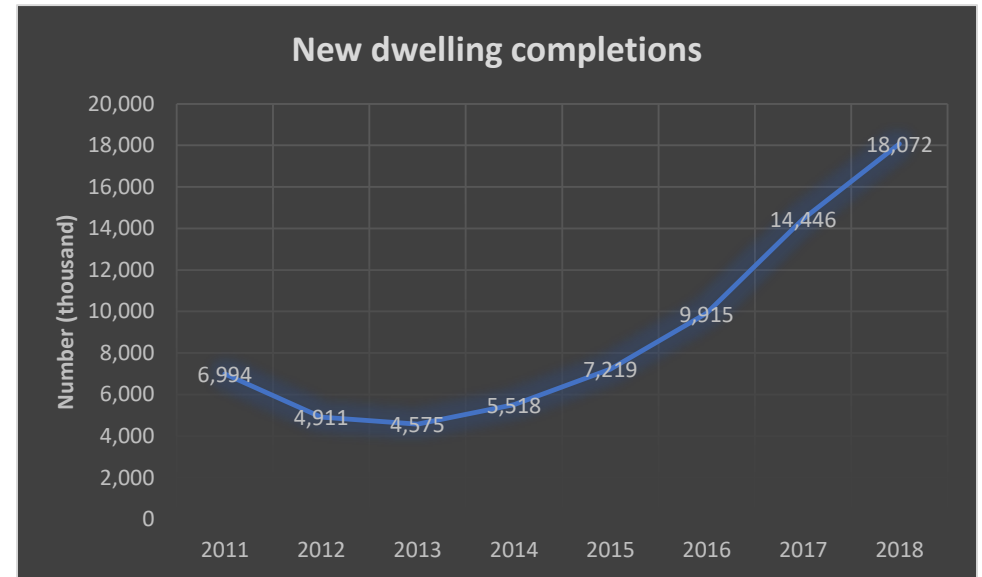
House building investment is expected to increase by 19.6% in 2019 and 11.9% in 2020.

A total of 18,072 new housing units were completed in 2018 (+25% year on year).

A total of 22,467 new housing units were commenced in 2018 (+28% year on year).

Based on investment levels CIF forecast completions will increase to 23,000 in 2019 and 28,500 in 2020.

In Dublin, house prices are 4.1% higher than a year ago, while the average for the rest of the country is 7.1%.



CSO

Private non-residential construction

*Brexit may result in new investment opportunities arising in the years ahead, or on the other hand, an adverse Brexit scenario may result in a slowdown or postponement of investment projects.

Private non-residential construction has recovered strongly since 2016 and the recovery continued in 2018, although at a slightly slower rate than experienced in 2016 and 2017.

Activity is forecast to increase by 7% and 6%, respectively, in 2019 and 2020 compared with the 12% rate of growth seen in 2018.

The growth in overall non-residential output has been focused on the commercial and Foreign Direct Investment (FDI) sectors.

There is a sustained level of investment underway or planned. However, the high volume of non-residential output is set to decline from 2018 following the sheer volume of commercial building that has been constructed during the years 2015-2017.

Demand in the industrial and logistics sectors is expected to primarily come from companies involved in E-commerce, logistics, pharmaceuticals and food manufacturing, while agents also expect to see a continued strong appetite for zoned land for data centre use in 2019.

2019 is showing strong demand for investment opportunities in the office and Build-to-Rent sectors. Within the hotel, retail and industrial sectors there is evidence of increasing investment in retrofit, refurbishment and renovation projects.

Public sector construction

The NDP is a blueprint, setting out a strategic framework for public capital investment to 2027 with a particular focus on meeting Ireland's infrastructure and investment needs in the priority areas of transport, education, health and housing.

Investment (GFCF) in commercial and civil construction increased by 19.4% in 2018 (current prices euro million). Output volumes increased in civil engineering work (+24%) in 2018 – albeit from a very low base.

Public sector construction as a percentage of total non-residential construction is estimated at approximately 15% in 2018.

€7.3 billion is committed in direct capital funding in 2019. This amount is a +24% increase on 2018. The wider semi-state sector will be investing in energy and water facilities bringing planned investment to €10 billion in 2019.

