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Revision of the framework for setting the countercyclical capital buffer in Spain: greater banking resilience in adverse phases of the cycle and macroeconomic stabilisation*

19 IESE Banking "Surfing the Wave of Uncertainty" Madrid Pablo Hernández de Cos Governor

* English translation from the original in Spanish.

Good afternoon. I would like to thank the IESE for their invitation to participate in this edition of the Banking Sector Meeting.

On this occasion, I would like to spend my time explaining in detail the revision of the framework for setting the countercyclical capital buffer (CCyB) that the Banco de España presented today, which marks the beginning of the public consultation period.

The main change is that the new framework sets a positive CCyB rate of 1% when cyclical systemic risk is found to stand at a standard level (an intermediate level between high and low risk).

Under the previous framework, this buffer was only built up when cyclical systemic risks were at a high level.

The level of cyclical systemic risks stands at a standard level at present and the application of this new framework means that the CCyB will begin to be built up gradually.

To be specific, we have initiated measures that will set the CCyB rate for 2024 Q4 at 0.5%, applicable to banks from 1 October 2025.

If the level of cyclical systemic risks remains at an intermediate level, the CCyB rate will be raised to 1% in 2025 Q4, applicable from 1 October 2026.

In any event, the Banco de España may change or even reverse these expectations if data are received to justify such a decision.

1 CCyB framework in place to date

The CCyB was designed by the Basel Committee on Banking Supervision (BCBS) in 2010 and, since 2016, has been the Banco de España's main macroprudential policy tool to address the cyclical or time dimension of systemic risks.

Activating the buffer is intended to both boost the banking sector's solvency to manage cyclical systemic risk and to slow its build-up.

The release of the CCyB when these risks materialise will give banks additional resources to absorb losses, should they materialise. As such, the CCyB helps the banking sector to continue providing financing to the real economy in crisis situations.

The activation and release of the CCyB therefore helps to reduce the volatility of the macrofinancial cycle.

Indeed, in general, higher capital ratios allow banks to meet demand for financing more easily, especially in adverse environments. However, the evidence also shows that it is not just banks' capital levels that matter; so too does their capital headroom above regulatory

requirements (the voluntary capital buffer).¹ Banks with greater headroom tend to extend more credit in adverse macroeconomic situations.² Releasing the CCyB automatically increases the voluntary buffers when risks materialise, making their use easier for banks.

In practical terms, any decision to activate or release the CCyB is based on cyclical systemic risk monitoring. To date, the Banco de España has used the credit-to-GDP gap as the main reference indicator to identify such risks alongside a number of additional quantitative indicators, including alternative estimates of credit cycle imbalances, indicators of price imbalance in the residential real estate market and indicators of external imbalances.

Under the previously applicable framework, the CCyB would have been activated only if a high level of cyclical systemic risk had been signalled by these indicators.

In line with the recommendations of the European Systemic Risk Board, the Banco de España regularly reassesses the validity of its CCyB framework.

This framework may require adjustments for several reasons.

First, evidence gathered over the years may call into question the suitability of the indicators used to measure the level of cyclical systemic risk.

This evidence may also allow a better assessment of the costs and benefits of activating and releasing the CCyB at different stages of the macro-financial cycle.

In addition, structural changes over time in the economy and/or the financial sector may require the method to be updated.

Indeed, the Banco de España's CCyB framework has been evolving ever since it was put in place in 2016.

As such, with time, some shortcomings in the credit-to-GDP gap could be seen.

- As a result of the persistent trend on which this indicator is based, it was found that the credit-to-GDP gap could provide inaccurate or even erroneous signals of the build-up or materialisation of systemic cyclical risks. Accordingly, the Banco de España developed a

¹ Specifically, the term voluntary buffer refers to banks' solvency ratio levels in excess of micro and macroprudential requirements and guidance: P1, P2R, combined buffer requirement (CBR) and P2G. The CBR includes the capital conservation buffer and the buffers for systemically important institutions, which cannot be released, as well as the CCyB and the systemic risk buffer, which can be released.

