Ireland: resilient to Covid-19 thanks to multinational firms

Economic structure helped to maintain incomes and government revenues amid large shock

September 2020

Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

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Summary

Economy’s structural advantages come to the fore

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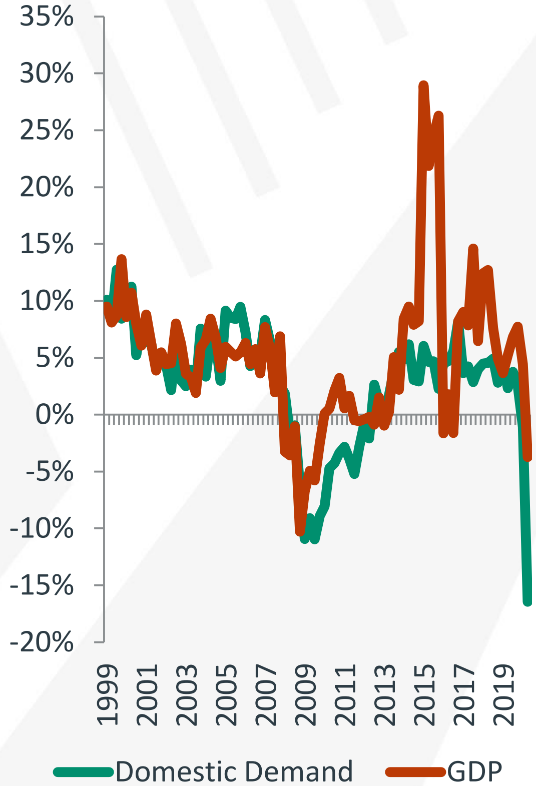
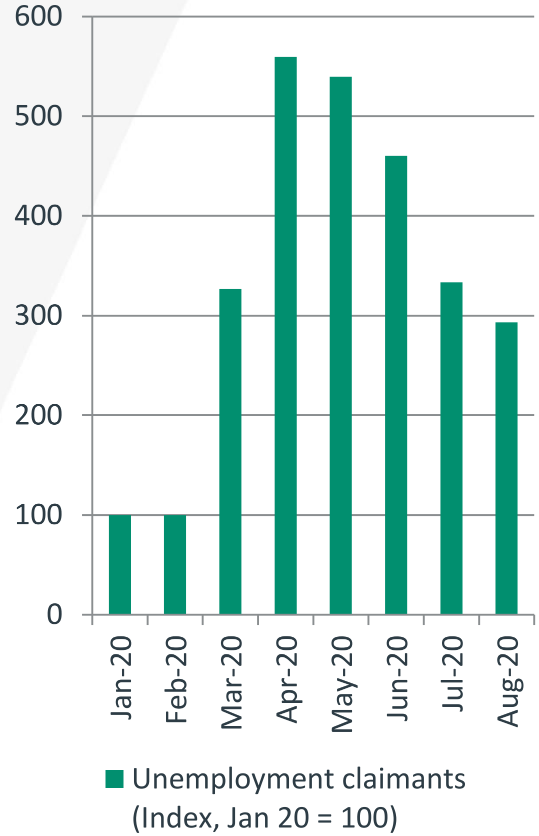
Economy impacted in Q2: unemployment peaked in April; Recovery as workers and spending returned over summer

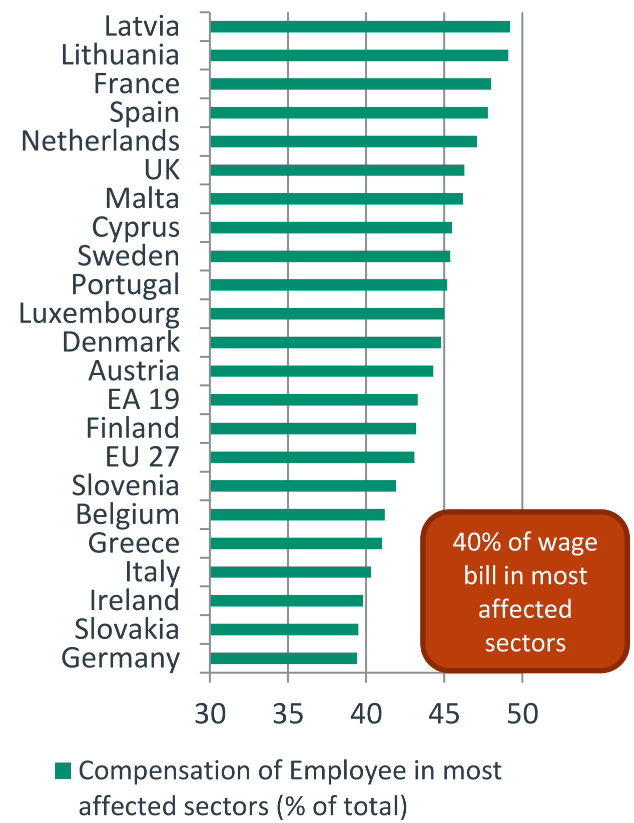
GDP holds up while domestic sectors struggle



U rate uncertain**; more returned to work in summer



Irish wage bill less impacted – ICT and pharma helping



Source: CSO, Eurostat

** Domestic demand series accounts for multinational activity and known as modified final domestic demand (excludes inventories)*

*** Whether those on government income supports are unemployed is statistically debatable. Some will have left the labour force, others are just temporarily furloughed.*

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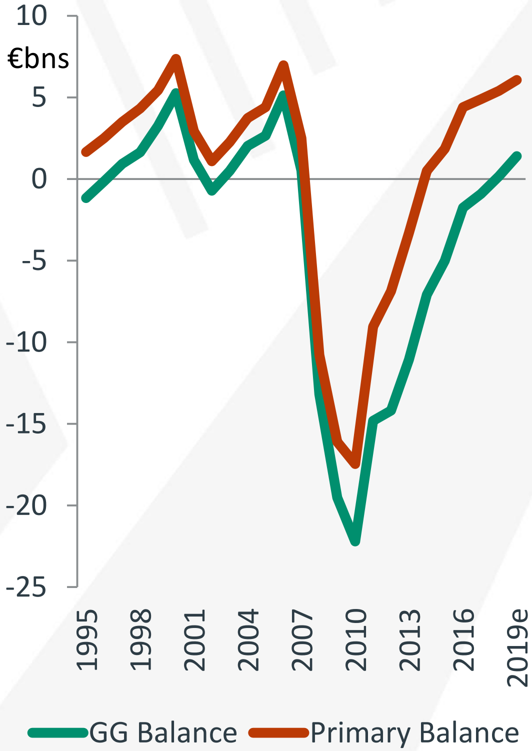
Ireland used 2014-19 growth to create fiscal room and improve debt sustainability

Six years of primary surplus; run to end in 2020



Improved debt position created room for fiscal boost

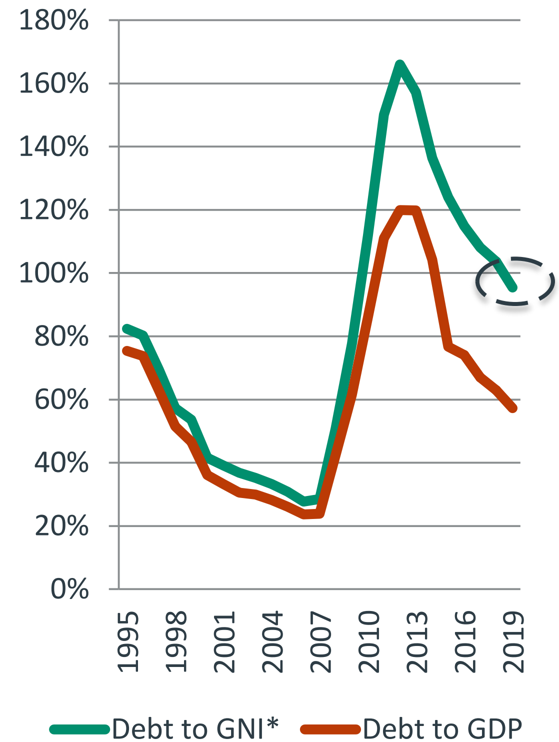
Debt-to-GNI*
(95% 2019, from 166% peak)

Debt-to-GG Revenue
(230% 2019, from 353%)

Average interest rate
(2.1% 2019, from 5.1%)

Debt-to-GDP^
(57% 2019, from 120%)

Debt fell to 95% of national income, but will rise again



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Source: CSO

^ due to GDP distortions, Debt to GDP is not representative for Ireland, we suggest using other measures listed.

Covid-19 and Ireland: significant hit to economy followed by powerful policy response

Recession

Ireland is in recession. Key question is for how long?

So far the most extreme outcomes have been avoided. Economy has begun first steps to recovery

Exposure

Ireland's domestic economy hit hard like others but internationally-traded sectors (Pharma and ICT) have been less impacted

Brexit risk in background

Policy

Significant stimulus announced Equivalent to 17% of GNI*

ECB and Fed actions should cap interest costs and allow necessary fiscal room

NTMA has already funded €20bn of revised funding plan of €20-€24bn; NTMA expects to hit upper end of range

Flexibility

Ireland has large cash balances, the final 2020 redemption prefunded and a year free of maturing bonds in 2021

Funding will come from several sources. Bonds, short-term paper and the "rainy day" fund

10 years

Weighted average maturity of debt one of longest in Europe

The ECB's QE enabled NTMA to extend debt maturities, reduce interest cost and repay the IMF. Now ECB is buying aggressively again with few limitations

AA-

Ireland has been affirmed in AA space by S&P

On relative basis, hit to Ireland may be less than other countries given multinationals, relatively smaller domestic share of economy and tourism

Section 1: Macro

Ireland's labour market highlights Covid-19 impact but jobs and spending have rebounded

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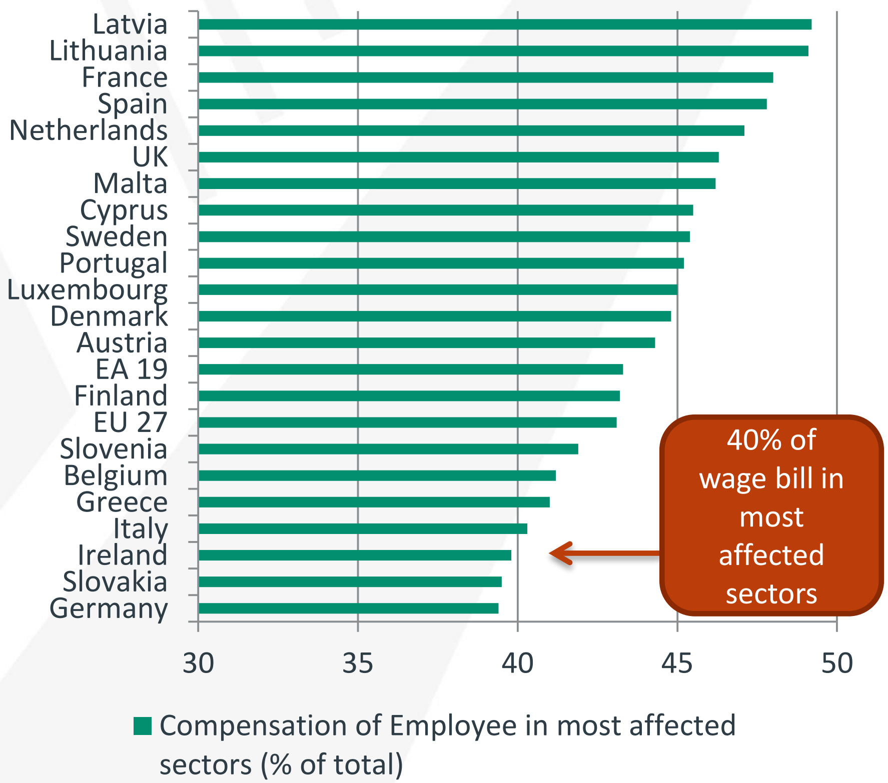
On a relative basis Ireland could perform better than most EU peers – thanks to big technology and pharma firms

The Irish wage bill is not going to be as impacted as other countries



ICT sector will be a bulwark in protecting incomes in Ireland

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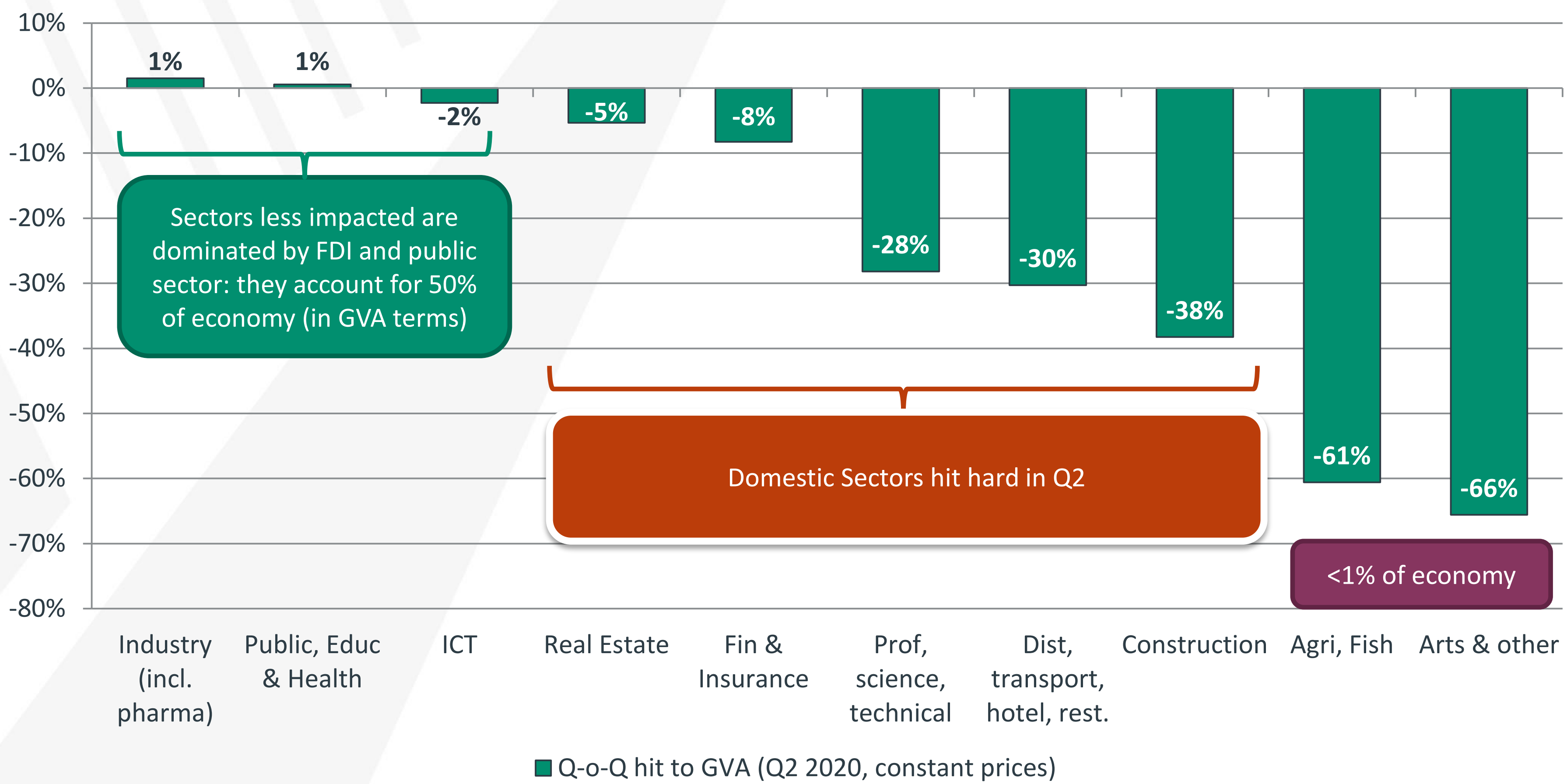
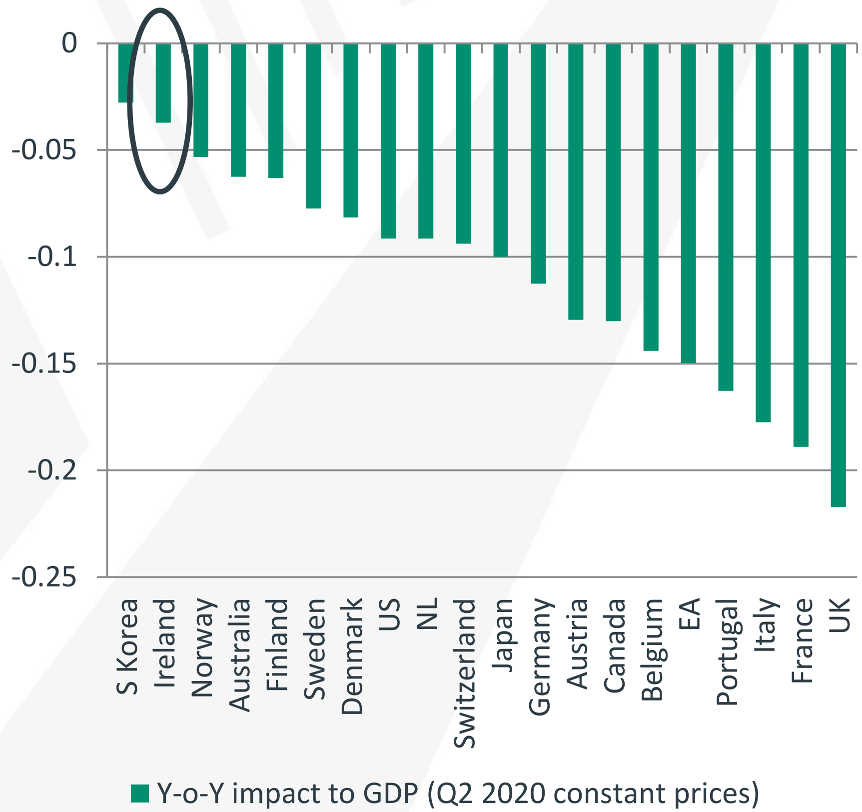
Source: Eurostat (2019)
Note: Most affected sectors include construction, wholesale and retail trade, transport, accommodation and food service activities, real estate activities, professional, scientific and technical activities; administrative and support service activities, arts, entertainment and recreation

Sector breakdown in Q2 – Multinationals holding up well, domestic side hit hard

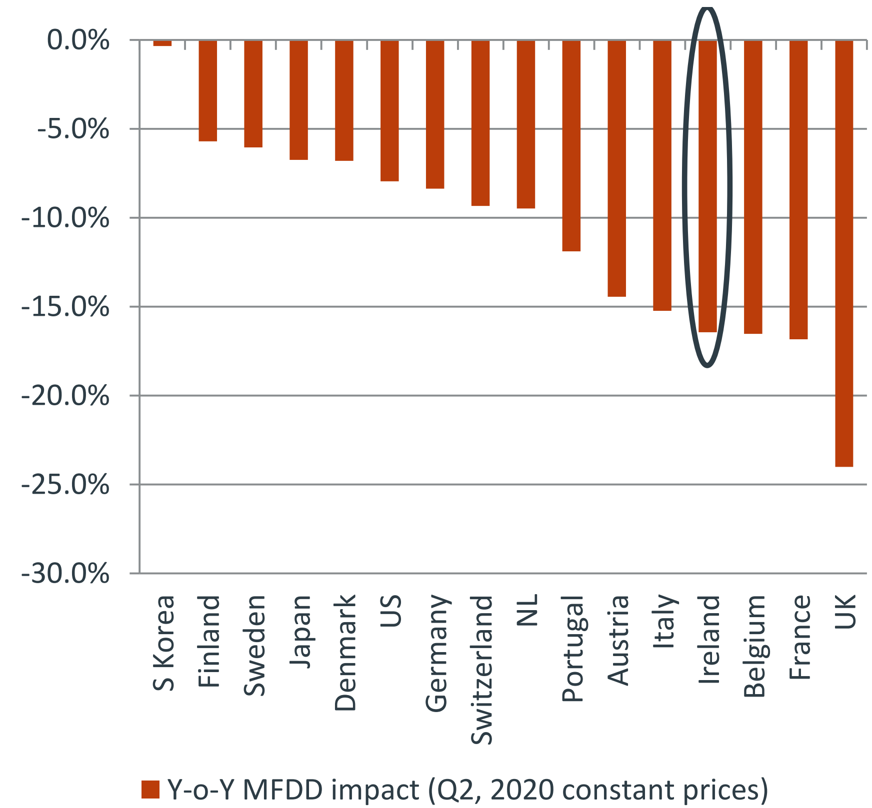


True Irish economy picture perhaps halfway between change in GDP and domestic demand because of FDI

Real GDP down 3.7% Y-o-Y in Q2 for Ireland: GDP *overstates* impact of multinationals



Real MFDD down 16.4% Y-o-Y in Q2: MFDD *understates* impact of multinationals



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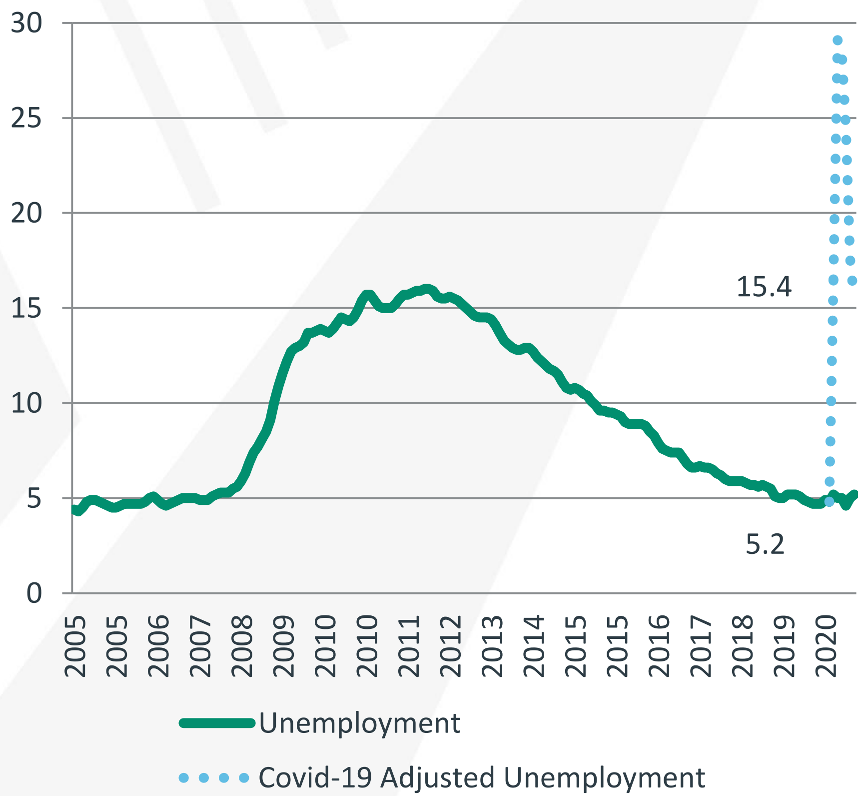
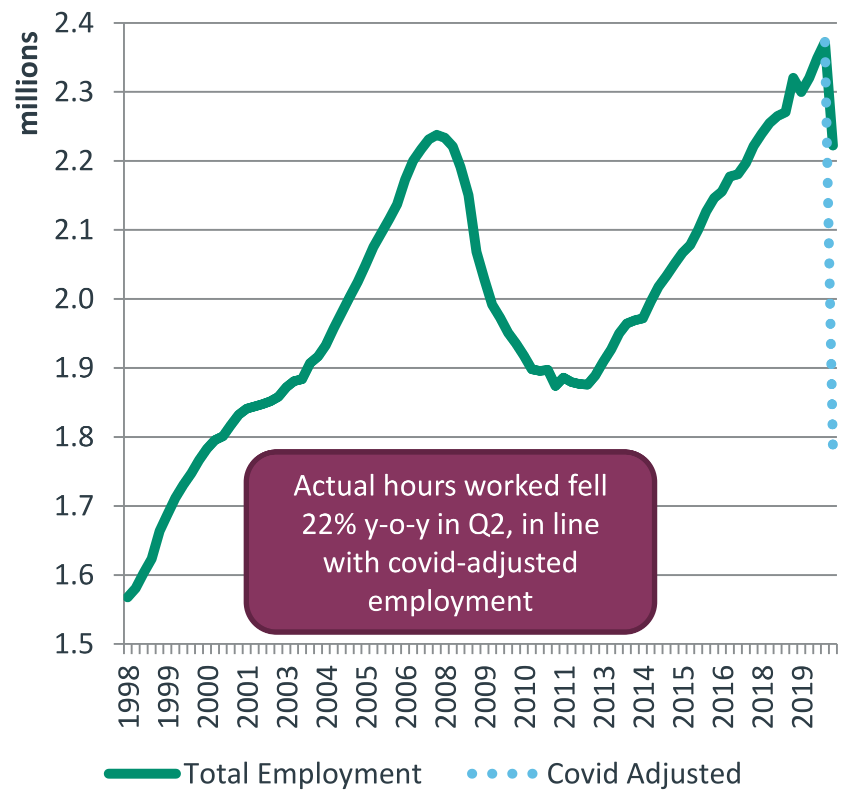
Source: CSO, DataStream
Note: MFDD for Ireland is modified for multinational activity by Ireland's Central Statistics Office (CSO). For other countries MFDD = Domestic demand = Consumption + Government (current) spending + Investment

Labour market data shows stark Covid-19 impact; will take time before labour market settles

True unemployment rate is uncertain: Covid-19 adjusted rate 15.4%* in August



At end-Q2, adjusted employment was estimated at 1.8m – likely closer to 2m now



Source: CSO

** The CSO have estimated the upper bound of the unemployment rate at 15.4% in August. The CSO have urged caution around labour market data given the likelihood of revisions and the unique nature of employment status for some people in the pandemic.*

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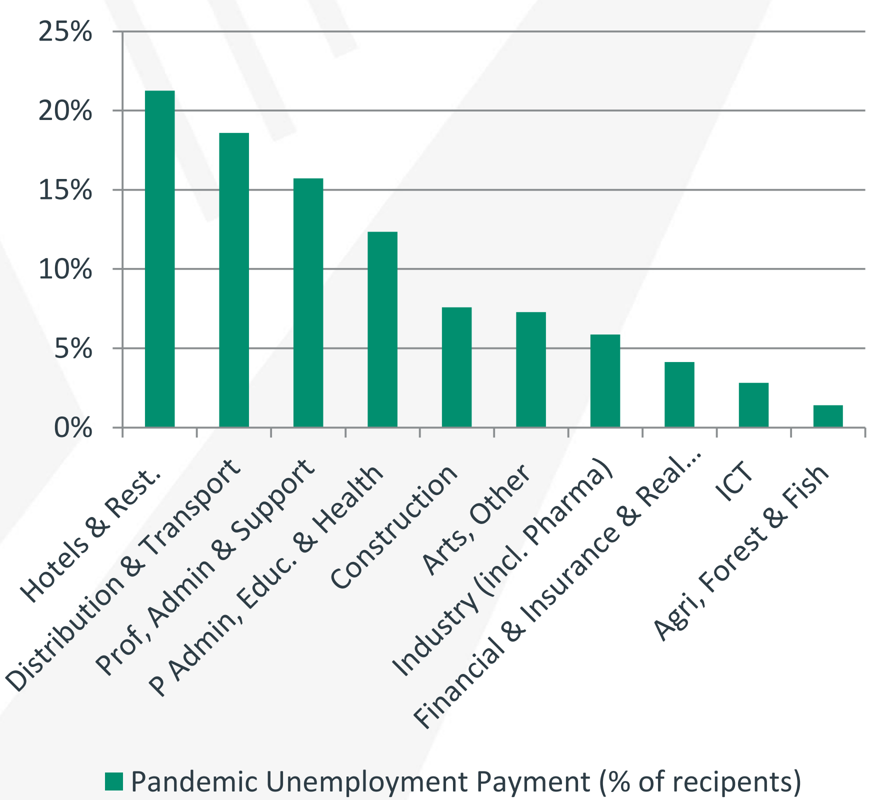
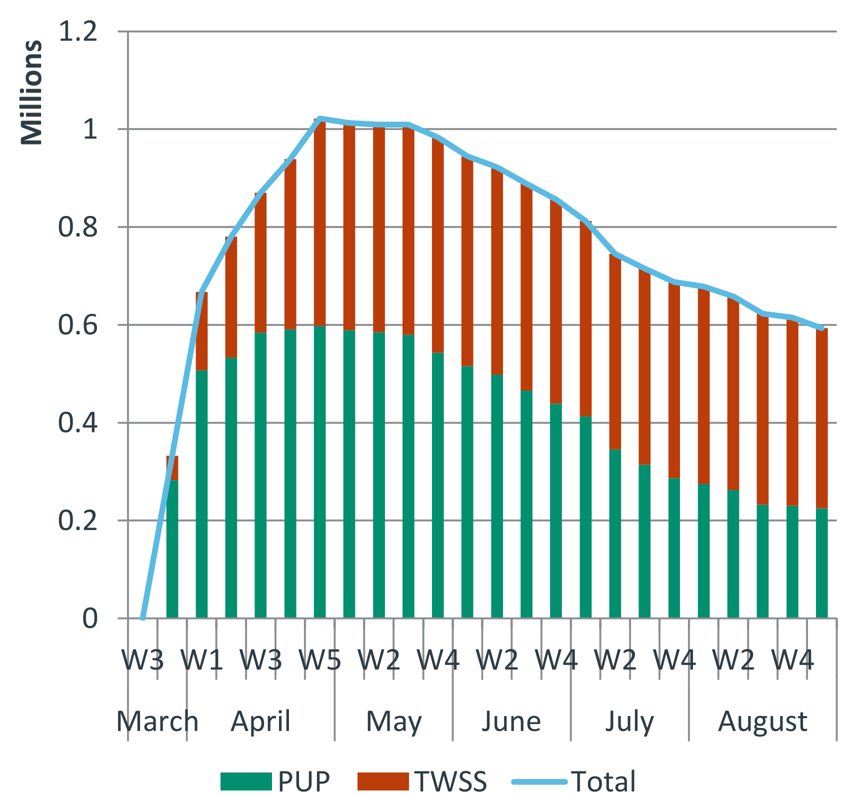
Government's income supports have peaked: those on TWSS are still employed; PUP unemployed (for a time)

