The Irish Economic Update

Economy Continues To Perform Well Despite Concerns Over Brexit

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AIB
Strong recovery 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% and GNP down 10%
- 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 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 rebounded strongly in 2013-16 period. Strong uptrend continues in 2017
- Domestic economy has recovered strongly, led by rebound in investment and retail spending
- Strong jobs growth. Unemployment rate fell from 15% in 2012 to below 6.5% in spring 2017
- Budget deficit has declined at quicker than expected pace. At just 0.5% of GDP in 2016
Indicators remain upbeat despite concerns over Brexit

- **Irish Retail Sales (ex-autos) - Volume, YoY, %**
  - Source: Thomson Datastream

- **OECD Leading Indicator - Ireland**
  - Source: Thomson Datastream

- **Consumer Confidence (ESRI - KBC)**
  - Source: ESRI - KBC, Thomson Datastream

- **Ireland Mfg and Services PMIs**
  - Source: Thomson Datastream, Investec

- **Irish Retail Sales (ex-autos) - Volume, YoY, %**
  - Source: Thomson Datastream
Strong growth continuing in 2017

- Robust GDP growth of 5.2% in 2016. Growth looks to have remained strong in H1 2017
- Mfg PMI weakened after Brexit vote before rebounding strongly. At 55 in April
- Strong rebound by services PMI after marked decline on Brexit vote. At 61.1 in April
- Construction PMI averaged 58 in Q1 2017. Rose to 61.3 in April from 60.8 in March
- OECD leading indicator index for Ireland hits 16-month highs in early 2017
- Consumer confidence at very high levels – close to 15 year peak in spring 2017
- Retail sales (ex-motor trade) up by 1.8% in Q1 2017 to give a rise of 6% in year-on-year terms
- Total car regs (new + used imports) up 2% yoy in Jan-April 2017 – surged in 2014-16 period
- Housing completions rose by 18% to 15,000 in 2016, but still very low. Rise further in early 2017
- Mortgage lending rising strongly – while mortgage approvals up 61% yoy in Q1 2017
- Strong employment growth continuing – rose by 3.5% year-on-year in Q1 2017
- Live Register continues its sharp decline in 2017. Jobless rate down to 6.4% in April/May
- Budget deficit on target at end April 2017 despite some shortfall in tax receipts
Robust jobs growth; unemployment falls sharply

<table>
<thead>
<tr>
<th>Year Average</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017(f)</th>
<th>2018(f)</th>
<th>2019(f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment Rate %</td>
<td>11.3</td>
<td>9.5</td>
<td>7.9</td>
<td>6.3</td>
<td>5.3</td>
<td>4.8</td>
</tr>
<tr>
<td>Labour Force Growth %</td>
<td>-0.3</td>
<td>0.5</td>
<td>1.2</td>
<td>1.3</td>
<td>1.5</td>
<td>1.6</td>
</tr>
<tr>
<td>Employment Growth %</td>
<td>1.7</td>
<td>2.6</td>
<td>2.9</td>
<td>3.1</td>
<td>2.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Net Migration : Year to April ('000)*</td>
<td>-5.0</td>
<td>5.0</td>
<td>10.0</td>
<td>15.0</td>
<td>20.0</td>
<td>25.0</td>
</tr>
</tbody>
</table>

Source: CSO and AIB ERU forecasts  *AIB estimates for migration. CSO will publish updated annual migration figures later this year based on Census 2016

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**Employment (YoY, %)**

- **Private**
- **Public**
- **Total**

Source: Thomson Datastream, CSO

**Unemployment Rate (%)**

Source: Thomson Datastream
Large Irish export base performs well

- Ireland a very open economy – exports, driven by huge FDI, equate to well over 100% of GDP
- Major gains in Irish competitiveness since 2009, with weakening of euro also 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 service exports rose 11.5% yoy in H2 2016
# 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

## 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
- Risk of protectionism means need bases abroad
- No certainty about future US tax policy
- But Republicans border tax plan could hit FDI
Many top global companies have big operations in Ireland.
Recovery by domestic economy in place since 2013

