Construction Prospects 2019

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CIF ECONOMIC & POLICY RESEARCH

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Economic and Fiscal Context going into 2019

National economic growth of 7.5% estimated in 2018.

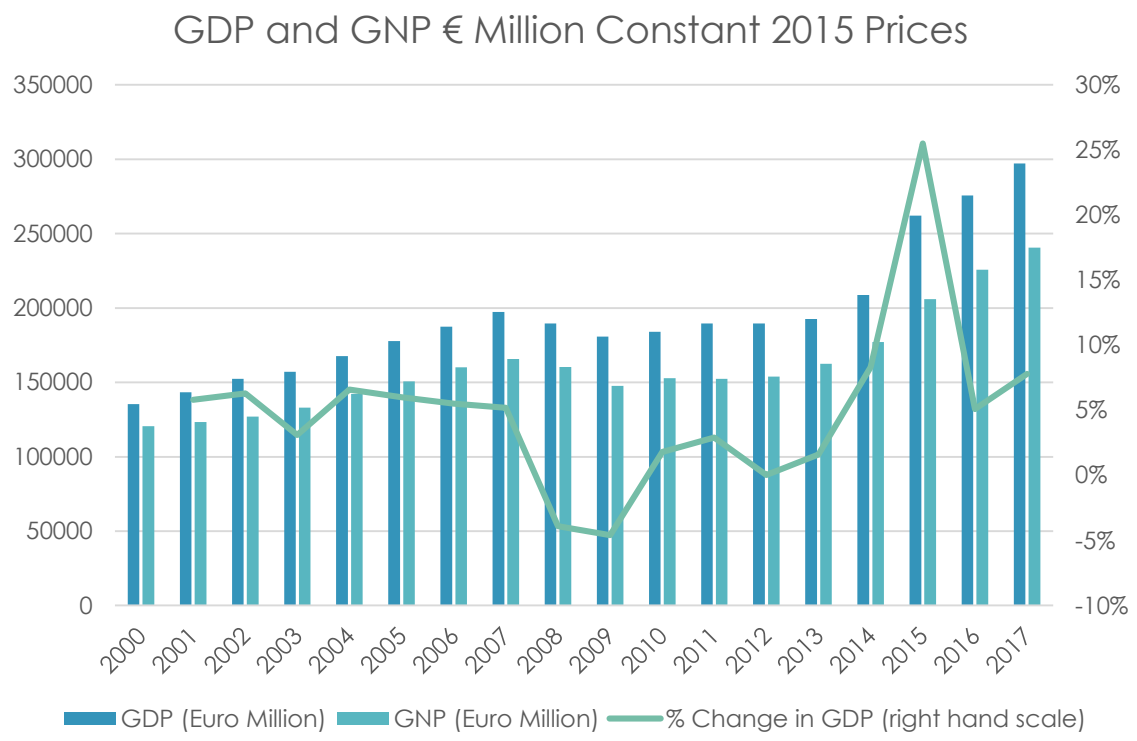
Growth of 4.2% forecast in 2019, followed by 3.6% in 2020, and 2.6% in 2021.

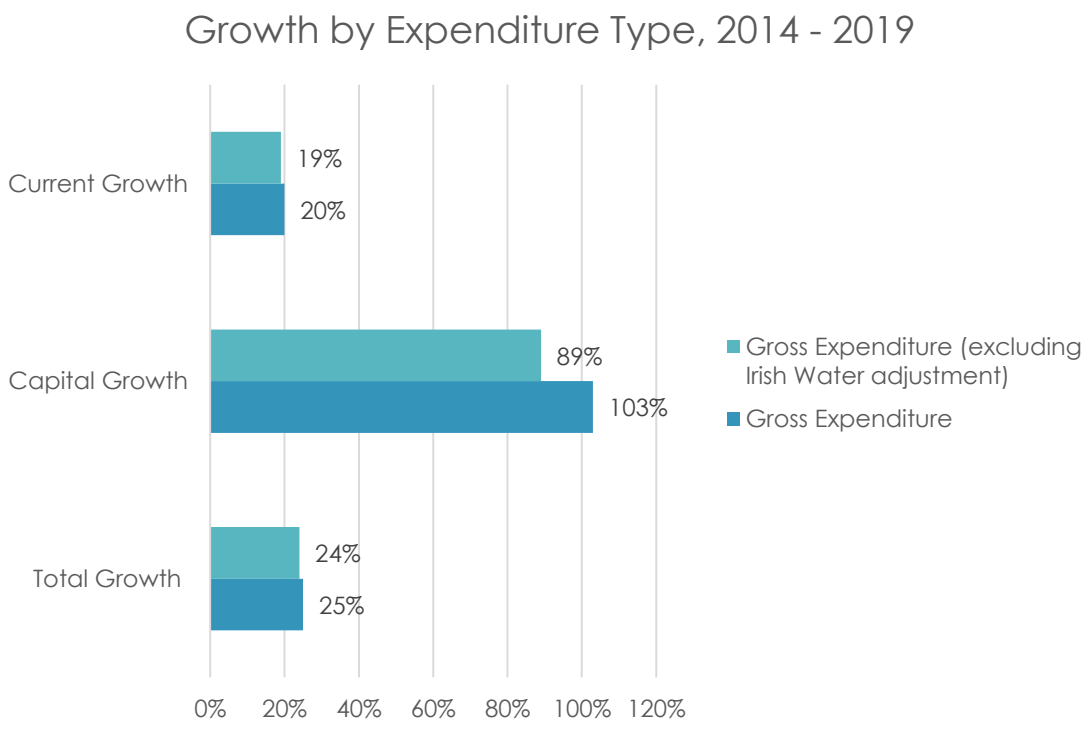
Labour market, tax receipts and trade have all increased in size and volume in 2018.

Downside risks: uncertainty regarding Brexit and international trading tensions.

Unemployment has fallen from 15% in 2012 to a forecast of 5.3% in 2019 leading to a tight labour market and competition for skilled personnel.

Economic & Expenditure Growth to 2019





Data Source: Central Bank

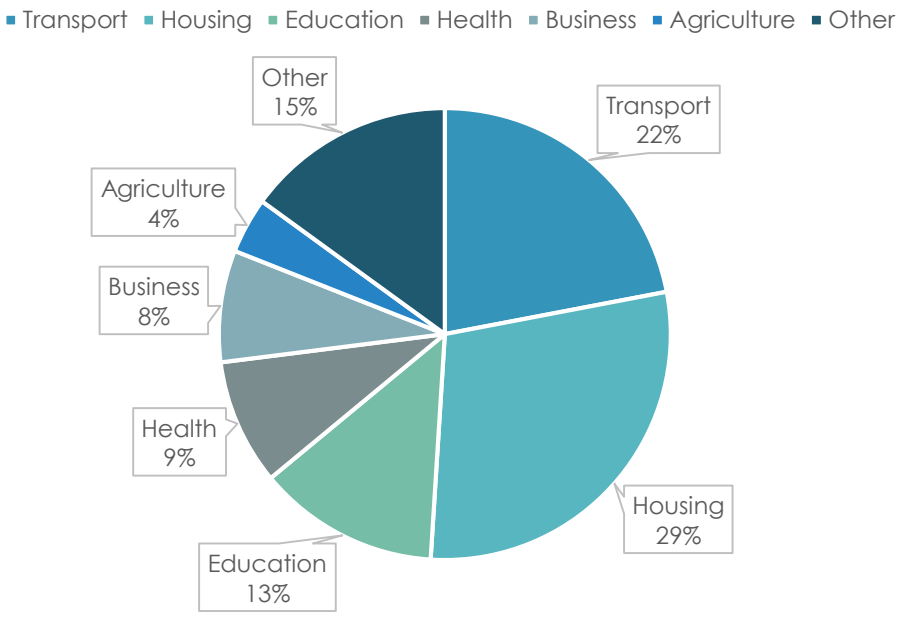
€7.3 billion in capital investment in 2019 bodes well for construction

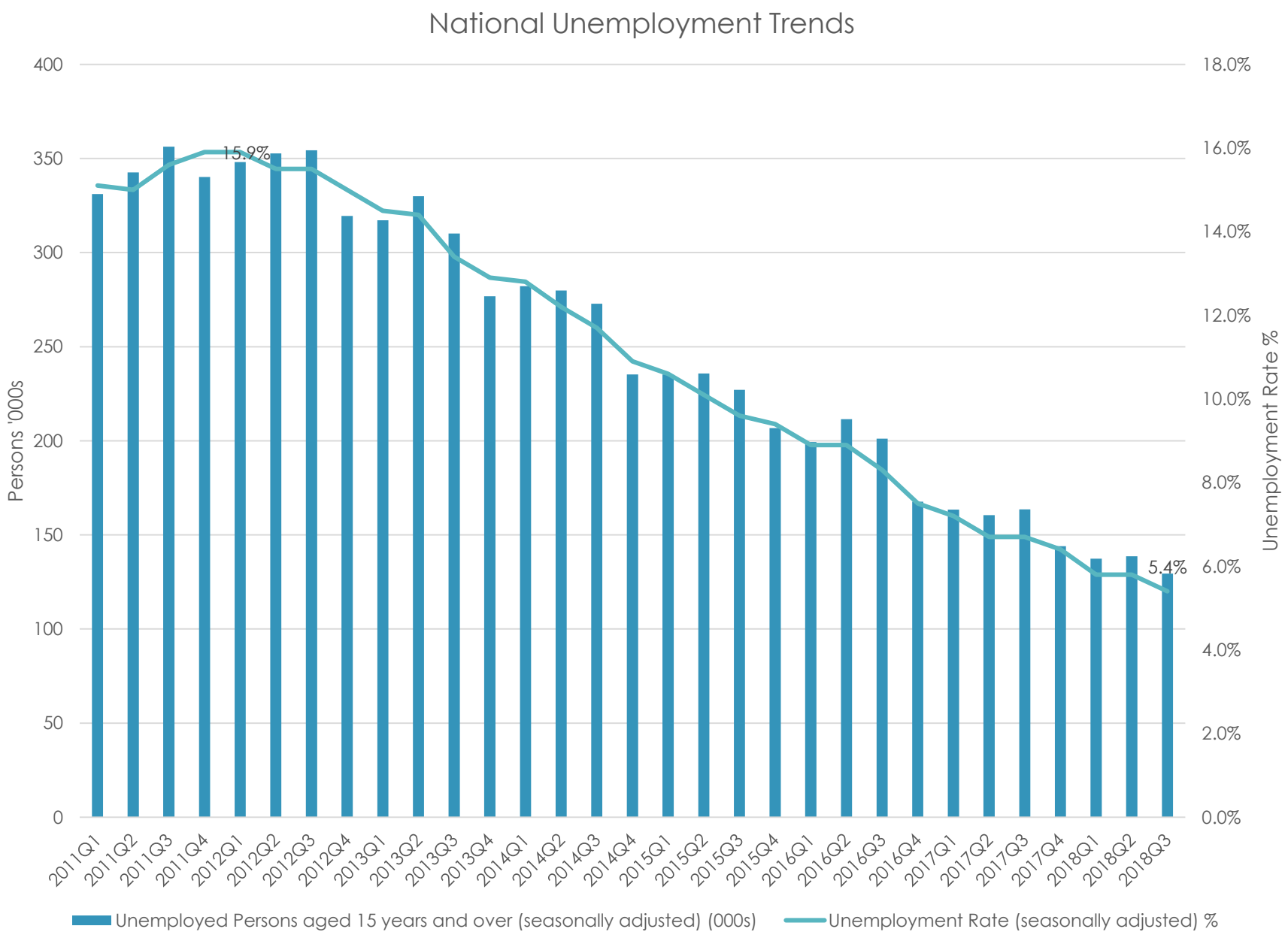
- The amount allocated in 2019 is broadly in line with the overall allocation set out in the National Development Plan, for 2019.
- Capital investment in 2019 is 23.6% greater than it was in 2018.