By 2021, Ireland's public investment, measured in terms of Gross Fixed Capital Formation, is currently projected to have increased to 9.3% of total General Government expenditure.

All departments' capital programmes are funded up to 2022. 2019 will see the first drawdowns from the four new funds set up under the NDP: rural, urban, technology and climate action (total drawdowns will be €195m in 2019).

There will be 25 major public infrastructure projects commencing construction in 2019 and a further 9 projects which have already commenced will be ongoing throughout 2019.

The 'Capital Tracker' details infrastructure projects and programmes and is now interactive and web-based with a mapping functionality: *MyProjectIreland*

Project Ireland 2040: The NPF and NDP



- The updated Project Ireland 2040 Capital Investment Tracker '*MyProjectIreland*' was launched on 2 May 2019.
- It maps mainly projects and programmes with costs greater than €20 million.
- Includes all projects supported to date under the Government's Urban and Rural Regeneration Funds.
- Future iterations of the map will include schools and social housing projects.
- Reflects the full portfolio of projects in the pipeline at present.
- Includes projects at all stages in the project lifecycle from project identification, business case, design, procurement, implementation/construction, and completion.
- Annual Report 2018 sets out progress achieved in the first year of Project Ireland 2040 and highlights the high-level priorities for the remainder of 2019.

MyProjectIreland

The screenshot displays the MyProjectIreland website interface. At the top, there are navigation tabs for 'About', 'Investment Projects', and 'National Programmes'. The main header includes the 'Project Ireland 2040' logo and the tagline 'Building Ireland's Future'. A map of Ireland is shown with various project locations marked by red pins and numbered circles. A list of projects is visible on the left side of the map. A pop-up window is open over a project in Kildare, providing the following details:

- URDF Category B:** Celbridge Southern Relief Road & Second Liffey Crossing
- Strategic Investment Priority:** Housing and Sustainable Urban Development
- Responsible Dept/Body:** Kildare County Council
- Location:** Kildare
- Description:** Celbridge Southern Relief Road & Second Liffey Crossing

The website is powered by GeoHive and Esri. The URL in the browser address bar is <https://geohive.maps.arcgis.com/apps/MapSeries/index.html?appid=752cbe93c0f64c6894fb63f7ebe7c4db>.



A detailed skills foresight exercise led by the Expert Group on Future Skills Needs.



An analysis of productivity and sustainability to inform new construction industry approaches for improvement.



Improving technology adoption and deployment of BIM.



Providing early warning on inflation pressures.



A report on the ex-post review of major infrastructural projects undertaken by the Irish Academy of Engineering.



Contributing to the OGP's medium-term procurement strategy.



Considering industry approaches to improve environmental sustainability.



Working on potential solutions and ideas to enhance the sector's circular economy.