² See Berger and Bouwman (2013) and Gambacorta and Shin (2018), for example, on the positive relationship between bank capital and credit supply. BCBS (2022) and Bedayo and Galán (2024) identify a greater credit supply from European banks with more headroom above the combined capital buffer requirement, both prior to and in response to the pandemic. Berrospide, Gupta and Seay (2021) and Couaillier, Duca, Reghezza and d'Acri (2022) also provide evidence of a larger credit supply from such banks during the early stages of the pandemic in the United States and Europe. For a review of the theoretical and empirical literature on the effects of capital requirement levels, see Thakor (2014).

credit-to-GDP gap metric calibrated to the duration of the credit cycle in Spain to mitigate these shortcomings, as well as a number of complementary models to assess cyclical risk.³

- The outbreak of the COVID-19 pandemic in 2020 and its particularly adverse impact on economic activity also revealed that the credit-to-GDP gap did not flag the right signals when there was a sharp drop in GDP, the denominator of the ratio.⁴ As a result, we decided to increase the relative weight of one of the complementary indicators, the change in the output gap, which tells us about the Spanish economy's cyclical position⁵ and is generally a forerunner of the credit gap during the initial phase of economic recoveries.

2 The revision of the CCyB framework

More recently, and after almost a decade of this tool being employed in many European jurisdictions, new empirical evidence and theoretical developments⁶ have come to light that show, in particular, that it is appropriate to activate the CCyB in situations where cyclical systemic risks are at a standard level. That is, when such risks are at an intermediate level, neither especially high nor low (with the latter level usually associated with risk materialisation), rather than only being activated when they are at a high level, as has been the case to date.

First, we find that the cost-benefit ratio of its activation when systemic cyclical risks are at a standard level and its release during a crisis scenario is clearly positive⁷ and is, under certain circumstances, even higher than estimated for its activation when the risk level is high (see Slide 1).

³ See Galán (2019) and Box 3.2 "<u>Calculating the credit-to-GDP gap and financial cycle duration in Spain</u>" of the Banco de España's Spring 2019 Financial Stability Report for more details on the calibrated credit-to-GDP gap, and Galán and Mencía (2021) for details on other model-based indicators.

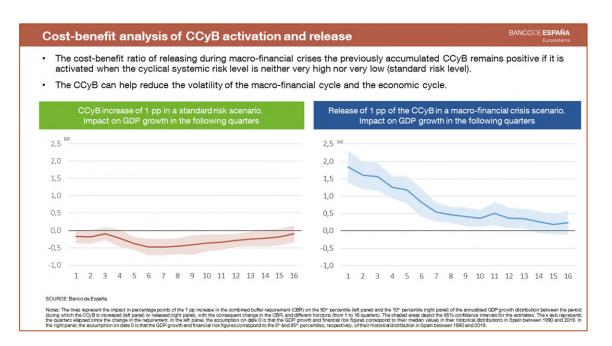
⁴ See, for example, <u>Chapter 3</u> of the Banco de España's Spring 2021 Financial Stability Report. For this type of bias, see also BCBS (2010) "<u>Guidance for national authorities operating the countercyclical capital buffer</u>", December 2010, in particular Principle 3 ("Risk of misleading signals").

⁵ See Cuadrado and Moral-Benito (2016).

⁶ See "<u>The role of macroprudential policy in the stabilisation of macro-financial fluctuations</u>", Pablo Hernández de Cos, Governor of the Banco de España. Opening remarks at the Conference on Financial Stability (Banco de Portugal) on 3 October 2023.

⁷ See Bedayo and Galán (2024), Galán (2020) and Estrada et al. (2024).

1 Cost-benefit analysis of CCyB activation and release



Furthermore, activating the CCyB when systemic cyclical risks are at a standard level makes it possible to account for the fact that it is not always possible to accurately identify when they are high, meaning that it is prudent to anticipate potential situations of this nature.