Like elsewhere, tourism, restaurants, bars and retail the most impacted sectors



Numbers on supports falling but pace has slowed in recent weeks



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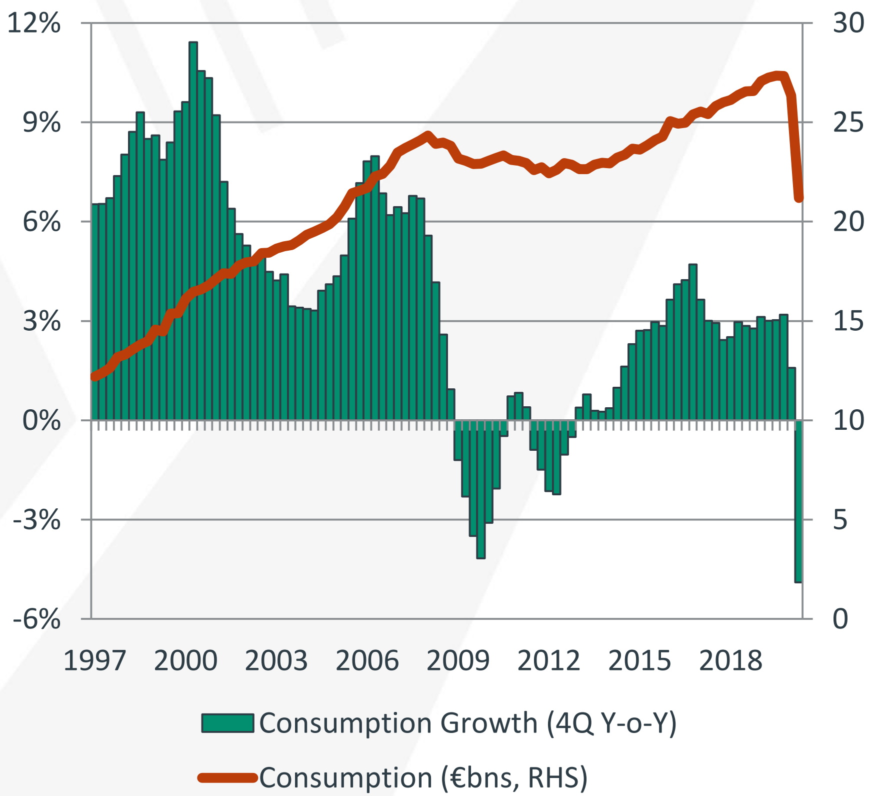
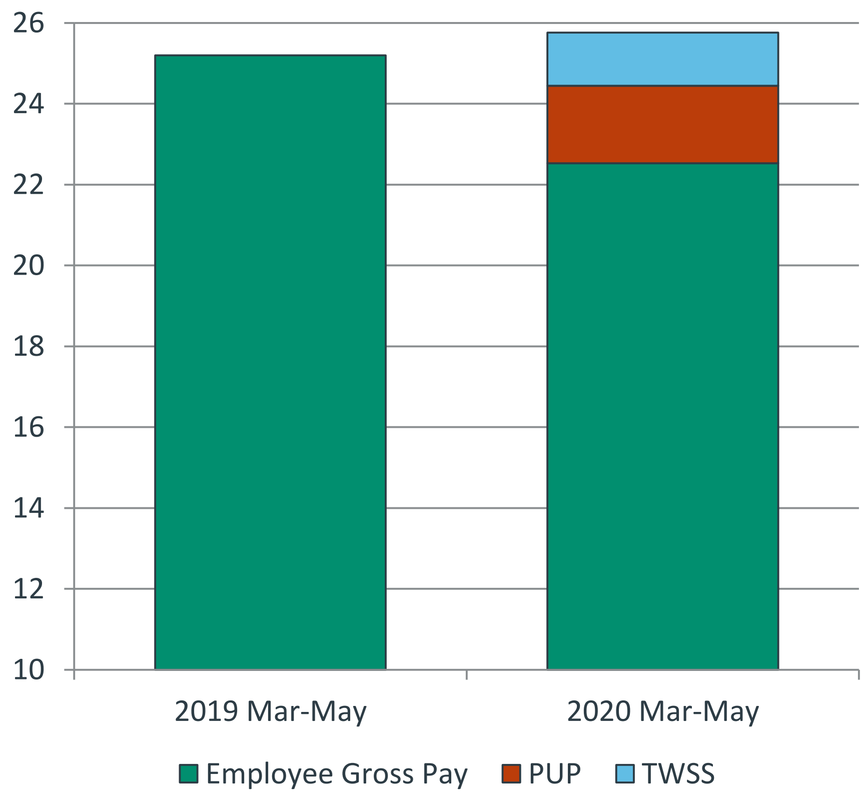
Source: Department of Social Protection (as of 7 September), Revenue(as of 3 September), CSO

Consumption fell sharply despite incomes being maintained; the result is record bank deposit inflow

Consumption sharply hit in Q2 – down 20% q-o-q but 5% down 4Q y-o-y



But income supports have meant aggregate income was maintained = savings (pg. 15)



Source: CSO, Revenue

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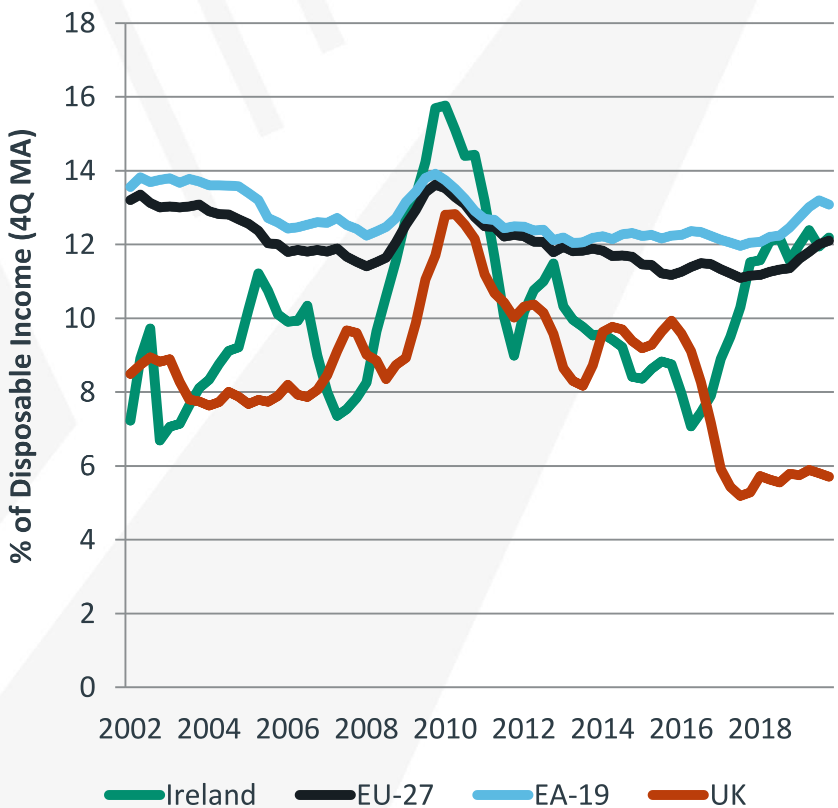
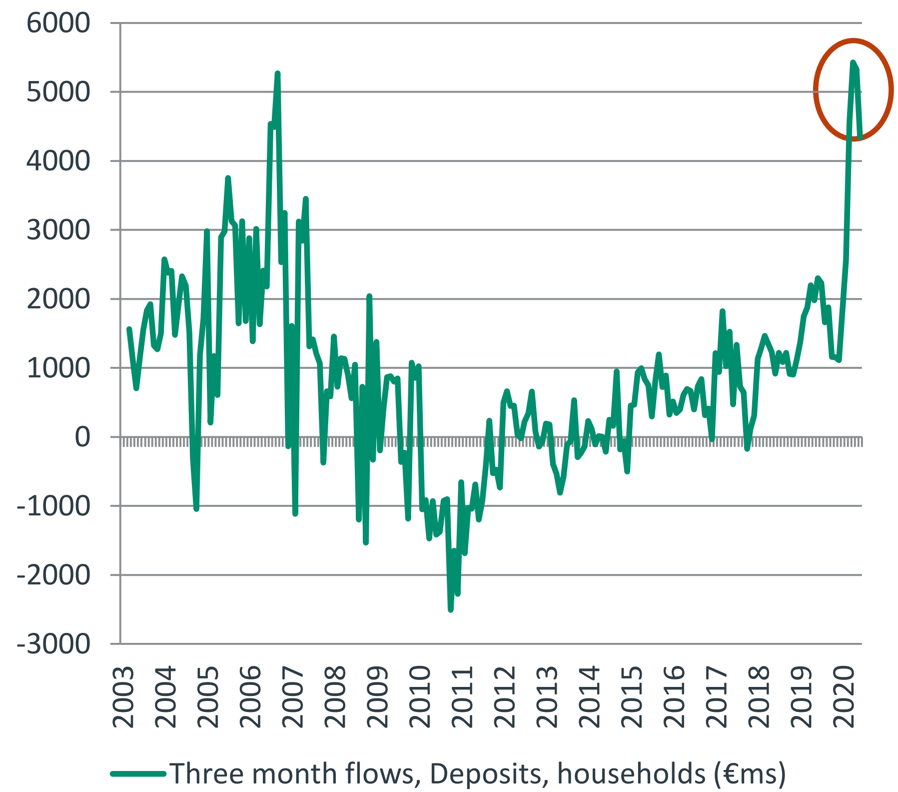
Savings rate will have increased sharply in Q2 – Ireland was close to EU average pre-Covid

Gross household saving rate recovered in growth year - close to EU-27 average



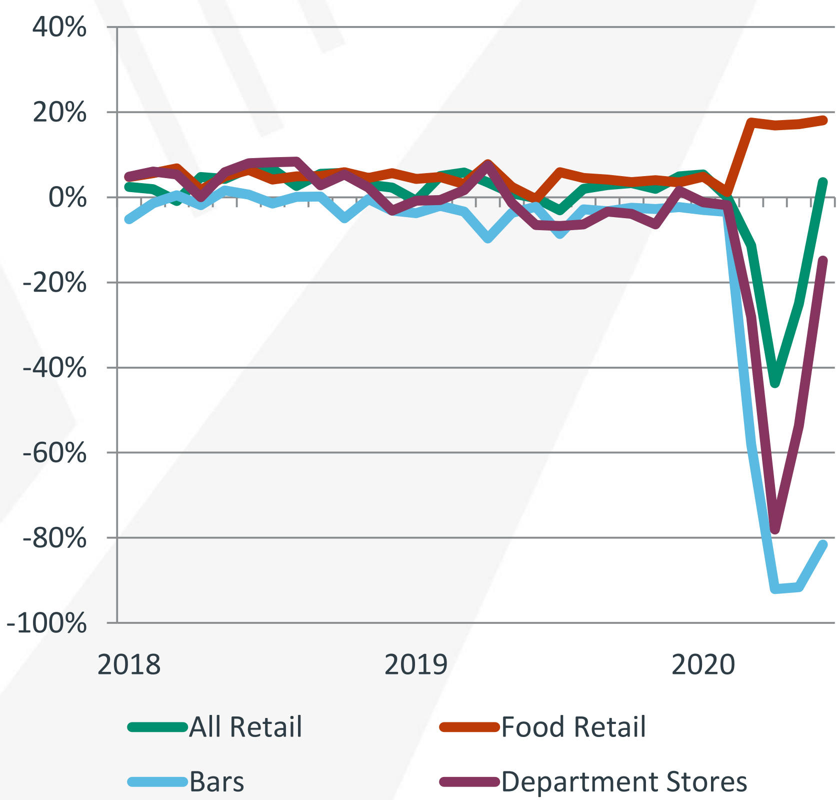
Bank deposits shows increased saving as h'holds couldn't consume in recent months



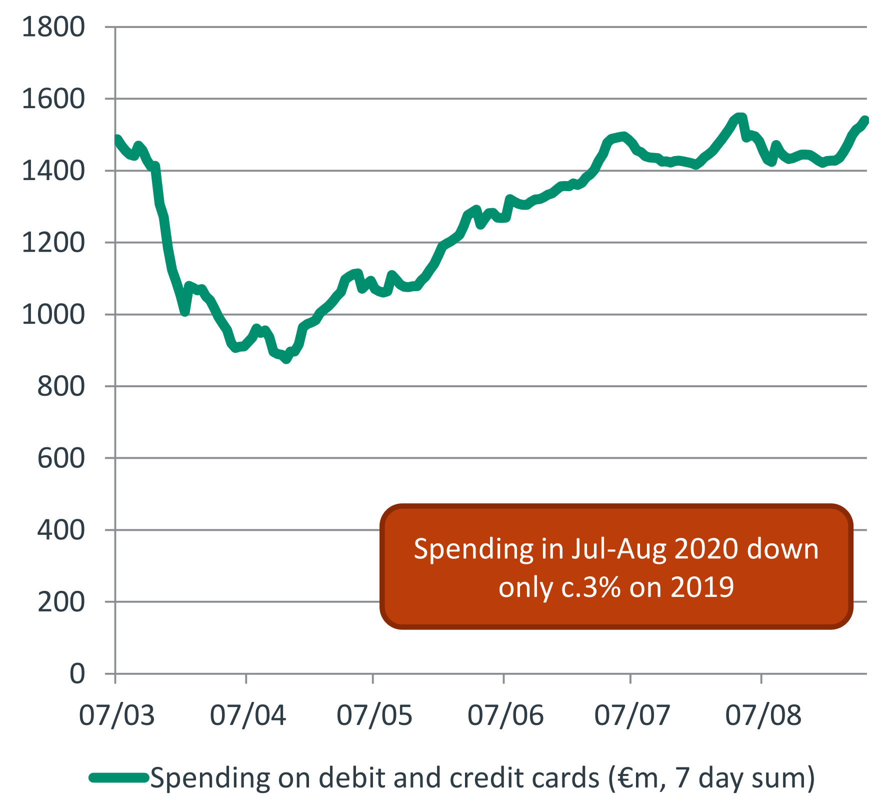
Source: Eurostat, ONS, CSO ; CBI, Eurostat; ECB NTMA calculations
Note: Gross Savings as calculated by the CSO has tended to be a volatile series in the past, some caution is warranted when interpreting this data

High frequency indicators suggest consumption has rebounded in Q3

Retail sales have rebounded – food & online sales offsetting large impact on other areas



Card data shows consumption fell sharply from mid-March & rebound in recent months



Source: CSO; CBI

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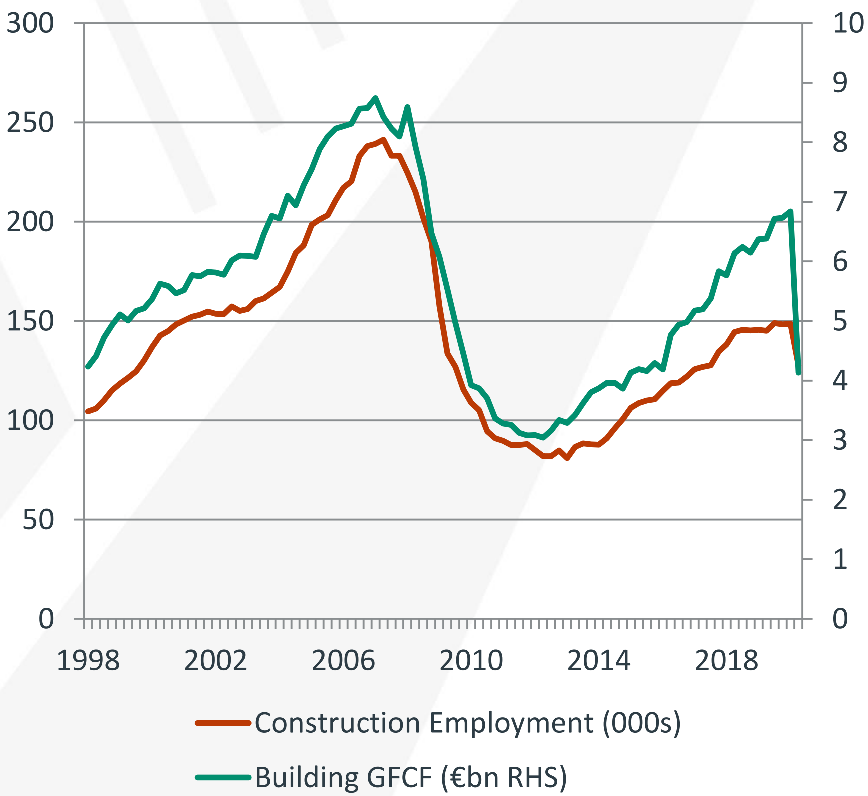
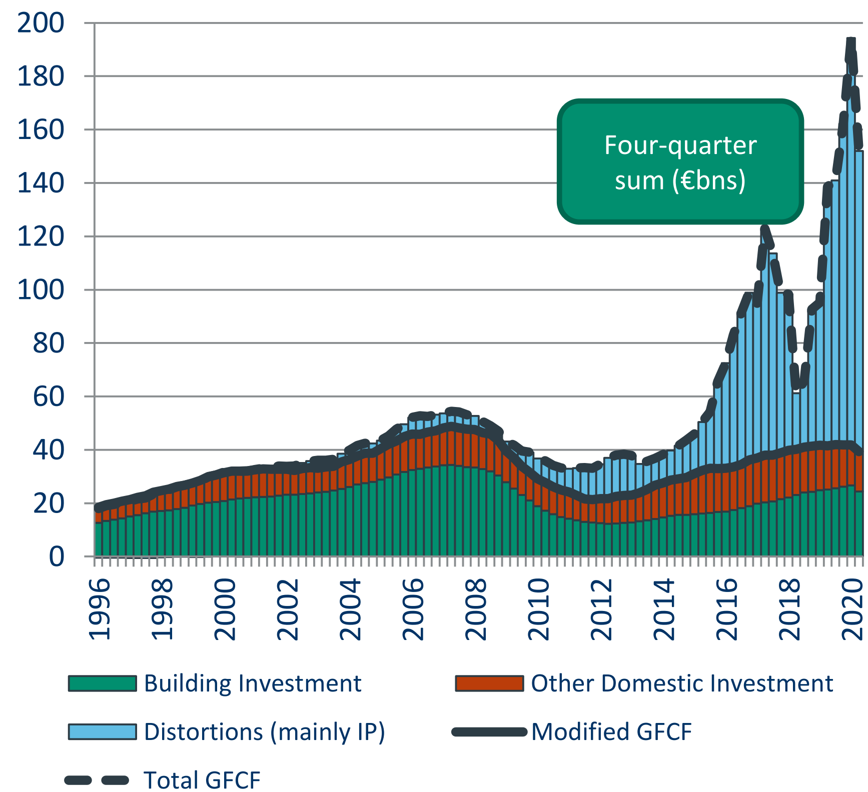
Investment falls 28% as construction sector was shuttered for six weeks before restart in mid-May

Building and construction investment by 40% hit in Q2 but can rebound quickly



Another surge of IP into Ireland in 2019-2020 – helps ICT but distorts investment picture



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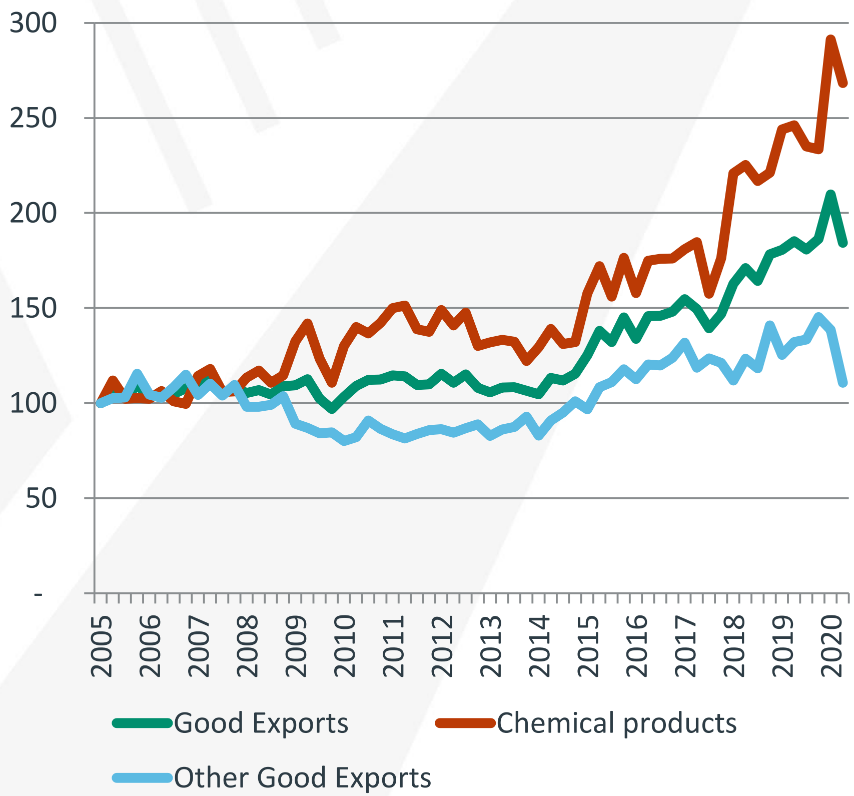
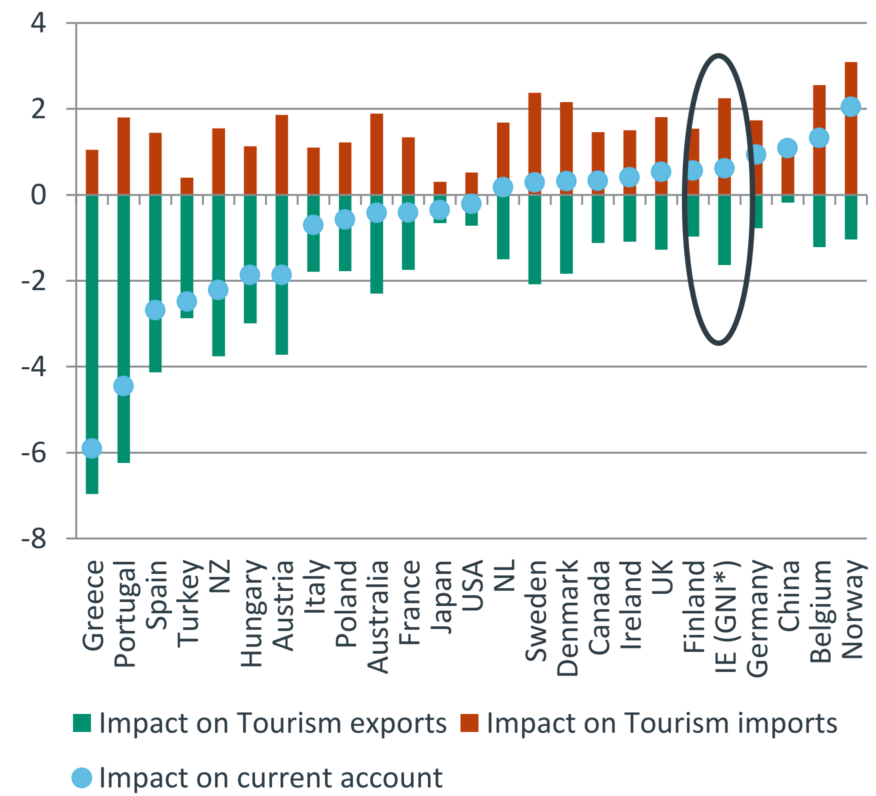
Source: CSO; NTMA calculations

Exports have held up due to multinationals and tourism being a smaller sector for Irish economy

Goods exports were flat y-o-y in Q2 - chemical exports offset other products



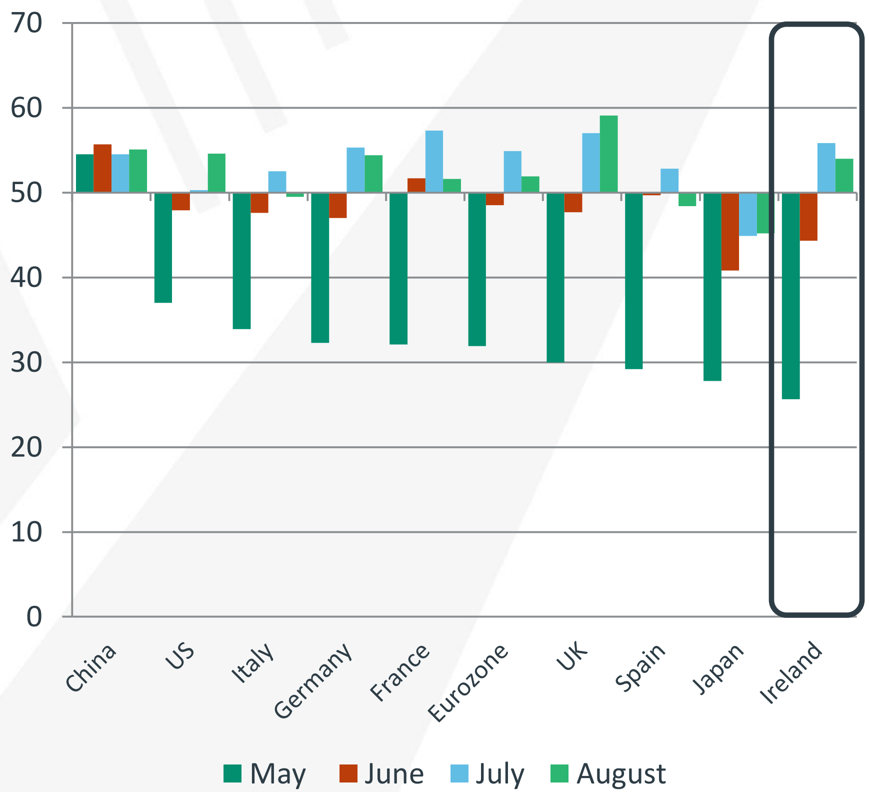
Covid-19 tourism impact on CA (% of GDP) estimated as plus for Ireland unlike others



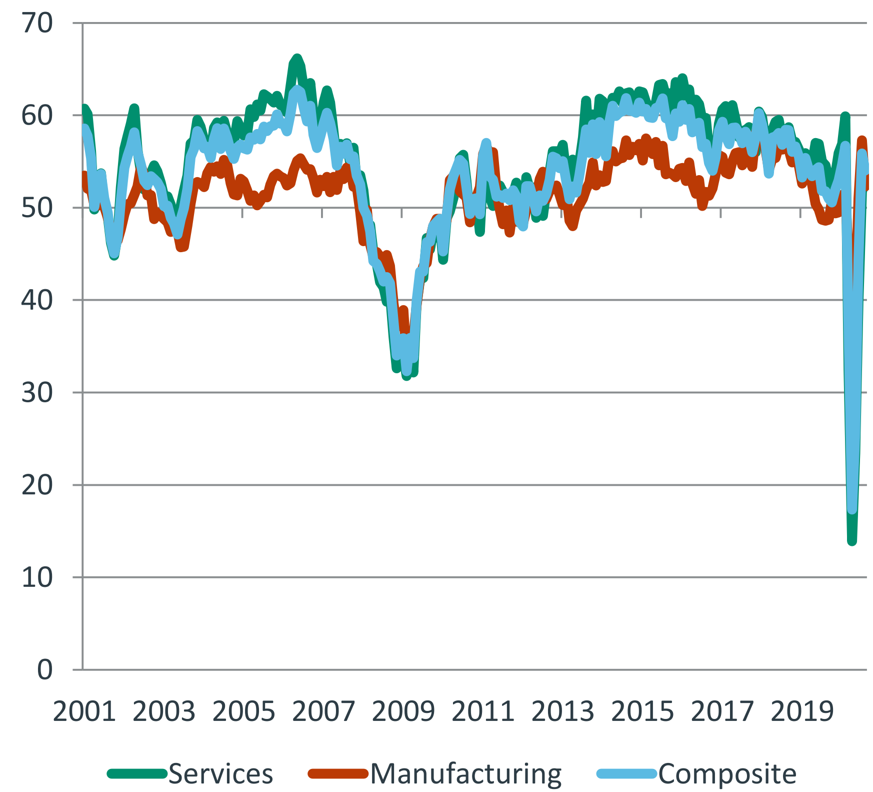
Source: CSO; IMF External Sector Report

PMI - All indicators back above 50; a slight softening in August may be attributed to delayed reopening