NDP Investment 2018-2027

€ billion*	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Total
Exchequer-Gross Voted	5.8	7.3	7.9	8.6	8.9	9.4	10.0	10.5	11.0	11.6	91.0
Non-Exchequer**	2.6	2.7	2.6	2.6	2.4	2.4	2.4	2.4	2.4	2.4	24.9
Total Cap Ex	8.4	10.0	10.5	11.2	11.3	11.8	12.4	12.9	13.4	14.0	115.9
Exchequer as % of GNI*	2.9%	3.5%	3.7%	3.8%	3.8%	3.9%	4.0%	4.0%	4.0%	4.1%	

Gross Voted Capital Expenditure 2019





Nine out of every ten jobs lost since the crisis have been recovered.

Employment growth has been broad-based across sectors and driven by gains in full-time positions.

Need to see policy actions within the area of skills development and R&D to accompany the national strategic outcomes identified within the NDP.

Data Source: Labour Force Survey, CSO

Direct construction employment of 145,700 persons by end Q2 2018.

Construction employment is 6.4% of the total number of persons currently in employment and 6.1% of the total labour force.

1 in every 15.5 jobs is in construction.

The largest annual rate of increase was recorded in the construction sector at +13.9% or +17,800 persons yoy to end Q2 2018.

Data Source: Labour Force Survey, CSO

Available construction skills

- The composition of employment across construction is changing.
- Reflects emerging technological developments that are transforming the way in which the sector is innovating into the future.
- Reduced intake in higher level education due to the recession has led to lower numbers of graduates from construction-related courses entering the labour market, with overall output dropping by 50%.
- Ireland, the UK, the US, Canada and Australia are competing for the same labour pool as the shortage of construction professionals is a global issue!!
- Reduced supply of job ready civil & building service engineers is expected to impact as the demand for these skills increases, which in turn will put pressure on wage rate levels and inflation.

Medium Term Construction Prospects

Are positive following the introduction of the longer-term spatial planning framework (NPF/Project Ireland 2040) and capital investment plan (NDP 2018-2027).

They will help to moderate the influence of external factors, such as Brexit, and place the construction industry, along with the wider economy, on a more sustainable path to growth.

The value of construction output reached approximately €20 billion in 2017 or just under 7% of GDP.

On an annual basis, the volume of output in building and construction increased by 13.9% in the year to end Quarter 2 2018.

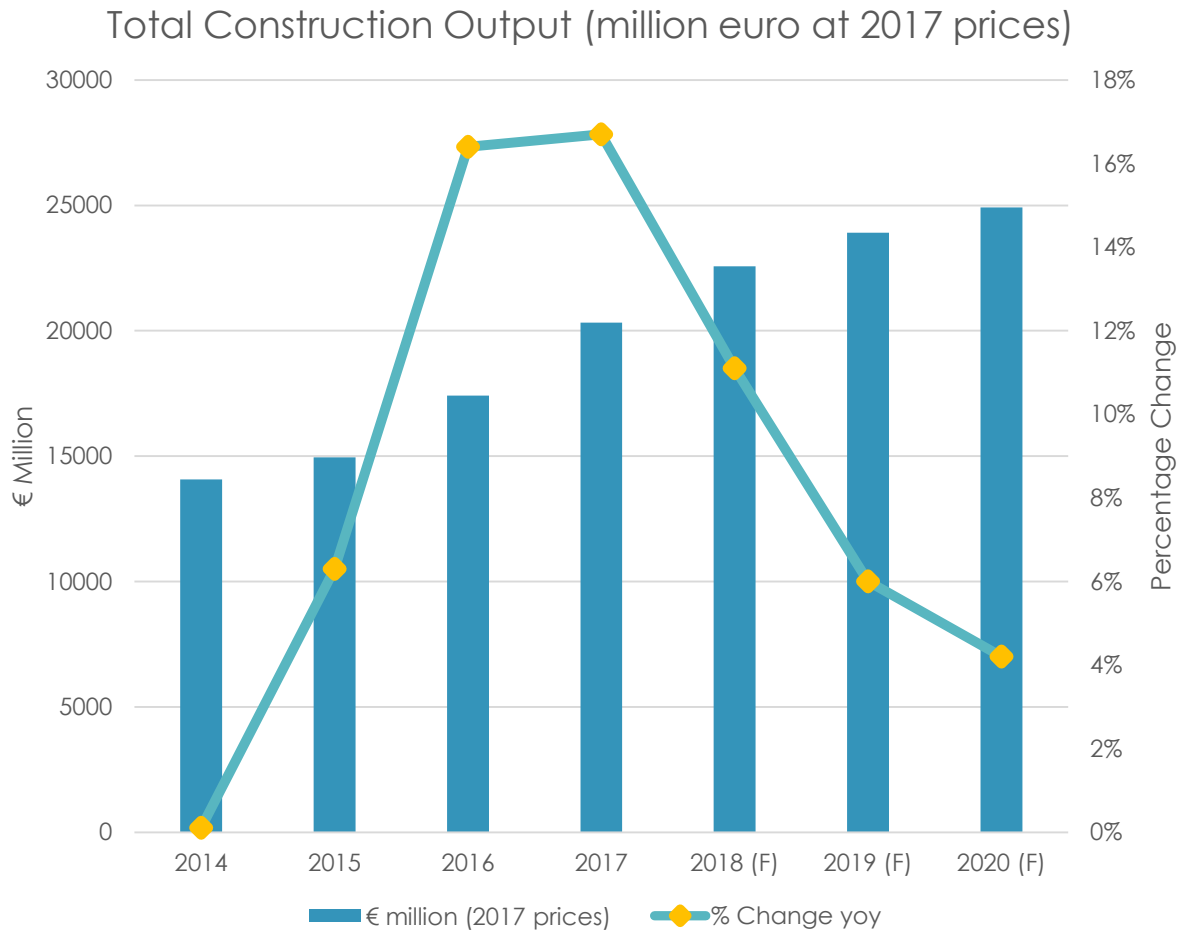
Residential building +18.8%

Non residential building +12.7%

Civil engineering work +8.3%

There was an increase of 17.6% in the value of production in the same period.

Medium Term Construction Prospects



The overall volume of construction output will increase by 11.1% in 2018, followed by 6% in 2019 and 4.2 % in 2020. The average annual growth rate in the period 2017-2020 is projected at 7%.

The volume of construction output by 2020 is forecast to reach €25 billion (in 2017 prices) or €30 billion in current prices, which is equivalent to 8.8% of GDP.

2017's growth in construction output was driven primarily by construction in the private residential and non-residential sector.

Data Source: CSO, CIF, EY-DKM

Gross Fixed Capital Formation / Investment

Underlying domestic demand increased by a strong 20% in the first half of 2018 - significant contribution to growth in recent years and is now just below its pre-crisis peak.

It was underpinned by strong growth of 11.6% in building and construction.

For the non-residential sector, activity is forecast to increase by 10% in both 2018 and 2019, moderating to 8% growth in 2020.

Overall, building and construction *investment* is forecast to increase by about 12% in both 2018 and 2019 and by 9.4% in 2020.

Data Source: Central Bank of Ireland

Housebuilding

19,000 units will be completed by the end of 2018 (+30 per cent year on year).

12,582 dwelling units were completed in the first 9 months of 2018.
14,670 dwelling units were commenced in the first 8 months of 2018.

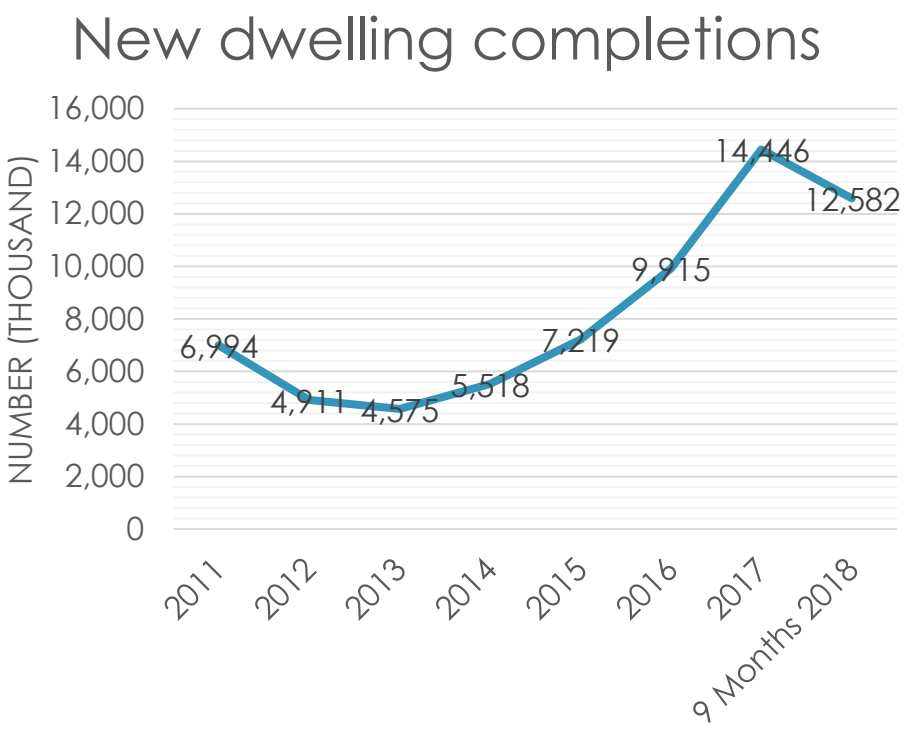
Based on investment levels CIF forecast completions will increase to 24,000 in 2019 and 28,500 in 2020.