Moreover, this proactive approach allows the buffer to be activated more gradually, providing more room for manoeuvre for banks to comply with the requirements, which should minimise the costs of its activation.

Lastly, early activation of the CCyB allows banks to build up more releasable capital that can then be effectively released by the macroprudential authorities in adverse phases of the cycle, including those originating outside the financial cycle. It thereby contributes to reducing cyclical volatility in the financial system and the economy.

Based on these considerations, the BCBS published a newsletter in 2022 clarifying that its guidance on the CCyB in 2010 allowed for the possibility of positive neutral CCyB activation when risks are deemed neither high nor low.⁸

For its part, the European Central Bank (ECB) is heavily encouraging the build-up of releasable macroprudential space in situations in which procyclical effects do not arise and has specifically considered building up a positive CCyB rate for this purpose in intermediate systemic cyclical risk environments.⁹

More recently, the findings of experts from the International Monetary Fund's 2024 Article IV mission to Spain¹⁰ recommend the adoption of a positive neutral CCyB rate to ensure

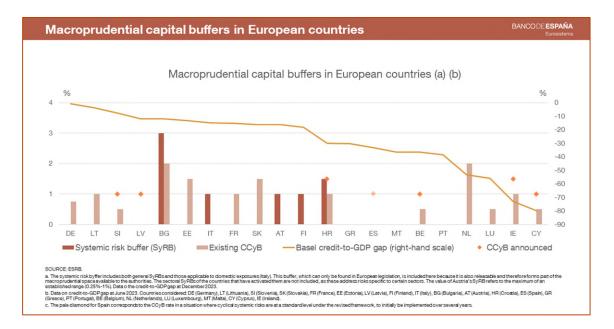
⁸ BCBS (2022).

⁹ See, for example, the <u>ECB Financial Stability Review</u>, <u>November 2023</u>. See also ECB (2022) "<u>A positive neutral rate for</u> the countercyclical capital buffer – state of play of the banking union".

¹⁰ Staff Concluding Statement of the 2024 Article IV Mission, April 2024.

that the financial system is more resilient and contributes more to economic growth, even in downturns.

In this setting, several national authorities in the European Union have adopted this approach and activated this buffer for standard risk levels (see Slide 2).



2 Macroprudential capital buffers in European countries

Beyond the general considerations above, the new CCyB framework is also justified by certain specific features of the Spanish economy.

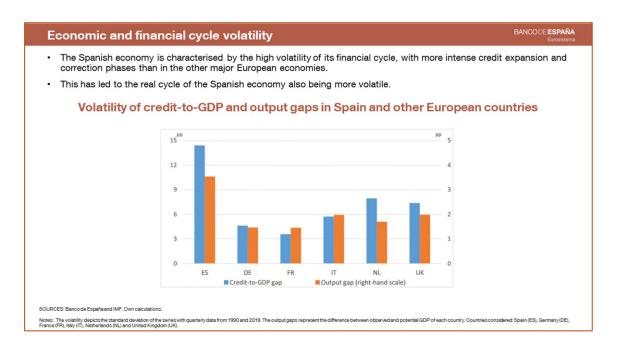
It is characterised by the high volatility of its financial cycle: both the credit expansion and correction phases are more intense than in the other major European economies.

In addition, credit institutions play a key role in this behaviour in Spain owing to their large share in the financing of the economy.¹¹

This high volatility in the financial cycle, in turn, appears to have led to the real cycle of the economy being more volatile in Spain than in other European countries (see Slide 3).

¹¹ Indeed, according to Laeven and Valencia (2018), Spain is one of the few European countries to have experienced more than one banking crisis in the last 50 years. Sweden and Slovenia have also had two banking crises in that same period.

3 Economic and financial cycle volatility



As noted above, activating the CCyB earlier will increase the availability of releasable capital and thus help to dampen the volatility of the financial and economic cycles.