Ireland's Composite PMI at 54.0 in August, Manufacturing up to 52.3



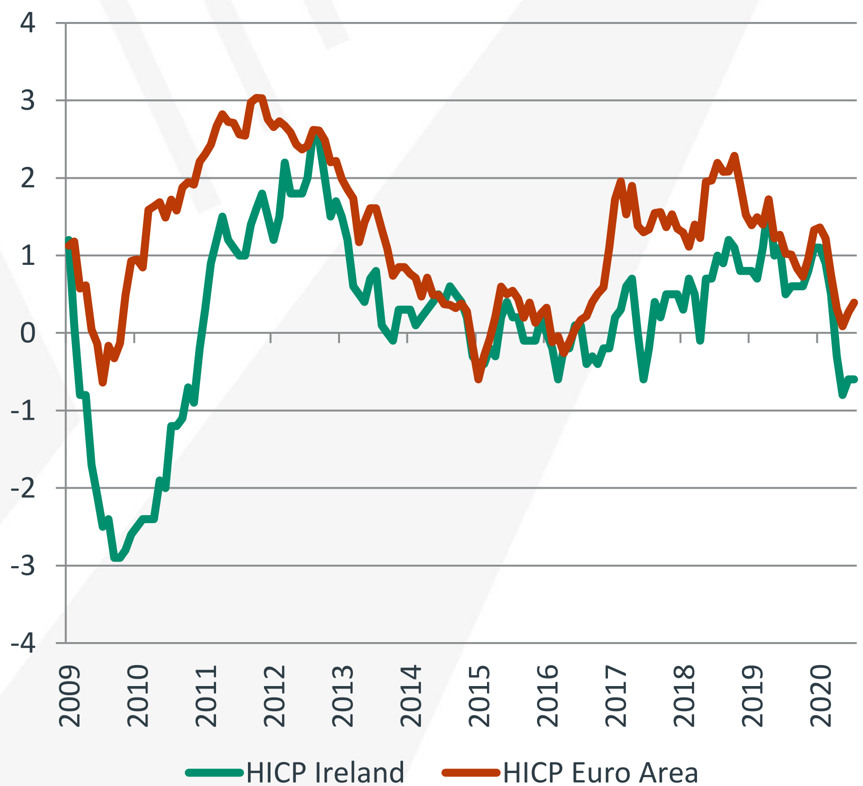
All three PMIs back above 50 – Manufacturing less impacted than services



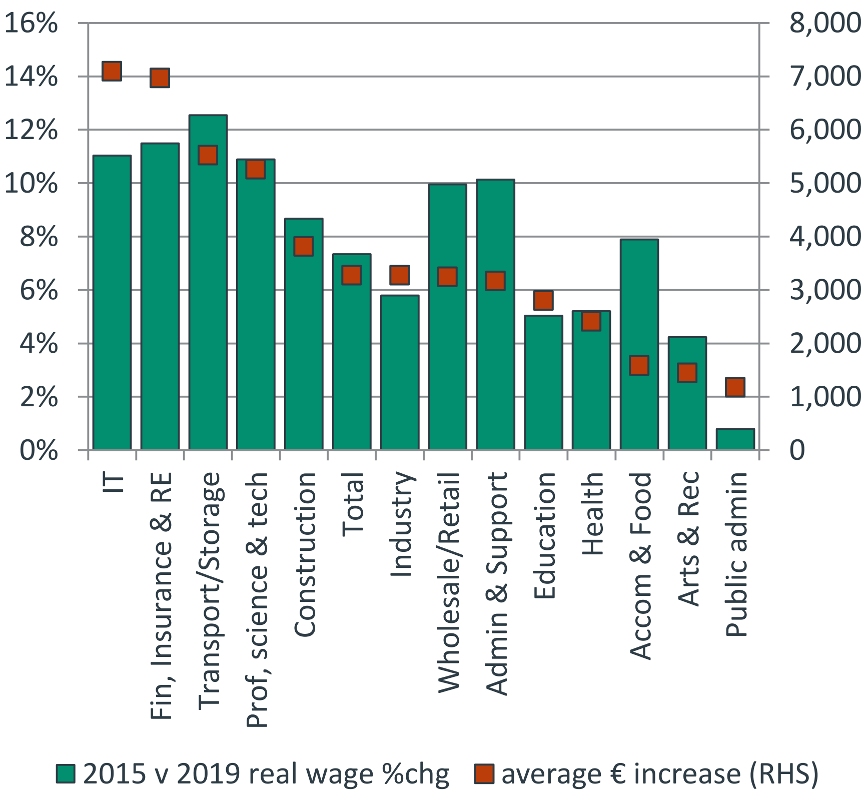
Source: Markit, Bloomberg

Deflation expected for 2020; wage growth and low inflation pushed real wages up in the last five years

Deflation expected for 2020 follows sustained period of low inflation



Real wages increase helped HHs to repair balance sheets, increase living standards



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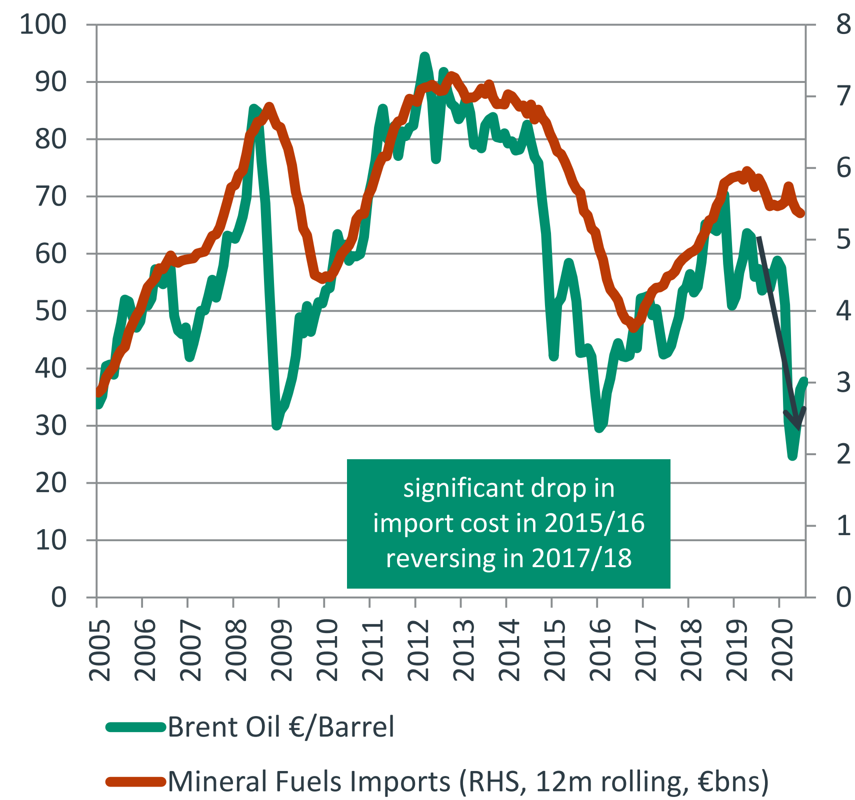
Source: Eurostat; CSO

External environment – monetary policy and oil positives will partially offset exogenous shock that Ireland faced

	2019	2020
EA Monetary Policy	Accommodative in Q4	Maximum accommodative
EU Fiscal Policy	Minimal	Expansionary
US Monetary Policy	Easing	Maximum accommodative
US growth	YC inversion, but still growing	Covid-19 shock
Oil price	Flat y-o-y	Significantly down despite rebound
UK growth	Brexit uncertainty headwind	Covid-19 shock; Brexit unresolved
Euro Growth	Sluggish	Covid-19 shock
Euro currency	No change y-o-y v. £; weaker v $	Strengthening vs. Dollar

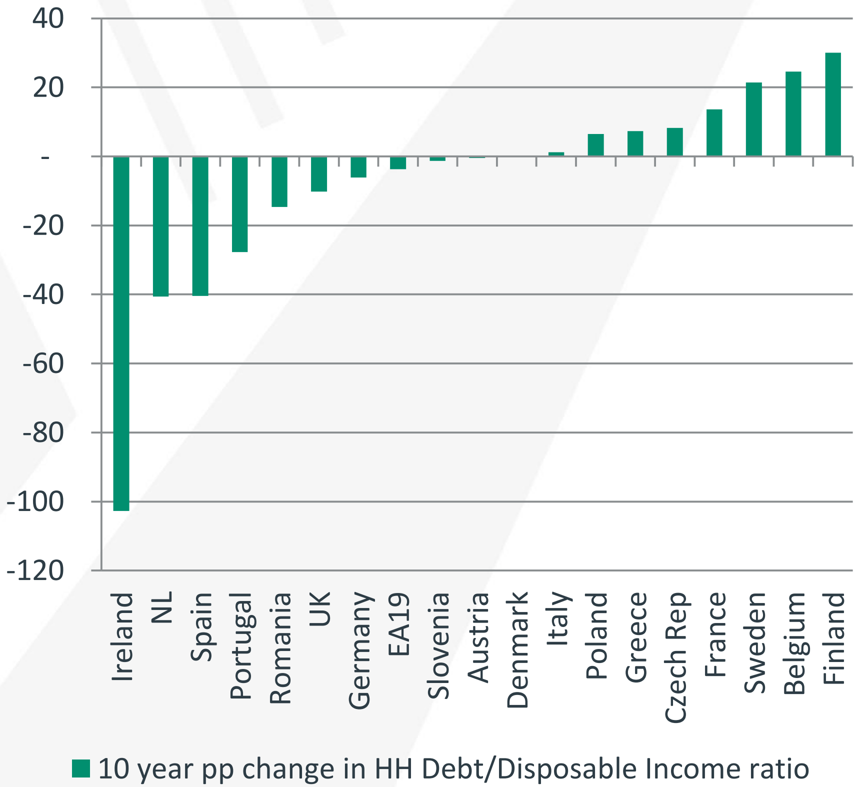
Oil price drop might boost the economy by 0.5-1% of GNI*



Source: NTMA analysis, DataStream, CSO

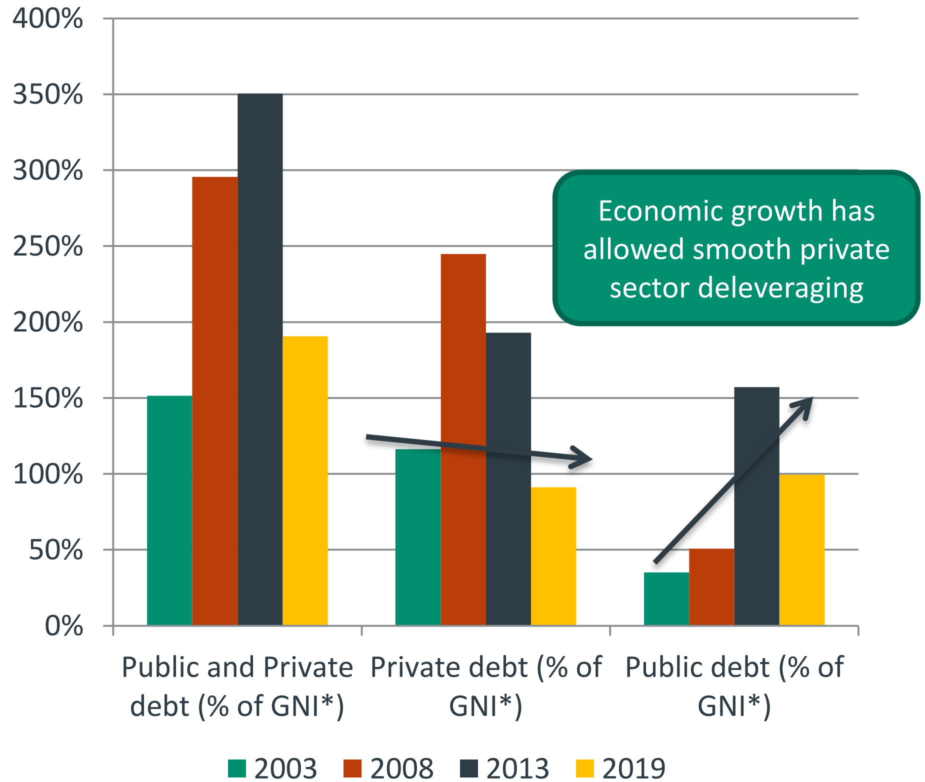
Ireland has used recovery period to repair private sector balance sheets – especially households

Household debt ratio has decreased due to deleveraging and increasing incomes



Source: Eurostat (2019 versus 2009)

Legacy of crisis is on the Government balance sheet not the private sector's



Source: CBI data, CSO

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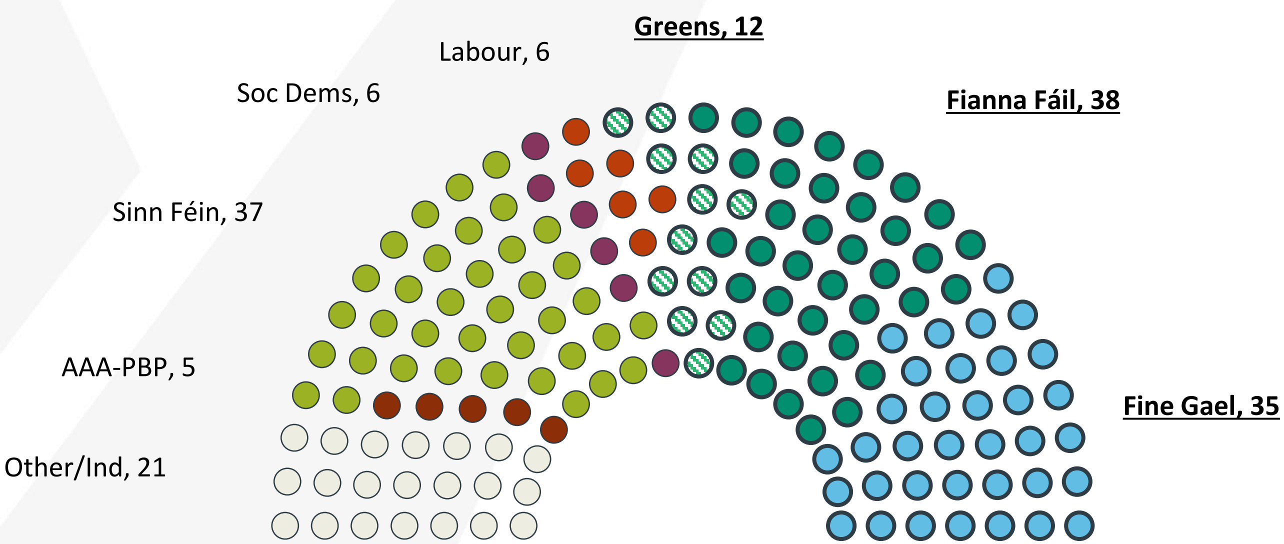
Note: Private debt includes household and Irish-resident enterprises (ex. financial intermediation) CBI quarterly financial accounts data used for household and CSO data for nominal government liabilities.

Irish coalition government up and running; made up of Fianna Fáil, Fine Gael and the Greens

Programme for government focuses on economic recovery, Brexit, public investment and climate action

Breakdown of seats in Dáil Éireann following 2020 General Election (160 Seats total)



New Taoiseach – position will rotate in 2022

Name	Party	Position/ Ministry
Micheál Martin	FF (leader)	Taoiseach (PM, until end 2022)
Leo Varadkar	FG (leader)	Tánaiste (deputy PM), Business
Simon Coveney	FG	Foreign Affairs (Brexit)
Paschal Donohoe	FG	Finance
Eamon Ryan	Greens (leader)	Climate, Transport

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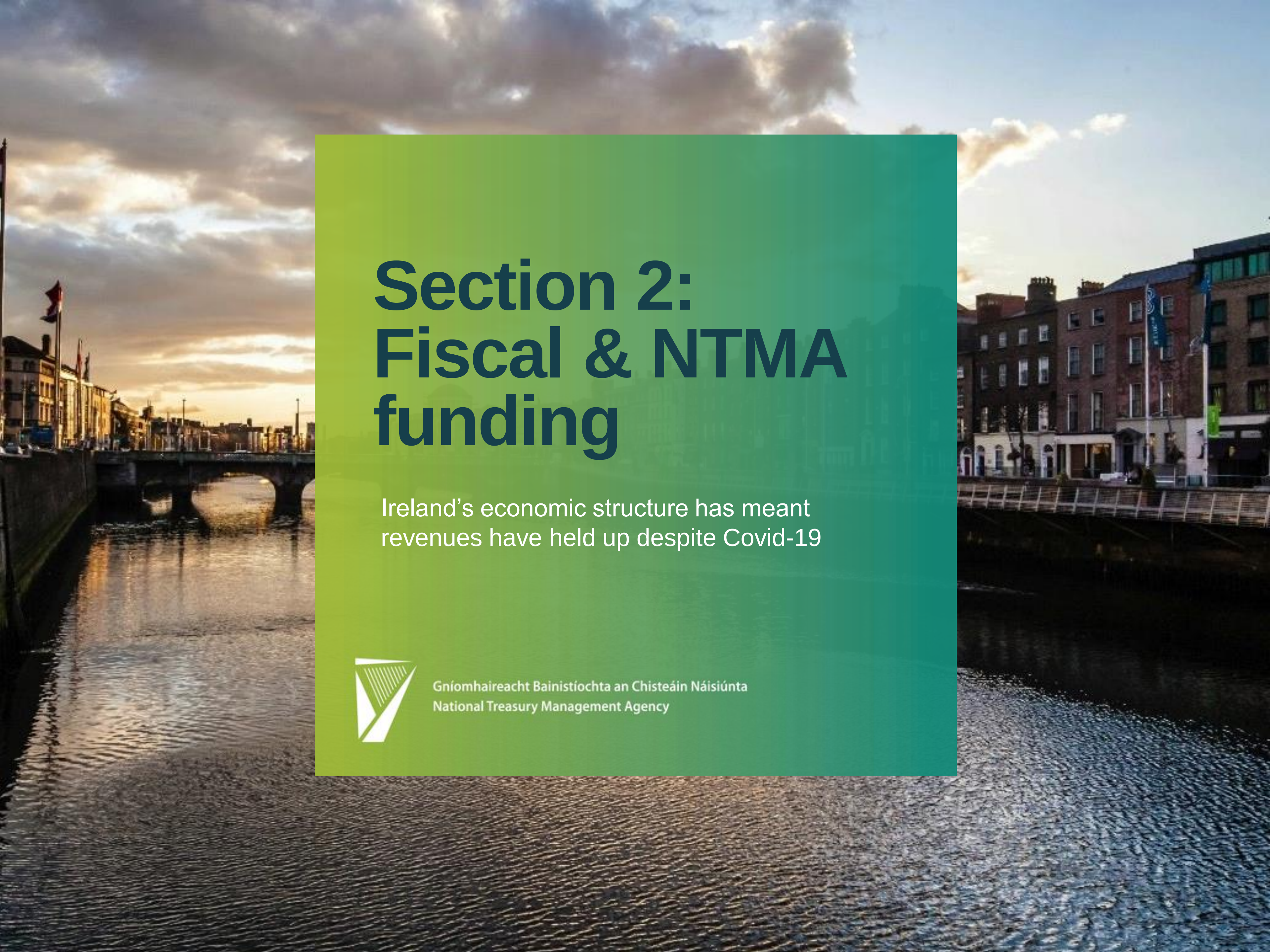
Source: NTMA analysis

Structure of the Irish economy: domestic side adds jobs/enterprises; multinationals adds GVA/high wages

	Share of Enterprises (2018)	Employed (000s, Q4 2019)	Share of Employment	% employment in Firms <50	Share of GVA (2018)	Gross Weekly Earnings € (Q4 2019)	Share of Tax Revenue
Agriculture	N/A	106.9	5%	N/A	1%	N/A	1%
Industry	6%	286.3	12%	24%	36%	920	14%
Construction	17%	147.1	6%	76%	3%	822	4%
Retail trade	14%	310.2	13%	50%	7%	604	21%
Transport	7%	108.0	5%	38%	2%	810	2%
Accom/food	6%	179.2	8%	52%	2%	382	3%
ICT	5%	127.6	5%	35%	12%	1,241	9%
Financial	7%	115.1	5%	25%	14%	1,115	16%
Professional	13%	141.1	6%	57%	4%	973	11%
Admin	6%	112.1	5%	26%	6%	617	6%
Public Admin	N/A	117.0	5%	N/A	3%	972	5%
Education	4%	191.6	8%	20%	3%	874	3%
Health	6%	294.3	12%	31%	5%	756	4%
Other	9%	118.7	5%	68%	1%	517	3%

Source: CSO, Revenue



Section 2: Fiscal & NTMA funding

Ireland’s economic structure has meant revenues have held up despite Covid-19

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Total fiscal response of €24bn (14% of GNI*) is large and needed

	€bn	% of GNI*	Description
Taxation Measures	**2.9**	**1.7**	
• Warehousing/Deferrals	2.0	1.1	Corporate Tax, VAT, Stamp duty tax deferrals
• Other	0.9	0.5	The standard rate of VAT will be decreased from 23% to 21% for the period September 2020 to 28 February 2021
Expenditure Measures	**17.5**	**10.1**	
• Labour supports	11.4	6.5	PUP/TWSS extended to April 2021; TWSS transforming into EWSS
• Health Spending	2.0	1.1	Covid-19 capacity expenditure
• Business Supports	1.5	0.9	Commercial Rates waivers, Grants
• Capital Expenditure	0.5	0.3	Capital works brought forward in time
• Other	2.2	1.3	Help-to-Buy, other grants and aids
Total Direct Supports	**20.5**	**11.7**	
Indirect supports	4.0	2.2	Credit Guarantee Scheme, Pandemic Stabilisation and Recovery Fund
Total Supports	**24.5**	**14**	

Source: Department of Finance

NTMA has already received €20bn of revised funding target of €20-€24bn for 2020

Flexibility

Ireland has large cash balances, the final 2020 redemption prefunded and a year free of maturing bonds in 2021

Funding will come from several sources. Bonds, Short Term paper and the Rainy Day Fund

10 years

One of the longest weighted average maturities in Europe

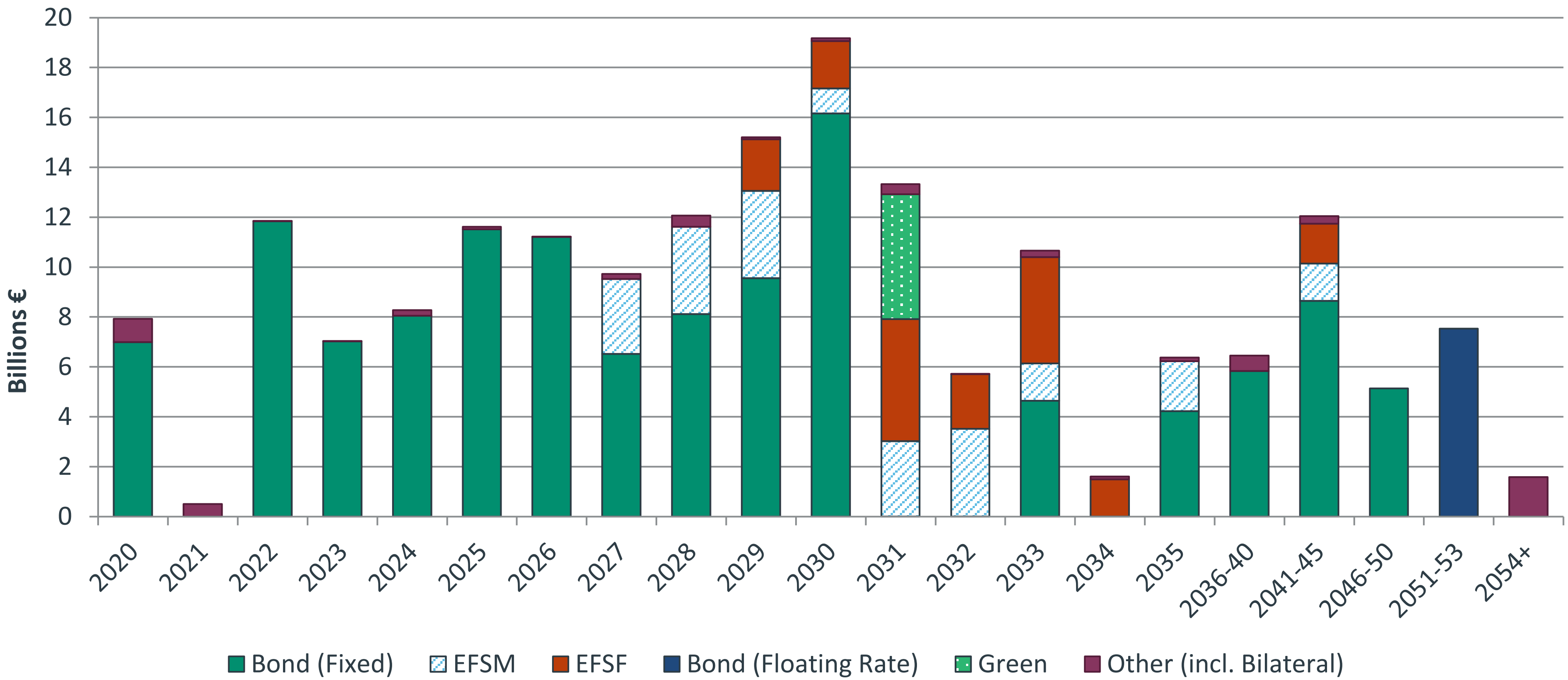
The ECB's QE enabled NTMA to extend debt maturities, reduce interest cost and repay the IMF. Now ECB is buying aggressively again with few limitations

AA-

Ireland has been affirmed in AA space by S&P

On relative basis, hit to Ireland may be less than other countries given multinationals, relatively smaller domestic share of economy and tourism

Flexibility helped by smoother maturity profile and no bond redemptions in 2021

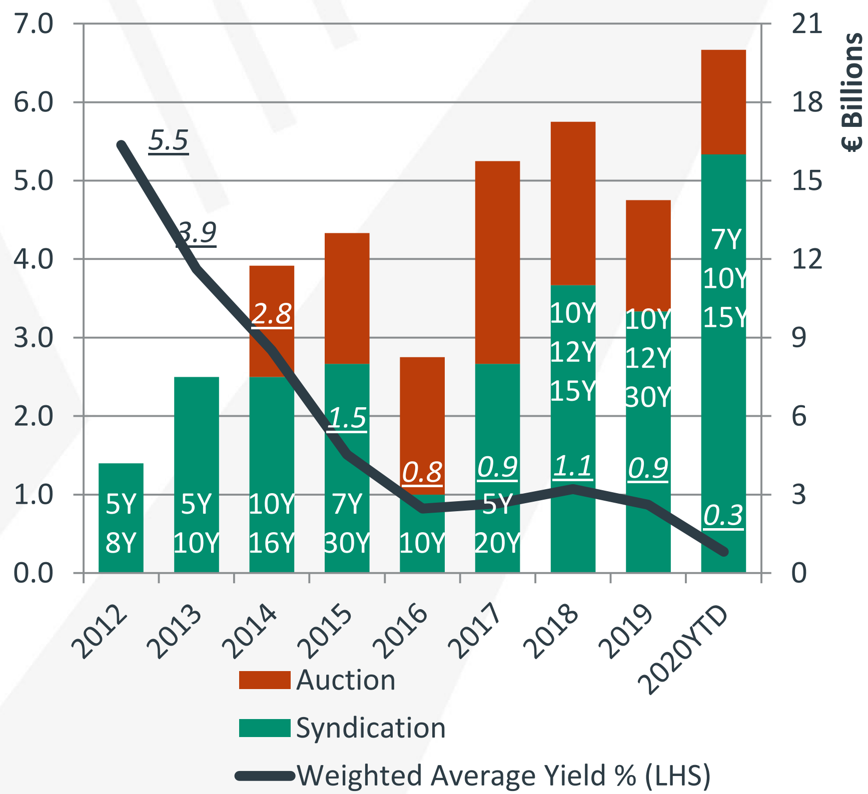


Source: NTMA

Note: EFSM loans are subject to a 7-year extensions. It is not expected that Ireland will refinance any of its EFSM loans before 2027. As such we have placed the pre-2027 EFSM loan maturity dates in the 2027-32 range although these may be subject to change.

