The Financial Policy Committee's approach to setting the countercyclical capital buffer

Policy Statement

Published on 12 July 2023

Executive summary

The Financial Policy Committee's (FPC) primary responsibility, with regard to its **financial stability objective**, includes the 'identification of, monitoring of, and taking of action to remove or reduce, systemic risks[1] with a view to protecting and enhancing the resilience of the UK financial system'.

A resilient financial system brings economic benefits to the UK economy. The Global Financial Crisis (GFC) demonstrated how vulnerabilities in the financial system could amplify adverse shocks, resulting in severe and persistent contractions in economic activity. By reducing the likelihood and severity of such crises, financial stability policies help to ensure the stable provision of financial intermediation services – including payment services, credit supply and insurance against risk – to the wider economy.

The countercyclical capital buffer (CCyB) was introduced following the GFC (as part of the Basel III agreement in 2010) as a tool to address systemic risks posed by financial cycles. The UK CCyB rate is set each quarter by the FPC and enables the capital requirements of the UK banking system to be adjusted to the changing scale of risk of losses on UK exposures over the course of the financial cycle. Active use of the CCyB helps the FPC to deliver on its statutory responsibility of protecting and enhancing the resilience of the UK financial system.

Financial cycles typically involve an expansion of credit and increase in asset prices (such as equity and house prices), greater than that justified by underlying fundamentals. The build-up of financial imbalances increases the sensitivity of the financial system to shocks and so raises the likelihood of systemic stress, or financial instability, including in the banking sector. This increase in sensitivity is significant: some estimates suggest that at the top of the financial cycle the banking system could require several percentage points more capital to absorb potential losses than during the rest of the financial cycle.

When banks cut lending or otherwise tighten lending conditions, households and businesses may have to cut back on spending and investment or default on their loans. In a deteriorating macroeconomic environment, it is prudent for banks to

factor in increased risk. However, if the reduction in the supply of credit is greater than warranted by the changes in the macroeconomic outlook, it can make a downturn in the economy much worse and lead to further defaults – for example, if businesses cut spending and employment further, potentially leading to a vicious downwards cycle. This cut back in the provision of credit could occur, for example, if banks are concerned about their own financial health and capital positions over and above the financial health of the households and businesses they lend to.

By increasing the CCyB when vulnerabilities are judged to be building up, the FPC ensures banks have an additional cushion of capital with which to absorb potential losses, enhancing their resilience and helping to ensure the stable provision of financial services.

The FPC expects to cut the CCyB if it anticipates that the banking system faced the prospect of losses that could otherwise lead it to restrict lending to defend capital positions in the face of a shock, by more than was warranted by the macroeconomic outlook. This means that banks have more capacity to lend safely – as they are able to absorb bigger losses before they hit their regulatory capital minima – thereby reducing, or avoiding, any unwarranted reduction in lending.

In this way the FPC not only supports its primary objective, by helping to ensure the provision of lending in a stress, but also contributes to its secondary objective to support the economic policy of His Majesty's Government, including its objectives for growth and employment. Growth driven by credit and asset price booms rather than the fundamentals of the economy is not sustainable; while it may lead to higher growth in the short-run, a financial crisis will lower growth over the medium and long-term. The FPC's strategy of varying regulatory capital buffers to be responsive to the financial cycle means the FPC can build resilience more efficiently than by maintaining higher baseline capital requirements, and when it is more cost effective to do so. This 'rainy day' capital is then usable when the CCyB is lowered.

Overall, using the CCyB means that in the face of shocks, the UK banking system is better able to absorb losses without unduly restricting essential services, such as the supply of credit, to the UK real economy. More recent shocks that have originated from outside of the financial system, such as the Covid-19 pandemic,

have also demonstrated the added value of ‘releasable’ capital buffers in helping to ensure that the banking system can absorb losses and continue to meet the credit needs of creditworthy households and businesses.

The FPC’s strategy for setting the CCyB is based on six core principles:

1. **The FPC's principal aim in setting the UK CCyB rate is to help ensure that the UK banking system is better able to absorb shocks without an unwarranted restriction in essential services, such as the supply of credit, to the UK real economy.**
2. **In setting the CCyB, the FPC takes into account the extent of financial vulnerabilities and the risk that the banking system could experience losses on its UK exposures arising from those vulnerabilities that may result in an unwarranted restriction in credit supply.**
3. **When financial vulnerabilities are building up, the FPC expects to increase the UK CCyB rate. The pace of adjustment will be determined with reference to the level and growth of financial vulnerabilities, and the economic cost of building resilience.**
4. **Building resilience by increasing the UK CCyB rate may also restrain credit growth and reduce the future build-up of financial cycle vulnerabilities, but this is not the primary objective of any rise in the CCyB.**
5. **In the current context of its overall capital strategy, the FPC judges that the neutral rate for the UK CCyB is around 2%.**
6. **Should vulnerabilities abate, or crystallise, the FPC would consider reducing the UK CCyB rate. The FPC expects to reduce the UK CCyB rate – if necessary to zero - if it anticipates that the banking system may face losses that could otherwise cause it to restrict lending by more than was warranted by the macroeconomic environment, thereby amplifying potential damage to the economy.**

These principles support the FPC in setting the CCyB in the way it judges most appropriate given its primary and secondary objectives. The FPC would of course take into account any other considerations relevant at the time of its decision.

The FPC’s approach to setting the UK CCyB rate is based on a two-stage approach:

1. First, the FPC assesses the level of financial vulnerabilities – including those in its core indicators, such as private sector credit growth – to take a view on where we are in the financial cycle.
2. Second, it assesses the impact of potential and actual shocks on the resilience of the UK banking system.

The indicators the FPC looks at to inform its assessment of financial vulnerabilities have been chosen because they can help to provide advanced warning of risks to financial stability – usually across a time frame of one to three years – which allows time to build resilience if necessary. These indicators can be broadly split into measures of 'borrower balance sheet stretch' and 'conditions in markets'. 'Borrower balance sheet stretch' includes measures of the level or growth in indebtedness of borrowers. ''Conditions in markets' capture measures of interest rates on new lending, asset valuations, and investor risk appetite more broadly.

The FPC does not just look at these indicators in isolation, but also considers how they might affect financial stability in the future. It considers, for example, the channels through which imbalances can affect financial stability – whether they will have a direct impact on losses experienced by banks, or whether the effect might be indirect, for example if households cut spending and this leads to losses on banks' lending to firms who see a reduction in earnings. This way the FPC can take a forward-looking and system-wide approach to considering the extent of financial vulnerabilities.

The FPC also considers the extent to which the CCyB might be the right tool to build resilience to these vulnerabilities. For example, the CCyB only applies to banks; and so it is not the right instrument to build resilience for vulnerabilities in the non-bank financial sector. However, the FPC does assess how vulnerabilities in the non-bank financial sector could spillover and affect UK banks, and would take that into account in its CCyB decision making.

To assess the UK banking system's resilience to potential and actual shocks, the FPC looks at measures of the banking system's capacity to absorb losses now and in the future. These include looking at the riskiness of banks' lending and funding structures; banks' current, forecasted and stress-tested capital and liquidity ratios; and an assessment of banks' ability to build capital such as profitability metrics and

business models. These indicators are complemented by additional information and analysis, including supervisory information, market intelligence, and surveys of credit conditions.

The FPC also make a judgement on whether banks are likely to act, in the short or medium term, in a way which could amplify rather than absorb a stress – in particular, through restrictions on lending taken primarily to defend capital positions, thus preventing creditworthy businesses and households from accessing funding. Such behaviour would be counterproductive, harming both the wider economy and ultimately the banks themselves and may be a reason to consider cutting the CCyB.

The FPC expects to set a neutral rate of around 2% for the UK CCyB rate. A non-zero neutral rate is important as it takes time for banks to increase their capital buffers. If the FPC started to build the CCyB to the level it might need at the top of the financial cycle from a zero rate, it might have to build it very quickly, increasing the economic cost of doing so.

Separate to its direct impact on the resilience of the banking system, increases in the CCyB could in principle also impact credit conditions. However, the impact should be limited as in arriving at its decision, the FPC takes into account banks' ability to meet the higher CCyB rate – and so the potential cost of doing so. It has a smaller economic impact if banks increase capital by retaining earnings rather than having to issue new equity, particularly under stressed conditions.

Following a cut in the CCyB, the FPC would provide an indicative period in which no increase is expected, to better allow the capital which has been released to be used. It would then monitor a number of factors including the expected evolution of the economic recovery, prevailing financial conditions and the outlook for banks' capital. The pace of return to the neutral CCyB rate would depend on banks' ability to rebuild capital while continuing to lend to creditworthy UK households and businesses.