National Planning Framework's National Policy Objective 32 targets the delivery of 550,000 additional households to 2040.

€89m provided in 2019 for a Serviced Sites Fund. Fund will reach €310m by 2021 and deliver 6,000 new affordable homes.

LIHAF allocated €41m in 2019 to fund 30 key infrastructure projects to unlock land for development. 28 projects to reach construction stage in 2019.

National Regeneration programme allocated €72m in 2019 - deep retrofit works in 28,000 homes.



Capital Projects and Programmes Tracker

6 of the largest projects:

- Busconnects Dublin (€2 billion) – estimated completion date is 2027
- Water Supply Project – Eastern and Midlands Region (€1.18 billion) proposed completion date is 2025
- National Children's Hospital (€916 million) estimated completion date is 2021
- N20 Cork to Limerick (€900 million) – estimated completion date is 2025
- Galway City Ring Road (€593 million) – estimated completion date is 2025
- Metro Link (€3 billion) – estimated completion date is 2027

In terms of the project lifecycle, 31% of projects are at some stage of appraisal, 46% are at planning and design and 21% are at implementation/construction.

Projects due to be completed in 2019 include:

National Forensic Mental Hospital on Portrane campus

The upgrade of the existing N56 road in Donegal

M11 Gorey-Enniscorthy Motorway

N25 New Ross Bypass

Dingle Relief Road

Skibbereen Flood Relief Scheme

National Indoor Arena Phase 2

A new Food Innovation Hub for R&D in Cork

The following will advance in 2019:

Early planning work on M20 Cork to Limerick scheme.

N4 Colooney to Castlebaldwin

N8 Dunkettle scheme

Sligo Western Distributor road

Resealing and strengthening the national and regional road network.

Town and Village Regeneration Schemes - Boyle, Callan, Ballinrobe, Banagher, Castleblayney and Cappoquin will receive funding of up to €100,000 in 2019.

€5 million investment in public libraries in Edgeworthstown, Portlaoise, Ennis and Stillorgan.

Future Growth Loan Scheme for businesses post-Brexit (€300m).

LEOs will provide competitive regional funding to indigenous businesses.

2019…
The drive for innovation

Lower productivity in construction can be partially explained by the fragmented nature of the industry and lack of vertical integration of technology and innovation, as well as the bespoke nature of individual projects and thin operating margins.

However, the construction industry has shifted from being one of the least dynamic industries to one which is showing greater appetite to adapt technology and embrace product innovation.

Initial research findings by CIF point to productivity improvements being driven by digital trends, labour shortages and efficiency gains.

2019… The drive for innovation

There is a requirement to engage in construction-related research and training and development in order to narrow the productivity gap between indigenous Irish companies and foreign owned MNCs.

All companies can benefit from using more technology and production innovation.

Some companies are already better placed than others.

The emerging shortage of skilled trades' people and construction professionals is a primary concern, as well as a barrier to growth and increased productivity.

Indicators of productivity improvement

- More investment in training and education
- More uptake of innovation
- Increased use of BIM and IT
- Reduction in waste and rework
- More customisable standard designs
- Improved uptake of Pre-Fabrication
- Better integrated supply chain
- Early Contractor Involvement
- More use of KPIs to select tenders
- More effective communication between client, design, build & regulator
- Greater standardisation of processes across full project lifecycle
- More sustainable procurement

Steps to improve construction prospects from 2019

Embed "productivity" into the wider policy agenda in construction (incl. education), which will help strengthen the industry's response to the changing external environment.

- Roadmap to Digital Transition 2018-2021…

- Human Capital Initiative €60m pa…

- National Training Fund levy to increase to 0.9% in 2019 = extra €69m for investment in higher and further education…

Best practice knowledge transfer through:–

Enhanced training and education programme identification; and Partnerships with sector specific experts (e.g. CIC/CSG/Enterprise Ireland/LCI/National BIM Council etc.)

1,200 new craft places.

1,100 additional Traineeships

1,000 new Springboard+ places

5,000 lifelong education and training places for those in employment

7,400 places through Skillnet Ireland…

Develop research relationships across the stakeholder base with the aim of developing a shared research agenda.

