REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

on Effects of Regulation (EU) 575/2013 and Directive 2013/36/EU on the Economic Cycle

# 1. Introduction

1. Article 502 of Regulation (EU) 575/2013 of the European Parliament and of the Council[[1]](#footnote-2)requires the Commission to examine periodically whether risk-sensitive regulatory requirements, as established in that Regulation and in Directive 2013/36/EU of the European Parliament and of the Council[[2]](#footnote-3), create unintended procyclical effects by reinforcing the endogenous relationship between the financial system and the real economy and thereby amplifying the real economic cycle*.*
2. The Commission is required to submit a proposal for any appropriate corrective measures, should such procyclical effects be found. The specific goal of this report is thus to analyse whether there is evidence that the provisions in Regulation (EU) 575/2013 and Directive 2013/36/EU contribute to any procyclical effects of capital ratio requirements.
3. The Commission prepared earlier and similar reports on procyclicality of capital ratio requirements in 2010 and 2012.[[3]](#footnote-4) This third report is the first one under Regulation (EU) 575/2013. This third report draws upon a dedicated report by the European Banking Authority (EBA), which encompasses contributions from the European Systemic Risk Board (ESRB), the European Central Bank (ECB) and authorities from EU Member States.[[4]](#footnote-5) It further builds on a broader examination of the literature.
4. There is broad consensus among regulators and academics that the financial system is inherently unstable and subject to risks which can have severe negative consequences for the real economy once they materialise. This is borne out also by historical experience. The global financial crisis, which broke out a decade ago, provided a stark reminder. To counter that financial instability, financial regulation and macroprudential policy aim at limiting systemic risk. With the lessons from the crisis in mind, ensuring sufficiently high capital levels, especially for banks, is generally seen to reduce the probability of systemic financial crises and their cost if they do occur.
5. However, capital ratio requirements to ensure sufficient capital might themselves become a source of instability as the risk-based approach embedded in Regulation (EU) 575/2013 and Directive 2013/36/EU implies that capital ratio requirements become looser in an upturn and tighter in a downturn. Such procyclicality of capital ratio requirements is a key potential externality of the financial system which can cause financial stability risks and is therefore of concern to regulators.
6. This report examines whether capital ratio requirements are procyclical and if so, whether they have an impact on the level of capital that banks actually hold or desire to hold.

# 2. Methodology

1. The question of procyclicality of capital ratio requirements is in first instance an empirical one. Recent literature surveys find limited and rather inconclusive evidence on the long-run impact of changes in capital ratio requirements on the level or growth rate of bank lending, even though negative near-term impacts are documented. To shed further light on the issue, the EBA report examines evidence for the Union on the procyclical impact of recent regulation on capital ratio requirements for banks. The EBA report uses information available from public sources as well as dedicated data collected from National Competent Authorities. The empirical evidence examined covers aggregate and micro-level evidence whether bank's capital ratio requirements mirror the development of the overall business cycle as well as regression analyses.
2. The data used by EBA mostly span the period 2008-2015, covering the global financial crisis and its aftermath. In addition to aggregate statistics and survey data the EBA relies on a sample of 144 individual banks active in 13 Union and EEA countries and representing some 95% of the Union banking sector's total assets. The sample includes banks with different scales of operation, ranging from international systemic banks to ones that are active only domestically. It covers banks with different business models, including retail and commercial banks, universal banks, as well as a number of banks with more specialised activities, such as covered bond issuance or investment banking.