The FPC is required to set the CCyB each quarter and communicates its decisions transparently. All CCyB decisions are published in the quarterly Record that follows the FPC's policy meetings. The FPC provides a more in-depth explanation of the financial stability risk assessment that underlies its decisions in its six-monthly

Financial Stability Report. In addition, the prevailing CCyB rate set by the FPC, as well as the core indicators that support its decisions, are published on the Bank of England's website each quarter.

The FPC's decisions on the CCyB will reflect the specific circumstances at the time. However, setting out its overall strategy for setting the CCyB rate helps participants in the financial system - including banks - to understand how the FPC will use it, allowing them to make more informed decisions.

In 2016 the FPC published a Policy Statement that set out how it would set the UK CCyB rate in response to its remit. Since then, the FPC has used the CCyB to respond to a number of different shocks to UK financial stability – some of which originated from outside of the financial system, such as the Covid pandemic. To reflect the FPC's experience in operationalising the CCyB and lessons learned, this Policy Statement is a replacement of the 2016 document.

It is structured as follows:

- Section 1 describes the CCyB including: to whom and to which exposures the UK CCyB rate applies to; what CCyB rates will apply to UK banks' foreign exposures; how the CCyB fits in with other elements of the capital framework; implementing the CCyB; and reciprocity arrangements.
- Section 2 sets out the FPC's strategy for setting the UK CCyB rate.
- Section 3 describes how the CCyB helps the FPC's primary and secondary objectives.
- Section 4 describes how the FPC chooses the CCyB rate, including how it assesses developments in financial vulnerabilities and the resilience of banks' balance sheets to potential shocks. It also includes some stylised examples to further demonstrate how the FPC's decision-making framework might respond to different shocks.
- Finally, Section 5 describes how the FPC communicates its CCyB policy actions.

1: Description of the countercyclical capital buffer

1.1: What is the countercyclical capital buffer?

The countercyclical capital buffer (CCyB) was introduced following the GFC (as part of the Basel III agreement in 2010) as a tool to address the systemic risks that financial cycles pose. The UK CCyB is a key macroprudential policy tool used by the FPC to deliver on its statutory responsibility of protecting and enhancing the resilience of the UK financial system. The UK CCyB rate allows the FPC to adjust the resilience of the banking system to the level of risk – at the system level – that banks will make losses on their UK exposures that could result in an undue restriction in the provision of essential services to the real economy. By aligning resilience with risk, the CCyB therefore reduces the extent to which economic shocks will be amplified by the banking system.

Although in principle this resilience could be achieved by very high baseline capital requirements, the FPC judges that this would be inefficient and inconsistent with its objective not to harm the capacity of the financial sector to contribute to the growth of the UK economy in the medium or long term. Varying capital requirements over time allows the required resilience to be achieved in a more efficient way.

1.2: Who does the countercyclical capital buffer apply to?

The CCyB applies to all banks, building societies and investment firms (other than those exempted by the FCA) incorporated in the United Kingdom (henceforth referred to as ‘banks’). The CCyB is applied at both individual entity and consolidated group levels. Over time, lending activity may migrate to institutions not covered by the CCyB. If this creates risks to financial stability, the FPC can make Recommendations designed to address these risks.

1.3: Calculating the institution-specific countercyclical capital buffer rate

Each bank must calculate its 'institution-specific' CCyB rate, defined as the weighted average of the CCyB rates in effect across the jurisdictions in which it has credit exposures.[2] The institution-specific CCyB rate is then applied to the firm's total risk weighted assets.

Table A provides a stylised example of how this operates. Bank A has only UK credit exposures so its institution-specific CCyB rate is equal to the UK CCyB rate of 2%; Bank B's credit exposures are distributed equally between the United Kingdom and the foreign jurisdiction, so its institution-specific CCyB rate is 1.5%, the average of the UK CCyB rate of 2% and the foreign CCyB rate of 1%; Bank C has only foreign credit exposures, so its institution-specific CCyB rate is equal to the foreign rate of 1%. These institution-specific CCyB rates are applied to each firm's total risk-weighted assets to calculate the amount of capital it has to have to meet its CCyB.

Table A: Mechanics of the institution specific CCyB

Credit exposures	Credit exposures	UK CCyB rate (per cent)	Foreign CCyB rate (per cent)	Institution specific CCyB rate (per cent)	Total risk-weighted assets (£ billions)	CCyB (£ billions)
Bank A	100% UK, 0% foreign	2	1	2	100	2
Bank B	50% UK, 50% foreign	2	1	1.5	100	1.5
Bank C	0% UK, 100% foreign	2	1	1	100	1

The CCyB rate applicable to UK banks as a result of their foreign credit exposures will typically be set by the relevant foreign authorities that have implemented the Basel III standards (see Box E: International experience of the CCyB, which shows the wide variety of approaches foreign jurisdictions have taken to setting the

CCyB). Since 1 January 2016, CCyB rates up to 2.5% set by such foreign authorities must be applied by UK banks in calculating their institution-specific buffer. The FPC also expects as a rule to recognise foreign CCyB rates above 2.5%, which would then become binding for UK banks under PRA rules. For exposures to non-UK countries, the FPC has the power to set CCyB rates for UK banks that are higher than those chosen by the relevant overseas authorities when, in its view, the foreign CCyB rate is not sufficient to protect the UK financial system from risks related to excessive credit growth in those economies.

Box A: How does the countercyclical capital buffer fit with the rest of the regulatory framework?

The CCyB is part of a **broader framework of equity and other loss-absorbing capital requirements that apply to UK banks,** introduced in the aftermath of the financial crisis.

The framework of risk-based capital requirements comprises three elements.

First, there are minimum levels of going concern capital that must be met at all times, for which banks follow internationally agreed methods for calculation and calibration.

Going concern capital is able to absorb losses in the normal course of business. The minimum Tier 1 capital requirement is 6%, 4.5 percentage points of which must be met with common equity Tier 1, the highest quality of loss-absorbing capital.

In addition to this common minimum requirement, the PRA applies supervisory requirements that vary by bank (referred to as ‘Pillar 2A’) to compensate for shortcomings in existing measures of risk-weighted assets.

Second, there are system-wide buffers of equity, which sum to the ‘combined buffer requirement’ in **PRA rules.** These buffers ensure that banks absorb losses in times of stress and can be drawn down and used to continue the provision of financial services, including the supply of credit and support for

market functioning. In periods of economic disruption buffers can help reduce incentives for banks to deleverage abruptly and excessively. They are based on internationally-agreed methods for calculation and calibration.

The combined buffer is comprised of:

- The capital conservation buffer, which is set at 2.5% of risk-weighted assets;
- The countercyclical capital buffer, which varies in line with the FPC's chosen rate. The purpose of and the approach to setting the CCyB are explained in detail in this publication;
- **Additional buffers for banks** that are judged to be systemically important for either the global or domestic economy. Banks judged by the Financial Stability Board to be globally systemic will have buffer requirements that range between 1% and 3.5% of risk-weighted assets. Ring-fenced banks and large building societies will be subject to an O-SII (Other Systemically Important Institutions) buffer of between 0% and 3% of risk-weighted assets.

Third, in addition to the 'combined buffer', some individual banks are subject to a supplementary supervisory buffer, calibrated to capture specific risks they face that are not captured in other buffers. This is the PRA buffer. It applies to banks whose balance sheets are more sensitive to a given level of economic risk than the system as a whole. Banks whose risk management and governance have weaknesses may also be subject to a PRA buffer.

The capital framework also includes a simple leverage ratio, which sets a floor of 3.25% for the level of Tier 1 capital a bank must have relative to its total (un-weighted) exposures. **The Government has given the FPC powers to supplement this leverage floor by making Directions over a countercyclical leverage ratio buffer (CCLB).** As a guiding principle, the FPC moves the CCLB in line with its setting of the CCyB, with the CCLB rate set at 35% of a bank's institution-specific CCyB rate. This will help to maintain overall consistency between the risk-weighted capital and leverage ratio frameworks.

1.4: Implementing the countercyclical capital buffer

When the FPC increases the CCyB, or recognises a CCyB for another country, banks will, in general, have 12 months before this rate must be used for calculating their institution-specific CCyB rates. While a longer implementation period is not permitted, a shorter one may be justified in exceptional circumstances.

A decision to decrease the CCyB takes effect immediately. When the FPC reduces the CCyB, it must decide on an indicative period during which no increase in that rate is expected.