Near-term redemptions much lower than last five years; lower borrowing costs also provides NTMA with flexibility

NTMA issued €88.5bn MLT debt since 2015; 13.2 yr. weighted maturity; avg. rate of 0.87%



Even with extra Covid-19 borrowings, NTMA might not match supply in 2015-19 period

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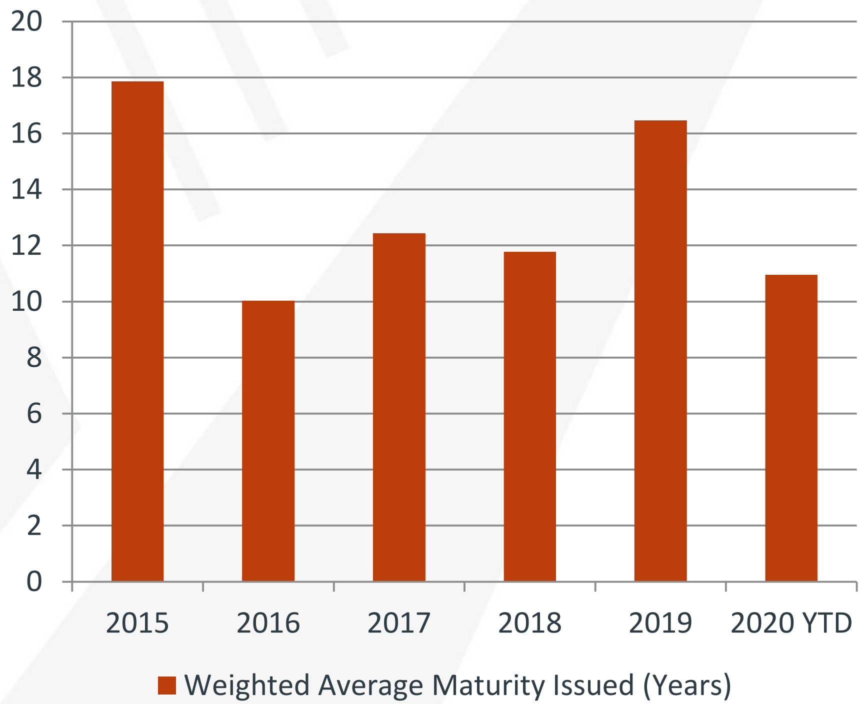
Source: NTMA
Only showing marketable MLT debt (auctions and syndications). Other issuance such as inflation linked bonds, private placement and amortising bonds occurred but not shown.

The NTMA took advantage of QE to extend debt profile

Various operations have extended the maturity of Government debt …



…Ireland (in years) now compares favourably to other EU countries

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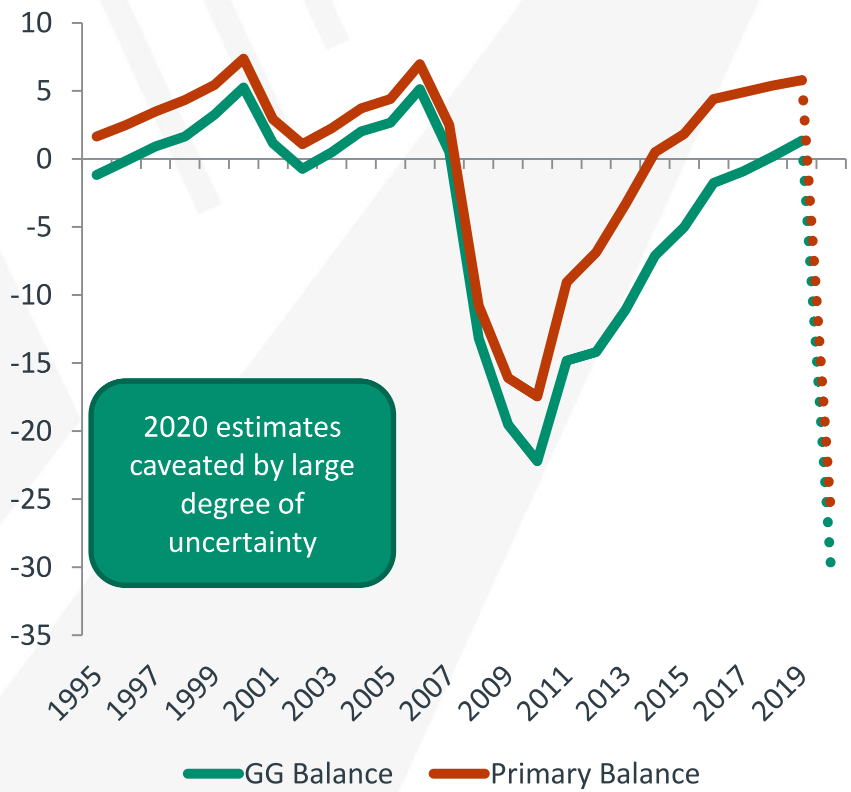
Source: NTMA; ECB

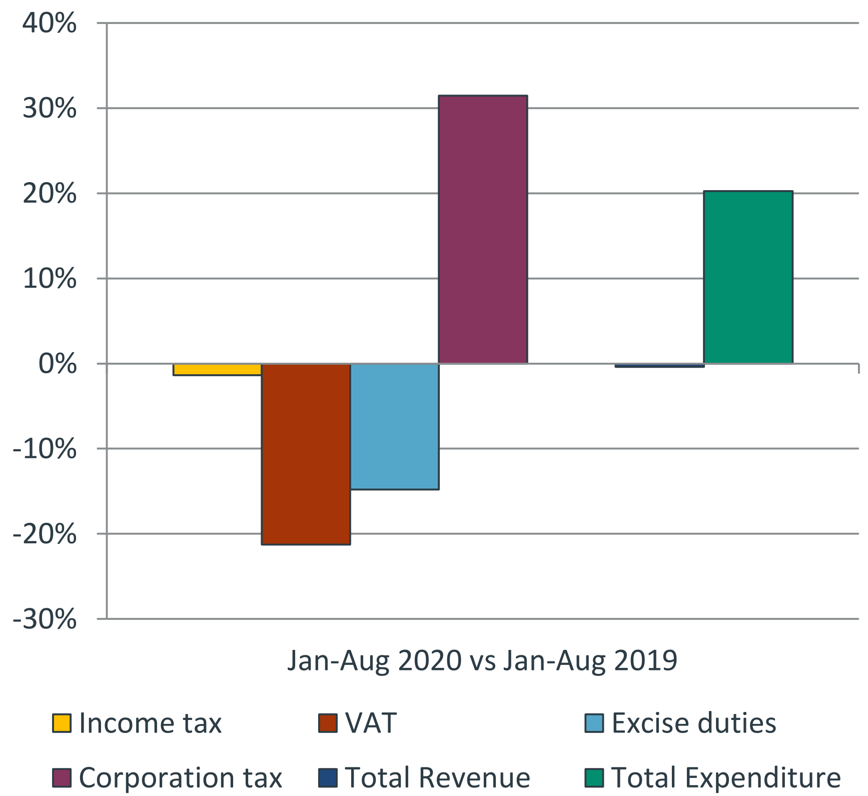
Note: Data excludes programme loans. Ireland's maturity including these loans is still similar

Fiscal discipline in evidence in last decade – after Covid-19 stimulus ends Ireland plans to narrow its deficit again

Gen. Govt. Balance (€bn) will be in significant deficit in 2020



Revenues holding up despite pandemic; expenditure is increasing (Central Govt.)



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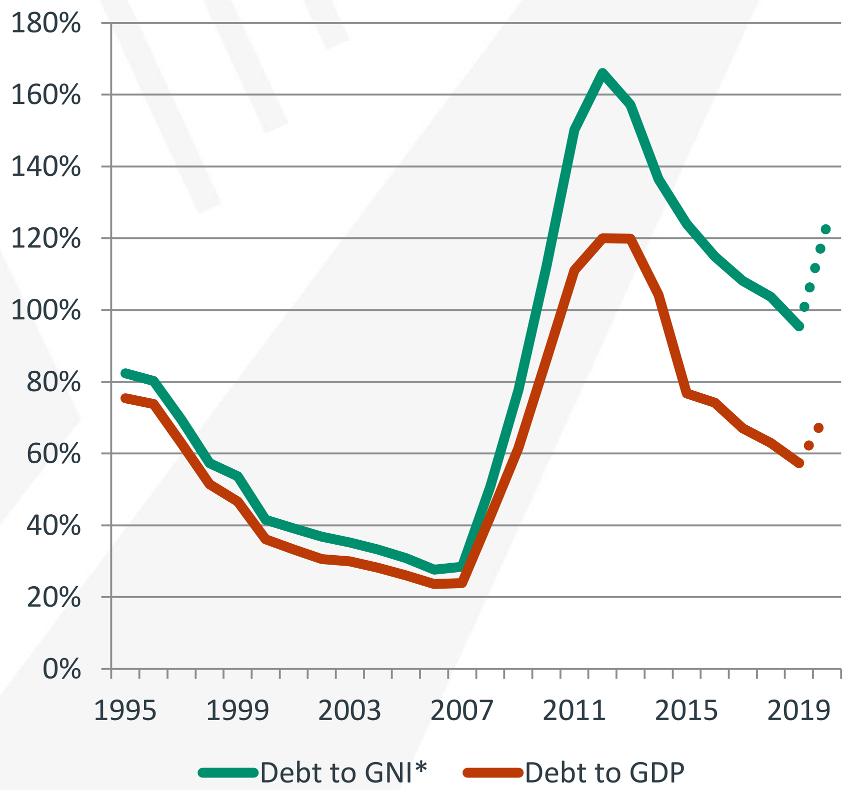
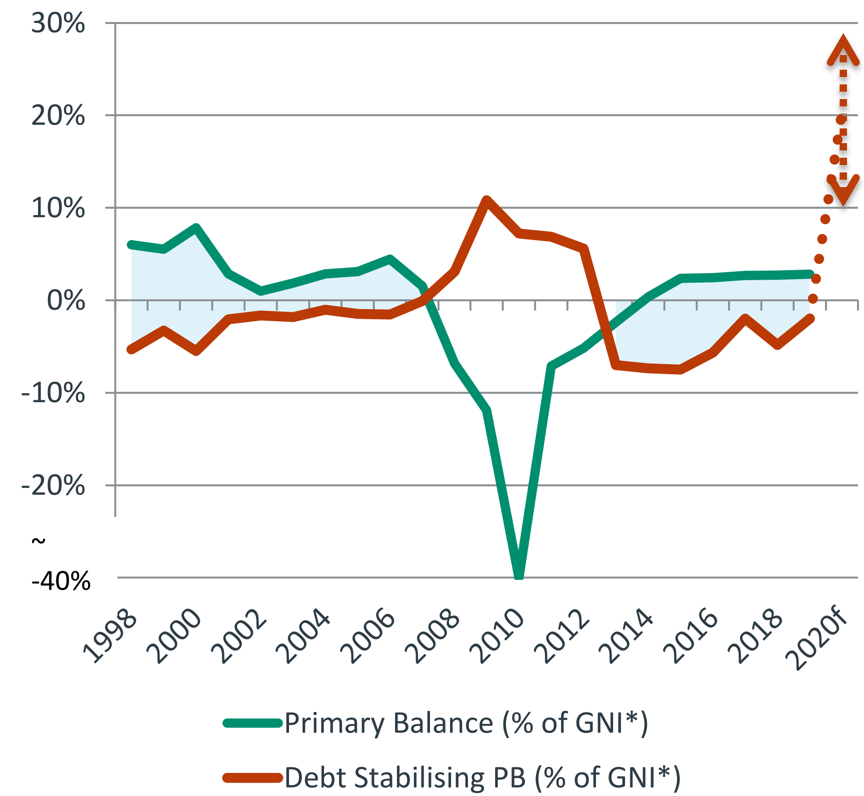
Source: CSO; Department of Finance

Gross Government debt 57% of GDP at end-2019 but close to 95% of GNI*; will spike in the short term

Debt-to-GNI* had dropped since last crisis



No country will be running primary surplus necessary to keep debt ratio in check



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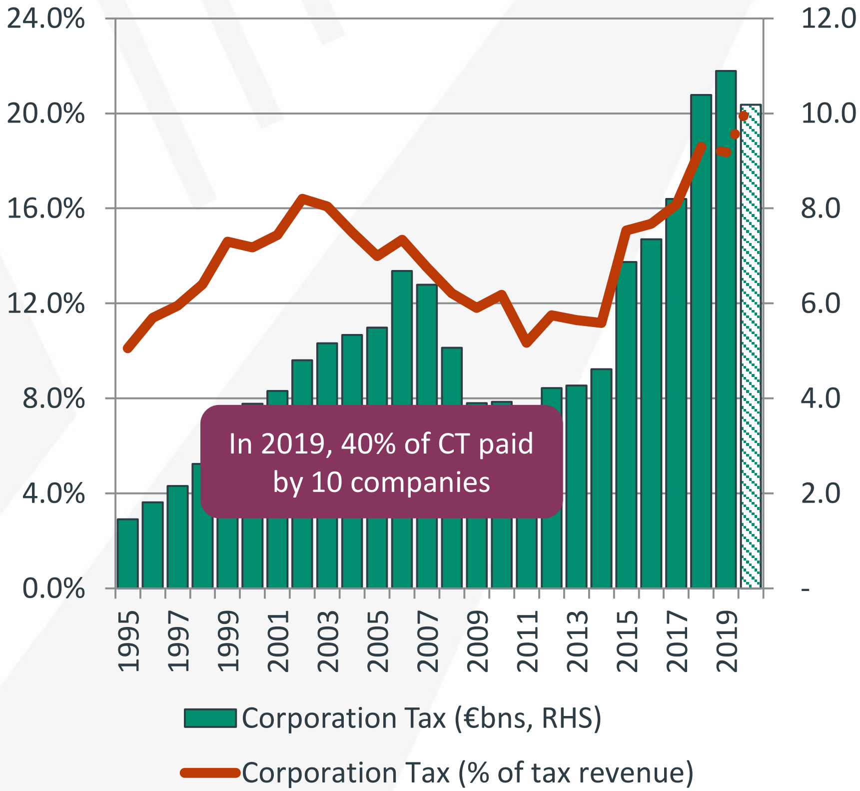
National Treasury Management Agency

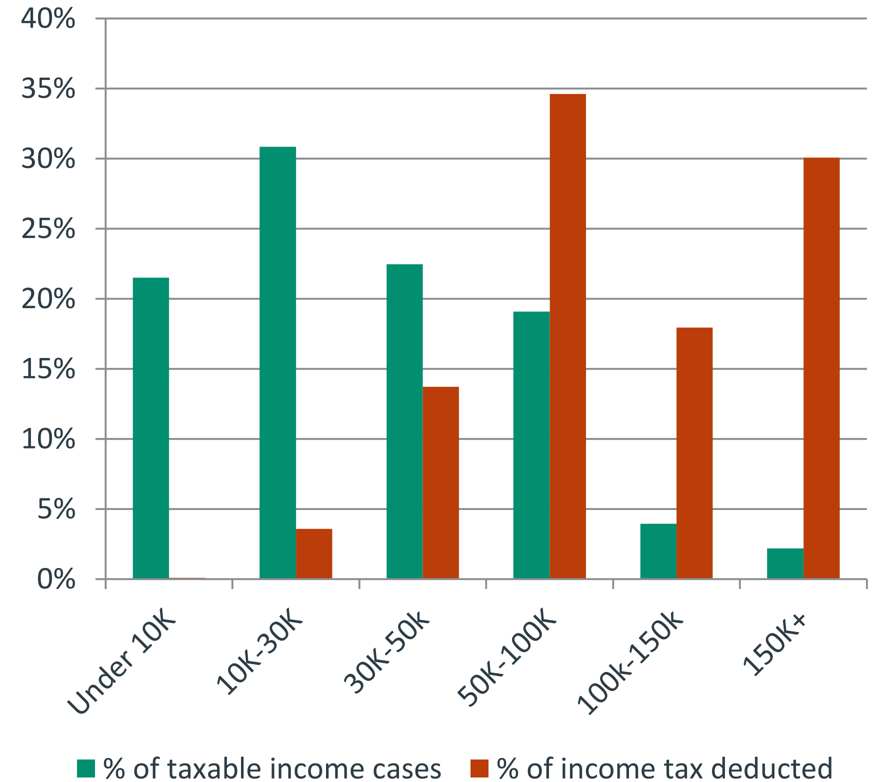
Source: CSO; Department of Finance, NTMA analysis

CT revenue cushioned by 2019 payments and defensive nature of Pharma and ICT; income tax protected also

Corporation tax (CT) receipts have more than doubled in four years



Progressiveness of income tax system and sector mix limits hit to overall receipts

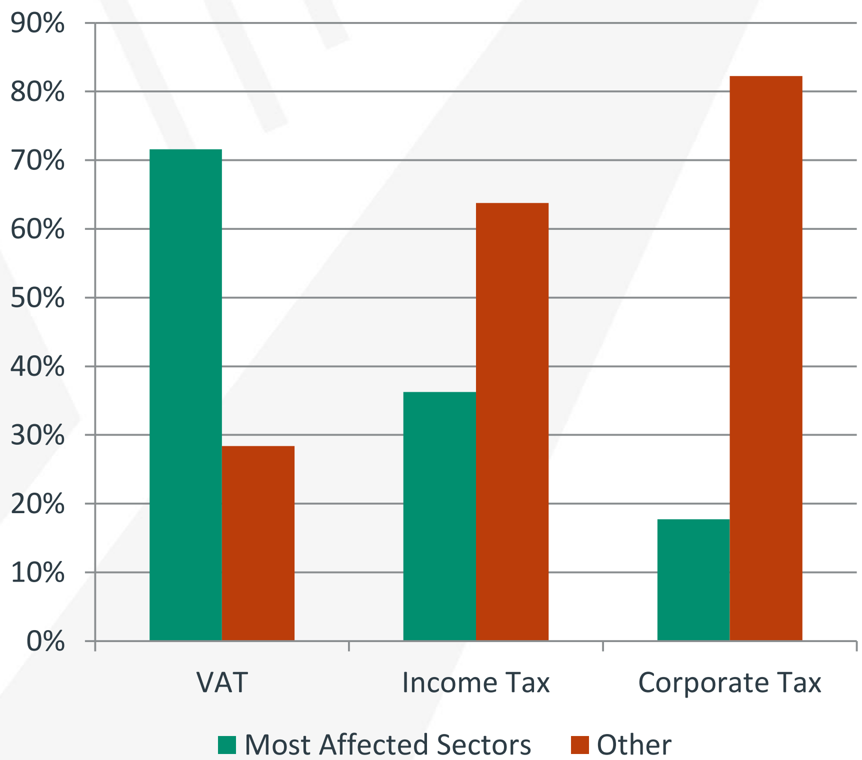


Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

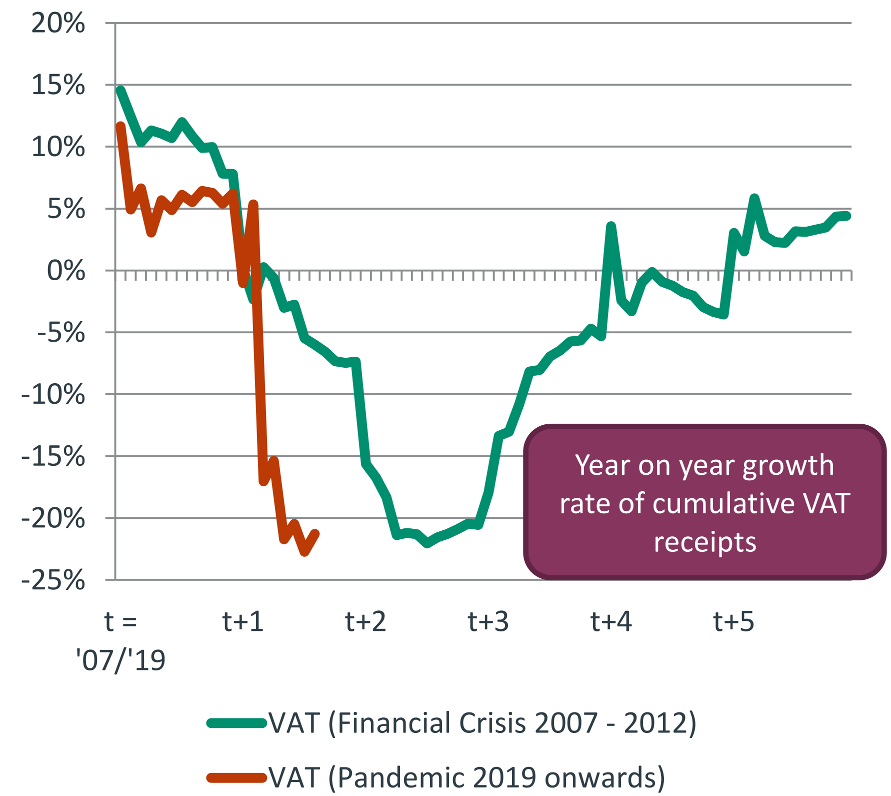
Source: Department of Finance, Revenue, NTMA analysis
Note: Most affected sectors include construction, wholesale and retail trade, transport, accommodation and food service activities, real estate activities, professional, scientific and technical activities; administrative and support service activities, arts, entertainment and recreation

VAT receipts directly impacted by lockdown; other tax categories less affected – CT in particular

Over 70% of VAT receipts comes from most affected sectors; only 17% of CT receipts



Fall off in VAT receipts much sharper in 2020 than start of financial crisis

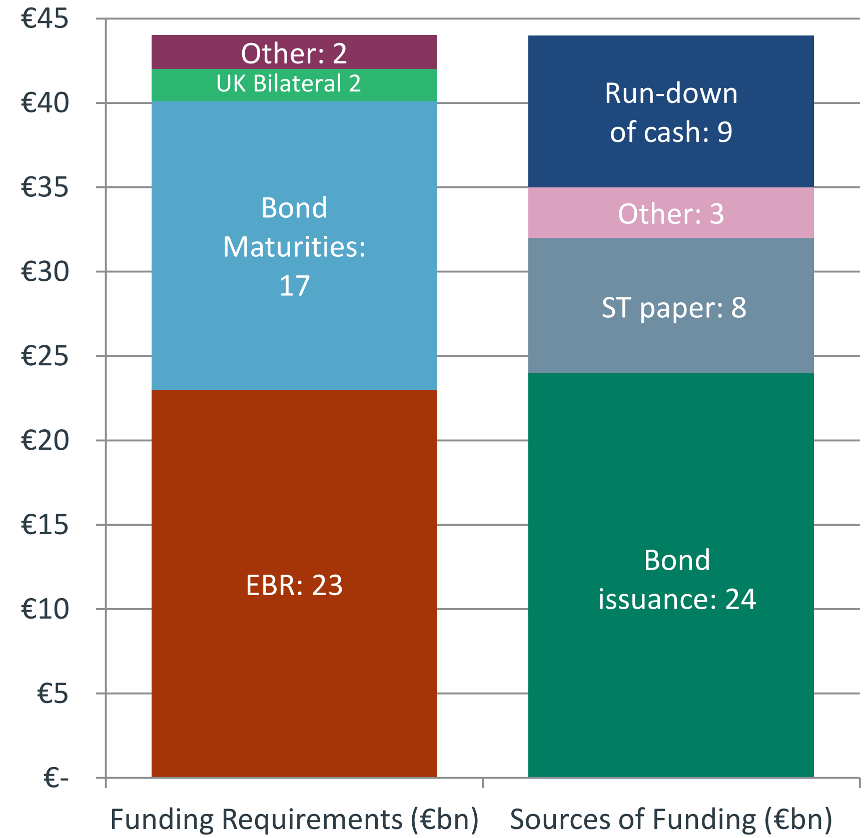


Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

Source: Department of Finance, Revenue, NTMA analysis
Note: Most affected sectors include construction, wholesale and retail trade, transport, accommodation and food service activities, real estate activities, professional, scientific and technical activities; administrative and support service activities, arts, entertainment and recreation

Various sources of funding will be used to meet Covid-19 borrowing requirements: cash balance and flexibility key

- Two bonds mature in 2020: the first matured in April and the second will mature in October.
- Four of the remaining five tranches of the UK bilateral loan mature in 2020.
- The Exchequer Borrowing Requirement (EBR) has been revised to c. €23bn up from €15.5bn. This is subject to change given the economic uncertainty.
- Existing cash balances will be run down to meet part of the 2020 funding requirement.
- Short term paper will also be an important funding source – one Ireland has not tapped in recent years.

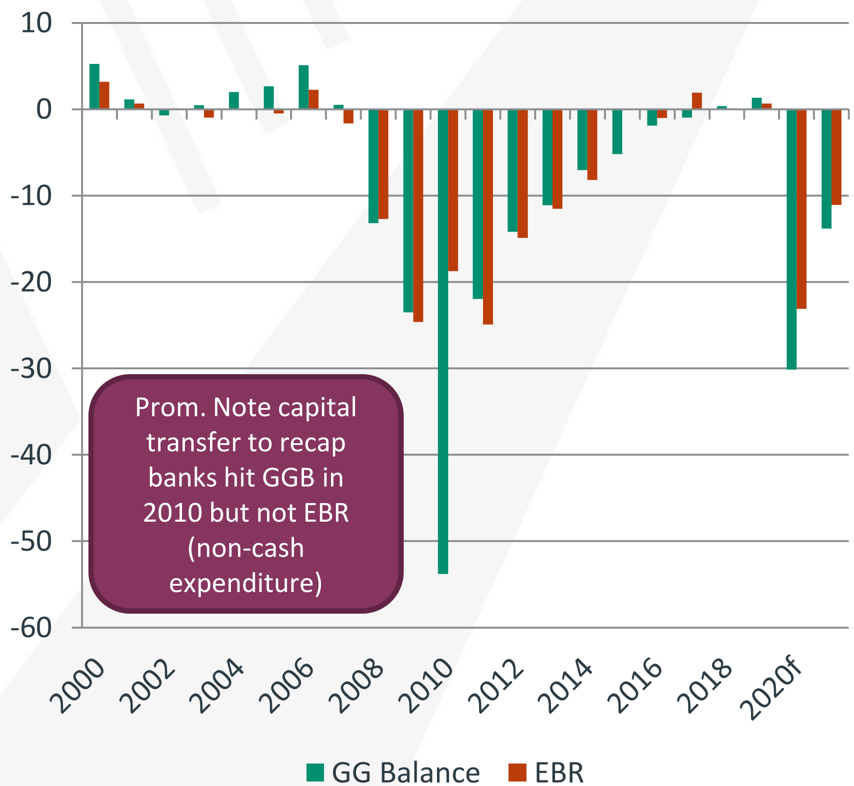


Source: NTMA

Notes:
Other funding: Includes general contingency provision including for potential FRN purchases
Bond issuance: High-point of €20-€24bn bond funding range.
Net ST paper: Forecast net growth in short-term paper.
Other Sources: Includes retail (State Savings), private placements and EIB loan drawdowns.