Disruptive Technologies Innovation Fund €500m…

A "Centre of Excellence for Construction"…

Future Jobs… preparing now

Research allocation for IOTs…

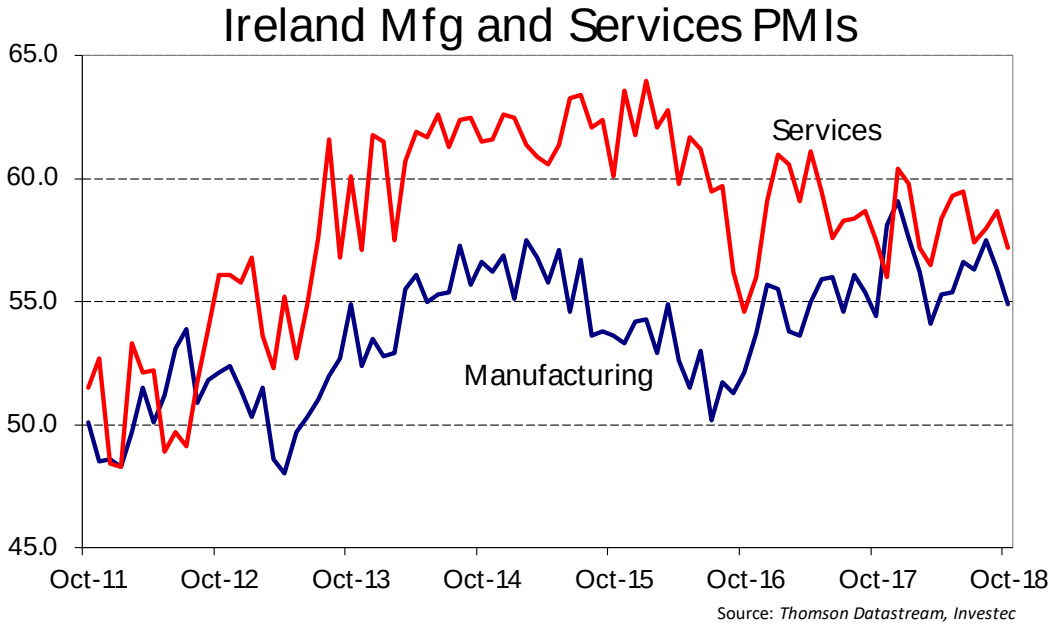
Thank you for listening

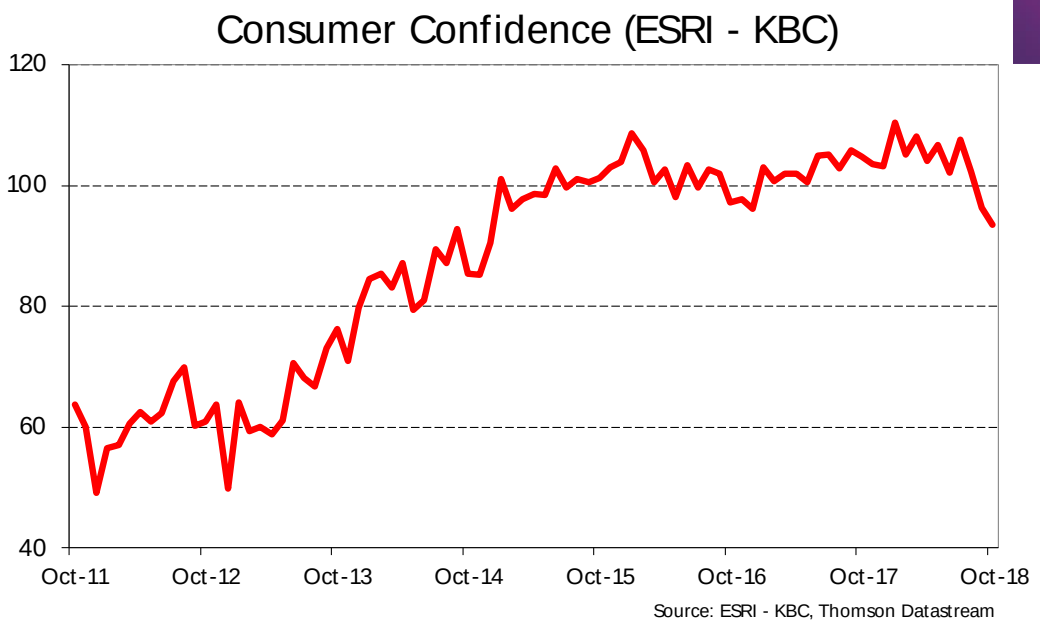
The Economic Outlook in Uncertain Times

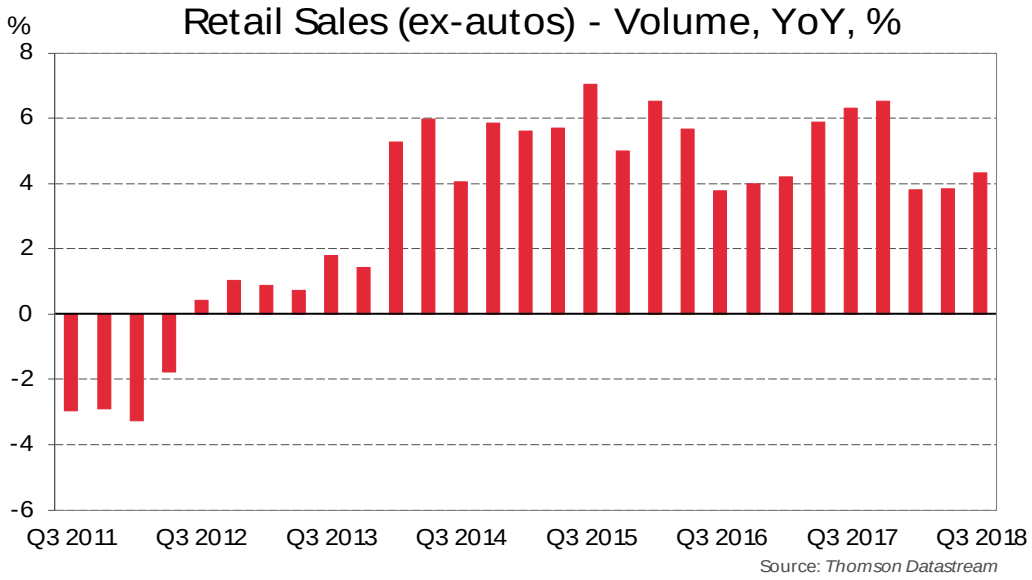
November 2018

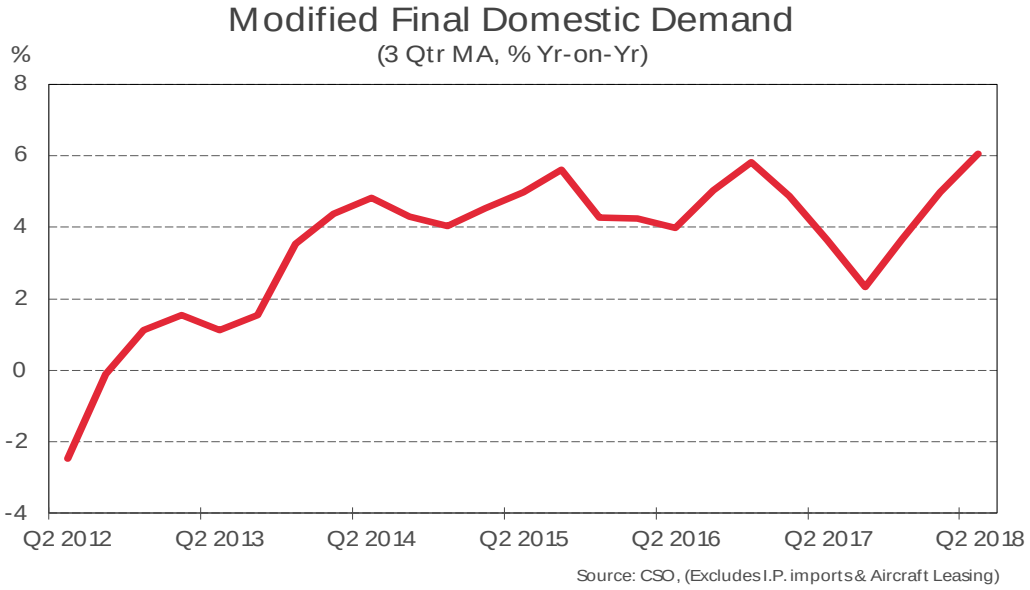
Oliver Mangan
Chief Economist
AIB

Economic indicators remain upbeat in 2018

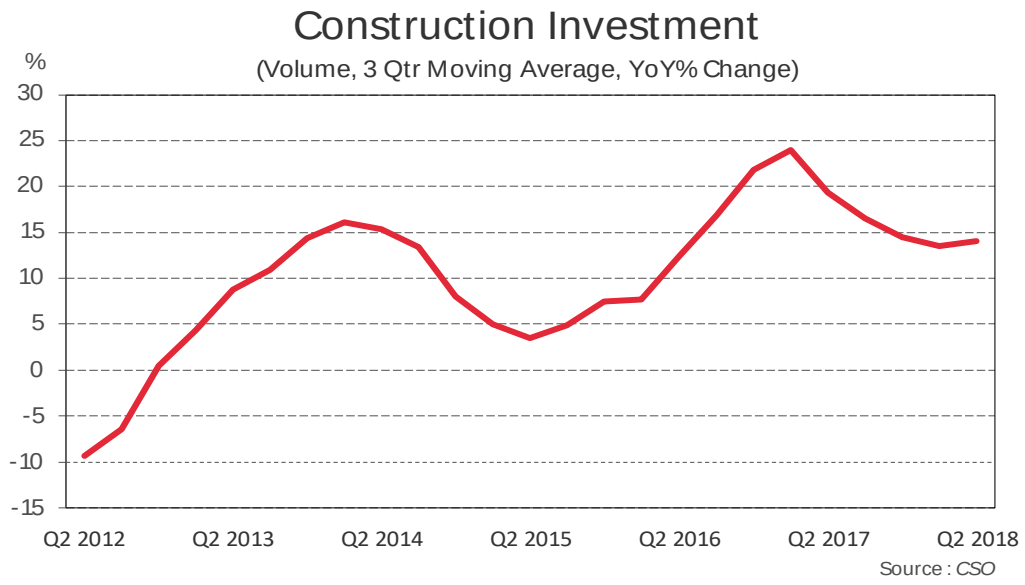


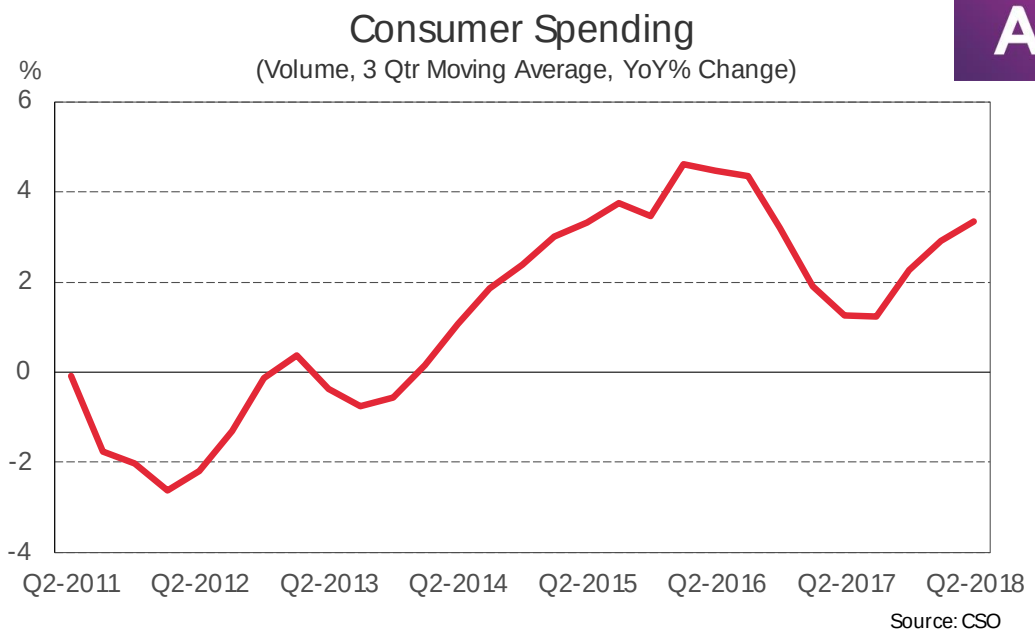


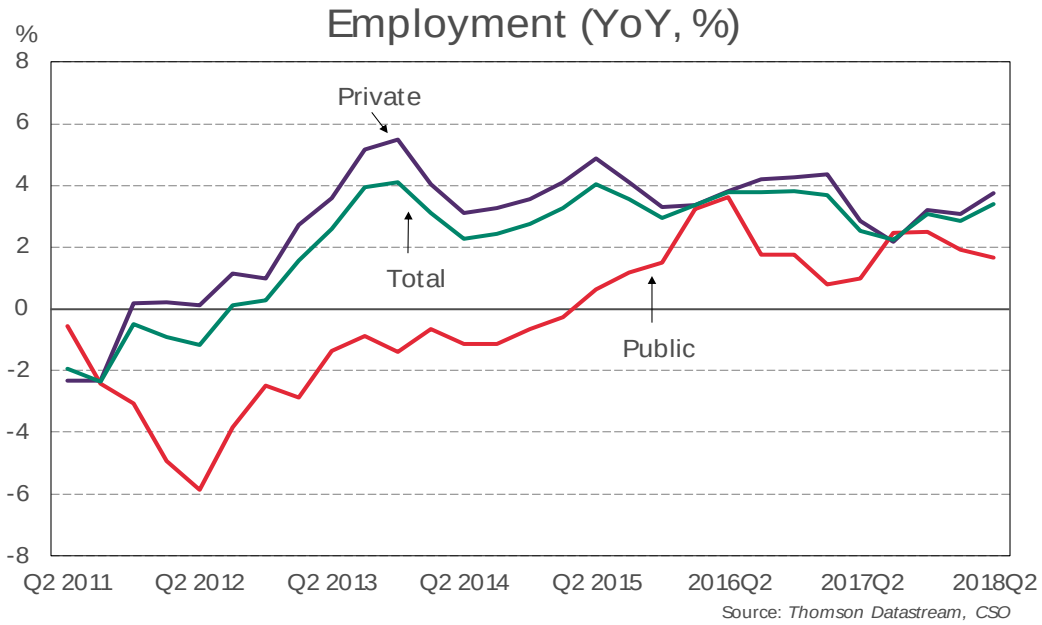




Robust activity; unemployment rate falls to 5.3%

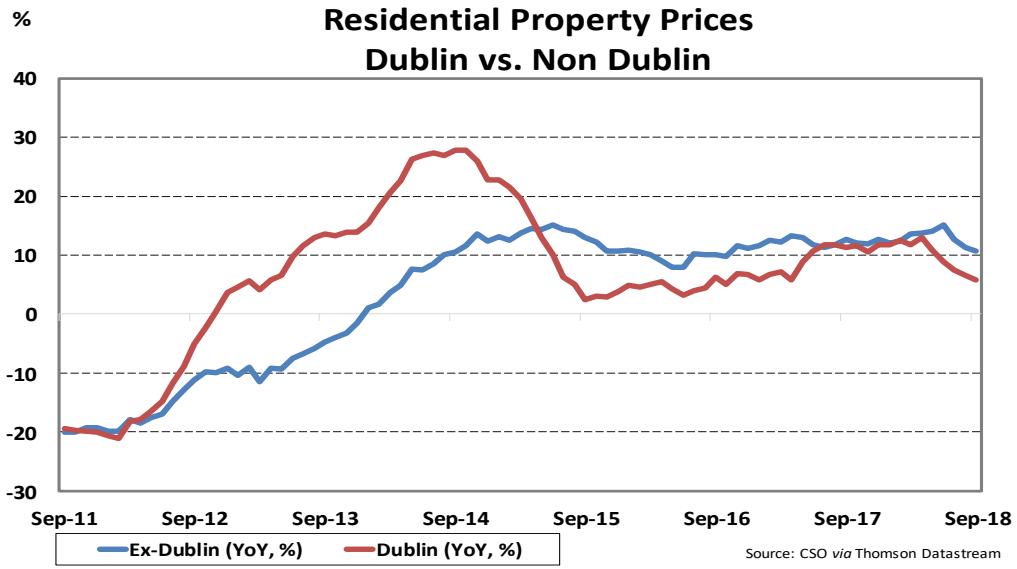






House prices inflation easing on tighter loan rules

- **Prices up 83%** to Sept 2018 from lows in 2013
- **House price growth easing**: 8.2% yoy nationally in September, down from 13.3% in April
- Dublin up 5.8% vs recent peak of 13% in April, non-Dublin slows to 10.8% from 15.4% in June
- **Mortgage approvals slow** sharply, though mortgage lending up by 20% yoy to September
- **Housing completions** increased by 45% to 14,500 in 2017. Up 28% yoy to Sept 2018
- Forecast at 18,500 in 2018 and 23,000 in 2019
- Could be **2022** before housing output rises to 35,000 units; estimated level of annual demand



Irish growth to remain strong if hard Brexit avoided

- **Strong growth** by Irish economy to continue
- **Construction** picking up from still low output levels, especially house building
- Continuing growth in **public spending**
