



Banc Ceannais na hÉireann
Central Bank of Ireland

Eurosystem

Financial Stability Review **2020: I**



Contents

Notes	3
Preface.....	4
Réamhrá	5
Overview	6
Forbhreathnú	11
Risk	16
The re-pricing of risk premia has led to large falls in risky asset prices and tighter financing conditions globally	16
COVID-19 represents an unprecedented macroeconomic shock.....	19
A necessary, but significant deterioration in euro area fiscal positions alongside challenging financial sector conditions.....	22
A sharp deterioration in the macro-financial outlook in Ireland, with material further downside risks	25
Box 1: Global financial conditions and downside risks to growth: lessons from past shocks	32
Box 2: Liabilities beyond government debt in European Member States and Ireland before the COVID 19 pandemic	34
Box 3: Irish Growth-at-Risk and COVID-19 related market stress. .	36
Resilience.....	38
Box 4: COVID-19 and the domestic real economy.....	38
Non-financial corporations.....	40
Households	43
Box 5: Payment breaks for Irish households and firms.....	47
Retail banks and credit unions.....	49
Sovereign	56
Non-bank financial sector	59
Box 6: Irish-resident funds and the market disruption at the onset of COVID-19	64
Policy.....	67
Central Bank of Ireland's active macroprudential policy instruments.....	70
CCyB rate at 0 per cent is appropriate in the current environment .	70
Buffers for systemically important institutions.....	72
Mortgage measures.....	73

Macroprudential policy response to COVID-19 across Europe	75
Central Bank of Ireland's macroprudential framework.....	76
Framework for bank capital.....	76
Investment funds.....	77
Abbreviations.....	78

Notes

1. Unless otherwise stated, this document refers to data available on 22 May 2020.
2. Irish retail banks refer to the five banks offering retail-banking services within the Irish State: Allied Irish Banks plc, The Governor and Company of the Bank of Ireland, Permanent TSB, KBC Bank Ireland plc and Ulster Bank Ireland Designated Activity Company.
3. The following symbols are used:

e	estimate	H	half-year
f	forecast	rhs	right-hand scale
Q	quarter	lhs	left-hand scale

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Preface

The Central Bank serves the public interest by safeguarding monetary and financial stability and by working to ensure that the financial system operates in the best interests of consumers and the wider economy.

The *Financial Stability Review* evaluates the main risks facing the financial system and assesses the resilience of the financial system to those risks. A resilient financial system is one that is able to provide services to Irish households and businesses, both in good times and in bad. The Central Bank's policy actions seek to ensure that the financial system is able to absorb, rather than amplify, adverse shocks.

The structure of this publication mirrors the overall approach the Central Bank takes in reaching a judgement around its macroprudential policy stance.

- The first section outlines the Central Bank's assessment of the main risks facing the Irish financial system over the short to medium term.
- The second section outlines the Central Bank's assessment of the resilience of the domestic financial system to adverse shocks and its ability to absorb, rather than amplify, shocks of this nature.
- The third section explains the Central Bank's policy actions to safeguard financial stability and ensure that the resilience of the financial system is proportionate to the risks it faces.

Ireland is host to a large and diverse financial sector. A growing part of that financial sector serves international clients, with limited direct implications for the domestic economy. This publication focuses on the segments of the financial sector that provide services to Irish households and businesses.

The *Review* reflects, and is informed by, the deliberations of the Central Bank's Financial Stability Committee and Macroprudential Measures Committee. The aim of the *Review* is not to provide an economic forecast, but instead focuses on the potential for negative outcomes to materialise. The Central Bank is committed to transparency over its judgements around financial stability and plans to use this publication as a key vehicle to explain the policy actions taken, within its mandate, to safeguard financial stability.

Réamhrá

Freastalaíonn an Banc Ceannais ar leas an phobail trí chobhsaíocht airgeadaíochta agus airgeadais a choimirciú agus trína áirithiú go bhfuil an córas airgeadais ag feidhmiú ar mhaithe le leas na dtomhaltóirí agus leas an gheilleagair níos leithne.

San Athbhreithniú ar Chobhsaíocht Airgeadais, déanaimid measúnú ar na príomhrioscaí atá os comhair an chórais airgeadais agus ar athléimneacht an chórais airgeadais in aghaidh na rioscaí sin. Is córas airgeadais athléimneach é córas inar féidir seirbhísí a chur ar fáil do theaghlaigh agus do ghnólachtaí Éireannacha le linn tréimhsí maithe agus drochthréimhsí araon. Le gníomhaíochtaí beartais an Bhainc Ceannais, féachtar lena áirithiú go bhfuil an córas airgeadais in ann turraingí dochracha a sheasamh seachas iad a mhéadú.

Tagann struchtúr an fhoilseacháin seo leis an gcur chuige a ghlacann an Banc Ceannais chun teacht ar a thuairim faoina sheasamh maidir le beartas macrastuamachta.

- Sa chéad mhír, déantar cur síos ar mheasúnú an Bhainc Ceannais ar na príomhrioscaí atá roimh an gcóras airgeadais Éireannach sa ghearrthéarma agus sa mheántéarma.
- Sa dara mír, déantar cur síos ar mheasúnú an Bhainc Ceannais ar athléimneacht an chórais airgeadais intíre in aghaidh turraingí dochracha agus ar a chumas chun riscaí den sórt sin a sheasamh seachas iad a mhéadú.
- Sa tríú mír, déantar cur síos ar ghníomhaíochtaí beartais an Bhainc Ceannais chun cobhsaíocht airgeadais a chosaint agus chun a chinntiú go bhfuil athléimneacht an chórais airgeadais ar comhréir leis na rioscaí atá roimhe.

Is earnáil airgeadais mhór agus ilchineálach í earnáil airgeadais na hÉireann. Tá fás ag teacht ar an gcuid sin den earnáil airgeadais a fhreastalaíonn ar chliaint idirnáisiúnta, agus tá impleachtaí díreacha teoranta ann don gheilleagar intíre. Díritear san fhoilseachán seo ar na codanna sin den earnáil airgeadais a chuireann seirbhísí ar fáil do theaghlaigh agus do ghnólachtaí Éireannacha.

San Athbhreithniú, léirítear breithnithe ón gCoiste um Chobhsaíocht Airgeadais agus ón gCoiste um Bearta Macrastuamachta de chuid an Bhainc Ceannais agus tá na breithnithe sin mar bhonn faisnéise leis an athbhreithniú. Ní hé is aidhm don Athbhreithniú réamhaisnéis eacnamaíoch a chur ar fáil. Ina ionad sin, díritear ar an bhféidearthacht go dtiocfadh torthaí diúltacha chun cinn. Tá an Banc Ceannais tiomnaithe do thrédhearcacht a chuid breithnithe maidir le cobhsaíocht airgeadais agus tá sé beartaithe aige an foilseachán seo a úsáid mar bhealach chun míniú a thabhairt ar na gníomhaíochtaí beartais a ghlactar laistigh dá shainordú chun cobhsaíocht airgeadais a chosaint.

Overview

The COVID-19 pandemic is an exceptional shock triggering the materialisation of long-identified risks to financial stability and a collapse in global economic activity. The risks posed to domestic financial stability stem from the sudden halt in domestic activity, financial market developments, including the sharp repricing of risk premia, and structural vulnerabilities of a small open economy exposed to the downside risks in the recovery of global demand. While the starting resilience of households and firms is significantly stronger compared to the onset of the financial crisis a decade ago, the scale of the economic shock is unprecedented and will create pressure on the financial position of borrowers and lenders. The transmission of these risks to the real economy and financial system will take time and in response, policymakers have reacted with a range of fiscal, monetary, macroprudential and microprudential actions to mitigate amplification and enable the financial system to support households and businesses through this crisis.

The main transmission channels to domestic financial stability are:

The economic shock related to COVID-19 and the necessary containment measures is very large and pervasive. The acute nature of the domestic economic impact of the pandemic is unprecedented – employment fell by 600,000 over one quarter and measures of business sentiment are at the weakest on record. While the impact varies by sector, an estimated 80 per cent of businesses, covering almost 70 per cent of employment are affected by the containment measures. Developments in external trade of both intermediate inputs and final goods and services are critical, given the small and open nature of the Irish economy. Multinationals in Ireland have so far proved more resilient to the impact of COVID-19, but they are not immune from developments in the global economy.

The re-pricing of risk has led to falls in risky asset prices and tighter financing conditions globally, partly mitigated by prompt central bank interventions. A prolonged period of accommodative financial conditions came to an abrupt halt with the onset of COVID-19, giving way to a widespread sell-off of risky assets and sharp increases in volatility. Stress in credit markets was amplified by the preceding period of growth and easing of underwriting standards in corporate debt markets and previously identified vulnerabilities in the non-bank sector. Irish retail banks' exposure to leveraged loans and the investment portfolios of domestic insurers provide a direct transmission channel to some of the more vulnerable segments of global corporate debt markets. Tightening global financial conditions also have implications for domestic lending, asset prices and economic output. Despite improvements more recently, partly reflecting significant central bank interventions, global financial market conditions remain fragile.

Governments globally, including in Ireland, have responded to cushion the economic shock, leading to a sharp expected increase in global public debt levels. Fiscal policy is the first line of defence in the context of the unprecedented collapse in economic activity. Government support is also necessary to minimise the risk of a persistent destruction in the productive capacity of the economy due to COVID-19. The interest burden of additional fiscal spending on healthcare and supports for firms and households remains low. Investor appetite for Irish and euro area sovereign debt generally has remained strong, underpinned by extraordinary monetary policy support. However, the global economy will emerge from this crisis with higher public debt levels and, in the

medium term, there is a risk that heightened public debt issuance could put pressure on government bond yields in some euro area countries.

The interconnected nature of the financial system has the potential to magnify the effects of the global shutdown. Interactions within the financial system determine how it can amplify or dampen the impact of the current shock. While the retail banking system continues to have relatively low levels of interconnectedness, recent Brexit-related changes have caused an increase in the complexity and interconnectedness of the wider Irish banking system. Further, credit unions, while not individually systemically important, provide an additional source of financial intermediation and have assets highly concentrated in the retail banking system. Ireland is an international hub for the funds industry with an increasing link to the domestic economy through investment in Irish commercial real estate and the retail banks' holding of fund debt creating a two-way transmission channel during periods of stress.

Overall, the macro-financial outlook has deteriorated significantly since the last Review. COVID-19 triggered the materialisation of long-identified risks to financial stability, such as the repricing of risk premia and structural risks stemming from the small, open nature of the Irish economy. This has negative implications for macro-financial conditions domestically, especially in key asset markets also impacted by the domestic macroeconomic shock from containment measures. While the scale and acute nature of COVID-19 is unprecedented, other risks also remain on the horizon. Most notably, progress with negotiations between the UK government and the EU on the future relationship has been slow, raising the risk of trade between the two jurisdictions reverting to WTO rules at the end of 2020. There is significant interdependence between risks, creating the possibility of amplification or a more prolonged domestic recovery from COVID-19.

With reference to the above risk environment, the Central Bank assesses the resilience of the economy and the financial system – their ability to absorb, rather, than amplify shocks.

Companies will require access to liquidity and, in some cases, solvency support to reduce the risk that the productive capacity of the economy is permanently damaged. Domestic public health measures have had the most direct impact on firms, with almost a quarter ceasing operations and an estimated 70 per cent reporting falls in turnover. This creates a short-run liquidity need, amplified by relatively modest cash holdings for many SMEs. In addition to the government, the banking system is operating as a source of liquidity support, whether in the form of new lending, payment breaks or through the drawdown of existing credit lines. SMEs are substantially less indebted now than in 2013, providing some capacity to borrow to meet outgoings. Despite this starting point, the longer the containment measures last, the more the solvency of companies will be called into question. Overreliance on debt risks diminishing medium-term resilience, if increased borrowing simply finances pandemic-related losses.

While starting from a stronger position, limited savings among some mortgage borrowers present a risk to mortgage repayment capacity. A continuing trend of falling aggregate debt and a halving of the share of highly indebted borrowers since 2013 underpins a significantly more resilient household sector compared to 2008. However, the widespread nature of the shock means almost half of mortgage holders work in an affected sector. In addition, a significant share of households have limited liquid assets and income support payments may be insufficient to meet mortgage repayments in some cases. This highlights the importance of payment breaks to support households' short-term liquidity needs, with almost 75,000 currently active agreements covering

11 per cent of the local mortgage market. In some cases, the income shock for mortgage borrowers will persist beyond the length of the payment break and will require additional forbearance, restructuring or resolution.

COVID-19 will put pressure on banks' financial positions, but improved resilience, supported by recent policy actions, results in a banking system that is now better able to absorb, rather than amplify, such a shock. Bank resilience has improved steadily in recent years, with capital levels improving substantially and less liquidity risk as funding is primarily based on more stable retail deposits. The credit quality of banks' domestic credit portfolios is also better than at the onset of the 2008 financial crisis. Still, the COVID-19 shock is expected to put pressure on banks' capital position. The banking sector has very significant direct credit exposures to the shock, with close to two-thirds of commercial lending and half of residential mortgages to borrowers in vulnerable sectors. Temporary payment breaks are aimed at mitigating the immediate liquidity shock to these firms and households but a significant portion may ultimately require further restructuring or resolution, generating losses as asset quality deteriorates. Additional pressure on banks' financial position is likely to stem from weaker underlying profitability, due to weaker credit demand, downward pressure on banks' interest margins from the low rate environment and high costs.

The investment fund sector has significant holdings of commercial real estate and is interconnected with the retail banking system, but short-run liquidity risk is mitigated to some extent given redemption schedules. The Irish investment fund sector is among the largest globally when measured relative to economic output. Although the risks are predominately external in nature due to their international focus, investment funds have become increasingly exposed to the domestic real estate market – accounting for more than a third of the estimated stock of investable commercial real estate. Amongst property funds, the prevalence of closed-ended funds and funds that allow investors to redeem their shares relatively infrequently mitigates liquidity risk to some extent. However, Irish property funds have higher leverage compared to their European peers, which poses vulnerabilities in the context of any commercial real estate price falls.

The financial position of the insurance sector is also expected to be under pressure, due to falls in asset values, increases in measured liabilities due to the fall in risk-free rates and the impact of pandemic-related claims on profitability. The domestic life and non-life insurance firms continue to have available capital above regulatory requirements, which is intended to protect against significant stress events, such as COVID-19. Firms are at risk of declines in their capital due to the immediate impact of financial market falls on asset values, further ratings downgrades and falls in risk-free interest rates increasing liability values. The impact of the pandemic on the underwriting side of business could also have a significant impact, amplified by any retroactive coverage of claims that were not priced or reserved against.

The COVID-19 health crisis will have a significant negative impact on the Irish public finances. Immediate government supports have been necessary to reduce the risk of permanent damage to the productive capacity of the economy. In recent years, the Irish public finances were on a broadly positive trajectory due to robust economic growth and the low rate environment but debt levels remained elevated relative to economic activity. COVID-19 will cause a deviation from this trend, as forecasts for the current year deficit are 10.5 per cent of GNI*. This is due to unprecedented expenditure demands on the exchequer combined with a likely sharp fall in tax revenue due to reduced economic activity. The medium term outlook is highly uncertain but

current debt costs are aided by €28 billion of prefunding, improvements to the maturity profile of public debt and the ECB's Pandemic Emergency Purchase Programme (PEPP) totalling €1,350 billion across the euro area.

The Central Bank uses its macroprudential policies to promote financial stability in Ireland and consider the balance between the risks facing the economy and financial system and their resilience.

Macroprudential policy is not acting in isolation, with a range of policy actions supporting financial stability. Given the unprecedented scale and immediacy of the COVID-19 pandemic, policymakers have responded with fiscal, monetary, microprudential and macroprudential actions. Along with additional healthcare provision, the fiscal support for households and firms is critical to dampening the effect of the immediate liquidity shock to the real economy. This ability to respond decisively to the pandemic has been enhanced by the accommodative monetary measures introduced in March, including the significant provision of additional liquidity to the European banking system. Microprudential policymakers have moved to underpin the usability of capital and liquidity buffers. These policies enable the banking system to support households and businesses during the COVID-19 economic crisis and, in doing so, reduce the risk that a sharp contraction in the supply of credit amplifies the economic shock.

In March, the Central Bank announced the reduction in the CCyB rate on Irish exposures from 1 per cent to 0 per cent. The full release of the CCyB was judged appropriate by the Central Bank given the severity of impact of the COVID-19 pandemic. It is consistent with the CCyB's objective of mitigating the amplification of the downturn risks by promoting banking sector resilience in good times, and facilitating banks maintaining a sustainable supply of credit to the real economy when shocks hit. The CCyB release makes available €940 million of capital across the retail banking sector, with the potential to support additional lending of between €10 billion and €16 billion. It is the Central Bank's intention that there will be no increase in the CCyB before the first quarter of 2021 at the earliest and subsequent decisions will depend on prevailing macroeconomic and financial conditions.

The O-SII buffer is fully usable to absorb losses during this period of stress, consistent with its purpose and the wider macroprudential and supervisory actions taken by the Central Bank and the ECB. The usability of the O-SII buffer to absorb losses in times of stress is an important element in the functioning of the capital buffer framework. The objective of the O-SII buffer is to reduce the probability of failure of a systemically important institution, and is calibrated based on the relative systemic importance of each institution. While the buffer rates of the Irish O-SIIs continue to be phased-in through 2021 in-line with previously announced schedules, they are also available for loss absorption in a period of stress.

In December 2019, the Central Bank concluded its most recent review of the mortgage measures, with no change to the LTV and LTI limits or exemptions. Now covering almost one third of outstanding lending, the mortgage measures were found to be meeting their objectives in guarding against an excessive loosening of underwriting standards, strengthening both borrower and lender resilience, and minimising the potential for a credit-house price spiral emerging in the 2019 review. As the situation continues to evolve, the Central Bank is continuously monitoring the impact of COVID-19 on the operation of the mortgage measures and the mortgage and housing market more generally, informing the annual review in the second half of the year. In particular,

the Central Bank has – and will continue to – engage with lenders around the operation of the allowances framework.

The Central Bank has reprioritised its work around the macroprudential framework in the face of COVID-19. At the end-2019, the Central Bank announced its key priorities from a macro-prudential perspective, covering banks, borrowers and non-banks. Given the substantial change in the macro-financial environment, the focus of the Central Bank has shifted away from *ex ante* measures to build additional resilience towards measures that ensure that that resilience can be drawn upon, as appropriate, to support the economy through this economic shock. It is in the wider interests of the Irish financial system that it continues to lend sustainably to households and businesses - minimising the extent of the downturn and maximising the contribution to recovery.

Forbhreathnú

Is turraing as an ngnáth í paindéim COVID-19 a spreag teacht chun cinn rioscaí a bhí sainaitheanta le fada don chobhsaíocht airgeadais chomh maith le tobthitim ar ghníomhaíocht eacnamaíoch dhomhanda. Eascraíonn na rioscaí don chobhsaíocht airgeadais intíre as stad tobann na gníomhaíochta intíre, as forbairtí sa mhargadh airgeadais, lena n-áirítear athphraghsáil ghéar ar phréimheanna riosca, agus as na leochaileachtaí struchtúracha a bhaineann le geilleagar beag oscailte atá neamhchosanta ar rioscaí ar an taobh thíos do théarnamh an éilimh dhomhanda. Cé go bhfuil athléimneacht teaghlach agus gnólachtaí i bhfad níos láidre anois ná mar a bhí ag tosach na géarchéime airgeadais deich mbliana ó shin, tá scála na turrainge eacnamaíche gan fasach agus cuirfidh sé brú ar staid airgeadais iasachtaithe agus iasachtóirí. Beidh tamall ann sula dtarchuirfear na rioscaí sin chuig an bhfíorgheilleagar agus mar fhreagairt orthu, tá réimse beart fíoscach, airgeadaíochta, macrastuamachta agus micreastuamachta glactha ag lucht déanta beartais chun méadú turraingí a mhaolú agus chun a chumasú don chóras airgeadais tacú le teaghlach agus gnóthaí le linn na géarchéime seo.

Is iad seo a leanas na príomhbhealaí tarchuir chuig an gcobhsaíocht airgeadais intíre:

Tá an turraing eacnamaíoch a bhaineann le COVID-19 agus leis na bearta riachtanacha imshrianta an-mhór agus an-láidir. Tá cineál géar an tionchair atá ag an bpaindéim ar an ngeilleagar intíre gan fasach - tháinig laghdú 600,000 ar an bhfostaíocht le linn ráithe amháin agus tá seintimint ghnó ag an leibhéal is ísle a taifeadadh riamh. Cé go n-athraíonn an tionchar sin ó earnáil go hearnáil, meastar go bhfuil tionchar ag na bearta imshrianta ar 80 faoin gcéad de ghnóthaí, is é sin le rá 70 faoin gcéad den fhostaíocht. Tá fíorthábhacht ag baint le forbairtí ar thrádáil sheachtrach ionchur idirmheánach agus earraí agus seirbhísí deiridh toisc gur geilleagar beag, oscailte é geilleagar na hÉireann. Is léir go bhfuil fiontair ilnáisiúnta níos athléimní ó thaobh thionchar COVID-19 de, ach níl siad slán ó fhorbairtí sa gheilleagar domhanda.

De thoradh na hathphraghsála riosca, tá laghduithe tagtha ar phraghsanna sócmhainní rioscúla agus tá dálaí maoiniúcháin ar fud an domhain tar éis éirí níos géire, rud a mhaolaítear go páirteach le hidirghabhálacha gasta banc ceannais. Tháinig deireadh tobann le tréimhse fhada dálaí in-chomhfhoirmeacha airgeadais nuair a thosaigh COVID-19, agus ina háit, chonacthas díol forleathan sócmhainní rioscúla agus méaduithe géara ar luaineacht. Méadaíodh an strus sna margaí creidmheasa de thoradh na tréimhse fáis roimhe seo agus an mhaolaithe ar chaighdeán frithgheallta i margaí fiachais chorparáidigh agus leochaileachtaí a sainaitníodh roimhe seo san earnáil neamhbhainc. Le neamhchosaint na mbanc ar iasachtaí gearáilte agus le punanna infheistíochta infheisteoirí intíre, cruthaítear bealach díreach tarchuir chuig deighleoga leochaileacha áirithe de na margaí domhanda fiachais chorparáidigh. Ina theannta sin, bíonn impleachtaí ag daingniú dálaí airgeadais domhanda don iasachtú intíre, do phraghsanna sócmhainní agus don aschur eacnamaíoch. Cé go raibh feabhsuithe ann le déanaí, rud a léiríonn go páirteach idirghabhálacha suntasacha banc ceannais, tá dálaí margaidh airgeadais leochaileach i gcónaí.

Tá rialtais ar fud an domhain, lena n-áirítear anseo in Éirinn, ag obair chun an turraing eacnamaíoch a mhaolú, rud a chruthaíonn méadú géar a rabhtas ag súil leis ar leibhéal fiachais phoiblí ar fud an domhain. Beartas fíoscach is ea an chéad líne cosanta i gcomhthéacs chliseadh gan fasach na gníomhaíochta eacnamaíche. Tá tacaíocht ón Rialtas riachtanach freisin chun go n-íoslaghdófar an

baol go ndéanfar scrios seasmhach ar chumas táirgthe an gheilleagair de bharr COVID-19. Tá an t-ualach úis a bhaineann le caiteachas fioscach breise ar chúram sláinte agus le tacaíochtaí do ghnólachtaí agus do theaghlaigh íseal i gcónaí. Tá éileamh infheisteoirí ar fhiachas ceannasach na hÉireann agus an limistéir euro láidir i gcónaí, agus tá tacaíocht úrghnách beartais airgeadaíochta mar thaca aige. Ar a shon sin, beidh leibhéil níos airde fiachais phoiblí ag an ngeilleagar domhanda i ndiaidh na géarchéime seo agus, sa mheántearma, tá an baol ann go bhféadfadh eisiúint níos airde fiachais phoiblí brú a chur ar na torthaí ar bhannaí rialtais i dtíortha áirithe sa limistéir euro.

Tá an fhéidearthacht ann go méadófar éifeachtaí an dúnta dhomhanda mar gheall ar idirnascthacht an chórais airgeadais. Is iad na hidirghníomhaíochtaí laistigh den chóras airgeadais a shocróidh conas is féidir leis an gcóras sin tionchar na turrainge reatha a mhéadú nó a mhaolú. Cé go leanann an córas baincéireachta miondíola de leibhéil ísle idirnascthachta a bheith aige, tá méadú tagtha ar chastacht agus ar idirnascthacht an chórais baincéireachta níos leithne in Éirinn mar gheall ar athruithe a tharla le déanaí de bharr Brexit. De bhreis air sin, cé nach bhfuil tábhacht shistéamach ag baint le comhair chreidmheasa astu féin, is foinse bhreise idirghabhála airgeadais iad agus tá sócmhainní acu atá thar a bheith comhchruinnithe sa chóras baincéireachta miondíola. Is mol idirnáisiúnta í Éire don tionscal cistí le nasc leis an ngeilleagar intíre a bhíonn ag méadú i gcónaí trí infheistíocht in eastát réadach tráchtála agus trí fhiachas cistí a bheith ar seilbh ag na bainc mhiondíola, rud a chruthaíonn tarchur dhá bhealach le linn tréimhsí anáis.

Ar an iomlán, tá meathlú suntasach tagtha ar an ionchas macra-airgeadais ón Athbhreithniú deireanach. Spreag COVID-19 teacht chun cinn rioscaí a bhí sainaitheanta le fada don chobhsaíocht airgeadais, amhail athphraghsáil préimheanna riosca agus rioscaí struchtúracha toisc gur geilleagar beag oscailte é geilleagar na hÉireann. Bíonn impleachtaí diúltacha aige seo do dhálaí macra-airgeadais intíre, go háirithe sna príomh-mhargaí sócmhainní a mbíonn tionchar ag an turraing mhaicreacnamaíoch intíre orthu de thoradh na mbeart imshrianta. Cé go bhfuil scála agus cineál géar COVID-19 gan fasach, tá rioscaí eile os ár gcomhair freisin. Go háirithe, tá an dul chun cinn sna cainteanna idir rialtas na Ríochta Aontaithe agus AE-27 maidir leis an gcaidreamh eatarthu amach anseo an-mhall, rud a mhéadaíonn an baol go mbeidh an trádáil idir an dá dhlíne faoi réir rialacha an WTO ag deireadh na bliana 2020. Tá idirspheáchas suntasach idir na rioscaí agus, dá bhrí sin, tá an fhéidearthacht ann go méadófar rioscaí nó go mbeidh tréimhse níos faide i gceist don téarnamh intíre ó COVID-19.

I ngeall ar an timpeallacht riosca sin thuas, déanann an Banc Ceannais measúnú ar athléimneacht an chórais airgeadais agus an gheilleagair - is é sin, measúnú ar a gcumas turraingí a iompar seachas iad a mhéadú.

Beidh rochtain ag teastáil ó chuideachtaí ar leachtacht agus, i gcásanna áirithe, ar thacaíocht sócmhainneachta chun go maolófar an baol go ndéanfar damáiste buan do chumas táirgthe an gheilleagair. Is iad na bearta intíre sláinte poiblí a raibh an tionchar is díri acu ar ghnólachtaí sa mhéid gurbh éigean d'aon cheathrú de na gnólachtaí scor dá gcuid oibríochtaí agus gur thuairiscigh tuairim is 70 faoin gcéad díobh laghduithe ar láimhdeachas. Cruthaíonn sé seo gá le leachtacht ghearrthréimhseach agus cuireann sealúchais measartha beag airgid ag mórán FBManna leis an ngá sin. I dteannta leis an rialtas, tá an córas baincéireachta ag feidhmiú mar fhoinsé leachtachta, cibé acu i bhfoirm iasachtú nua, sosanna ó íocaíochtaí nó trí línte creidmheasa reatha a tharraingt anuas. Tá níos lú fiacha ar FBManna anois ná mar a bhí in 2013, rud a chiallaíonn go bhfuil acmhainn acu airgead a fháil ar iasacht chun freastal ar eisíocaíochtaí. D'ainneoin an phointe tosaigh seo, dá fhad a mhaireann na bearta imshrianta, is ea is mó an t-amhras a tharraingeofar ar

shócmhainneacht cuideachtaí. Le róspleáchas ar fhiachas, tá an baol ann go laghdófar athléimneacht mheántéarmach má bhíonn caillteanais a bhaineann leis an bpaindéim á maoiniú ag iasachtaíocht mhéadaithe.

Cé go bhfuil staid na n-iasachtaithe morgáiste níos láidre anois, tá coigiltis theoranta ag cuid díobh, rud a chuireann a gcumas aisíocaíochta morgáiste i mbaol. Tá treocht leanúnach d'fhiachas comhiomlán atá ag ísliú agus laghdú cion na n-iasachtaithe ag a bhfuil fiacha móra faoina leath ó 2013 i leith, mar thaca faoi earnáil na dteaghlach atá i bhfad níos athléimní anois ná mar a bhí sa bhliain 2008. Ar a shon sin, ciallaíonn fairsinge na turrainge go bhfuil beagnach leath de na sealbhóirí morgáiste ag obair i gceann de na hearnálacha a ndéantar dífear dóibh. Ina theannta sin, tá sócmhainní leachtachta teoranta ag líon mór teaghlach agus b'fhéidir nach leor íocaíochtaí tacaíochta ioncaim chun freastal ar aisíocaíochtaí morgáiste. Leagann sé seo béim ar an tábhacht a bhaineann le sos ó íocaíochtaí chun tacú le riachtanais ghearrthéarmacha leachtachta teaghlach agus tá beagnach 75,000 comhaontú gníomhach reatha i bhfeidhm a chuimsíonn 11 faoin gcéad den mhargadh morgáiste áitiúil. I gcásanna áirithe, mairfidh an turraing ioncaim d'iasachtaithe morgáiste níos faide ná an tréimhse sosa ó íocaíochtaí agus beidh gá le staonadh breise, le hathstruchtúrú nó le réiteach.

Cuirfidh COVID-19 brú ar staid airgeadais na mbanc, ach tá cumas níos fearr ag an gcóras airgeadais anois turraing den sórt seo a iompar, seachas í a mhéadú, de thoradh athléimneacht fheabhsaithe a bhfuil bearta beartais arna nglacadh le déanaí mar thaca léi. Tá athléimneacht na mbanc feabhsaithe de réir a chéile le blianta beaga anuas, sa mhéid go bhfuil feabhas suntasach tagtha ar a leibhéil caipitil agus tá riosca neamhleachtachta níos ísle i gceist ó tharla go bhfuil maoiniúchán bunaithe go príomha ar thaiscí cobhsaí miondíola. Tá cáilíocht chreidmheasa phunanna creidmheasa intíre na mbanc níos fearr anois ná mar a bhí ag tús na géarchéime airgeadais. É sin ráite, meastar go gcuirfidh an turraing ó COVID-19 brú ar seasamh caipitil na mbanc. Tá neamhchosaintí suntasacha díreacha creidmheasa ag an earnáil baincéireachta ar an turraing sa mhéid go bhfuil beagnach dhá thrian d'iasachtú tráchtála agus leath de mhorgáistí cónaithe ag dul chuig iasachtaithe atá in earnálacha leochaileacha. Le sosanna sealadacha ó íocaíochtaí, féachtar leis an turraing láithreach leachtachta do na gnólachtaí agus teaghlaigh sin a mhaolú ach féadfaidh go mbeidh athstruchtúrú breise nó réiteach ag teastáil ó chuid mhór díobh, rud a ghinfidh caillteanais de réir mar a rachaidh cáilíocht sócmhainní in olcas. Is dócha go n-eascróidh brú breise ar staid airgeadais na mbanc as bunbhrabúsacht níos laige de bharr éileamh creidmheasa níos laige, brú anuas ar chorrílaigh úis na mbanc ón timpeallacht rátaí ísle úis, agus costais arda.

Tá sealúchais shuntasacha eastáit réadaigh tráchtála ag earnáil na gcistí infheistíochta agus tá sí idirnasctha leis an gcóras baincéireachta miondíola, ach maolaítear an riosca gearrthéarmach neamhleachtachta go pointe leis na sceidil d'fhuascailtí. Tá earnáil na gcistí infheistíochta in Éirinn ar cheann de cinn is mó ar domhan agus í á tomhas i gcomparáid le haschur eacnamaíoch. Cé gur rioscaí seachtracha den chuid is mó iad na rioscaí toisc go bhfuil béim idirnáisiúnta acu, tá neamhchosaint cistí infheistíochta ar an margadh eastáit réadaigh intíre ag méadú - is ionann anois iad agus aon trian de stoc measta an eastáit réadaigh tráchtála sho-infheistithe. I measc cistí maoine, maolaítear go pointe an riosca neamhleachtachta mar gheall ar fhorleithne cistí iata agus cistí a ligeann d'infheisteoirí a gcuid scaireanna a fhuascailt go hannamh. Tá gearáil níos airde ag baint le cistí maoine Éireannacha i gcomparáid lena bpiaraí Eorpacha, rud a chruthaíonn leochaileachtaí i gcomhthéacs aon laghdaithe ar phraghsanna eastáit réadaigh tráchtála.

