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 8.5% 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 rebounds strongly in 2013-17 period. GDP growth of 5.1% in 2016, 6.5% in 2017
- 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 near 6% by Jan 2018
- Budget deficit has declined at a quicker than expected pace. Down to 0.3% of GDP in 2017
Indicators remain upbeat despite concerns over Brexit

**Ireland Mfg and Services PMIs**

- Manufacturing
- Services

**Consumer Confidence (ESRI - KBC)**

**Retail Sales (ex-autos) - Volume, YoY, %**

**Modified Final Domestic Demand**

(3 Qtr MA, % Yr-on-Yr)

Source: Thomson Datastream, Investec

Source: CSO, (Excludes I.P. imports & Aircraft Leasing)
Economy continues to grow at strong pace

- Robust GDP growth of 5.1% in 2016. GDP forecast at 6.5% in 2017 but underlying rate put at 4-5%
- Mfg PMI hit record high of 59.1 in December and strong start to 2018 – at 57.6 in January
- Services PMI very strong recently, with index at 59.8 in January and 60.4 in December
- Continuing very high construction PMI – hits 61.4 in January as sector grows strongly
- Consumer confidence at very robust levels – rises to 17-year high in January
- Retail sales (ex-motor trade) rose by 7% in 2017 – fourth year in a row of strong growth
- Total car regs (new + used imports) rise further in January 2018 – surged in 2014-17 period
- Housing completions (ESB connections) rose by 29% to 19,300 in 2017 after 18% increase in 2016
- Mortgage lending rising strongly – drawdowns rose by 29% in value terms in 2017
- Strong job growth continuing – employment rose by 2.8% year-on-year during Q1-Q3 2017
- Live Register continues its sharp decline in early 2018. Jobless rate down to 6.1% in January
- Budget deficit fell to 0.3% of GDP in 2017. Good January 2018 figures - tax receipts up 5% yoy
Robust jobs growth; unemployment falls sharply

<table>
<thead>
<tr>
<th>Year Average</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017(e)</th>
<th>2018(f)</th>
<th>2019(f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment Rate %</td>
<td>11.9</td>
<td>10.0</td>
<td>8.4</td>
<td>6.7</td>
<td>5.8</td>
<td>5.2</td>
</tr>
<tr>
<td>Labour Force Growth %</td>
<td>0.4</td>
<td>1.2</td>
<td>1.9</td>
<td>0.8</td>
<td>1.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Employment Growth %</td>
<td>2.6</td>
<td>3.5</td>
<td>3.7</td>
<td>2.7</td>
<td>2.2</td>
<td>1.9</td>
</tr>
<tr>
<td>Net Migration : Year to April (‘000)</td>
<td>-8.5</td>
<td>5.9</td>
<td>16.2</td>
<td>19.8</td>
<td>25.0</td>
<td>30.0</td>
</tr>
</tbody>
</table>

Source: CSO and AIB ERU forecasts

**Employment (YoY, %)**

**Unemployment Rate (%)**

Source: Thomson Datastream, CSO
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 service exports up 13% yoy in Q1-Q3 2017
# FDI and the Irish economy

## 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

## 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

## 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 15% in 2016 and 17% yoy to Q3 2017
- Core business investment (ex aircraft/intangibles) grew by average 22% in 2012-2016. Fell back in 2017
- Consumer spending grew by 2.0% in 2014, 4.2% in 2015 and 3.3% in 2016. Rose by 2% yoy to Q3 2017
- Core domestic spending (ex aircraft/intangibles) grew by average 4.8% in 2014-2016. Up 2% yoy to Q3 2017, so growth in domestic economy slowed in 2017
- Core retail sales (i.e. ex-autos) rose strongly in 2014-16 period. Trend continued in 2017, up 7% in the year
- Total car regs (new + used imports) up 1% yoy in January 2018, having surgied in 2014-17 period
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 have since rebounded as big housing shortage emerged after 90% fall in house building.
- Supply overhang eliminated with little stock for sale.
- Prices up 72% by Dec 2017 from low in Mar 2013.
- Dublin prices up by 87% from their trough in Feb 2012, while non-Dublin prices have risen by 65%.
- House prices nationally are still 23% below their peak levels hit in 2007.
- House price inflation picked up in 2017.
- Prices up 12.3% yoy nationally in Dec 2017. Dublin up 11.6%, with non-Dublin rising 13.3% yoy.
- Rents have also rebounded strongly – now 18.5% above previous peak reached in 2008 per CSO data.