- Activity supported by **low interest rates**
- **FDI** remains strong - could ease somewhat on pressure from Trump administration
- **Solid global growth** to help exports
- No major **Brexit** impact on economy so far
- Good GDP growth forecast for 2019-2021
- A no-deal, hard Brexit and slowdown in global economy are **main risks**

AIB Irish Economic Forecasts

% change in real terms unless stated	2018 (f)	2019 (f)	2020 (f)	2021(f)
GDP	**6.5**	**4.0**	**3.5**	**3.2**
GNP	7.0	3.7	3.2	3.0
Personal Consumption	3.5	2.5	2.5	2.2
Government Spending	3.5	3.0	3.0	3.0
Fixed Investment	-3.0	7.0	6.0	5.5
Exports	7.5	4.5	4.3	4.0
Imports	1.5	4.5	4.5	4.3
HICP Inflation (%)	0.9	1.4	1.6	1.8
Unemployment Rate (%)	5.7	5.2	5.0	4.9
Budget Balance (% GDP)	-0.1	0.0	0.2	0.3

Continuing steady global growth forecast but…

GDP (Vol % Change)	2017	2018(f)	2019(f)	2020(f)
World	3.7	3.7	3.7	3.7
Advanced Economies	2.3	2.4	2.1	1.7
US	2.2	2.9	2.5	1.8
Euro Area	2.4	2.0	1.9	1.7
UK	1.7	1.4	1.5	1.5
Japan	1.7	1.1	0.9	0.3

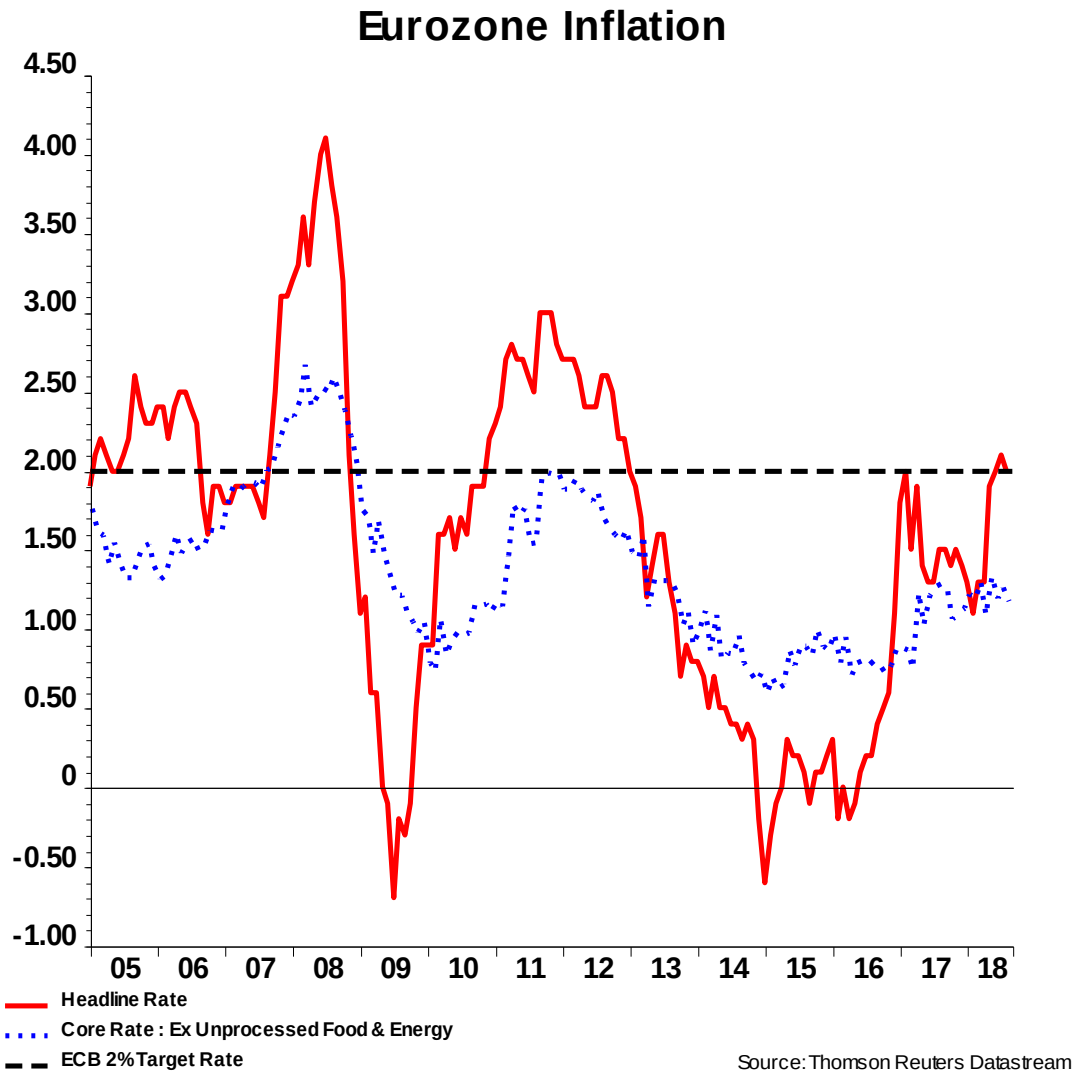
Source: IMF World Economic Outlook October 2018

- IMF/OECD forecasting steady growth of 3.7% for world economy in 2019/20
- Loose monetary policies, more expansionary fiscal policies, recovery in commodity prices, rising real incomes all helping to boost activity
- Inflation remains subdued, allowing central banks to keep rates very low
- Downside risks, though, are mounting for world economy – IMF/OECD have lowered their growth forecasts in latest updates

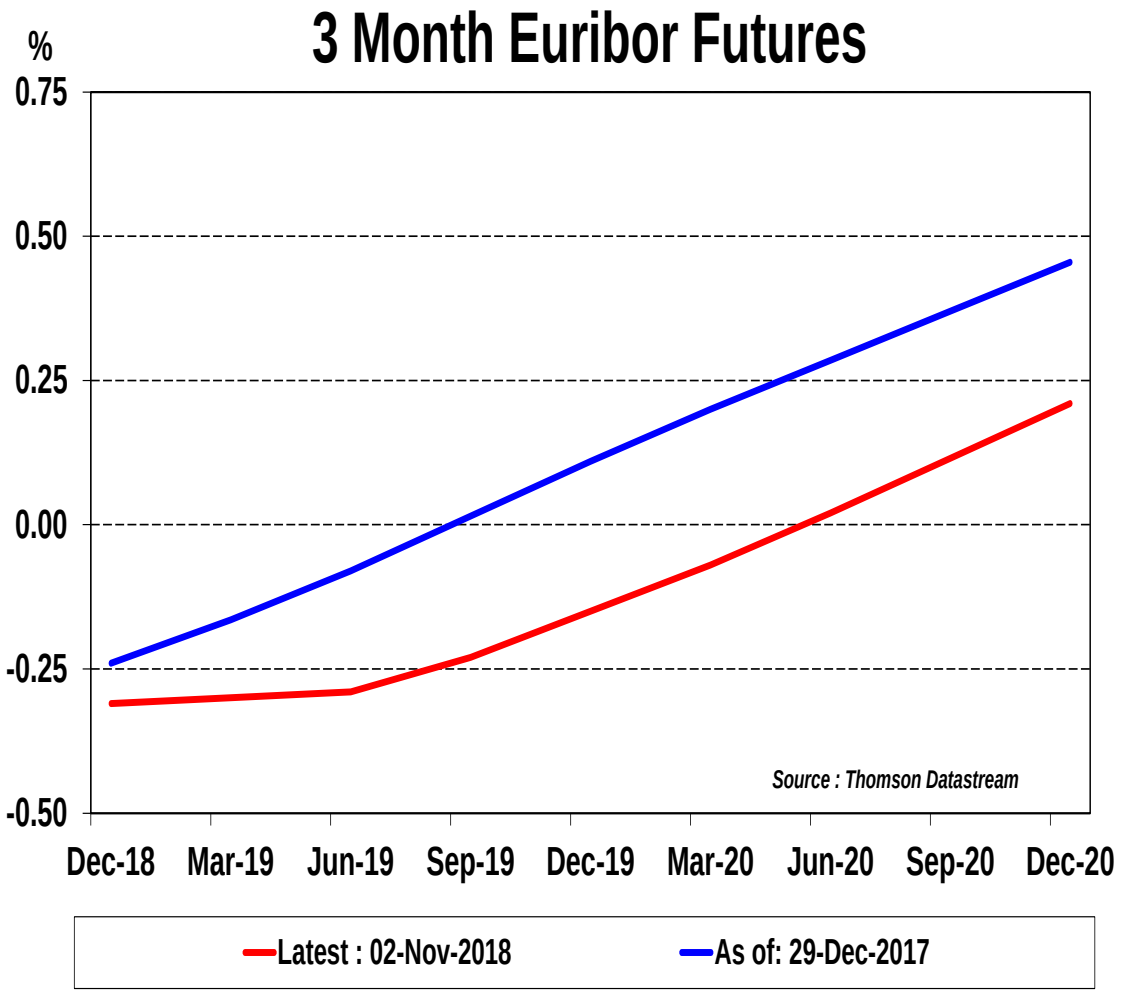
…many concerns about the economic outlook