In this respect, macroprudential policy can complement the role of monetary and fiscal policies in terms of their macroeconomic stability objective. This is particularly important in the context of the euro area, in which we have a single monetary policy and where, in the absence of a common and permanent fiscal capacity, only national fiscal policy is available to counter the negative consequences of economic shocks.

In light of the above, the revision of the new framework established that a positive CCyB rate will be set when systemic cyclical risks are deemed to be at a standard level (i.e. between a high and low level).

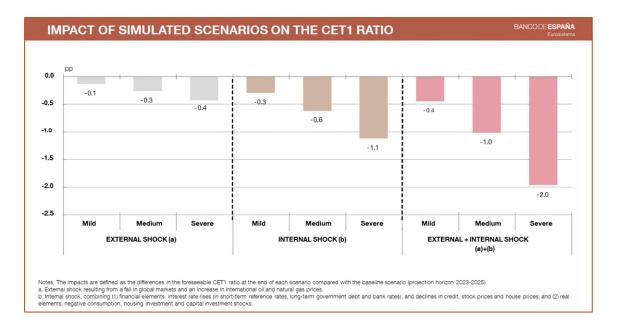
3 The CCyB rate in a standard risk level environment

Setting the appropriate CCyB level when systemic cyclical risk is at a standard level is calibrated on the basis of the results of multiple simulations of the Spanish economy's performance¹² in response to various adverse cyclical shocks (distinguishing between those originating externally or internally and of a real or financial nature) and the Spanish banking system's capital charges associated with them (which are estimated using stress tests).¹³ The intensity of the shocks has been calibrated in line with historical experience (see Slide 4).

¹² The model used is the long-standing <u>Quarterly Macroeconometric Model of the Banco de España</u>.

¹³ The Banco de España's Forward Looking Exercise on Spanish Banks (FLESB) tool was used for this purpose.

4 Impact of the simulated scenarios on the CET1 ratio



Estimating the impact on bank capital (in the order of 0.5 percentage points (pp) of the CET1 ratio) of the combined materialisation of mild internal and external shocks is considered an appropriate benchmark for setting the CCyB rate for a standard cyclical systemic risk environment.

First, such shocks are plausible in a context where cyclical systemic risks are neither very high nor low.

Second, the estimated impact of 0.5 pp on the CET1 ratio represents a sufficiently high fraction of the banking system's solvency to be of systemic importance.

Moreover, according to the available estimates, this CCyB rate would enable the impact of medium and severe external shocks to the Spanish economy to be absorbed, as long as no domestic shocks arose in parallel. It could also absorb domestic shocks of a low to medium intensity.

The CCyB in terms of total risk-weighted assets (RWAs) is calculated as the weighted average of the CCyBs set by the authorities in the various jurisdictions in which the banks operate, weighted by the relative share of risk-weighted exposures in each jurisdiction. This means that a CCyB rate of 1% in Spain would contribute almost 0.5 pp to the CCyB at a consolidated level, in line with the estimated baseline impacts.

Therefore, the CCyB rate is set at 1% in a standard risk level environment.

Of course, should there be significant changes to the structural conditions of the Spanish economy and the financial system, in particular the banking sector, or new methodological developments, the Banco de España would recalibrate this rate.

4 Operation of the CCyB over the macro-financial cycle

The CCyB rate of 1% would be reached gradually over several years, with the aim of minimising its activation costs.

Once reached, it would remain unchanged either until vulnerabilities started to build up in such a way that the probability or impact of cyclical systemic risks increase significantly (to a high level of risk) or until risks involving losses and capital charges for institutions materialise (low risk level).

In the first case, the CCyB requirement would be raised to above 1% either in conjunction with other macroprudential tools or not, depending on the nature and intensity of these systemic risks.