[Graphs showing national and regional house price movements and rent inflation from 2007 to 2017.]
House building rising slowly from very low levels

- Housing completions (new electricity connections) increased by 29% to 19,300 in 2017
- Housing commencements rose by 33% in 2017 to 17,500, pointing to continuing rising supply
- Output still running well below annual new housing demand estimated at over 30,000 units
- Measures being put in place to boost new house building. More Local Authority and NAMA building
- Tax rebate introduced to help fund deposits for FTB
- Mortgage lending picks up again after slowing on new CB rules in 2015 – rose by 29% in 2017
- Housing affordability hit by rising house prices but helped by low mortgage rates. Still at good levels
- Likely to be 2020 before housing output rises above 30,000 units – or close to estimated annual demand

![Housing Completions Graph](image)

---

**Housing Completions**

Source: CSO; DoEHLG and AIB ERU. *(Based on new connections to electricity network)*

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**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

- 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

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
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</thead>
<tbody>
<tr>
<td>Household Formation</td>
<td>26,500</td>
<td>26,500</td>
<td>26,500</td>
<td>27,500</td>
<td>27,500</td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indigenous Population Growth</td>
<td>18,000</td>
<td>18,000</td>
<td>17,000</td>
<td>16,500</td>
<td>14,500</td>
</tr>
<tr>
<td>Migration Flows</td>
<td>8,500</td>
<td>8,500</td>
<td>9,500</td>
<td>11,000</td>
<td>13,000</td>
</tr>
<tr>
<td>Headship Change*</td>
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<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>
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<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>32,000</td>
<td>32,000</td>
<td>32,000</td>
<td>33,000</td>
<td>33,000</td>
</tr>
<tr>
<td>Completions (ESB)</td>
<td>15,000</td>
<td>19,300</td>
<td>23,000</td>
<td>27,000</td>
<td>31,000</td>
</tr>
<tr>
<td>Shortfall in Supply</td>
<td>-17,000</td>
<td>-12,700</td>
<td>-9,000</td>
<td>-6,000</td>
<td>-2,000</td>
</tr>
</tbody>
</table>

*Headship is % of population that are heads of households.  Sources: CSO, DoECLG, AIB ERU
Govt debt ratios fall, private sector deleverages

**Government Debt Ratios (%)**

- Gross General Gov Debt/GDP Ratio
- Net Gov Debt (i.e. ex cash & liquid assets) /modified Gross National Income Ratio

Sources: Dept of Finance, Irish Fiscal Council, AIB ERU (Note Inflated/Distorted GDP figures from 2015)

**Gov Debt Interest (% GDP)**

Sources: NTMA; Dept of Finance

**Irish Private Sector Credit (Inc Securitisations) as % GDP**

Sources: Central Bank, CSO, AIB ERU Calculations (Note Inflated/Distorted GDP figures for 2015-17)

**Irish Household Debt Ratio**

Source: 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 has fallen sharply over the course of this decade
- The deficit fell to 0.3% of GDP in 2017 and forecast at 0.2% of GDP for 2018
- Primary budget surplus (i.e. excluding debt interest) of 1.7% of GDP in 2017
- Debt interest costs low – at 2% of GDP in 2017
- Good start to 2018 with tax receipts up 5% in January and budget balance improving further
- 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 A2
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 big rise in online 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 rules and regulations, compliance costs, possible customs duties/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.
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
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 by 2-2.5% 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 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 hard Brexit WTO scenario
Irish SMEs pessimistic about Brexit

AIB BREXIT SENTIMENT INDEX* (Q4 2017)

Most Pessimistic / Negative
-100

Most Optimistic / Positive
+100

-36 (ROI) Neutral

AIB BREXIT SENTIMENT INDEX* (Q3 2017)
-41 (ROI) -38 (NI)

EXPORTERS LOOK TO NEW MARKETS

23% ROI exporters considering new markets

15% NI exporters considering new markets

TOP 3 MARKETS BEING EXPLORED
Germany
France
Other Europe

TOP 3 MARKETS BEING EXPLORED
Republic of Ireland
North America
Other Europe

*The Index reflects and measures the sentiment of Irish SMEs 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.

Source: Ipsos MRBI
Trade with UK equates to 35% of Irish GDP. Thus, it is a key trading partner. UK takes 43% of Irish indigenous firm exports, so very important trading partner.

Expected negative impact of Brexit on UK economy will have knock-on effect in Ireland.

Sterling has fallen sharply on Brexit concerns, which will hit exports to UK.

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 citizenship 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 UK’s exit from EU and a future EU-UK free trade agreement (FTA)
- Future FTA needs top 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

- 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 citizenship 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
Customs arrangements key Brexit issue

- UK to leave EU, Single Market and Customs Union – does not want common external tariffs
- Exit deal will need to contain transition arrangements to avoid disruption to trade until EU/UK free trade deal is done. UK suggests common UK-EU Customs Unions during transition period
- UK wants to conclude full free trade deal with EU within 2 years of its 2019 departure
- Worst outcome is if UK has to fall back on WTO rules post Brexit. These require a common set of tariff rates to be applied to all countries where no free trade deals exits
- Unclear what the arrangements on customs will be after transition period ends. UK suggests ‘a new customs partnership’ or else ‘highly streamlined customs arrangements’ as part of FTA
- Brexit impacts the border with Northern Ireland. All sides don’t want hard border - agreed on this in Phase 1 of Brexit negotiations, but would prove difficult to avoid if UK has its own tariffs
- Period of uncertainty could last until end 2020/early 2021 when it is hoped to conclude an EU/UK free trade deal that will determine future trade relationship
Talks on trade to determine shape of Brexit

