The Irish Economic Update

Continuing Robust Growth

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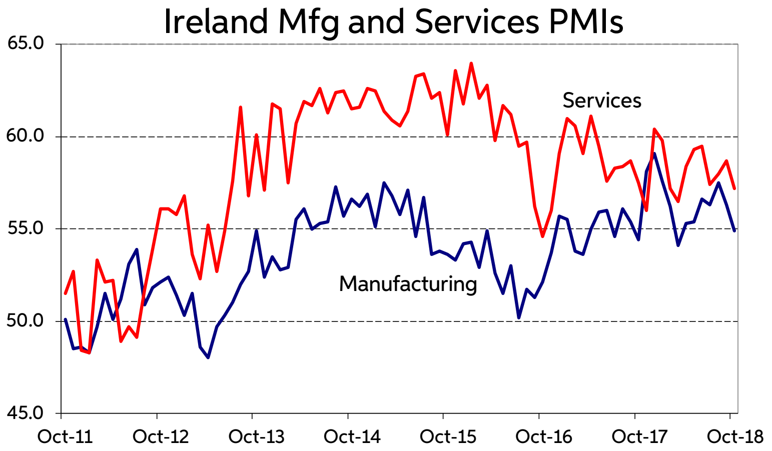
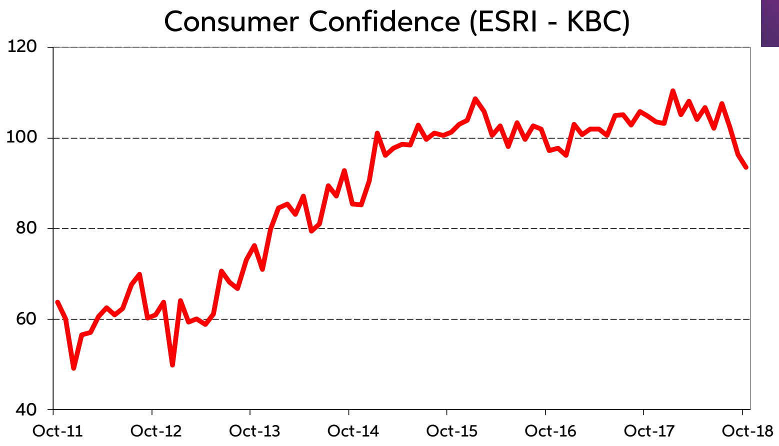
Strong growth by Irish economy since 2013

- Irish economy boomed from 1993 to 2007 with GDP up by over 250% – Celtic Tiger
- Very severe recession in Ireland in 2008-2009. GDP fell by 8.5% and GNP down 11%
- Collapse in construction activity and banking system, severe fiscal tightening, high unemployment. Ireland entered a 3 year EU/IMF assistance programme from 2010-2013
- GDP at end of 2008-09 recession was still over 25% higher than in 2001, highlighting that the economic crash came after a long period of very strong growth, unlike in other countries
- Ireland tackled its problems aggressively in the public finances, banking sector and property market. Imbalances in economy unwound – housing, debt levels, competitiveness, BoP
- Ireland focused on generating growth via its large export base as the route to recovery
- Economy grows very strongly over 2013-18 – underlying growth averages 4.5% for the period
- Domestic economy has recovered strongly, led by rebound in investment and retail spending
- Strong jobs growth. Unemployment rate fell from 16% in early 2012 to 5.5% in October 2018
- Budget deficit has declined at a quicker than expected pace. Down to 0.1% of GDP in 2018

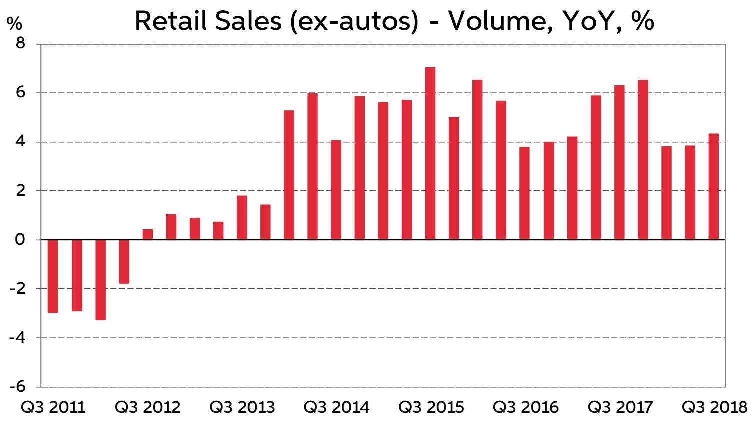
Economic indicators remain upbeat in 2018



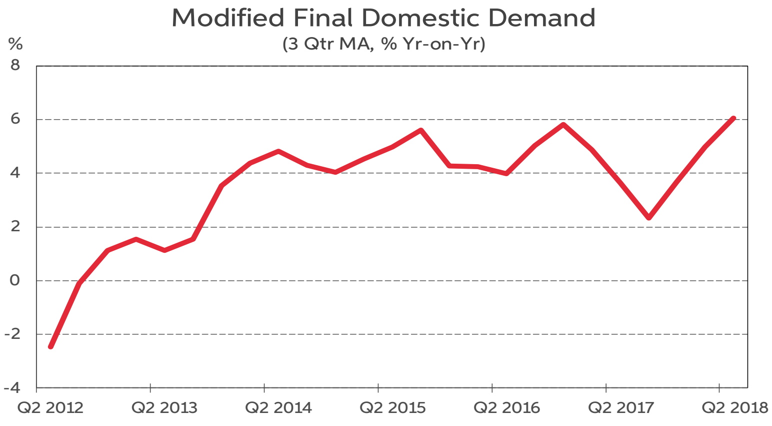
Source: *Thomson Datastream, Investec*



Source: ESRI - KBC, Thomson Datastream



Source: *Thomson Datastream*



Source: CSO, (Excludes I.P. imports & Aircraft Leasing)