Construction Sector Group 2019 Priorities

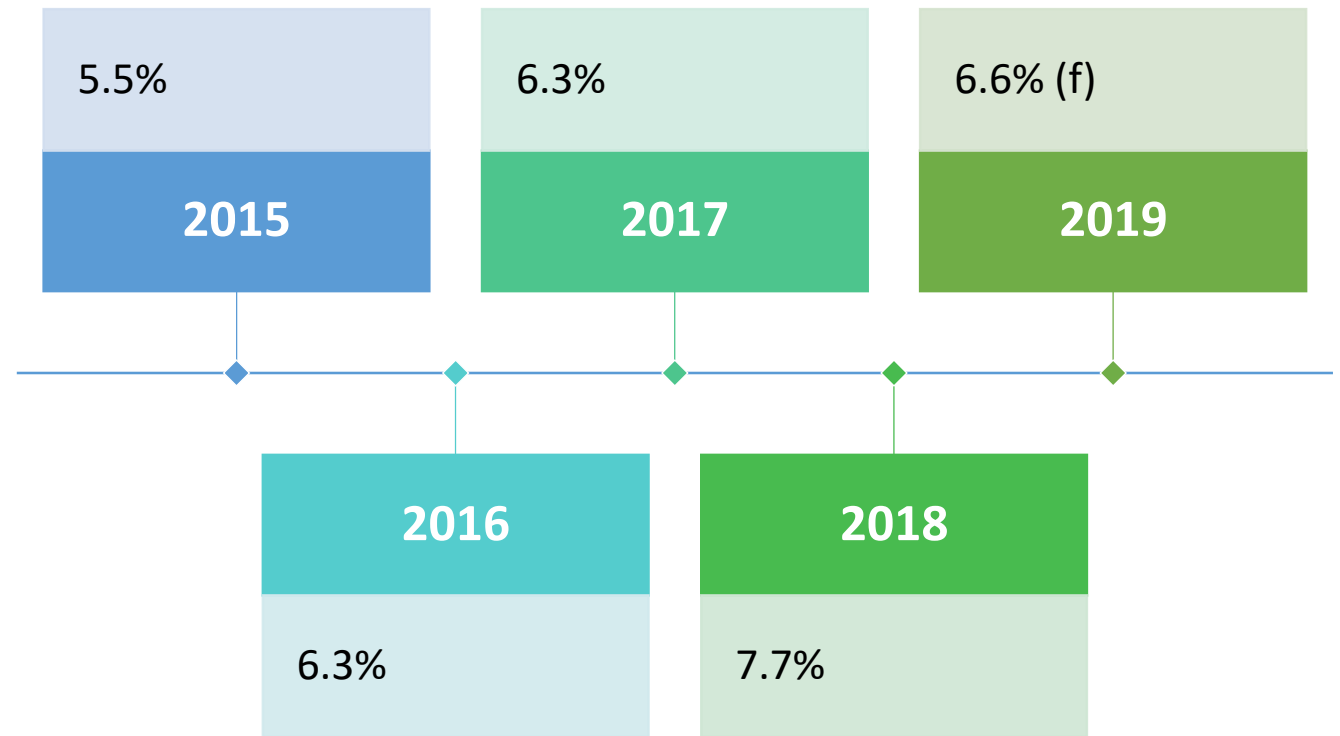
- 1) Growth and Productivity
- 2) Enhancing Value for Money
- 3) Leading on Sustainability

SCSI Tender Price Index

Due to the high ongoing demand for construction services the level of price increases is likely to continue into 2019.

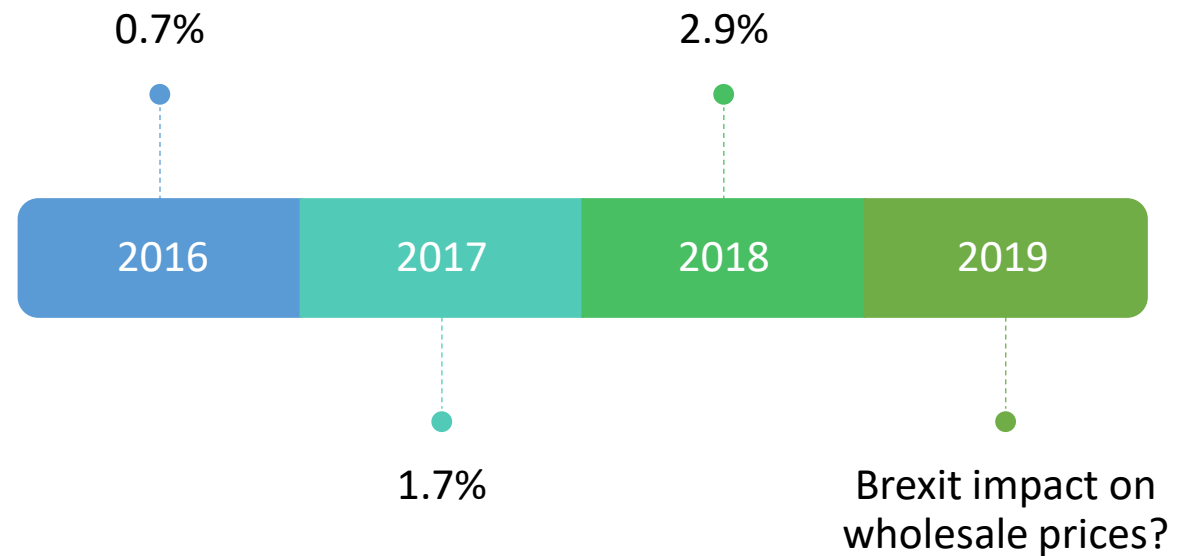
This emphasises the importance of planning for future construction inflation.