Meastar go mbeidh staid airgeadais na hearnála árachais faoi bhrú freisin de thoradh laghdaithe ar luachanna sócmhainní, méaduithe ar dhliteanais thomhaiste mar gheall ar an titim ar rátaí saor ó riosca agus mar gheall ar an iarmhairt atá ar bhrabúsacht ag éilimh a bhaineann leis an bpaindéim. Leanann gnólachtaí árachais saoil agus neamhshaoil de chaipiteal a shealbhú os cionn na gceanglas rialála, rud atá ceaptha cosaint a thabhairt in aghaidh teagmhais shuntasacha anásta amhail COVID-19. Tá an baol ann go mbeidh laghdaithe ar chaipiteal gnólachtaí mar gheall ar an iarmhairt láithreach a bhíonn ag laghdaithe margaidh airgeadais ar luachanna sócmhainní, agus mar gheall ar íosghrádú rátálacha agus laghdaithe ar rátaí saor ó riosca, rud a mhéadaíonn luachanna dliteanas. D'fhéadfadh go mbeadh iarmhairt shuntasach ag an bpaindéim ar thaobh frithgheallta gnó, agus méadófar an iarmhairt sin má chlúdaítear go cúlghabhálach aon éilimh nár praghsáladh nó nár forchoimeádadh ina gcoinne.

Beidh tionchar suntasach diúltach ag géarchéim sláinte COVID-19 ar airgeadas poiblí na hÉireann.

Bhí tacaíochtaí láithreacha rialtais ag teastáil chun go maolófaí an baol go ndéanfaí dochar buan do chumas táirgthe an gheilleagair. Le blianta beaga anuas, bhí airgeadas poiblí na hÉireann ar chonair a bhí measartha dearfach de bharr fás eacnamaíoch láidir agus timpeallacht rátaí ísle úis ach bhí na leibhéil fiachais fós ard i gcomparáid le gníomhaíocht eacnamaíoch. Beidh athrú ar an treocht seo mar gheall ar COVID-19 agus tuartar gurb ionann an t-easnamh don bhliain reatha agus 10.5 faoin gcéad den OIN*. Tá sé seo inchurtha d'éilimh caiteachais gan fasach ar an Státchiste mar aon le titim ghéar ar ioncam ó cháin de bharr gníomhaíocht eacnamaíoch laghdaithe. Tá éiginnteacht mhór ag baint leis an ionchas meántéarmach ach cuidítear leis na costais fiachais reatha le réamh-mhaoiniúchán €28 billiún, mar aon le feabhsuithe ar phróifíl aibíochta an fhiachais phoiblí agus Clár Ceannaigh le haghaidh Éigeandáil na Paindéime (PEPP) arb ionann san iomlán é agus €1,350 billiún ar fud an limistéir euro.

Baineann an Banc Ceannais leas as a chuid beartas macrastuamachta chun cobhsaíocht airgeadais a chur chun cinn in Éirinn agus chun cíoradh a dhéanamh ar an gcothromaíocht idir na rioscaí atá roimh an ngeilleagar agus roimh an gcóras airgeadais agus athléimneacht an chéanna in aghaidh na rioscaí sin.

Ní bhíonn an beartas macrastuamachta ag gníomhú leis féin, bíonn réimse gníomhartha beartais ag tacú le cobhsaíocht airgeadais. I bhfianaise scála gan fasach agus neasacht phaindéim COVID-19, tá lucht déanta beartais ag baint úsáid as bearta físcacha, airgeadaíochta, micreastuamachta agus macrastuamachta chun dul i ngleic léi. Mar aon le soláthar breise cúraim sláinte, tá tacaíocht fhioscach do theaghlaigh agus do ghnólachtaí riachtanach chun go maolófar an éifeacht atá ag an turraing láithreach leachtachta ar an bhfíorgheilleagar. Feabhsaíodh an cumas chun dul i ngleic go láidir leis an bpaindéim trí bhíthin na mbeart in-chomhfhoirmeach airgeadaíochta a tugadh isteach i mí an Mhárta, lena n-áirítear soláthar suntasach leachtachta breise chuig an gcóras baincéireachta Eorpach. Gníomhaigh lucht déanta beartais micreastuamachta chun bonn a chur faoi inúsáidteacht maolán caipitil agus leachtachta. Leis na beartais seo, cumasaítear don chóras baincéireachta tacú le teaghlaigh agus le gnóthaí le linn ghéarchéim eacnamaíoch COVID-19 agus, ar an gcaoi sin, laghdaítear an baol go méadófar an turraing eacnamaíoch de thoradh cúngú géar ar sholáthar creidmheasa.

I mí an Mhárta, d'fhógair an Banc Ceannais go laghdófaí ráta CCyB ar neamhchosaintí Éireannacha ó 1 faoin gcéad go dtí 0 faoin gcéad. Mheas an Banc Ceannais go raibh scaoileadh iomlán an CCyB iomchuí i bhfianaise dhéine iarmhairt phaindéim COVID-19. Tá sé seo i gcomhréir le cuspóir an CCyB chun aon mhéadú ar rioscaí cor chun donais a laghdú trí athléimneacht na hearnála

baincéireachta a chur chun cinn le linn tréimhsí maithe agus trína éascú do na bainc soláthar inbhuanaithe creidmheasa chuig an bhfíorgheilleagar a choimeád ar bun nuair a thagann turraingí chun cinn. Le scaoileadh an CCyB, cuirtear caipiteal arbh ionann é agus €940 milliún ar fáil d'earnáil na baincéireachta miondíola, agus táthar in ann tacú le hiasachtú breise idir €10 billiún agus €16 billiún. Tá sé gceist ag an mBanc Ceannais nach mbeidh aon mhéadú ar an CCyB roimh an gcéad ráithe de 2021 ar a luaithe agus beidh cinntí ina dhiaidh seo ag brath ar dhálaí maicreacnamaíocha agus airgeadais a bheidh i réim.

Tá maolán O-SII inúsáidte go hiomlán chun caillteanais a iompar le linn na tréimhse anáis seo, i gcomhréir lena chuspóir agus i gcomhréir leis na bearta macrastuamachta agus maoirseachta arna nglacadh ag an mBanc Ceannais agus ag an BCE. Tá inúsáidteacht mhaolán O-SII chun caillteanais a iompar le linn tréimhsí anáis ina gné thábhachtach d'fheidhmiú an chreata caipitil mhaolánaigh. Is é is cuspóir do mhaolán O-SII, an dóchúlacht go gclisfidh institiúid a bhfuil tábhacht shistéamach léi a laghdú, agus déantar é a chalabhrú bunaithe ar thábhacht shistéamach gach institiúide. Fad a leanfar de rátaí maolánacha O-SIIanna Éireannacha a thabhairt isteach de réir a chéile le linn na bliana 2021 i gcomhréir leis na sceidil a fógraíodh roimhe seo, tá siad ar fáil chun caillteanais a ionsú le linn tréimhse anáis freisin.

I mí na Nollag 2019, thug an Banc Ceannais an t-athbhreithniú is déanaí dá chuid ar na bearta morgáiste i gcrích, agus beartaíodh nach mbeadh aon athrú ar theorainneacha CIL nó CII nó ar na díolúintí ó na teorainneacha sin. Agus aon trian den iasachtú fós amuigh á chur san áireamh, thángthas ar an gconclúid gur shásaigh na bearta a gculpóirí chun cosaint a thabhairt in aghaidh scaoileadh iomarcach caighdeán frithgheallta, chun athléimneacht iasachtaithe agus iasachtóirí araon a neartú agus chun an fhéidearthacht a laghdú go dtiocfadh bíseanna creidmheasa - praghsanna tithe chun cinn. De réir mar a bhíonn an staid seo ag forbairt, tá faireachán leanúnach á dhéanamh ag an mBanc Ceannais ar an tionchar atá ag COVID-19 ar fheidhmiú na mbeart morgáiste agus ar an margadh morgáiste agus tithíochta i gcoitinne agus beidh sé sin mar bhonn eolais don athbhreithniú bliantúil a dhéanfar sa dara leath den bhliain. Go háirithe, leanfaidh an Banc Ceannais de rannpháirtíocht a bheith aige le hiasachtóirí maidir le feidhmiú an chreata liúntas.

Tá obair an Bhainc Ceannais sa chreat macrastuamachta curtha in ord tosaíochta athuair aige de bharr COVID-19. Ag deireadh na bliana 2019, d'fhógair an Banc Ceannais a chuid príomhthosaíochtaí ó thaobh na macrastuamachta de, agus cuimsíodh bainc, iasachtaithe agus eintitis neamhbhainc. I bhfianaise an athraithe shuntasaigh ar an timpeallacht macra-airgeadais, tá an Banc Ceannais tar éis a bhéim a aistriú ó bhearta *ex ante* lena gcuirfear le hathléimneacht bhreise go dtí bearta a chinntíonn gur féidir leas a bhaint as an athléimneacht sin, de réir mar is cuí, chun tacú leis an ngeilleagar le linn na turrainge eacnamaíche seo. Is ar mhaithe le leas chóras airgeadais na hÉireann atá sé go leanfaidh iasachtú inbhuanaithe do theaghlaigh agus do ghnóthaí - rud a íoslaghdóidh fairsinge an chor chun donais agus a uasmhéadóidh an méid cuirfear leis an téarnamh.

Risk

COVID-19 is an exceptional shock triggering the materialisation of long-identified risks to financial stability and an unprecedented collapse in global economic activity. In contrast to the domestic and Global Financial Crisis of the late 2000s, the financial sector is responding to, as opposed to being at the root of the challenges posed by the pandemic. The outbreak of the pandemic has resulted in the re-pricing of risk premia leading to large falls in risky asset prices and tighter financing conditions globally. The sell-off of risky assets went hand in hand with sharp increases in volatility to levels last seen during the Global Financial Crisis. This has negative implications for macro-financial conditions domestically, especially in key asset markets, which are also sensitive to the significant macroeconomic shock of COVID-19. The immediate and future implications of the COVID-19 outbreak and the necessary public health response will put pressure on the financial position of banks, insurers and investment funds, especially through their exposure to the domestic real estate market and the economic sectors most affected by the containment measures. This strain could be further amplified by the degree of interconnectedness between the financial system domestically and internationally. The public policy response to the COVID-19 shock will result in higher levels of sovereign debt in the euro area. In the absence of mitigants, this re-asserts the possibility of widespread pressures in sovereign debt markets, with negative spillovers to financing conditions for banks, companies and households. A slower than expected recovery, or a second wave of the pandemic resulting in prolonged or repeated public health containment measures, remain a significant source of risk.

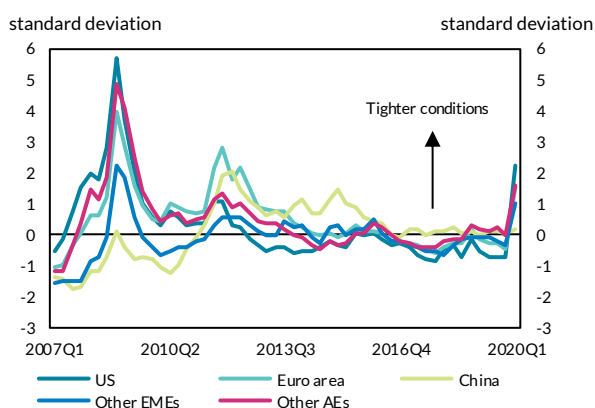
The re-pricing of risk premia has led to large falls in risky asset prices and tighter financing conditions globally

Global financial conditions tightened abruptly with the onset of the COVID-19 pandemic. The global spread of COVID-19 brought an abrupt stop to a prolonged period of accommodative global financial conditions (Chart 1), giving way to precipitous falls in prices of risky assets and commodities while the prices of safe-haven assets, such as gold and US Treasuries increased. The sell-off of risky assets was accompanied by sharp increases in financial market volatility (Chart 2) to levels last seen during the Global Financial Crisis. Falling equity prices and widening corporate spreads were only partly offset by declines in interest rates across most advanced and emerging market economies. Emerging markets experienced a particularly sharp tightening of financial conditions, driven by a sharp increase in their external funding costs fuelled by currency depreciation and capital outflows.

At the peak of the financial market turbulence in March, and amidst a widespread demand for cash, financial market disruption extended to government bond markets and short-term bank funding markets. The US Treasury bond markets – normally one of the deepest and most liquid markets globally – experienced dislocations on the back of forced selling of these securities by highly leveraged investors. Over the same period, responding to actual as well as expected investor outflows, money market funds sought to reduce their commercial paper holdings to raise cash and build liquidity buffers, contributing to disruptions in the commercial paper market. In foreign currency funding markets, the premium paid on US dollar funding in exchange for local currency widened for most currencies.

Chart 1: Financial conditions tightened sharply in 2020:Q1 ...

Global Financial Conditions Index

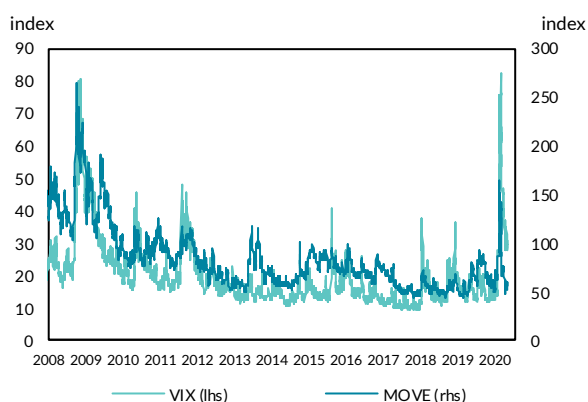


Source: IMF.

Notes: The z-score indicates an observation's distance from the population mean in units of standard deviation. An increase in Z scores signifies a tightening of financial conditions, while a decrease in Z scores signifies a loosening of financial conditions. The standard deviations and means used for the financial conditions indices are calculated over the period 1996–2020. Other EMEs denotes IMF-defined systemically Important Emerging Market Economies other than China. Last observation 2020Q1.

Chart 2: ... as market volatility spiked ...

Volatility Indices; VIX and MOVE



Source: Datastream.

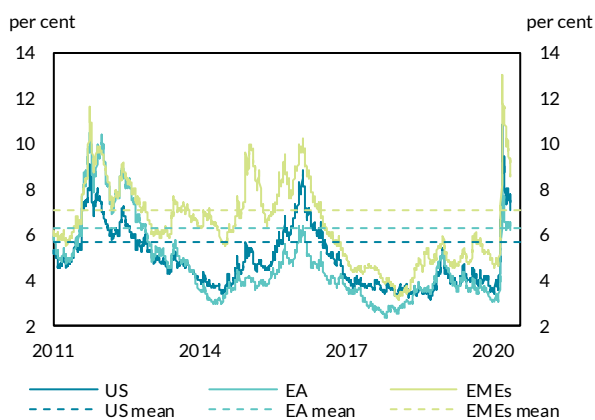
Notes: VIX = Chicago Board Options Exchange Volatility Index. MOVE = Merrill Lynch Option Volatility Estimate. Last update 22 May 2020.

Stress in corporate credit markets was amplified by borrowers' leverage. Corporate debt markets expanded rapidly after the Global Financial Crisis, reaching USD 9 trillion globally, while borrowers' credit quality weakened and underwriting standards eased. At the onset of the COVID-19 shock, investment grade bond spreads widened, as investors started to focus on the large share of BBB credits that are at risk of downgrades and elevated leverage in this market segment. High-yield bond spreads also widened dramatically since late February, particularly for energy and in sectors most affected by the pandemic (Chart 3). Leveraged loan prices experienced sharp declines, about half the drop seen during the Global Financial Crisis at the worst point of the March sell-off (Chart 4). This period of heightened stress also saw sharp redemptions from open-ended investment funds with exposures to corporate debt, both globally and in Ireland (Box 6). The Irish financial system entered into the current period with some direct exposure to these global corporate debt markets (see *Resilience*).

Market functioning has improved on the back of decisive central bank interventions. The US Federal Reserve, the ECB and other major central banks responded to the onset of the COVID-19 shock by employing a range of tools at their disposal. These included public and private sector asset purchases; additional funding and liquidity support to the banking system to support the flow of credit to households and businesses; and the provision of foreign currency liquidity by establishing, or extending, foreign currency swap lines amongst central banks. These interventions built on programmes designed since the Global Financial Crisis, but were deployed in a matter of weeks as a response to the pandemic.

Chart 3: ... and corporate bond spreads widened considerably.

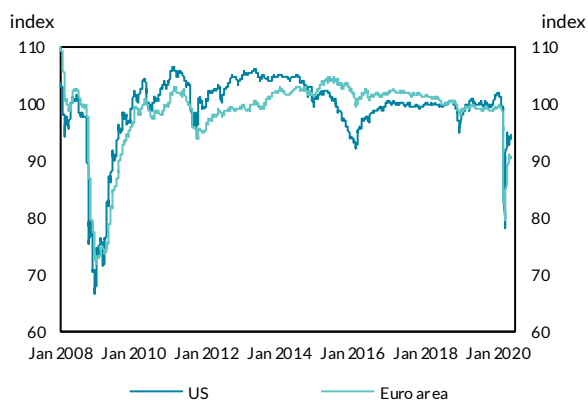
Corporate Bond Spreads



Source: St Louis Fed, BIS, and Central Bank of Ireland calculations.
Notes: ICE BofAML Option-Adjusted Spreads on below investment grade corporate bonds. Dashed lines indicate historic averages since 1998 for US and EA and 1999 for EMEs. Last observation 22 May 2020.

Chart 4: Leveraged loan prices experienced a decline of about half the drop seen in the Global Financial Crisis.

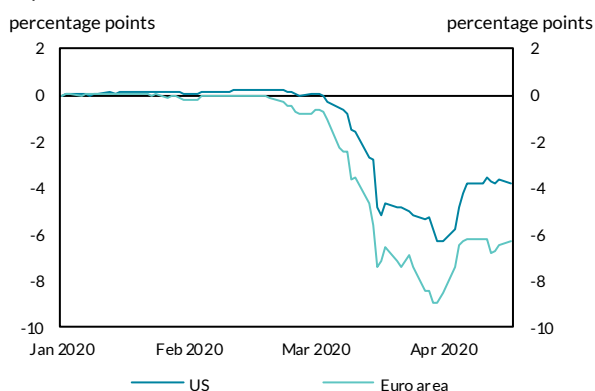
S&P Leverage Loan Index



Source: Bloomberg and Central Bank of Ireland calculations.
Notes: Percentage deviations from a linear trend. Last observation 22 May 2020.

Chart 5: Revisions to expected dividend futures imply sharp contraction in activity

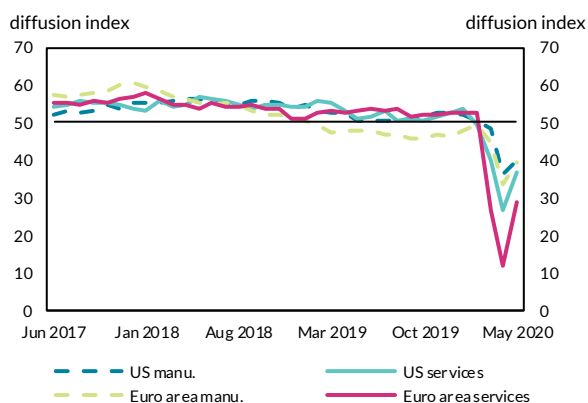
Change in 1 year GDP growth expectations compared to expectation on 01 Jan 2020



Source: Gormsen and Koijen (2020).
Notes: derived from the projection of dividends growth on real GDP growth. The estimated coefficients are used to forecast GDP growth expectations based on the 2-year dividend yields since 01 Jan 2020. Last observation 20 April 2020.

Chart 6: Activity indicators plummeted to record lows.

Manufacturing and Services PMI



Source: IHS Markit.
Notes: Values below 50 indicate contraction. Last observation May 2020.

Despite some reprieve in financial markets more recently, financial market fragility remains given the unprecedented downside risk to the macroeconomic outlook. Projections based on dividend futures, as well as data on earnings expectations, suggest that markets are pricing in drastic revisions to output growth for 2020 with an anticipated strong rebound in 2021 (Chart 5).¹ Consistent with those near-term expectations, activity in the US and EU across services and manufacturing plummeted to record lows in April (Chart 6), and forecasts for global growth have

¹ Gormsen, N. J., & Koijen, R. S. (2020). Coronavirus: Impact on stock prices and growth expectations. *University of Chicago, Becker Friedman Institute for Economics Working Paper*, (2020-22).

become persistently worse.² In the public health sphere, uncoordinated containment measures could lead to repeated virus outbreaks and lockdowns across the globe.³ Likewise, escalating financial market tensions in one region can result in further contagion through global financial markets leading to negative spillovers on economic activity and increased downside risks to economies around the world, with Ireland being particularly sensitive to a tightening in global financial conditions (see Box 1). In particular, stress already evident in emerging and frontier markets, amplified by the drop in oil and other commodity prices so far in 2020, could become more acute.⁴

COVID-19 represents an unprecedented macroeconomic shock

The domestic economic impact of the pandemic has been unprecedented in terms of scale and speed. Within weeks of the initial introduction of containment measures in mid-March, over 600,000 people had lost employment, bringing the adjusted unemployment rate to 28.2 per cent in April.⁵ At the same time, over 43,000 businesses covering 427,400 employees (approximately 17 per cent of the labour force) were in receipt of the Pandemic Wage Subsidy scheme given their fall in revenue due to the COVID-19 shock (Chart 7).⁶ A number of high frequency and survey-based indicators testify to the scale of the shock. There have been sharp declines in consumer and business sentiment.⁷ Activity levels as measured by Purchasing Managers Indices (PMI) collapsed as the containment measures took hold, especially for the services and construction sectors where the reported contractions were the most severe on record.⁸ Credit and debit card-based activities were as much as 40 per cent below normal levels during March and April.⁹

The economic shock related to COVID-19 is pervasive, but felt to different degrees across different sectors and regions. By the nature of the public health crisis being addressed, non-essential businesses which require personal interaction, or where physical distancing is impractical, are most affected (e.g. hotels, restaurants, travel and parts of the retail sector). Box 4 outlines the relative sensitivity across sectors of the economy, highlighting those which are highly or moderately affected. Approximately 80 per cent of businesses, covering almost 70 per cent of

² See [IMF World Economic Outlook, April 2020](#). The IMF has sharply lowered its forecast for global growth in 2020 from 3.3 to -3 per cent, to a level significantly lower than during the Global Financial Crisis in 2008 (-0.1 per cent).

³ [Kohlscheen, Mojon, and Rees \(2020\) "The macroeconomic spillover effects of the pandemic on the global economy" BIS Bulletin, No. 4.](#)

⁴ EM Debt-to-GDP had risen to 220 per cent before the onset of COVID-19, and over one-fifth of global refinancing needs in 2020 relates to EM debt ([IIF Global Debt Monitor, April 2020](#)).

⁵ The adjusted unemployment rate includes those in receipt of the Pandemic Unemployment Payment, who due to the containment measures may not be available for work and not meet the ILO statistical definition of being unemployed. [See CSO release.](#)

⁶ See [Revenue release for details.](#)

⁷ The [KBC Bank Consumer Sentiment Index](#) declined by almost 35 points to 42.6 in April, a record monthly decline. Business sentiment, as measured by the [Bank of Ireland Business Pulse Index](#) fell by almost 40 points to 29.6 in the same month.

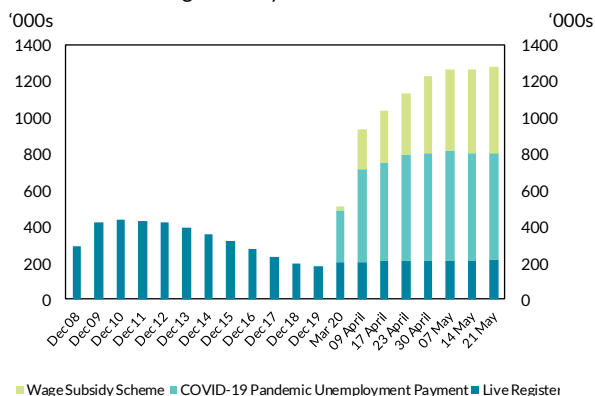
⁸ The [AIB Ireland Services PMI](#) registered 13.9 in April, following a reading of 32.5 in March. Data for May indicates a further, albeit less pronounced contraction. The Ulster Bank Construction PMI came in with a reading of just 4.5 in April. For both indices readings below 50 represent a contraction in activity.

⁹ For more see [Hopkins and Sherman \(2020\) "How has the COVID-19 Pandemic Affected Daily Spending Patterns?"](#), [Behind the Data, Central Bank of Ireland.](#)

employment are either moderately or highly affected by the containment measures required to combat COVID-19.¹⁰

Chart 7: Over 1.2 million people in the labour force are in receipt of State income support

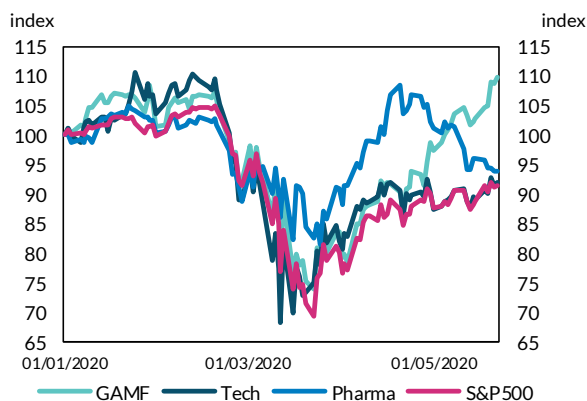
Persons on Live Register, in receipt of the Pandemic Unemployment Payment or a subsidised wage/salary under the COVID-19 Wage Subsidy Scheme



Source: CSO, DEASP, Revenue Commissioners
Notes: Last observation 21 May 2020.

Chart 8: While GAMF reacted strongly to COVID-19 news, they bounced back rather quickly

Sectoral reactions to COVID-19 news



Source: Bloomberg and Central Bank of Ireland staff calculations
Notes: 1 January 2020 = 100. GAMF refers to Google, Apple, Microsoft and Facebook. Tech refers to Adobe, Dell, Intel, Oracle, VMware, and Western Digital. Pharma refers to Alexion, Allergan, Gilead, Mallinckrodt, Merck, Perrigo, Pfizer, and Takeda. Last observation 22 May 2020.

As production declined around the world in response to the emergency, fragilities inherent to Global Value Chains (GVCs) emerged – noteworthy given the importance to the Irish economy of external trade in both intermediate inputs and final goods and services. The implications of Ireland's relative reliance on the external trade of multi-national enterprises, including as part of GVCs, has been highlighted in previous Reviews.¹¹ Global trade had already slowed in early 2020 and EU external trade subsequently declined sharply as Europe became the epicentre of the pandemic through March.¹² While Irish external trade data point to a sharp fall in imports, goods exports have so far been less affected in aggregate terms, owing primarily to the exporting of medicinal and pharmaceutical products and organic chemicals.¹³ Indeed the dominance of particular sectors and firms in Irish external trade may have partially offset the immediate impact of COVID-19 on headline economic activity. The firms and sectors which dominate Irish MNE activity (Pharma, MedTech, ICT) have been among the better performing in terms of market value since the onset of COVID-19 (Chart 8). Corporation tax receipts, which can be sensitive to MNE profitability, have also continued to perform strongly so far in 2020.¹⁴ However the medium- and longer-term outlook will depend on how quickly global demand in general recovers, and any

¹⁰ See McGeever et al., “SME liquidity needs during the COVID-19 shock”, Central Bank of Ireland, Financial Stability Note, Vol. 2020, No. 2.

¹¹ See [FSR 2019 II](#) and [Box 2: Financial stability considerations of being a small, highly globalised economy in FSR 2019 I](#).

¹² On a seasonally adjusted basis, EU goods exports and imports fell by 13 and 10.4 per cent respectively in March compared to February. See [Eurostat News Release](#).

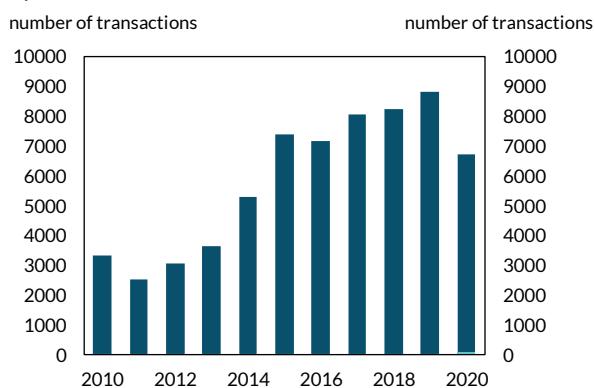
¹³ See [CSO External Trade Statistical Release](#)

¹⁴ See [Fiscal Monitor May 2020](#), Department of Finance. Exchequer returns for June may be more reflective of the corporation tax implications of the COVID-19 shock.

structural changes in global production that might arise as a result of the pandemic with increased on-shoring of activity to larger economies.¹⁵

Chart 9: Residential property transactions have fallen substantially following containment measures

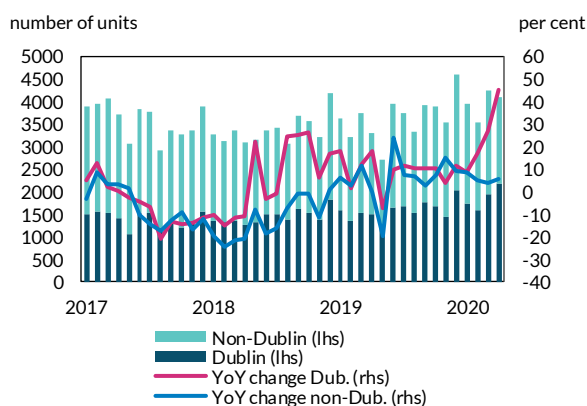
PSRA residential property price register entries for March and April – (2010-2020)



Source: Property Services Regulatory Authority
Notes: Last observation available 22 May 2020.

Chart 10: Notable increase in the number of properties listed for rent in Dublin

Number of properties listed for rent at the end of each month on Daft.ie



Source: Daft.ie
Notes: Last observation April 2020

Early evidence of the effect of COVID-19 on the housing market can be seen in the significant decline in recent entries on the residential property price register. The number of residential property transactions recorded throughout March and April 2020 were at their lowest level since 2014 and down by almost 25 per cent on the same period in 2019 (Chart 9). These transactions would have begun in advance of the arrival of the pandemic, so the effect may be more pronounced in future months. The impact of containment measures on a number of professional services necessary to support transactions (estate agents and valuers, surveyors, solicitors, etc.), could also serve to delay the practical operation of the market. Similarly, the closure of building sites across the country from end-March to mid-May saw a cessation in the delivery of new housing units, at a time when a significant supply shortfall already exists. Industry data suggests that as of late April, 90 per cent of construction activity had ceased in Ireland.¹⁶ As a result, housing output in 2020 is expected to be lower than 2019, and further below estimates of medium term demand.¹⁷ Another immediate effect of COVID-19 has been a rise in available properties for rent, in part due to a shift out of short-term lets arising from the fall in tourism and most notably in Dublin (Chart 10). While this is likely to have contributed to the reduction in asking rents in April, longer term this rental supply is itself sensitive to any changing accommodation preferences for short-term lets and the capacity of the industry to deliver new units to meet overall housing demand.¹⁸

¹⁵ Structural changes in international corporate tax regimes may also contribute to a similar outcome. See [FSR 2019 II](#).

¹⁶ See Goodbody, "Construction during COVID - Ireland a big outlier in Europe", May 1, which contains a link to FIEC's update on the "[Impact of COVID1-19 Crisis on Construction](#)".

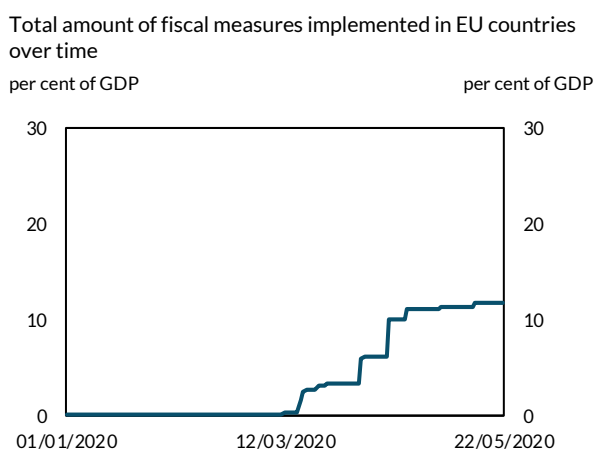
¹⁷ See Conefrey and Staunton (2019) "[Population Change and Housing Demand in Ireland](#)", Central Bank of Ireland, Economic Letter Vol. 2019, No. 14. Completions of 16,000 units in 2020 is the current forecast from the [Central Bank of Ireland, Quarterly Bulletin April 2020](#).

¹⁸ See Daft.ie [Irish Rental Report](#) Q1 2020. Asking prices for rents declined 2.1 per cent in the month of April, the largest monthly decline since March 2009.

A necessary, but significant deterioration in euro area fiscal positions alongside challenging financial sector conditions

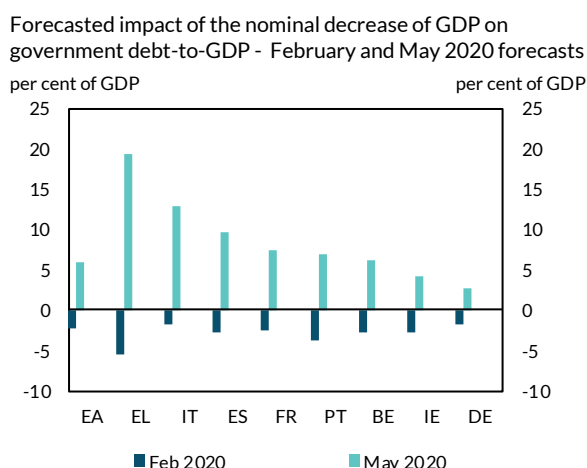
Together with the containment measures, governments activated large spending programmes to limit the immediate economic fallout of the pandemic (Chart 11). The automatic stabilisers related to fiscal policy (lower tax and increased spending) have been complemented with exceptional discretionary measures such as deferral of tax payments, wage subsidy schemes to preserve the link between employers and employees and, in some instances, direct grants to firms. Credit guarantees extended to firms increased the countries' expenditure on state aid and hence their portfolio of contingent liabilities (see Box 2). These measures are necessary to ensure that the health crisis does not lead to a permanent destruction in the productive capacity of the economy. However, the resulting fiscal deficits, alongside the contraction in economic growth, is expected to add substantially to sovereign debt levels across the euro area (Chart 12).¹⁹

Chart 11: EU fiscal response to COVID19 crisis



Source: Blavatnik School of Government, Oxford university, Bloomberg, Datastream and Central Bank of Ireland calculations.
Notes: The original dataset provides the amount of measures in USD, using the exchange rate on the day the measures were announced. Last observation 22 May 2020.