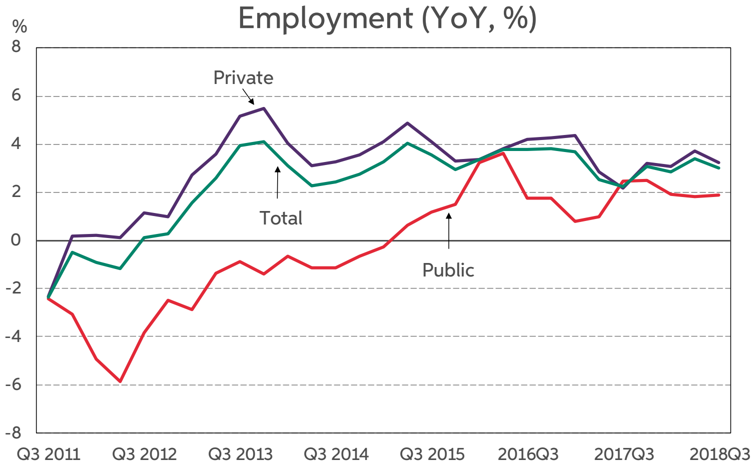
Economy continues to perform strongly in 2018

- Modified final domestic demand grew by over 6% yoy in H1 2018
- Mfg PMI remains high in 2018 – at 54.9 in October and 56.3 in September
- Services PMI also very strong in 2018 – at 57.2 in October and 58.7 in September
- Continuing very high construction PMI – averaged 58.4 in Q3
- Consumer confidence remains high but has dipped in recent months on Brexit concerns
- Retail sales (ex-motor trade) rising strongly again this year, up 4.3% yoy in Q3
- Total car regs (new + used imports) steady at very high level in 2018 – surged over 2014-17
- Further strong rise in housing completions – up 28% yoy to September
- Mortgage lending up by 20% yoy to end September, after rising by 29% in 2017
- Continuing strong job growth – employment rose by over 3% yoy in Q1-Q3 2018
- Live Register continues its sharp decline in 2018. Jobless rate drops to 5.5% in Oct 2018
- Budget deficit down to 0.1% of GDP in 2018. Tax receipts up 5% yoy to end Q3

Robust jobs growth; unemployment rate falls to 5.5%

Year Average	2015	2016	2017	2018(f)	2019(f)	2020(f)
Unemployment Rate %	10.0	8.4	6.8	5.7	5.2	5.0
Labour Force Growth %	1.2	1.9	1.1	1.8	2.0	1.8
Employment Growth %	3.5	3.7	2.9	3.0	2.5	2.0
Net Migration : Year to April ('000)	5.9	16.2	19.8	34.0	38.0	40.0