The CCyB forms part of banks' combined buffer requirement (see 'Box A: How does the countercyclical capital buffer fit with the rest of the regulatory framework?'). Under the PRA regime, banks face mandatory restrictions on their distributions, including dividend payments, share buy-backs, bonuses and coupons on additional Tier 1 instruments if they have insufficient CET1 capital to meet their combined buffer. Banks in these circumstances are subject to a maximum distributable amount (MDA). When a bank is in the fourth or highest quartile of its combined buffer (ie when it meets between 75% and 100% of it), 60% of profits can be distributed; in the third quartile, 40% can be distributed; in the second quartile, 20%; and in the first or lowest quartile, 0%. When a bank does not meet its combined buffer, it is required under PRA rules to prepare a plan and submit it to the PRA explaining how it will meet the buffer level within an appropriate timeframe. [3]

1.5: Reciprocity of the countercyclical capital buffer rates

The FPC sets the CCyB rate for UK exposures. The FPC expects the CCyB rate it sets (up to 2.5% of risk-weighted assets) to apply to the UK exposures of internationally-active banks in jurisdictions that have implemented the Basel III regulatory standards. These arrangements bring clear global financial stability benefits as they help to ensure that CCyB actions do not distort the level playing field between domestic banks and foreign banks with exposures in that jurisdiction. The FPC works with other authorities to achieve reciprocity, consistent with its own policy on reciprocity and the PRA has implemented reciprocity provisions in the Capital Buffers Part of the PRA Rulebook. The experience with reciprocity has been mixed across jurisdictions to date.

2: The FPC's strategy for setting the countercyclical capital buffer

The FPC's strategy for setting the UK CCyB rate is based on six core principles:

1. **The FPC's principal aim in setting the UK CCyB rate is to help ensure that the UK banking system is better able to absorb shocks without an unwarranted restriction in essential services, such as the supply of credit, to the UK real economy.**

2. **In setting the CCyB, the FPC takes into account the extent of financial vulnerabilities[4] and the risk that the banking system could experience losses on its UK exposures arising from those vulnerabilities that may result in an unwarranted restriction in credit supply.**

The UK CCyB rate applies to UK credit exposures. Other instruments may be more appropriate and efficient to deal with potential losses on other exposures.

One example of this is risks from non-bank financial institutions. The CCyB only applies to banks so it would not be an effective tool to build resilience against vulnerabilities in the non-bank financial sector.

3. **When financial vulnerabilities are building up, the FPC expects to increase the UK CCyB rate. The pace of adjustment will be determined with reference to the level and growth of financial vulnerabilities, and the economic cost of building resilience.**

Typically, banks will have 12 months to meet any increase in the UK CCyB rate. Small increases that banks can meet, for example, through retained earnings should have a relatively small effect on the cost of capital to the real economy.

However, in some cases the FPC may need to build the CCyB at a faster rate to reach the necessary level of resilience. This could include a need to build capital at a faster rate than banks can meet through retaining earnings. This could be when

risks from the financial cycle are elevated, costs to the economy of banks having inadequate levels of capital are high and/or the cost to banks of meeting a higher UK CCyB rate is low (for example, if they had surplus capital available).

4. **Building resilience by increasing the UK CCyB rate may also restrain credit growth and reduce the future build-up of financial cycle vulnerabilities, but this is not the primary objective of any rise in the CCyB.**

Other macroprudential tools, such as those aimed directly at lending standards or sectoral capital requirements, may be better placed to address excessive growth of credit or other heightened vulnerabilities.

5. **In the current context of its overall capital strategy, the FPC judges that the neutral rate for the UK CCyB is around 2%.**

The FPC expects to set a positive neutral rate for the UK CCyB of around 2% when indicators of underlying cyclical financial vulnerabilities are at or around their long-term historical average and an assessment of banks' resilience to potential and actual shocks suggests they are likely to be able to absorb a shock rather than amplify it.

This is important as it takes time for banks to increase their capital buffers. If the FPC only started to build the CCyB to the level it might need at the top of the financial cycle banks might have to build capital very quickly, increasing the economic cost, and there might not be enough capital in place in time.

A positive neutral CCyB rate means that the FPC would be able to release the buffer in the event of a shock that emerged with little warning. The speed and unpredictability of adverse developments within the financial system make being prepared particularly important, as does the inherent uncertainty involved in the measurement of cyclical and other systemic risks.

In the December 2019 Financial Stability Report, when updating its capital strategy, the FPC noted that many of its indicators ahead of the GFC did not point to financial vulnerabilities being elevated until 2004 or later. Given that any decision to increase the UK CCyB rate normally takes 12 months to become effective, the FPC judged that it was unlikely the Committee would have been able to identify risks sufficiently early to build the CCyB from a rate of 1% and ensure the banking

system was appropriately capitalised for its risks at the peak of the cycle. Starting from a higher neutral rate for the UK CCyB would allow the FPC time to observe evidence of building financial vulnerabilities and respond in a way that did not require banks to raise capital quickly which could cause them to cut lending and so risk creating a downturn in credit growth or the economy.

6. **Should vulnerabilities abate, or crystallise, the FPC would consider reducing the UK CCyB rate. The FPC expects to reduce the UK CCyB rate – if necessary to zero - if it anticipates that the banking system may face losses that could otherwise cause it to restrict lending by more than was warranted by the macroeconomic environment, thereby amplifying potential damage to the economy.**

The FPC expects to reduce the CCyB if there is a heightened risk of large losses that might make banks restrict the provision of essential financial services to defend capital positions in a way that was not warranted by the macroeconomic environment. Cutting the CCyB should help reduce the risk that the banking system prevents creditworthy businesses and households from accessing funding, which would be counterproductive, harming both the wider economy and ultimately the banks themselves. More details on how the FPC considers and assesses these issues are set out in Box B: Bank lending decisions following a deterioration in the macroeconomic outlook.

Following a cut in the CCyB, the FPC provides an indicative period in which no increase is expected, to aid usability of the CCyB. The FPC then monitors a number of factors including the expected evolution of the economic recovery, prevailing financial conditions and the outlook for banks' capital. The pace of return to the neutral CCyB rate would depend on banks' ability to rebuild capital while continuing to lend to creditworthy UK households and businesses.

In contrast, many business cycle downturns will not lead to losses that constrain banks' balance sheets and warrant a CCyB cut. Similarly, shocks elsewhere within the financial system (for example, to non-bank financial institutions) are only likely to warrant a UK CCyB cut if they indirectly pose significant threats to the banking system and the provision of essential services, such as the supply of credit, that banks provide to the real economy.

These principles support the FPC in setting the CCyB in the way it judges most appropriate given its primary and secondary objectives. The FPC would of course take into account any other considerations relevant at the time of its decision.

Box B: Bank lending decisions following a deterioration in the macroeconomic outlook

When making lending decisions during shocks, banks consider a range of factors affecting their capacity to lend, including their financial resilience and any balance sheet implications. Banks consider risks associated with borrower quality and returns on risk-adjusted lending that have implications for their profitability and financial resilience. They also consider their capital and liquidity positions.

When faced with a deterioration in the macroeconomic outlook, it is appropriate for banks to adjust their lending terms to reflect this deterioration, along with consequent changes in the credit quality of borrowers. Such actions ensure that banks manage their lending activity prudently and in line with their risk appetite.

With regard to their capital positions, banks often set internal and external target capital ratios (ie measures of capital relative to a bank's assets) and manage their businesses towards those. Typically, banks will seek to maintain additional capital (sometimes called a management buffer) above regulatory minima and buffers, to provide flexibility in case of unexpected events.

If capital ratios move below their targets – for example due to credit losses – banks have a number of options to rebuild them. One way is to issue new capital, though research shows that issuing capital can be relatively expensive. Another is to build capital levels via retaining earnings. To accelerate the rebuild of capital through retained earnings, banks could take actions such as reducing costs, including variable pay, for some period. A third option would be for banks to reduce their assets, either by selling them or by lending less than they otherwise would have.

If banks cut lending primarily to defend their capital positions, this contraction in lending could itself worsen asset quality by causing a tightening in financial conditions that would not be commensurate with the changes in the macroeconomic outlook, thus creating the potential for a damaging feedback loop.

Restrictions on lending not warranted by the macroeconomic outlook might appear to strengthen a bank's capital position, due to the direct effects of lower risk-weighted assets and impairment charges. But if all banks were to do this, lending could fall sharply, preventing some creditworthy households and businesses from accessing funding. In turn, this could lead to a further round of credit losses and impairments for banks.

This is an example of a collective action problem: what may appear rational for each bank in isolation could result in all banks being worse off. Restricting lending beyond what would be warranted by changes in the macroeconomic outlook would therefore be counterproductive, harming both the wider economy and ultimately banks themselves. One example of this occurred during the GFC when banks restricted lending to households and businesses to defend their capital ratios. This had damaging effects on the real economy.