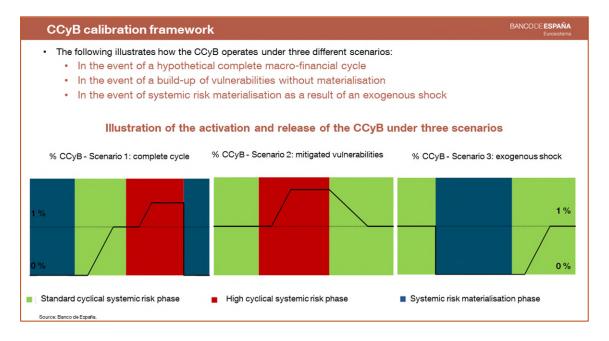
If the measures taken to mitigate cyclical systemic risks when these are high take effect and these risks start to dissipate, the accumulated CCyB would be gradually released until it returns to the 1% level set for a standard level of cyclical systemic risks (scenario 2 of Slide 5). This release process must be done with the necessary prudence.

If, however, cyclical systemic risks materialise, the accumulated CCyB would be released immediately, normally in full (scenario 1 of Slide 5).

The CCyB would also be released in response to the materialisation of other adverse systemic shocks so that banks could absorb their effects and continue to provide financing to the real economy (scenario 3 of Slide 5).

At the time of its release, the Banco de España would announce its expectations for the future reactivation of the CCyB, which would take place until the consequences of the crisis had been absorbed and cyclical systemic risks had returned to a standard level. As provided for by the regulations, a one-year advance notice would be given before the rebuilding of the CCyB, which would take place gradually, depending on the existing macro-financial conditions.

5 CCyB calibration framework



5 Cyclical risk monitoring framework

Determining the cyclical phase of the macro-financial variables and their most likely future path is a key element of how the CCyB operates. Taking into account the multidimensional nature of cyclical systemic risk and the uncertainty associated with its identification, a comprehensive approach, including a two-stage analysis, is proposed.

In the first (quantitative) stage, 16 key indicators will be considered. These indicators are grouped into blocks representing the following risk analysis dimensions considered relevant: macroeconomic indicators,¹⁴ macro-financial indicators,¹⁵ financial market indicators¹⁶ and indicators of the situation of the banking system.¹⁷

The credit-to-GDP gap, adjusted to the characteristics of the Spanish economy, will continue to be an important monitoring indicator. However, given its limitations, it will be evaluated jointly with the others. Nevertheless, high levels of the credit-to-GDP ratio would continue to receive special attention in determining whether there is a high level of cyclical systemic risk.¹⁸

¹⁴ Economic activity and labour market indicators.

¹⁵ Financial indicators, such as bank credit, and their interaction with macroeconomic variables.

¹⁶ This financial indicator is disaggregated from the rest because it is particularly useful for contemporaneously measuring the materialisation of risks in the financial markets.

¹⁷ Indicators calculated on the basis of the consolidated and individual accounting information reported by credit institutions to the Banco de España.

¹⁸ In any event, high levels of the credit-to-GDP gap should not automatically be interpreted as indicative of a high level of cyclical systemic risk. The upsurge in this metric at the start of the COVID-19 pandemic illustrates this situation, in which there is a misleading signal (see footnote 4).

Similarly, the output gap will continue to be particularly important under the new framework, as it directly captures the economy's position in the real business cycle and is capable of predicting the credit cycle.

The level of cyclical risk resulting from each indicator is classified into three categories: low risk, standard or intermediate risk and high risk. To this end, the present value of each indicator is compared with its historical distribution.

These indicators are aggregated at the level of each cyclical systemic risk analysis dimension to obtain four composite indicators, which in turn can be combined to give an overall composite indicator.

In general, the appropriate time to build up a positive CCyB level would be when (i) the overall indicator is at a standard level, (ii) the composite indicators of at least two of the dimensions are also at a standard level, and (iii) the banking system indicators do not point to low capital generation capacity.

Compared with the Banco de España's previous buffer-setting framework, this analysis incorporates two new developments.

First, it provides an integrated quantitative indicator of macro-financial indicators.

Second, it incorporates additional indicators that are also compatible with the applicable regulations. Noteworthy among these are those that proxy the banking sector's capacity to generate capital. Basic macro-financial metrics (GDP and house price growth) are also added to make the analysis more robust than statistical assumptions of gap-based indicators.