- Domestic economy contracted by 20% in five year period from 2008-2012
- Collapse in construction was big drag on GDP - fell from 13.5% of GDP in 2005-07 to 5.3% by 2012
- Construction has seen steady growth since 2013 of circa 10% per annum – continued in 2016
- Business investment (ex aircraft/intangibles) more than doubled in 2013-2015 but fell back in 2016
- Consumer spending grew by 1.7% in 2014, 4.5% in 2015 and 3.0% in 2016
- Core domestic spending (ex aircraft/intangibles) averaged growth of 4.4% in 2013-2015
- Slower growth in core domestic spending in 2016
- Core retail sales rose strongly in 2014-16 period. Increased by 1.8% in Q1 2017 on Q4 2016 levels
- Total car regs continued uptrend in 2017 (+2% yoy)
House prices rebound as big housing shortage emerges

- House prices declined by a very sharp 55% between their peak in late 2007 and early 2013
- House prices then rebounded as big housing shortage emerged after 90% fall in house building
- Supply overhang eliminated with little stock for sale
- Prices up 50% by Mar 2017 from low in early 2013
- Dublin prices up by 68% from trough, while non-Dublin prices have risen by 46%
- House prices, though, including in Dublin, are still 31.5% below peak levels hit in 2007
- Central Bank mortgage rules cooled Dublin house price inflation – fell from 25% to below 3% in 2015
- House prices inflation picked up again 2016. Prices up 9.6% yoy nationally by Mar 2017. Dublin up 8.2%
- Rents have also rebounded strongly – now 14% above previous peak reached in 2008
House building rising only slowly from very low levels

- Housing completions at 12,700 in 2015, up from 11,000 in 2014 and 8,300 in 2013
- Completions rose by 18% to 15,000 in 2016 but still at low level. Forecast to rise to 18,000 in 2017
- Annual demand estimated at circa 30,000 units
- Measures being put in place to boost new house building. More Local Authority and NAMA building
- Central bank lending rules relaxed while tax rebate introduced in budget to help fund deposits for FTB
- Mortgage lending has picked up again after slowing on introduction of CB rules in 2015
- Housing affordability helped by low mortgage rates
- Improving trend in new housing starts a positive sign. Housing completions rise further in early 2017
- However, could be 2020 before housing output rises to 30,000 units – estimated annual demand

### Housing Repayment Affordability *

* % of disposable income required for mortgage repayments for 2 income household, 30 year 90% mortgage. Based on Permanent TSB/ESRI national house price & CSO residential property price index

Source: AIB, Permanent TSB/ESRI, CSO, Dept. of Finance
AIB Model of Estimated Housing Demand

- Headship changes 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 became a drag on demand of circa 10,000 p.a.
- Assume no change in headship in 2016-2020 – note long-term trend is for it to add to demand.
- Pent-up demand also builds 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 or demand being reduced by negative headship changes. Both factors very evident in 2011-16 period.

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Formation</td>
<td>24,000</td>
<td>24,000</td>
<td>24,500</td>
<td>25,500</td>
<td>26,000</td>
</tr>
<tr>
<td>of which Indigenous Population Growth</td>
<td>19,500</td>
<td>18,000</td>
<td>17,000</td>
<td>16,500</td>
<td>15,500</td>
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<tr>
<td>Migration Flows</td>
<td>4,500</td>
<td>6,000</td>
<td>7,500</td>
<td>9,000</td>
<td>10,500</td>
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<tr>
<td>Headship Change*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Second Homes</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Replacement of Obsolete Units</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Estimated Demand</td>
<td>29,500</td>
<td>29,500</td>
<td>30,000</td>
<td>31,000</td>
<td>31,500</td>
</tr>
<tr>
<td>Completions</td>
<td>15,000</td>
<td>18,000</td>
<td>22,000</td>
<td>26,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Shortfall in Supply</td>
<td>-14,500</td>
<td>-11,500</td>
<td>-8,000</td>
<td>-5,000</td>
<td>-1,500</td>
</tr>
</tbody>
</table>

*Headship is % of population that are heads of households.  Sources: CSO, DoECLG, AIB ERU
Gov debt ratio falls, private sector deleverages

Gross Gen Gov Debt (% GDP)

Gov Debt Interest (% GDP)

Irish Private Sector Credit (Inc Securitisations) as % GDP

Irish Household Debt (% of Disposable Income)