By cutting the CCyB, the FPC can reduce the incentives for banks to restrict lending beyond what would be warranted by changes in the macroeconomic outlook. It is also important that banks use, as necessary, other capital buffers, which are designed to be used to allow banks to continue to support the economy in downturns while also weathering losses.

3: The CCyB, financial stability and the FPC's objectives

The **Financial Policy Committee's (FPC's) primary objective is to contribute to the achievement by the Bank of its Financial Stability Objective.**[5] Its statutory responsibility, in relation to that objective, relates primarily to the 'identification of, monitoring of, and taking of action to remove or reduce, systemic risks with a view to protecting and enhancing the resilience of the UK financial system'. Systemic risks include those attributable to 'structural features of financial markets, such as connections between financial institutions', to 'the distribution of risk within the financial sector', and to 'unsustainable levels of leverage, debt or credit growth'.

The FPC's task is not to achieve resilience at any cost. Its actions should not – in its opinion – be likely to have 'a significant adverse effect on the capacity of the financial sector to contribute to the growth of the UK economy in the medium or long term'. Subject to achieving its primary objective, the FPC must also support 'the economic policy of Her Majesty's Government, including its objectives for growth and employment' as its secondary objective. The Government's economic policy objective, as set out in the FPC's 2022 Remit letter, is to achieve strong, sustainable and balanced growth.

A resilient financial system brings economic benefits to the UK economy. The GFC demonstrated how vulnerabilities in the financial system can amplify adverse shocks, resulting in severe and persistent contractions in economic activity. By reducing the likelihood and severity of such crises, financial stability policies help to ensure the stable provision of financial intermediation services – including payment services, credit supply and insurance against risk – to the wider economy, and thus promotes sustainable economic growth. In contrast, growth driven by credit and asset price booms rather than the fundamentals of the economy is not sustainable; while this may lead to higher growth in the short-run, a financial crisis will lower growth over the medium and long term.

3.1: The cost of financial crises and credit crunches

There is a large body of research which suggests that 'financial' recessions – ie economic recessions which occur at the same time as systemic crises in the banking sector – result in **deeper economic downturns and slower recoveries than 'normal' recessions.** This is due to the sudden, sharp reduction in the availability of credit (or so called 'credit crunch') coming from the banking sector – even banks that did not fail in stress episodes cut back lending to preserve their balance sheets. For example, estimates vary, but the credit crunch from the banking sector explains about a **third of the economic downturn** as a result of the GFC in 2008.

When banks cut lending or tighten financial conditions, households and businesses may have to default on their loans – if they are not able to refinance their loans – or cut back on spending and investment. This can make a downturn in the economy worse and lead to higher defaults on loans as businesses cut spending and employment. This can lead to a potentially vicious cycle and a larger fall in growth and employment, which then leads to even higher defaults on loans. Taking defensive actions such as cutting lending primarily to defend balance sheet positions would be costly to the UK economy, and ultimately counterproductive for banks as it would lead to higher defaults. It is therefore in the collective interest of the banking system to continue to lend to creditworthy households and businesses.

As a result, the FPC's principal aim in setting the UK CCyB rate is to help ensure that the UK banking system is better able to absorb shocks without an unwarranted restriction in essential services, such as the supply of credit, to the UK real economy.

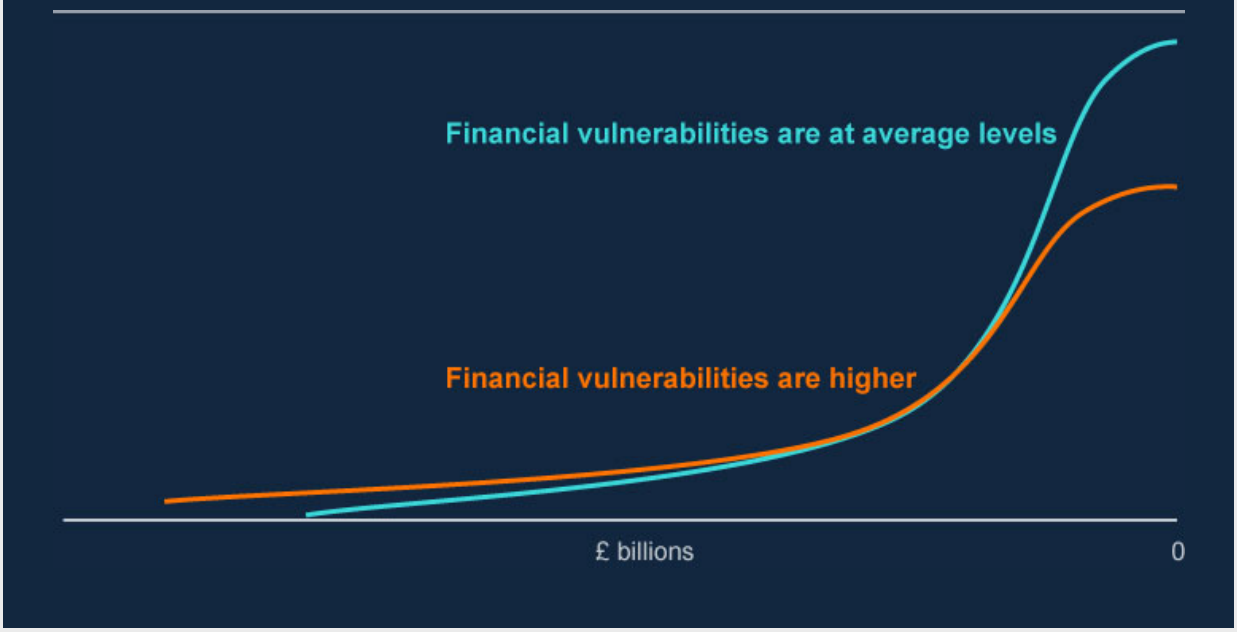
Box C: Financial cycles and the likelihood of large losses

Financial cycles are not the same as business cycles. While there is no universal definition of a financial cycle, there are some key elements: financial cycles are significantly longer than business cycles; **and the peaks of a financial cycle are often associated with financial crises and large falls in GDP**. This can be seen in Chart A which plots the UK business cycle (in blue) and financial cycle (in red) using the methodology in **Drehmann et al (2012**).

Chart A: The financial and business cycle compared in the UK

Potential losses are likely to be larger at ‘higher’ points in the financial cycle than at ‘lower’ points in the cycle. In other words, the distribution of banks' potential losses at the higher stage of the financial cycle might have a ‘fatter tail’, such as that shown by the orange line in Figure A, which means that stressed outcomes are more likely.

Figure A: Stylised distribution of potential losses at different stages in the financial cycle



This increase in potential losses, or the increase in the sensitivity of the system to shocks, is significant. A BIS study estimated that in the top third of the cycle - when the cycle is defined by the probability of a banking crisis occurring – the banking system would require several percentage points more capital to absorb the losses that they could make than during the rest of the financial cycle.

Using data from the US and a simple stress-testing model, **Hirtle et al (2016)** show considerable cyclicality of the capital shortfall in response to a macroeconomic stress with the capital gap at the 'peak' being over five times larger than at the lower part of the cycle. Other approaches such as **Aikman et al (2019)** and **Adrian (2021)** estimate the capital that would be needed to maintain lending and/or offset the fall in GDP and also find that considerably higher capital requirements would be needed at times in the financial cycle when financial vulnerabilities are higher compared to when they are lower. **Historical evidence** suggests that in 2007, the UK CCyB rate would have needed to be set in the range of 3.5%–5% for the UK banking system to have had sufficiently large usable capital buffers to absorb losses that followed the credit boom without severely restricting lending to the real economy.

This means that different levels of resilience are needed during different parts of the financial cycle. With active use of the CCyB, the FPC aims to ensure that its capital strategy is responsive to evolving macroeconomic conditions.

3.2: How the CCyB helps build a resilient banking system

A resilient banking system is likely to bring economic benefits to the UK economy. Its importance was particularly evident during the GFC, when many UK banks experienced significant losses. Because banks' capital levels were too low relative to the risks they were taking, the losses led to some institutions coming close to failure or requiring recapitalisation by the Government. Lending to the real economy fell sharply, households and businesses cut back on spending, and the economy experienced one of the worst recessions since the Second World War.

As part of the package of post-GFC reforms for the financial sector, stronger regulatory capital requirements were introduced to ensure that banks appropriately internalise the wider economic costs of their business practices and risk-taking behaviour. Higher levels of capital in the banking system can help reduce both the likelihood of a banking crisis occurring and its severity: a system with better capitalised banks is generally more resilient, and, if an individual institution does suffer losses, it is more likely to remain solvent and maintain investor and depositor confidence without the need for a sharp reduction in the supply of credit to households and businesses.