Cost increases are being driven by skills shortages, wage increases resulting from the SEOs, increasing building standards including the nZEB regulations and a shortage of sites for disposal of construction waste.



CSO Industrial Price Index

Percentage change in wholesale prices in Building and Construction (i.e. materials and wages) over 12 months.



Detailed Wholesale Price Index

(February 2019)

*Industry should remain vigilant of the potential inflationary pressures on wholesale prices resulting from Brexit.

Detailed Wholesale Price Indices (excluding VAT) for Building and Construction Materials

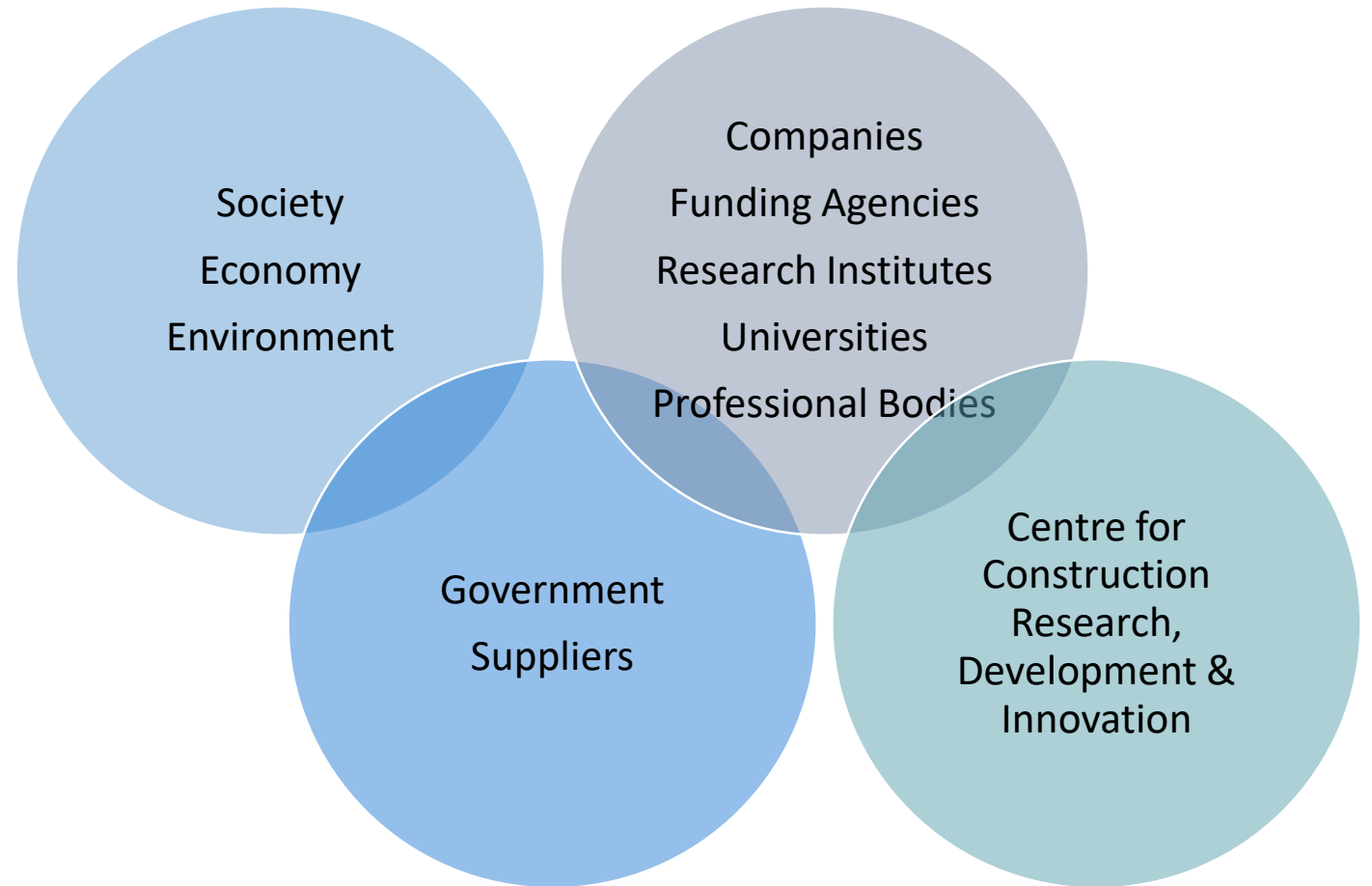
Base: Year 2015 = 100

	Monthly % Change			Annual % Change
	Dec	Jan	Feb	Feb
	2018	2019	2019	2019
Materials				
Stone, sand and gravel	-0.4	0.3	3.6	0.5
Stone	0.3	-0.4	2.0	0.8
Sand and gravel	-3.3	4.1	11.4	-0.5
Cement	0.0	5.7	0.0	5.7
Ready mixed mortar and concrete	1.5	2.0	0.6	2.8
Concrete blocks and bricks	-0.5	0.6	1.1	0.5
Other concrete products	0.0	0.2	0.0	0.0
Precast concrete	0.0	0.7	0.0	0.2
Other concrete products (Excluding precast concrete)	0.0	0.0	0.0	0.0
Structural steel and reinforcing metal	-0.1	1.6	0.0	3.3
Structural steel	0.0	2.6	0.0	4.0
Fabricated metal	0.0	2.9	0.0	4.4
Other Structural steel	0.0	0.0	0.0	0.5
Reinforcing metal	-0.1	-0.2	0.0	2.3
Other steel products	0.0	0.0	0.4	5.0
Rough timber (including plain sawn)	0.0	2.4	0.0	3.4
Hardwood	0.0	0.0	0.0	7.3
Other	0.0	2.7	0.0	2.8
Other timber	0.0	0.0	0.0	4.9
Windows and doors	0.0	0.0	0.0	2.6
Other	0.0	0.0	0.0	7.9
Bituminous macadam, asphalt and bituminous emulsions	-0.5	1.8	1.6	3.4
Bituminous macadam and asphalt	-0.5	2.0	1.6	3.4
Bituminous emulsions	-0.6	-2.0	-0.9	3.3
Electrical fittings	-0.1	0.1	0.0	1.7
Lighting equipment	0.0	0.0	0.0	0.0
Protection & communication equipment	0.0	-0.1	-0.2	0.8
All other materials	0.0	0.1	0.1	0.6