Sources:
- Dept of Finance. (Note Inflated/Distorted GDP figures from 2015)
- NTMA; Dept of Finance
- CSO, Central Bank, AIB ERU Calculations (Note Inflated/Distorted GDP figs in 2015/16)
- CSO, Central Bank, AIB ERU
Budget deficit falls sharply – now close to balance

- Some €30bn (18% of GDP) of fiscal tightening implemented in 2008-2014 period
- Budget deficit falls sharply to very low levels
- Deficit down to 0.5% of GDP in 2016. Deficit on target in 2017 despite some shortfall in taxes
- Budget deficit forecast at 0.1% of GDP for 2018
- Fiscal policy now mildly expansionary
- Primary budget (i.e. excluding debt interest) surplus of 1.8% of GDP in 2016
- Debt interest costs low – at 2% of GDP in 2017
- Gross Gov Debt/GDP ratio has fallen sharply
- Irish bonds yields have fallen to very low levels
- Sovereign debt ratings upgraded; S&P have Ireland at A+, Fitch at A, Moody’s A3
Brexit is a major challenge for Ireland

- Brexit has serious implications given close economic/trade links with UK
- Trade with UK equates to 35% of Irish GDP. Thus, it is a key trading partner
- UK takes some 40% of Irish indigenous firms exports, so very important trading partner
- Expected negative impact of Brexit on UK economy will have knock-on effect on Irish exports to there
- Agri, tourism, energy, retailing, financial services, the sectors likely to be most impacted by Brexit

- Sterling has fallen sharply on Brexit concerns, which hits exports to UK
- Impacts Irish firms competing with UK exports to Ireland and elsewhere
- Many Irish exporters are small firms with no Treasury function so don’t hedge currency exposure
- Cross border trade picks up as shoppers head North following sterling’s big fall. Also rise in on-line sales going to the UK
- Sterling weakness also has a significant impact on cross-border businesses like hotels, restaurants

- Higher trading costs from more administration, differing trade rules and regulations, compliance costs, possible customs duties and tariffs when UK leaves EU
- Brexit could impact considerable cross-country investment between UK and Ireland.
- Border with Northern Ireland will become an external EU land border, with possible Customs checks etc
- Ireland will lose key ally within EU when UK leaves as share similar views on taxation, regulation, state involvement in economy etc.
Ireland would be impacted by a hard Brexit

- Unclear what trade arrangements will be put in place between EU and UK post Brexit
- UK to leave Single Market and possibly Customs Union – does not want common external tariffs
- Ireland and UK want to preserve common travel area but need will EU agreement on this
- Very unlikely to see a full EU-UK trade deal concluded before Brexit
- Exit deal will need to contain transition arrangements on trade to avoid economic disruption
- Leaving the Customs Union and Single Market makes this more difficult to achieve
- Worst outcome is if UK has to fall back on WTO rules post Brexit, which require a common set of tariff rates to be applied to all countries where no free trade deals exits
- This would be bad news for Irish/UK trade as could see imposition of tariffs, customs duties and increased costs from non-tariff barriers like rules of origin, production standards, licenses etc
- Both UK and EU say they want to avoid this and reach an agreement of future trade relationship
- Brexit likely to have impact on the border with Northern Ireland. Gov does not want hard border
- Main upside is that Brexit would make Ireland more attractive for FDI vis-à-vis the UK
- Hard Brexit in 2019, with no deal on trade, would depress Irish growth
Brexit expected to lower growth rate of Irish economy

Impact of Brexit on Output (% deviation from base)

- ESRI-D/Finance estimate Irish output would be reduced by over 2% on a soft Brexit
- Sharp fall-off in trade with UK likely on a hard Brexit
- Output almost 4.0% lower over time if there is hard Brexit and a fall back on WTO rules
- Employment 2% lower and unemployment rate nearly 2% higher
## Irish Government’s Priorities in Brexit Talks

### Border

- Avoid a hard border on the island of Ireland
- Cater for Good Friday Agreement and allow Northern Ireland to automatically join EU if it ever opts for United Ireland
- Irish citizens in Northern Ireland to retain EU citizens rights post Brexit
- Retain the Common Travel Area between Ireland and the UK
- UK and EU to agree on reciprocal protection of citizens rights for those residing in each others territory