As discussed in Box C: Financial cycles and the likelihood of large losses, building up capital buffers is especially important when the level of financial vulnerabilities in the system is relatively high. Consequently, the FPC aims to increase the level of capital in the system for the phase of the financial cycle associated with higher potential loss conditions. Varying banks' capital buffers in line with financial vulnerabilities and the banks' sensitivity to them allows the FPC to put in place a 'shock absorber' that could be used to prevent a shock to the financial system turning into a systemic crisis and/or to moderate the negative impacts of systemic crises on the real economy.

For this reason, it is important to maintain a positive CCyB rate through the financial cycle, so that it can be released when risks crystallise.

3.2.1: The impact of the CCyB on bank resilience and how it helps banks to keep lending in a stress

The impact on each bank's overall capital requirement will depend on the proportion of UK exposures in its risk-weighted assets. There will be a wide dispersion of effects on individual banks, with a higher effect on banks with higher levels of UK exposures, as discussed in Section 1.3.

There is significant evidence, including from the GFC and the Covid pandemic, that well-capitalised banking systems are likely to be more resilient to adverse shocks: not just to survive the shock but also to be able to keep lending and providing services to the real economy.

Vazquez and Federico (2015) find that banks with stronger capital and structural liquidity positions in the pre-crisis period were less likely to fail in its aftermath. **Berger and Bouwman (2013)** report a similar finding using a longer-run data set of US banks. **Carlson, Shan and Warusawitharana (2013)** find that US banks with higher pre-crisis capital ratios had stronger loan growth in its aftermath, with the effect particularly pronounced at lower capital ratios. Similarly, **Cornett et al (2011)** and **Kapan and Minoiu (2018)** report that banks that relied more heavily on stable sources of funding such as core deposits and equity capital continued to lend relative to other banks during the crisis. **Couaillier et al (2022)** find that banks with less headroom above regulatory buffers cut lending by more during the Covid pandemic. **Berrospide et al (2021)** find that, during the pandemic, 'buffer-constrained' banks reduced loan commitments to SME firms by more and were more likely to end pre-existing lending relationships than 'buffer-unconstrained' banks. A recent strand of literature goes further and shows the effect on macroeconomic outcomes. **Aikman et al (2019)** show that material downside risks to growth stemming from credit and property booms can by partly mitigated by increased capitalisation of the banking system, and **Fernandez-Gallardo et al (2023)** show that macroprudential policy substantially reduces tail-risks to GDP in part by reducing the likelihood of credit booms.

There is some evidence that releasing the CCyB during Covid led to increased lending by banks. A **cross-country study** undertaken by the BIS indicates a positive effect on loan growth for banks that were subject to a CCyB release. **Mathur et al (2022)** find that UK banks receiving greater capital relief from the cut to the UK CCyB during the pandemic maintained more stable capital ratios, lending provision and risk taking capacity. And **Couaillier et al (2022)** show that capital relief measures (including the release of the CCyB) for Euro Area banks increased credit supply and did not lead to higher risk-taking, and the more effective capital relief measures were those which were done transparently and perceived as long-lasting. **Wong et al (2023)** examine the CCyB release in Hong Kong and find the release of the CCyB supported the provision of credit for those banks with relatively smaller capital buffer than their peers, as it provided more capital headroom to lend; but that, reflecting uncertainty, the credit went to sectors least hit by the pandemic. It should be noted that, in case of Covid, isolating the impact of CCyB release is difficult as typically it was part of the package of multiple measures aimed to mitigate the impact of the pandemic on the financial system and wider economy.

3.3: The impact of increasing the CCyB on credit conditions

In addition to its direct impact on the resilience of the banking system, increases in the CCyB will also have knock-on effects on credit conditions and hence the central outlook for the economy. This effect is expected to be small, particularly because the FPC considers the economic cost – particularly on lending and therefore economic growth – of its actions in its policy.

When the CCyB is increased, banks that do not have sufficient capital resources to meet the new regulatory capital requirements must either:

- Increase capital, either by retaining a greater proportion of their earnings or by issuing new shares; or
- Reduce risk-weighted assets, either by reducing lending or other exposures, or by rebalancing portfolios away from assets that carry high regulatory risk weights.

Banks that have capital resources in excess of requirements may choose to retain a voluntary buffer by taking similar actions.

The effect on credit conditions is likely to vary depending on which adjustment channel is taken. The effect is likely to be smaller if banks are able to adjust by retaining a greater proportion of their earnings.

Raising capital can be especially costly for individual banks experiencing capital shortfalls – one reason for this is because investors can interpret an equity issuance as a signal that the firm's stock is overvalued. In these circumstances, individual banks facing capital shortfalls may choose to adjust by restricting lending growth. Raising equity to meet system-wide capital requirements is likely to be less costly than other equity issuances because it applies to the entire UK banking system, and so it will not give rise to the same interpretation. The CCyB is less likely to imply such high costs of equity as it is a system-wide requirement.

Most existing studies of the effect of increases in capital requirements are on unexpected increases in capital requirements that are binding on banks, and applied at an individual level. This means that they were likely to be an upper bound on the effect on credit conditions.

So far, research suggests that increasing the CCyB has not had large increases in costs for banks. For example **Couaillier et al (2023)** show that increases in the CCyB lead to lower Credit Default Swap (CDS) spreads for banks and that bank valuations do not react. They interpret this as 'markets therefore consider that higher capital requirements translate into more stable banks at no material cost for shareholders'. **Benbouzid et al (2022)** also find that bank CDS premia fall after an increase in the CCyB.

However, these studies have an important caveat: they rely on the reaction of financial markets after a CCyB increase is announced, which captures the extent to which the announcement is unexpected by financial markets. But CCyB increases are typically not a surprise as authorities generally have predictable strategies for setting the CCyB. As a result, these studies may underestimate the cost to banks because these increased capital requirements may have already been factored in by banks and financial markets, **limiting the reaction**. The CCyB is also a macroprudential instrument and applies to all banks with credit exposures in a country, which can make inference difficult – as it is hard to differentiate between banks that are more or less affected by the increased capital requirements as a result of the CCyB.

3.4: How the FPC's strategy for the CCyB contributes to the FPC's secondary objective

As described above, the CCyB is designed to reduce the impact of the financial cycle on the real economy and to ensure that the financial system acts to absorb rather than amplify shocks.

As a result, active use of the CCyB should increase the long-term level of growth for the UK economy as well as support higher employment. This effect is likely to be particularly strong when the CCyB is cut or reduced if the banking system faced losses that could otherwise cause it to restrict lending to defend capital positions by more than was warranted by the macroeconomic environment.

A strategy of using the CCyB actively in response to the financial cycle rather than having a higher baseline level of capital requirements, means that the FPC expects to be able to build resilience for the banking system efficiently - which should lead to a higher overall level of economic growth.

And by taking into account the economic cost of raising capital when increasing the CCyB, the FPC lowers the cost of building resilience on economic growth.

This approach ensures the CCyB contributes to both the FPC's primary objective and its secondary objective of supporting HM Government's economic policy, including its objectives for growth and employment.

4: How the FPC choose the countercyclical capital buffer rate

The FPC follows a two-stage approach to determine the CCyB rate: first it assesses the level of financial vulnerabilities to try and take a view on where the UK is in the financial cycle; second, it assesses the banking system's resilience to potential and actual shocks.

4.1: Stage 1: How the FPC assess financial vulnerabilities

In order to identify and measure developments in financial vulnerabilities the FPC uses a number of quantitative indicators. These core indicators play a key role in informing the FPC's decision and communication regarding the setting of the UK CCyB buffer rate. The decisions are not mechanically tied to any level or rate of change for an individual or specific combination of indicators; rather, the FPC makes a comprehensive, qualitative assessment informed by the indicators.

4.1.1: Indicators of financial vulnerabilities

The FPC has a set of core indicators that can be broadly split into 'borrower balance sheet stretch' and 'conditions in markets'.

'Borrower balance sheet stretch' includes measures of the level or growth in indebtedness and provide a simple gauge of the propensity of borrowers' balance sheets to amplify shocks. 'Conditions in markets' includes measures of interest rates on new lending, asset valuations and investor risk appetite more broadly, and are usually signs of exuberance.

While every cycle is different, financial crises are usually preceded by an expansion of credit and build-up of asset prices (such as equity and house prices), greater than what is justified by underlying fundamentals. This may occur because lending standards may be lax and terms and conditions are not capturing the fundamental risk that the lenders are facing - for example lenders may be over optimistic (eg **Mian et al (2017)**) or less averse to risk than usual. The excessive build-up of these financial imbalances increases the sensitivity of the financial system to

shocks and raises the likelihood of systemic stress, or financial instability, in the banking sector. **Borio and Drehman (2009)** show that unusually strong increases in credit and asset prices tend to precede banking crisis; **Schularick and Taylor (2012)** show that credit growth has been a reliable predictor of financial crises since 1870.