Chart 12: Increases in government debt will also be due to the contraction in GDP



Source: European Commission Spring Forecasts, May 2020.
Note: Impact of the nominal decrease of GDP on general government consolidated gross debt - Excessive deficit procedure (based on ESA 2010), as a percentage of gross domestic product at current prices (excessive deficit procedure).

As a consequence there has been a substantial increase in public debt issuance above what Treasuries across the euro area had foreseen for 2020, albeit at continuing low interest rates supported by accommodative monetary policy. By end-March 2020, the National Treasury Management Agency (NTMA) had already issued bonds for €11 billion, above the lower limit of the band for its planned issuance in 2020, with all issuances being at least 2.5 times oversubscribed. Subsequently the NTMA announced a revised funding schedule in April, with an expected requirement to issue €20-24 billion of debt to finance the 2020 government deficit arising from the COVID-19 shock. As of early June, the NTMA had issued €18.5 billion during 2020, with a 10-year syndicated issue on 9 June being a record 11 times oversubscribed.

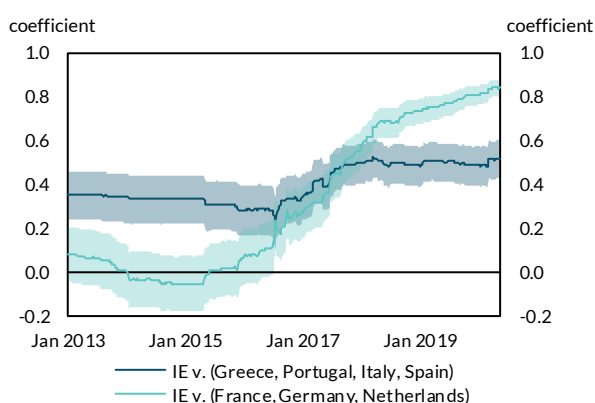
While investor appetite for Irish and euro area sovereign debt generally remains strong, it is underpinned by extraordinary monetary policy support amidst further progress to be made on the Union's financial architecture. Consistent with the experience of the NTMA issuances described

¹⁹ [European Economic Forecast, Spring 2020, European Commission.](#)

above, trading conditions in most euro area sovereign debt markets generally have been relatively orderly, though yield spreads have widened in some countries. Further fragmentation at present has been minimised by the additional monetary policy measures announced by the ECB in light of the COVID-19 shock, such as the Pandemic Emergency Purchase Programme (PEPP - see *Policy*). While sovereign spreads have risen somewhat, yields on Irish debt increasingly move with that of Germany, the Netherlands and France (Chart 13), while yields generally remain low by historical norms (Chart 14). However, as the strain on US Treasuries during mid-March showed, even the most liquid of instruments can in times of stress come under pressure if investors' need for cash is high. If broader concerns around the sustainability of sovereign debt in the euro area were to emerge at the same time as a widespread rush for liquidity, the risk to broader financial stability would be significant.

Chart 13: Irish yields increasingly move with that of France, Germany and the Netherlands

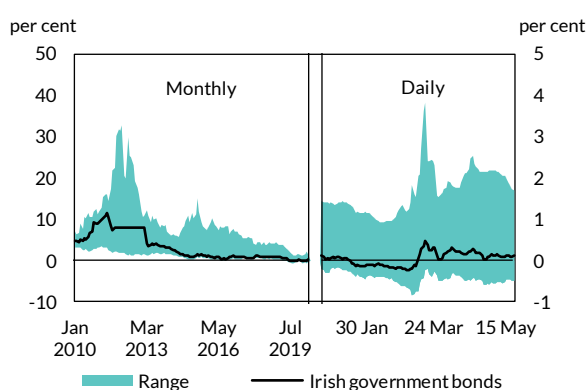
Correlation between Irish bond yields and other countries



Source: Datastream and Central Bank of Ireland calculations
Notes: Time-varying average pairwise cross-country correlations (solid lines) between changes in the Irish 10-year sovereign bonds yields and those of two groups of countries, observed at a weekly frequency, Jan 2013-May 2020. The correlation is computed using a window size of 240; calculations start in Jan 2002. Shaded areas indicate 95 per cent confidence intervals. Last observation 22 May 2020.

Chart 14: Sovereign bond yields remain low

Euro area Sovereign bond yields



Source: Bloomberg and Central Bank of Ireland calculations
Note: Data are for a time-varying sample of 16 euro area Member States. Range refers to the spread between the largest and smallest yield on sovereign bonds. Left pane shows the monthly values over the period 31 January 2010 to 22 May 2020 (left axis). Right pane shows the daily values over the period 1 January 2020 to 22 May 2020 (right axis).

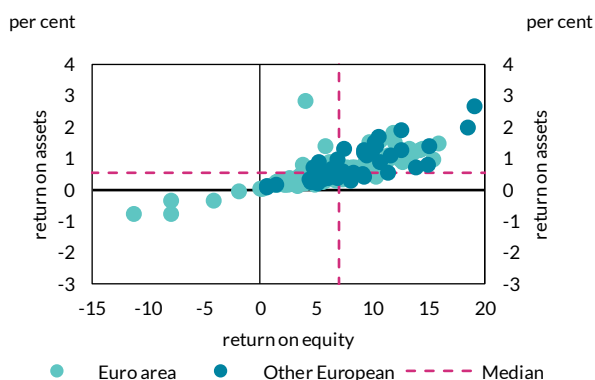
Perceptions of sovereign debt sustainability in the euro area remain influenced by the effectiveness of a comprehensive, Union-wide financial architecture. The euro-area sovereign crises of a decade ago highlighted the potential negative feedback loop that can develop between ailing banking systems and sovereigns. At the time, governments of countries with weakly capitalised banks often bore substantial fiscal costs arising from the need to provide support to the banking system. Ensuing concerns over sovereign creditworthiness spilled back to the banking system via losses on holdings of domestic sovereign bonds. A severe macroeconomic shock, such as that stemming from COVID-19, can act as catalyst that can trigger this feedback loop.

Profitability across the euro-area banking sector remains comparatively low, and markets are pessimistic about the outlook for bank profitability. Prior to the COVID-19 pandemic, the profitability of many euro-area banks lagged behind international peers (Chart 15). Combined with a weak and deteriorating market perception of future profitability as a result of pandemic-related losses, the price-to-book ratio for many European banks, including Irish retail banks, has fallen further below par (Chart 16). Low valuations imply banks may find it difficult to raise capital

through market issuance in the future, forcing them to delever instead to maintain capital ratios at appropriate levels.²⁰ If the economic recovery from the COVID-19 shock is especially protracted, losses may be even greater than expected, reducing capital levels even further and, subject to market reaction, causing further contraction in the size of the banks' balance sheets. This self-reinforcing dynamic is a significant tail risk, for which substantial macroprudential and supervisory policy action has been taken to mitigate (see *Policy*).

Chart 15: Low profitability persists across euro area banks

Various measures of bank profitability across Europe

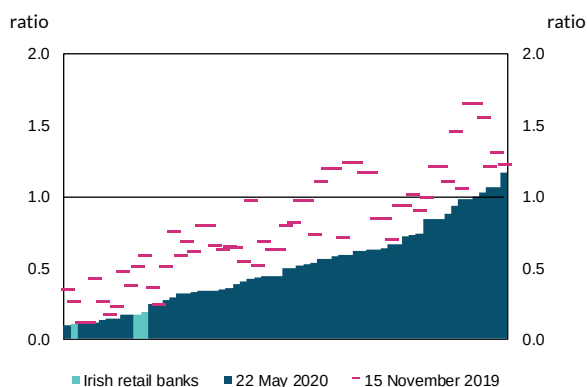


Source: S&P Global

Notes: Data relate to a sample of 131 European banks. Data for year-end 2019.

Chart 16: Market perception of European banks remains negative.

Price-to-book ratios for European banks



Source: Bloomberg

Note: Data are for a sample of 63 European banks. Last observation 22 May 2020.

While measures have been taken to mitigate the sovereign-bank feedback loop in the euro area in recent years, the overall framework remains incomplete. The establishment of the Single Supervisory Mechanism (SSM), the Single Resolution Mechanism (SRM) and the adoption of the Bank Recovery and Resolution Directive have improved bank supervision, capitalisation, resilience, and resolvability. The establishment of the ESM and ECB policy measures have also eased market perceptions regarding fragmentation risk. Some key elements of the financial architecture, however, remain incomplete. Additional measures to further shield banks and governments from periods of contagion, such as the creation of a euro area-wide integrated deposit insurance scheme and a common safe asset, remain a work in progress.

The comprehensiveness and design of the European fiscal response will influence the financial stability outlook. The European Commission and the Eurogroup have agreed or announced a number of emergency measures, covering direct funding to Member States and the provision of guaranteed loans to SMEs under the auspices of the European Investment Bank (EIB), amounting to €200 billion. Resources mobilised by EU authorities by mid-May were approximately €940 billion (excluding national liquidity measures), roughly 8 per cent of 2019 euro area GDP. As well as the emergency measures there has also been agreement to consider the funding necessary to support recovery and how the multi-annual EU budgetary framework can best be used to achieve this across the EU.²¹ Draft measures have been published, covering grants and loans to Member States totalling €750 million and financed through issuing an EU debt instrument backed by an EU-

²⁰ Investor demand may also differ across the different types of instrument that banks issue which they can use toward overall capital demand (core equity, AT1, Tier 2, etc.).

²¹ See [account of European Council meeting 23 April 2020](#).

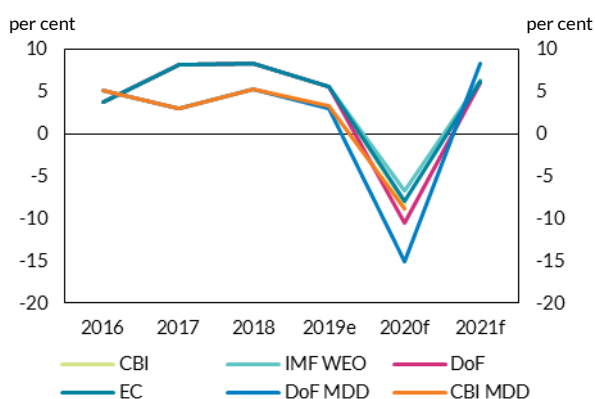
wide digital tax, carbon-related taxes or the operation of the Emissions Trading Scheme.²² The comprehensiveness of these initiatives, and the distribution of their impact, will be important in minimising the risk of financial fragmentation in the euro area and avoiding further strain on sovereign debt markets.

A sharp deterioration in the macro-financial outlook in Ireland, with material further downside risks

The onset of the COVID-19 shock has led to an abrupt deterioration in the macro-financial outlook for Ireland. Depending on the success of the containment measures, most current projections expect that the worst of the economic impact will be evident in the second quarter of 2020, with a gradual recovery to begin in the third quarter. Even with this trajectory, the unemployment rate is still expected to average in the mid-teens for 2020 as a whole, with the domestic economy to contract by between 9 and 15 per cent (Chart 17).²³ However, even these near-term expectations are subject to much greater uncertainty than usual.

Chart 17: Recent projections for economic growth

Annual growth in real GDP and Modified Domestic Demand

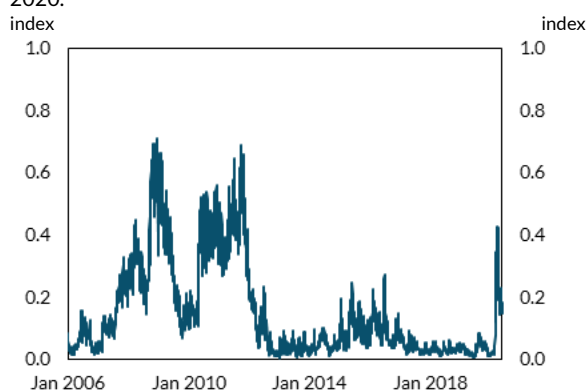


Source: Department of Finance, Central Bank, European Commission and IMF

Notes: Forecasting data as of spring 2020

Chart 18: Irish financial market stress rose to levels last seen during the sovereign debt crisis

Irish Composite Stress Index (ICSI). January 2006 – May 2020.



Source: Central Bank of Ireland.

Notes: The ICSI is a weighted composite of five market sub-indices (Banking=0.30, Bond=0.15, Equity=0.15, FX=0.25, Money=0.15) that is further adjusted to account for degree of correlation amongst sub-indices. Daily frequency. Last observation 22 May 2020.

The COVID-19 related turbulence in global financial markets has also been evident in Irish market conditions, reflecting the expected materialisation of the economic downturn and adding to the downside risks to the macro-financial outlook. Real-time measures of systemic stress across a range of indicators for Irish financial markets, covering bonds, equities, banking and foreign exchange markets, largely correspond to the wider global market developments in light of COVID-19. The Irish Composite Stress Indicator (ICSI) spiked in early March to levels not seen since the 2011 euro area sovereign debt crisis, while subsequently easing back to conditions similar to the

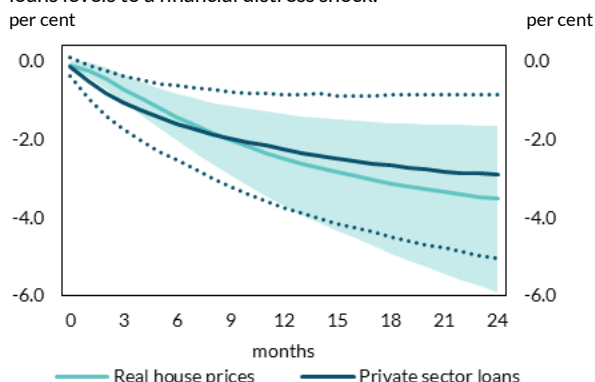
²² See [Commission Proposal 2020](#).

²³ [Central Bank of Ireland Quarterly Bulletin, April 2020](#). [Department of Finance Stability Programme Update, April 2020](#).

period of the Brexit referendum in 2016 (Chart 18).²⁴ As well as being a real-time indicator of economic and market conditions and expectations, financial market conditions themselves impact the real economy, especially if the banking system or the sovereign are particularly affected.²⁵ For example, an unanticipated worsening in financial conditions (which increases the ICSI by 0.1 units on impact) is estimated to lead to a reduction in real house prices of 3.5 per cent and to a decrease in private sector loans of 2.9 per cent over a two-year horizon (Chart 19). This would be before any impact of broader economic conditions are considered.²⁶

Chart 19: Financial market stress distress may lead to a decrease of both house prices and private sector credit.

Responses of real house prices levels and of private sector loans levels to a financial distress shock.

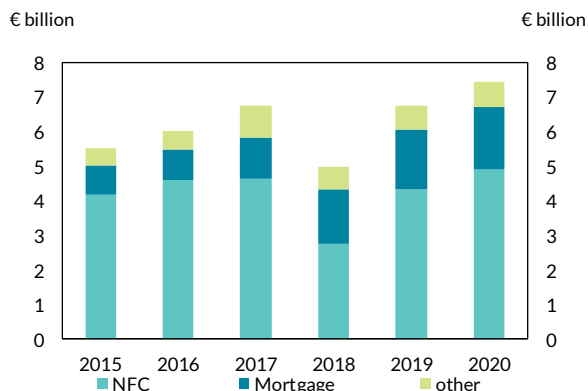


Source: Central Bank of Ireland and CSO.

Notes: The chart shows the impulse responses of real house prices (in levels) and of private sector loans (in levels) to a financial distress shock normalized to a 0.1 units increase in the ICSI. The bootstrap median estimates and the 90 per cent confidence intervals (CIs) are reported (dashed lines refer to CI of private sector loans). The impulse responses are computed over a 24 months forecast horizon.

Chart 20: Pre-COVID-19 new lending was increasing

Volume of new business lending to Irish residents



Source: Central Bank of Ireland

Note: New lending data excluding renegotiations for households and NFCs. Data are for the first 3 months of each year. Last observation: March 2020.

The sharp deterioration in the macro-financial outlook is also likely to lead to reduced demand for credit, alongside tighter financing conditions. Banks and credit unions may see a reduction in some forms of new lending; especially longer-term products for expansion or investment (e.g. term loans for businesses or mortgages for households). Instead, customers may look towards lenders for overdrafts and short-term credit to support immediate liquidity needs. Overall lending could decrease significantly, which may have implications for future profitability (see *Resilience*). The

²⁴ See [Box 5, Central Bank of Ireland \(2016\), Macro-Financial Review](#). The ICSI combines information on 16 financial markets series representative of money, bond, equity, banking and foreign exchange markets by following the methodology proposed by Hollo et al. (2012) which develops a financial stress index for the Euro area as whole, namely the Composite Indicator of Systemic Stress (CISS). For more see [Hollo, Kremer and Lo Duca \(2012\) "CISS - A composite indicator of systemic stress in the financial system" Working paper series No. 1426, European Central Bank](#). A similar monthly indicator developed by Duprey et al. (2017), the country-level index of financial stress (CLIFS) is maintained by the ECB. For more see [Duprey, Klaus and Peltonen \(2017\) "Dating systemic financial stress episodes in the EU countries" Journal of Financial Stability, 32, pp.30-56](#).

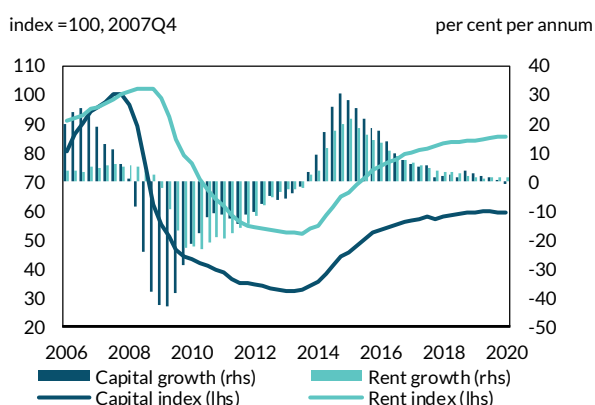
²⁵ The latest Bank Lending Survey results also point toward an expected tightening in credit conditions by banks in response to the economic shock of COVID-19. See [Byrne, Holton and Parle \(2020\) "COVID-19: Bank credit conditions and monetary policy", Economic Letter, Vol. 2020, No. 5](#).

²⁶ For technical details on the estimation of a mixed-frequency VAR for the Irish economy see [Barham, Parla and O'Brien \(2019\), Financial market distress and the macro-financial environment in Ireland, in FSR 2019:II](#). For technical details on the mixed-frequency VARs see [Ghysels \(2016\) "Macroeconomics and the reality of mixed frequency data", Journal of Econometrics, 193\(2\), 294-314](#).

latest monthly data available for March fails to capture the full effects of the pandemic on the domestic economy. New lending in the first three months in 2020 was 10 per cent higher than in 2019 (Chart 20). However, exploratory data using the activity on the Central Credit Register shows a sharp reduction in credit enquiries during April – with mortgage-related enquiries being some 50 per cent lower than what they had been in early March.²⁷

Chart 21: Commercial property capital values and rents have stabilised at levels well below previous peaks

CRE capital value & rent indices and annual growth rates

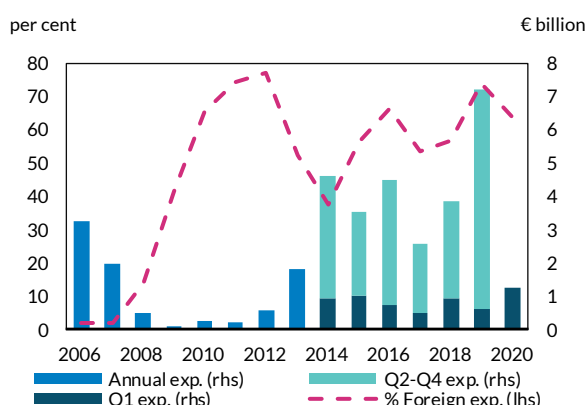


Source: MSCI

Notes: Valuations for 2020Q1 (last observation) include a “material uncertainty” clause (as guided by the RICS) due to the impact of COVID-19 on the market.

Chart 22: 2019 was a record year in terms of investment in Irish CRE, a large portion of which originated abroad

Investment expenditure on Irish CRE, including share from abroad



Source: CBRE

Note: Data for 2019 includes the sale of Green REIT for €1.3bn. Last observation 2020Q1.

The price of Irish commercial real estate assets appears to have been stabilising prior to the arrival of the COVID-19 virus. Despite the recent moderation in the growth of capital values and rents (Chart 21), commercial real estate (CRE) continued to attract significant volumes of investment, largely from abroad in early 2020 (Chart 22). The spread between the Irish CRE yields and domestic sovereign bond yields remained well above its long-run average in 2020Q1 (Chart 23), suggesting that the risk premia associated with investment in Irish commercial property may not have been excessively compressed. Similarly, Irish CRE yield and spread were broadly similar to other European markets.

While an increase in the involvement of foreign investors and non-bank entities in the CRE market can help increase liquidity and broaden risk sharing, it can also give rise to vulnerabilities that facilitate the transmission of the global impact of the COVID-19 pandemic. Irish domiciled, largely foreign funded, real estate investment funds (REIFs), are estimated to hold about one third of the identifiable stock of “invested” Irish CRE.²⁸ Further, 60 per cent of the cumulative sum invested in Irish CRE since 2014 originated from overseas (Chart 22). The investment behaviour of such entities will always be affected by market uncertainty, shifts in sentiment towards individual countries and/or sectors, and changes in global financial conditions. In the short-run, the retail and leisure sectors in many countries have suffered as a result of COVID-19. Longer-term structural

²⁷ See [McElligott, Sherman and Woods \(2020\) “Has demand for new loans changed during the COVID-19 crisis”](#). A similar finding emerges from the latest Bank Lending Survey, which notes a decline in credit demand across a number of categories.

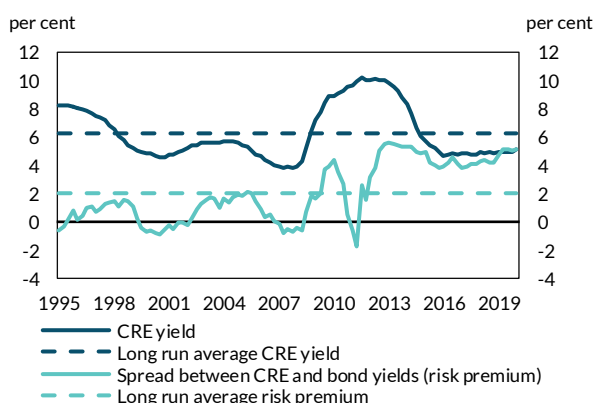
²⁸ See [Coates et al., “Who invests in the Irish commercial real estate market? An overview of non-bank institutional ownership of Irish CRE”, Central Bank of Ireland, Financial Stability Note, Vol. 2019, No. 6.](#)

changes in work practices, such as more use of remote working, could lead to lower levels of demand for office space in the future. These factors are likely to negatively affect the value of CRE investments, part of which may be reflected in the market value of publicly traded Irish real estate investment trusts (REITs) (see *Resilience: Investment funds*). In addition, any reversal in risk pricing in other asset markets will have repercussions for the financing of commercial property markets, as investors may seek investment opportunities elsewhere.

A sudden stop or reversal in foreign investor appetite for CRE would have adverse consequences for the financial system and the wider economy. The subsequent drop in commercial property prices could have negative implications for the real economy, through knock-on collateral, wealth, investment and employment effects, as €2.4 billion of bank lending to non-real estate NFCs is collateralised by Irish CRE. The ability of NFC customers to have such debt re-financed could be impaired if the value of their CRE collateral declines substantially. Such a development would also likely have spillover effects for Irish retail banks and other financial institutions active in the property market, either directly through lending to the CRE sector, or indirectly through debt exposures, including the extension of credit lines to institutional investors such as and REITs.²⁹

Chart 23: CRE yields stable and while below historical average are well above domestic sovereign yields

Commercial property yields and risk premia

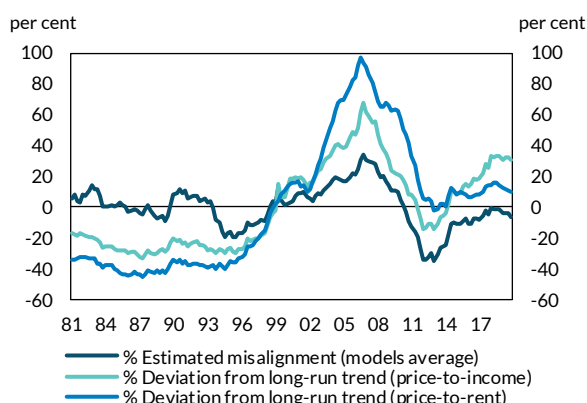


Source: MSCI and Datastream

Notes: Risk premium / spread is the difference between the yield on Irish CRE (calculated as the rent passing on a property at the end of a period, divided by its net market capital value) and the yield on an Irish 10 year government bond. Last observation 2020Q1.

Chart 24: House price valuations somewhat below long-run estimates of fundamental levels, but high compared to income or rent on a historical basis

Estimates of residential property price misalignment



Source: CSO & Central Bank of Ireland calculations

Note: Model-based series is the average of 3 reduced-form house price models in Kennedy, O'Brien and Woods (2016). Last observation 2019Q4.

In the housing market, while the immediate impact of the containment measures presented logistical challenges, the longer-term implications are linked to the broader economic developments influencing demand, supply, and overall confidence – all of which depend on the progression of the pandemic itself. The shock to income and loss of employment arising from the virus will hinder the ability of some households to secure or service mortgages for a time. Mortgage approvals in March and April 2020 were down 30 per cent on the equivalent period in 2019.³⁰ House price growth had been moderating in the months before the virus appeared, likely reflecting a number of factors including Brexit-related uncertainty, a growing supply of properties

²⁹ Approximately 8 per cent of Irish retail banks total domestic loan book is directly related to the domestic CRE sector.

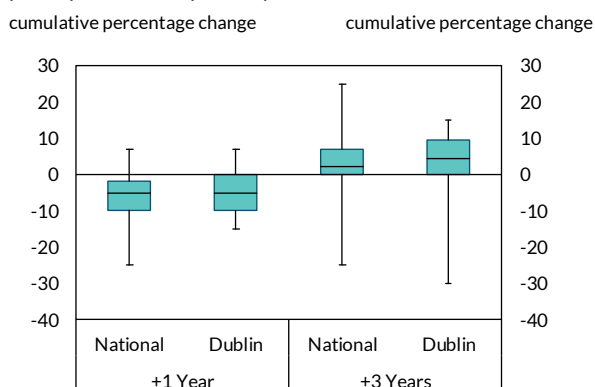
³⁰ According to BPF, 4,601 mortgages for the purchase of residential property were approved in March and April 2020, see BPF [Mortgage Approvals](#).

and affordability constraints. Thin market conditions could see significant house price volatility in the near term with the trend influenced by the progression of the pandemic. Almost 8 in 10 respondents to the latest Central Bank/SCSI Property Survey (2020Q1) expect property prices to decrease in the short-term. The median expected house price fall nationally over a one-year time horizon is 5 per cent (Chart 25). Looking further ahead, the majority of survey respondents are forecasting a relatively anaemic rate of house price growth over the medium term. By the end of 2023Q1, participants' median expectation is for national house prices to be just 2 per cent higher than they were at the end of 2020Q1.

On the eve of the restrictions, house price valuations were found to be somewhat below long-run estimates of fundamental levels, but remained high compared to income or rent on a historical basis. The suite of model-based approaches used by the Central Bank to assess misalignment in house prices show that actual prices were at the time somewhat below what would be expected given economic fundamentals (Chart 24). This is explained, in part, by relative shortfall in supply compared to medium-term estimates of demand in recent years. Statistical indicators of house price valuations, such as house price-to-rent and house price-to-income ratios, however, exceed historical averages. Higher positive deviations from long-run averages of price-to-income are typically associated with higher probabilities of house price declines in the future, especially when shocks occur.

Chart 25: Property professionals' median expectation is for house prices to fall over the coming year and to rise marginally over the medium term.

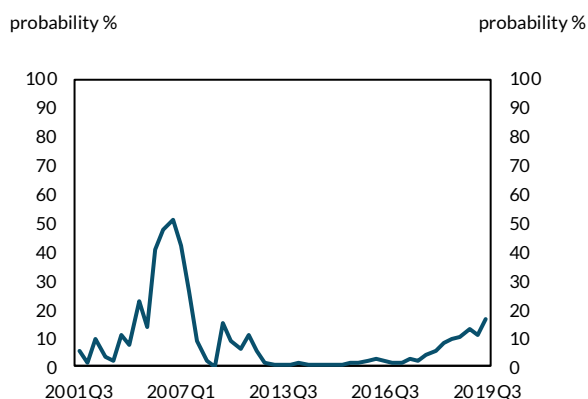
Distribution of Central Bank/SCSI property survey participants' house price expectations



Source: Central Bank/SCSI Property Survey
Notes: +1 year and +3 year time horizons relative to 2020Q1. Minimum, maximum, median, 25th percentile and 75th percentile values across each time horizon are included in the chart.

Chart 26: Macro-financial vulnerabilities were building in the period preceding the COVID-19 outbreak

Systemic banking crisis likelihood



Source: Central Bank of Ireland EWS for banking crises.
Notes: Last observation 2019Q3

Overall, the COVID-19 shock occurred when the domestic macro-financial environment had built up a number of vulnerabilities, but not to the same scale as prior to the financial crisis a decade ago. Several early warning indicators were pointing towards a gradual build-up in macro-financial vulnerabilities (Chart 26).³¹ These were primarily driven by developments in house price valuations and credit, but also indirectly reflect market developments, involving trade and Brexit-related withdrawal agreement tensions, which were a feature of the political landscape

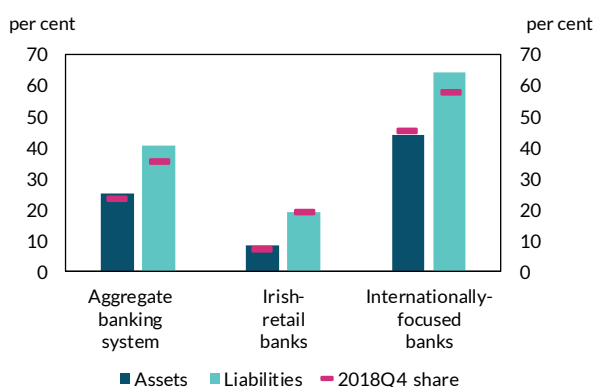
³¹ See O'Brien and Wosser (2018) "An early warning system for systemic banking crises: A robust model specification", Central Bank of Ireland Research Technical Paper, Vol. 2018, No. 9 for more details on the Central Bank of Ireland's systemic banking crisis EWS.

throughout 2019H2. However, despite this increased build-up of vulnerabilities towards the end of 2019, and the subsequent COVID-19 related shock, there are two clear differences between this period and the previous financial crisis. First, the level of macro-financial imbalances has been much lower than in the 2004-2007 period. Second, given the various macroprudential and supervisory measures introduced over recent years, the banking system's current resilience to shocks is much higher than it was a decade ago (see *Resilience*). Indeed, previous settings of the CCyB had been consistent with the macro-financial environment at the time.

The interconnected nature of the financial system and the market concentration in domestic deposits and credit may magnify the effects of the financial and economic shock of COVID-19. As a result of Brexit, some cross-border and intra-financial system activities of internationally-focused banks that were formerly conducted in the UK have been transferred to their Irish entities (Chart 27), which could allow for the transmission and amplification of risk. These firms have a low degree of connection to the domestic economy and the Irish retail banking sector but given their business models, are more exposed to potential disruptions in global capital markets. A significant direct exposure of the domestically relevant banks, insurers and investment funds to one another is the funding provided by retail banks to resident funds investing in Irish CRE (see *Resilience*). Another is the credit union sector, where approximately 30 per cent of their assets are deposits with, or bonds issued by the Irish retail banks. More broadly, the domestic economy remains reliant on a small number of banking groups for the majority of its lending (Chart 28). The greater the concentration of lending within a small group of institutions, the more important those firms will be to the subsequent economic recovery. Ensuring that distress for one of these institutions does not disrupt the sustainable provision of financial services to the real economy is the underlying rationale for the O-SII buffer (see *Policy*).

Chart 27: The interconnectedness of the banking system has increased

Financial assets and liabilities held vis-à-vis other financial Institutions

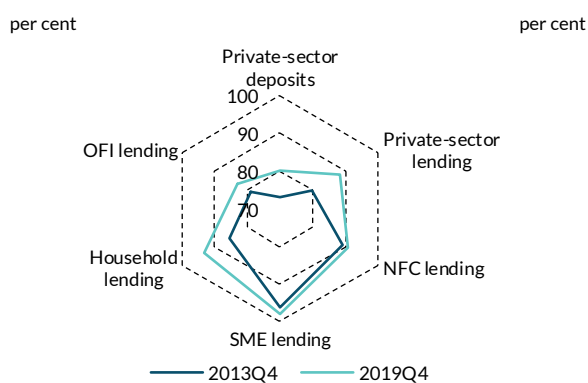


Source: Central Bank of Ireland

Notes: Data are consolidated. Assets include debt instruments, loans and advances to other financial institutions. Liabilities include derivatives, short positions and deposits held by other financial Institutions. Data as at 2019Q4

Chart 28: Key lending and deposit markets remain heavily concentrated in a small number of banks

Market share of five largest banking groups



Source: Central Bank of Ireland

Note: Data are adjusted for group structure. Credit union and are grouped together. Five largest banking groups are calculated per category and may not be the same across markets or points in time.