Source: CSO and AIB ERU forecasts

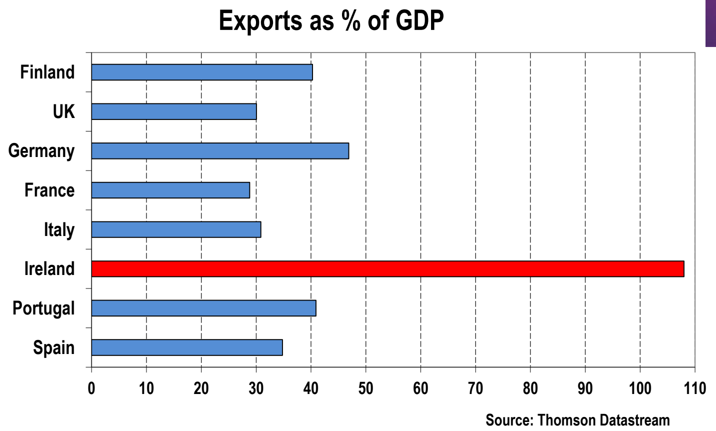


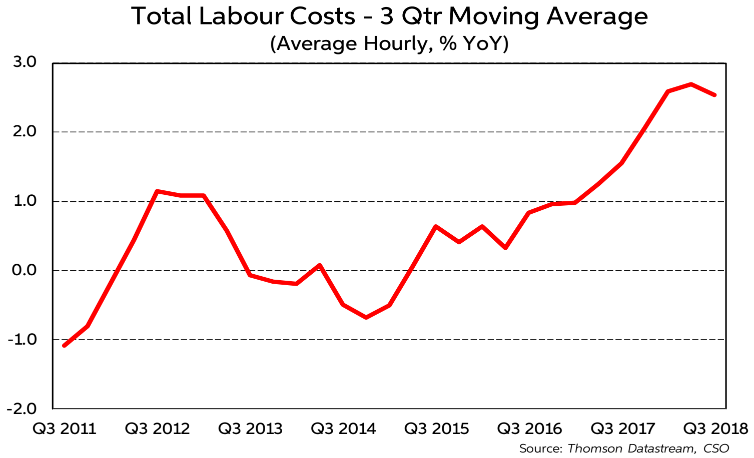
Source: *Thomson Datastream, CSO*

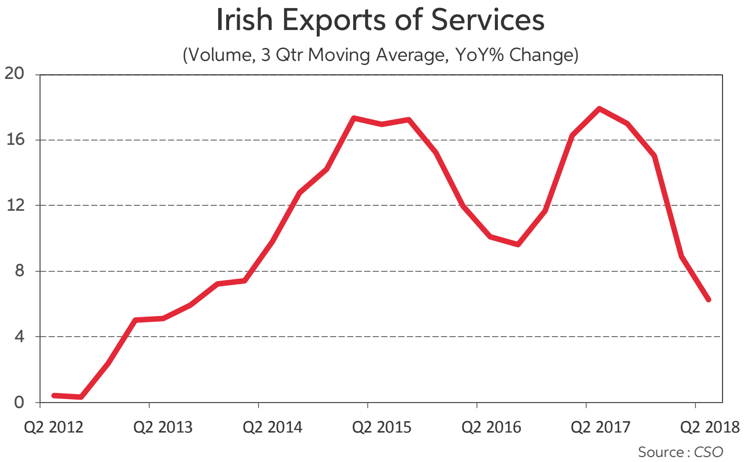
Source: Thomson Datastream

Large Irish export base performing very well

- Ireland a very open economy – exports, driven by huge FDI, equate to well over 100% of GDP
- Major gains in Irish competitiveness in past decade - weakening of euro in 2014/15 helpful
- Exports have risen strongly, helped by large FDI inflows and recovery in global economy
- Sterling's sharp fall a challenge for exports to UK, but total exports still up 8.8% yoy in H1 2018







FDI and the Irish economy

WHAT ATTRACTS FDI TO IRELAND?

- Access to European markets
- Low corporate tax rate of 12.5%
- English speaking country
- Well educated, flexible workforce
- Common law legal system
- Stable political framework
- Long history of successful FDI
- Access to decision makers

KEY FDI IMPACTS ON THE IRISH ECONOMY

- 1,200 multinational companies
- €150bn Exports (64% of Irish exports)
- 200,000 Jobs in FDI, 340,000 in total
- 70% of Corporation Tax
- €8.7bn Spending on Irish services/materials
- €10bn in Payroll
- 67% of Business R&D expenditure

WORLD LEADERS CHOOSE IRELAND

- 8 of the top 10 in ICT
- 9 of the top 10 in Pharmaceuticals
- 17 of the top 25 in Medical Devices
- 3 of the top 5 Games companies
- 10 of the 'top born on the Internet' firms
- More than 50% of the world's leading Financial firms
- UK becoming less attractive for FDI owing to Brexit

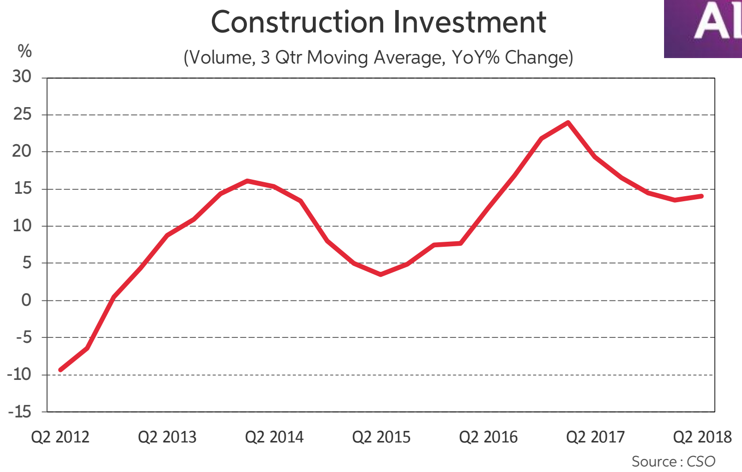
US TAX CHANGES SHOULD NOT HIT FDI

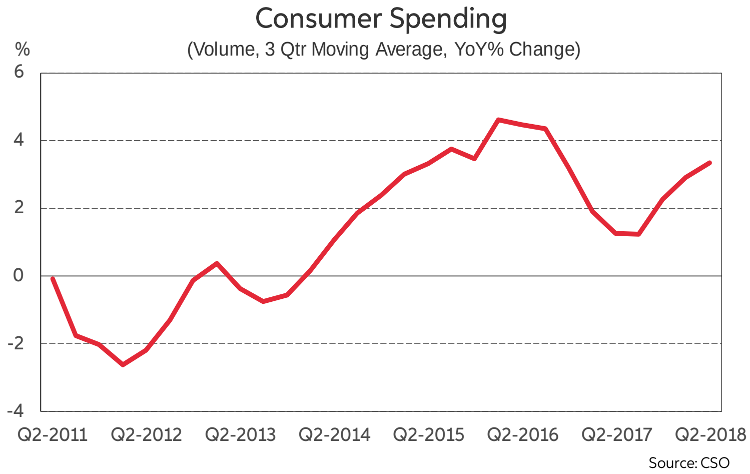
- US firms have well established operations here
- Need highly skilled, multi-lingual workforce
- Firms do not move Ireland to avoid US tax
- Ireland is base to service their European markets
- Easier to operate in local rather than US time zone
- Still wide gap between US & Irish corporate tax rates