NTMA's job is to finance the cash deficit (EBR) but it's best to use accruals-based GGB for comparison to peers

Gap between EBR and GGB (€bns) usually minor - stark in 2020



Methodological Differences	EBR	GGB
Accounting basis	Cash (exchequer)	Accrual
Financial transactions	Included	Excluded
Scope	Subset of Central Govt.	Includes all of Central & Local
Intra-Government Consolidation	No	Yes

	2019	2020		Comments
EBR	0.6	-22.5		This is the deficit in cash terms that the NTMA must finance each year
Adjust for Accruals	0.9	1.4		Accruals can relate to interest, taxes, other expenditures
Exclude Equity & Loan Transactions	-2.5	-4.8		Transactions between the Exchequer and NAMA, CBI and other govt. entities: **this benefits funding req.**
Social Insurance Fund	1.5	-2.1		Archaic funding structure of social insurance in Ireland is outside Exchequer. Consolidated in GGB
Semi State, ISIF, other funds	1.2	-0.4		Dividends and profits from government entities
Local Govt.	-0.5	-1.7		Local governments fund themselves
GGB	1.3	-30.1		Most complete metric for fiscal position. Use this for deficit comparison with other nations

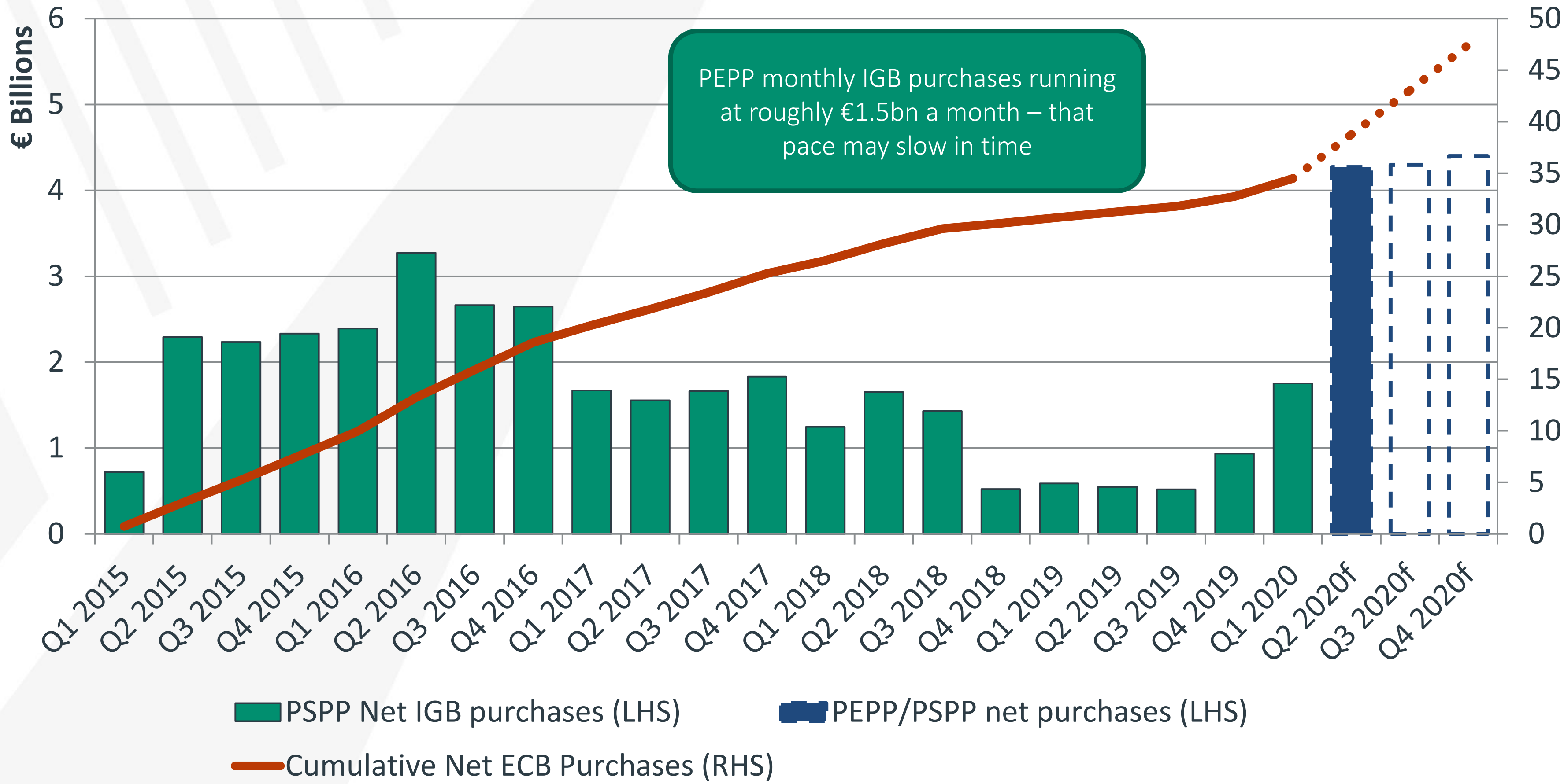
Source: CSO, Department of Finance

Need to assess other metrics apart from debt to GDP when analysing debt sustainability

2019	GG debt to GG revenue %	GG interest to GG rev %	GG debt to GDP %
Greece	370.0%	6.2%	176.6%
Italy	286.4%	7.2%	134.8%
Portugal	274.7%	7.0%	117.7%
Spain	244.2%	5.8%	95.5%
Cyprus	231.7%	6.1%	95.5%
Ireland	*229.1%*	*5.1%*	*57.3%*
UK	226.5%	5.6%	88.1%
Belgium	196.1%	3.9%	98.6%
France	186.6%	2.7%	98.1%
EA19	181.1%	3.5%	84.1%
Austria	143.7%	2.9%	70.4%
Germany	127.6%	1.7%	59.8%
Finland	113.8%	1.6%	59.4%
Netherlands	111.4%	1.8%	48.6%
Sweden	71.5%	0.8%	35.6%

Source: Eurostat
Ireland 95% Debt to GNI ratio in 2019*

In addition to PSPP, ECB's PEPP with its flexibility (no limits) & size (€1.35trn) will underpin Irish bond market



Source: ECB, NTMA Calculations

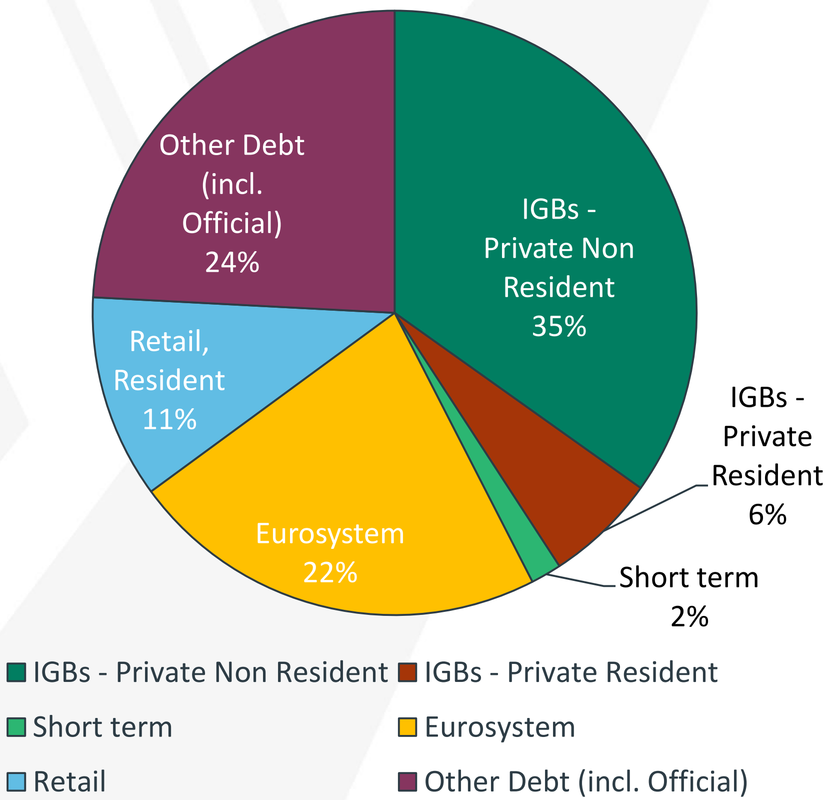
Notes:

Forecasts sees Ireland's capital key of 1.69% and assumes 90% of new purchases will be for public sector assets with 7% of public sectors assets being supranational issuers.

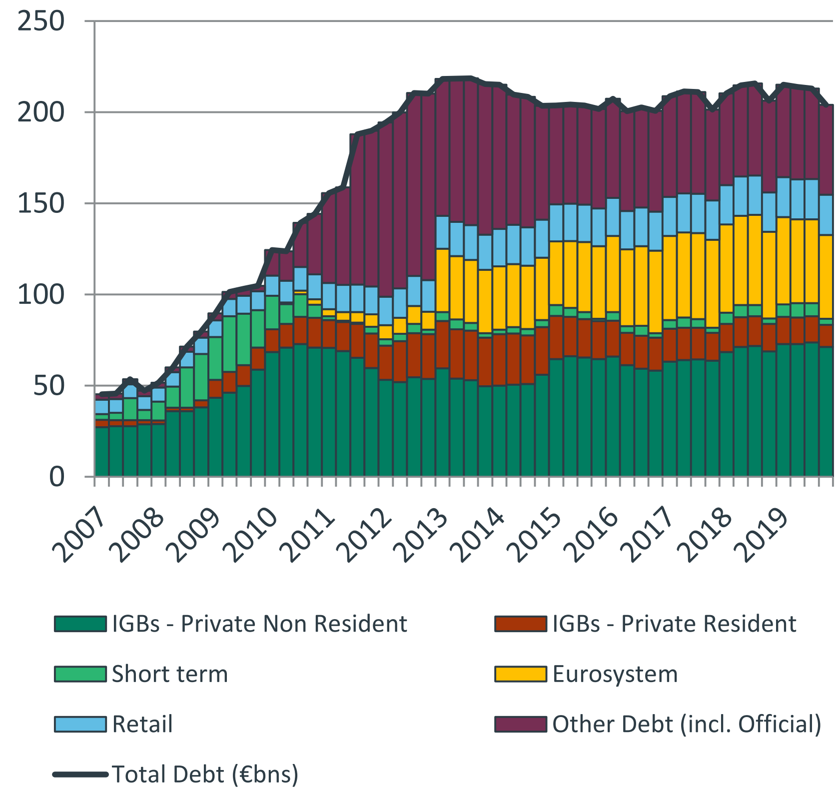
Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

Diverse holders of Irish debt – sticky sources account for over 50%; will increase further with Eurosystem's PEPP

Ireland roughly split 80/20 on non-resident versus resident holdings (Q4 '19)



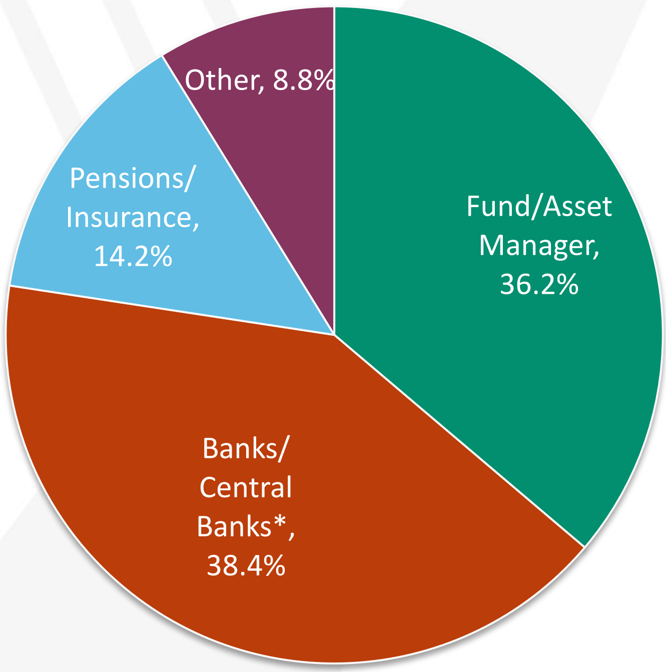
"Sticky" sources - official loans, Eurosystem, retail - make up over 50% of Irish debt



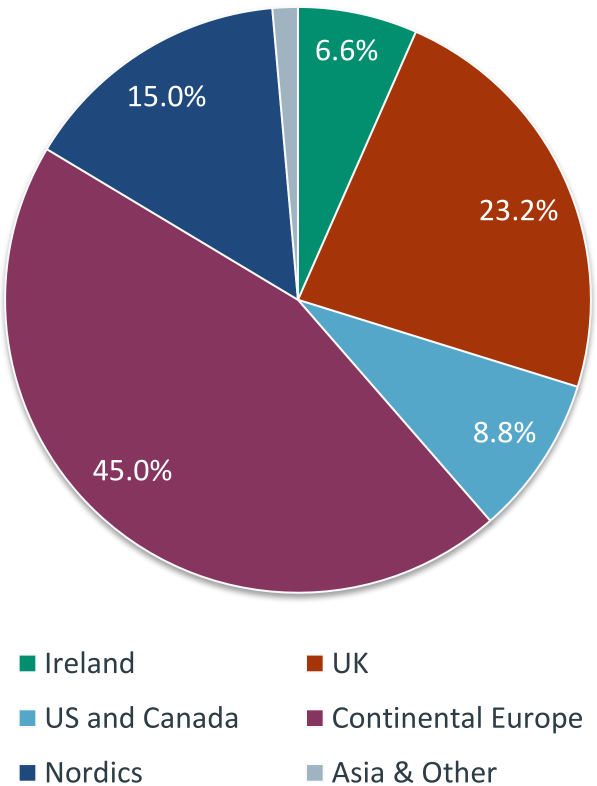
Source: CSO, Eurostat, CBI, ECB, NTMA Analysis
IGBs excludes those held by Eurosystem. Eurosystem holdings include SMP, PSPP and CBI holdings of FRNs. Figures do not include ANFA. Other debt Includes IMF, EFSF, EFSM, Bilateral as well as IBRC-related liabilities. Retail includes State Savings and other currency and deposits. The CSO series has been altered to exclude the impact of IBRC on the data.

Investor base for Government bonds is wide and varied

Investor breakdown: Average over last five syndications



Country breakdown: Average over last five syndications



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Source: NTMA

** Does not include ECB. ECB does not participate on primary market under its various asset purchasing programmes*

Ireland rated in “AA” category by Standard & Poor's

Rating Agency	Long-term	Short-term	Outlook/Trend	Date of last change
Standard & Poor's	AA-	A-1+	Stable	Nov 2019
Fitch Ratings	A+	F1+	Stable	Dec 2017
Moody's	A2	P-1	Stable	Sept 2017
DBRS	A(high)	R-1 (middle)	Positive	Jan 2020
R&I	A	a-1	Stable	Jan. 2017

Source: NTMA

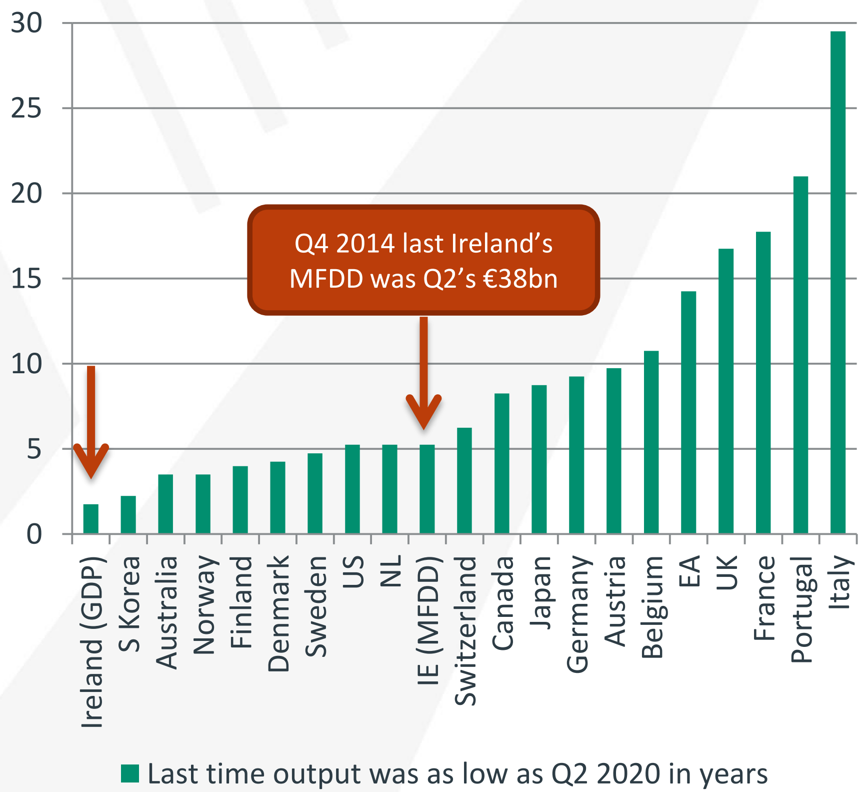
Section 3: Long term fundamentals

Ireland’s long run positives like demographics will reassert in time

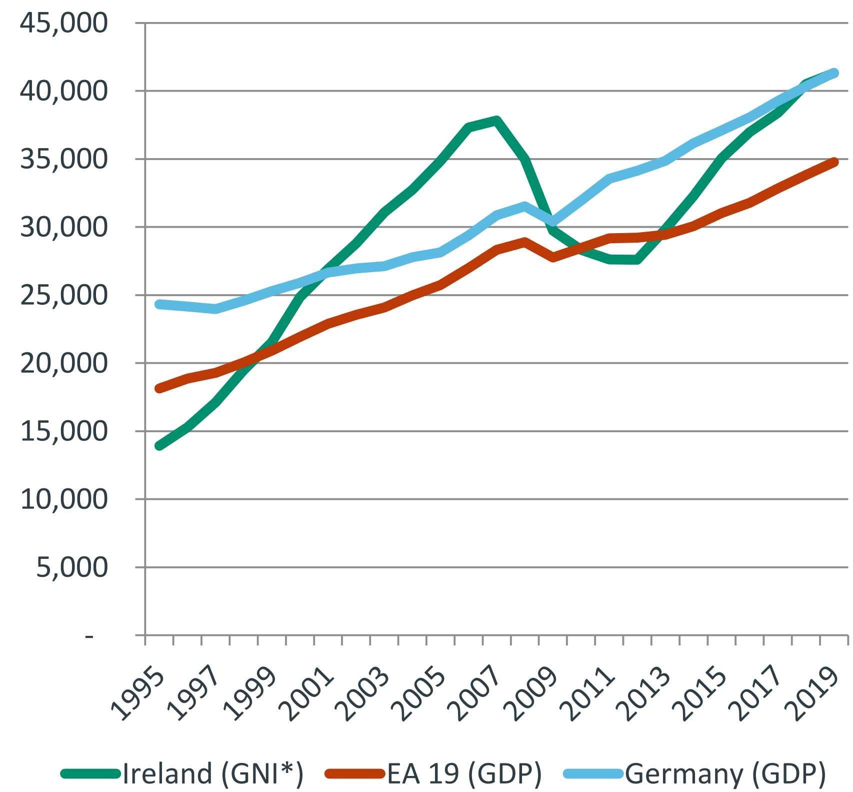
Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

Ireland’s structural drivers of growth will reassert when crisis passes

Crisis is a large hit but Ireland’s growth means the impact is not generational



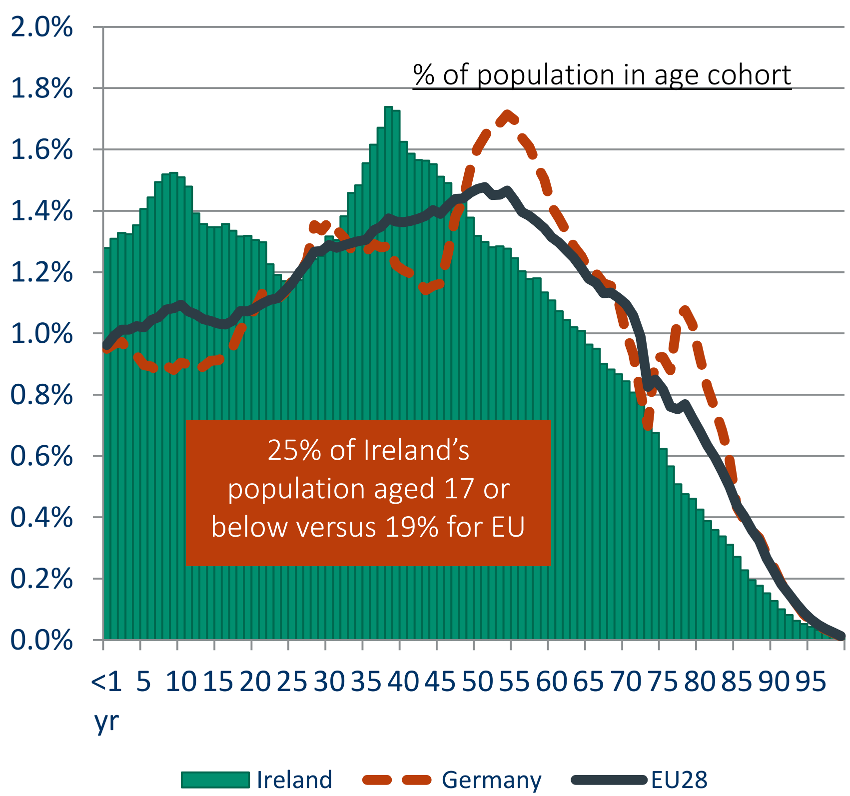
Ireland’s GNI* per capita above 2007 levels and compares favourably to EA



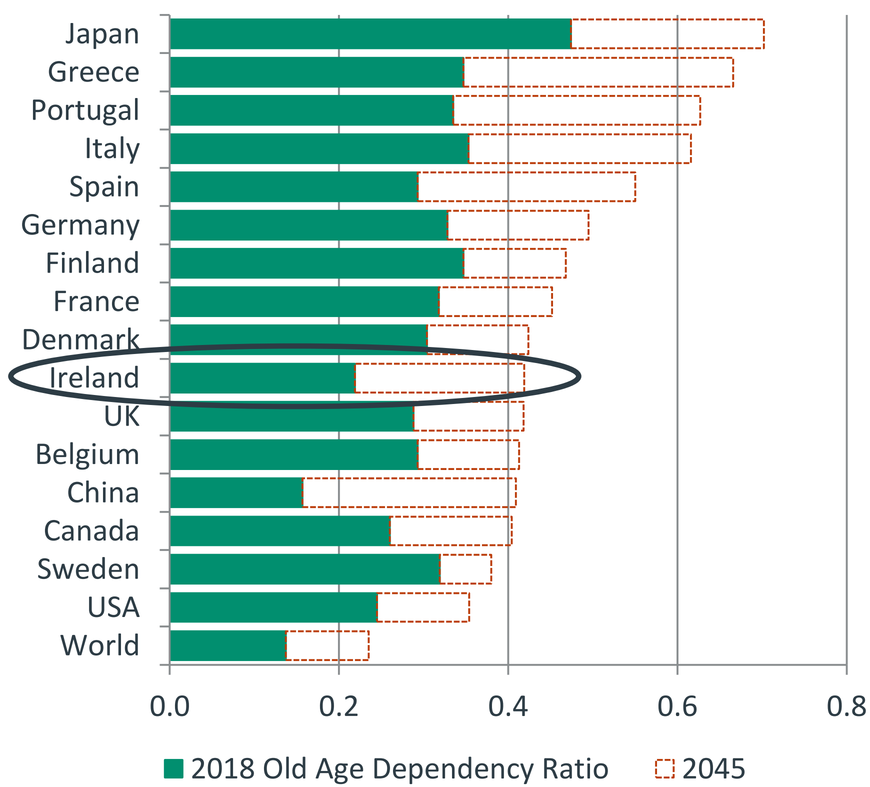
Source: DataStream, Eurostat

Ireland's population profile younger than the EU average

Ireland's population estimated at 4.98m in 2020 – over 200,000 more than 2011 Census



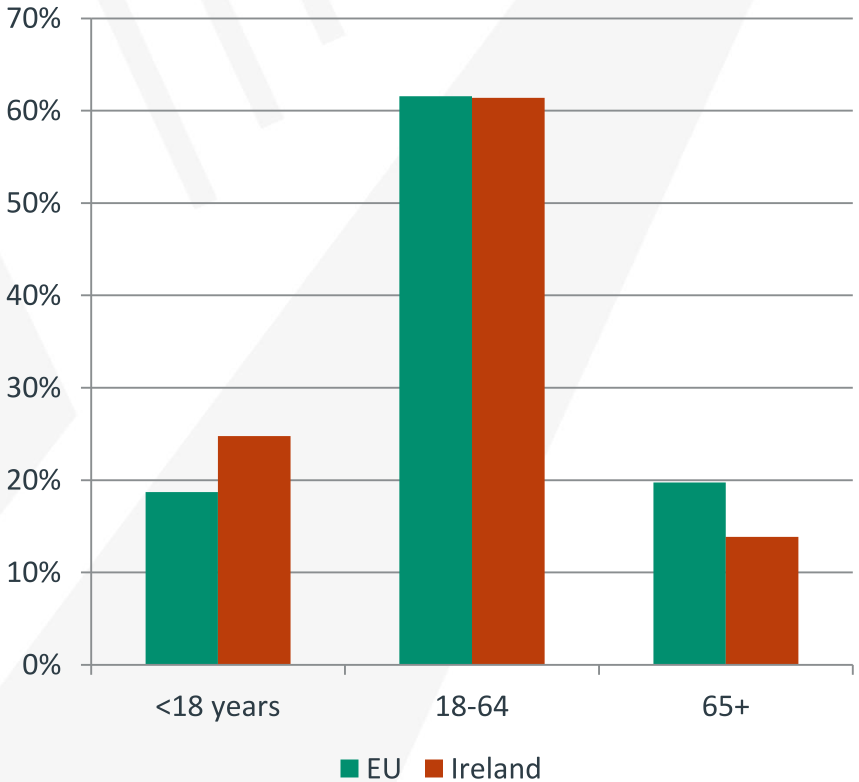
Ireland's population will remain younger than most of its EA counterparts



Source: Eurostat (2019) CSO; OECD

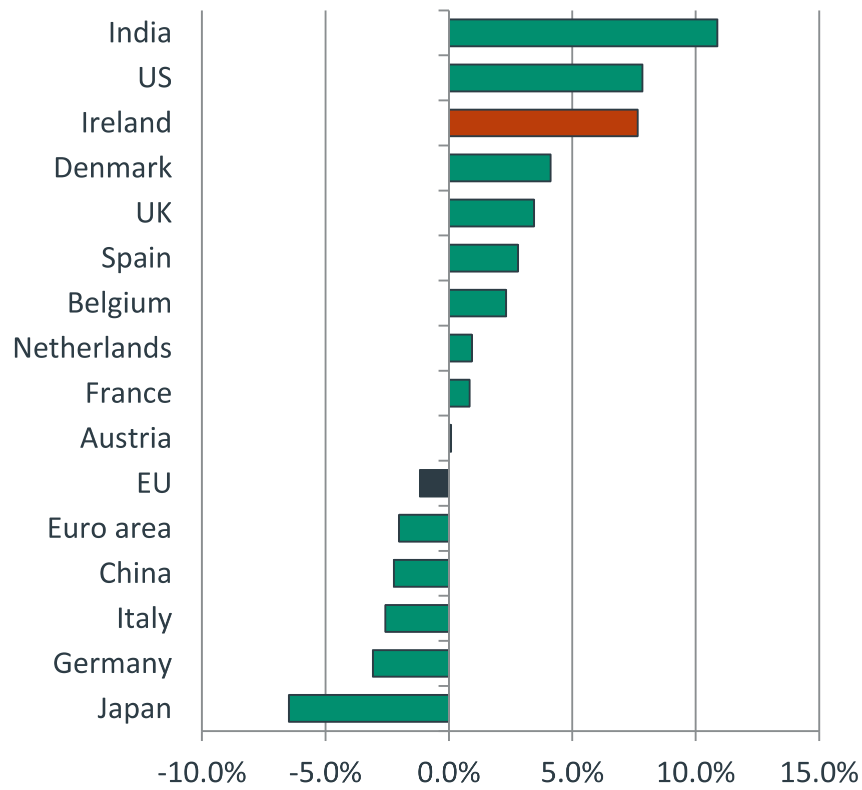
Favourable population characteristics underpin debt sustainability over longer term: next 10 years look healthy

Percentage of population: Ireland's has relatively more young people and fewer old



Source: Eurostat

The consequence is that working-age population expected to grow (2020-2029)