- **Global Trade:** Move away from free trade towards protectionism\tariffs under Trump Presidency
- **US Budget Policy:** Concern that the US is expanding fiscal policy aggressively at a time of full employment and will result in rising budget & balance of payment deficits, possibly higher inflation
- **US Economy:** Should grow strongly in near-term, but then may slow sharply as fiscal stimulus fades and higher interest rates impact activity. Already the second longest US economic expansion
- **Political Uncertainty Across Europe:** Rise in populism, nationalism, anti-immigration, EU scepticism, divisions between older and newer EU member states, Italian budget
- **Brexit:** UK leaving the EU, Single Market and Customs Union in March 2019 but what then?
- **Emerging Economies Wobble:** Rising US dollar/rates & domestic issues expose weaknesses and rattle confidence in some big emerging economies – Argentina, Brazil, Turkey, S Africa, Indonesia
- **Nervous Financial Markets:** Much more volatility in financial markets this year, with increased risk aversion amidst greater uncertainty and weak stock markets

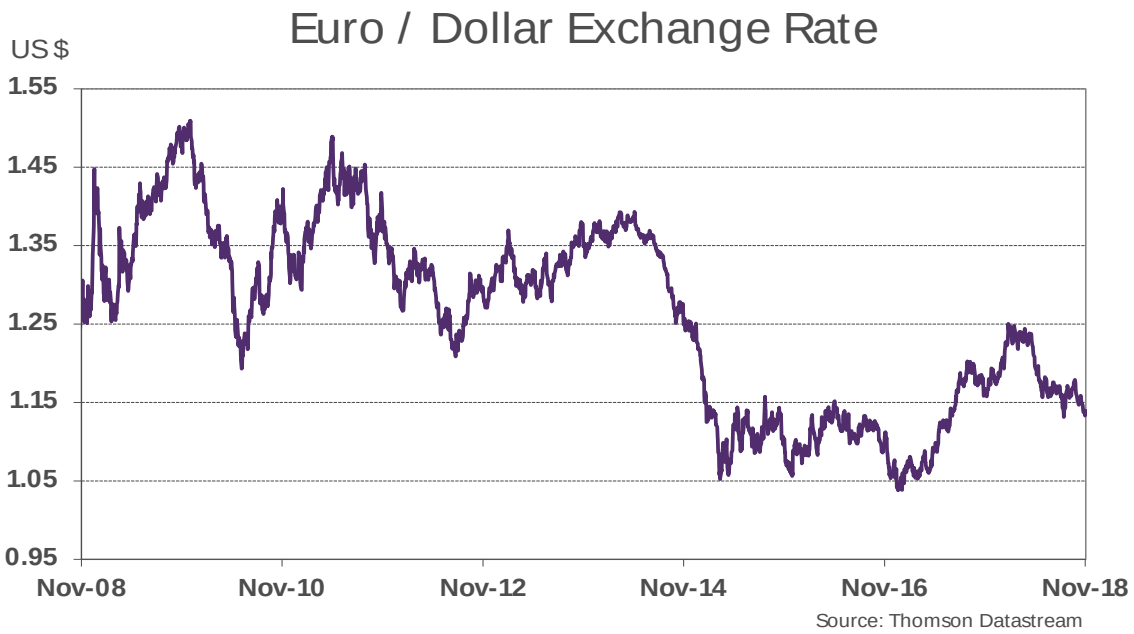
ECB rates expected to remain very low

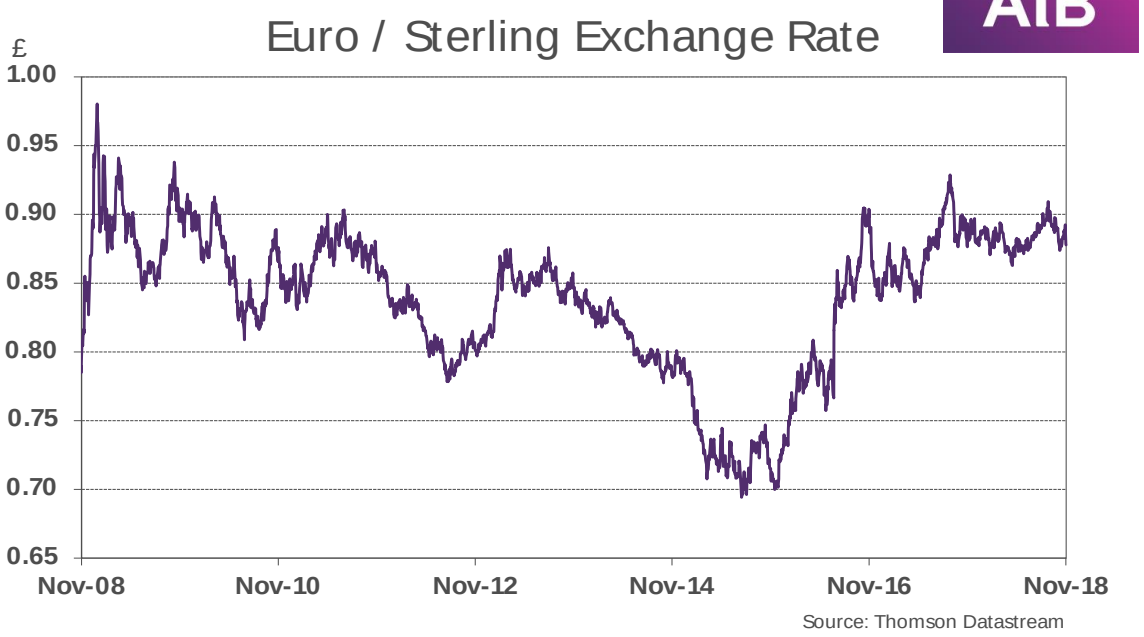


Source: Thomson Reuters Datastream



Strong dollar; sterling driven by Brexit news flow





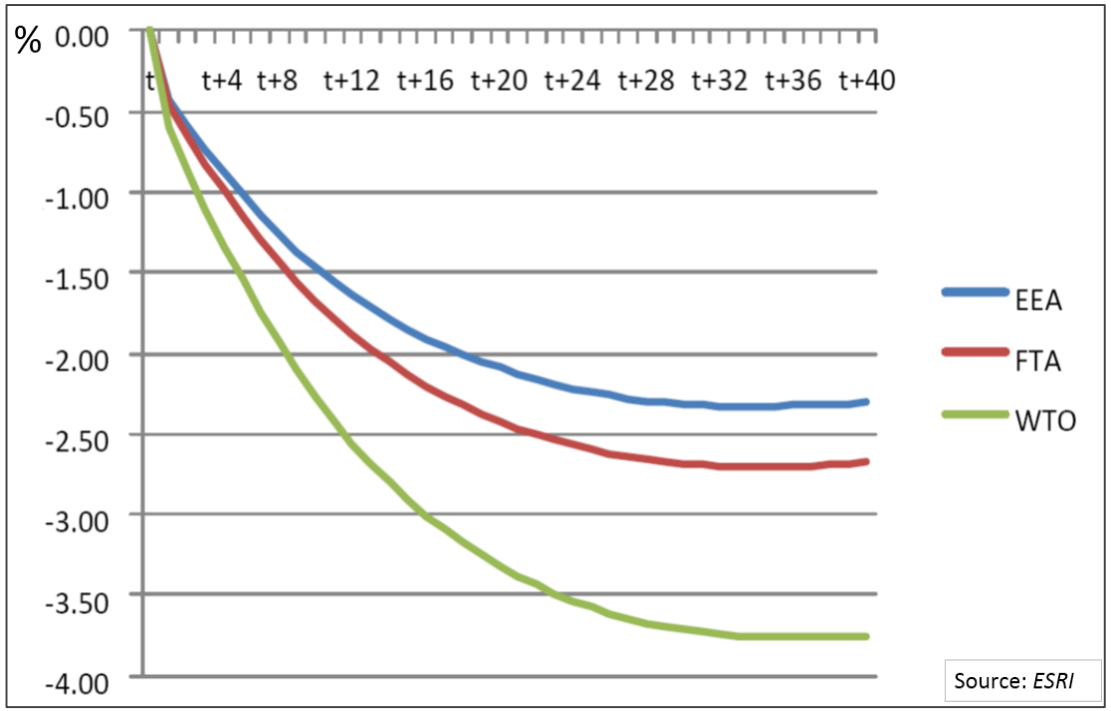
- Rising **US rates** providing support for dollar after its sell-off in 2017
- **Euro** falls below $1.15 from high of $1.25 earlier in year
- **Dollar** looks well underpinned near-term, but US imbalances a long-term worry
- **EUR/GBP** largely trades in a narrow 87-90p range since September 2017
- **Brexit** the key factor influencing sterling – a hard Brexit could see steep fall in currency