Plumbing materials incl. sanitary ware	0.0	0.0	0.0	2.1
HVAC (heating & ventilation equipment)	0.0	0.0	0.0	1.2
Insulating materials	0.0	0.0	0.0	1.0
Pipes and fittings	0.0	-0.1	0.0	2.0
PVC	0.0	0.0	0.0	4.8
Copper	0.0	-0.2	0.0	1.2
Plaster	0.3	0.0	0.0	0.1
Paints, oils and varnishes	0.0	2.5	0.0	3.7
Glass	0.0	0.0	0.0	-18.5
All other metal fittings	0.0	2.2	0.0	3.8
All other products	0.0	0.0	0.2	-0.2
All materials	0.1	0.8	0.5	1.6

R&D and Innovation Expenditure in Construction

CIF is calling for greater investment in construction related R&D and Innovation in collaboration with funding agencies, professional bodies, universities and Institutes of Technology.

The future establishment of a digital Centre of Excellence and the potential establishment of a designated centre for construction research, development and innovation as a destination for applied research, training and best practice exemplars offers a framework for peer to peer knowledge-based transfer and increasing productivity.



New Productivity Research by CIF

- New research carried out by the CIF Economic & Policy Research department shows that productivity improvements in construction firms being driven by digital and technology trends, labour requirements (supply chain optimisation) and process gains (efficiency building and effective decision making, e.g. using advanced analytics and performance measurement, etc).
- To drive productivity growth in construction we need:
 - Improved labour utilisation
 - Investment in R&D and Innovation
 - Supply chain optimisation
 - Adoption of new technology in the procurement, design and production process
- Companies sampled in this research have made consistent and multiple investments in terms of training existing staff, new technologies, new plant and equipment, hiring new staff, off-site construction and performance measurement in the last 12 months.