The immediate near-term economic impact of the COVID-19 outbreak poses significant challenges to financial stability, but the overall financial stability risk is explicitly linked to the course of the pandemic and the strength of the subsequent economic recovery, both of which are subject to a high degree of uncertainty. The speed at which the economy can recover, and the risks to financial stability can be contained, will depend on a number of key factors:

- the success or otherwise of the containment measures and advances in clinical treatments or a vaccine for COVID-19, with the prospect of subsequent waves of the pandemic being of particular concern,
- the length of the necessary containment measures both domestically and in major trading partners,
- the capacity of the financial system, businesses and households – both domestically and globally – to absorb the shock, such that it is not amplified (see *Resilience*),
- the ability of policy measures to sustainably mitigate the immediate economic shock, reduce uncertainty, restore confidence and minimise longer-term scarring on potential growth (see *Policy*).

Considering all these factors, the range of scenarios for the macro-financial environment over the coming years is particularly broad, but more likely to be toward the lower end of probable outcomes in the medium term (see Box 3). The longer it takes to combat the public health crisis, the greater the risks to the macro-financial outlook and the likelihood that challenging liquidity conditions will turn into solvency issues for households, businesses and, by implication, parts of the financial sector. If market participants' expectations of future outcomes end up being too optimistic, should less favourable 'tail' outcomes begin materialising, there could be a further market correction and a greater tightening of financing conditions.

Any COVID-19 related tail-risk scenario over the medium term could be compounded by the materialisation of other significant risks facing the Irish economy and financial system, such as disruptive frictions in the future EU-UK relationship. Negotiations continue on the post-transition relationship between the EU and the UK following Brexit. At present, the deadline for concluding those negotiations and establishing such a relationship is end-2020. The Central Bank, working with other authorities domestically and internationally, has taken action to ensure that the most material and immediate risks to the provision of cross-border financial services from a disorderly exit of the UK from the EU's Single Market have been mitigated during the transition phase. However, the macroeconomic shock of reverting to a WTO regime for trade in goods between the EU and UK from 2021 could be material for Ireland, with more severe effects in certain regions and sectors. The degree to which this remains the case will depend on the extent of overlap between the COVID-19 shock already being experienced and any marginal impact of a disruptive EU-UK trading relationship from end-2020. The pass-through of such a shock to households and firms' capacity to service existing debt would present further challenges to financial stability.³²

³² See [FSR 2019:II](#).

Box 1: Global financial conditions and downside risks to growth: lessons from past shocks

By Lorenz Emter (International Analysis and Relations)

The COVID-19 pandemic has led to a substantial tightening of global financial conditions, which poses risks to global macroeconomic and financial stability. This Box shows that tighter global financial conditions lead not only to worse median growth outcomes, but additionally severely increase downside risks to growth in countries around the world, including Ireland.¹ In fact, Ireland shows a stronger reaction at the lower tail of the conditional GDP distribution than the EA average. Country characteristics such as relatively high foreign currency liability exposures, high levels of private sector leverage, and less flexible exchange rate arrangements can increase vulnerability to such shocks.

To estimate the effect of a tightening in global financial conditions, we use a Bayesian panel quantile vector autoregression (BPQVAR). This model is applied to a quarterly panel of macroeconomic and financial data for 44 advanced and emerging market economies, spanning the period from 1980Q1 to 2019Q2.² In line with the literature, variation in US financial conditions is assumed to be the prime mover of global financial conditions.³ US financial conditions are measured by the excess bond premium (EBP) developed by Gilchrist and Zakrajšek (2012) which captures variation in the average price of bearing exposure to US corporate credit risk, above and beyond the compensation for expected defaults and has been shown to be informative about future economic activity in the US.⁴

Two key results emerge. First, deteriorating global financial conditions have strongly asymmetric effects on the conditional distribution of GDP growth across countries (Chart A). Hence, the conditional distribution of GDP growth changes shape. That is, tighter global financial conditions lead not only to worse median outcomes, but additionally severely increase downside risks to growth, or growth-at-risk, across countries. The effect of the shock at the 10 per cent quantile is up to four times stronger than the effect at the median. While a one standard deviation increase in the US EBP leads to a reduction of GDP growth by 0.7 percentage points (annualised) on average across countries, the lower tail of the conditional GDP growth distribution is reduced by 2.6 percentage points. In March, the EBP increased by 2.4 standard deviations implying that the 10 per cent quantile of the conditional growth distribution would be shifted downwards by an annualised 6.2 percentage points on average across countries, according to our model. The effect at the 90 per cent quantile is positive and less pronounced. Dissipating only after 8 quarters, the effects on the tails of the growth distribution are also more persistent than at the median.

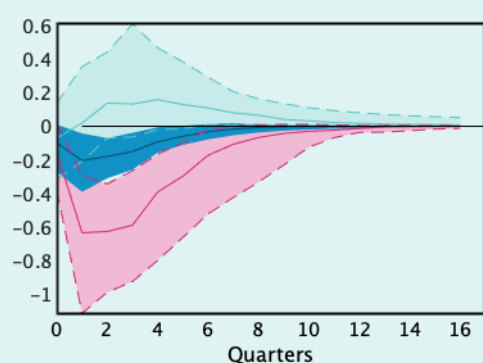
Second, we find substantial heterogeneity in the impact of the shock across countries, with Ireland showing a stronger reaction at the lower tail of the conditional GDP distribution than the EA average (Chart B).⁵ Structural country characteristics can explain how strongly shocks to US financial conditions affect the lower tail of the GDP growth distribution in individual countries. Specifically, we find that the asymmetry is particularly strong for countries with relatively high foreign currency liability exposures, high levels of private sector leverage, and less flexible exchange rate arrangements, which includes countries in a currency union such as the EA. Moreover, financial openness and financial market development per se are not significantly related to the size of the response when conditioned on the other factors mentioned above. These findings highlight policy dimensions that may affect the impact of deteriorating global financial conditions on downside risk to growth. The fact that Ireland

shows a stronger reaction at the lower tail of the conditional GDP distribution than the EA average could be explained by a combination of the factors discussed as well as by the significant contribution MNEs make to Irish GDP growth and the fact that US financial conditions are particularly important for these, mostly US, companies.

As laid out in the *Review* and *Quarterly Bulletin*, the COVID-pandemic affects the real economy through supply, demand, as well as uncertainty channels. The results presented here focus only on the estimated effect of a shock to global financial conditions on the conditional distribution of GDP growth. Unprecedented monetary, fiscal, as well as macroprudential measures taken by authorities around the world aim to counteract the effects.

Chart A: GDP growth impulse response to an EBP shock

percentage points



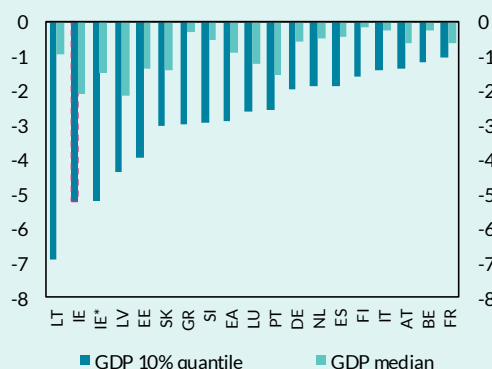
Source: Authors' calculations.

Notes: Mean group estimate of the IRFs across 44 advanced and emerging market economies to a one standard deviation increase in the US EBP. Blue line depicts IRFs with GDP at the median, light blue line with GDP at the 90 quantile, and red lines with GDP at the 10 per cent quantile. Shaded areas show one standard deviation across individual country IRFs. The underlying model also includes CPI and short-term interest rates and two lags of all variables. Real GDP and CPI enter in log differences. The variables are ordered as follows: EBP, GDP, CPI, interest rates.

Chart B: GDP growth impulse response to an EBP shock across EA

percentage points

percentage points



Source: Authors' calculations.

Notes: 4-quarter sum of the IRF of log difference in real GDP at the 10 per cent quantile and the median to a one standard deviation increase in the US EBP. IE* denotes results for GNI*.

¹ The box is based on Beutel, J., Emter, L., Metiu, N., Prieto, E. and Schueler, Y., (2020), "Dilemma or Trilemma? Evidence from the international transmission of US financial shocks to downside risks to growth", *mimeo*, [available at SSRN](#).

² Countries included are: AUS, AUT, BEL, CAN, CHE, CHL, CHN, COL, CZE, DEU, DNK, ESP, EST, FIN, FRA, GBR, GRC, HKG, HUN, IDN, IRL, ISL, ISR, ITA, JPN, KOR, LTU, LUX, LVA, MEX, MYS, NLD, NOR, NZL, PHL, POL, PRT, RUS, SGP, SVK, SVN, SWE, THA, ZAF.

³ US financial conditions are an essential determinant of global financial conditions because the US dollar plays an important role as funding currency for international financial intermediaries and as currency of denomination for portfolios worldwide. See, for example, Arregui et al. (2018), Miranda-Agrippino and Rey (2019).

⁴ The results are qualitatively similar using alternative measures of US financial conditions, for example the Chicago FED National Financial Conditions Index (NFCI).

⁵ This result holds if GNI* is used instead of GDP for Ireland.

Box 2: Liabilities beyond government debt in European Member States and Ireland before the COVID 19 pandemic

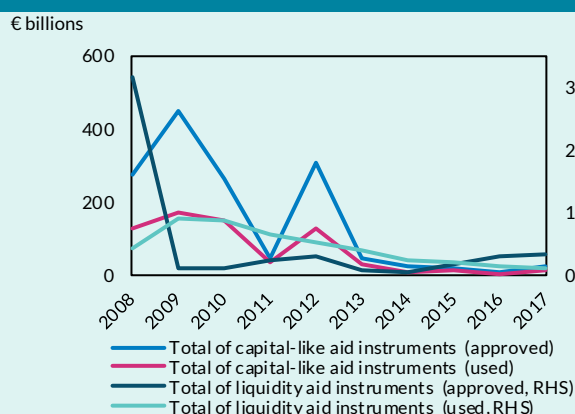
By Silvia Calò (International Analysis and Relations)

This Box assesses the level of contingent liabilities, trade credits and state aid across EU member states at the onset of the COVID19 crisis, focusing in particular on Ireland. Almost ten years after the sovereign debt crisis in the euro area these measures have decreased in size and distribution across Member States. While government debt is mainly the result of accumulated deficits, government guarantees and other liabilities can trigger jumps in the debt burden, especially during downturns and in extreme circumstances. So, in order to gauge a country's fiscal space and given the opacity of these measures it is important to examine them, especially as their revelation or materialisation can trigger sudden adverse behaviour in financial markets.

The factors leading to a trend of increasing euro area Government debt include a series of budget deficits, extraordinary measures such as bailouts, and the granting of state aid. When measures are not included in the deficit but affect the debt, the stock-flow adjustment of government debt captures this discrepancy (e.g. for direct acquisitions). At the same time, some forms of State aid can contribute to higher deficits and debts through foregone government revenue (see Calò, 2019 for a discussion of these two instruments). Moreover, especially during times of distress, governments might increase their use of trade credit – i.e. delaying the payments to their suppliers.

To preserve the integrity of the single market and the level playing field, the Treaty of the EU prohibits State aid unless it is justified by reasons of general economic development. Before the COVID-19 crisis, use of State aid was quite low, while ample use had taken place of various instruments during the Global Financial Crisis (Chart A) also thanks to a Temporary Framework put in the place by the European Commission.

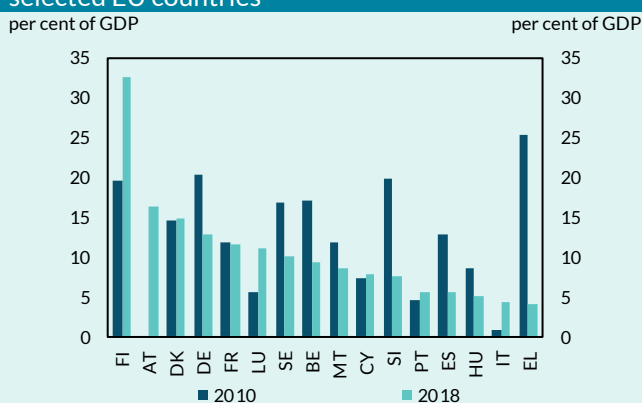
Chart A: Approval and use of State aid in the EU



Source: European Commission, State aid Scoreboard.

Notes: The information provided by the European Commission is provided on a best effort basis and might be subject to future revisions depending on information provided by Member States.

Chart B: Stock of Government Guarantees – selected EU countries



Source: Haver Analytics.

Notes: Guarantees are arrangements whereby the guarantor promises a lender that if a borrower defaults, the guarantor will make good the loss the lender would otherwise suffer. Only countries reporting guarantees above 4 per cent of GDP are included.

Comparing 2018 to 2010, it emerges that the overall outstanding amount of General Government guarantees had decreased drastically since the Global Financial Crisis, their distribution across countries has also changed (Chart B). In particular, guarantees extended by the Irish government

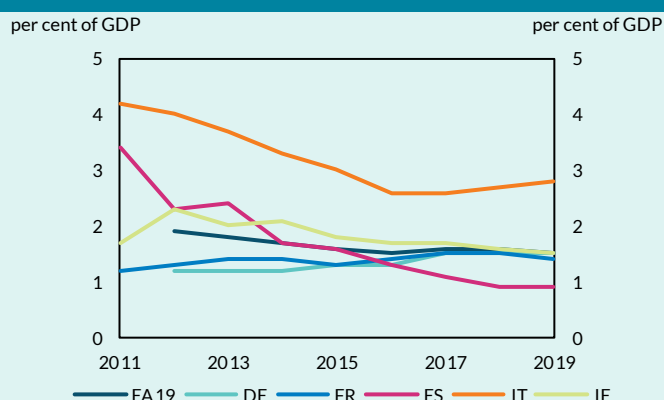
amounted to 96 per cent of GDP in 2010. At the end of 2018, Ireland had outstanding government guarantees for €6.72 million, or 0.0 per cent of GNI*.

Trade credit (delayed payments from the government temporarily slowing down the growth of government debt), also plays a role in determining fiscal space. Overall, government credit and advances in the EA have decreased over the last decade (Chart C), especially as countries that made the most use of this instrument reduced their reliance. While Irish Government trade credit and advances had been above the EA average, their value as a share of GDP has been decreasing and converging to the EA.

The nature of the COVID19 crisis has created again the need for Member States to support firms directly. On 19 March 2020, the European Commission set out a State aid Temporary Framework, regulating the access to State aid during the emergency. By 22 May 2020, the European Commission has approved 140 State aid notifications from 24 Member States.¹ The measures vary in size and scope.

A further vulnerability to Government finances comes from the liabilities of government-controlled entities classified outside general government. Since these entities behave as market units, they are classified outside the General Government, but in case of market stress, their balance sheet might affect government debt and the budget deficit. The size of liabilities of public corporations varies across Member States both in size and in nature. In some Member States, the majority of liabilities belongs to corporations involved in financial activities (Chart D), as it is the case in Ireland, making the risk stemming from ownership of these companies more concentrated in the financial sector. Yet, overall the share of liabilities of government-controlled entities in Ireland, at 76 per cent of GNI* (or 47 per cent of GDP, as reported by Eurostat), is significantly smaller than some other countries.

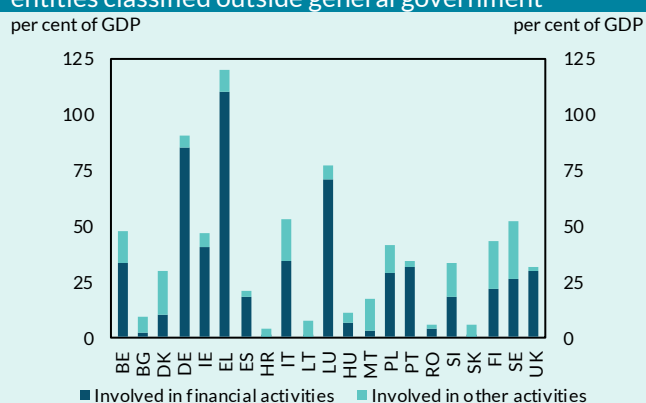
Chart C: Government trade credit and advances



Source: Haver Analytics.

Notes: Government trade credit and advances – liabilities. Trade credits and advances payable are unpaid liabilities of government resulting from transactions in goods and services. The expenditure for the goods and services (not yet paid) affects the deficit/surplus, their stock is not included in government (EDP) debt.

Chart D: Liabilities of government controlled entities classified outside general government



Source: Haver Analytics.

Notes: Only those entities whose liabilities exceed 0.01 per cent of GDP are included in the aggregate of each country. Values refer to the stock of liabilities at the end of the year 2018. Values for France, Austria and the Netherlands are missing.

Ultimately, the capacity of Member States to implement countercyclical fiscal policies to in response to the current shock will depend not only by the headline debt to GDP ratio, but also on the amount of contingent liabilities accumulated before, and the need for recapitalisation of public entities. Overall, euro area countries and Ireland in particular have reduced their contingent liabilities, use of State aid in general and trade credit, even if they remain at a non-negligible level.

¹ This includes the UK, since it has to abide to State aid rules during the transition.

Box 3: Irish Growth-at-Risk and COVID-19 related market stress.

By Martin O'Brien & Michael Wosser, Macro-Financial Division

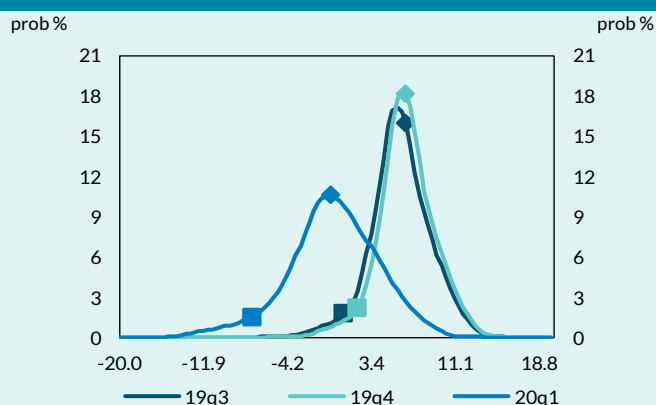
The objective of macroprudential policy is to (i) guard against the build-up of financial imbalances that could lead to large, adverse economic outcomes in the future; and (ii) minimise the cost of such outcomes, by ensuring that the financial system is resilient to those shocks. In this Box, we quantify the impact of the COVID-19 shock on a macroeconomic measure of financial stability risks over the next year, focussing on the worst possible or 'tail' outcomes. We find that COVID-19 has led to a significant deterioration in the central and tail outcomes for the Irish macro-financial environment and that the higher frequency financial market indicators are a good pre-cursor of the severity of those tail outcomes. The analysis suggests that policy measures taken in response to the immediate financial market turbulence and in expectation of future economic difficulties have in part mitigated the severity of tail outcomes.

Recent advances in systemic risk assessment uses a framework known as "Growth-at-Risk" (GaR) to assess future tail macroeconomic outcomes given current conditions.¹ These new models use current levels of economic activity and various systemic risk indicators to predict the entire distribution of possible future economic outcomes over a particular horizon. Of particular interest for financial stability are the potential 'tail' outcomes at the lower end of the distribution, with the 5th percentile often being chosen as a reference point (5 per cent GaR). As systemic risk and economic conditions evolve, 5 per cent GaR levels also change, and allows us to assess the severity of future negative outcomes as well as the role of various current drivers of those worse outcomes.

Using the GaR framework, we estimate a model using quarterly data to predict the distribution of average annual economic growth (real GNI*) over the following four quarters based on current levels of financial market stress (ICSI), cyclical systemic risk conditions (the national preferred "alternative" credit gap) and current levels of economic growth.² Prior to the onset of the COVID-19 shock at end 2019, the distribution of potential economic growth over the following year was relatively narrow (Chart A). The 5 per cent GaR was around 2 per cent growth, materially lower than baseline forecasts at the time. As the COVID-19 shock materialised, first evident in the ICSI, the 5 per cent GaR in 2020Q1 shifted left to -8.3 per cent.

The outward shift in the left tail outcomes is primarily due to the deterioration in the ICSI, itself a real-time indicator of market expectations on future economic activity and also a contributor to tighter financing conditions (see *Risk*). The relative role the higher frequency data can play in understanding severity of tail outcomes can be seen in Chart B, where we simulate the distribution of future macroeconomic outcomes from 2020Q2. When the easing of financial market conditions seen through the second quarter is included in the simulation alongside the sharp drop in economic activity, the 5 per cent GaR is less severe than if the market stress in March had continued (-11.3 per cent and -15.7 per cent respectively).

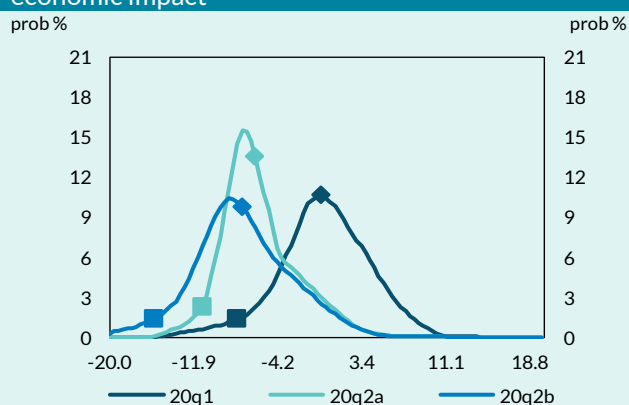
Chart A: Left 'tail' growth outcomes are worse due to COVID-19 shock



Source: Central Bank of Ireland

Notes: Distribution of projected average annual growth in GNI* over the following four quarters conditional on financial market stress (ICSI), cyclical systemic risk indicators (Alt. credit gap) and current economic growth. "20q1" assumes 1.2 per cent y-o-y contraction in real GNI* based on the reported contraction in Modified Domestic Demand by the CSO Quarterly National Accounts for 2020q1. Square marker denotes 5% GaR. Diamond marker denotes median of distribution.

Chart B: Financial market stress pushes tail outcomes further to the left – precursor to economic impact



Source: Central Bank of Ireland

Notes: Distribution of projected average annual growth in GNI* over the following four quarters conditional on financial market stress (ICSI), cyclical systemic risk indicators (Alt. credit gap) and current economic growth. "20q2a" assumes 15 per cent y-o-y contraction in real GNI* and reduction in ICSI to 0.1 per cent. "20q2b" assumes 15 per cent y-o-y contraction in real GNI* and maintains ICSI at its 20q1 value of 0.42 per cent. Square marker denotes 5% GaR. Diamond marker denotes median of distribution.

Using the GaR framework, we can examine the relative role of the financial market and real economic shocks from COVID-19 on a macroeconomic measure of financial stability, specifically the 5 per cent GaR. COVID-19 financial market stress during March had pushed the 5 per cent GaR further into the left-tail of future growth outcomes and led to higher downside uncertainty to future outcomes. In contrast, the real economic shock related to COVID-19, which is more evident in hard data for 2020Q2, plays a slightly greater role in increasing the probability of those left-tail outcomes occurring. This points to the importance of the policy reaction to date in mitigating the immediate financial market shock and to minimise the potential for the real economic shock being amplified. This reaction has in part reduced risks to financial stability than what would otherwise have been the case. However, the central and tail outcomes as a result of the COVID-19 shock remain firmly negative.

¹ See Ch. 3 Financial Conditions and Growth at Risk IMF Global Financial Stability Report - October (2017), and references therein for details.

² The model is estimated using quantile regression on an unbalanced panel of data covering the 27 EU Member States and the UK from 1990Q1 to the present. Data for all countries, except Ireland, are sourced from the ECB Statistical Data Warehouse, covering real GDP growth (real GNI* for Ireland), Country-Level Indicator of Financial Stress – CLIFS (ICSI for Ireland), and the Basel credit gap (Alternative credit gap for Ireland). Based on the fitted values from the quantile regression a probability density function is fitted using the Epanechnikov kernel density estimator.

Resilience

Box 4: COVID-19 and the domestic real economy

The sources and transmission channels of the economic and financial shock currently materialising in Ireland differ from the previous global financial crisis. In 2008, a collapse in aggregate demand followed a period of unsustainable credit-driven growth in consumption, real estate investment and asset prices. The COVID-19 shock, by contrast, was not preceded by a widespread domestic credit boom in Ireland, nor by unsustainable growth in asset markets such as housing. Rather, the current shock has placed restrictions on the movement of individuals, now beginning to ease, that have sharply curtailed economic activity in some sectors and limited supply in others. More broadly, the shock has affected consumer confidence globally.

Analysis of the resilience of banks, households and firms in this chapter will rely on a categorisation of sectors of the economy as being at either Direct, Intermediate, or Indirect (DII) exposure to the movement restrictions and enterprise closures that have been in place as part of the public health response to the virus. This Box explains this categorisation and provides statistics on the share of firms and employees in each of the DII categories (based on most recently available categorisation data for 2017).

The focus of this DII classification is on risks over the rest of 2020 and beyond, including the risk that tighter restrictions than those in place in June 2020 may need to be reverted to in the future. Sectors that had been out of operation during periods of tight movement restrictions, but which can operate at lower capacity during less restrictive periods, such as construction, are categorised as being at Intermediate rather than Direct exposure:

- **Direct** – sectors where sales are curtailed by policy that restricts the ability of customers to purchase from firms due to sales typically requiring face-to-face interaction, e.g. hotels, restaurants, cinemas, non-essential retail outlets.
- **Intermediate** – sectors where physical distancing limits supply capacity in the sector, e.g. construction and manufacturing.
- **Indirect** – sectors that can continue to operate through periods of movement restriction, due to their being deemed essential e.g. pharmaceutical manufacturing, grocery retail, or due to ability of workers to operate from home, e.g. information and communication services, public service. The negative effect, if any, of COVID-19 on these sectors is likely to arise through a generalised downturn in aggregate demand rather than through specific features of public health policy.

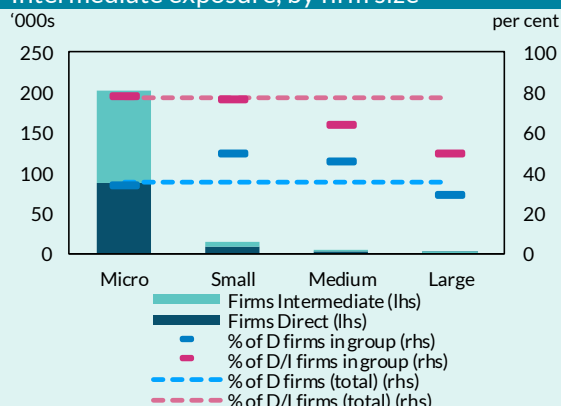
Using a range of data sources, the following sections will highlight how lending exposures are allocated across these sector types. In this Box, Chart A highlights how employees and firms in the main “1-digit” sectors are distributed across these types. The most affected sectors include the hotels and restaurants sector and “Other Service Activities”, which includes arts and entertainment. Manufacturing and professional and scientific services have significant shares of employment at Intermediate exposure, but minimal levels of Direct exposure. Information and communication services are measured as the least exposed.

Chart B highlights the widespread exposure to the shock: out of 283,244 firms in the business economy, 95,968 are estimated to be operating with Direct and 128,505 with Intermediate exposure. Differences are notable across firm size groups: 80 and 77 per cent of Micro and Small firms are at Direct or Intermediate risk, respectively, while only 53 per cent of Large firms are similarly exposed.

Chart A: Direct and Intermediate exposures to COVID-19, by sector


Source: McGeever, McQuinn, Myers (2020), CSO Business Statistics

Notes: Data refer to total firm count and employment across all firms in the business economy, which excludes agricultural and public service employment

Chart B: Number of firms in sectors with Direct and Intermediate exposure, by firm size


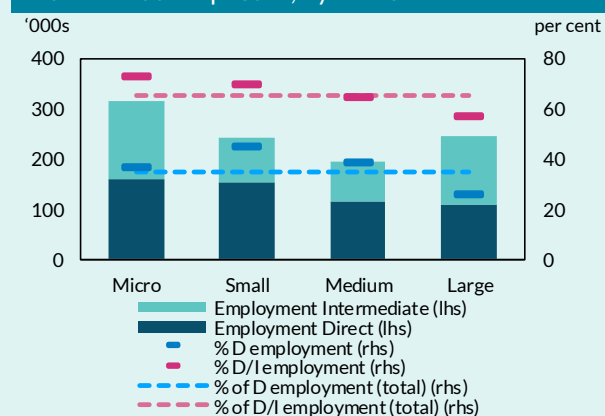
Source: McGeever, McQuinn, Myers (2020), CSO Business Statistics

Notes: Data refer to total firm count across all firms in the business economy, which excludes agricultural and public service employment

Chart C then weights these firms by employment, and highlights that 1.03 million from a total of 1.52 million private business employees were working at firms at Direct or Intermediate exposure before the onset of the shock. Again, more employees are at risk in smaller firms, reflecting the sectoral distribution of activity in Ireland, with large firms more likely to operate in high-tech sectors that are experiencing the negative initial effects of the COVID-19 shock less directly.

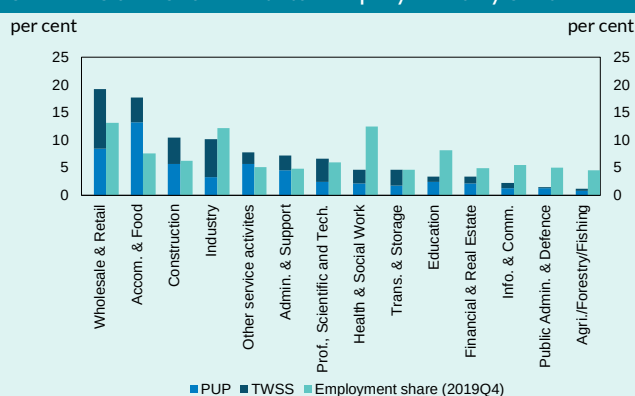
The data in Charts A to C depict the situation before the economic effects of COVID-19 began to be felt. Since then, as business revenues have collapsed, many employees have begun to access the Pandemic Unemployment Payment (PUP). Others remain attached to their employer, with wages subsidised by the State through the Temporary Wage Subsidy Scheme (TWSS).

Chart D measures recipients of these two income supports. The stacked navy (TWSS) and blue (PUP) bars show the share of total recipients of both programs accounted for by each one-digit sector, while the teal bar shows the share of that sector in total employment. The Wholesale & Retail (19 per cent), Accommodation & Food (18 per cent) and Construction (10 per cent) sectors account for almost half of all scheme participants. In all three of these sectors, their participation in the two schemes is substantially higher than their share of total pre-COVID-19 employment. Disproportionately low levels of take-up suggest certain sectors' employment has not been affected thus far, including Agriculture, Forestry & Fishing, Public Administration and Defence, Health & Social work, Information and Communication and Education.

Chart C: Employment in sectors with Direct and Intermediate exposure, by firm size


Source: McGeever, McQuinn, Myers (2020), CSO Business Statistics

Notes: Data refer to total employment across all firms in the business economy, which excludes agricultural and public service employment

Chart D: Share of recipients of PUP and TWSS schemes and share of total employment by sector


Source: Department of Employment Affairs and Social Protection (PUP). Revenue statistics (TWSS) and CSO Labour force Survey.

Notes: PUP data is based on individuals in receipt of payment as of June 9th, TWSS is the number of employees as of May 28th and CSO data is as of 2019Q4.

Non-financial corporations

The resilience of Irish NFCs has been severely challenged by the COVID-19 shock. Revenue has fallen sharply in many sectors. The immediate challenge for affected firms has been to meet or defer expenses. Government measures and loan payment breaks are providing important relief in this regard. Many firms entered this period with relatively modest cash holdings and most SMEs have limited access to undrawn credit facilities. About a fifth of SMEs have no bank loan or bank relationship manager and these firms may face particular challenges in accessing liquidity finance. Firms' deleveraging in recent years provides them with some capacity to take on debt, but the medium-term resilience of firms is likely to be diminished if increased borrowing simply finances pandemic-related losses. If the pandemic episode continues for longer than is generally expected, it is likely that the balance sheet impact on some firms would be severe and insolvency rates would rise.

The resilience of Irish firms has been severely challenged by the COVID-19 shock. Over 200,000 Irish enterprises operate in sectors with Direct or Intermediate levels of exposure (see Box 4). In a CSO survey in early May, almost a quarter of firms reported they had temporarily ceased trading and one third of firms reported having made staff temporarily redundant. Seventy per cent of firms reported that their turnover was lower than normal and 44 per cent reported that their turnover was less than half of normal levels.

The most immediate challenge for affected firms has been to meet or defer expenses. Government policy initiatives have played an important role in this regard by significantly reducing the wage costs of firms by over €1 billion through the Temporary Wage Subsidy Scheme, reducing or deferring certain tax liabilities at a cost of over €2 billion, and increasing the size and scope of existing government loan schemes. Loan payment breaks are also helping firms to reduce their outgoings, with Irish retail banks approving payment breaks for a large proportion of their SME and large corporate borrowers. As of May 29th, payment breaks were active on 23 per cent of loan balances of Irish-resident NFCs at the five retail banks.

The capacity of firms to meet their liabilities remains unclear. Recent research from the Central Bank estimates a three-month SME liquidity shortfall of between €2.4 and €5.7 billion due to COVID-19.³³ As restrictions for some sectors persist, financial shortfalls may expand beyond these initial estimates. Where liabilities fall due and payment is deemed unavoidable, affected firms will rely on a combination of their existing liquid assets, undrawn credit facilities such as overdrafts, or new borrowing (potentially with aid of a state credit guarantee).