Many top global companies have big operations in Ireland

Strong recovery by domestic economy in place since 2013

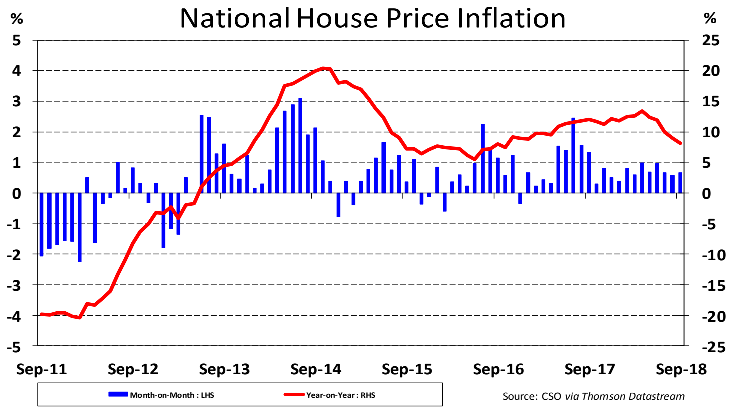
- Domestic economy contracted by 20% in period from 2008-2012, with particularly big fall in construction
- Construction has seen good recovery since 2013, with output up by 15% in 2016 & 2017 and 11% in H1 2018
- Very strong growth in agri-food sector in recent years, helped by abolition of EU quotas
- Modified final domestic demand up 6% yoy in H1 2018, after averaging growth of 4.4% in 2014-17 period
- Core business investment (ex aircraft/intangibles) has rebounded since 2013. Up strongly in H1 2018
- Consumer spending grew by close to 3% on average over 2014-2017 period. Up 3.7% yoy in H1 2018
- Core retail sales rose by 4.3% yoy in Q3 2018
- Total car regs (new + used imports) remain at very high level in 2018, having surged over 2014-17 period

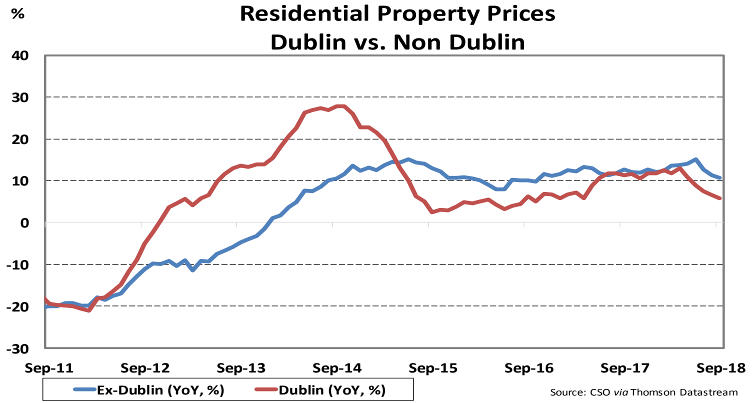




High house price inflation starts to decelerate

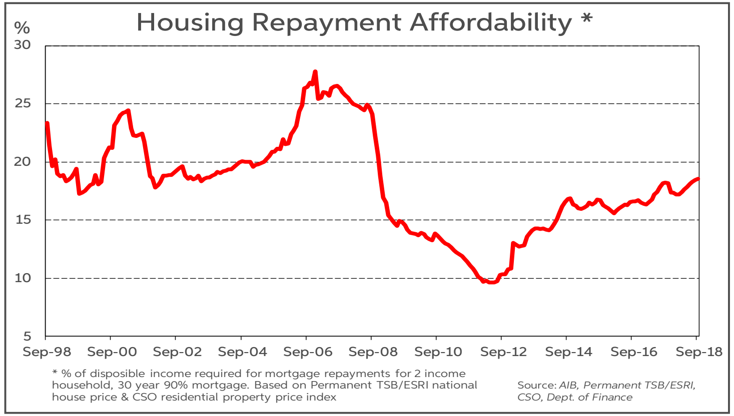
- House prices declined by a very sharp 55% between their peak in late 2007 and early 2013
- House prices have since rebounded as big housing shortage emerged after 90% fall in house building
- Little stock for sale, house building remains low
- Prices up 83% by September from low in March 2013 –Dublin prices up by 96%, non-Dublin rise 78%
- House prices nationally still 18% below 2007 peak
- House price inflation moderates this year as Central Bank lending rules and affordability impact
- Prices up 8.2% yoy nationally in September 2018, down from recent peak of 13.3% in April
- Dublin up 5.8% vs recent peak of 13% in April, while non-Dublin slows from 15.4% in June to 10.8% yoy
- Rents have also rebounded strongly – now over 25% above previous peak reached in 2008 per CSO data





House building rising slowly from very low levels

- New CSO data show housing completions increased by 45% to 14,500 in 2017
- Housing commencements rose by 33% in 2017 to 17,500, pointing to continuing rising supply
- Completions up by 28% yoy to Sept 2018. On course to reach 18,00-18,500 in 2018
- Output still running well below annual new housing demand, estimated at circa 35,000 units
- Measures put in place to boost new house building. More Local Authority and NAMA building
- Mortgage lending up by 20% yoy to end September, though mortgage approvals have slowed this year
- Housing affordability hit by rising house prices, especially Dublin, but helped by low mortgage rates
- Could be 2022 before housing output rises to 35,000 units – around level of estimated annual demand