Source: Oxford Economics forecasts

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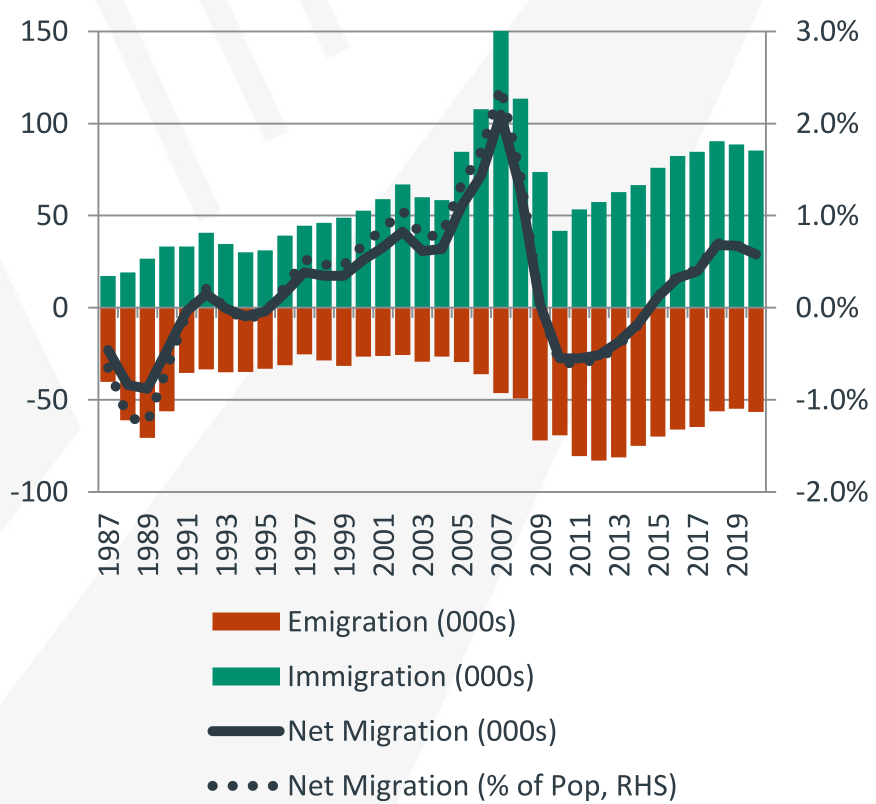
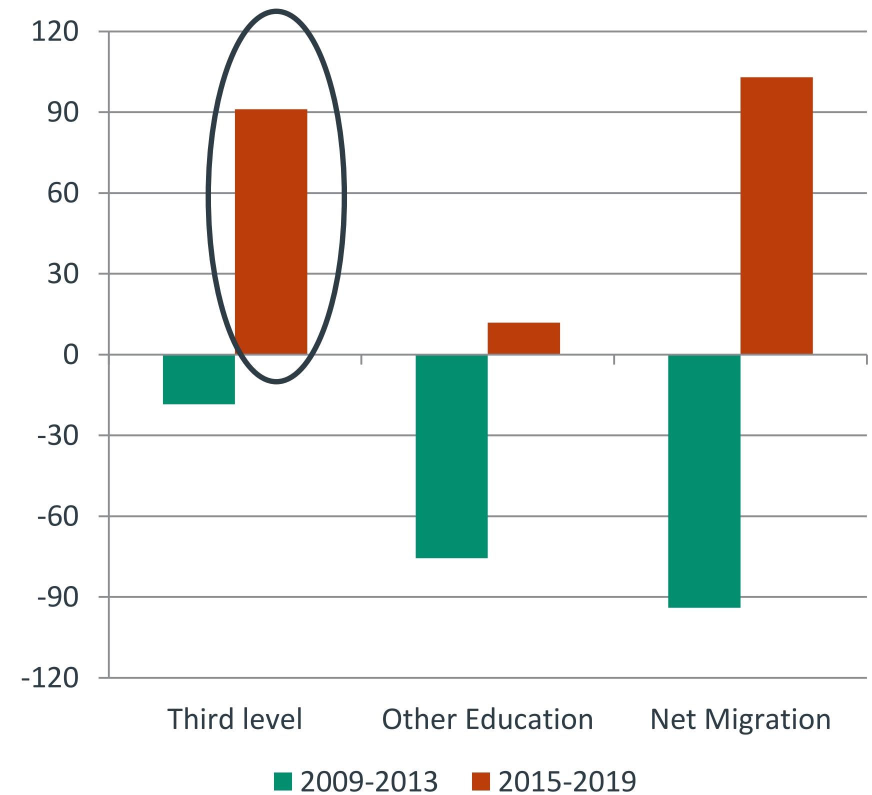
Openness to immigration has been beneficial to Ireland; migration post-Covid to be closer to zero given travel bans

Latest Census data show net migration positive since 2015 – mirroring economy



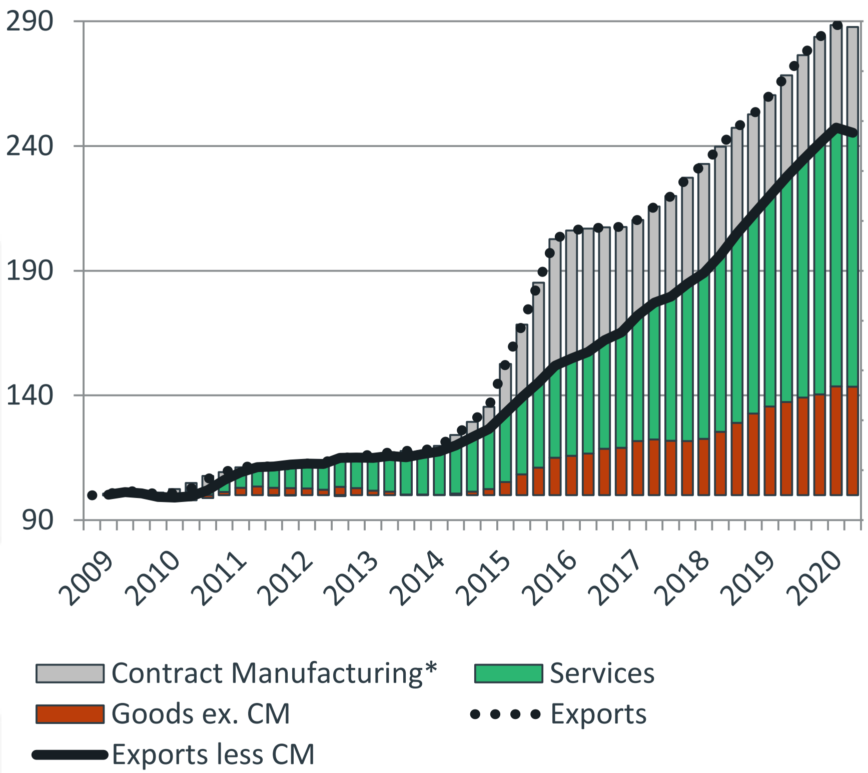
Highly educated migrants moving to Ireland "Reverse Brain Drain"



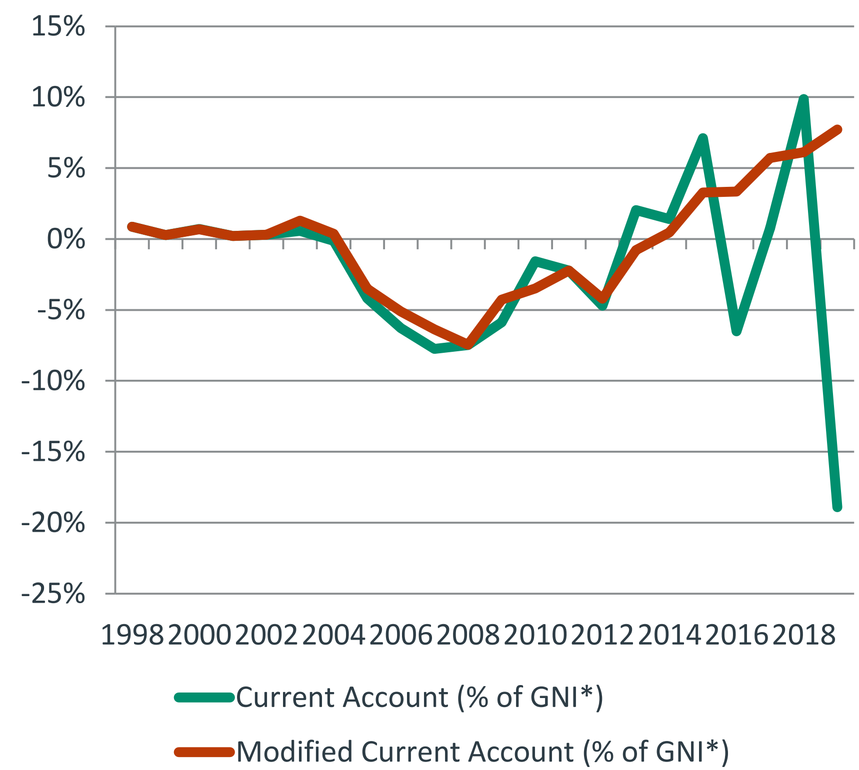
Source: CSO

Openness to trade is also central to Irish success – led by services exports; Ireland running current account surplus

Cumulative post-crisis total exports (4Q sum to end-2008 = 100, current prices)



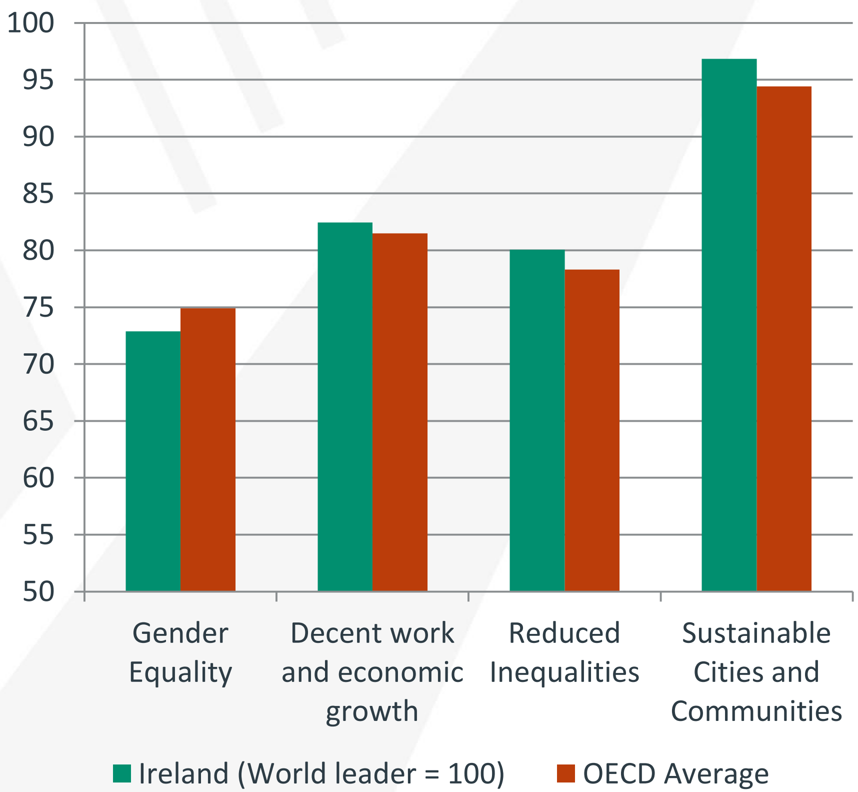
Current account is distorted heavily by MNEs: modified CA is consistent with GNI*



*Source: CSO, NTMA calculations * Contract manufacturing proxy*
Nominal values, exports excludes contract manufacturing.
Modified CA=CA less (IP Depreciation + Aircraft Leasing Depreciation + Redomiciled Incomes + R&D Services Exports) adding back (Imports of related to Leasing Aircraft + R&D related IP and services Imports). Significant caution should be exercised when viewing Ireland's current account data. MNC's action distort metrics heavily.

Ireland scores well on social issues and ability to do business

Ireland is close to OECD norms socially

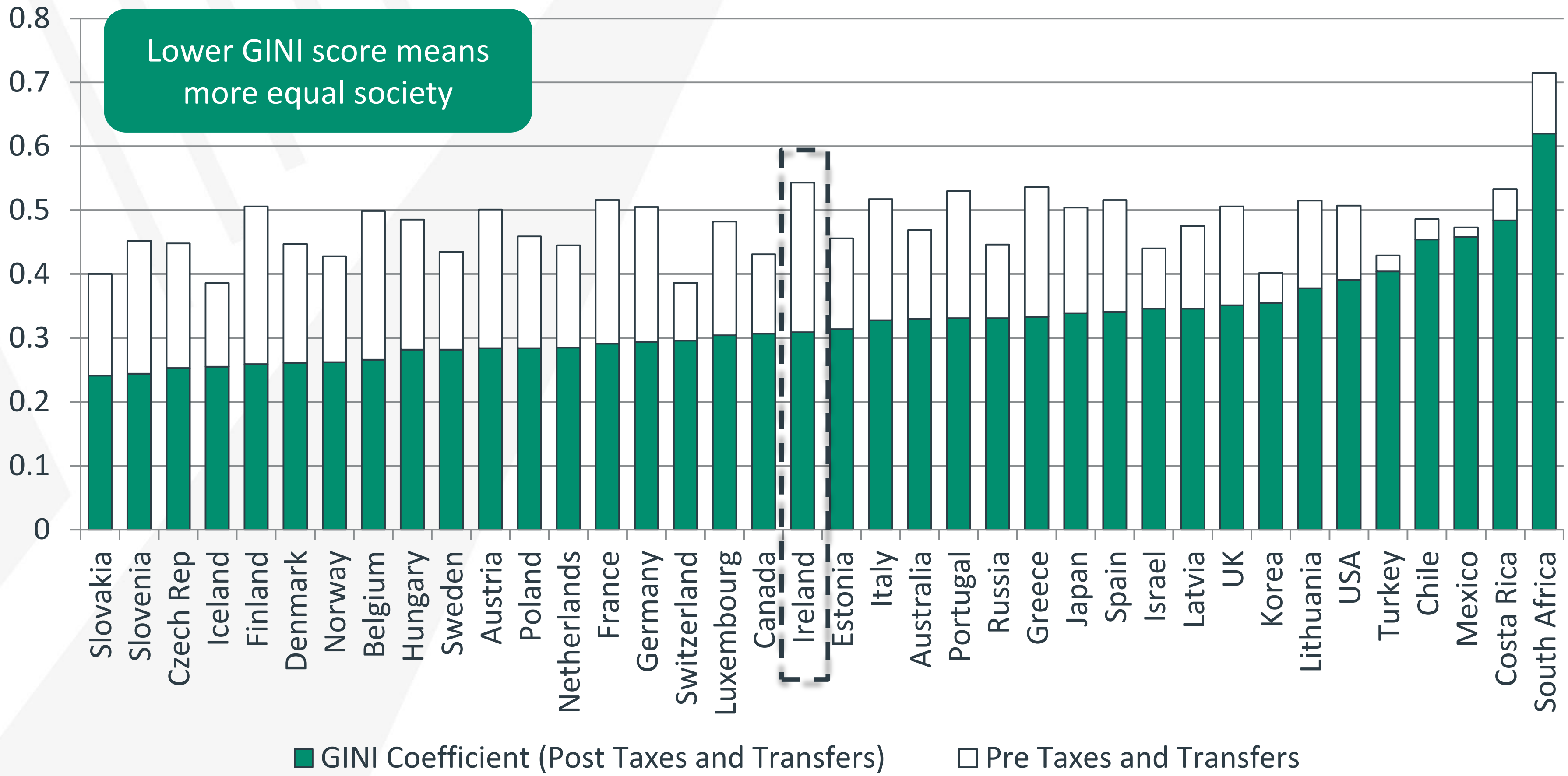


Favourable metrics on property rights and government efficiency

UN Goal – Peace, Justice and Strong institutions	Ireland Actual Figure	Ireland Normalised (world leader = 100)	OECD Average
Overall	-	87.5	75.8
Corruption Perception Index (0-100)	73.0	79.4	73.5
Government Efficiency (1-7)	4.8	**74.8**	**52.8**
Homicides (per 100,000 people)	1.1	97.8	96.1
Prison population (per 100,000 people)	80.0	87.8	74.6
Property Rights (1-7)	6.1	**94.8**	**73.1**
Population who feel safe walking alone at night (%)	75.0	73.7	67.4

Source: United Nations SDG project

Income equality: Ireland's progressive system means the country is around the OECD average after tax



Source: OECD

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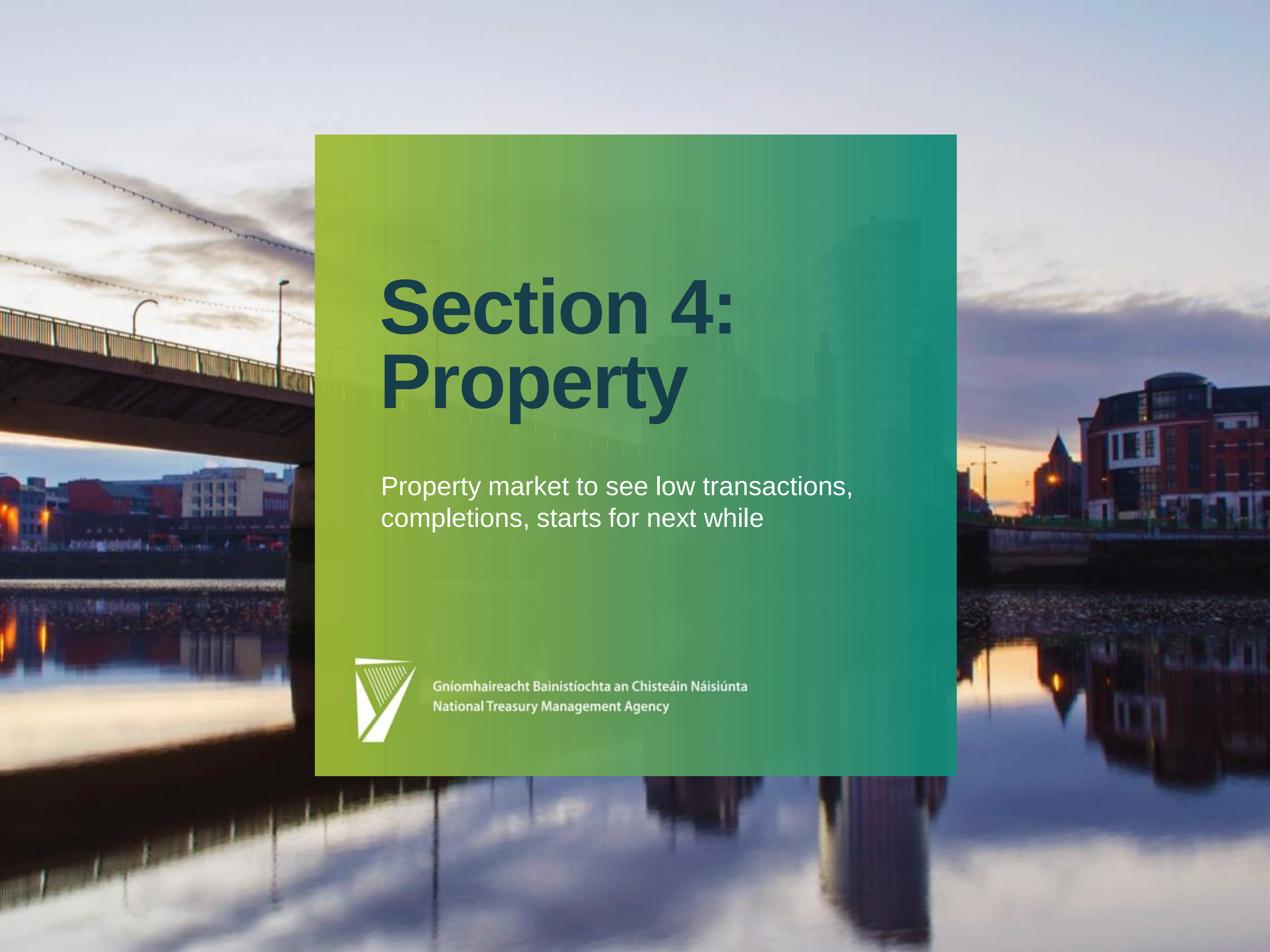
OECD’s BEPS 2.0 process could impact the business tax landscape globally – agreement might be delayed

Pillar One : proposal to re-allocate taxing rights on non-routine profits

- The OECD has proposed further corporate tax reform - a BEPS 2.0.
- BEPS 2.0 looks at two pillars. The first pillar focuses on proposals that would re-allocate taxing rights between jurisdictions where assets are held and the markets where user/consumers are based. Non-routine profits could - to some - degree be taxed where customers reside.
- Under such a proposal, a proportion of profits would be re- allocated from small countries to large countries. Such a proposal will reduce Ireland’s corporation tax base but it is impossible to predict the size of the impact.
- Nothing has been decided as of yet. There are disagreements across countries. OECD original deadline of end 2020 is unlikely to be met.

Pillar Two: proposal for minimum global tax

- Pillar Two - the basic idea is to introduce a minimum tax rate with the aim of reducing incentives to shift profits.
- Where income is not taxed to the minimum level, there would an “income inclusion rule” which operates as a ‘top-up’ to achieve the minimum rate of tax.
- The obvious questions arise:
  - what is the appropriate minimum tax rate?
  - who will get the ‘top-up’ payment?
  - Is the minimum rate taxed at a global (firm) level or on a country-by-country basis?
- These questions are as yet unanswered. If the minimum rate agreed is greater than the 12.5% rate that Ireland levies, it might erode this country’s comparative advantage.



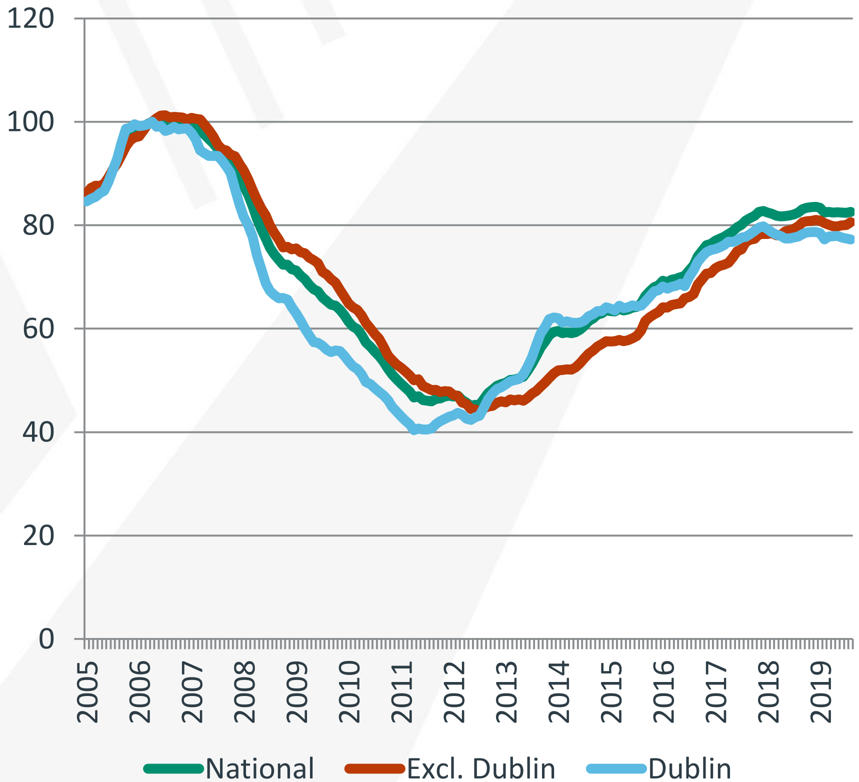
Section 4: Property

Property market to see low transactions, completions, starts for next while

Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

House prices had plateaued before the virus arrived

House prices have stabilised 20% below their peak (100 in 2007)



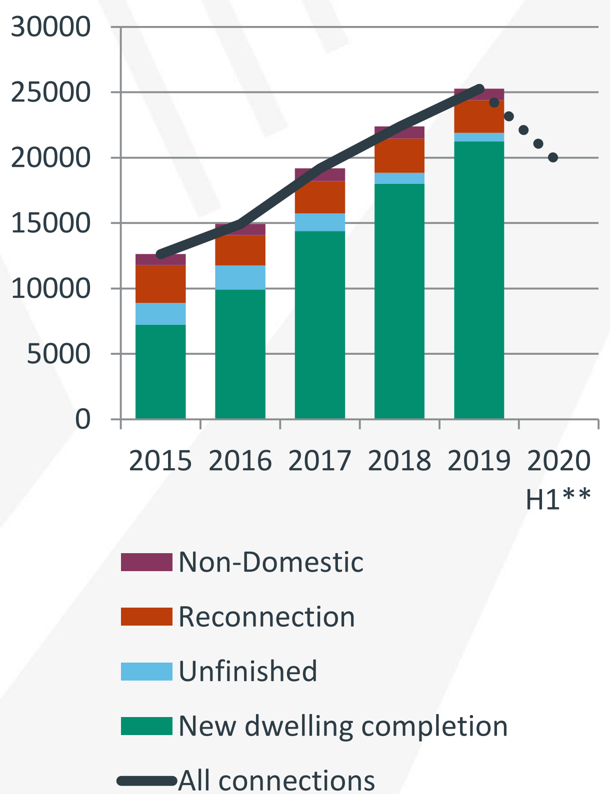
Covid-19 impact: transactions, approvals down sharply; prices stable

Level (y-o-y % change)	Mar	Apr	May	Jun	Jul
# of transactions	4,386 (1.6%)	2,621 (-42.6%)	2,553 (-48.0%)	2,988 (-31.1%)	3,327 (-39.7%)
# of mortgage approvals	3,733 (-9.9%)	2,200 (-46.5%)	1,879 (-61.9%)	2,263 (-49.5%)	3,397 (-33.8%)
Commencements	2,383 (-3.8%)	1,039 (-47.4%)	873 (-53.1%)	1,187 (-36.7%)	1,621 (-25.3%)
Residential Property Price Index	134.3 (1.0%)	134.2 (0.7%)	134.1 (0.4%)	134.4 (0.1%)	
Private Rent Index	117.5 (3.1%)	115.4 (0.8%)	114.1 (-0.7%)	113.8 (-1.2%)	114.0 (-1.4%)

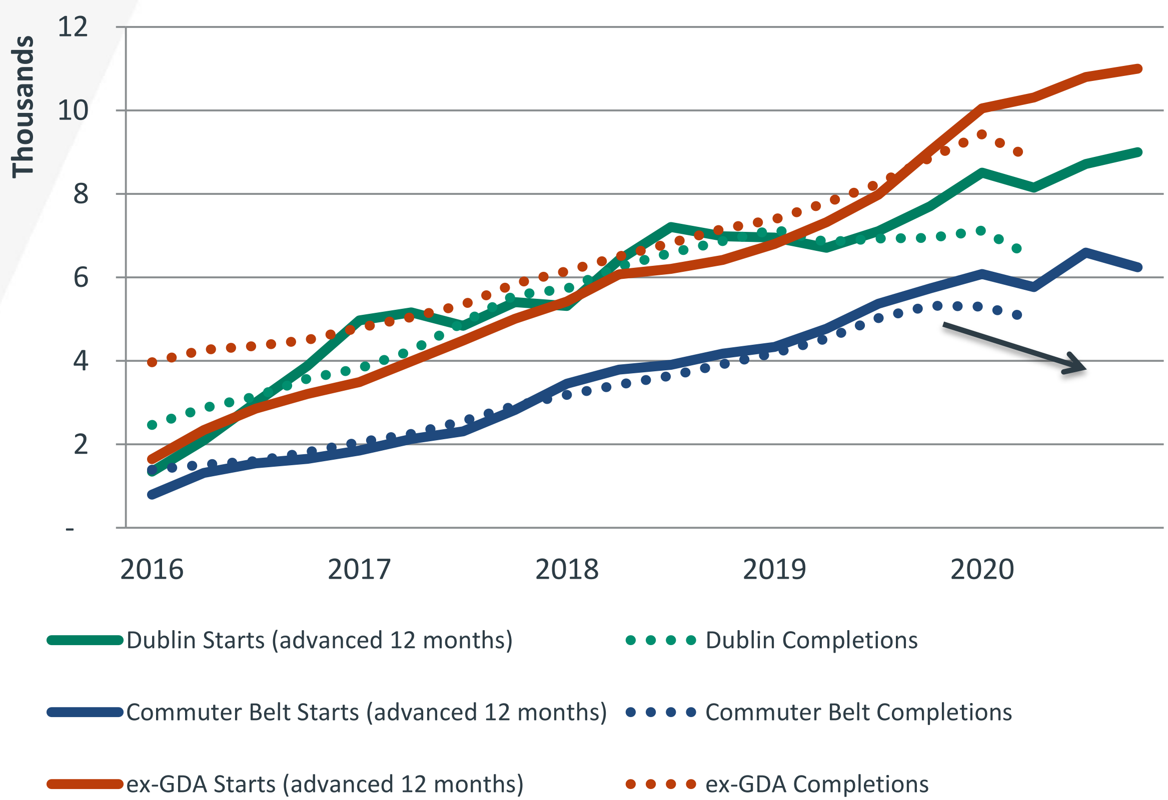
Source: CSO; BPFI, PPR, Department of Housing

Housing supply still below demand; supply was catching up before Covid-19 slowed market