In a second stage, the complementary information available, including qualitative information, will be analysed in order to ratify or correct the preliminary result obtained previously.

In general, this exercise will depend on the specific economic juncture in Spain, the assessment of which will use, among other elements, the projections of the indicators used in the first stage, consistent with the Banco de España's forecasting exercises, and also its qualitative classification of risks to financial stability.

In any event, in this stage some aspects will be analysed on a recurring basis.

Special attention will be paid to analysing banks' capacity to comply, at any given time, with the CCyB once it is activated, with minimum adverse effects on credit and activity. In particular, the existing voluntary buffers and banking sector profitability forecasts will be taken into account.

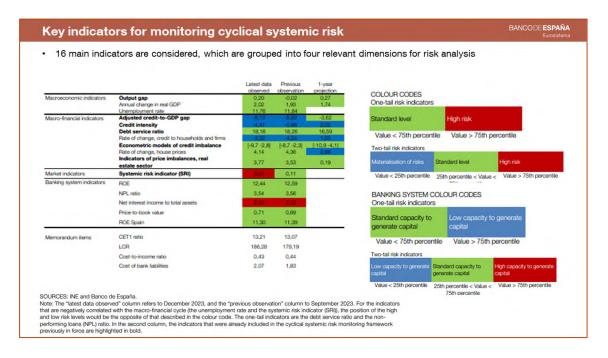
Once the buffer is released owing either to materialisation of cyclical systemic risks or to the impact of adverse shocks on the financial system, this analysis of the capacity to build buffers will also guide expectations as to its future activation and how gradual the build-up required of banks will be.

Other regular elements of this second stage will be the analysis of the macroprudential policy stance (a metric which compares economic growth under baseline and risk scenarios), complementary information on bank lending to households and non-financial corporations in Spain (especially new loans), and the current account balance of the Spanish economy.

6 Assessment of cyclical risk and decision to activate the CCyB in the current environment

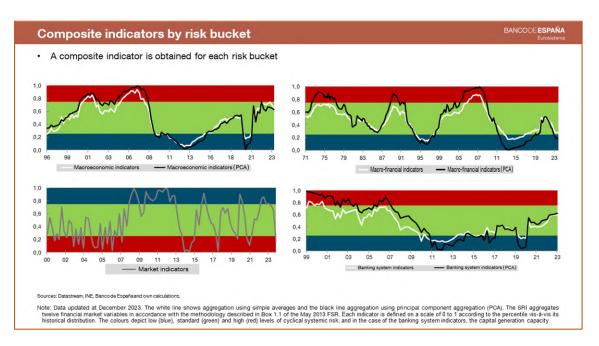
Based on an analysis of the current juncture, it can be concluded that the level of cyclical risk in Spain is currently at an intermediate or standard level (see Slide 6).

6 Key indicators for monitoring cyclical systemic risk



First, the composite indicator of the macroeconomic indicators analysed is at that intermediate level (see Slide 7). In particular, the output gap is currently positive, slightly above equilibrium, and just short of the 60th percentile in terms of its historical distribution, between the 25th and 75th percentiles which define the standard risk situation under the revised framework. The projections currently available for the Spanish economy suggest that this gap could widen further in the coming quarters.

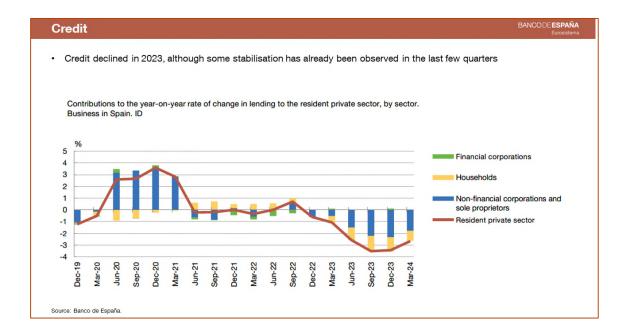
7 Composite indicators by risk bucket



At the same time, GDP and unemployment are at intermediate levels by historical standards, albeit approaching a more expansionary range.