# 3. Main findings

1. Capital ratio levels of the Union banking sector have significantly increased since risk-sensitive capital ratio requirements were first introduced. The increase accelerated since 2014 with the application of the capital ratio requirements laid down in Regulation (EU) 575/2013 and Directive 2013/36/EU. The significant increase in capital has been driven primarily by a rise in banks' Common Equity Tier 1 requirements, rather than by the cyclicality of underlying internal rating based risk parameters, notably probability of default and loss given default. These risk parameters remained relatively stable over the sample period which covers a major economic downturn in most Member States. This stability can be explained by banks' active portfolio reshuffling. Overall capital ratio levels have increased faster than the required regulatory minimum ratios which could reflect a preference of banks for additional room for manoeuvre in their capital buffers in a period of uncertainty.
2. In contrast to the rise in mandatory and overall capital buffers, total risk-weighted asset ratios of European banks declined from 2008 onwards, with some modest pick-up since 2014. Loan portfolios mirrored this trend. In particular, loans from euro area-based banks to non-financial corporations decreased in the aftermath of the global financial crisis as weak aggregate demand weighed on the demand for credit. Some pick-up was only registered towards the end of the sample period. The decrease in risk-weighted assets has been larger than the fall in the exposures as defined for the leverage ratio, suggesting a rebalancing of bank portfolios. The development of risk-weighted exposures was largely due to the trends in credit risk, the most important subcategory.
3. Various alternative regression specifications confirm that changes in exposures, notably exposure at default, rather than changes in risk parameters, have driven observed cyclical patterns in bank capital. While there is some limited procyclical effect of the macro economy on bank variables, notably on minimum required capital, there is no marked difference between risk-based and standardised approaches in this respect. These findings are broadly supported by a portfolio-level analysis and by bank lending surveys.
4. It seems that since 2008 crisis-related effects rather than changes in capital requirements have been a major force in shaping bank credit supply in recent years. There is some evidence of a structural break in the regulatory regime due to the transition to the Basel III framework imposed through Regulation (EU) 575/2013 and Directive 2013/36/EU affecting the interaction between bank capital, credit and the real economy. Even so, it is difficult to distinguish level shift effects from a more lasting potential procyclical impact of the regulatory requirements introduced by Regulation (EU) 575/2013 and Directive 2013/36/EU.
5. The results from the empirical analyses have to be treated with due caution. This is partially due to the limited sample size and lack of detailed breakdowns of the data. Also, the period since introduction of Regulation (EU) 575/2013/Directive 2013/36/EU has been short compared to the typical duration of a financial cycle. The period examined was characterised by strong swings in real activity, substantial crisis-induced financial losses, public capital injections and a strong regulatory drive to increase capital buffers culminating in the transition towards Basel III-compliant minimum capital requirements, which is due to be completed by 2019.
6. More detailed empirical findings are given in the Commission Staff Working Document accompanying this report. In all, the available evidence does not show a sizeable procyclical impact of the regulatory framework laid down in Regulation (EU) 575/2013 and Directive 2013/36/EU.

# 4. Measures to address procyclicality

1. The rules laid down in Regulation (EU) 575/2013 and Directive 2013/36/EU incorporate a number of measures aimed at mitigating procyclicality in bank lending, including higher capital ratio requirements, countercyclical and capital conservation buffers, the introduction of a leverage ratio, and reduced dependency on credit rating agencies for prudential requirements and stress tests. On 23 November 2016, the Commission adopted a proposal to amend capital requirement regulations by incorporating the remaining elements of the regulatory framework agreed within the Basel Committee on Banking Supervision (BCBS).[[5]](#footnote-6) On 20 September 2017 the Commission published a proposal on the review of the Union system of financial supervision, with a number of further proposed targeted improvements. The Commission advocated targeted adjustments to the composition and organisation of the European Systemic Risk Board and its coordination with Union bodies and institutions.[[6]](#footnote-7) Some of the main measures aimed at mitigating procyclicality are summarised below.

## 4.1 Application of the capital ratio requirements laid down in Regulation (EU) 575/2013 and Directive 2013/36/EU

1. As de-leveraging of credit in international banks in response to regulatory requirements set by national supervisors may occur outside home jurisdictions, the full implementation of the single rule book should reduce regulatory arbitrage. In particular, it might mitigate procyclical effects of ring-fencing of capital and asymmetric de-leveraging in "host countries", that is excessive credit retrenchment by internationally active banks in countries outside their home jurisdiction. That is supported by the different pillars of the Banking Union, comprising common resolution and deposit insurance provisions.