The indicators the FPC look at to inform its assessment of financial vulnerabilities have been chosen because they can help to provide advanced warning of risks to financial stability – usually across a time frame of one to three years - which allows time to build resilience if necessary. Indicators have been chosen on the back of a wide range of empirical work both within and outside the Bank highlighting their strong predictive power for the probability of a financial crisis, tail risks to macroeconomic variables, as well as the depth and severity of future recessions. There is a large literature on these produced by both the Bank of England and academia: **Bridges et al (2017)**, **Aikman et al (2018)**, **Aikman et al (2019)**, **Bluwstein et al (2020)**, **Lloyd et al (2021)**, **Schularick and Taylor (2012)**, **Jorda et al (2013)**, **Baron and Xiong (2017).**

These indicators are only a subset of the wide range of economic and financial indicators that the FPC examines when it makes its assessment of the current and projected state of financial vulnerabilities. In addition to data and analysis, the FPC also considers supervisory and market intelligence as well as information from its Agents network.

These core indicators are published **online** each quarter. The FPC updates this list of indicators over time as it learns from experience, as the financial system evolves, as data availability and quality improve, and as new research is undertaken.

4.1.2: Analytical methods to consider financial vulnerabilities

The FPC also considers the channels through which vulnerabilities can affect financial stability – for example whether they will have a direct impact on losses experienced by banks, or an indirect impact, for example if households cut spending, leading to losses on lending to firms who see a reduction in earnings who then default.

For example, the FPC look at analysis examining how sensitive the proportion of households with high debt servicing ratios is to an increase in interest rates or an increase in unemployment. This way the FPC can take a more forward-looking approach to considering the state of financial vulnerabilities.

The interaction between variables is important too. For example, **Greenwood et al (2022)** show that credit booms accompanied with asset price booms are more likely to be followed by a financial crisis than when they appear separately. In addition, not all credit booms result in a financial crisis, for example as set out by **Gorton and Ordoñez (2020)**. There have also been a number of innovations in analytical methods which estimate how these variables affect extreme tail-outcomes of the economy at different horizons – for example through the concept of **GDP at Risk** which allows the FPC to consider how much **weight** to put on different **variables over different time periods**.

Analysing and addressing vulnerabilities in the non-bank financial sector is an important part of the FPC's work to protect and enhance the resilience of the UK financial system. However, in the context of the CCyB specifically, the CCyB is a tool that only applies to banks; and so it is not the right instrument to build resilience for vulnerabilities in the non-bank financial sector. However, the FPC does assess how vulnerabilities in the non-bank financial sector could spillover and affect UK banks and would take that into account in its decision making.

These indicators and analytical methods play an important role in both the decision and communication of the CCyB rate. However, the level and direction of vulnerabilities do not tell the whole story, and the interplay between the different parts of the economy is complicated – especially as the FPC is trying to consider the more extreme parts of the distribution where interactions are often highly non-linear and unpredictable. As a result, despite the continual development of models and analysis, FPC judgement plays a key role. The FPC will communicate its judgements and how it came to its decision on the CCyB rate in its Record (see Section 5: Communicating decisions on the countercyclical capital buffer).

4.2: Stage 2: Banks' resilience to shocks

In the second stage, the FPC form a view on the resilience of UK banks and their ability to absorb shocks without an undue restriction in lending. In forming this view, the FPC takes into account a wide range of information.

4.2.1: Indicators of UK banks' balance sheet resilience and analytical methods

Indicators related to UK banks' balance sheet resilience provide a simple gauge of the banking system's capacity – both current and forward-looking – to absorb losses on its UK exposures.

These include looking at the riskiness of banks' lending and funding structures, banks' current, forecasted and stress-tested capital and liquidity ratios, together with an assessment of banks' ability to build capital such as profitability metrics and business models. The FPC also looks at market-based measures of bank resilience.

The FPC uses a range of indicators to monitor conditions in lending markets. These include data on the quantity, quality and terms and conditions of lending. They are considered alongside macroeconomic developments as well as some of the indicators mentioned above on financial vulnerabilities and asset quality to inform a view on whether changes in these conditions are warranted by changes in the macroeconomic outlook.

These indicators and quantitative analysis are not the only metrics related to banks' resilience and credit provision that the FPC uses in its decision-making when setting the UK CCyB rate. The FPC also takes into account information from a wide variety of sources, such as regulatory and wider Bank of England data collections, market intelligence, supervisory insight, and agency information.

Given the FPC's desire to take a forward-looking approach when setting the UK CCyB rate and to consider the economic cost of raising the CCyB, the FPC also considers how UK banks' resilience will likely evolve in future. This means that, in addition to UK banks' current capital and liquidity positions, the FPC also considers the key drivers that could influence these positions in both the near and medium term – such as the current and future profitability of the sector, the nature of banks'

exposures, as well as the quality of their loan books. In doing so, it takes account of the impact of IFRS9, which requires earlier recognition of asset quality deterioration and a more forward-looking view of the quality of the loan book.

Box D: The role of stress testing in setting the countercyclical capital buffer

Banks' resilience under stress is examined in macroprudential stress tests. In normal times, this is primarily through the Annual Cyclical Scenario test (ACS), though in the Covid period the FPC adapted its framework to include desktop stress testing and the use of reverse stress testing – examining whether the banking sector is resilient to paths for the economy that are much worse than expected. The FPC also uses inputs from models and analysis of the **interaction** between different parts of the financial system in a stress.

The Bank conducts concurrent stress tests of the UK banking system, covering the major UK banks. The severity of the **cyclical stress test scenario** is linked systematically to the FPC's assessment of financial vulnerabilities across markets and regions. The stress being tested against will generally be severe and broad, in order to assess the resilience of major UK banks to 'tail-risk' events. In addition, where financial vulnerabilities are judged to be heightened, the related aspects of the test will be more severe and vice versa.

While there is no mechanical link between the outputs of the stress test and the CCyB – the CCyB is set at the FPC's discretion drawing on a range of indicators and analysis – the tests will inform the FPC's decisions. In particular, stress tests provide information on whether the system, and banks within it, have buffers of equity that are sufficient to be able to withstand the stress and continue to meet credit demand from UK households and businesses.

The results of the stress tests also help the FPC and PRA to co-ordinate the setting of the CCyB with the PRA buffer by informing a view on the appropriate level of system-wide and individual bank resilience.

4.3: Putting stage 1 and stage 2 together to set the CCyB rate

When financial cycle vulnerabilities are building up or the UK banking system is not sufficiently resilient, the FPC expects to increase the UK CCyB rate. The pace of increasing the UK CCyB rate will be determined with reference to the level and growth of financial vulnerabilities and the economic cost of building resilience. Typically, banks will have 12 months to meet any increase in the UK CCyB rate.

The FPC expects to set a positive neutral rate for the UK CCyB of around 2% when indicators of underlying cyclical financial vulnerabilities are at or around their long-term historical average and an assessment of banks' resilience to potential and actual shocks suggests they are likely to be able to absorb a shock rather than amplify it.

If it appears that vulnerabilities are crystallising or a major shock has, or is likely to, hit the banking system, the FPC would consider reducing the UK CCyB rate. If in its stage 2 analysis it anticipated that the banking system could otherwise unduly restrict lending primarily to defend capital positions in the face of a shock, the FPC would expect to cut the CCyB, including if necessary to zero. A decision to reduce the CCyB takes immediate effect.

As noted above judgement plays an important role given the complexity of the financial system and assessing the manner in which shocks would propagate. And frequent changes in capital requirements are not helpful for banks' capital planning decisions. As a result, the FPC does not expect to finely calibrate the CCyB and will generally change the CCyB rate in increments of 25 basis points or more.

4.4: Returning the CCyB to the neutral rate following a cut

Following a cut in the CCyB to zero in response to a shock, the FPC is required to accompany such a decision with an indication of the period during which no increase to the CCyB is expected and its rationale for choosing that period. This helps ensure the capital which has been released can be used to ensure that the banking system is able to better absorb rather than amplify the shock.

When considering whether a zero CCyB rate is still needed – either during or after that indicative period - the FPC would take into account whether banks were experiencing credit losses that were leading them to cut lending to defend capital positions in a way that was not warranted by the macroeconomic backdrop.

The pace of return to the neutral CCyB rate of 2% would depend on banks' ability to rebuild capital while continuing to lend to creditworthy UK households and businesses. The FPC would monitor a number of factors in making that assessment, including the expected evolution of the economic recovery, prevailing financial conditions and the outlook for banks' capital. In monitoring the outlook for banks' capital, the FPC would be mindful that impairments may only appear on banks' balance sheets considerably after the shock that caused the impairments had passed.