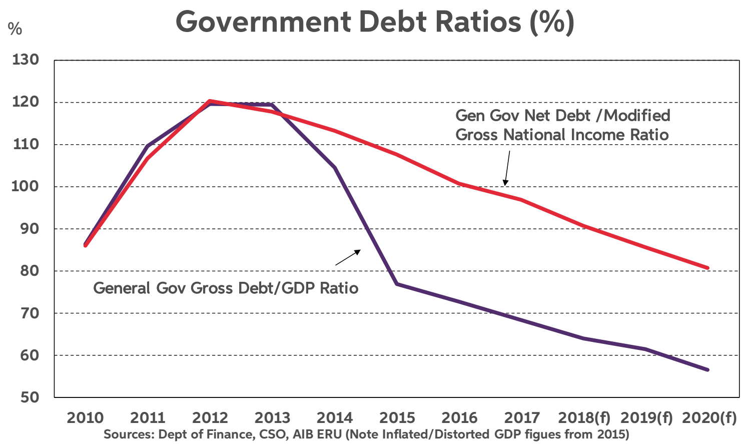
AIB Model of Estimated Housing Demand

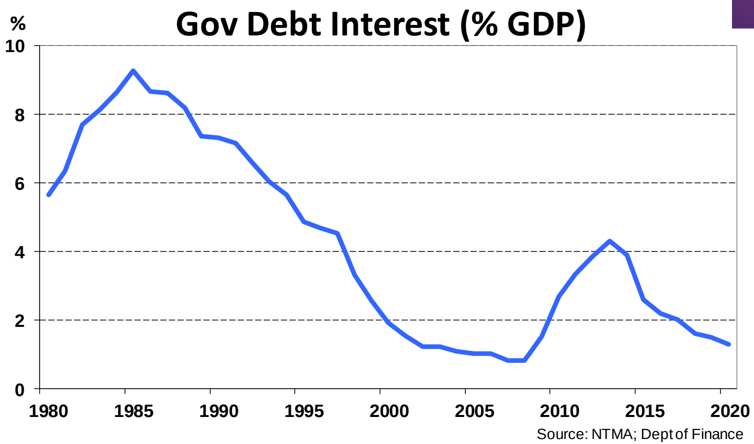
- Rising headship rates added circa 8,000 per year to housing demand in 2002-2011 period
- Shortage of housing, high rents, tighter lending rules saw average household size rise in 2011-16. Thus, headship fell – was a drag of circa 10,000 p.a. on housing demand
- Assume no change in headship in 2016-2020 – note long-term trend is upwards, adding to demand
- Pent-up demand has also built up in recent years from lack of supply
- Thus, forecast table may be under-estimating actual real level of housing demand
- Shortfall in supply met from run down of vacant stock and demand being reduced by fall in headship rate. Both factors very evident in 2011-16 and most likely in 2016-20

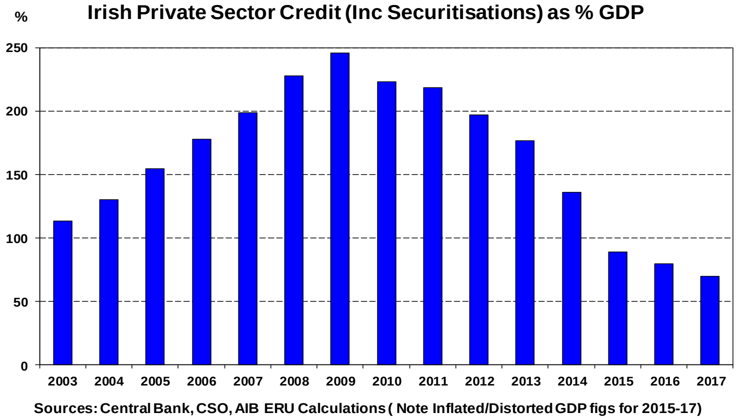
Calendar Year	2016	2017	2018	2019	2020
Household Formation	26,500	26,500	26,500	27,500	27,500
of which					
Indigenous Population Growth	*18,000*	*18,500*	*17,500*	*16,500*	*14,500*
Migration Flows	*8,500*	*9,500*	*12,000*	*13,000*	*13,000*
Headship Change*	*0*	*0*	*0*	*0*	*0*
Second Homes	500	500	500	500	500
Replacement of Obsolete Units	5,000	5,000	5,000	5,000	5,000
Estimated Demand	**32,000**	**33,500**	**35,000**	**35,000**	**33,000**
Completions	**9,900**	**14,500**	**18,500**	**23,000**	**27,000**
Shortfall in Supply	***-22,100***	***-19,000***	***-16,500***	***-12,000***	***-6,000***

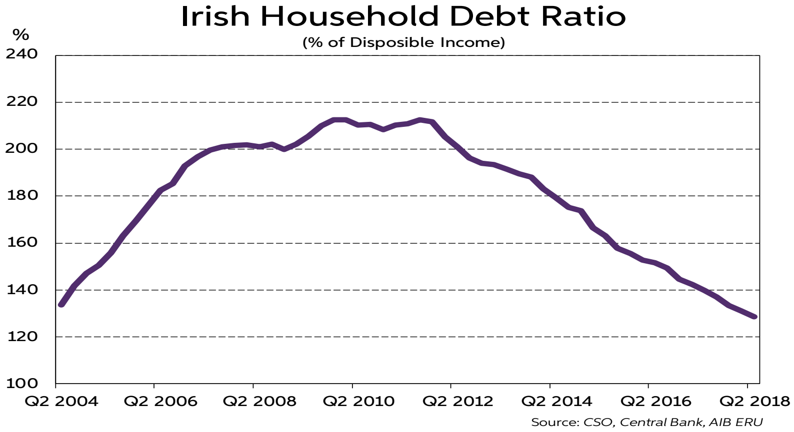
**Headship is % of population that are heads of households.* *Sources: CSO, DoECLG, AIB ERU*