Much uncertainty still about Brexit

- **UK expected to leave EU**, Single Market and Customs Union in March 2019
- **Withdrawal Agreement** finalised between UK and EU to allow for orderly UK departure from EU. Special summit on Sunday November 25th
- It includes **a transition period** to allow for continuing EU-UK free trade while a new trade deal is being negotiated. Last to at least end 2020
- Agreement provides for **backstop** to be triggered with customs arrangements if new trade deal can't be agreed to avoid a hard border in Ireland
- Backstop allows **unfettered access for NI** to both EU and UK markets
- Getting Withdrawal Agreement through **UK Parliament** a challenge. Tory Party badly split. Government could fall, or may need support of some Labour MPs
- Still a lot of **uncertainty about Brexit.** Wide variety of possible outcomes, including a second referendum that could see UK staying in EU

Brexit expected to lower growth rate of Irish economy

Impact of Brexit on Output *(% deviation from base)*



- **ESRI** estimate that Irish output would be reduced over time by 2-2.5% on a soft Brexit
- Sharp fall-off in trade with UK likely on a no-deal, hard Brexit
- Output almost 4.0 % lower over time if there is hard Brexit and a fall back on **WTO rules** and tariffs
- Employment 2% lower and unemployment rate nearly 2% higher in hard Brexit

- Copenhagen Economics Report considers costs of regulatory divergence for goods and services and of border checks, as well as tariffs in assessing impact of Brexit
- Estimates impact by 2030 is to reduce Irish GDP by 2.8% under a soft Brexit (EEA), 4.3% in a FTA and 7% in a no-deal, hard Brexit WTO scenario

2019 OPPORTUNITIES FOR CONSTRUCTION COMPANIES

Breakfast Briefing

21 NOVEMBER 2018

Your Presenter

Terry McAdam

Management Consulting Partner, RSM Ireland

- Key focus on technology and process enhancement/automation projects
- Goal to help clients consider their options regarding optimising how they do business
- Guided many businesses, including construction entities, through change
- Contact details: tmcadam@rsmireland.ie,

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AGENDA

Agenda

- RSM Ireland
- Key Construction Industry Challenges
- How Lean may help
- What is Lean?
- What are the benefits of Lean?
- Early steps
- Our relevant experience
- Potential funding sources
- Further information

RSM IRELAND

RSM Ireland

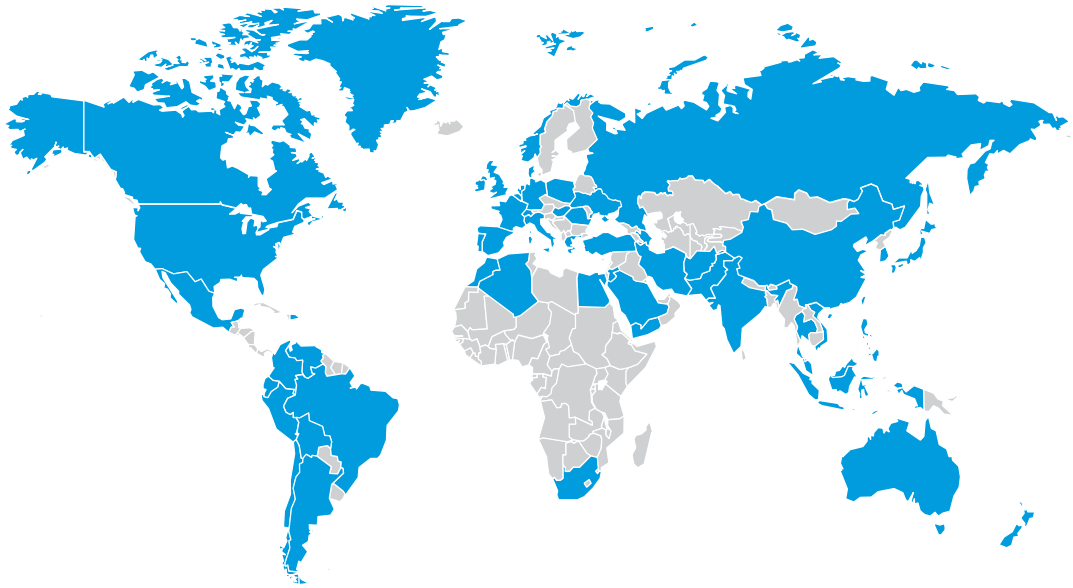
Our firm's history goes back to **1987.** Grown to become one of the **top 10** professional services firms in Ireland specialising in providing business advice to **mid-market businesses**. Circa **150 professional staff** at present. Provide **audit, tax, consulting and transaction services** (corporate finance and corporate recovery). **Successful partnership with CIF** across last decade. Deep construction expertise.

RSM International:

One of the fastest growing global networks of its type:

- ✓ We are the **sixth largest** with combined revenues of **$5.1bn**.
- ✓ Our member firms operate out of more than **800 offices** in over **120 countries**. We have over **41,400 staff worldwide**.

Network coverage map:



KEY CONSTRUCTION INDUSTRY CHALLENGES

Key Construction Industry Challenges

- 2019 - a year of opportunity, but…
- most construction businesses will still face challenges including:
  - tight contract margins = pressure re profitability and cashflow
  - keeping your customers happy
  - managing operational contract risk
  - addressing skills shortages
- Good news: some of the answers may rest within your control
- Time to revisit how you do business – on site and off site

HOW LEAN MAY HELP

How Lean May Help

- If successfully adopted, Lean can help the business to:
  - focus on eradicating embedded wasteful practices which erode profitability
  - be driven by what your customer really wants
  - streamline and simplify processes which normally equals reduced operational risk
  - standardise and simplify processes to enable staff to perform to their maximum

WHAT IS LEAN?

What is Lean?

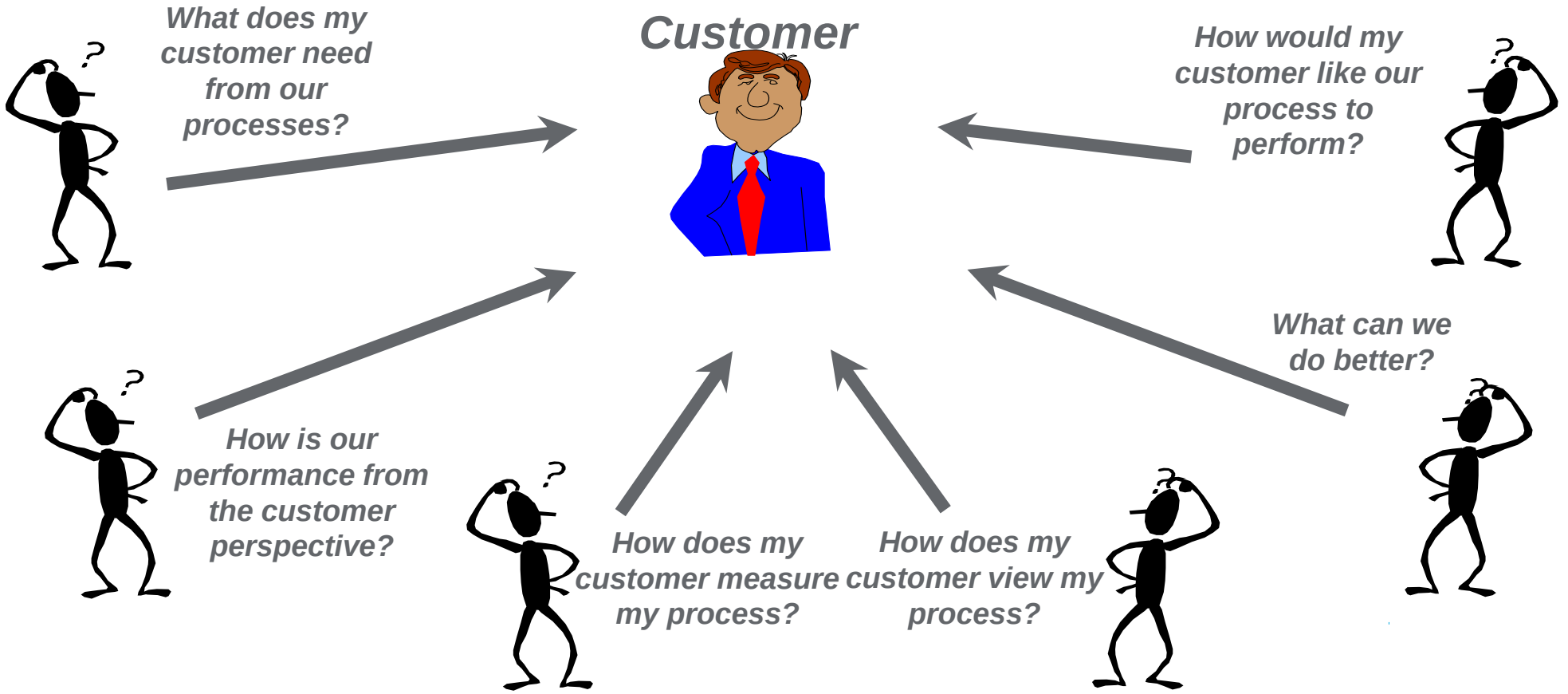
- Lean has been around a long time – form of continuous improvement:
  - Pioneered by Ford in the early 1900's
  - Perfected by Toyota post WWII
- Focused outwardly on being flexible to meet customer demands
- Inwardly focused on waste and cost reduction in all processes
- What activities add value? Focus on processes across your business on site and off site
- Scale of business or nature of activities do not matter

“The ability to eliminate waste is developed by giving up the belief that there is ‘no other way’ to perform a given task. It is useless to say, ‘It has to be done that way,’ or ‘This can’t be helped!’

At Toyota, we have found that there is always another way.”

Study of the Toyota Production System

Customer Focus



What processes do you need?

- All processes must either:
  - add value to the customer or
  - help you comply with the law or regulation

- All other processes must be challenged

Eliminating Seven Wastes – TIM WOOD

1. Waste of **T**ransportation (staff/material)
2. Waste of holding **I**nventory (or WIP: too much or too long)
3. Waste of **M**ovement (Worker)
4. Waste of **W**aiting (Idle)
5. Waste of **O**verproduction
6. Waste of **O**ver Processing (Doing more than needed)
7. Waste of Making **D**efective Products (Snagging)

WHAT ARE THE BENEFITS OF LEAN?

What Are The Benefits of Lean?