In some circumstances, banks might not have experienced the extent of the losses that might have been anticipated following a severe shock that had led to the CCyB cut. That could mean that an increase in the CCyB would not require banks to strengthen their capital positions, but could rather be met with existing capital. An increase in the UK CCyB in this situation would therefore be unlikely to materially impact prevailing credit, or wider economic, conditions. In such scenarios, the FPC might be minded to raise in larger than normal increments in order to return to the neutral rate.

4.5: Some illustrative scenarios to show how the FPC could use the CCyB

In order to put the FPC's CCyB decision-making framework and strategy into context, this sub-section sets out a number of stylised scenarios that are intended to illustrate how the FPC could act in a number of different situations.

These scenarios are intended to be illustrative: the actual CCyB decision will be dependent on an overall assessment of conditions at the time, and there will always be specific considerations that feed into the FPC’s decision.

Scenario 1: A downturn in the business cycle

In this scenario, the economy is forecast to be entering a recession and aggregate levels of indebtedness are increasing. There are signs that some households and businesses are finding it harder to access credit.

The FPC has assessed the extent of financial vulnerabilities across the UK economy and considers that, while they are increasing, they will not reach a level beyond which the neutral rate of the CCyB is set for.

The FPC has also assessed the projected profile for banks' resilience, taking into account asset quality, the timing of impairments and the profitability and capital generation possibilities of the banking system. It has also assessed the outlook for credit conditions. It considered that the banking system has sufficient levels of capital.

A key consideration for the FPC in this scenario would be whether banks are tightening credit conditions because firms and households are riskier – ie in line with the economic outlook – or whether banks are cutting back lending in order to defend their capital positions by more than was warranted by the macroeconomic environment.

In this scenario, if it appeared that banks were simply adjusting their lending appropriately to the macro-environment rather than acting to defend their capital positions, and that was likely to remain the case given the outlook for bank profitability and resilience, the FPC's most likely action is to leave the UK CCyB rate unchanged. This is because when banks' balance sheets are not constrained – and nor are they expected to be constrained – a CCyB cut, which is designed to ease banks' balance sheet constraints, is not likely to be needed.

The FPC would likely also note that its role is not to try and lean against the business cycle by fine-tuning credit supply. Banks reducing their lending in line with changes in the economic outlook does not mean they are becoming capital constrained. The calibration of capital requirements is such that UK banks could

withstand a normal recession without breaching their capital requirements. So changing the CCyB in the face of a business cycle downturn would only be appropriate if the anticipated recession – and its impact on the banking system – would be sufficiently severe such that banks act in a manner that constrains the supply of credit to the economy primarily in order to defend their capital positions, rather than to reflect the macroeconomic environment.

Scenario 1b: a crucial assessment in Scenario 1 was that the existing level of capital was sufficient for the current level of vulnerabilities.

If the FPC considered that the level of vulnerabilities was increasing and the level of capital may not be sufficient in the short to medium term then the FPC might consider raising the CCyB, despite the expected economic downturn. This is because the financial system would be more vulnerable to future shocks and could even amplify them, making the economic downturn worse. This assessment would be informed by a Stage 2 analysis of banks' resilience and how capital constrained they were. Recognising that the challenging economic environment would likely make it harder for banks to raise capital by retaining earnings and that a fast increase might make the downturn worse (leading to more impairments), the FPC would likely increase the CCyB at a slower pace than it would if it were in a more benign macroeconomic environment.

In different circumstances where the FPC felt as if banks were materially undercapitalised in the short-term the FPC might consider a faster increase in the CCyB. Although banks normally have 12 months to meet a CCyB rate the FPC can impose a shorter timetable in exceptional circumstances.

Scenario 2: A shock from outside the financial system hits the UK

A shock has hit the UK economy that is expected to lead to a large fall in output and incomes. This could be something similar to the shock that was anticipated at the start of the Covid pandemic.

In this scenario, the FPC would note that although financial vulnerabilities were not particularly large, the shock that had hit the UK economy was. As a result, banks could expect to make material losses on their UK exposures which could lead their

capital positions to deteriorate considerably. The FPC judged the existing level of capital to be sufficient.

A key consideration in this scenario would be whether the shock would generate losses at a scale that might cause banks to unduly restrict the supply of credit to the real economy in order to defend their capital positions, rather than reflect the macroeconomic environment. If this was the case then banks could amplify the shock: by cutting back lending they would likely cause output and employment to fall even further. Releasing the CCyB would help ensure that the banking system did not need to cut lending in this way and so the FPC would likely cut the CCyB rate in this situation.

During the Covid pandemic the FPC judged that it would be costly for the banking system and for the wider economy to take defensive actions, such as cutting lending, and that it was in the collective interest of the banking system to continue to support businesses and households through this period. In this scenario cutting the CCyB would not only help absorb the shock but also. by maintaining lending, it would lead to lower losses for banks and potentially greater resilience for the system as a whole.

Scenario 3: A financial shock hits the non-bank financial system but not the UK banking sector overall

In this scenario, financial markets are extremely volatile following the failure of a large hedge fund that had made a very large unhedged bet that went in the wrong direction; the need to meet their margin calls amplified the shock and led to further losses following a fire sale of its assets. Several banks had exposures to that hedge fund.

The FPC has assessed the extent of financial vulnerabilities and considers that they are at a level at which the neutral rate of the CCyB is set for.

The key consideration for the FPC in this scenario would be the banking system’s direct and indirect exposures to the current market dislocation. In this scenario, the losses are isolated in a few investment banking arms of certain UK banks rather

than the UK banking system more widely. The risk of direct system-wide losses to the UK banking system (and therefore the risk of a material reduction in aggregate credit supply) appears contained.

The FPC would likely not cut the CCyB in response, as it is intended to be used for banking system-wide losses which could cause UK banks to cut credit to preserve capital positions. However, the FPC would continue to monitor the situation carefully, especially if indirect losses materialised – for example if the market disruption led to a material downturn in the UK economy for which banks were not capitalised.

Scenario 4: Credit boom in a key UK trading partner

One of the UK's key trading partners is experiencing a credit boom fuelled by strong inward capital flows following major modernisation reforms including financial and trade liberalisation. One UK bank has substantial exposures to this country.

The FPC has done an assessment of UK financial vulnerabilities and considered that they are around the level at which the neutral rate of the CCyB is set for.

The FPC would look at the potential impact to the UK of a potential crisis in the trading partner. While some banks would be likely to make large losses that could affect their balance sheets, the direct losses would not be system-wide. The UK CCyB rate applies to UK credit exposures rather than exposures to the trading partner, so it would not be targeted or efficient to increase resilience in this way. The FPC would expect to reciprocate any CCyB rate put in place by the trading partner’s authorities (see Box E for further information on the setting of the CCyB by foreign authorities). Alternatively, the PRA would put in place microprudential measures to ensure banks had enough capital for the potential losses on exposures to the trading partner. Changing the UK CCyB is not necessarily the right tool to build resilience in this situation.

However, any crisis in the trading partner would likely affect the UK economy via several different channels including a reduction in UK exports to the trading partner – which could cause businesses to become more indebted – and a change in global financial conditions which could then affect UK financial conditions. This

could lead to a drag on the UK economy and losses on UK exposures. If – as the overseas credit boom built – the FPC thought these potential spillovers to the UK economy would be significant and therefore cause losses to banks on their UK exposures, then it would consider increasing the CCyB.

In practice **the UK is a highly open economy** and external shocks can have a considerable **impact on UK financial stability** and the size of any economic downturn, so the FPC spends considerable time considering how global events can affect the UK.

Scenario 5: Rebuilding after a cut in the CCyB

An extremely large shock – such as a global pandemic – hit the world economy, greatly worsening the economic outlook and increasing uncertainty. Anticipating that banks could cut lending to defend their balance sheets in the face of losses the FPC cut the CCyB to zero.

Financial vulnerabilities – particularly those associated with balance sheet stretch – did not fall materially during the shock and are at a level consistent with the neutral rate.

At the time that the shock hit, uncertainty was extremely high and the FPC expected that banks could make large losses. The FPC had reduced the CCyB to zero, anticipating that banks could otherwise cut lending primarily to defend their balance sheets.

However, the shock has passed and financial vulnerabilities are at a level consistent with the neutral rate and the FPC is considering how and when to increase the CCyB.

In determining the pace and timing of the return to the neutral CCyB rate the FPC would consider banks' ability to rebuild capital while continuing to lend to creditworthy UK households and businesses.