Many firms entered this crisis period with relatively modest cash holdings. Half of SMEs are estimated to hold 5 per cent or less worth of annual turnover in cash (Chart 29). For a quarter of SMEs, this estimate is below one per cent. However, this may be an overly negative assessment of SME liquidity if the line between enterprise assets and the personal assets of entrepreneurs or shareholders is blurred.³⁴ Separate CSO survey evidence from early May shows that a quarter of SMEs were not confident they had the financial resources to continue operating for three months or more, while 46 per cent thought they could survive for six months or more.

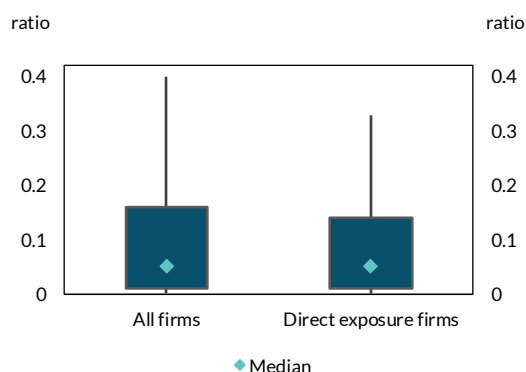
³³ [McGeever, McQuinn, and Myers, 2020](#).

³⁴ For instance, if a company's shareholders have provided personal guarantees on the company's liabilities.

Half of large corporations hold 8 per cent of annual turnover or less in cash (Chart 30). A quarter of large corporations hold less than 3 per cent of turnover in cash. These figures suggest that affected firms faced considerable urgency at the onset of the crisis to cut expenses, avail of government supports and loan payment breaks, utilise undrawn credit, or raise new finance.³⁵

Chart 29: Half of SMEs hold 5 per cent of annual turnover or less in cash

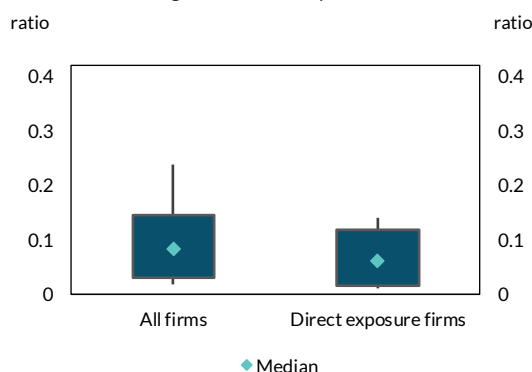
The distribution of cash and cash equivalents-to-annual turnover



Source: Department of Finance Credit Demand Survey
Notes: Data are as of March 2019.

Chart 30: Half of large corporations hold 8 per cent of annual turnover or less in cash

The distribution of cash and cash equivalents-to-annual turnover of the largest 60 Irish corporations



Source: Companies Registration Office; Dun and Bradstreet.
Notes: Foreign-parent and redomiciled firms are excluded.

SMEs entered this period with considerably less access to undrawn credit than their large corporate counterparts (Chart 31). Irish-resident SMEs had approximately €2.4 billion in undrawn credit facilities at Irish retail banks at the end of April. Access to this undrawn credit is higher in less vulnerable sectors and is also concentrated in a small cohort of larger SME borrowers. Thus, the existing stock of undrawn credit is unlikely to be sufficient to cover the liquidity needs of Irish SMEs in the coming months.³⁶

A significant minority of SMEs have no existing bank lending relationship (Chart 32). Twenty two per cent of SMEs report in surveys that they have no outstanding bank debt and no existing bank relationship manager. This lack of pre-existing relationships may hamper the ability of these firms to secure liquidity finance from the banking system. Government supports in the form of grants, credit guarantees, and micro enterprise loans may be particularly important for this set of firms.

A majority of SMEs entered this crisis period with no outstanding bank debt (Chart 33). Fifty seven per cent of SMEs report in surveys that they have no bank debt. The typical SME is substantially less leveraged now than in 2013.³⁷ This may provide SMEs with some capacity to take on debt to meet current outgoings. However, the medium-term resilience of SMEs is likely to weaken if increased borrowing finances pandemic-related losses.

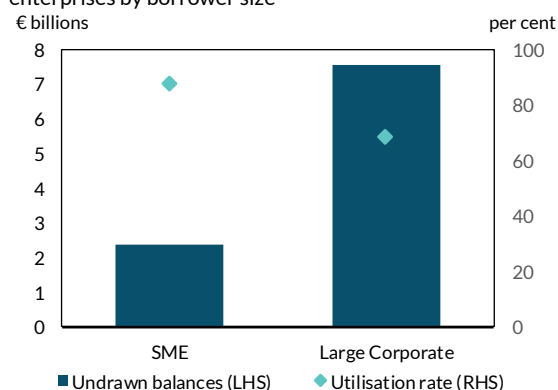
³⁵ US evidence shows that adverse changes in equity prices and CDS spreads in 2020 were less severe for corporates with greater financial flexibility on their balance sheets ([Fahlenbrach, Rageth, and Stulz \(2020\) "How valuable is financial flexibility when revenue stops? Evidence from the COVID-19 crisis" NBER Working Paper 27106](#)).

³⁶ See [McGeever, McQuinn and Myers \(2020\) "SME liquidity needs during the COVID-19 shock", Central Bank of Ireland Financial Stability Notes, Vol. 2020, No. 2](#).

³⁷ See [FSR 2019:II](#) and [McCann & McQuinn \(2017\), "The financial vulnerability of Irish small and medium enterprises, 2013 to 2017", Central Bank of Ireland, Economic Letter Vol 2017 No. 14](#).

Chart 31: SMEs entered this period with limited access to undrawn credit

Undrawn credit and utilisation rates of Irish-resident enterprises by borrower size

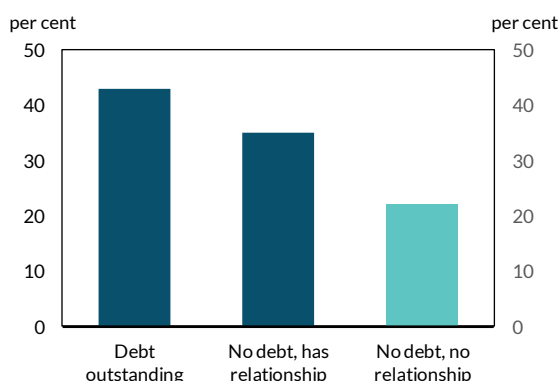


Source: Central Bank of Ireland

Notes: Based on end-April 2020 data from three Irish retail banks. Distinction between SME and Corporate borrowers in reported data is based on lenders' internal definitions. The utilisation rate is the proportion of committed loan balances that are outstanding.

Chart 32: A significant minority of SMEs have no bank debt or relationship manager

Proportion of SMEs by bank relationship status

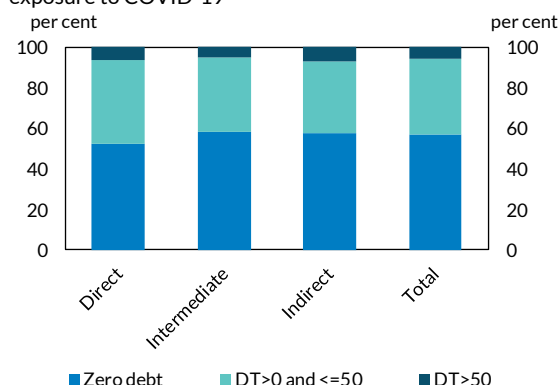


Source: Department of Finance Credit Demand Survey

Notes: Data are as of September 2019.

Chart 33: A majority of SMEs entered this period with no outstanding bank debt

Share of SMEs in debt-to-turnover (DT) ratio bands by exposure to COVID-19

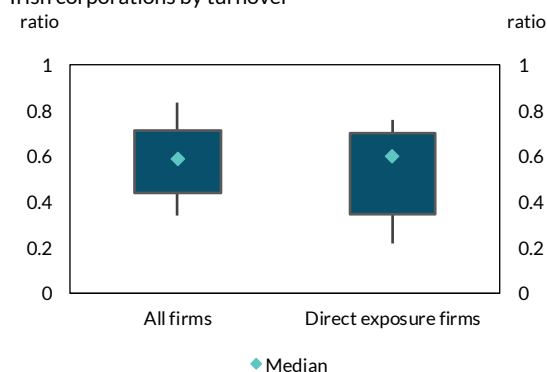


Source: Department of Finance Credit Demand Survey

Notes: Data are as of September 2019, Categories defined according to sector exposure to COVID-19.

Chart 34: The leverage of large corporations is moderately high

The distribution of liabilities-to-assets ratios of the largest 60 Irish corporations by turnover



Source: Companies Registration Office; Dun and Bradstreet.

Notes: Foreign-parent and redomiciled firms are excluded.

The leverage of large Irish corporations is moderately high. The median leverage ratio of large Irish corporations is 0.6, while a quarter of large corporations have ratios of 0.72 or higher (Chart 34). The leverage of these firms has been relatively steady over recent years, as increases in nominal debt levels were accompanied by rising asset values.³⁸ Nonetheless, international evidence shows that the typical firm entering distress has a leverage ratio of roughly 0.8.³⁹ While liquidity remains the most pressing issue for large corporations, their medium-term resilience will be further tested in the event of significant and sustained declines in asset values and earnings.

³⁸ See [FSR 2019:II](#).

³⁹ [Campbell, Hilscher and Szilagyi \(2008\) "In search of distress risk" Journal of Finance Vol. 63 No. 6](#) study a sample of large US corporations from 1963 to 2003 and report a median total liabilities-to-total assets ratio of 0.51 for all firms and 0.82 for firms upon failure. [Asis, Chari and Haas \(2020\) "In search of distress risk in emerging markets" NBER Working Paper 27213](#) study a sample of large corporations from 25 emerging market countries from 1995 to 2016 and report a mean total liabilities-to-market value of assets ratio of 0.31 for all firms and 0.76 for firms upon bankruptcy.

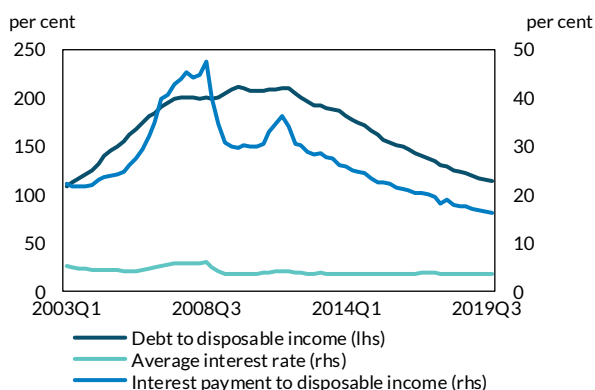
Households

The household sector has entered this crisis from a stronger position than in 2008, albeit with pockets of vulnerability due to legacy issues. Nevertheless, the shock is having a profound effect on household finances and the ability of mortgage holders and renters to continue to pay their bills. Government supports partly mitigate the income shock to households, and the mortgage market is skewed towards employees in sectors currently less directly impacted by the COVID-19 shock. However, where households experience job loss, current income supports are not always sufficient to avoid increased housing payment burdens. At the same time, a significant share of households have limited liquid assets to cover housing costs. Consequently, many households have availed of payment breaks. Longer-term loan restructuring may be needed to support some households to recover from the crisis.

The household sector entered the crisis from a significantly stronger position than in 2008, due to lower debt levels relative to income (Chart 35). This reflects not only increases in incomes in recent years, but also lower levels of debt per person. The number of households with very high debt-to-income ratios has declined over the past five years (Chart 36). Between 2013 and 2018, the proportion of households with no debt increased from 43 per cent to 49 per cent. Of those households with debt, the proportion with debt greater than five times their income fell from 10 per cent of households with debt to 6 per cent of households with debt. The household sector interest burden is also lower than at any time over the past 15 years, increasing households' resilience to the recent income shock.

Chart 35: The household sector entered the crisis with lower debt-to-income levels than in the previous crisis

Household sector debt to disposable income and weighted average interest rates on outstanding loans

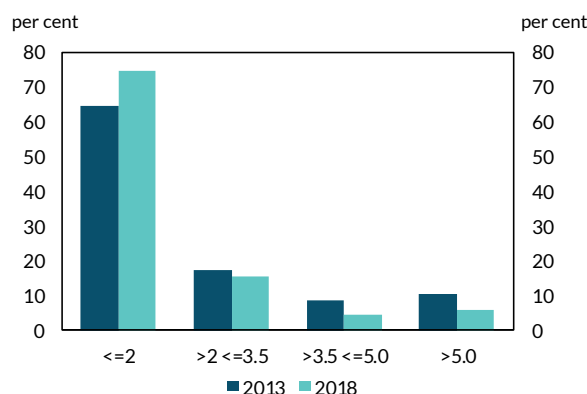


Source: CSO, Central Bank of Ireland

Notes: Data prior to 2003 contains series breaks, so is not included. Interest rate calculated as a weighted average of interest rates on all household debt types. Last observation 2019Q4.

Chart 36: Fewer households have a very high debt-to-income ratio

Current debt to income ratios for households with debt



Source: CSO Household Finance and Consumption Survey, Central Bank of Ireland Calculations.

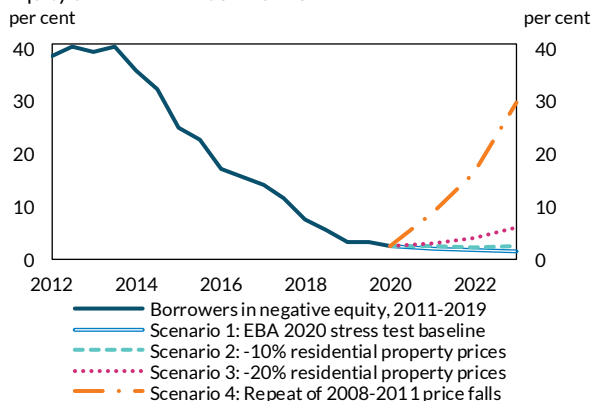
Note: 2018 data provisional. Baseline does not include households with no debt. This data is for all households who have debt, where the DTI in the HFCS is greater than 0 (and is not missing), and therefore includes renters and outright owners who may have non-mortgage debt. This version is weighted as at 11 May 2020.

The number of borrowers in negative equity has fallen, meaning that borrowers are in a better position to absorb house price reversals. If residential property prices decline in the short term and then stabilise, relatively few loans will fall into negative equity, even if some borrowers temporarily pause their loan payments in response to income losses (Chart 37). However, if prices were to fall by more than ten per cent, a larger proportion of borrowers would be vulnerable to a loss of housing equity, especially recent homebuyers whose initial loan-to-value ratios were high.

Despite the improvement in the financial position of the household sector in recent years, legacy issues have left a cohort of borrowers in a vulnerable starting position (Chart 38). Over 85,000 mortgage accounts have been restructured from their original contract terms and are more vulnerable to additional shocks. These restructured accounts have also proven more likely to default, even prior to the current shock, and have higher mortgage repayment to income ratios than other mortgages.⁴⁰

Chart 37: Fewer borrowers are in negative equity

Percentage of mortgage borrowers at retail banks in negative equity under different scenarios

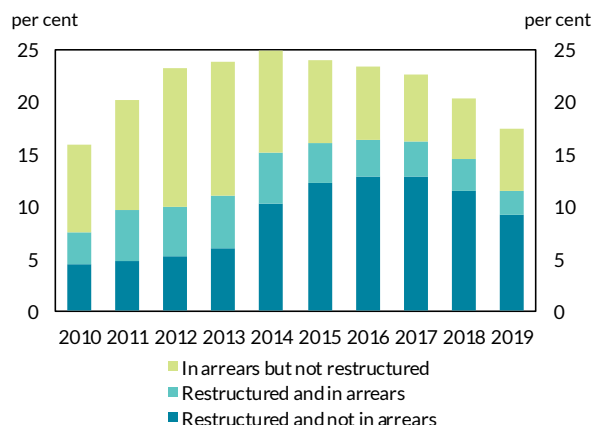


Source: Central Bank of Ireland.

Notes: Scenario projections are as at 31 December each year. In each scenario, loans amortise on schedule; however, this plays a relatively small role compared to property price fluctuations. New loans originate each year at 2018 LTVs and volumes.

Chart 38: A cohort of borrowers is in a vulnerable starting position

Share of Irish PDH mortgages restructured and/or in arrears



Source: Central Bank of Ireland.

Notes: All figures are as at 31 December each year.

Income losses due to the COVID-19 shock are challenging the financial position of households.

Some have received support through the Temporary Wage Subsidy Scheme (TWSS) or the Pandemic Unemployment Payment (PUP) (see Box 4). As of May 19-21, 1.058 million people were accessing income assistance through these programs, with 473,500 on TWSS and 585,000 on PUP, representing 43 per cent of the labour force.

A significant number of households have limited liquid assets to support them in the event of sustained income falls or unemployment. The bottom fifth of mortgaged households are estimated to have between one and four months' mortgage payments in cash balances, while the equivalent level is lower for renters (Chart 39).⁴¹ The 2018 Household Finance and Consumption Survey (HFCS) indicates that deposits held by households employed in more affected sectors are around half of those households employed in indirectly affected sectors, while incomes of households in affected sectors were around 30 per cent lower on average.

Mortgage holders are more likely to work in sectors where employment has been less affected by COVID-19 (Chart 40). For example, manufacturing, human health and social work, education, and public administration are four of the five largest sectors of employment for mortgage holders. If income falls affect fewer mortgage holders, this will dampen some of the direct and immediate financial stability effects of COVID-19 on banks' asset quality. Nonetheless, the widespread

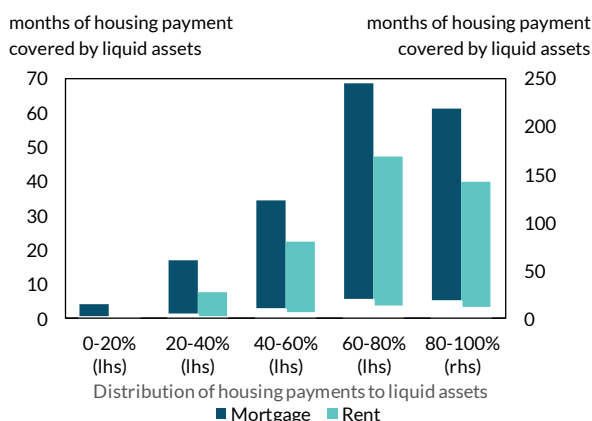
⁴⁰ See [FSR 2019:I](#).

⁴¹ For a discussion on under-reporting of bank deposits in household surveys, see [Cussen, Lydon and O'Sullivan \(2018\) "Macro and micro estimates of household wealth", Central Bank of Ireland Research Technical Paper, Vol. 2018, No. 11](#).

nature of the shock means that 47 per cent of mortgage holders work in a sector classified as being at either Direct or Intermediate exposure.

Chart 39: A substantial minority of households have limited liquidity buffers to cover housing payments

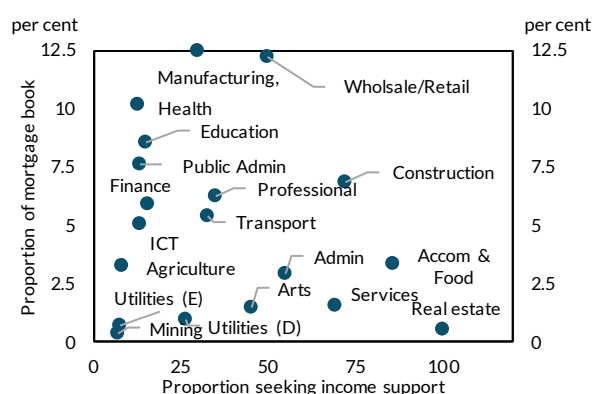
Estimated range of months of mortgage or rent covered by liquid assets for the average household in each quintile of the payment-to-liquid assets distribution.



Source: CSO Household Finance & Consumption Survey (HFCS).
Note: Columns represent ratios of total bank deposits to monthly mortgage and rent payments, respectively. Columns' minima reflect the median number of months of housing payments relative to bank deposits for that quintile of the distribution, based on deposits reported in the HFCS. Columns' maxima are based on adjusted deposits whereby HFCS deposit is multiplied by a factor in order to approximate the aggregate HFCS deposit to the aggregate deposit from Deposit Level Dataset (Cussen, Lydon and O'Sullivan, 2018).

Chart 40: Mortgage holders are more likely to work in less-affected sectors

Mortgage book exposure and proportion on PUP/TWSS of each NACE sector



Source: Central Bank of Ireland analysis based on CSO Census data, Revenue TWSS statistics and DEASP PUP statistics.

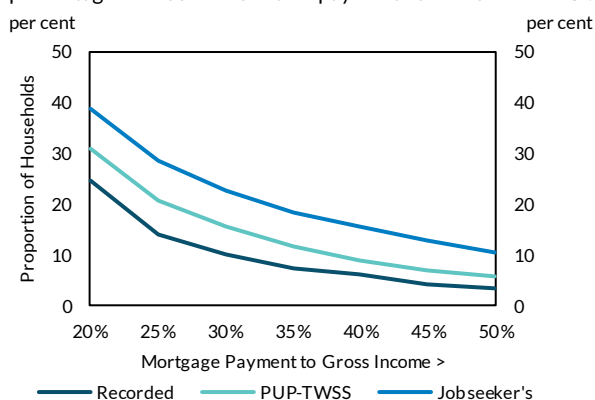
COVID-19 related support payments are supporting household mortgage repayments, but estimates suggest they will not fully offset the effect of lost income across the mortgaged household population (Chart 41). In a simulation informed by household survey data and modelled on the current shock and income supports, the median mortgage payment to gross monthly income ratio rises slightly from 13 to 14 per cent⁴². However, the proportions at higher levels of payment burdens rise substantially. The proportion of households with extremely high mortgage payment burdens in excess of 30 per cent of gross income rises from 10 to 15 per cent. With pre-COVID income supports available through Jobseeker's Benefit, the equivalent figure would be even higher at 23 per cent, highlighting the mitigating effect of the recent schemes. Uncertainty remains about the likely mortgage default rate resulting from COVID-19, which will be mitigated by factors such as reduced consumption and payment breaks but will be determined chiefly by the strength of the wider economy.

⁴² Revenue-TWSS and DEASP-PUP statistics are combined at the sector-level, along with estimates of total employment from the Labour Force Survey, to produce a sector-specific job shock probability. Labour income is then simulated using these probabilities and HFCS data. Individuals who receive the shock are simulated to receive PUP (€350 per week) or TWSS benefits according to the relative importance of each policy in their sector. TWSS income is modelled using sectoral top-up rates and prior income. Individuals who receive a top-up receive their regular gross wage, while others receive €350 per week, which is the modal subsidy at the time of writing. Three scenarios from such simulations are shown in Charts 41 and 42. The first shows the payment to gross income ratio as recorded in the data. The second (PUP-TWSS) shows the simulation under the current policy regime as described above. The third (Jobseeker's) shows a simulation in which individuals experiencing income distress receive Jobseeker's Benefit of €203 per week, instead of a PUP/TWSS payment. The statistics presented are averages from one thousand simulations.

Renters (comprising both private renters and those in local authority housing) have higher housing payment burdens than mortgagors, but social welfare support payments cover a larger proportion of their lost income. Analysis of the 2018 wave of the HFCS for Ireland shows that renters derive a lower average share of income from employment than mortgagors, being 50 per cent compared with 84 per cent, with the remainder comprising social supports and income from capital. Renters are younger on average and earn less employment income. As a result, a simulated labour income shock affects the ratio of rental payments to income less than the ratio of mortgage payments to income (Chart 42).⁴³ In simulations in which lost incomes are replaced with PUP-TWSS, the median rental payment burden is unchanged at 15 per cent, while the fraction with payment burdens above 30 per cent rises slightly from 20 to 21 per cent. If the replacement income were Jobseeker's Benefit, the fraction of renters with payment burdens in excess of 30 per cent of monthly gross income would rise to 27 per cent.

Chart 41: Mortgage repayment burdens are rising, mitigated somewhat by income supports

Distribution of simulated change in housing-payment-to-gross income (HPGI) ratio of mortgaged households. Vertical axis: percentage of households with repayment burden above HPGI.

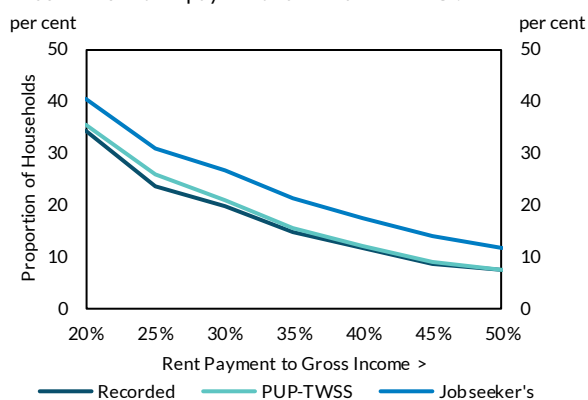


Source: Central Bank of Ireland analysis, based on Household Finance and Consumption Survey 2018.

Notes: The three data series show the distribution of mortgage payments to monthly gross income of households under three scenarios. The first is the data as recorded in the HFCS. The second shows a simulation in which labour income of persons experiencing job loss is topped up using a model based on the PUP-TWSS schemes. The third scenario shows the same job-loss simulation, where Jobseeker's Benefit level of €203 per week is used as the replacement income.

Chart 42: Renters have higher housing payment burdens than mortgagors but income supports have greater impact

Distribution of simulated change in housing-payment-to-gross income ratio of rental households. Vertical axis: percentage of households with repayment burden above HPGI.



Source: Central Bank of Ireland analysis, based on Household Finance and Consumption Survey 2018.

Notes: The three data series show the distribution of rent payments to monthly gross income of households under three scenarios. The first is the data as recorded in the HFCS. The second shows a simulation in which labour income of persons experiencing job loss is topped up using a model based on the PUP-TWSS schemes. The third scenario shows the same job-loss simulation, except Jobseeker's Benefit level of €203 per week is used as the replacement income.

Many households have availed of payment breaks to help support their liquidity needs. At May 29th, there were 66,284 active payment breaks (PBs) on ROI mortgages, worth €10.1bn, or 10.8 per cent of total ROI mortgage lending of the retail banks. An additional 30,917 PBs were active at the retail banks for "credit for consumption" of ROI borrowers. Outside the retail banking system, there were active PBs on €1.5bn worth of ROI mortgages at Retail Credit Firms and Credit Servicing Firms, representing 7.6 per cent of the ROI mortgage portfolio at these firms. These PBs provide important liquidity relief to households to absorb the immediate effects of lost income due to COVID-19. Once the PBs expire, applications for forbearance or restructuring are likely to increase, particularly if employment does not revert to previous levels (see Box 5).

⁴³ These simulations are carried out for the population of renters in the 2018 HFCS data, using their rental payments as recorded. The simulation methodology is identical to that used to calculate Chart 51 for mortgagors. The methodology does not account for the recent changes to Rent Supplement.

Box 5: Payment breaks for Irish households and firms

In response to the COVID-19 shock in March, banks, credit unions, retail credit and credit servicing firms in Ireland have made payment breaks (PBs) available to household and business customers.¹ Three-month extensions to the initially-offered three month COVID-19 related PBs have since been offered. The Central Bank has engaged with regulated entities to ensure they take a consistent and customer-focused approach to PBs and the treatment of distressed borrowers thereafter.² The Central Bank has also been actively involved at a European level on policy considerations around PBs.

Temporary breaks to loan repayments during a crisis such as COVID-19 are likely to have important macroeconomic benefits. Uncertainty about the spread of the virus and the necessary public health interventions implies that economic uncertainty will persist for many borrowers. In such an environment, PBs offer liquidity relief, avoiding the potential need for reductions in consumption to meet debt obligations. PBs can also be seen as part of the risk-sharing function that the financial sector would ideally provide to the real economy during times of unanticipated stress.

In Ireland, PBs have been implemented by the industry rather than through legislation, as is the case in many other countries. The design of the PBs has sought to avoid the loans being classified as forborne or non-performing, which carry higher provisions. Higher provisions deplete bank capital, which reduces the maximum amount a bank can lend, risking a tightening of bank credit to the economy if the capital shock is large enough.

The EBA published Guidelines on payment moratoria on April 2nd. These Guidelines set down the criteria that must be met for COVID-19 PBs to not automatically trigger classification as forborne or non-performing under the banking prudential regulatory framework.³ Through this policy action, the Central Bank and partner European institutions have facilitated a pragmatic approach to supporting borrowers who have suffered an acute income shock due to COVID-19. This complements recent monetary, macroprudential and supervisory policy decisions (see *Policy*). In addition, lenders were reminded that there had been no change to the reporting of PBs to the Central Credit Register, and that no submission of “missed payments” or “restructure events” are required where a PB has been agreed with a borrower. The range of policy decisions taken since the onset of COVID-19 will support the financial system to absorb, rather than amplify, any disruption arising in the real economy.

At May 29th, 192,985 PBs were active at the five main domestic retail banks, relating to outstanding loan exposures of €24.9bn. Of these, €8 billion relates to Irish-resident firms, covering 22.8 per cent of total retail bank loans to these firms. A further €10.1 billion to Irish mortgage holders, or 10.8 per cent of the banks’ ROI mortgage portfolio.⁴ In total, PBs represent 13.3 per cent of total loans for Irish retail banks, making the outcome for borrowers beyond the PB period a material consideration for financial stability.

The rest of the Box focuses on the residential mortgage market. A range of solutions have been provided by firms since the introduction of the Central Bank’s Code of Conduct on Mortgage Arrears (CCMA), which is a statutory Code put in place to ensure that regulated entities have fair and transparent processes in place for dealing with borrowers in or facing potential mortgage arrears on a primary residence.⁵ All cases must be handled sympathetically and positively by the regulated entity, with the objective at all times of assisting the borrower to meet his or her mortgage obligations. Seeking to ensure that firms examine the individual merits of each case and explore all available options for appropriate and sustainable alternative repayment arrangements (ARAs) has been a supervisory priority for the Central Bank ([Donnery et al., 2018](#)). This framework has facilitated large volumes of

restructuring arrangements: in a mortgage market with around 750,000 primary dwelling mortgages, over 121,000 were availing of a restructure at its maximum in September 2016, with the overwhelming majority of borrowers meeting the terms of their restructure arrangement.⁶ This statutory framework places the system on a stronger footing than in 2008 to manage distressed household debt cases.

As the longer-term effects of the COVID-19 shock materialise, firms will need to assess a variety of borrower types:

1. *No additional forbearance*: In cases where incomes have recovered or are on a clear path to recovery, the amounts outstanding may be paid back through an increase in monthly instalments which results in the loan being repaid in full in line with the existing term. Alternatively, extensions to mortgage terms may be further required to enable full repayment.
2. *Additional measures required*: due to the size of the income shock being experienced, there will inevitably be cases where a return to full capital and interest payments is not possible at the expiry of the PB. For these borrowers, the full suite of potential restructuring and resolution options should be considered.
 - A. *Restructure/Resolution*: A cohort of borrowers will be deemed unable to meet their current debt obligations after the PB, meaning that longer-term appropriate and sustainable restructuring arrangements or debt resolution options will be required, in line with the CCMA. Continuation of debt obligations that cannot be sustainably serviced will not be in either the borrower or the lender's long-term interest in such cases.
 - B. *Additional temporary measures*: In some cases, income uncertainty will remain, but borrowers may make some repayments currently and exhibit potential to recover lost earnings over the medium term. For such borrowers, tailored additional short-term arrangements are one potential outcome under the CCMA process. Uncertainty in many sectors of the economy in the near future means that this option may be appropriate in many cases.

Regardless of whether the initial arrangement is time-bound or long-term in nature, the Central Bank expects lenders to ensure appropriate sustainable solutions are available and to engage with borrowers well in advance of the expiry of the PB in order to best support them. Even in cases where temporary arrangements may be initially appropriate, the Central Bank will emphasise the importance over the longer term of appropriate restructuring arrangements in the customers' long-term interest, as outlined in (2A) above, and will assertively supervise to ensure that its expectations are being met.

The availability and resolution of PBs will occur in a context where a large stock of long-term arrears cases still required adequate resolution at the onset of COVID-19. The Central Bank will continue to work with stakeholders to ensure that appropriate and sustainable solutions are arrived at for both newly distressed borrowers and these longer-term cases.

¹ The initial BPFIs announcement, which related to retail banks only, was followed by confirmation that non-members of the BPFIs would also offer PBs to customers.

² More details on the Bank's communication around its expectations are available [here](#).

³ The Central Bank has been actively engaged in all EBA's work related to the Guidelines on payment moratoria. Further details on the EBA announcement of April 2nd can be accessed [here](#). The Guidelines stipulate that throughout the duration of the payment break, institutions should assess the potential unlikelihood to pay of the borrower in line with the application of the definition of default (Article 178 CRR).

⁴ In addition to the retail banks, 7.6 per cent of the €21bn ROI mortgage portfolio of Retail Credit Firms and Credit Servicing Firms (CSF) had an active PB at May 29th.

⁵ The Central Bank published [sustainability guidelines](#) for mortgage lending in 2013.

⁶ Mortgage arrears statistics available [here](#).