## 4.2 Capital Conservation Buffer and Countercyclical Capital Buffer

1. One key regulatory response to the perceived procyclicality of bank lending is the introduction of a Capital Conservation Buffer and a Countercyclical Capital Buffer. These extra buffers, built up over good economic times, can be released in an economic downturn to enable banks to absorb their losses in an orderly way that does not lead to costly increases in the price of credit, which can aggravate recession. They should mitigate both the existing lack of responsiveness of regulatory requirements to risk build-up at the macro level and their cyclicality. Since dynamics can be very different across different markets, the buffers are determined on a national base. The European Systemic Risk Board developed common guidance for setting countercyclical capital buffer rates.[[7]](#footnote-8)
2. As many Member States still are recovering from the recessionary shock of the global financial crisis, only in few of them do Countercyclical Capital Buffer rates currently exceed zero percent. Similarly, Capital Conservation Buffers have been built up, but to date there is no experience with releasing such buffers. In addition, as regards sectoral financial stability risks related, for instance, to real estate, the Countercyclical Capital Buffer affects all corporate and retail exposures and can currently not be targeted to sectoral exposures. Reflections are ongoing in Basel and in the Union on the merits of introducing sector-specific buffers to address the cyclical nature of some specific risks and to avoid some of the inaction bias inherent to the broad scope of the Countercyclical Capital Buffer.

##  4.3 Risk weights for specific exposures and other supervisory measures

1. The current rules foresee specific macro-prudential measures to counter risks from specific exposures, such as real estate. This may take the form of requirements on risk weights. In particular, under Article 124 of Regulation (EU) 575/2013 competent authorities may set a higher risk weight or stricter criteria on exposures secured by immovable property on the basis of financial stability considerations. Similarly, Article 164 of Regulation (EU) 575/2013 allows competent authorities to set higher minimum values for exposure weighted loss given default for exposures secured by immovable property in their territory on the basis of financial stability considerations. Article 458 of Regulation (EU) 575/2013 allows authorities to adjust risk weights for targeting asset bubbles in the residential or commercial property sector or to take measures such as adjusting the level of the own funds or the level of the Capital Conservation Buffer, with a bearing on the capital base of banks.
2. The EU regulatory framework further comprises measures to mitigate the impact of cyclical risks on banks. These include provisions in Articles 181 and 182 of Regulation (EU) 575/2013 on risk parameters associated with rating grades or pools, which require banks to use estimates that are appropriate for an economic downturn if those are more conservative than the long-run average. Banks are recommended to use internal ratings models to adopt a through-the-cycle approach in calculating capital ratio requirements for credit risk. Moreover, supervisory authorities can take into account cyclical risks for institution-specific second pillar capital ratio requirements.
3. In addition, the implementation of other regulatory requirements have a bearing on mandatory capital levels, for example, the banking book standards (IRRBB) and IFRS 9 accounting standards. The EU Supervisory Review and Evaluation Process may impact capital requirements as do resolution provisions and loss absorbency requirements such as the Minimum Requirement for own funds and Eligible Liabilities (MREL) and the total loss-absorbing capacity thresholds for global systemically important banks.

## 4.4 Leverage Ratio

1. The Leverage Ratio is an additional non risk-based capital requirement conceived to supplement the risk-based capital ratio requirements. In the Union, the Leverage Ratio is being implemented in line with Basel III requirements, meaning that the Leverage Ratio is calculated by dividing Tier 1 capital by the bank's average total consolidated assets (the sum of the exposures of all assets and non-balance sheet items), the banks being expected to maintain a leverage ratio in excess of 3%. It would help to limit excessive bank lending during the upswing of an economic cycle when banks have momentum to expand balance sheets without an appropriate increase in capital.
2. The theoretical and empirical literature underlines the link between procyclical leverage and financial instability. Empirically, banking sector leverage has been procyclical at an aggregate level in almost all Member States, tending to fall in credit booms and rising in downturns. A static leverage ratio limit would therefore address the procyclicality of banking leverage during an upturn. Furthermore, it would operate as a backstop to the procyclicality of risk-weighted capital ratio requirements. Indeed, it ensures that capital moves in proportion with total exposure, while aggregate risk weights and risk-weighted capital requirement can vary over time, according to the different phases of the cycle.