### Trade

- Orderly withdrawal of UK from the EU that avoids a hard Brexit or cliff-edge
- Agree transitional arrangements to bridge the gap between the exit deal and a future EU-UK free trade agreement (FTA)
- Future FTA needs to be broad and ambitious
- Integrity of single market needs to be protected in FTA
- FTA to promote regulatory conformity and avoid regulatory dumping
- Disputes resolution mechanism needs to be part of a FTA
Solid Irish growth to continue ahead of Brexit

- Rebound by Irish economy is continuing
- Construction picking up from still low output levels
- Budgetary policy turns mildly expansionary
- Activity supported by low interest rate environment
- FDI strong despite concerns on corporate tax
- Irish inflation remains very low, below that of the Eurozone and UK
- Global economy, including the Eurozone, is picking up momentum, helping exports
- However, Brexit is a major challenge for economy
- Sharp fall in sterling impacts exports to UK, tourism from UK, Irish firms competing with UK exports
- Irish GDP grew by a strong 5.2% in 2016
- Irish GDP growth generally forecast at around 4% for 2017 and 3.5% in 2018
- Not many signs yet, though, that economy is slowing
### AIB Irish Economic Forecasts

<table>
<thead>
<tr>
<th>% change in real terms unless stated</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017 (f)</th>
<th>2018 (f)</th>
<th>2019 (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>8.5</td>
<td>26.3</td>
<td>5.2</td>
<td>4.0</td>
<td>3.5</td>
<td>3.0</td>
</tr>
<tr>
<td>GNP</td>
<td>9.2</td>
<td>18.7</td>
<td>9.0</td>
<td>3.5</td>
<td>3.0</td>
<td>2.5</td>
</tr>
<tr>
<td>Personal Consumption</td>
<td>1.7</td>
<td>4.5</td>
<td>3.0</td>
<td>3.0</td>
<td>2.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Government Spending</td>
<td>5.4</td>
<td>1.1</td>
<td>5.3</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Fixed Investment</td>
<td>18.2</td>
<td>32.7</td>
<td>45.5</td>
<td>6.0</td>
<td>5.0</td>
<td>4.5</td>
</tr>
<tr>
<td>Core Fixed Investment*</td>
<td>14.4</td>
<td>18.3</td>
<td>N.A.</td>
<td>6.0</td>
<td>5.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Core Domestic Spending*</td>
<td>4.2</td>
<td>6.6</td>
<td>N.A.</td>
<td>3.9</td>
<td>3.3</td>
<td>3.0</td>
</tr>
<tr>
<td>Exports</td>
<td>14.4</td>
<td>34.4</td>
<td>2.4</td>
<td>4.5</td>
<td>4.2</td>
<td>4.0</td>
</tr>
<tr>
<td>Imports</td>
<td>15.3</td>
<td>21.7</td>
<td>10.3</td>
<td>4.0</td>
<td>3.8</td>
<td>3.7</td>
</tr>
<tr>
<td>HICP Inflation (%)</td>
<td>0.3</td>
<td>0.0</td>
<td>-0.2</td>
<td>0.7</td>
<td>1.2</td>
<td>1.5</td>
</tr>
<tr>
<td>Unemployment Rate (%)</td>
<td>11.3</td>
<td>9.5</td>
<td>7.9</td>
<td>6.3</td>
<td>5.3</td>
<td>4.8</td>
</tr>
<tr>
<td>Budget Balance (% GDP)</td>
<td>-3.7</td>
<td>-2.0</td>
<td>-0.5</td>
<td>-0.4</td>
<td>-0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Gross General Gov Debt (% GDP)</td>
<td>105.3</td>
<td>78.7</td>
<td>75.4</td>
<td>73.0</td>
<td>71.0</td>
<td>69.0</td>
</tr>
</tbody>
</table>

*Excludes investment in aircraft and intangibles (data not available for 2016)

Source: CSO, AIB ERU Forecasts
Risks to the Irish economic recovery

- 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
- Possibility of reduced FDI from US if Trump administration slashes corporate taxes and introduces border tax on imports. Any trade war would undermine fragile global recovery
- Questions around corporation tax regime (eg Apple ruling) could impact FDI but seems unlikely
- 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
- Continuing credit contraction – fewer banks, tighter credit conditions, on-going deleveraging

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