Retail banks and credit unions

Banks began the COVID-19 period in a better position than at the onset of the 2008 crisis. Capital positions are stronger across the Irish retail banks, though some lenders have less headroom above minimum requirements than the average would suggest. Funding is primarily based on stable deposits, which pose less liquidity risk. The reduction of the CCyB from one per cent to zero, and recent announcements by supervisors around the usability of capital buffers, will improve banks' capacity to weather losses that may arise from COVID-19. Widespread payment breaks provide borrowers with important relief to absorb the immediate effects of the shock. Furthermore, unencumbered assets and broader collateral eligibility criteria provide a further liquidity backstop. However, the COVID-19 shock is expected to put pressure on banks' capital position as asset quality deteriorates, and a large volume of pre-COVID-19 restructured loans continue to represent a vulnerability. Further, profitability was weak even before the pandemic began, and this is likely to persist, owing to low policy rates, weak credit demand and high operating costs.

Irish banks entered the COVID-19 period with more resilient balance sheets than at the onset of the 2008 crisis; however, the average masks important variation in banks' capital ratios. At the end of 2019, the aggregate transitional CET1 ratio across the retail banking system was 19 per cent, between twice and three times the level in the system in 2008, indicating a far higher level of loss absorption capacity (Chart 43). This is the result of post-2008 reforms of the quantity, composition and quality of capital, and the introduction of macroprudential buffers. While the aggregate figure of 19 per cent is indicative of strong system-wide resilience, there is substantial variation in starting CET1 ratios across banks.

Headroom above minimum capital requirements will allow banks to absorb significant losses, reducing the risk of sharp contractions in credit supply. The announcement of the temporary usability of CCoB, P2G and O-SII buffers implies that banks can operate at capital levels that meet Pillar 1 and Pillar 2 Requirements (P2R).⁴⁴ Irish banks are either at or above median headroom levels across Europe (Chart 44). Despite this favourable starting point, the future is uncertain, and even with additional capacity to absorb losses, contractions in lending supply resulting from a reduction in lenders' risk appetite or loss-driven capital depletion remain a risk.⁴⁵

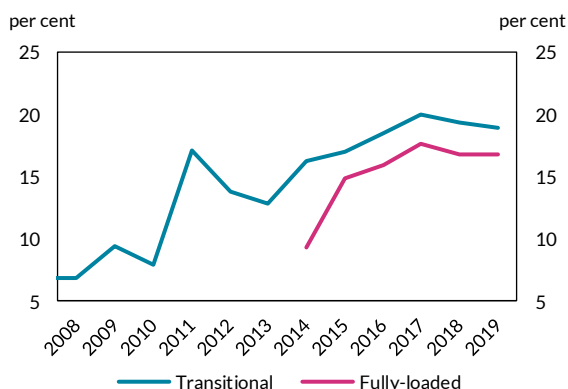
This capacity to absorb losses is greater in Ireland than in most European countries, partly due to higher absolute capital requirements from higher risk weights. Irish banks' leverage ratios, measuring capital as a share of total assets, are higher than in most European countries. Higher risk weights reflect a riskier current loan book and higher historical losses on lending in Ireland. Because every euro of lending is subject to a higher capital requirement, banks have required a higher amount of capital to support total assets (Chart 45).

⁴⁴ Significant banks will also benefit from greater flexibility provided by banking supervisors with respect to how they meet regulatory Pillar 2 Requirements (P2R), whereby significant banks are now allowed to use capital instruments that do not qualify as common equity tier 1 (CET1) capital, to satisfy Pillar 2 requirements (P2R).

⁴⁵ The BIS warns that in an adversely-severe scenario, banks may be reluctant to increase leverage further by creating additional lending, even if policymakers offer regulatory forbearance.

Chart 43: Loss absorption capacity is far greater now than in 2008

System-wide average Common Equity Tier 1 capital ratio.

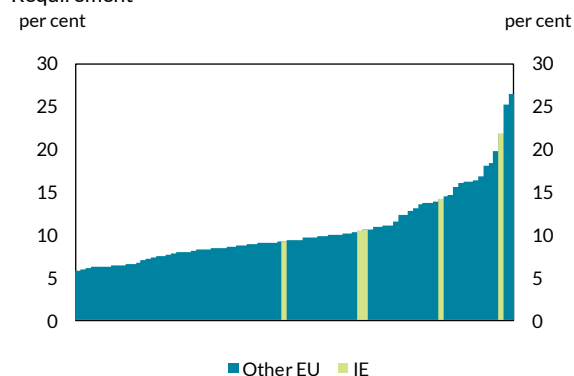


Source: S&P Global.

Notes: Prior to 2012, data restricted to AIB, BOI and PTSB, for whom data are consistently available. Data for the five retail banks is included from 2012 onward. Last observation 2019Q4.

Chart 44: Headroom above regulatory capital requirements is relatively high in Ireland after recent announcements of supervisory flexibility

European banks' headroom above Pillar I and Pillar II Requirement



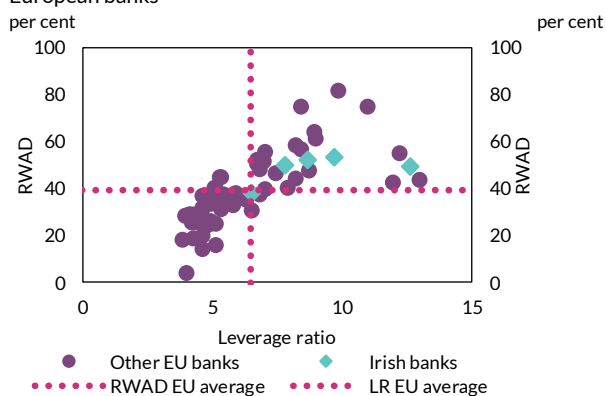
Source: Central Bank of Ireland calculations, EBA transparency exercise data.

Notes: 2019Q2 capital positions used. Headroom calculated based on recent SSM announcements on usability of CCB and P2G buffers. Each institution's minimum requirement calculated as the sum of Pillar 1 and Pillar II Requirement. Top 5 per cent of banks removed from the graph for ease of display.

The steady reduction in non-performing loan ratios since the last crisis will contribute to greater resilience to this shock. In 2014, the median retail bank NPL ratio was over 30 per cent. Driven primarily by successful loan restructuring and loan portfolio sales, NPLs have continued to fall since, to 6 per cent at the median in 2019Q4 (Chart 46). Without these improvements in balance sheet health, banks' capacity to absorb losses at the onset of the COVID-19 shock would have been materially weaker.

Chart 45: Higher risk weights in Ireland mean that the system can absorb greater losses than most other countries

Risk-weighted asset density and Basel III Leverage Ratio of European banks

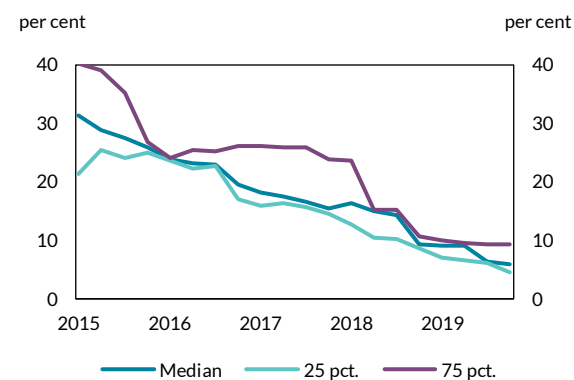


Source: S&P Global.

Notes: All data reported at 2019Q4. Irish banks included are AIB, BOI, PTSB, UBIDAC and KBC.

Chart 46: Non-performing loans have steadily reduced since the last crisis

NPL ratio of Irish banks, 2014-2020



Source: Central Bank of Ireland.

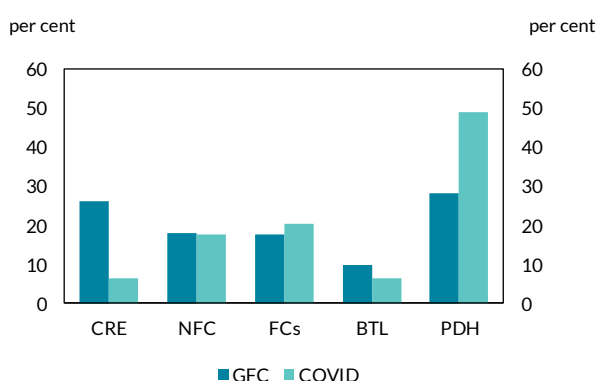
Notes: Sample includes data on AIB, BOI, PTSB, UBIDAC and KBC. Last observation 2019Q4.

The credit quality of retail banks' domestic loan books is better than at the onset of the 2008 crisis. PDH mortgages are now the predominant domestic asset class on bank balance sheets (Chart 47). This is in marked contrast to 2007Q4, when asset classes with higher historic default rates, such as CRE and BTL loans, were relatively more important. Furthermore, riskier development loans accounted for between 20 and 25 per cent of retail banks' CRE portfolios at 2010Q4, relative to

just 10 per cent in 2019Q4.⁴⁶ Within the PDH mortgage asset class, new lending over the last four years has been at lower income multiples (LTI) than in the run-up to the 2008 crisis, due in large part to macroprudential mortgage measures. 53 per cent of mortgages were issued at LTI above 3.5 between 2004 and 2007, compared to 12 per cent between 2016 and 2019 (Chart 48). This changed asset profile means, for a given macroeconomic shock, domestic credit losses would likely be lower now than those that would have emerged given the composition of banks' portfolios at the onset of the last crisis.

Chart 47: Relative to the 2008 crisis, asset composition is skewed away from asset classes with higher historic default rates

Asset composition of domestically-resident lenders and borrowers, 2007Q4 (GFC) and 2019Q4 (COVID)

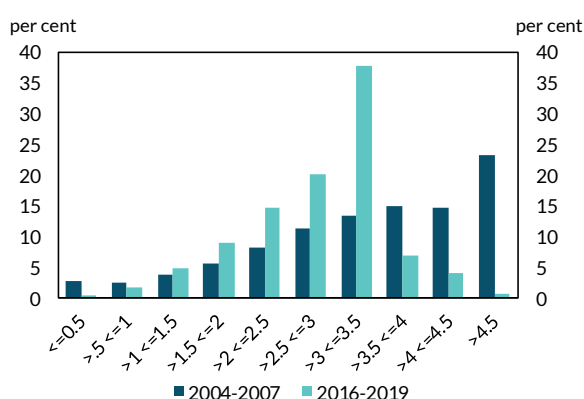


Source: Central Bank of Ireland.

Notes: Domestically-resident banks and borrowers only. NFC: all corporate lending apart from Sector "11. Real Estate, Land and Development Activities" and "10. Financial Intermediation (Excl. Monetary Financial Institutions)" from Central Bank of Ireland statistical table A.14. PDH and BTL data taken from Tables a.18.1 and a.18.2.

Chart 48: Mortgage lending has been safer in the lead-in to this crisis

Loan to Income profile of new mortgage lending, 2004-2007 and 2016-2019



Source: Central Bank of Ireland.

Notes: All new PDH mortgage loans for property purchase included in each four year period.

Irish banks' profitability had weakened in 2019, due to rising impairments, rising costs and tightening interest margins. The current crisis will exacerbate these difficulties and may potentially weaken capital resilience. Weak profitability was already presenting a challenge to future capital generation before COVID-19; Irish banks' ROE and ROA had been reducing steadily through 2019 (Chart 49). The previous Review had highlighted that this deterioration was more rapid than the average across Europe. The source of this reduction in profitability was a tightening of net interest margins, owing to Irish banks' reliance on interest income and the low interest-rate environment, as well as to rising expenses and loan impairments (Chart 50).

The outlook for credit suggests tightening supply and weakened demand overall, but greater demand for short-term liquidity. According to evidence from a survey of Irish banks, sharp changes in credit allocation are likely.⁴⁷ On the supply side, banks expect to tighten lending criteria in the second quarter of the year. Credit demand from households is expected to weaken substantially. Banks expect increased demand for short-term loans from firms, but less demand for long-term loans, reflecting liquidity needs of businesses and the downturn in investment prospects. These

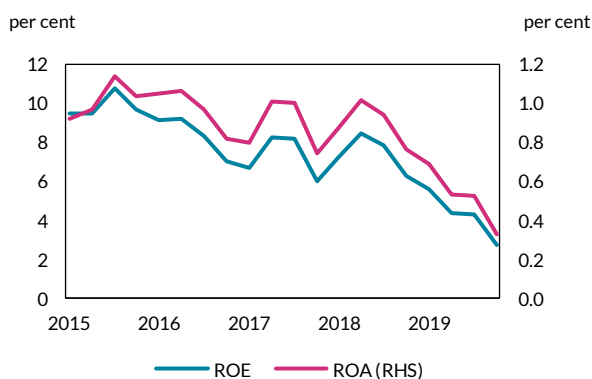
⁴⁶ Data on CRE composition from Central Bank of Ireland, Quarterly Standard Financial Return, for which 2010Q4 is earliest available data submission. Speculative development was likely to have accounted for an even larger share of total CRE assets before transfers to NAMA, which had already occurred before these data were gathered.

⁴⁷ See Byrne, Holton and Parle (2020) "COVID-19: Bank credit conditions and monetary policy", *Economic Letter*, Vol. 2020, No. 5.

expectations suggest that loan volumes, and banks' potential to earn interest income, are likely to fall, putting pressure on underlying profitability.

Chart 49: Profitability had been weakening in the run-up to COVID-19, presenting challenges to future capital generation

ROE and ROA for domestic retail banks

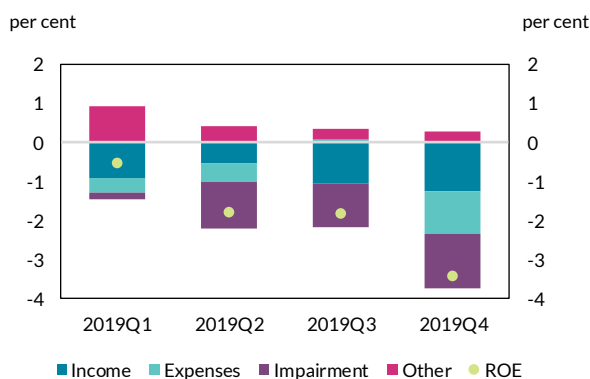


Source: Central Bank of Ireland.

Notes: Weighted averages of the ROE and ROA for the five domestic retail banks. Last observation at 2019Q4.

Chart 50: Tighter interest margins, higher impairment were primary drivers of weakening profits. Both are likely to continue

Composition for the change in ROE relative to 2018Q4



Source: Central Bank of Ireland.

Notes: Each observation decomposes the absolute change in the ROE relative to 2018Q4. Sample includes the five domestic retail banks.

COVID-19 will have a severe effect on Irish retail banks' asset quality, due to substantial exposures to enterprises in the most acutely affected sectors. Over €13 billion of Irish retail banks' corporate lending is to firms with Direct or Intermediate (see Box 4 for definitions of sector types) exposure to the economic effects of COVID-19 (Chart 51). In SME lending, the figure is close to €9bn, driven by over €3 billion of lending to the Accommodation and Food sector, and over €1.4 billion of lending to affected borrowers in the Wholesale and Retail sector. When Direct and Intermediate exposures to large corporations and SMEs are combined with Commercial Real Estate (CRE) loans, €37.3 billion, or 63 per cent of Irish retail banks' total commercial lending is exposed to the most immediate effects of the shock. Further, 47 per cent of mortgage borrowers work in sectors with Direct or Intermediate exposure to the shock (see *Resilience: Households*).

Large, concentrated corporate exposures present a risk. In certain sectors, where liquidity buffers are low and pre-existing debt levels high, there is a risk that large firms may fail in the absence of State support. This presents a particular issue for banks, in that a small number of failures could have material effects on asset quality and capital due to large, concentrated corporate exposures. Among the major Irish lenders, the twenty largest loans in each lending segment account for €5 billion from a total commercial lending portfolio of €60 billion (Chart 52). The hundred largest loans per segment account for €13bn, or 22 per cent of total commercial exposures.⁴⁸ The concentration among large exposures appears greatest in the CRE book.

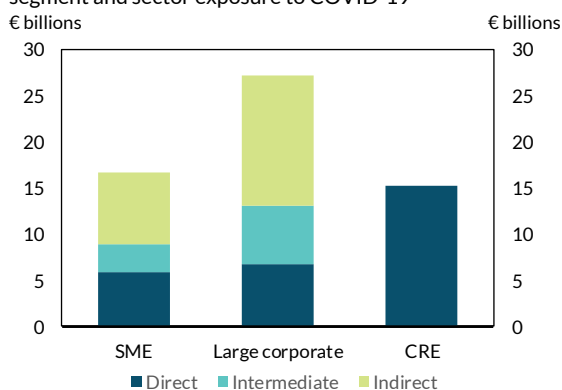
Global leveraged finance exposures may be particularly vulnerable. Corporate borrowers in this segment of the market have much higher levels of leverage and recent years have seen a gradual deterioration in leveraged loan covenants. Significant downgrades in credit ratings across the leveraged loan and high yield bonds have been applied to businesses in impacted sectors. Irish retail banks are estimated to have in excess of €15 billion in exposure to leveraged corporate

⁴⁸ These figures are totals for AIB, BOI and UBIDAC, the three Irish retail banks engaged in material levels of commercial lending.

credit, when using the ECB definition of total debt to EBITDA of more than four times.⁴⁹ Rating downgrades, even in the absence of default events, may lead to forward-looking provisions being taken in this portfolio, depleting capital.

Chart 51: Substantial volumes of commercial lending are to firms in sectors with Direct or Intermediate exposure to COVID-19 restrictions

Bank commercial lending exposures by counterparty segment and sector exposure to COVID-19

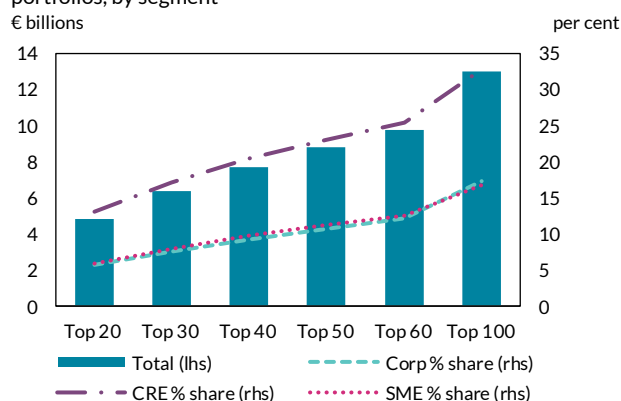


Source: Central Bank of Ireland.

Notes: Based on end-April 2020 supervisory returns of three Irish retail banks. "Direct", "Intermediate" and "Indirect" exposure of sectors is defined in Box 4.

Chart 52: Concentration among large corporate borrowers may lead to large losses if risks lead to defaults

Share of largest loan balances in Irish banks' commercial lending portfolios, by segment



Source: Central Bank of Ireland December 2019 Loan Level Data

Note: Sample includes AIB, BOI and UBIDAC. Loan exposures are measured within an individual lending institution only. Lending segments are Micro, SME, Corporate and CRE.

In addition to credit losses, banks may see pressures on their capital ratios due to the drawdown of pre-committed credit lines. Firms in acutely affected sectors are currently experiencing a liquidity crisis, with banks potentially standing as "lenders of first resort" through pre-committed overdrafts and credit lines.⁵⁰ Irish retail banks had €14.7 billion of undrawn credit lines available to corporate borrowers as of April 2020, down from €16.6 billion in February, suggesting that firms had already begun to utilize these facilities. The effect of a full drawdown of these facilities on banks' capital ratios, through an increase in Exposure at Default, in the absence of any loan defaults, would be around 2 per cent across the retail banking system (Chart 53).

Many loans are receiving temporary payment breaks. Banks have responded rapidly to the liquidity crisis in the real economy, offering three- and six-month payment breaks (PB) to affected borrower (see *Resilience: Households* and *Resilience: Non-Financial Corporations*). This liquidity relief has supported borrowers in absorbing the immediate effects of the COVID-19 shock on revenues. These vulnerable customers comprise 13.3 per cent of total lending, suggesting that outcomes beyond the PB will have material effects on the resilience of banks (Chart 54). PB take-up has been substantially higher for firms than households, with 23 per cent of Irish enterprise lending currently on an active PB, relative to 11 per cent of Irish mortgages.

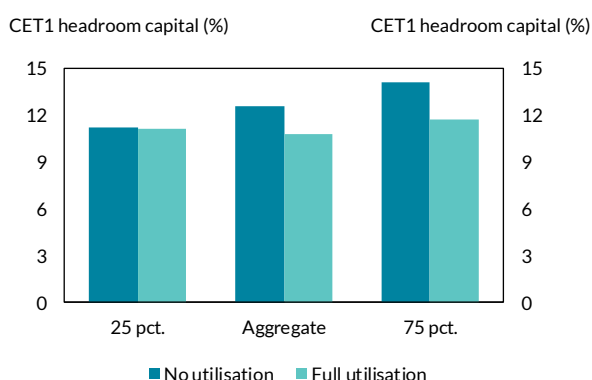
⁴⁹ This exposure is from a total commercial lending portfolio (Large Corporate, SME and CRE) of €61 billion for Irish retail banks. Of this, the main Irish banks have an estimated €10 billion in US and European syndicated leveraged finance exposures, which are a combination of financial sponsored backed transactions and highly geared publicly quoted companies.

⁵⁰ [Li, Strahan and Zang \(2020\) "Banks as lender of first resort: evidence from the COVID-19 crisis" NBER Working Paper 27256](#). They report that the \$482 billion increase in corporate lending in the last three weeks of March in the USA was around 50 times the historical average, explained almost entirely by the drawdown of committed credit lines in response to COVID-19 liquidity shortages.

Some customers on payment breaks will not return to full capital and interest payments, leading to losses and capital depletion. The success rate of PBs is uncertain. Some performing loans will be assessed as IFRS 9 Stage 2 (S2) if they require further forbearance or restructuring after the PB. Others will be deemed to have further deterioration in credit quality and will be classified as having defaulted (see Box 5 for a detailed discussion of PBs as a response to COVID-19). For banks opting to apply IFRS9 capital transition, the provisions for which are to be shortly amended, the effects on CET1 of the transition to S2 may be cushioned.

Chart 53: Liquidity stresses will mean that corporates and SMEs draw down existing credit lines. This will deplete bank capital.

Impact of utilisation on capital ratios

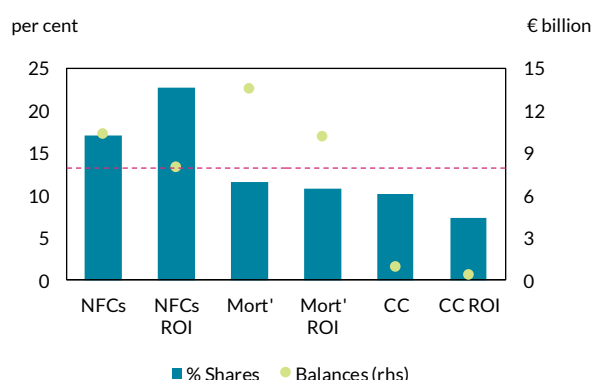


Source: Central Bank of Ireland.

Notes: 25 pct. and 75 pct. correspond to the respective 25th and 75th percentiles of the distribution of undrawn exposures held by the 5 domestic retail banks. "Aggregate" refers to the system as whole. Sample includes five domestic retail banks. Data as at 2019Q4.

Chart 54: Payment breaks have been widely issued, with take-up highest for firms in Ireland

Value and share of loan balances by asset class with active payment breaks, Irish retail banks



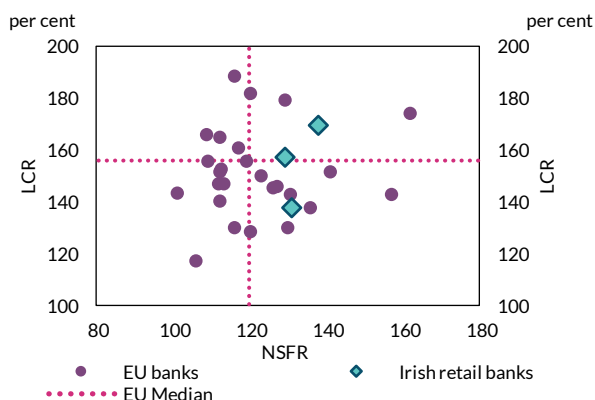
Source: Central Bank of Ireland.

Notes: Active payment breaks at May 29th reported in data. Payment breaks outside the retail banking sector not included in calculations. "NFC" refers to all SME, Corporate and CRE exposures. "Mort'" refers to residential mortgages, both PDH and BTL. "CC" refers to credit for consumption purposes. % Shares refer to share of total lending in each asset class currently on an active payment break. Dashed line refers to the 13.3% of total loans currently on an active payment break.

Banks' liquidity ratios are well above minimum requirements, implying liquid assets are sufficient to meet potential outflows. Eurosystem eligible assets can be mobilised to allow access to Eurosystem funding lines if required. Irish banks' liquidity ratios were both above 100 per cent at December 2019 (Chart 55). The Liquidity Coverage Ratio measures the ability of banks to meet levels of stressed outflows through utilisation of their available pool of liquid assets. Should liquidity difficulties arise beyond those envisaged by the LCR, some banks may seek recourse to Eurosystem funding facilities, in which case, availability of eligible collateral will be a pivotal determinant of bank funding stress. Asset encumbrance levels have fallen in recent years for Irish retail banks (Chart 56), suggesting more collateral is available to access central bank funding, if eligible. At April 20th 2020, the three domestically owned retail banks had €37.3 billion of unencumbered collateral, net of haircuts, available. Recent announcements of additional flexibility on eligibility criteria by the ECB have contributed €1.0 billion to this total.

Chart 55: Liquidity Coverage Ratios are well above minimum requirements, due to Irish banks' reliance on deposit funding

LCR and NSFR for European and Irish banks

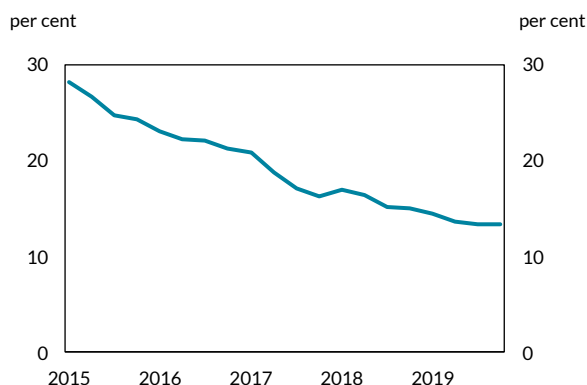


Source: S&P Global.

Notes: Chart shows Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR) for 41 European banks. Irish retail banks include AIB, BOI and PTSB. Data as at 2019Q4.

Chart 56: Asset encumbrance levels have fallen, indicating that collateral will be available to facilitate access to central bank liquidity, if required

Encumbered assets to total assets

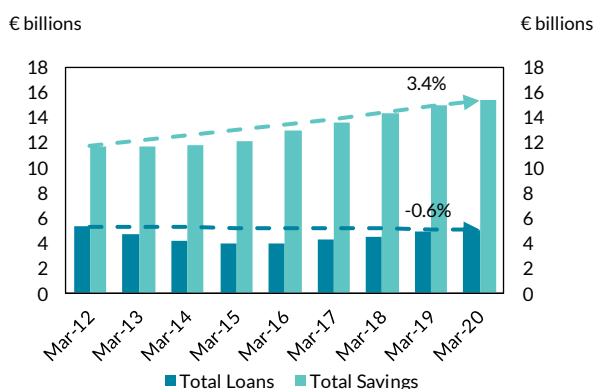


Source: Central Bank of Ireland.

Note: Chart presents the ratio of encumbered assets to total assets for the five domestic retail banks. Last observation at 2019Q4.

Chart 57: Credit union lending has been falling relative to savings, reducing earning capacity

Total loans and total savings of credit unions, 2012-2020

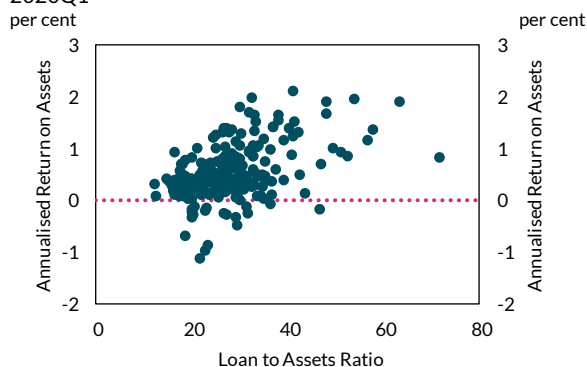


Source: Central Bank of Ireland

Notes: Quarterly data refer to Q1 of each year reported

Chart 58: Low lending levels and weak profitability are a feature of the sector

Credit union loan-to-asset and return-on-asset ratios, 2020Q1



Source: Central Bank of Ireland.

Note: Data are based on prudential return relating to 31 March of the relevant year. Figures provided from the quarterly Income and Expenditure Statement are reported on a year-to-date basis (from 1 October to date). Return on Asset figures are annualised.

Many credit unions continue to face well-documented sustainability challenges impacting their financial performance. The credit union business model has and continues to suffer from reduced loan demand, with loan volumes outpaced by stronger savings growth (Chart 57). Furthermore, the credit union sector's operational business model lacks scale efficiencies and has high operating costs. Surplus savings that are not lent out to members are appropriately not exposed to undue risk, and they yield limited investment returns reflective of the current low interest rate environment. Credit unions with lower loan-to-asset ratios typically have lower ROA, with a substantial number of credit unions having ROAs of less than 1 per cent, with a segment having negative ROA in 2020Q1 (Chart 58).

Sovereign

The COVID-19 pandemic will have a significant negative impact on the Irish public finances. As economic activity contracts, revenues are likely to substantially reduce across most tax heads. Expenditure on automatic stabilisers, increased health spending to directly combat the virus and expanded income supports have already led to, and will continue to drive the government deficit, which is estimated at 10 per cent of GNI in 2020. The debt to GNI* ratio is likely to rise to 115 per cent. However, the future path for the public finances is highly uncertain, and depends on the set of public health policies that are necessary to manage the virus during the next one to two years. Additional large deficits beyond 2020 are probable. At end-May, Ireland's cost of borrowing had remained comparable to other European countries with strong pre-pandemic financial positions. Recent ECB announcements around bond purchases are likely to mitigate the effect of increased deficits on the State's borrowing capacity.*

Public health and social welfare spending in response to COVID-19 will place significant demands on the Exchequer. The initial estimate of the cost of direct spending measures introduced by the government was approximately €7 billion (3.8 per cent of GNI*).⁵¹ These include income supports, increased health spending and liquidity assistance for businesses.⁵² By the end of May, over one million people, out of a total labour force of 2.4 million, were in receipt of either the PUP or TWSS payments. These are in addition to the over 200,000 people claiming Jobseeker's Benefit before the crisis began. The Government has also introduced €7 billion in guarantees, loans and tax deferrals for businesses, which could lead to additional future expenditure or revenue shortfalls.⁵³

At the same time, the reduction in economic activity will lead to sharp falls in tax revenue. Both VAT and excise receipts declined by around 35 per cent on an annual basis in the month of May – reflecting both reduced activity and deferred payments. Income taxes have also started to weaken and were 8 per cent lower compared with a year earlier. Corporation taxes, by comparison, have continued their trend of the last few years coming in ahead of expectations, with receipts doubling from the previous May.

The Irish public finances were on a broadly positive trajectory prior to the pandemic, but debt levels remained high relative to economic activity. The general government balance recorded its first surplus in over a decade in 2018 and this strengthened to 0.6 per cent of GNI* last year, due in part to a surge in corporation tax receipts and falling interest costs. The general government debt ratio has also improved significantly in recent years, with the gross ratio falling from a peak of 166 per cent of GNI* in 2012 to 97 per cent last year, and a net debt ratio of 84 per cent. Although the decline in debt has been significant in recent years, debt still entered the crisis at a high level, reflecting the magnitude of the correction required after the previous crisis (Chart 59). Relative to other European countries, the Irish fiscal picture entering the crisis was mixed (Chart 60). While the general government balance compared favourably to the Euro area as whole, the gross general

⁵¹ Department of Finance, 'Draft Stability Programme Update 2020', April 2020.

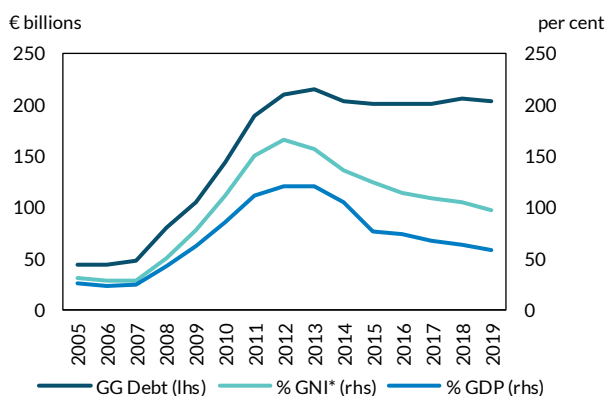
⁵² For a more detailed discussion on the measures that have been introduced by the Government, see [Central Bank of Ireland Quarterly Bulletin No. 2, April 2020](#).

⁵³ Department of the Taoiseach, 'Government outlines further measures to support businesses impacted by Covid-19', 2 May 2020.

government debt ratio was estimated to be the sixth highest in the region, despite the favourable economic environment in Ireland in recent years.

Chart 59: Government debt had stabilised at €200 billion before COVID-19, but remained close to 100 per cent of GNI*

Government debt balances, and percentage of GDP and GNI*

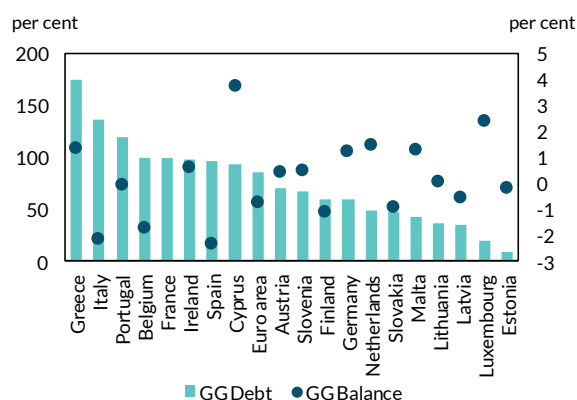


Source: CSO, CBI

Note: GNI*/GDP - 2019 are estimates based on 4 quarters of growth in 2019.