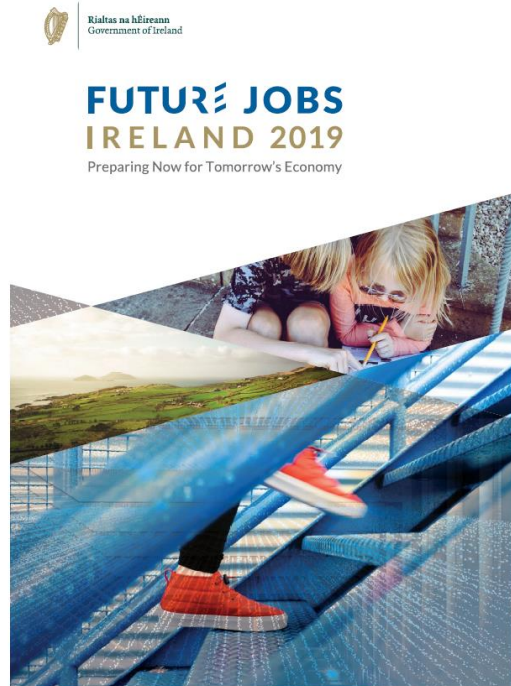
Factors Affecting Productive Capacity as Ranked by CIF Research Participants

Overall

<i>Ranking</i>	<i>Productive Capacity Attribute</i>
1	Project Scheduling
2	Project Management
2	Employee Motivation
4	Employee Skills
5	General Management
6	Internal Communications (top down and bottom up)
7	Quality Control
8	Safety
9	Employee Age (knowledge, technical experience, energy)
10	Plant and Equipment (including ICT)

Sample recommendations contained in the CIF report on productivity

- Map productivity enhancing actions leading to better supply chain optimisation. Clients (and their agents) must consider playing a role in industry's productivity, particularly regarding the uptake of new technology and proper resourcing of design teams.
- Make downstream investments, including the use of procurement policy with more equitable distribution of risk and reward, to help to create markets for SME companies. Government should focus on increasing public support options for company-level R&D such as tax credits, grants, innovation vouchers and loan schemes.
- Improve how apprenticeships and careers in construction are viewed by the general public, so that they appeal to more young men and women, and in turn attract good calibre individuals to the industry. All parties should work together to ensure careers in construction offer clear paths for professional development and progression.
- A solid pipeline of public capital investment should be maintained to give certainty to industry thereby allowing it to plan investment in human capital, R&D and innovation.
- Early Contractor Involvement, earlier planning, and better control of the construction process by people who understand construction and timescales will lead to higher productivity outcomes for industry.



Lastly, Future Jobs Ireland 2019 – a whole of government strategy

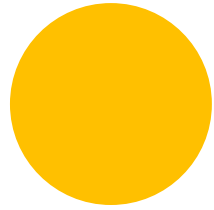
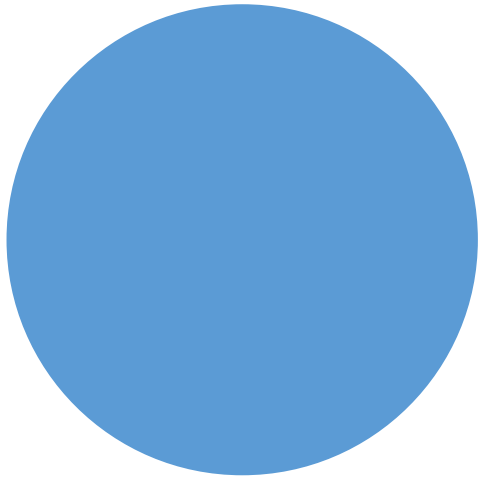
Future Jobs Ireland was published in March 2019.

Future Jobs Ireland places a strong focus on increasing productivity and boosting participation rates in the economy. It focuses on five pillars, namely:

1. Embracing Innovation and Technological Change
2. Improving SME Productivity
3. Enhancing Skills and Developing and Attracting Talent
4. Increasing Participation in the Labour Force
5. Transitioning to a Low Carbon Economy

In terms of the construction sector we need to engage with government in the roll out of the strategy.

CIF is focused on increasing the capacity of Construction SMEs to engage in research, development & innovation and developing incentives for SMEs to invest in human capital and new technologies.



Questions?

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