- Reduce defects, cost and waste – time, people, material, energy, stocks, WIP. Continuous scrutiny of what you do and how?
- Simplify and streamline all processes (operational and administrative) to promote consistency between teams, projects, sites.
- Reduce risk in projects as consistent approach to delivering quality, teams more interchangeable.
- Processes developed will underpin health and safety.
- Problem-solving tools are core to Lean. Allow rapid response to issues arising via Kaizen events, root cause analysis.

EARLY STEPS

Early Steps

- 5S – simple example on following pages
- Process mapping, value streaming – with your customer (main contractor)
- Root cause analysis
- Pareto chart
- Kaizen events
- **Key advice: Take small steps, deliver successful projects, build confidence, create enthusiasm**

5S

- 5S is a method to reduce waste and improve productivity through maintaining an orderly workplace and using visual cues to achieve more consistent operational results.
- 5S represents 5 disciplines for maintaining a Visual Workplace (visual controls and information systems).
- These are critical to the Kaizen process (continuous improvement) and the basis of "Lean Manufacturing" (waste removing) concepts.
- The 6S's (5S + Safety).

5S – The Impact

OUR RELEVANT EXPERIENCE

Our Relevant Experience

mcavoy
Think Smart. Build Smart.

kirby
engineering & construction

McC
fpmccann

Acheson & Glover

Acheson
& Glover

RSM

POTENTIAL FUNDING SOURCES

Potential Funding Sources

- Enterprise Ireland
  - LeanStart
  - LeanPlus
  - LeanTransform
  - GreenStart
  - GreenPlus

- Local Enterprises Offices (LEO)

FURTHER INFORMATION

Further Information

RSM IRELAND WEBSITE – https://www.rsm.global/ireland/

LEAN BUSINESS IRELAND - https://www.leanbusinessireland.ie/

LEAN CONSTRUCTION IRELAND - http://leanconstructionireland.ie/

Thank you for your time and attention

"No. 1 for Quality, Value & Range"

Mark Lohan
Managing Director

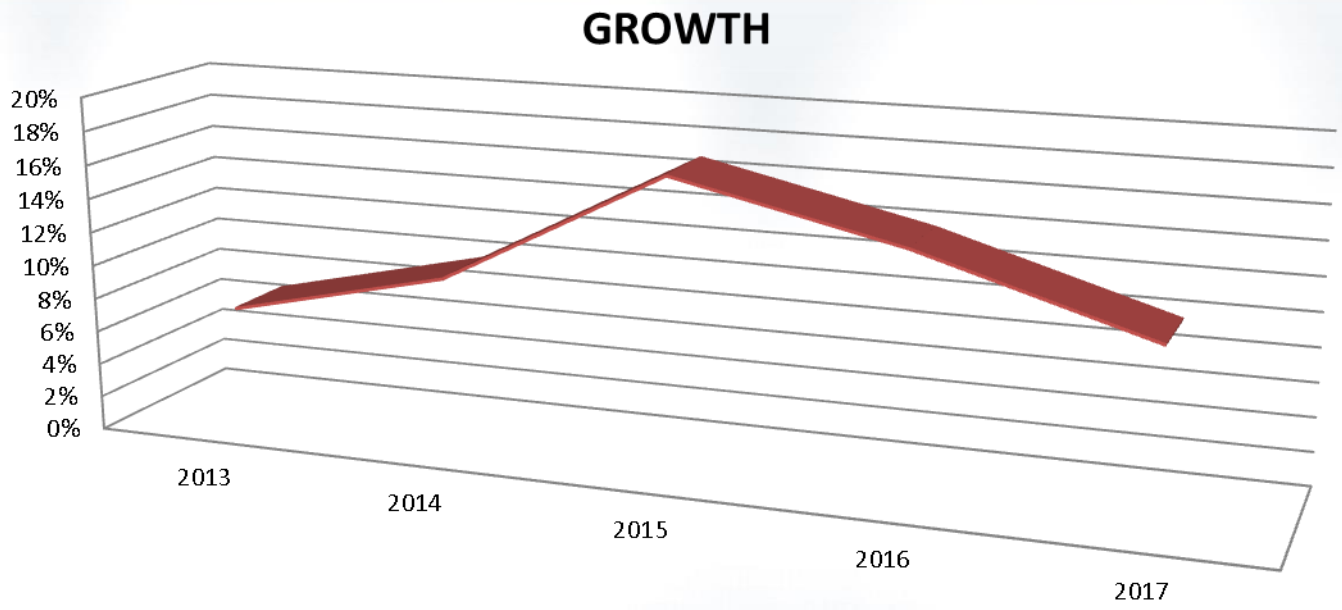
In 1976 the Irish Government was rapped on the knuckles for failing to comply with the European Economic Community guidelines by implementing the agreed sex equality legislation.

The Irish Government immediately advertised to fill the position of an equal pay enforcer officer.

The advertisement offered

different salaries for men and women!!

BROOKS



	2013	2014	2015	2016	2017
PERCENTAGE	7%	10%	17%	14%	10%

BROOKS

GROWTH IN THE MATERIALS MARKET

The sector as a percentage of GDP will grow from 8% in 2018 to 12% in 2023. This is underpinned by a number of government-backed plans;

✓Rebuilding Ireland (€500m to 2021); 90,000 houses deficit

✓Project 2040 (€115bn)

- Children's Hospital, Data Centres, Education, Transport.

✓Renewables – Ireland will <u>miss</u> 2020 targets (significant penalties)

ISSUES

✓Brexit – Impact on public finances

✓Availability of finance

✓Skills shortages

✓Building Regulations

BROOKS

THE CONSTRUCTION INDUSTRY OUTLOOK

SUPPLY ISSUES INSULATION, MDF, OSB

LABOUR & SUPPLY

REGULATIONS

ECONOMY IMPROVING

REGULATIONS/ FIRE→ SPCIFICATIONS

RISING PRICES

SIGNIFICANT CONSTRUCTION INITIATIVES

SECTOR RECOVERING

UK SLUMPS UK IMPORTS

SOLUTIONS/ RATHER THAN PRODUCTS

DRIVE TO QUALITY PRODUCTS

BROOKS

THE CONSTRUCTION INDUSTRY OUTLOOK

2007 – 2013

- Moth-balling of facilities

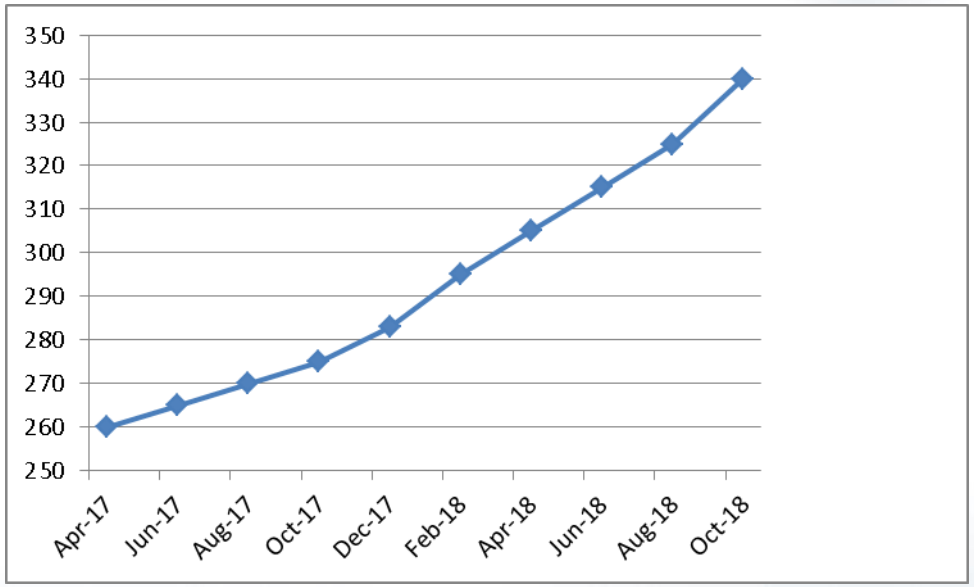
2013 – Present

- Increased demand from USA, China
- Sustainable product →FSC/PEFC
- Significant and continuing price increase trajectory

➲ Building materials generally ➲ 2-3% p.a.
Timber 8 price increases in 18 months

BROOKS

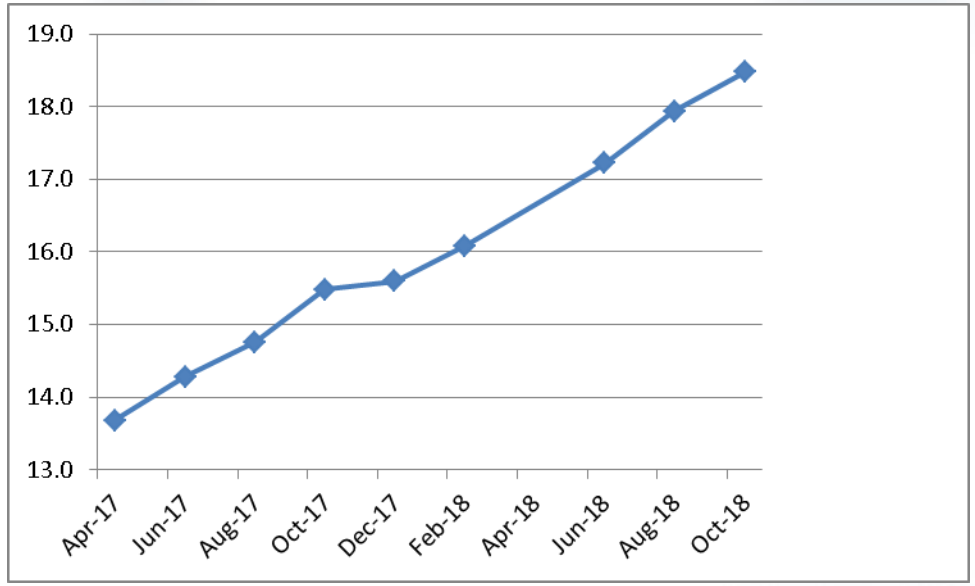
SUPPLY ISSUES



SOFTWOOD COSTS

BROOKS

TIMBER PRICES



OSB
SHEET
COSTS

The Softwood trend has been replicated in OSB – 35% increase as demand for overall fibre increases

BROOKS

OSB PRICES

BROOKS

Thank You!