Chart 60: The government balance was among the more favourable in Europe in 2019, but debt was sixth highest relative to economic activity

Government balances



Source: European Commission AMECO Database

Forecasts for the deficit and debt level have increased sharply due to COVID-19. In the absence of the pandemic, the positive trends outlined above were expected to continue this year against the backdrop of strong economic activity and falling interest costs. COVID-19 has sharply altered the outlook. On the revenue side, the decline in private consumption and taxable incomes is expected to have a strong negative impact on direct taxes, indirect taxes and social contribution receipts. On the expenditure side, higher income support payments and health spending is expected to lead to a significant increase in government consumption and social transfers. These factors are expected to result in a general government deficit of between €22 billion and €30 billion (or between 11.5 and 17.5 per cent of GNI*). The corresponding increase in general government debt will leave the debt to GNI* ratio at between 115 and 125 per cent.⁵⁴ Given the unprecedented nature of the crisis, all projections are characterised by an extreme level of uncertainty.

The medium term outlook is now highly uncertain but a return to economic growth should see the public finances improve. Assuming the economy returns to annual growth next year both the general government deficit and debt ratios should start to decline as temporary COVID-19 measures drop out of the base and government revenues begin to expand once again. Both are likely to remain at an elevated level, however. The debt ratio declined rapidly following the financial crisis – particularly relative to other Euro area economies – reflecting an extremely favourable interest-growth differential and deficit debt adjustment (see Chart 62).⁵⁵ These factors appear unlikely to be as supportive in the coming years, meaning primary deficits will be a bigger drag on debt dynamics and the ratio will improve at a more gradual pace.

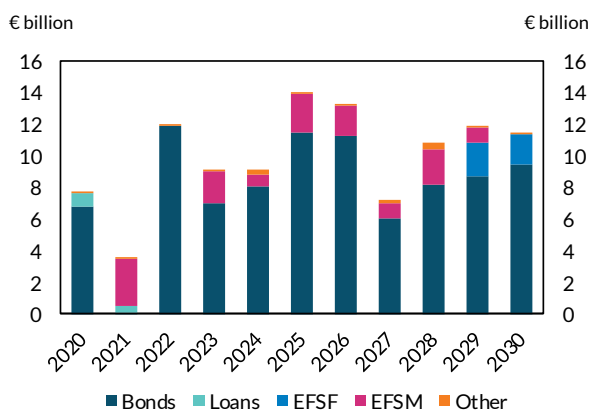
⁵⁴ This estimate assumes a rundown in cash balances of around €8 billion, consistent with the figure for the year in the Stability Programme Update. Additional sources of finance to bridge the gap between revenue and expenditure this year include the Rainy Day Fund, the expected surplus payment from the National Asset Management Agency and Central Bank surplus income.

⁵⁵ For a more detailed discussion on this see [Conefrey, Hickey and Walsh, "Debt and Uncertainty: Managing risks to the Public Finances", Central Bank of Ireland Economic Letter, Vol. 2019, No. 11.](#)

Recent policy announcements from the ECB will contribute to mitigating the damaging effects of the crisis on the State's borrowing capacity. One risk to public debt sustainability in the coming years is an increase in sovereign borrowing costs. Low interest rates have played an important role in both reducing government expenditure and supporting favourable debt dynamics in recent years. While in the current environment there are clearly risks that the cost of sovereign borrowing increases once again, there are mitigating factors, including the ECB's €750 billion Pandemic Emergency Purchase Programme (PEPP), the availability of loans from the European Stability Mechanism and increased funding from the European Investment Bank. Furthermore, the National Treasury Management Agency (NTMA) have taken advantage of favourable market conditions in recent years to build up cash balances, reduce interest costs and improve the maturity profile. Ireland's relatively long maturity profile, with particularly low redemptions in 2021, will mitigate some of the initial borrowing pressure arising due to the pandemic (Chart 61).

Chart 61: The long maturity of many Irish debt instruments will ease the burden on government finances

Maturity profile of Irish government debt

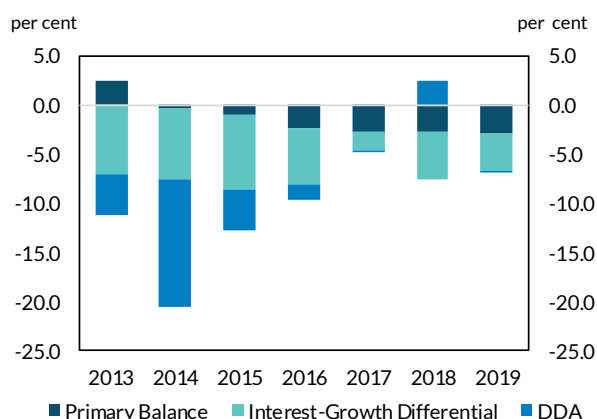


Source: NTMA

Notes: EFSM loans are subject to a 7-year extension and it is not expected Ireland will have to refinance any of these loans until 2027.

Chart 62: Exceptional factors drive the strong debt reduction after the last Crisis, but these are not expected to be as significant in the coming years

Contributions to reduction in Debt to GNI* ratio



Source: CSO and Central Bank of Ireland calculations

Notes: "DDA" refers to the deficit debt adjustment – sometimes referred to as the stock flow adjustment – which reconciles two key government indicators, the government deficit / surplus and government debt. It incorporates factors that impact the debt level without affecting the budget balance, such as the reduction of cash holdings to or sale of assets.

Non-bank financial sector

Investment funds

Relative to the size of economy, Ireland has one of the largest non-bank financial sectors in the world. These non-bank financial entities are generally internationally focused, but important domestic linkages exist. Notably, funds that invest in Irish commercial real estate own a third of that market. In addition, there is interlinkages with the retail banking system providing close to about a fifth of the leverage to investment funds. The COVID-19 pandemic introduced additional risk and uncertainty around property asset valuations, which has led to a limited number of suspensions of funds. Real estate investment funds (IREFs) raise funding through a mix of equity and debt, with a cohort of funds being highly leveraged. Liquidity transformation is less of a concern as funds are either close ended (i.e. investors cannot liquidate their investment until the end of a period, say five years) or have limited liquidity (i.e. limited opportunities to liquidate their investments, for example annually). However, sustained pressure on these funds can potentially amplify shocks in the domestic CRE market, or aid in the transmission of this shock to the banking sector.

Investment by funds is particularly important in the financing of domestic CRE. Irish investment funds now account for over 35 per cent of the CRE market, as they have invested a total of €18 billion in Irish property and land, partially funded from abroad. This represents a potentially beneficial diversification of CRE funding, away from domestic investors towards international investors. Nonetheless, this new form of financing also poses potential vulnerabilities. Highly levered funds may have to sell their assets if the cost of their debt rises or they breach loan covenants. This is particularly relevant given the current global tightening in financing conditions. Funds with liquidity mismatches may also have to sell assets quickly to fulfil redemptions which could put downward pressure on asset prices, amplifying any CRE market downturn.

Some Irish-resident real estate funds have high levels of leverage. On average, Irish funds investing in CRE are more levered than real estate funds in over 90 per cent of European countries in the sample.⁵⁶ Some of the debt used by these funds takes the form of loans from equity holders. Even if these loans are removed from the measure of leverage at the end of 2018, leverage measured as Loan-to-Value reduces from 54 per cent to 40 per cent,⁵⁷ which is still higher than the leverage of real estate funds in more than 90 per cent of European countries. These aggregate leverage metrics also mask significant heterogeneity amongst individual funds (Chart 63). While over €8 billion is held by funds with little to no leverage, 52 per cent of IREFs, in terms of AUM, have an adjusted LTV of greater than 50 per cent. Over a billion euro of assets is held in funds with adjusted LTV higher than 90 per cent.

The starting leverage position of some of the funds makes them more vulnerable to CRE price falls. For example, a 15 per cent fall in CRE prices, would increase the weighted average Loan-to-Value (LTV) across IREFs (excluding shareholder loans) from 43 per cent to 50 per cent. The same shock

⁵⁶ The data on European real estate funds is limited, thus the nature of the business model reasons for stated differences cannot be ascertained in detail.

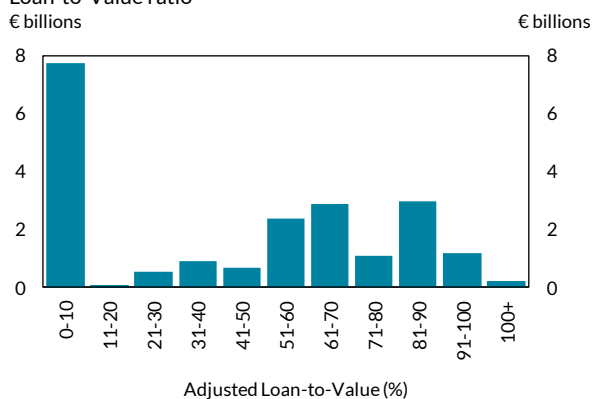
⁵⁷ See [FSR 2019:II](#).

would result in 20 IREFs, with €2 billion in AUM, entering negative equity. These shocks could lead to covenant breaches, which may in turn lead to forced property sales.

Irish resident funds that invest in domestic CRE use financing from various sources, including Irish retail banks. The loans provided to these funds, which make up their leverage, come from a variety of sources (Chart 64). About a quarter come from shareholder loans. However, about a fifth of the loans comes from Irish retail banks, highlighting interconnectedness between the two sectors that could constitute a vulnerability in situation of market stress. Potentially, a shock to the CRE market could be transmitted through Irish CRE funds to the banking sector, thus amplifying existing pressures on the banking sector (see *Resilience: Retail banks and credit unions*).

Chart 63: Leverage of real estate funds displays significant heterogeneity

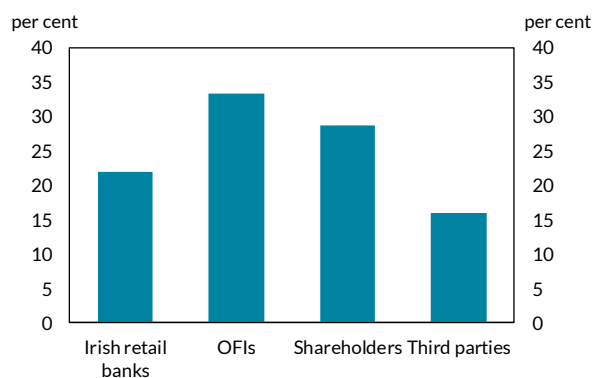
Distribution of total assets by Irish real estate funds adjusted Loan-to-Value ratio



Source: Central Bank MMIF Returns Q4 2019 and Investment Fund Prospectus.
Notes: Loan-to-Value (LTV) is calculated as Debt/Total Assets, where Debt = 1 - Equity. Adjusted LTV is calculated as Debt/Total Assets, where Debt = 1 - (Equity + Shareholder Loans).

Chart 64: Most of leverage employed by real estate funds takes the form of loans from bank and other financial institutions

Structure of debt owed by Irish-resident real estate funds



Source: Central Bank of Ireland.
Notes: Irish real estate funds are those investment funds resident in Ireland which hold Irish real estate. Third parties denote entities other than Irish retail banks, OFIs, and shareholders, including non-Irish banks. Data as of 2018Q4.

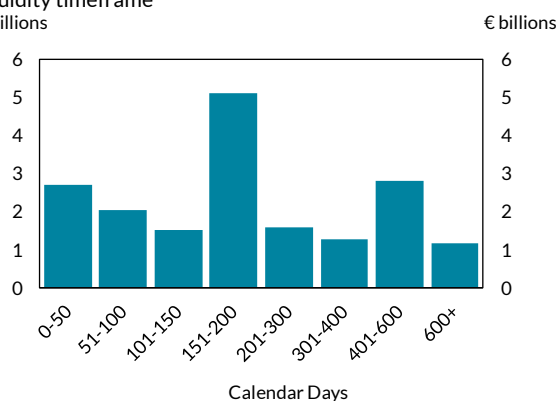
Liquidity mismatches in Irish-resident funds that invest in CRE are limited, though still apparent in some cases. Liquidity is particularly important for funds holding CRE, as it is difficult to sell a building in a short period at prevailing market prices. For example, analysis of CRE transaction times suggests that an average time to sell is around 6-7 months in non-stressed periods. The majority of Irish CRE funds give investors at most one opportunity per year to redeem their investments, though there are some funds with more frequent redemption periods. In addition, many funds allow a notice period during which investors can notify that they wish to redeem their shares and also outline a typical settlement period for payment of the redeeming fund shares. This extended timeframe allows funds to sell property over a longer period, to meet any redemptions. Analysis by Central Bank staff suggests that a meaningful share of funds have a liquidity timeframe less than 6-7 months (Chart 65). Funds also keep liquid asset holdings, such as cash or deposits, which allow them to fulfil typical redemption flows without the need to sell real estate assets. These liquidity buffers are on average around 5 per cent of assets. Liquidity management tools are also available to these funds. For example, they can limit large redemption requests with “gates” and redemption fees or they can suspend redemptions for a period. This reduces the risk that Irish real estate funds may have to sell properties quickly at discounts to meet redemptions.

Two Irish real estate funds suspended redemptions, given the increase in valuation uncertainty. In March, two Irish IREFs suspended redemptions. This was because the valuers of their property

holdings had activated ‘material uncertainty’ clauses in the context of the COVID-19 shock. This prompted those funds to suspend as it was deemed the net asset value of the fund could not be calculated with sufficient certainty. While these actions were taken from an investor protection perspective, they also have broader, system-wide benefits, as they reduce the risk that funds may be forced to sell properties over a short period to meet any redemptions.

Chart 65: Irish real estate funds have diversified liquidity profile

Distribution of total assets across Irish real estate funds by liquidity timeframe
€ billions



Source: Central Bank MMIF Returns and Investment Fund Prospectus'
Notes: Data as of Q4 2019 for 132 funds with €18.1 billion in AUM. Information on liquidity timeframes not available for 25 funds with €2.4 billion in AUM. Liquidity timeframe = standard notice period + settlement period. Standard notice period is the number of days prior to the dealing day during which redemptions may be requested.

Insurance firms

Insurance firms will be affected to varying degrees by the fallout from the COVID-19 pandemic given the heterogeneous nature of their business models. Although firms are likely to see declines in their solvency positions in the immediate term due to the falls in financial asset values and/or falls in risk free interest rates, domestic insurance firms' solvency positions were above regulatory requirements as at 2020Q1. Non-life domestic firms' aggregate profitability continued to improve in 2019 but there may be challenges to firms' future profit levels in an environment of low interest rates, financial market uncertainty and weak economic conditions.

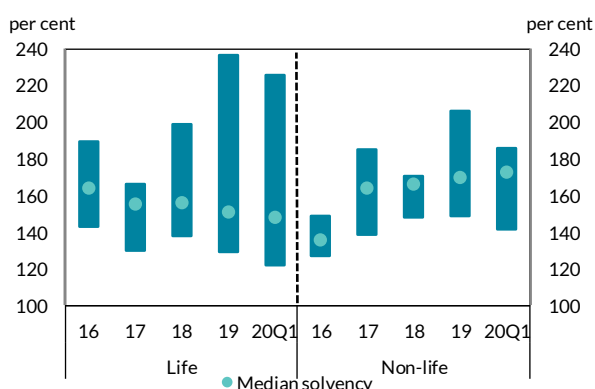
The insurance sector in Ireland is diverse and comprises life, non-life and reinsurance firms operating across a range of markets. The impact of the COVID-19 pandemic will vary across insurance firms, given the heterogeneous nature of business models throughout the sector. An insurance firm's solvency capital requirements (SCR) is intended to ensure that insurers are resilient to significant stress events. A number of firms have seen declines in their SCR coverage due to the immediate impact of financial market falls on asset values and/or falls in risk free interest rates increasing liability values. This has resulted in some of the internationally-focused firms requiring a capital injection from their parent firm. The companies providing insurance products in the domestic market are life and non-life firms. As at 2020Q1, domestically-focused life and non-life insurers' available capital (own funds) continued to exceed their SCR under

Solvency II (Chart 66). Capital quality is high for both domestic life and non-life firms with Tier 1 unrestricted capital accounting for 97 per cent and 95 per cent of total own funds, respectively.⁵⁸

The investment portfolios of some insurance firms have been adversely affected by the falls in the market value of some assets and may experience losses in the event of credit defaults or further market stress. At an aggregate level, domestic non-life insurers' investment portfolios predominantly comprise fixed income securities with the allocation shifting from sovereign bonds to riskier corporate bonds and collective investment funds in recent years as firms have sought to increase investment returns in a low interest rate environment (Chart 67). Along with falls in asset values, bond holdings may be subject to credit downgrades, which could increase capital requirements under Solvency II. In particular, BBB rated bonds account for 25 per cent of non-life insurers' investments (Chart 68). Direct equity holdings - which have seen the sharpest fall in value - account for only 3 per cent of firms' investments. Firms' financial asset holdings are, however, heavily concentrated in the financial (56 per cent) and manufacturing (16 per cent) sectors.⁵⁹

Chart 66: Domestic insurers' solvency positions are above regulatory requirements

Solvency position of domestic life and non-life insurers

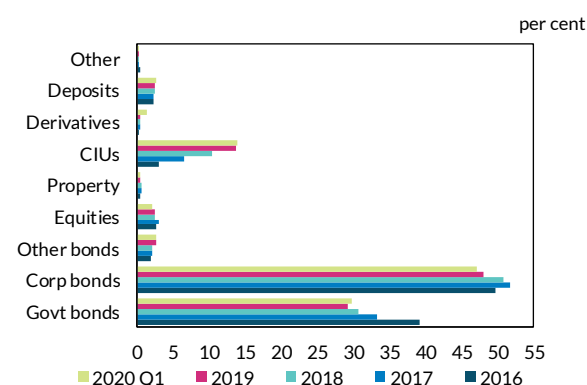


Source: Central Bank of Ireland.

Notes: The solvency position is measured as eligible own funds as a percentage of SCR. The box at each point shows the maximum and minimum range. Sample is time varying comprising the largest domestic life and non-life insurance firms. Last observation 2020Q1.

Chart 67: Domestic non-life insurers' investment allocation shifting from sovereign bonds to corporate bonds and collective investment funds

Non-life insurers' investment asset allocation



Source: Central Bank of Ireland.

Note: Last observation 2020Q1.

There may be challenges to firms' future profit levels in an environment of continuing low interest rates, a weaker economy and financial market uncertainty. Domestic life insurers predominantly sell unit-linked products (comprising 90 per cent of assets under management), where the investment risks are primarily borne by the policyholder. The current losses being experienced in financial asset markets will translate into reduced policy values for unit-linked policyholders. This in turn will lead to a reduction in firms' income as the fees earned on these products are typically based on the value of the assets under management. Lapse rates, which are currently low, could also increase if policyholders require access to their accumulated savings or are unable to continue with their ongoing premium payments thereby creating further profitability challenges for firms. A slow, protracted recovery from the pandemic-related economic shock would also result in lower volumes of new business premium income in both the life and non-life sectors as households' and

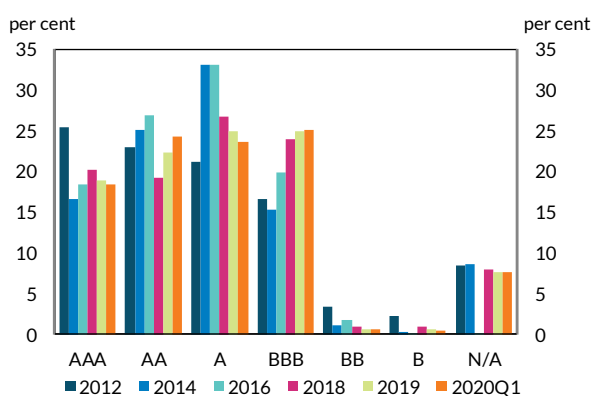
⁵⁸ Insurers' 'Own funds' are divided into 3 'tiers' based on both 'permanence' and 'loss absorbency'. Tier 1, being the highest quality, is also divided into 'restricted' and 'unrestricted' tier 1 which includes issued share capital and reserves.

⁵⁹ Financial assets are corporate bonds, equities, collateralised securities and collective investment funds.

firms' demand for insurance products would likely fall given reduced levels of income and a decline in economic activity. The prolonged low interest rate environment will continue to present challenges to firms in generating investment income, which has been a declining share of the non-life sector's profitability in recent years. While firms' aggregate profitability continued to improve in 2019, the path of future underwriting profitability is uncertain as the impact of the COVID-19 pandemic on insurance claims, for example business interruption claims, will only emerge over time (Chart 69). In addition, the resilience of the sector would be undermined by the retroactive coverage of claims that were not priced or reserved for as this could create risks to firms' solvency and ultimately compromise policyholder protection and market stability.

Chart 68: Domestic non-life insurers' holdings of BBB rated assets have been increasing

Domestic non-life insurers' financial assets by asset rating.

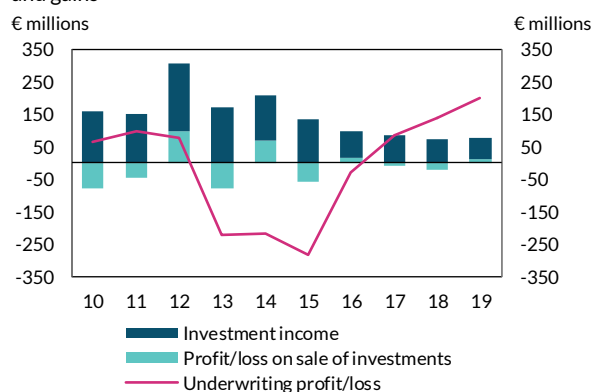


Source: Central Bank of Ireland.

Notes: Categories are as a per cent of total financial assets. Last observation 2020 Q1.

Chart 69: Domestic non-life insurers' profitability continued to strengthen in 2019

Non-life insurers' underwriting profits and investment income and gains



Source: Central Bank of Ireland.

Note: Data are an aggregation of domestically-focused firms. Profit/loss on sale of investments includes realised and unrealised gains and losses. Data relate to firms' domestic and global business. Last observation: 2019Q4.

While insurance firms typically experience low levels of liquidity risk, the very nature of the COVID-19 shock could give rise to heightened liquidity risk in individual firms. The insurance business model is fundamentally different to that of banking, in that insurers do not engage in maturity transformation but seek to match the average duration of their assets and liabilities. Still, a confluence of events amidst an uncertain operating environment could give rise to heightened liquidity risk in individual firms. These include, for example, reduced cash flows arising from a large spike in claims, reduced premium income, a deterioration in the market liquidity of their assets or increased margin calls due to heightened market volatility. Unit-linked insurance products could also see increased redemptions. Indeed, since January 2020, a number of life insurance firms (both domestic and cross-border firms) have closed their property-related unit-linked funds to withdrawals or have changed the pricing method from an acquisition basis to a disposal basis.⁶⁰ This was due to a sharp increase in redemption requests as well as challenges in determining the value of the underlying assets in times of market uncertainty. These actions were taken to protect the interests of all policyholders: both those looking to exit, and those remaining in, the fund. But they also have broader, system-wide benefits, as they reduce the risk that unit-linked funds may be forced to sell properties over a short period of time to meet any redemptions.

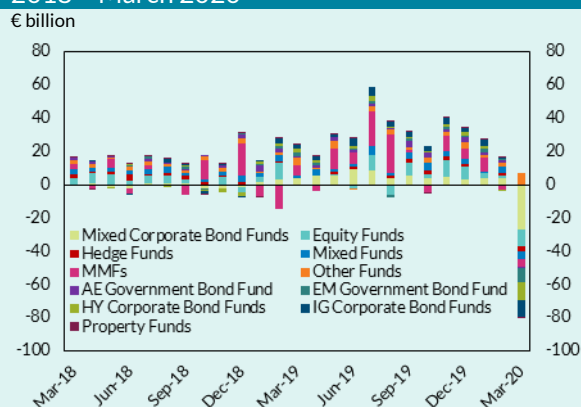
⁶⁰ Property-related assets account for €6 billion of the unit-linked funds, which includes € 4 billion invested in Irish properties, mostly commercial property.

Box 6: Irish-resident funds and the market disruption at the onset of COVID-19

By Neill Killeen, Vasileios Madouros and Kitty Moloney (Financial Stability Directorate)¹

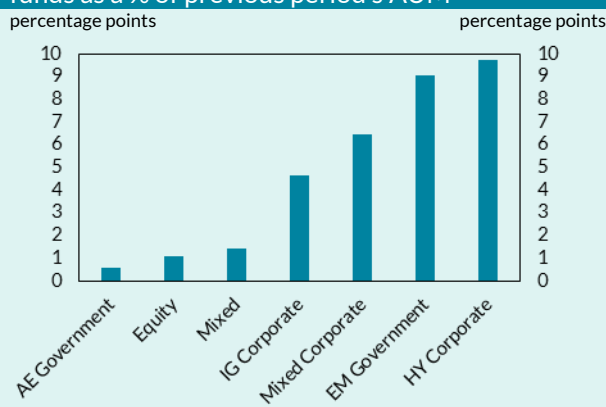
As financial market turbulence, a broader ‘flight to safety’ and heightened demand for cash swept through a range of markets at the onset of the COVID-19 shock, the global funds sector experienced a sharp increase in redemptions. Ireland hosts an internationally oriented funds sector, which is large by European and international standards.² This box provides an overview of the impact of the market disruption at the onset of the COVID-19 pandemic on the Irish-resident funds sector.

Chart A: Flows in Irish-resident funds, € volumes, March 2018 – March 2020



Source: Central Bank of Ireland and authors' calculations.

Chart B: Outflows in Irish-resident investment funds as a % of previous period's AUM



Source: Central Bank of Ireland and authors' calculations
Note: Data as at March 2020

The onset of the COVID-19 pandemic saw a significant increase in market volatility, a widespread ‘flight to safety’ and a deterioration in market liquidity in key asset markets (see *Risks*). Over the same period, the funds industry globally saw large outflows. A similar pattern was observed in the Irish-resident funds sector. In aggregate, there were around €72bn of net redemptions from Irish-resident funds in March (Chart A). These outflows were driven by funds that typically offer daily redemptions to investors, such as equity funds, bond funds and money market funds (MMFs). The contribution to total outflows by funds with less frequent dealing frequencies, such as property funds or hedge funds, was much smaller.

The pattern of redemptions across different fund segments suggests that funds with exposures to less liquid assets, or assets that became temporarily illiquid, were particularly susceptible to outflows. As a share of assets under management, redemptions were highest amongst corporate bond funds (especially less liquid, high-yield corporate bonds) and EME government bond funds and lowest for funds with exposures to more liquid instruments, such as developed market government bonds and equities (Chart B). It is also noteworthy that redemptions from funds were not necessarily correlated with asset returns. For instance, equity price falls were much larger than falls in corporate bond or EME government bond prices. Nevertheless, as a share of assets under management, equity funds experienced much smaller redemptions compared to corporate bond or EME government bond funds. As noted by the ESRB (2020), this overall pattern of redemptions would be consistent with the presence of “first-mover advantage” dynamics amplifying redemption pressures in some cases.³

One of the fund segments that proved particularly susceptible to outflows in March was corporate bond funds. The corporate bond market also saw a sharp deterioration in market liquidity at the onset of the COVID-19 shock. For example, bid-ask spreads for euro-denominated, high-yield corporate bonds spiked to levels close to those observed during the global financial crisis. Market intelligence at the time also pointed to reduced trade sizes and difficulty in executing trades at quoted prices in corporate debt markets. In response to both an increase in redemptions and a deterioration in market liquidity, some funds responded by using liquidity management tools.

However, as shown in Chart C, corporate bond funds also responded to redemption pressures by selling either liquid assets (such as deposits and government bonds) or less liquid assets (such as corporate debt securities). Such asset sales, especially of less liquid assets over a short period of time, may have contributed to further asset price pressures.

Flows into corporate bond funds have stabilised recently, as global central banks interventions have supported financial market functioning.

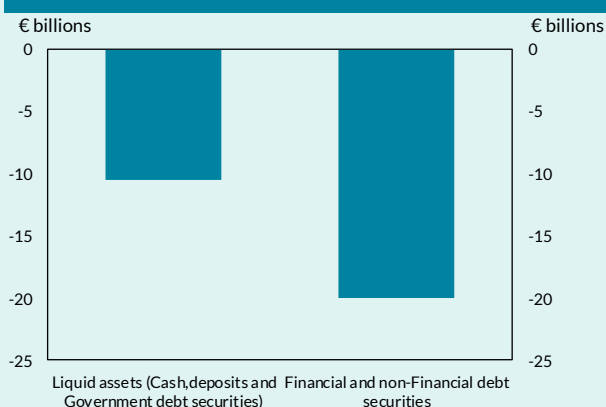
Looking ahead, a key risk for the corporate bond market stems from potential credit rating downgrades. As described in ESRB (2020), large-scale downgrades by credit rating

agencies could lead to falls in assets values beyond those relating solely to a deterioration of credit fundamentals.⁴ The risk of downgrades may also have implications for investment funds. For instance, funds may be required to sell downgraded corporate bonds due to their investment mandates or due to existing risk limits. Large scale downgrades could also act as a trigger for further fund redemptions.

A second key area of vulnerability during March was in MMFs. MMFs are typically used by investors for cash management purposes and are active players in short-term funding markets. The main investors in Irish MMF are other financial institutions, including investment funds and insurance companies, as well as non-financial corporations. Other financial institutions invest in MMFs to meet their own liquidity management needs e.g. their own investors' redemptions and or derivative margin calls. NFCs use MMFs for short-term cash management purposes e.g. payroll expenses. In turn, MMFs are key buyers of short-term bank and corporate debt, especially commercial paper.

In March, as the crisis began to unfold, some Irish MMFs – similar to other MMFs globally – experienced a substantial increase in redemptions. Within the aggregate picture, there was significant heterogeneity of flows amongst the different types of Irish-resident MMFs. For example, US dollar denominated Irish-resident MMFs with investments in private sector debt experienced large outflows in March, whereas US dollar denominated Irish-resident debt MMFs with investments in government debt recorded inflows during the same period. Such flow dynamics were consistent with international developments. Irish MMFs responded to this period of stress by increasing the liquidity of the fund and reducing the maturity of their assets (Chart D). While this means that MMFs are better placed to meet any future redemption pressures, it also implies that

Chart C: Irish-resident corporate bond fund asset sales, 2020Q1



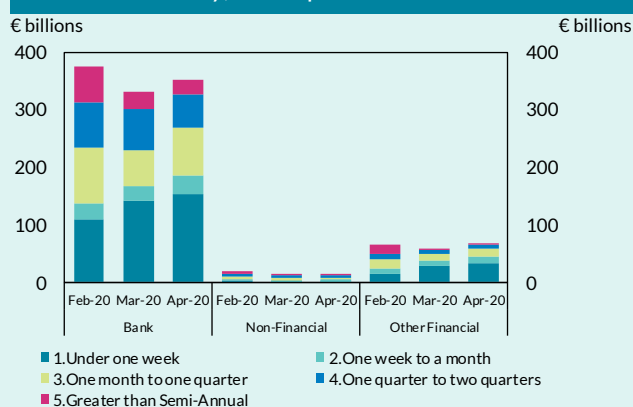
Source: Central Bank of Ireland and authors' calculations

Notes: Liquid assets comprise cash and deposits and government debt securities.

MMFs have been only been willing to provide only very short-term funding to the banking system and the real economy.

Since the onset of the COVID-19 shock, the Central Bank has heightened its monitoring of developments in markets and the funds sector and intensified its supervisory engagement with both asset managers and funds, especially around liquidity management. Given the international and cross-border nature of market-based finance, the Central Bank has also been engaging actively with international counterparts, including via fora such as the FSB, ESRB, ESMA and IOSCO. The near-term focus of the Central Bank remains on monitoring, and mitigating, potential COVID-related risks to market functioning, and ensuring a coordinated international response to the COVID-19 shock. Nevertheless, the market stresses experienced in March, together with the scale of central bank intervention required to manage those stresses, have brought to the fore previously-identified, structural vulnerabilities relating to some segments of the investment fund sector. Building on international work in this area, these will need to be considered and, if necessary, addressed over time. Among others, the observed dynamics at the onset of the COVID-19 shock reinforce the importance of developing and operationalising macroprudential tools for the investment fund sector (see *Policy*).

Chart D: Irish-resident LVNAV MMFs assets by residual maturity, Feb-April 2020



Source: Central Bank of Ireland and authors' calculations.

¹ The authors thank Brian Golden, Brian Power, Tarek Elbay, Barra McCarthy and Aisling Kerr (all Statistics Division) for the provision of data underlying some of the charts used in the box. The box also has benefitted from comments and suggestions from Brian Golden, Colm Kincaid, Kevin Mullen, Cian Murphy and James O'Sullivan.

² Cima, S., Killeen, N. and Madouros, V. (2019), "[Mapping Market-Based Finance in Ireland](#)", Central Bank of Ireland Financial Stability Notes No 17, December.

³ First-mover advantage dynamics refer to the possibility that investors who redeem their shares first would not bear the liquidation cost of selling assets, which in turn is borne by remaining investors. See, for example, Capponi, A., Glasserman, P., & Weber, M. (2018). [Swing Pricing for Mutual Funds: Breaking the Feedback Loop Between Fire Sales and Fund Runs](#) (No. 18-04).