Govt debt ratios fall, private sector deleverages



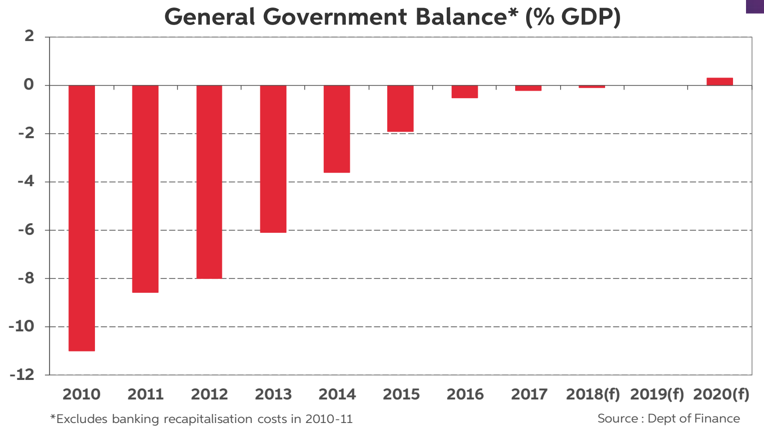


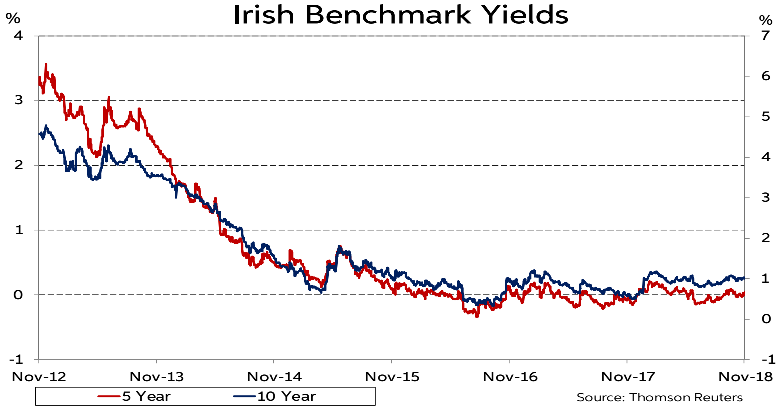




Budget deficit virtually eliminated in 2018

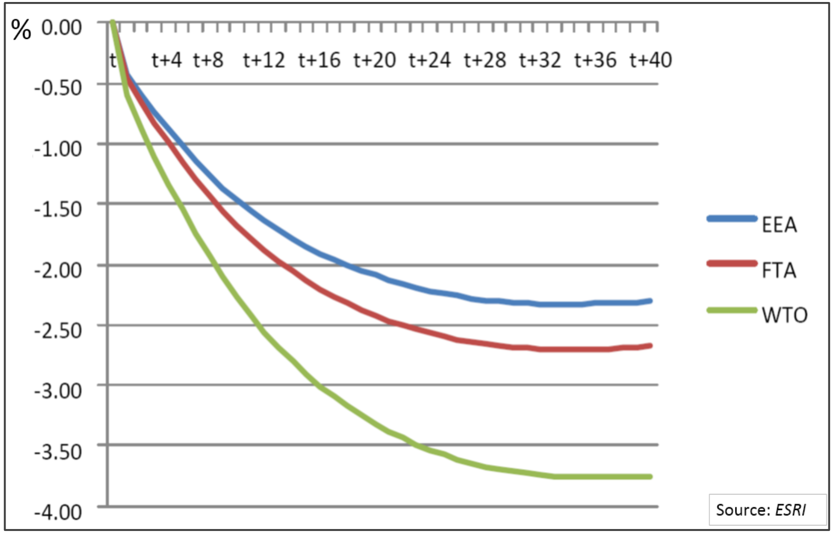
- Some €30bn (18% of GDP) of fiscal tightening implemented in 2008-2014 period
- Budget deficit has fallen sharply over the course of this decade
- The deficit declined to 0.2% of GDP in 2017 and is forecast at 0.1% of GDP for 2018
- Primary budget surplus (i.e. excluding debt interest) of 1.5% of GDP in 2018
- Debt interest costs low – at 1.5% of GDP
- Government aims for a balanced budget in 2019 and budget surpluses from 2020
- Gross Gov Debt/GDP ratio has fallen sharply
- Irish bonds yields at very low levels
- Sovereign debt ratings upgraded; S&P have Ireland at A+, Fitch at A+, Moody's A2





Brexit expected to lower growth rate of Irish economy

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



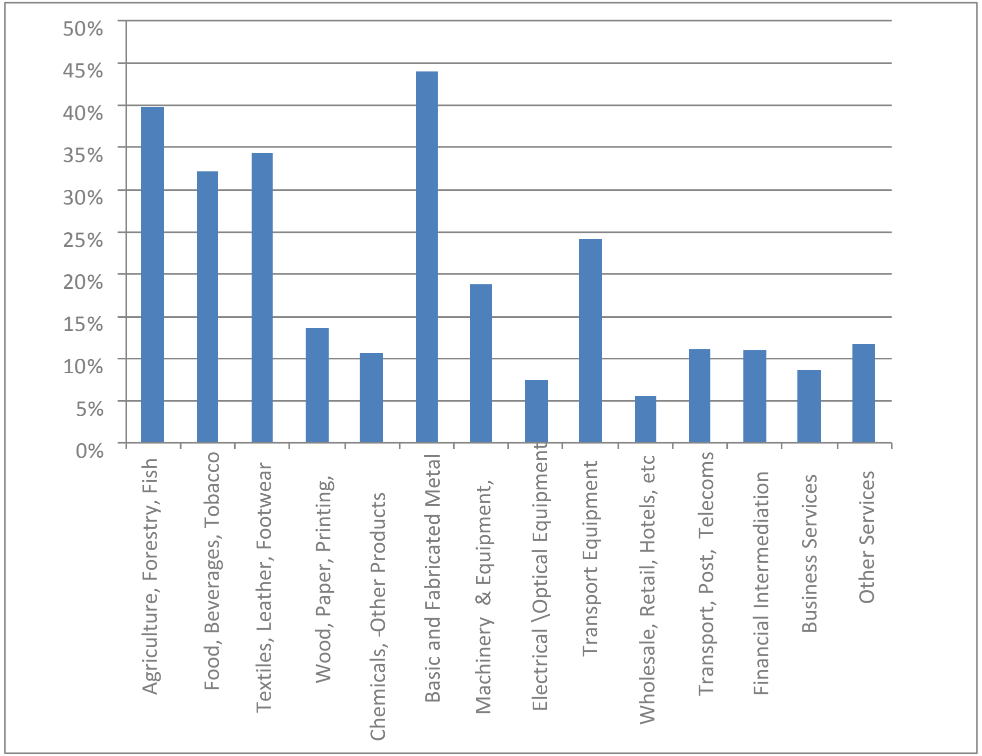
- ESRI estimate that Irish output would be reduced over time by 2-2.5% on a soft Brexit
- Sharp fall-off in trade with UK likely on a no-deal, hard Brexit
- Output almost 4.0 % lower over time if there is hard Brexit and a fall back on WTO rules and tariffs
- Employment 2% lower and unemployment rate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