Housing Completions* above 25,000 in 2019



Housing supply picked up pre-Covid: coronavirus to hamper supply H2 2020



Source: DoHPCLG, CSO, NTMA Calculations

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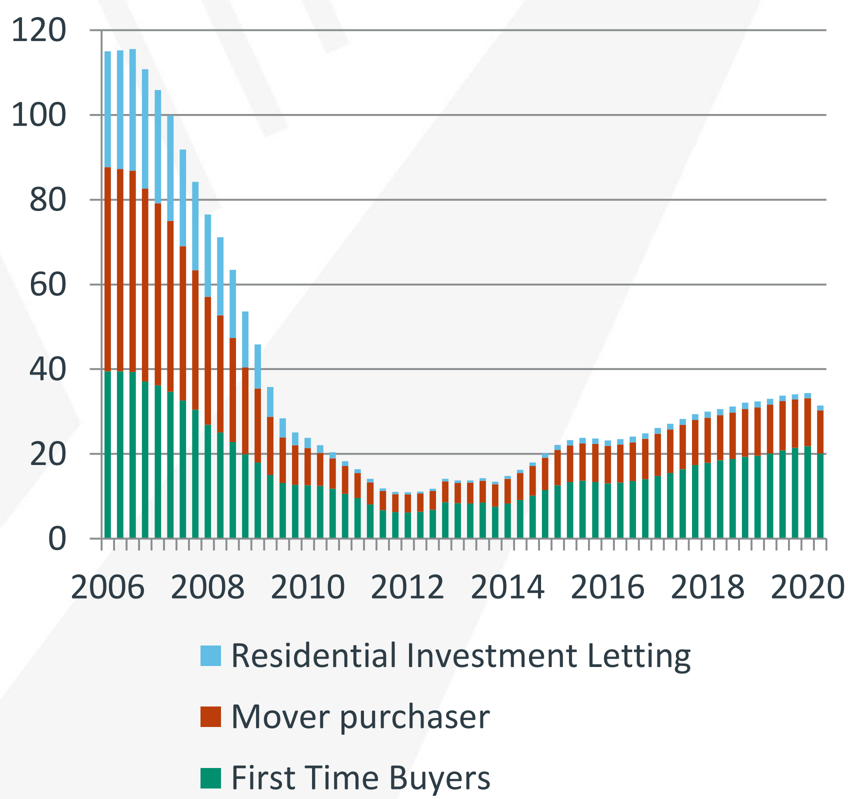
National Treasury Management Agency

* Housing completions derived from electrical grid connection data for a property. Reconnections of old houses or connections from "ghost estates" overstate the annual run rate of new building.
**2020 H1 completions annualised

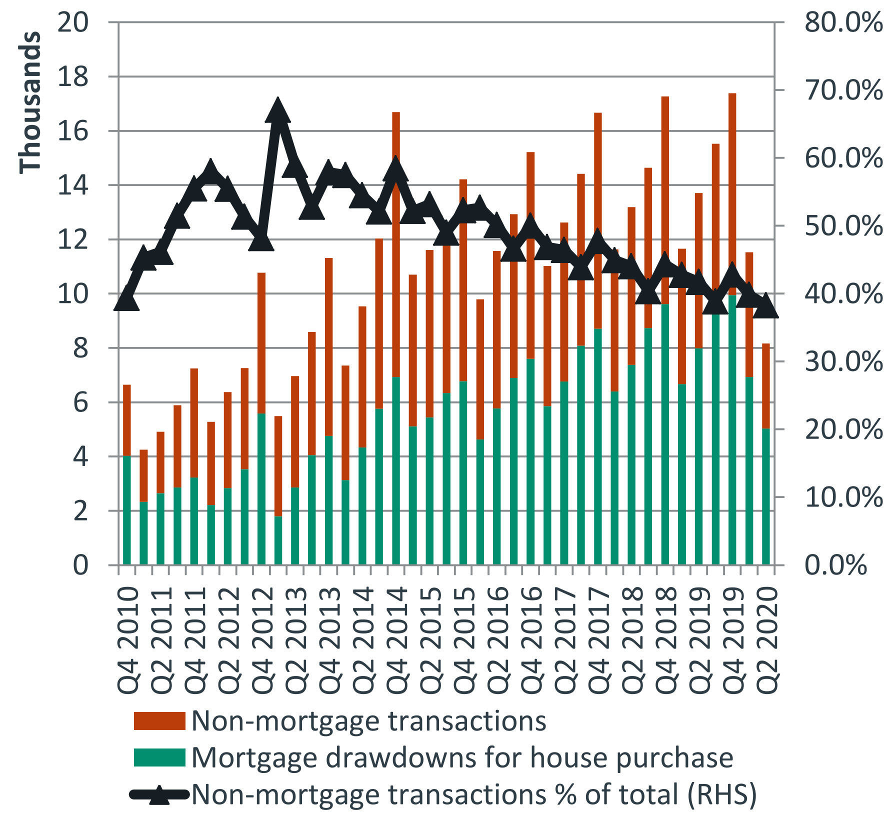
Demand will fall off given lower migration and rising unemployment – demand may drop below 30,000 in ST

Mortgage drawdowns (000s) rose from deep trough before Covid-19 impact



Source: BPFI (4 quarter sum used)

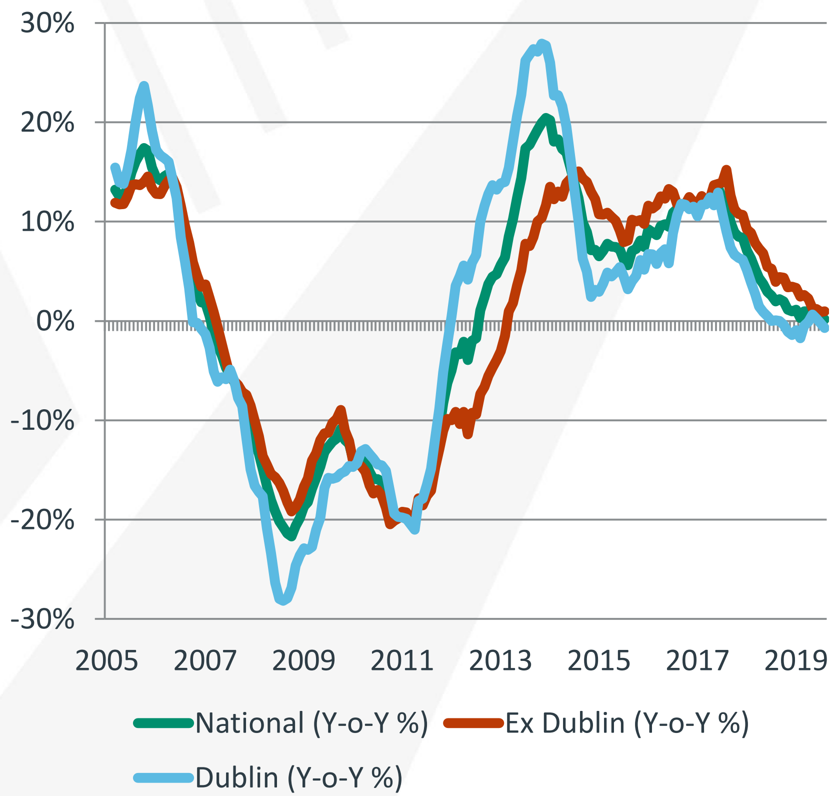
Non-mortgage transactions still important; transaction volume hit in Q2



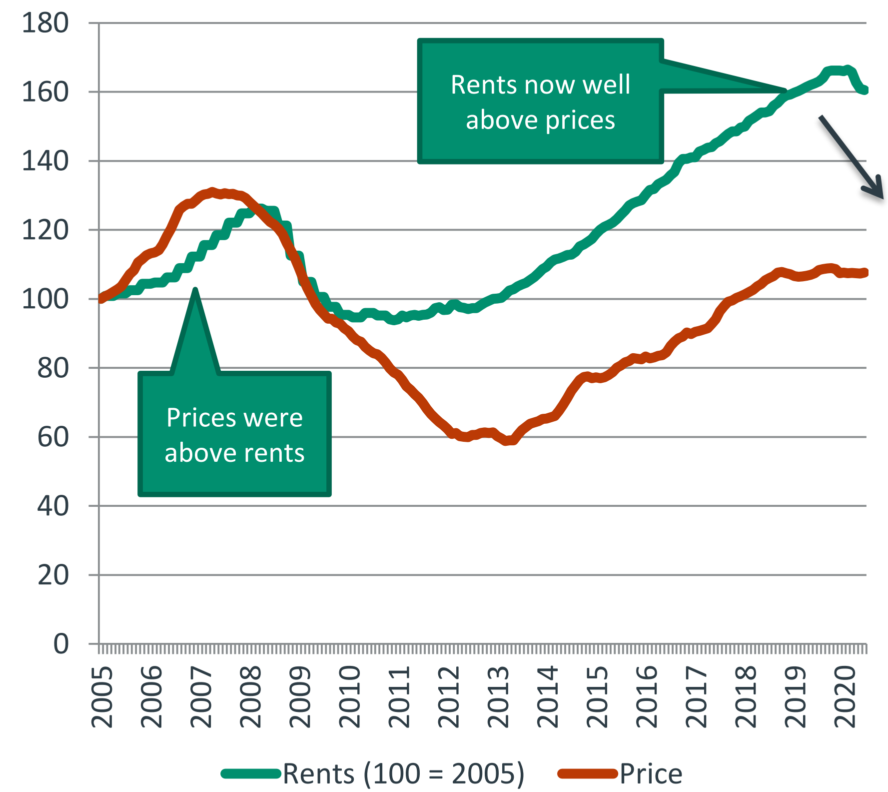
Source: BPFI; Residential Property Price Register

Covid-19 impact on prices unclear as both supply and demand impacted, but rents should come off highs

Dublin resi. property prices fell in 2019; higher end of the market most hit



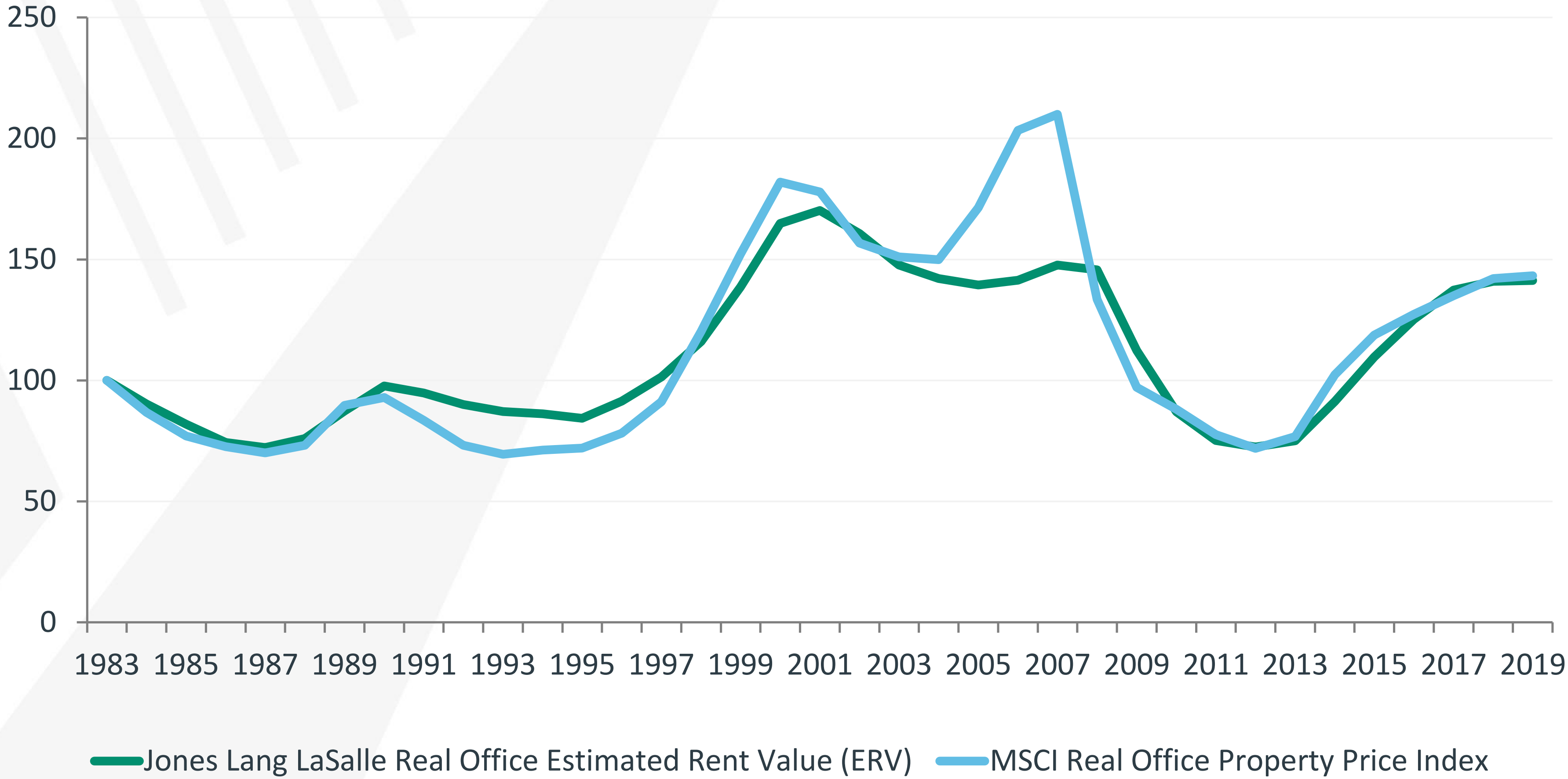
Rents are well above previous peak but have fallen in recent months



Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

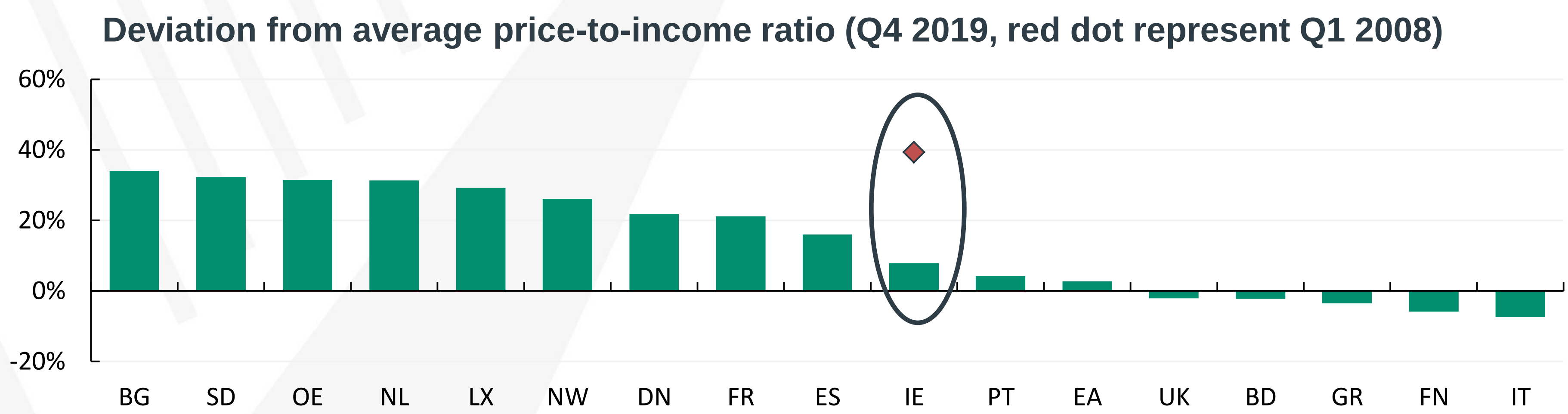
Source: CSO; RTB

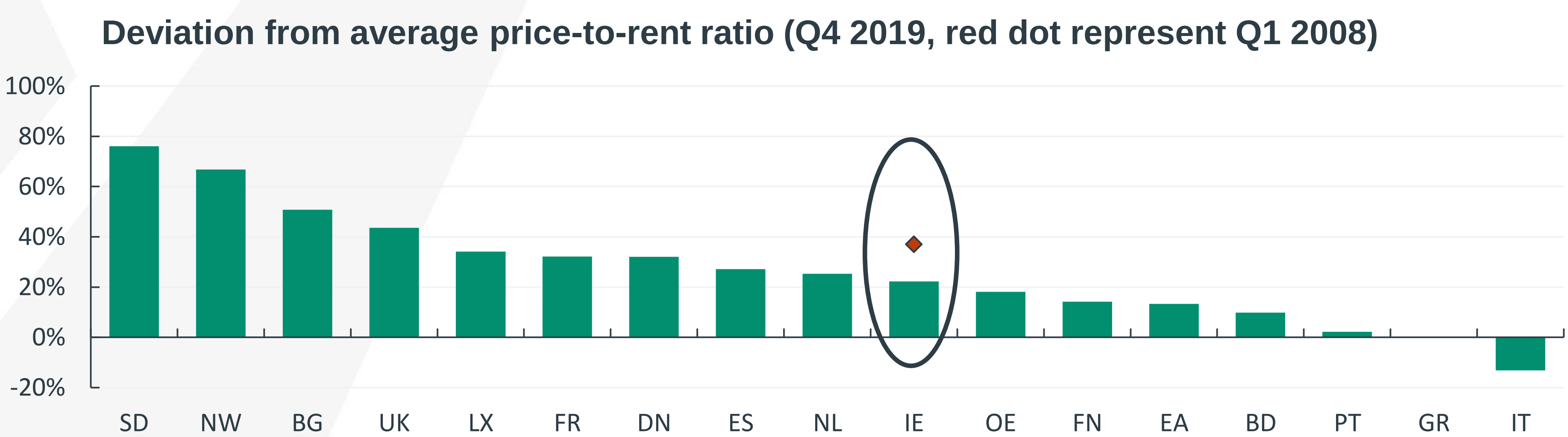
Commercial property rent and prices were in sync pre-Covid – both plateaued in 2018/19 and now threatened



Source: MSCI, Jones Lang LaSalle, NTMA analysis
Indexed data, 1983 = 100

Irish house price valuation metrics remained well below 2008 levels throughout last cycle





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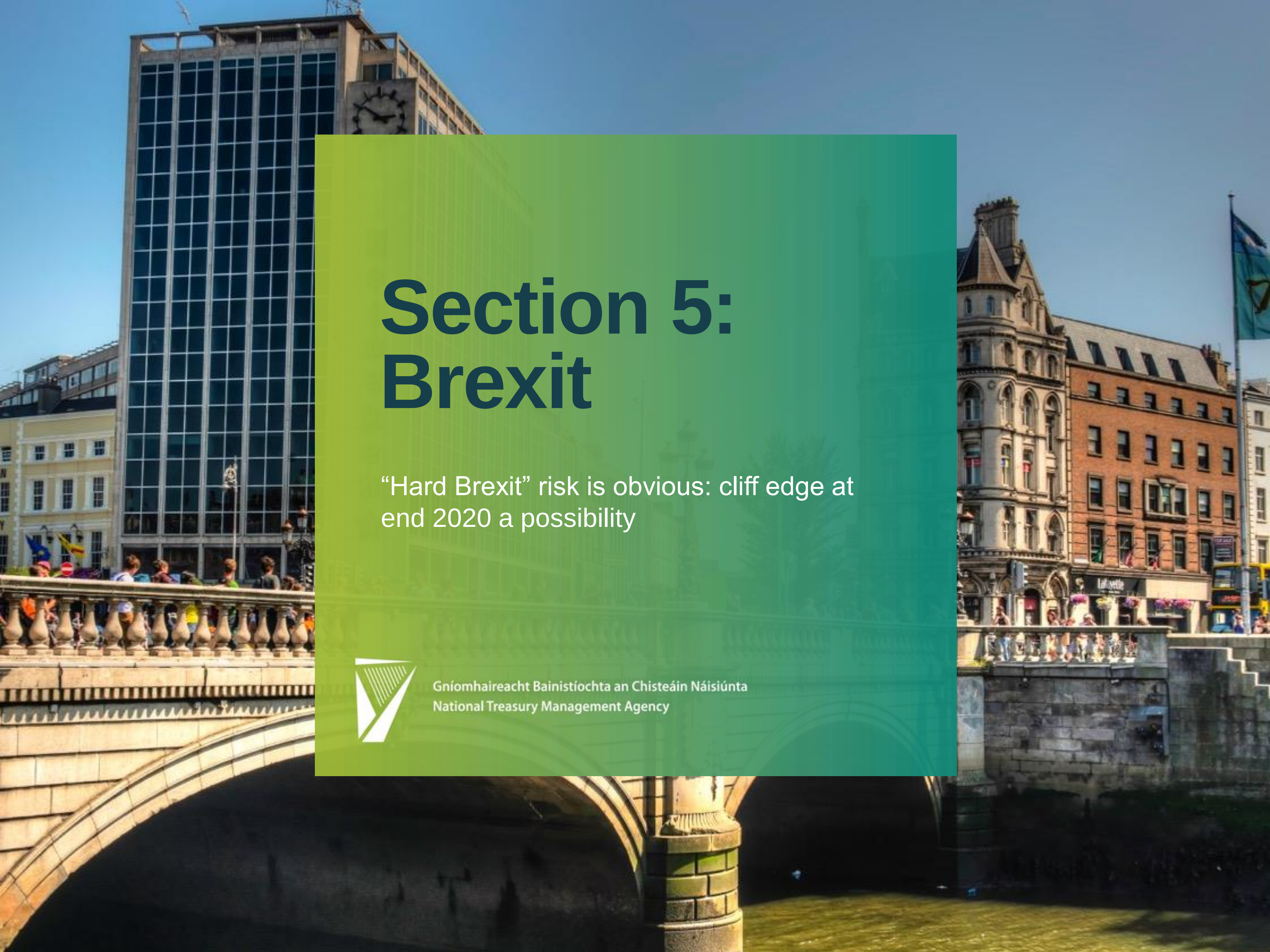
Source: OECD, NTMA Workings
Note: Measured as % over or under valuation relative to long term averages since 1980.



Section 5: Brexit

“Hard Brexit” risk is obvious: cliff edge at end 2020 a possibility

Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

State of play: amid Covid-19, negotiations about trade agreement continue but not much progress

UK-EU Future trading relationship unresolved

- The withdrawal agreement of 2019 meant that the transition period started in 2020. It will finish at the end of the year.
- The UK government has stated its intention to seek a free-trade arrangement for the long term. This is a more distant relationship than previously argued for by the UK side.
- The upshot is that the trading relationship will be diverging more, making negotiations difficult.
- Points of contention include:
  1. Level playing field
  2. "Fisheries for financial services"
  3. ECJ role in new relationship
- There are four months to negotiate what normally takes several years. A partial trade deal is possible.
  - Extending the transition period has been formally rejected by the UK government.
- Hard Brexit estimates suggest the economic hit to Ireland would between 2-6% over the short term.
- <u>*Risk of hard Brexit has increased given transition period was not extended*</u>

Withdrawal Agreement in 2019 helped to solve Northern Ireland border issue; economic issues remain

Main points of Withdrawal Agreement

- The withdrawal agreement is a legally binding international treaty.
- Northern Ireland will remain within the UK Customs Union but will abide by EU Customs Union rules – dual membership for NI.
- No hard border on the island of Ireland: the customs border will be in the Irish sea. Goods crossing from Republic of Ireland to Northern Ireland will not require checks, but goods that are continuing on to the UK mainland will.
- Complex arrangements will be necessary to differentiate between goods going to NI and those travelling through NI to UK or vice versa. Customs checks at ports, VAT and tariff rebates and alignment of regulations will be needed.
- All of this is backed by a complex consent mechanism, which allows Stormont to opt-out under simple majority at certain times.

Negatives of hard Brexit outweigh positives in short-term, although opportunities may appear longer term

Cons

Short term

- Major trade disruption from tariffs, customs checks and documentation (red tape)
- Regions suffer severe recession in agriculture and UK-focused manufacturing; tourism might dip
- Confidence shock to business and households
- Liquidity may dry up in property market
- Fiscal impacts are likely given need to support regions

Long term

- Lower consumer spending thanks to higher inflation when tariffs dominate the FX benefit
- Political economy cost (loss of ally in the EU)

Pros

Short term

- Cheaper domestic food prices

Long term

- Fiscal help from Europe is likely; selective temporary waiving of State Aid rules?
- FDI influx from UK, as multinationals avoid turmoil; UK's reputation might be tarnished
  - Financial services (passporting lost by UK)
  - Other multinationals - especially IT and business services
- Commercial property occupancy could rise; there may also be an influx of well paid workers
- Gradual partial trade recovery
  - Irish companies focused on Britain may steal EU market share from British competitors
  - Import substitution (especially in food)

Whichever type of Brexit materialises, trade is likely to be negatively impacted

% of total	Goods (2018)		Services (2018)		Total (2018)	
	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.
US	27.9	18.5	11.6	25.4	18.0	23.1
UK*	11.5	21.7	15.7	9.6	13.8	13.6
NI	1.6	1.6	n/a	n/a	n/a	n/a
EU-27	38.8	37.4	29.4	26.8	33.5	30.3
China	3.9	5.9	2.6	1.5	3.1	3.0
Other	21.8	22.4	43.3	38.3	30.7	31.1

Irish/UK trade linkages will suffer following Brexit

- The UK is the second largest single-country export destination for Ireland's goods and the largest for its services
- At the same time, Ireland imports c. 20% of its goods from the UK.

Ireland's trade with the UK is labour intensive

- The UK might only account for 14% of Ireland's total exports, but Ireland is more dependent than that because those UK-reliant sectors are labour intensive

SMEs account for over 55% of Irish exports to the UK. They are likely to be more adversely affected than larger companies by the introduction of tariffs and barriers to trade

*Source: CSO 2018 * UK data includes Northern Ireland*
NTMA calculations; Data does not include contract manufacturing

If no deal by year-end, UK's Global Tariff Schedule would come into effect for Ireland's exporters to UK (mainland)

Under the UK's WTO Tariff Schedule, it would impose tariffs on only 40% of the UK's imports from MFN countries: For Ireland, agri-food exports particularly hit by tariffs

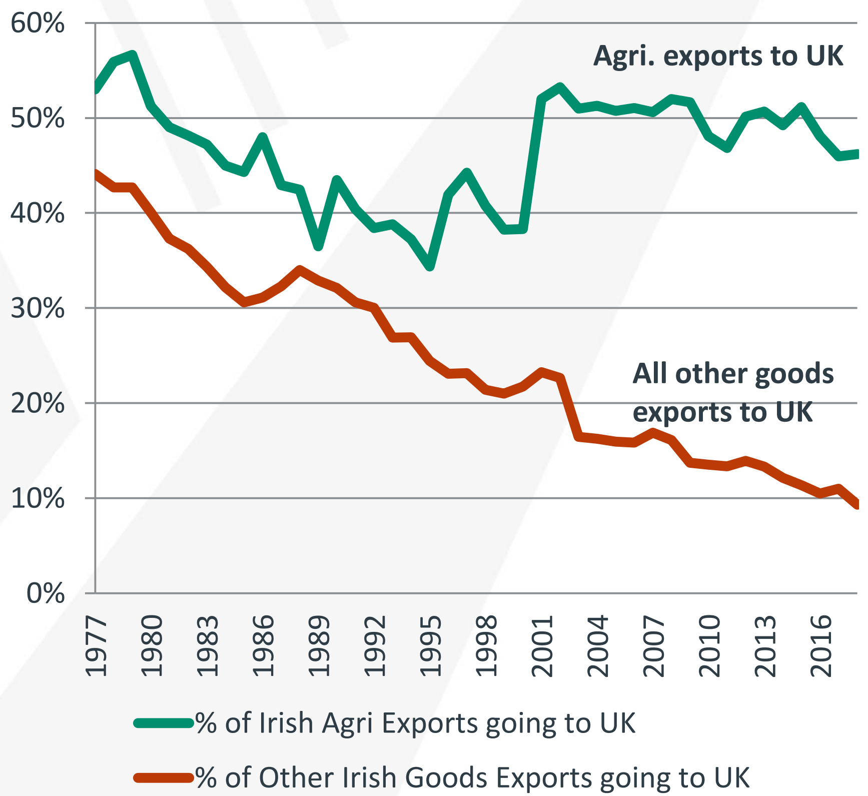
UK-EU Relationship	% of Tariff Free Products
EU Membership	100%
Free Trade Agreement	60-100%
Partial FTA	60-100%
WTO UK GT schedule	60%
WTO EU MFN schedule (Assumed in modelling)	52%

Economic modelling of WTO scenario often assumes a worse tariff regime than UKGT

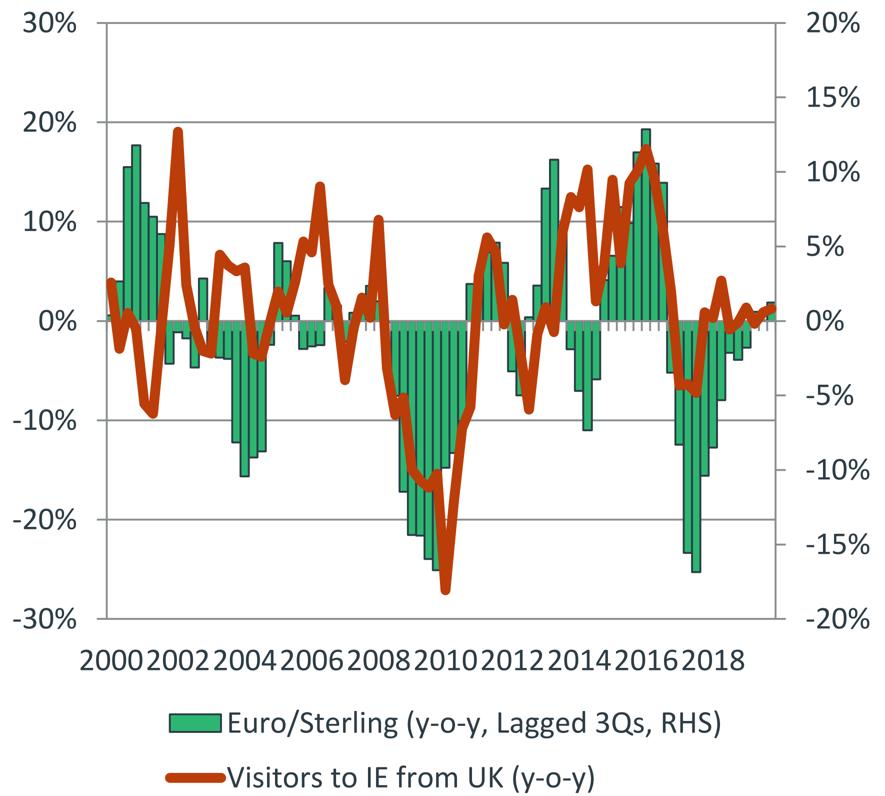
Product	% of IE-UK goods exports	Comment on tariff imposed under UK schedule
Pharmaceutical products	16.9%	Almost all pharma products are tariff free
Machinery and mechanical appliances	8.1%	A lot of this category remains duty free.
Meat and edible offal	7.7%	High customs duties are imposed on Meat (6-16% + £34-£2313 per 100kg)
Dairy produce, birds eggs, natural honey, edible products	5.6%	High customs duties are imposed on Dairy (6-16%+£14-185 per 100kg)
Electrical machinery and equipment	4.8%	A lot of this category remains duty free.
Organic chemicals	4.3%	Tariffs on Active Pharmaceutical Ingredients (6%)
Plastics and articles thereof	3.8%	Tariff rates increase but are lower than the current EU MFN rates.
Cereals, flour, starch or milk, pastry cooks products	3.7%	Bread and bakery face a small tariff (8%)
Meat & fish	3.5%	High tariff (6-25%+£34-2313 per 100kg)
Optical, medical or surgical instruments	2.9%	Most medical devices remain tariff free

Agri-food and tourism most at risk from trade barriers

Agriculture has not diversified from the UK



Tourism numbers linked to FX moves



Source: CSO, DataStream

Hard Brexit impact estimates all show similar story – return to WTO rules would be negative for Ireland

Forecast vs. no Brexit baseline	Short term (2 years)	Medium term (5 years)	Long term (10-15 years)
Department of Finance (ESRI)	-2.4%	-3.3%	-5.0%
Copenhagen Economics	-2.0 to 2.5%	-4.5%	-7.0% (of which -4.9pp is due to regulatory divergence)
Central Bank of Ireland	-4.0%	-	-6.0%
Bank of England "disruptive" (implied)	-5.0%	-6.2%	-6.2%
Bank of England "disorderly" (implied)	-6.3%	-8.2%	-8.2%
UK Treasury range (implied)	-	-	-5.0 to 7.2%

Source: ESRI, Copenhagen, Bank of England, UK treasury
Implied uses the impact on UK GDP and an elasticity measure of 0.8 to calculate the impact on Irish Growth

Many financial institutions have announced that they will expand or set up in Dublin

FDI: Ireland benefitting already

- Ireland could be a beneficiary from displaced FDI. The chief areas of interest are
    - Financial services
    - Business services
    - IT/ new media.