## 4.5 Credit ratings

1. Credit ratings, obtained through specific credit rating agencies or internal rating models, also play an important role in the determination of the actual capital ratio level of banks. External ratings are closely correlated with the economic cycle, implying that capital ratio requirements linked to external ratings will also follow a cyclical pattern, at least at the level of individual exposures. In view of this, Regulation (EU) 575/2013 encourages the use of internal ratings and strengthens provisions on how external ratings can be used. For banks using an internal ratings based approach, it requires independent risk assessment capability and creates incentives to better manage credit risk. A through-the-cycle approach could help smooth the impact on capital ratio requirements.

## 4.6 Stress tests

1. Stress test can be seen as another, albeit indirect, instrument to help avoid undue procyclical responses of credit institutions to meet capital ratio requirements during periods of financial stress. In the aftermath of the crisis, micro-prudential stress tests were used promptly to assess the capital needs of individual banks. Such stress tests are helpful in informing how buffers can be set, also above minimum requirements. The EU Supervisory Review and Evaluation Process allows the results of stress tests to be used to devise supervisory measures, including capital ratio requirements.

# 5. Conclusion

1. While a procyclical impetus from capital ratio requirements is acknowledged in the literature as a potential source of risk, the empirical evidence is not conclusive as regards its actual strength for banks in the Union. There is no evidence of a strong procyclical bias of the current framework which would affect the non-financial sector in the economy. This result may be driven by the available data not covering an entire cycle, the lack of more granular data that would allow for distinguishing the behaviour of different types of banks, the challenge to control for portfolio rebalancing effects, the difficulty to disentangle loan supply and demand effects, and the difficulty to disentangle the impact of other post-crisis reforms and extraordinary policy measures.
2. Against the background of the weak evidence on the existence of procyclical effects due to the rules laid down in Directive 2013/36/EU and Regulation (EU) 575/2013, there is no reason at this juncture to propose significant alterations to the prevailing regulatory framework for bank capital. The higher capital ratios achieved in recent years imply that the procyclical impact of a given loss will be weaker. The Union financial regulatory framework already includes various tools to deal with any procyclical effects. These include the capital conservation buffer, the countercyclical capital buffer, the leverage ratio, adjustments to risk weights for specific exposures and other supervisory measures.
3. Looking ahead, the impact of the Union regulatory capital ratio requirements on the economic cycle should be monitored regularly and the potential impact, effectiveness and efficiency of counter-cyclical instruments should be further analysed. It will be important to gather evidence on a continuous basis of any procyclical bias stemming from capital ratio requirements becoming stronger. Concrete proposals to change the current set-up should be based on such evidence becoming available.
1. Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (OJ L 176, 27.6.2013, p. 1). [↑](#footnote-ref-2)
2. Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC (OJ L 176, 27.6.2013, p. 338). [↑](#footnote-ref-3)
3. SEC(2010)754, COM (2012) 400. [↑](#footnote-ref-4)
4. EBA Report under Article 502 CRR, issued on 22 December 2016 (EBA-Op-2016-24): [https://www.eba.europa.eu/documents/10180/1701905/Report+on+the+Cyclicality+of+Capital+Requirements+%28EBA-Op-2016-24%29.pdf](https://www.eba.europa.eu/documents/10180/1701905/Report%2Bon%2Bthe%2BCyclicality%2Bof%2BCapital%2BRequirements%2B%28EBA-Op-2016-24%29.pdf) [↑](#footnote-ref-5)
5. <http://europa.eu/rapid/press-release_MEMO-16-3840_en.htm>. [↑](#footnote-ref-6)
6. <http://europa.eu/rapid/press-release_MEMO-17-3322_en.htm>. [↑](#footnote-ref-7)
7. [Recommendation (ESRB/2014/1)](https://encrypted.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwiHraTLj7LZAhVKuxQKHavWAn8QFgg1MAA&url=https%3A%2F%2Fwww.esrb.europa.eu%2Fpub%2Fpdf%2Frecommendations%2F2014%2F140630_ESRB_Recommendation.en.pdf%3F049d9074b5850a7c4513dcfba1393ba2&usg=AOvVaw3wlFQdu2_Y5ncpGUsYzK43). [↑](#footnote-ref-8)