Second, of all the indicators analysed, the macro-financial indicators stand at the lowest level, with the credit-to-GDP gap, credit intensity to GDP and the rate of growth of credit to households and non-financial corporations reflecting a relatively weak credit cycle (see Slide 6).

However, the most recent credit stock developments are less contractionary and the latest available forecasts suggest that the credit-to-GDP gap will follow an upward trend over the coming quarters, reaching positive values at the end of 2025 (see Slide 8).



8 Credit

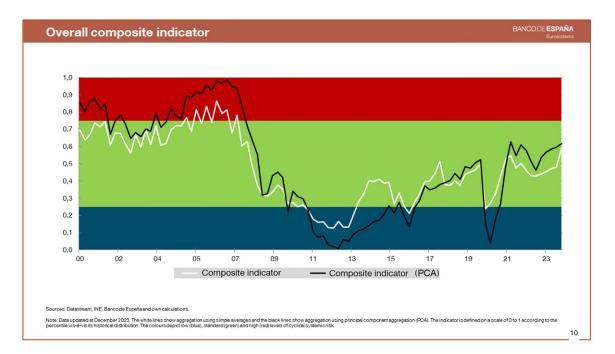
In addition, credit cycle position indicators based on econometric models, which relate changes in credit to their fundamental determinants, indicate intermediate levels of risk.

Indicators of price imbalances in the residential real estate sector are at a standard level, consistent with some overvaluation in this sector. The projections anticipate that it will remain at this level in the coming years.

Third, the systemic risk indicator suggests that financial market conditions have been accommodative for some time and this may facilitate the build-up of cyclical systemic risks (see Slide 7).

Lastly, the banking system indicators, considering in particular profitability and the ratio of market value to book value, point to a standard level of risk which suggests that the industry's capacity to generate capital is significant.

As a result, the aggregate indicator of cyclical systemic risks stands at an intermediate level (see Slide 9).

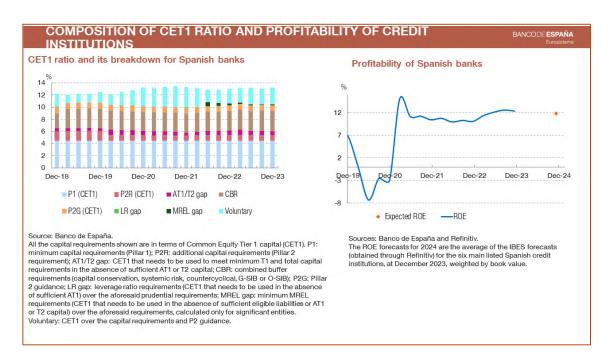


9 Overall composite indicator

To ratify or correct this diagnosis, different complementary information was analysed in a second stage (see Slide 10).

In particular, voluntary buffers currently account for 2.5% of the banking sector's RWAs.

10 Composition of the CET1 ratio and bank profitability



According to market expectations, banks' future profitability will decline only marginally from the levels reached in 2023, thereby remaining high by historical standards.

These conditions strengthen confidence in the banking sector's capacity to absorb the requirement of a higher CCyB rate on exposures located in Spain.

7 Conclusions

In conclusion, the position of cyclical systemic risks to the banking sector is currently at a standard level.

Under the revised framework, this level of risk is consistent with the proposal to set a CCyB rate of 1%.

To minimise the costs associated with its introduction, it will be activated gradually.

The procedure is now under way to set the CCyB rate required for exposures located in Spain at 0.5% (applicable from 1 October 2025) and, subsequently, if cyclical systemic risks remain at a standard level, a second increase of up to 1% is projected (applicable on 1 October 2026).

In any case, the CCyB is a flexible tool and the Banco de España will be able to adapt this action plan appropriately to new relevant information that may be received in the future.

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