- Aim is to agree arrangements by this March for a circa two-year transition period post Brexit. UK will have to continue to abide by EU rules during this period.
- Talks on a post-transition period trade deal to prove difficult as UK wants separate customs arrangements, negotiate trade deals and have its own rules and regulations.
- Different to usual trade talks as no trade barriers at present. Thus, EU points out that any free trade deal for UK will be inferior to the Single Market.
- EU insistent on a level playing field in any trade deal to prevent “Regulatory Dumping” e.g. similar workers rights, subsidy rules, production standards, environmental controls.
- Disputes resolution mechanism will need to be agreed, but it will be inferior to the ECJ.
- UK faces a trade-off in talks between regaining sovereignty and retaining access to EU Single Market.
- The more UK moves away from EU rules, the less access it will have to Single Market.
Strong Irish growth to continue ahead of Brexit

- Strong growth 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
- Very low Irish inflation, well below that of the Eurozone and especially the UK
- Global economy, including the Eurozone, is picking up momentum, helping Irish 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 growth forecast at around 6.5% for 2017 but real underlying rate put at 4% to 5%
- GDP growth generally forecast at circa 4% for 2018
- ESRI estimate long-term growth rate of economy at around 3.5% in 2016-2025 period
### 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>8.3</td>
<td>25.6</td>
<td>5.1</td>
<td>6.5</td>
<td>4.0</td>
<td>3.5</td>
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<tr>
<td>GNP</td>
<td>9.0</td>
<td>16.3</td>
<td>9.6</td>
<td>5.0</td>
<td>3.5</td>
<td>3.0</td>
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<tr>
<td>Personal Consumption</td>
<td>2.0</td>
<td>4.2</td>
<td>3.3</td>
<td>2.2</td>
<td>2.7</td>
<td>2.5</td>
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<tr>
<td>Government Spending</td>
<td>4.8</td>
<td>1.8</td>
<td>5.3</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
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<tr>
<td>Fixed Investment</td>
<td>18.1</td>
<td>27.9</td>
<td>61.2</td>
<td>-12.0</td>
<td>6.0</td>
<td>5.0</td>
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<tr>
<td>Core Fixed Investment*</td>
<td>13.5</td>
<td>10.8</td>
<td>13.6</td>
<td>-12.0</td>
<td>6.0</td>
<td>5.0</td>
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<tr>
<td>Exports</td>
<td>14.4</td>
<td>38.4</td>
<td>4.6</td>
<td>5.5</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Imports</td>
<td>14.9</td>
<td>26.0</td>
<td>16.4</td>
<td>-3.2</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>HICP Inflation (%)</td>
<td>0.3</td>
<td>0.0</td>
<td>-0.2</td>
<td>0.2</td>
<td>0.8</td>
<td>1.2</td>
</tr>
<tr>
<td>Unemployment Rate (%)</td>
<td>11.9</td>
<td>10.0</td>
<td>8.4</td>
<td>6.7</td>
<td>5.8</td>
<td>5.2</td>
</tr>
<tr>
<td>Budget Balance (% GDP)</td>
<td>-3.7</td>
<td>-2.0</td>
<td>-0.7</td>
<td>-0.3</td>
<td>-0.2</td>
<td>-0.1</td>
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<tr>
<td>Gross General Gov Debt (% GDP)</td>
<td>105.3</td>
<td>76.9</td>
<td>72.8</td>
<td>70.0</td>
<td>69.0</td>
<td>67.0</td>
</tr>
</tbody>
</table>

*Excludes investment in aircraft and intangibles

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 as US cuts its corporate tax rate from 35% to 21%
- Questions around Irish corporation tax regime (Apple ruling, moves on tax harmonisation in EU) could impact FDI, though Ireland retains 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 – fewer banks, tighter credit conditions, on-going deleveraging

Note: All Irish data in tables are sourced from the CSO unless otherwise stated. Non-Irish data are from the IMF, OECD and Thomson Financial. Irish forecasts are from AIB Economic Research Unit. This presentation is for information purposes and is not an invitation to deal. The information is believed to be reliable but is not guaranteed. Any expressions of opinions are subject to change without notice. This presentation is not to be reproduced in whole or in part without prior permission. In the Republic of Ireland it is distributed by Allied Irish Banks, p.l.c. In the UK it is distributed by Allied Irish Banks, plc and Allied Irish Banks (GB). In Northern Ireland it is distributed by First Trust Bank. In the United States of America it is distributed by Allied Irish Banks, p.l.c. Allied Irish Banks, p.l.c. is regulated by the Central Bank of Ireland. Allied Irish Bank (GB) and First Trust Bank are trade marks used under licence by AIB Group (UK) p.l.c. (a wholly owned subsidiary of Allied Irish Banks, p.l.c.), incorporated in Northern Ireland. Registered Office 92 Ann Street, Belfast BT1 3HH. Registered Number NI 018800. Authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. In the United States of America, Allied Irish Banks, p.l.c., New York Branch, is a branch licensed by the New York State Department of Financial Services. Deposits and other investment products are not FDIC insured, they are not guaranteed by any bank and they may lose value. Please note that telephone calls may be recorded in line with market practice.