The key distinction between the two sub scenarios below is not the shock itself – which is the same in both – but the effect that the shock had on banks' capital positions.

Scenario 5a: The shock led to large losses on banks' balance sheets

In this case the shock led to large losses on banks' balance sheets and banks now have considerably lower capital ratios than before the shock hit. The losses, with some more still to come, make it difficult for banks to generate profits in the near-term

As a result, having to meet an increase in the CCyB – even with the usual 12-month lag – would likely lead to banks having to take defensive actions, cutting back lending, which would make the downturn worse or prolong it. The FPC would likely note that returning the CCyB to its neutral rate would be counterproductive: it is in the collective interest of the banking system to lend because cutting lending to defend their balance sheets banks ultimately would harm their own resilience. And prolonging the downturn would likely make financial vulnerabilities worse by increasing borrower balance sheet stretch.

The FPC would be unlikely to return the CCyB to its neutral rate in this circumstance. Instead it would likely continue to closely monitor the economic recovery, financing conditions and the outlook for banks' capital when choosing the right time to return to a neutral rate.

Scenario 5b: The shock did not lead to large losses on banks' balance sheets

In this scenario banks did not make large losses on their balance sheets. This was because several support measures by the public authorities meant that households and businesses were able to repay loans and did not have to cut spending and investment as much as anticipated. While banks had tightened credit conditions to firms, these were in sectors that were expected to become considerably less creditworthy as a result of the shock that had led to considerable structural change in the UK economy.

As the shock did not, nor was anticipated to lead to, large losses on banks' balance sheets banks now have similar capital ratios compared to before the shock occurred.

If the FPC judged that this meant that banks would be able to meet a neutral rate with limited economic cost – because they had not needed to use the cut in the CCyB rate – then the FPC would likely consider raising the CCyB to its neutral rate at a faster than usual pace.

Box E: International experience of the CCyB

The CCyB, introduced in 2016, is now used in a range of countries with **89 worldwide** reporting that they put in place a framework for the CCyB and with more than 20 countries so far actively varying their CCyB rates.

The CCyB was originally developed by the BCBS as part of Basel III (and many European countries implemented it as part of the Capital Requirements Directive (CRD)). As a result, countries are generally well aligned on the overarching purpose of the CCyB, and the types of shocks and vulnerabilities – financial cycle risks in the context of bank resilience – it is designed to respond to. However, reflecting the flexibility inherent in the guidance, there is, with regard to the detailed implementation of the CCyB, **a range of practices around the world**; for example with regard to the range of indicators considered, the steady state value of the CCyB or the mapping of vulnerabilities to CCyB rates.

Similar to the UK, the vast majority of jurisdictions with an announced or implemented CCyB rate greater than zero **released their CCyBs** during the Covid pandemic (fully or partially) to provide banks with additional capital headroom to support lending (Chart A). Since then a large number of authorities have rebuilt their CCyB and a number of countries which did not previously have a positive CCyB have set one (Charts A and B).

A major lesson for many countries following the pandemic was the value of a positive capital buffer in the banking system that can be released following a shock, even if it was not related to the financial cycle. The UK had an explicit positive neutral rate strategy already prior to the pandemic. Since then several countries have introduced positive neutral rate frameworks, including **Sweden**, the **Netherlands**, **Australia** and **Ireland**. Reasons include having a higher capital buffer to mitigate unexpected shocks that

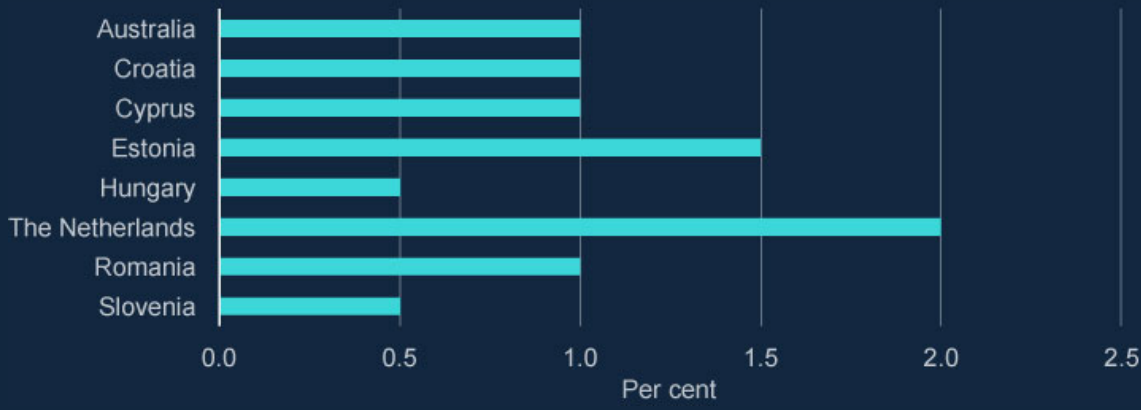
occur before the manifestation of elevated systemic risks, as well as **mitigating concerns** around lags in data availability and other measurement challenges in the build-up of sufficient capital buffers in a timely manner. While not explicitly a positive neutral rate other countries (eg **Denmark** and **Norway**) have adopted early build-up strategies, ie not setting a neutral level for their CCyB (or equivalent buffer), but instead explicitly stating a preference for the 'early build-up' of their CCyB in advance of financial cycle vulnerabilities developing.

Reflecting the common objectives, the set of indicators chosen by countries are heavily focused on financial vulnerabilities in the real economy as well as bank resilience, where the specific choice of indicators reflect country experiences and heterogeneities in economic and financial structures. For example, a larger role for price to rent gaps in Hong Kong, and the monitoring of CDS spreads of foreign (Nordic) banks active in the domestic economy in Lithuania's or Norway's frameworks.

Countries use these indicators in a judgement rather than mechanically based way, reflecting the uncertainty around metrics and indicators of the financial cycle. While there is a lot of cross-country commonality in the objectives and the indicators used to inform decisions, there is a wider range of practices on communicating the rationale for decisions and the position in the financial cycle. Some countries focus on an aggregated index of key indicators while others focus on a singular measure – usually a variant of the credit-to-GDP gap. Others have chosen to categorise vulnerabilities and the stage of the financial cycle into more subjective buckets (usually a variation of low/subdued, standard/normal and elevated) and still others put emphasis on a wider range of individual indicators in their communication.

Chart A: CCyB rates in countries which had set a positive CCyB rate pre-pandemic

Chart B: CCyB rates in countries which have now set a positive CCyB rate



Sources: ESRB, BIS, national authorities' websites. Listing BCBS or ESRB reporting countries which had a non-zero pending or effective rate at some point since 2015. The countries in Chart B did not announce a positive CCyB before the Covid pandemic. Information up to mid-June 2023.

5: Communicating decisions on the countercyclical capital buffer

The FPC is required to set the CCyB rate each quarter. The FPC communicates its decisions in a transparent and systematic manner. All CCyB decisions are published in the quarterly Record that follows its policy meetings. The FPC provides a more in-depth explanation of its decisions in its six-monthly Financial Stability Report. In addition, the prevailing CCyB rate chosen by the FPC, as well as the core indicators that support its decisions, are published on the Bank of England's **website** each quarter. Banks are also required to disclose their institution-specific CCyB rates (as defined in Section 1.3 Calculating the institution-specific countercyclical capital buffer rate above), **as well as information regarding the geographical location of their credit exposures.**

1. Systemic risks include those attributable to 'structural features of financial markets, such as connections between financial institutions', to 'the distribution of risk within the financial sector', and to 'unsustainable levels of leverage, debt or credit growth' (Section 9C(3) of the Bank of England Act 1998)

2. Relevant credit exposures include those in exposure classes that are subject to own funds requirements for credit risk, specific risk or incremental default and migration risk in the trading book, or securitisation positions. Excluded exposure classes include central governments or central banks, regional governments or local authorities, public sector entities, multilateral development banks, international organisations, and institutions (ie credit institutions and investment firms).

3. For details of these capital conservation measures, see Article 141 of the CRD, the Capital Buffers Part of the PRA Rulebook, and PRA Supervisory Statement 6/14.

4. The **Financial Stability Board** define a financial vulnerability as ‘a property of the financial system that: (i) reflects the accumulation of imbalances, (ii) may increase the likelihood of a shock, and (iii) when acted upon by a shock, may lead to systemic disruption’.

5. The FPC’s responsibilities in relation to the CCyB are not ‘functions’ under the Bank of England Act 1998 but set out in the Capital Requirements (Capital Buffers and Macro-prudential Measures) Regulations 2014. However, the FPC takes into account, where relevant, its objectives and ‘have regards’ under the Bank of England Act 1998 (and HM Treasury’s remit and recommendations letter) when setting the CCyB.