⁴ See ESRB (2020), "[Issues note on liquidity in the corporate bond and commercial paper markets, the procyclical impact of downgrades and implications for asset managers and insurers](#)", ESRB Report, May.

⁵ See, for example, Eren, E., Schrimpf, A. and Sushko, V. (2020), "[US dollar funding markets during the Covid-19 crisis – the money market fund turmoil](#)", BIS Bulletin No. 14, May and ESRB (2020), "[Issues note on liquidity in the corporate bond and commercial paper markets, the procyclical impact of downgrades and implications for asset managers and insurers](#)", ESRB Report, May.

Policy

The Central Bank's objective in its use of macroprudential policy is to promote financial stability in Ireland and to mitigate the impact of negative shocks on the continuous provision of financial services to the real economy. The COVID-19 pandemic, which has triggered the materialisation of previously identified risks to financial stability in Ireland as well as a deep economic shock, highlights the benefit of acting early in order to build resilience in the system. Resilience which can now, in combination with the much broader policy response to mitigate the economic and financial impact of COVID-19, support the banking system in absorbing the impact of the shock and in continuing to serve the real economy. It is in the collective interest of the Irish financial system that it continues to lend sustainably to households and businesses - minimising the extent of the downturn and maximising the contribution to recovery.

This section outlines the Central Bank's current macroprudential policy stance for each of its active policy instruments (See Table 1 for an overview). The Central Bank's immediate macroprudential policy response to the COVID-19 pandemic was the reduction in the countercyclical capital buffer rate to 0 per cent, announced in March.⁶¹ The CCyB is the key cyclical tool in the macroprudential policy toolkit. Releasing it in response to the emerging impact of the COVID-19 pandemic was aimed at supporting the provision of credit from the banking sector to households and businesses. The O-SII buffer and the mortgage measures remain in line with the outcome of their respective 2019 reviews. The Central Bank emphasises that the O-SII buffer is fully available to absorb losses as required. The Central Bank continues to keep its macroprudential policies under review in light of the evolving situation, in addition to each tool being subject to its standard periodic assessment.

The macroprudential policy stance of the Central Bank should be seen in the context of the much broader policy response, both domestically and across Europe, to address the impact of the COVID-19 pandemic. As discussed below, macroprudential measures have been taken by authorities across Europe to address the financial sector impact of COVID-19. These measures complement and reinforce measures taken at the microprudential level. Over and above the prudential measures, both fiscal and monetary authorities have taken significant action to mitigate the economic and financial impact of COVID-19, which will have a positive benefit for financial stability and, ultimately, the ability of the financial system to support households and businesses.

Fiscal policy is paramount in terms of mitigating the detrimental effects of COVID-19 related shocks to the economy and, through that, the financial stability outlook. Beyond the obvious support of the health sector to increase its capability to cope with the health emergency, fiscal policy has a key role to play in supporting aggregate demand and reducing the risk of permanent damage to the productive capacity of the economy. Policy measures have looked to protect incomes and jobs, support companies through the crisis and enable economic recovery. To date the Irish Government has implemented a range of measures including a COVID-19 illness benefit payment, a wage subsidy scheme and a pandemic unemployment payment as well as a variety of supports for businesses to support financing needs and provide relief on costs. While such fiscal actions are critical to the mitigation of the immediate economic impact and to minimise long-term scarring, countries will emerge from the COVID-19 pandemic with higher levels of sovereign debt

⁶¹ Central Bank of Ireland [Statement 18 March](#).

(see Risk). A unified and coordinated approach will benefit all European member states, including Ireland. The European Commission has already taken a number of actions including a temporary framework for state aid and activating the general escape clause of the Stability and Growth Pact.

Table 1 | Summary of macroprudential policies for the banking sector

	Mortgage Measures	O-SII	CCyB
Objective	(i) Increase resilience of banks and borrowers to negative economic and financial shocks (ii) Dampen pro-cyclicality of credit and house prices.	Increase resilience of systemically important banks, defined as those institutions whose failure would have a large impact on the financial system.	Increase banking system resilience to cyclical risks to facilitate a sustainable flow of credit to the economy in good times and bad.
Rate	LTV: 70% - 90% depending on borrower type LTI: 3.5 times A proportion of new lending above the limits is allowed <i>See Table 3 for more detail</i>	0.5% - 1.5% depending on the institution	0%
Type of risk addressed	Cyclical and structural	Structural	Cyclical
Exposures in scope	Proportion of newly originated mortgage exposures	All exposures	Irish exposures
Effective from	February 2015	July 2019 on a phased basis	April 2020
Next review	Q4 2020	Q4 2020	No increase prior to 2021Q1 ¹

Notes: ¹ While the Central Bank reviews the CCyB rate quarterly, it has outlined that it does not expect to announce an increase in the CCyB rate until 2021Q1 at the earliest.

In terms of monetary policy, the ECB is operating a package of monetary policy measures designed to safeguard liquidity conditions, protect the flow of credit to the real economy, and prevent a pro-cyclical tightening of financial conditions.⁶² In March, the ECB announced the introduction of the Pandemic Emergency Purchase Programme (PEPP) “to counter the serious risks to the monetary policy transmission mechanism and the outlook for the euro area posed by the outbreak and escalating diffusion of the coronavirus, COVID-19”.⁶³ The size of PEPP purchases was expanded to over €1.3 trillion in June and the duration was extended beyond the end of 2020. This is being complemented by the third programme of targeted long-term refinancing operations (TLTROs), which incentivise lending to the private sector, and the pandemic emergency longer-term refinancing operations (PELTROs) which ensure sufficient liquidity and smooth money market conditions. The ECB has also temporarily eased collateral requirements to pro-actively facilitate banks’ access to liquidity operations. The ECB has outlined that it is continuously examining the

⁶² See ECB Blog [The monetary policy response to the pandemic emergency, May 1 2020](#)

⁶³ ECB press release [ECB announces €750 billion Pandemic Emergency Purchase Programme \(PEPP\)](#)

policy stance, both in terms of the individual instruments and as an overall package to ensure they provide the necessary accommodation in light of the current uncertain economic environment.

Prudential capital buffers, both micro and macro, can complement the above policy measures and look to maximise the role the financial system can play in supporting the real economy during these times of stress. Many of these buffers such as the capital conservation buffer (CCoB), CCyB and O-SII buffer, formed part of the reform of the regulatory framework for banks in the aftermath of the global financial crisis. The build-up of these buffers in recent years has contributed to the banking system now being in a better position to absorb shocks. The recent announcements made by microprudential⁶⁴ and macroprudential authorities use the regulatory framework, as intended, to support the functioning of the banking system and mitigate the impact of the COVID-19 shock. The release of macroprudential buffers such as the CCyB reduces banks' regulatory capital requirements with a view to minimising the potential that they act as a constraint on the provision of lending to the real economy. The flexibility provided by supervisory authorities regarding institutions temporarily being allowed to operate below the levels of capital implied by Pillar2 Guidance (P2G) is similar in nature. In addition, authorities have emphasised the usability of banks' combined buffer requirement, albeit subject to certain limitations, to absorb the impact of COVID-19.⁶⁵

The effectiveness of these capital buffer measures is being strengthened by complementary actions taken to conserve capital. Measures here include flexibility in terms of the implementation of payment moratoria and IFRS9 accounting standards.⁶⁶ Authorities have also encouraged banks to refrain from certain voluntary pay-outs including dividends.⁶⁷ These actions should reduce the front-loading of COVID-19 related losses on banks' balance sheets and reduce any immediate depletion of bank capital.

⁶⁴ On March 12, ECB Banking Supervision [announced](#) a series of measures which would apply to institutions directly supervised by the ECB within the SSM. The [Central Bank has extended](#) the application of supervisory measures taken by the ECB, and other European authorities, to those institutions, which it supervises directly.

⁶⁵ A banks combined buffer requirement is made up of the capital conservation buffer and where applicable the institution specific countercyclical capital, systemic risk and O-SII buffers. Where an institution's level of capital dips below its combined buffer requirement certain restrictions and limitations apply – See [ECB Banking Supervision FAQs on supervisory measures in reaction to the coronavirus](#).

⁶⁶ See [ECB Banking Supervision provides further flexibility to banks in reaction to coronavirus](#).

⁶⁷ See [ECB asks banks not to pay dividends until at least October 2020](#) and [ESRB/2020/7](#) on restriction of distributions during the COVID-19 pandemic.

Central Bank of Ireland's active macroprudential policy instruments

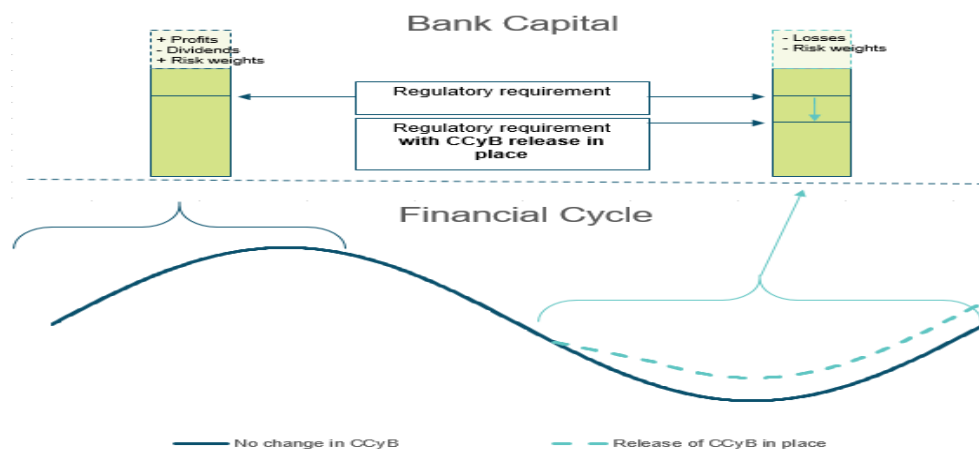
CCyB rate at 0 per cent is appropriate in the current environment

In response to the COVID-19 outbreak, the Central Bank reduced the CCyB rate on Irish exposures from 1 per cent to 0 per cent. A CCyB of 0 per cent is deemed to be appropriate in the current macro-financial conditions, triggered by the COVID-19 outbreak, and is consistent with the Central Bank's objective and framework for the CCyB. A 0 per cent CCyB rate looks to facilitate banks in maintaining a sustainable supply of credit to the economy in these challenging times and thereby limit the scope for the banking system to amplify the shock to the detriment of the real economy. It is the Central Bank's intention that no increase in the CCyB be announced before the first quarter of 2021 at the earliest.

The full release of the CCyB in response to COVID-19 is consistent with the Central Bank's framework and objective whereby the buffer would be reduced or released when a downturn or materialisation of cyclical systemic risk is identified, in order to limit the impact of the downturn on credit supply. Binding regulatory capital requirements can potentially lead banks to take actions which exacerbate an economic downturn. As risks materialise, especially in the context of heightened uncertainty, actual and expected losses act as a drag on banks' capital positions. At the same time, risk weights used in calculating risk-based capital requirements will typically increase during a downturn, which also depletes bank capital. As banks move closer to their required level of capital, they are incentivised to delever, often through tightening credit conditions and reducing their supply of credit. This response can amplify the initial economic shock, leading to further losses and impairing the provision of intermediation services, to the detriment of the real economy. The CCyB was designed to mitigate this potential cycle of events. A stylised representation of the intended effect of releasing the CCyB is shown in Figure 1. The CCyB release is consistent with and complementary to the capital relief and capital conservation measures, discussed above, taken by supervisory authorities.

COVID-19 has had a significant impact on both financial markets and the real economy. As outlined in *Risks*, market uncertainty reached historically high levels as the scale of the pandemic grew. This translated into higher yields and spreads on risky assets, broad liquidity challenges and safe haven assets coming under strain. In March, market developments in Ireland triggered by COVID-19 were consistent with a widespread reversal of financial conditions and pointed toward levels of stress not seen since the 2011 euro area sovereign debt crisis. As expected at the time of the CCyB release in March, the necessary public health actions required to minimise the strain on the health system have resulted in lower levels of consumption, investment and economic activity overall, with knock-on implications for the financial conditions of businesses and households. Overall, given the severity of impact of the COVID-19 pandemic, setting the CCyB rate at 0 per cent is considered appropriate by the Central Bank.

Figure 1: Stylised representation of the impact of the CCyB release on the financial cycle and bank capital during the downturn phase.



The release of the Irish CCyB frees up capital that may otherwise have to be used to meet banks' regulatory capital requirements. As discussed in De Nora, O'Brien & O'Brien (2020), the CCyB release equates to around €940 million of capital across the retail banks.⁶⁸ This capital is available to banks to either support lending (existing or new) or absorb bank losses and possibly higher risk weights. Hence, how any available capital translates into new credit supply will depend on any losses experienced by banks and on banks' post-release capital requirements, as well as the risk-weight density of any new lending that actually occurs.

It is important to note that future credit developments will be a result of the interaction of both credit supply and credit demand. The CCyB release can only support credit supply. Demand for credit by households and firms may still decline in-line with the overall demand shock facing the economy, or at least its composition may change. In the current environment, for example, there may be less demand for larger loans and facilities for investment purposes or mortgages, but greater demand for smaller working capital loans and overdraft facilities. Based on plausible estimates for risk-weight densities, the capacity for (net) new lending could range from between €10 billion and €16 billion.⁶⁹

In terms of the outlook for the CCyB, it is the Central Bank's expectation that no increase will be announced before the first quarter of 2021 at the earliest. Subsequent decisions on the timing and pace of increase will depend on prevailing macroeconomic and financial conditions and will be consistent with the Central Bank's framework whereby it believes the buffer should be positive early in the cycle.⁷⁰

⁶⁸ See [Releasing the CCyB to support the economy in a time of stress](#), Central Bank of Ireland, Financial Stability Notes Vol. 2020 No.1.

⁶⁹ See De Nora, O'Brien & O'Brien 2020, [Releasing the CCyB to support the economy in a time of stress](#).

⁷⁰ See the Central Bank's [website](#) for an articulation of its high-level framework for the CCyB.

Buffers for systemically important institutions

The objective of the other systemically important institutions (O-SII) buffer is to reduce the probability of failure of institutions that arising from the nature or scale of their activities are systemically important. O-SII buffers provide an additional layer of loss absorption capital at these institutions, whose failure would have a greater impact on the financial system and economy. In line with previous announcements by the Central Bank O-SII buffers in Ireland continue to be phased-in through to July 2021. Consistent with the purpose of the buffer and the wider macroprudential policy response to the COVID-19 shock, the O-SII buffer is fully available to banks to absorb the impact of the shock to the economy.

The usability of the O-SII buffer to absorb losses in times of stress is an important element in the functioning of the capital buffer framework. The objective of the O-SII buffer is to reduce the probability of failure of a systemically important institution. The failure of one of these systemically important institutions would have a greater impact on the financial system and economy than the failure of a non-O-SII. The O-SII buffer is an institution specific requirement, calibrated based on the relative systemic importance of each institution. It enhances the resilience of these institutions, which due to the scale or nature of their business are of systemic importance, by providing an additional layer of loss absorbing capital.

The set of Irish O-SIIs comprises both domestically-focused retail banks as well as diverse and complex internationally-focused banks (Table 2). The Central Bank is maintaining the phase-in schedule for the O-SII buffer as previously announced.⁷¹ As such, O-SII buffer requirements are being phased-in over the period up to July 2021. For the main retail banks, this phase-in period has been in place for a number of years while the most recent annual O-SII assessment resulted in buffers being applied to BBI and BAMLI consistent with this existing phase-in period.⁷² As of July 1 2020, the O-SII buffer will provide €1.6 billion of capital across the six Irish O-SIIs. The Central Bank emphasises that this capital is fully available to institutions to absorb the impact of the economic shock arising from COVID-19.⁷³

The Central Bank undertakes an annual review of the designation of O-SIIs and their related buffer rates. The 2020 review will take place over the coming months with the outcome due to be announced in FSR 2020:II.⁷⁴ The annual review allows for any changes in the banking sector and the systemic importance of individual institutions to be captured and reflected, as appropriate, in the outcome of these regular reviews. For example, the 2019 annual review resulted in O-SII buffers being applied to two institutions, BAMLI and BBI, for the first time as they responded to the UK's decision to leave the EU by moving business from the UK to Ireland. Similarly, this year's assessment will take account of any further changes within the Irish banking system which occurred since the 2019 review took place.

⁷¹ See the [published account](#) of the April 6 2020 meeting of the Macroprudential Measures Committee.

⁷² The outcome of each annual O-SII assessment carried out by the Central Bank is available on its [website](#).

⁷³ The O-SII buffer, along with the capital conservation buffer, and where relevant the countercyclical capital buffer and the systemic risk buffer make up an institutions combined buffer requirement (CBR). If an institution's level of capital dips below its CBR certain restrictions and limitations apply – See [ECB Banking Supervision FAQs on supervisory measures in reaction to the coronavirus](#).

⁷⁴ The [2019 O-SII Assessment](#) is detailed in FSR 2019:II.

Table 2| Outcome of 2019 O-SII review

Institution	EBA Score	O-SII Buffer	Applicable as of:		
			1 July 2019	1 July 2020	1 July 2021
		%	%	%	%
AIB Group plc	1172	1.5	0.5	1.0	1.5
Bank of Ireland Group plc	1777	1.5	0.5	1.0	1.5
Citibank Holdings Ireland Limited	1424	1.0	0.25	0.5	1.0
Bank of America Merrill Lynch International DAC	773	0.75		0.5	0.75
Barclays Bank Ireland plc	583	0.75		0.5	0.75
Ulster Bank Ireland DAC	375	0.5	0.25	0.5	0.5

Mortgage measures

The Central Bank reviews the mortgage measures on an annual basis. The 2019 review did not result in any changes to the measures. The measures have been useful in building bank and borrower resilience since their introduction in 2015. Resilience is especially important in light of the current economic shock arising from COVID-19. Analysis into the impact of COVID-19 on the mortgage measures and mortgage and housing markets more generally is ongoing within the Bank. This work will inform this year's review of the measures.

The Central Bank is committed to reviewing, on an annual basis, the calibration of the mortgage measures in the context of wider housing and mortgage market developments. Following the most recent review, released in December 2019, no changes were made to the measures (see Table 3).⁷⁵

The measures consist of loan-to-value (LTV) and loan-to-income (LTI) limits, which restrict the size of mortgages that consumers can borrow, while allowing a portion of lending to occur above the limits. The twin objectives of the measures are (i) strengthening bank and borrower resilience to negative economic and financial shocks, and (ii) dampening the pro-cyclicality of credit and house prices in order to prevent the emergence of a damaging credit-house price spiral.

Since the conclusion of the 2019 review, loan level data on new mortgage lending for the full year of 2019 are available.⁷⁶ These data show that €9.7 billion of new lending was originated by reporting institutions in 2019. This is an increase of 9 per cent relative to the value of lending in 2018 (€8.9 billion).

The bank and borrower resilience the measures have been building up since their introduction in 2015 is particularly important in light of the materialisation of an economic shock in the form of COVID-19. The LTV limits provide a collateral buffer against house price declines, while the LTI limits are designed to provide a buffer against the effects of income and employment shocks. As the mortgage measures operate through the flow of new lending, they have an incremental effect on the overall stock of outstanding mortgages. As of end-2019, 31 per cent of outstanding mortgage lending at Irish retail banks had been issued since the introduction of the Central Bank's

⁷⁵ See [FSR 2019:II](#).

⁷⁶ See [New Mortgage Lending – Data and Commentary](#) on the Central Bank website.

mortgage measures, 28 per cent in scope of the measures and 3 per cent not in scope (Chart 70). In addition, as noted in *Resilience: Retail banks and credit unions* the mortgage measures have contributed to containing the proportion of high LTI lending in recent years relative to the mid-2000s.

Table 3| Details of the LTV and LTI Regulations – 2020

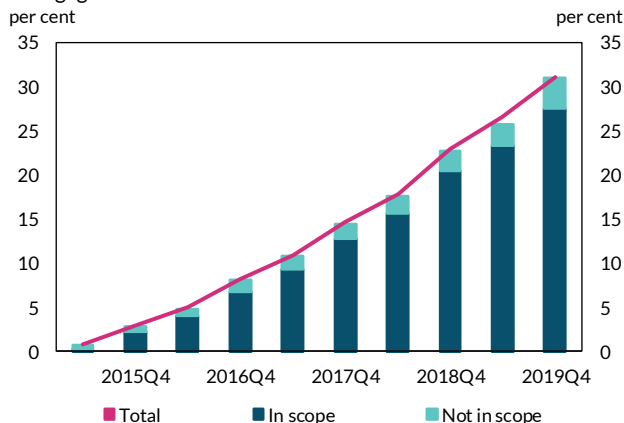
LTV Limits	For primary dwelling homes (PDHs):	First-time buyers (FTBs): 90%	5% of new lending to FTBs allowed above 90%
		Second and subsequent buyers (SSBs): 80%	20% of SSB new lending allowed above 80%
	For buy-to-let borrowers (BTLs):	70% LTV limit	10% of new lending allowed above the BTL limit
LTI Limit	For PDHs	3.5 times income	20% of new lending to FTBs allowed above 3.5 limit
			10% of SSB new lending allowed above 3.5 limit
Exemptions	From LTV Limit Borrowers in negative equity	From LTI Limit BTL borrowers Lifetime mortgages	From both limits: Switcher mortgages Restructuring of mortgages in arrears

The proportionate allowances, which allow for some lending to take place above the LTI and LTV limits, are an important element of the mortgage measures. In 2019, about 1 in 8 new mortgage loans, accounting for 17 per cent of the value of new mortgage lending, received an allowance of some sort. About half of allowances tend to go to borrowers in Dublin (Chart 71), illustrating the importance of the allowances for the region.

In December 2019, the Central Bank announced a work programme to undertake a broader assessment of the overarching framework of the mortgage measures, in addition to the annual reviews of the measures. The main elements of that broader assessment, including public engagement initiatives, will not now take place prior to 2021. Analysis of the impact of COVID-19 on the mortgage measures and the mortgage and housing markets more generally is ongoing within the Central Bank and will inform this year's annual review. This includes examining the operation of the proportionate allowances given the role they play in the mortgage market. In undertaking this work, the Central Bank will engage with external stakeholders, including mortgage lenders, in order to understand appropriately how the economic impact arising from COVID-19 is interacting with the mortgage measures. The outcome of the annual review is expected to be announced in *FSR 2020:II*, notwithstanding the current COVID-19 related uncertainty.

Chart 70: The mortgage measures have been incrementally increasing resilience as lending since their introduction accounts for a greater share of outstanding mortgages

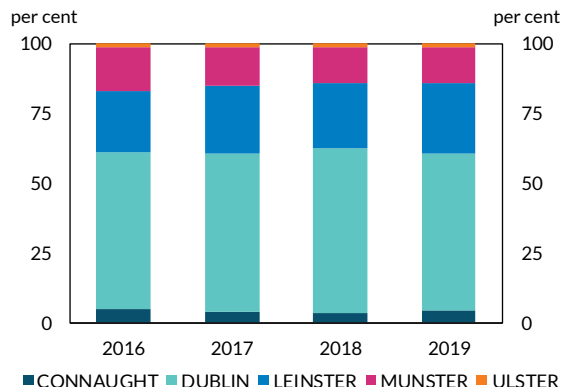
Share of Irish retail bank mortgage lending issued under the mortgage measures framework



Source: Central Bank of Ireland calculations using MT and LL Data. Notes: Mortgages issued under the mortgage measures framework are those mortgage loans approved and drawn down since 9 February 2015.

Chart 71: Over half of loans with an allowance go to borrowers in Dublin

Distribution of allowances by region



Source: Central Bank of Ireland calculations using MT data. Notes: Distribution of allowances by region by number of mortgages

Macroprudential policy response to COVID-19 across Europe

Designated authorities throughout Europe have deployed macroprudential policy responses to mitigate the impact of the COVID-19 pandemic on the economy and financial system.⁷⁷

Authorities in a number of countries, including the Czech Republic, Denmark, France, Iceland, Lithuania, Norway, Sweden and the UK, have reduced their CCyB rates, in many cases to zero. Due to the CCyB reciprocity requirements, these actions reduce requirements for all banks with exposures to these countries.⁷⁸ Therefore, to the extent that Irish institutions have exposures in the jurisdictions in question, the release of the CCyB in other countries results in a reduction in Irish banks capital requirements. The UK represents the largest cross-border exposure of the Irish banking system and as such, the release of the CCyB in the UK by the Financial Policy Committee⁷⁹ has the largest impact for the Irish banking system in aggregate.

A number of European countries have responded to the COVID-19 crisis by adjusting structural buffers (i.e. O-SII or SyRB). Finland, Estonia and Poland reduced the SyRB rate to 0 per cent while the Netherlands reduced the rate for three institutions. Finland and the Netherlands also decided to lower the O-SII buffer for one bank each while Cyprus, Portugal and Lithuania will delay the phase-in of O-SII buffers by one year. Authorities in Hungary have announced the release of the buffer for all O-SII institutions. In addition to the changes in the structural buffers, the Netherlands has postponed the introduction of capital surcharges on domestic mortgage loan exposures under Article 458 of the Capital Requirements Regulation (CRR).

⁷⁷ The [ESRB](#) and [ECB](#) websites contain further information on the macroprudential measures taken by authorities across Europe in response to the COVID-19 pandemic.

⁷⁸ CCyB reciprocity arrangements require banks from other jurisdictions to apply the same capital requirement to their exposures in the country applying the CCyB.

⁷⁹ See FPC statement from March 11 [Bank of England measures to respond to the economic shock from Covid-19](#).

Recognition of macroprudential measures taken by other countries

Reciprocity aims to increase the effectiveness of macroprudential measures by reducing cross-border leakages and by minimising negative cross-border effects. When a country introduces a national macroprudential policy measure that may have cross-border effects, reciprocity requires other countries to apply the same or an equivalent measure to domestically authorised institutions. The Central Bank has laid out a reciprocation framework⁸⁰ in line with the ESRB Recommendation on voluntary reciprocity for macroprudential policy measures.⁸¹ Reciprocity involves two distinct processes; responding to ESRB reciprocation recommendations and conducting an annual review of outstanding reciprocation recommendations.

There are currently four active measures in other Member States for which the ESRB has recommended reciprocation. The Central Bank considers all requests for reciprocity and to date has reciprocated a French macroprudential measure under Article 458 of Regulation (EU) No 575/2013 ("CRR").⁸² For the three other active measures⁸³ for which reciprocity has been recommended by the ESRB, the Central Bank's annual review in November 2019 confirmed that the conditions for non-reciprocation continued to be met and that the decisions to not reciprocate the measures remained appropriate.

Central Bank of Ireland's macroprudential framework

In December 2019, the Central Bank outlined the broad tenets of a multi-year programme for the further development of its macroprudential framework.⁸⁴ The impact of the COVID-19 pandemic has resulted in the re-prioritisation and re-focusing of certain elements of this programme. At that time, the Central Bank was looking towards taking stock of issues such as the appropriate level of capital for the banking system in Ireland, as well as expanding its horizons in the area of the non-bank sector. Many of the elements of that work programme were focused towards building resilience of the financial system *ex ante* in the context of a gradual build-up of financial vulnerabilities. In light of COVID-19, and the abrupt change in the macro-financial outlook, the near-term focus of the Central Bank has shifted. The materialisation of a number of shocks are likely to result in that previously accumulated resilience being used to support the economy.

Framework for bank capital

Prior to the outbreak of the COVID-19 pandemic, the Central Bank was looking towards the completion of its macroprudential framework for bank capital with the expected incorporation of the systemic risk buffer into its available toolkit. In light of this, the Central Bank had signaled that it would take a holistic view of the overall bank capital framework, in order to deliver an appropriate level of capital for the banking system in Ireland. While the timeframe for the review is now going to be later than originally envisaged, the review will still inform the future calibration

⁸⁰ Central Bank of Ireland (2016) Macro Financial Review 2016:1, Pg. 50.

⁸¹ ESRB/2015/2 ESRB Recommendation on the assessment of cross border effects of and voluntary reciprocity for macroprudential measures.

⁸² [Announcement](#): Decision by the Central Bank of Ireland to reciprocate a French measure under Article 458 of Regulation (EU) No 575/2013 ("CRR").

⁸³ ESRB (2019) Reciprocation of Measures: [Belgium](#), [Finland](#) and [Sweden](#).

⁸⁴ See [Opening remarks by Gabriel Makhoul, Governor, Central Bank of Ireland, at the launch of the FSR 2019: II](#).

of capital buffers upon their (re-)introduction having emerged from the current episode of disruption.

The systemic risk buffer (SyRB) will not be introduced by the Central Bank in 2020. On 18 March 2020, the Minister for Finance announced his decision to defer the introduction of the SyRB as part of a package of measures to support individuals and businesses impacted by COVID-19.⁸⁵

The Central Bank concurs that this is not the appropriate time to introduce a systemic risk buffer. Nonetheless, the Central Bank's underlying rationale for implementing a SyRB in Ireland, when economic conditions are appropriate to do so, remains. The fundamental structural characteristics of the Irish economy point to the domestic banking system being – at all points in the cycle – exposed to greater macroeconomic risk than banking systems in larger, more diversified economies.⁸⁶ The SyRB would look to build resilience against the higher probability and larger impact of structural shocks arising from being a small and highly-globalised economy.

Investment funds

The Central Bank is engaging with international counterparts to monitor and assess the impact of the current crisis on the funds sector internationally and to evaluate the development and use of macroprudential tools. Many of the risks posed to the market-based finance sector in Ireland are similar to those posed to the sectors based in other countries. Given the global nature of capital markets, international co-ordination in this area is key. Therefore, it is integral to our macroprudential policy approach that the Central Bank engages with international counterparts during the current crisis. As part of this work, the Central Bank is actively collaborating with the ESRB, ECB, ESMA, the FSB and IOSCO as well as with other central banks to assess the risks and consider the potential need for any coordinated action. This international engagement builds on previous work, which has examined liquidity risks in funds, including previous ESRB recommendations that highlighted the need to harmonise the availability of liquidity management tools across the EU.⁸⁷ The current crisis illustrates the gap stemming from the lack of *ex ante* macroprudential tools available in the market-based finance sector and highlights the need to develop a policy framework for non-bank financial institutions.

In December 2019, the Central Bank announced a deep dive into property funds, with a view to considering whether an *ex ante* macroprudential policy response to any identified risks was required. Due to the abrupt change in the macro-financial outlook given the COVID-19 crisis, the analysis undertaken by the Central Bank as part of this deep dive has refocused to inform the assessment of potential crystallisation of risks in the real estate investment funds sector, both in Ireland and at an EU level.

⁸⁵ [Department of Finance Press Release, 18 March 2020.](#)

⁸⁶ [See FSR 2019:I.](#)

⁸⁷ See recommendation A of 2017 ESRB recommendation on liquidity and leverage risks in investment funds.

Abbreviations

Country and currency abbreviations follow the [European Union standards](#).

AIB	Allied Irish Bank	KBC	Kredietbank ABB Insurance CERA Bank
AMECO	Annual macro-economic database of the European Commission's Directorate General for Economic and Financial Affairs	LCR	Liquidity coverage ratio
BBI	Barclays Bank Ireland plc	LTi	Loan to income ratio
BEPS	Base erosion and profit shifting	LTV	Loan to value ratio
BIS	Bank of International Settlements	MFI	Monetary financial institution
BOI	Bank of Ireland	MMIF	Money Market and Investment Funds
BPFI	Banking & Payments Federation Ireland	MREL	Minimum requirement for own funds and eligible liabilities
BRRD	Bank Recovery and Resolution Directive	MSCI	Morgan Stanley Capital International
BTL	Buy-to-let	MF-VAR	Mixed frequency Vector Autoregressions
CBOE	Chicago Board Options Exchange	NFC	Non-financial corporation
CBRE	Coldwell Banker Richard Ellis Group	NMDI	New mortgage lending to disposable income
CCP	Central clearing counterparty	NPL	Non-performing loan
CCyB	Countercyclical capital buffer	NTMA	National Treasury Management Agency
CET1	Common equity tier 1	OECD	Organisation for Economic Co-operation and Development
CLO	Collateralised Loan Obligation	OFI	Other financial institution
CRD	Capital Requirements Directive	O-SII	Other Systemically Important Institutions
CRE	Commercial real estate	PB	Payment Break
CSO	Central Statistics Office	PDH	Primary dwelling house
DBEI	Department of Business, Enterprise and innovation	PMI	Purchasing managers' index
EBA	European Banking Authority	PTSB	Permanent PTSB
ECB	European Central Bank	PRS	Private rental sector
EEA	European Economic Area	REIT	Real Estate Investment Trust
EPS	Earnings per share	ROAE	Return on average equity
ESM	European Stability Mechanism	ROE	Return on equity
ESRB	European Systemic Risk Board	RWA	Risk-weighted asset
ESRI	Economic and Social Research Institute	RWAD	Risk-weighted asset densities
EU	European Union	SCR	Solvency capital requirement
FDI	Foreign direct investment	SCSI	Society of Chartered Surveyors of Ireland
FINREP	Financial reporting	SEPP	Supervisory Expectations for Prudent Provisioning
FSR	Financial Stability Review	SME	Small and medium enterprise
FTB	First-Time Buyer	SRM	Single Resolution Mechanism
GDP	Gross domestic product	SSB	Second and subsequent buyer
GNI	Gross national income	SSM	Single Supervisory Mechanism
GOS	Gross operating surplus	UBI	Ulster Bank Ireland
ICSI	Irish composite stress index		
IMF	International Monetary Fund		
IRB	internal risk based		
JLL	Jones Lang LaSalle		

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