Agri. sector would be severely impacted by hard Brexit

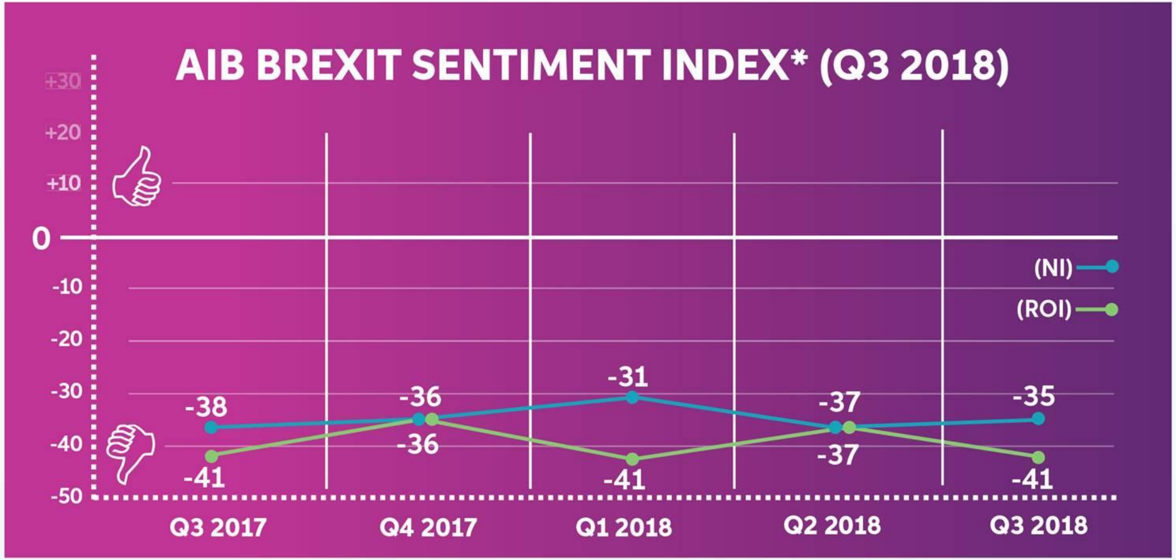
- Main EU tariffs relate to food products, keeping prices up. UK may not maintain these post-Brexit
- Food and Beverages account for 25% of total Irish exports to UK
- Around 40% of Irish food exports go to the UK
- Other sectors very dependent on UK market include machinery and transport, metal products, textiles
- Some 40% of indigenous Irish exports go to UK compared to 10% for foreign owned companies

Share of Exports by Industry Destined for the UK (ESRI)



AIB Brexit Sentiment Index – Q3 2018

- A total of ***700 SME's (with up to 250 employees)*** across the island of Ireland



Source: Ipsos MRBI

*The Index reflects and measures the sentiment of Irish SMEs in the Republic of Ireland and Northern Ireland towards Brexit, summarised as a single number, with a potential range from +100 to -100. It takes the difference between the positive and negative responses across four key measures: Impact on business now, Impact on future business (next 5 years), Level of visibility and, finally, the Wider economic impact of Brexit.

- **Very negative sentiment readings, but firms say Brexit is having little impact on businesses now**
- **SMEs surveyed are most concerned about its impact in the future, both on their own business and wider economy, as well as lack of clarity on Brexit**
- **Tourism, Manufacturing, Retail sectors most worried**