- Dublin is primarily competing with Frankfurt, Paris, Luxembourg and Amsterdam for financial services.

- Ireland's FDI opportunity will depend on the outcome of post-exit trade negotiations. The UK (City of London) is almost certain to lose its EU passporting rights on exit, so there may be more opportunities in time.

Companies that have indicated jobs have or will be moved to Ireland

BARCLAYS

Morgan Stanley

citi

J.P.Morgan

Goldman Sachs

TD

Bank of America Merrill Lynch

LEGG MASON GLOBAL ASSET MANAGEMENT

S&P Global Ratings

BARINGS

Section 6: Banks & other

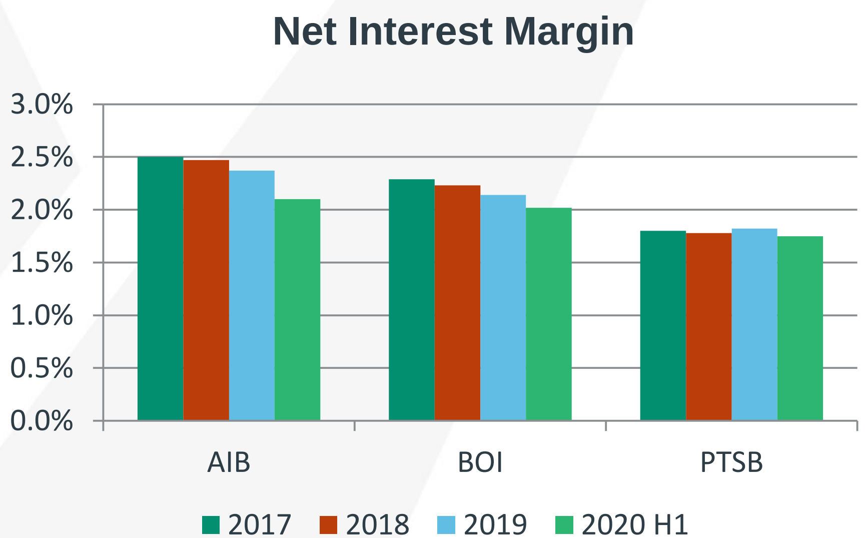
Ireland's banks now among best capitalised in Europe – complete reverse of late 2000s

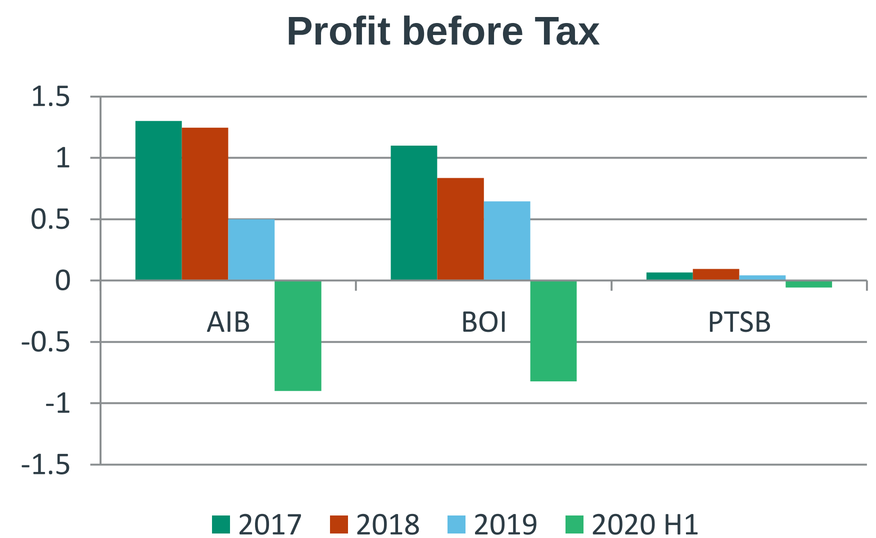
Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

Ireland's pillar banks in relative good shape to weather Covid-19 storm

- Banks profitable before Covid-19: income, cost and balance sheet metrics much improved.
- Interest rates on mortgages and to SMEs are still high compared to EU thanks to legacy issues and the slow judicial process in accessing collateral.
- An IPO of AIB stock (28.8%) occurred in June 2017. This returned c. €3.4bn to the Irish Exchequer to be used for debt reduction. Further disposal of banking assets unlikely in the short term given valuations
- Irish banks had paid dividends in recent years.

<u>All three pillar banks were profitable in recent years, Covid impact in H1</u>





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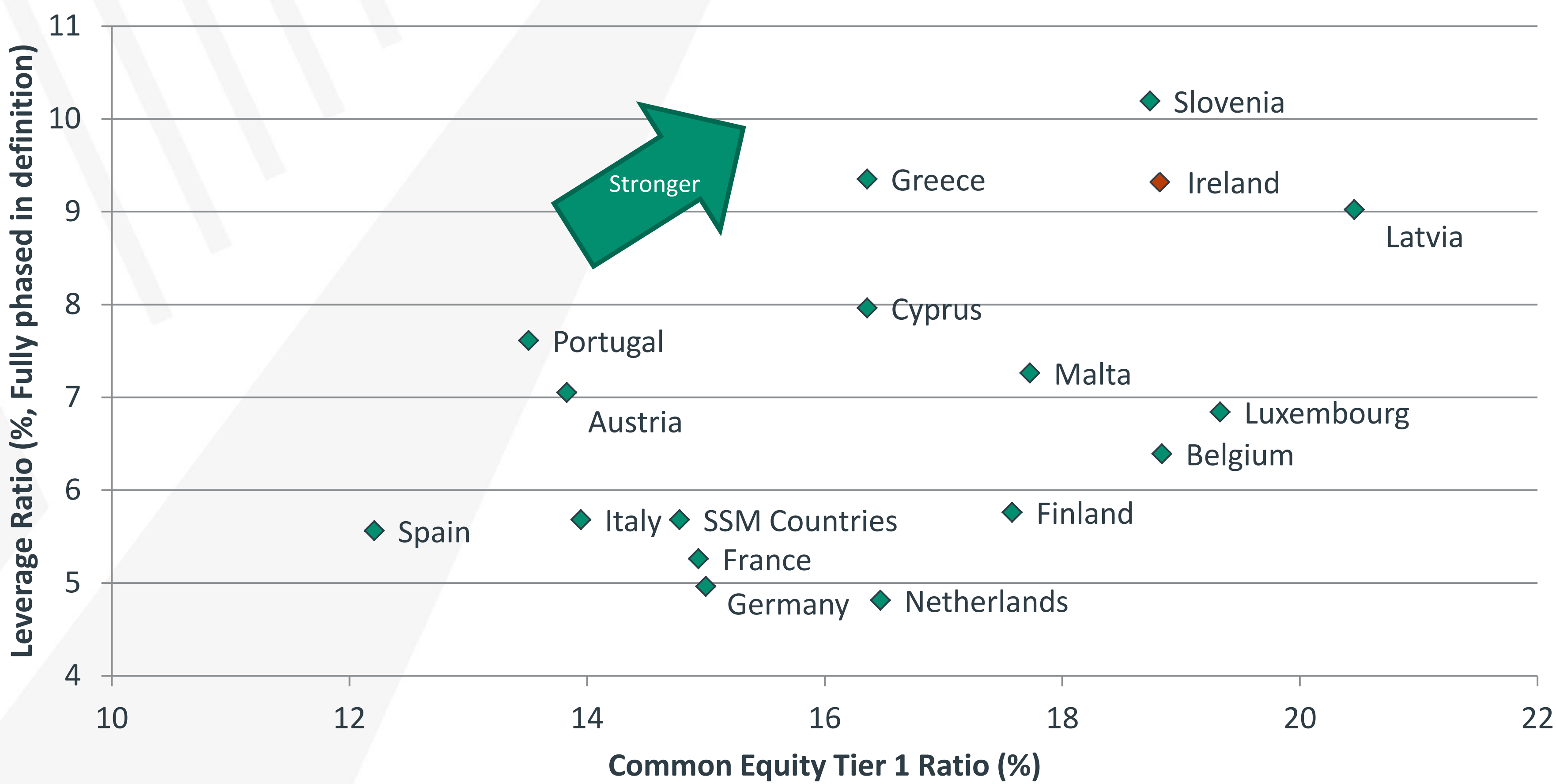
National Treasury Management Agency

Source: Annual reports of banks - BOI, AIB, PTSB

Ireland’s banks are among the best capitalised in Europe



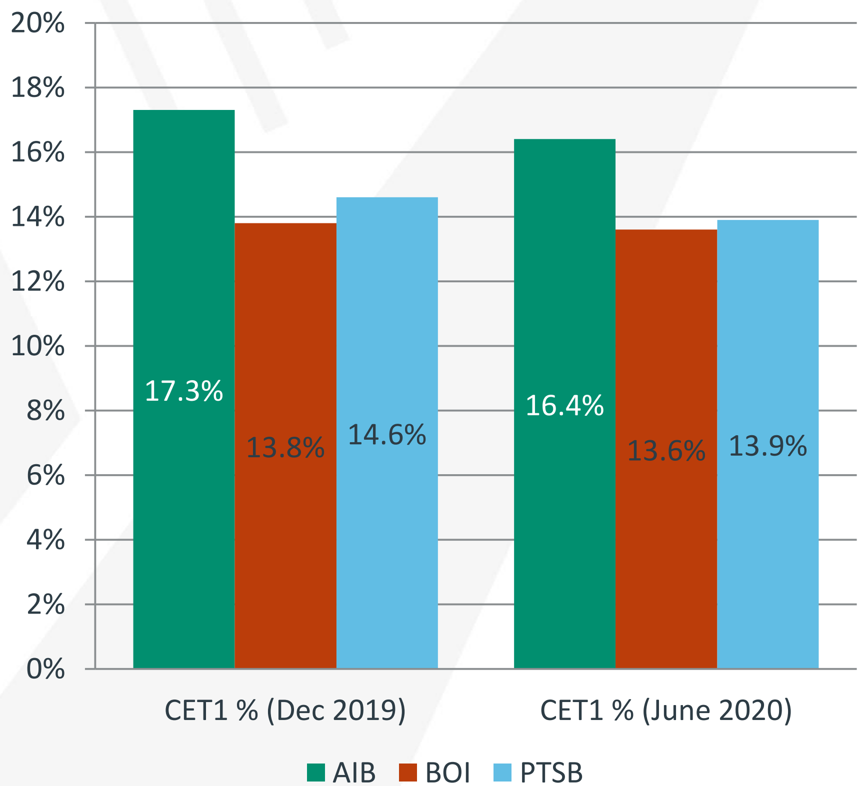
Source: ECB consolidated banking data (Q4 2019)

Note: Leverage Ratio = Tier 1 capital/Total leverage exposure; CET1 = Common tier 1 capital/total risk exposures. “Fully loaded” refers to the actual Basel III basis for CET1 ratios.

Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

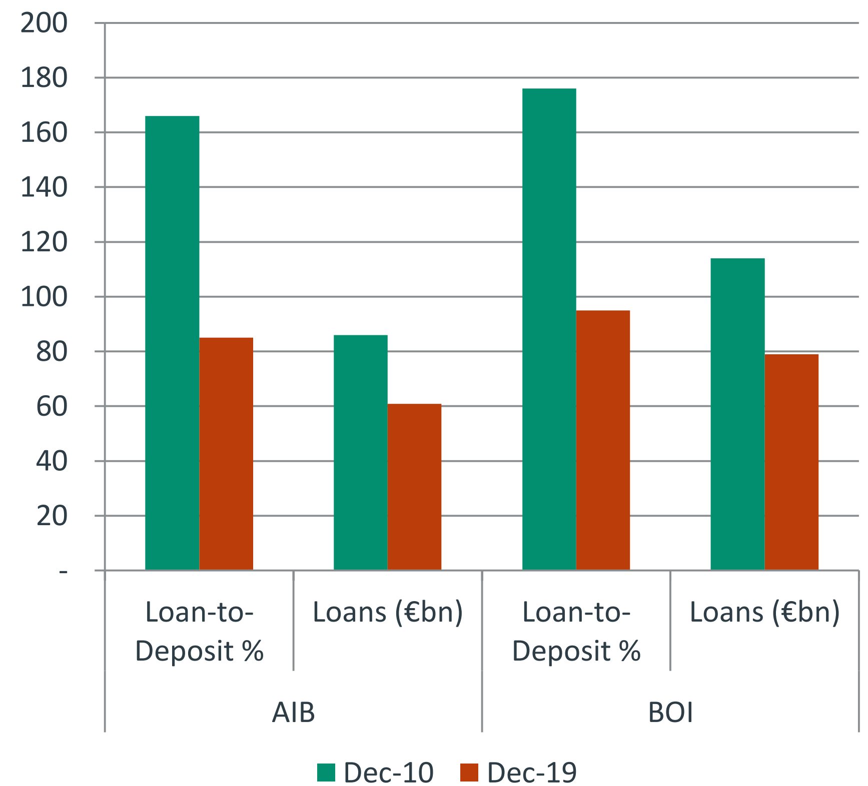
Capital ratios strengthened as banks shrunk and consolidated in last ten years

CET 1 capital ratios allow for amble forbearance in Q2



Source: Published bank accounts

Loan-to-deposit ratios have fallen significantly as loan books were slashed

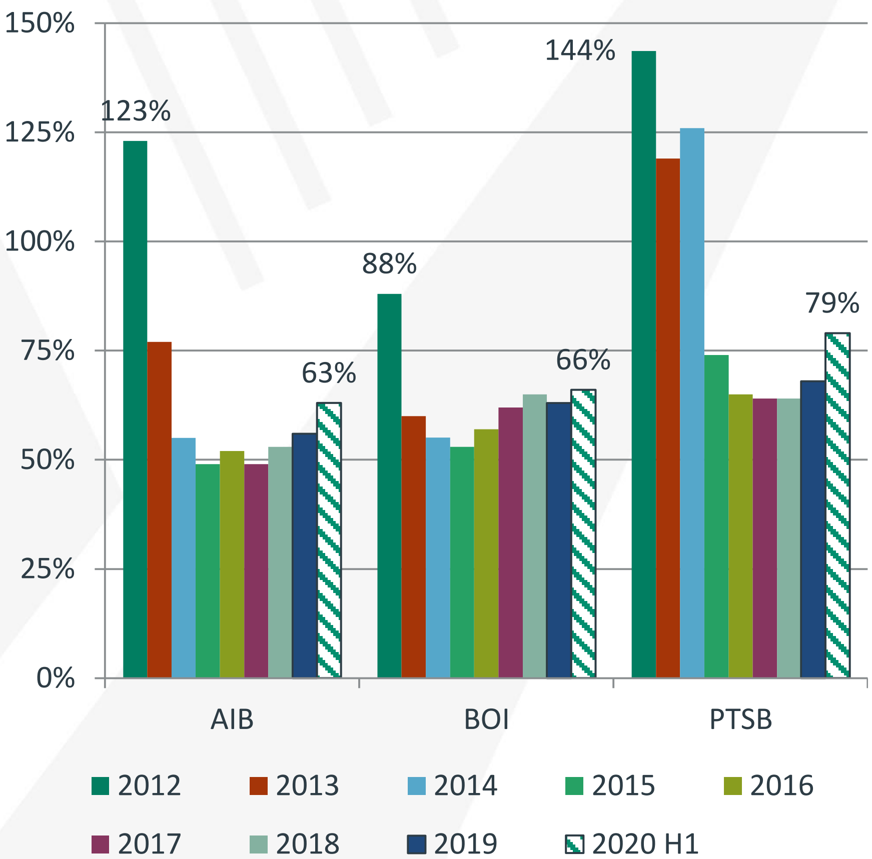


Source: Published bank accounts

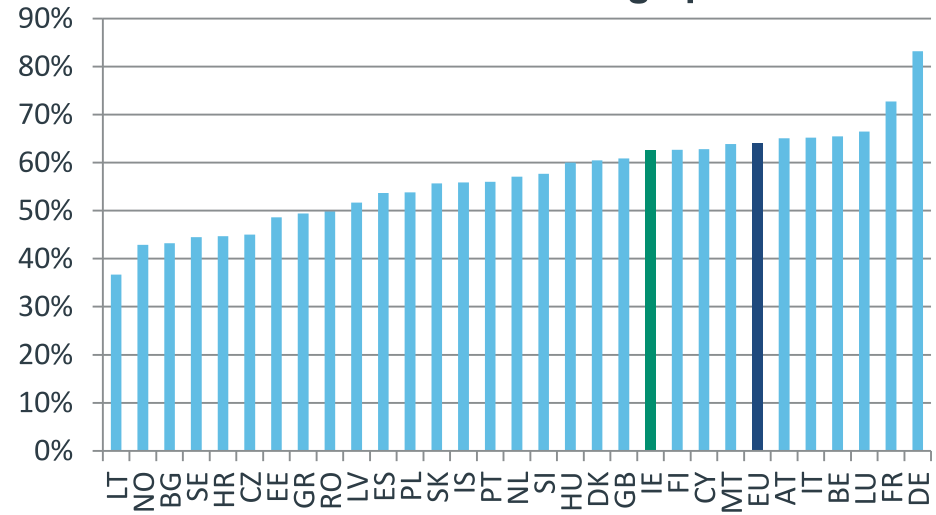
Note: "Transitional" refers to the transitional Basel III required for CET1 ratios
"Fully loaded" refers to the actual Basel III basis for CET1 ratios.

Domestic bank cost base has risen due to Covid

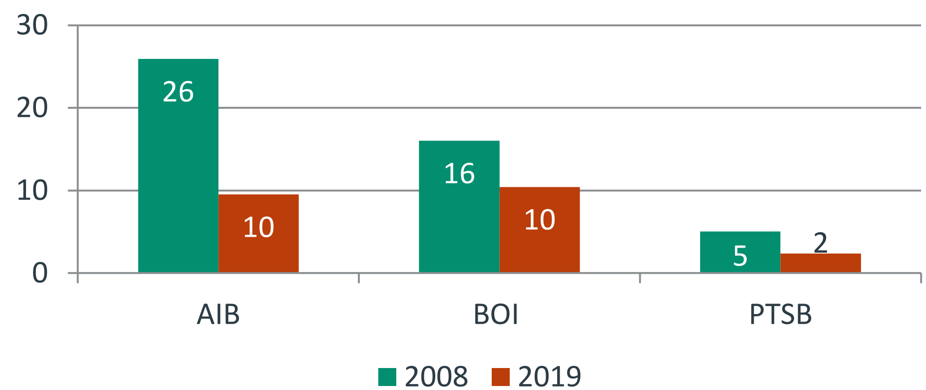
Cost income ratios increased …



… IE banks* below EU average pre-Covid



Staffing (000s) halved post crisis



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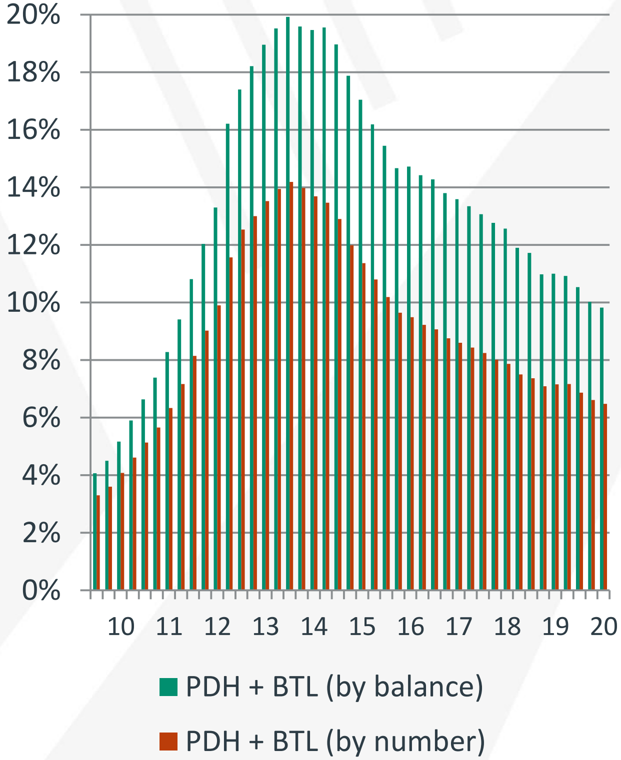
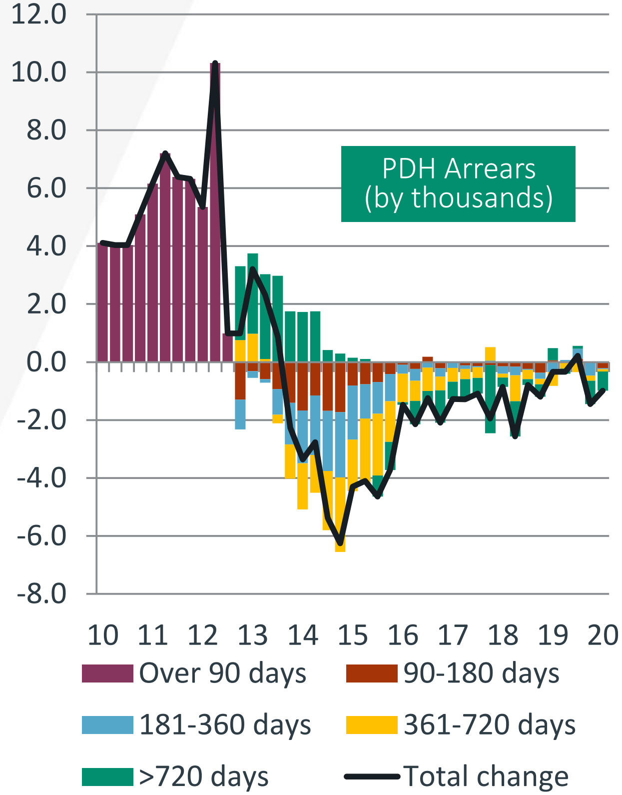
Source: Annual reports of Irish domestic banks, EBA
* EBA data includes three domestic banks as well as Ulster Bank, DEPFA & Citibank.

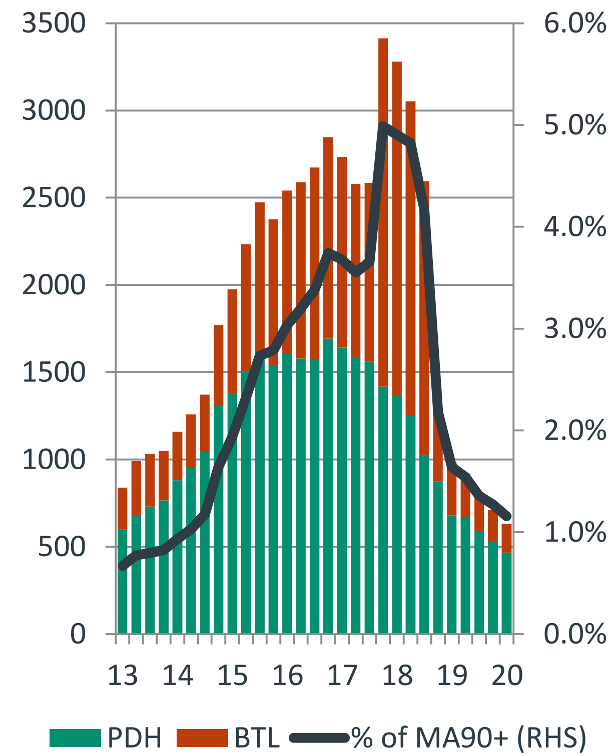
Irish residential mortgage arrears may reverse course in 2020 – moratorium will help

Mortgage arrears (90+ days)





Repossessions*



Source: CBI

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National Treasury Management Agency

* Four quarter sum of repossessions. Includes voluntary/abandoned dwellings as well as court ordered repossessions

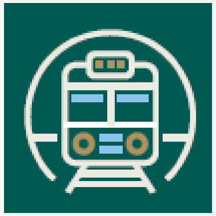
The European Commission's ruling on Apple annulled in court: appeal by EC is possible

- Back in 2016, the EC had ruled that Ireland illegally provided State aid of up to €13bn, plus interest to Apple. This figure is based on the tax foregone as a result of a historic provision in Ireland's tax code. This provision was closed on December 31st 2014.
- Apple appealed the ruling, as did the Irish Government. <u>The General Court granted the appeal in July, annulling the EC's ruling.</u>
- This case had nothing to do with Ireland's corporate tax rate. It related to whether Ireland gave unfair advantage to Apple with its tax dealings. <u>The General Court has judged no such advantage occurred.</u>
- It is possible the Commission will appeal to a higher court, European Court of Justice. This process could still be lengthy. Pending the outcome of the second appeal, the €13bn plus EU interest would remain in an escrow fund.
- The appeal deadline is 25th September 2020. If no further appeal is brought by the Commission, the money will revert back to Apple.
- The NTMA has throughout the whole process made no allowance for these funds in any of its planning. <u>There is no need to adjust funding plans given the decision by the General Court in July.</u>

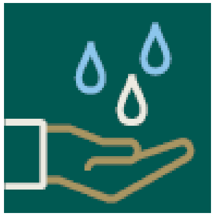
Government's NDP outlines green projects; aim to cut CO_2 emissions by at least 80% by 2050 and Greens in govt.

1 in 5 euros in the National Development Plan (NDP) to be spent on green projects

Sustainable Mobility
€8.6 billion



Sustainable Management of Water and Environmental Resources
€6.8 billion



Transition to a Low carbon and Climate Resilient Society
€7.6 billion

Total:€23 billion (13% of GNI*)

Further details are available at ntma.ie

Source: National Development Plan 2018-2027

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