Still much uncertainty about Brexit

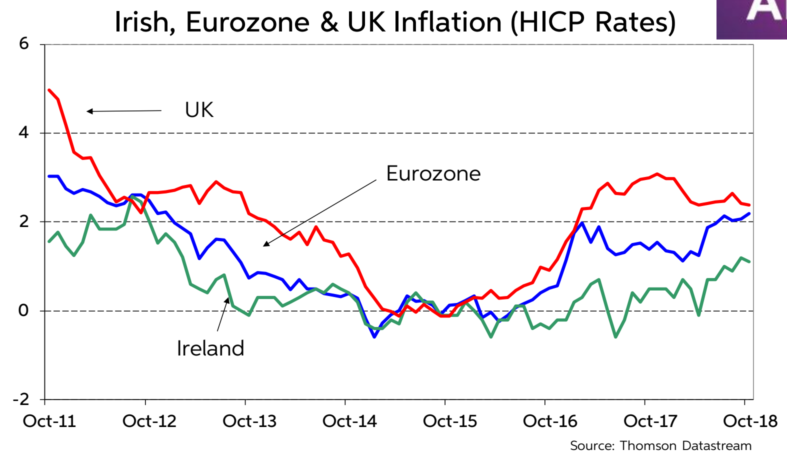
- UK expected to leave EU, Single Market and Customs Union in March 2019
- Withdrawal Agreement reached between UK and EU allows for orderly UK departure from EU. Will be the basis for a legally binding Treaty
- It includes a transition period to allow for continuing EU-UK free trade while a new trade deal is being negotiated. This will last until at least end 2020
- Provides for a backstop to be triggered if new EU-UK trade deal can’t be agreed in order to avoid a hard border in Ireland
- Backstop allows unfettered access for NI to both EU and UK markets. UK will remain within a customs territory with EU. NI in deeper EU customs regime
- Exit deal also includes a political declaration on future EU-UK relationship
- Getting Withdrawal Agreement through UK Parliament a major challenge
- Still a lot of uncertainty about Brexit. Wide variety of possible outcomes

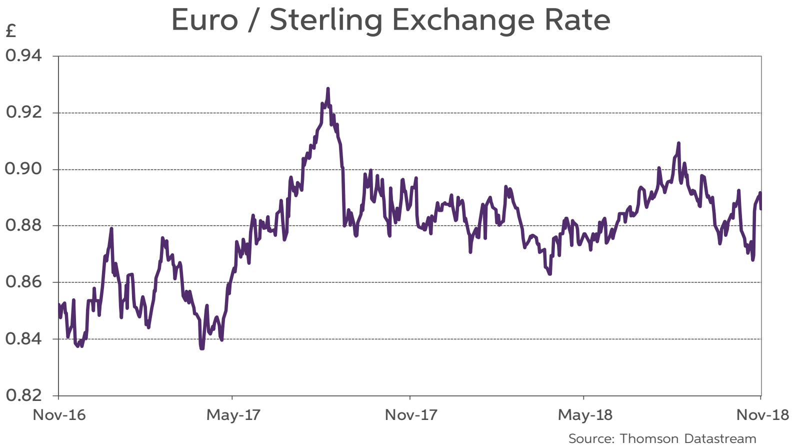
Parliamentary arithmetic major hurdle to Brexit deal

- Tory Party badly split over Brexit. DUP strongly opposed to current deal. No support from opposition parties for Withdrawal Agreement
- Withdrawal Bill likely to be defeated by a large margin in the Commons vote expected to be taken before Christmas Break
- Parliamentary logjam possible whereby no Brexit option- Withdrawal Agreement, No-Deal or Remain can command majority support
- Large majority of MPs are against a no-deal hard Brexit
- EU very unlikely to entertain any renegotiation of Withdrawal Agreement
- Government likely to play hardball and leave Parliament facing option of hard Brexit or supporting deal. Bill could pass on second vote to avoid hard Brexit
- Other options are a general election or have another Brexit referendum. This would require extension of Article 50 i.e. defer the March Brexit date

Irish growth forecast to remain strong

- Strong growth by Irish economy should continue
- Construction picking up from still low output levels
- Big rise in public spending next year
- Activity supported by low interest rate environment
- Continuing FDI despite concerns on corporate tax
- Low Irish inflation still low, well below that of the Eurozone, UK and US
- Global economy growing at a steady pace, helping Irish exports
- However, Brexit is a challenge for the economy
- GDP growth forecast at 4.0-4.5% for 2019 and 3.5% in 2020, assuming a no-deal, hard Brexit avoided
- ESRI estimates medium-term growth rate of economy at around 3.25% in the period 2020-2025





AIB Irish Economic Forecasts

% change in real terms unless stated	2016	2017	2018 (f)	2019 (f)	2020 (f)
GDP	**5.0**	**7.2**	**6.5**	**4.0**	**3.5**
GNP	11.5	4.4	7.0	3.7	3.2
Personal Consumption	4.0	1.6	3.0	2.5	2.5
Government Spending	3.5	3.9	3.5	3.0	3.0
Fixed Investment	51.7	-31.0	-3.0	7.0	6.0
Modified Final Domestic Demand*	5.6	3.2	5.0	4.0	3.8
Exports	4.4	7.8	7.5	4.5	4.3
Imports	18.5	-9.4	1.5	4.5	4.5
HICP Inflation (%)	-0.2	0.2	0.9	1.4	1.6
Unemployment Rate (%)	8.4	6.8	5.7	5.2	5.0
Budget Balance (% GDP)	-0.5	-0.2	-0.1	0.0	0.3
Gross General Gov Debt (% GDP)	72.8	68.0	64.0	61.4	56.5

*Excludes investment in aircraft and intangibles

Source: CSO, AIB ERU Forecasts

Risks to the Irish economy

- Main risks to Irish recovery no longer internal but external, in particular Brexit
- Brexit major issue for Ireland given its strong trading links with UK and sharp fall by sterling
- Uncertain external environment with growing downside risks to global growth from increasing protectionism/tariffs, tightening monetary conditions, problems in some emerging economies
- Questions around Irish corporation tax regime (Apple ruling, moves on tax harmonisation in EU, cuts in US/UK rates) could impact FDI. Note that Ireland has the right to set its own tax rates
- Supply constraints in new house building activity, which is recovering at a slow pace with output still at very low levels
- Competitiveness issues - high Dublin house prices, high rents, high personal taxes
- Credit constraints – tightening of lending rules, on-going deleveraging