THE ROLE OF COUNTERCYCLICAL MEASURES IN CONTROLLING THE PROCYCLICAL BEHAVIOUR OF BANKS

Irina – Raluca Badea, Ph. D Student
University of Craiova
Faculty of Economics and Business Administration
Craiova, Romania

Abstract: The global financial crisis has triggered both questions and answers to the 'stakeholders' of the financial system. On the one hand, the key notions that rule the financial world refer to financial stability, systemic risk and interlinked market participants. Nevertheless, the procyclicality of the monetary policy reveals the weaknesses of the authorities' policymaking; therefore, countercyclical measures are required to be taken in order to prevent the financial system from collapsing because of the procyclical behaviour of banks.This paper aims at outlining the importance of the countercyclical policies, with regard to the regulatory framework of the monetary policy, the ongoing capital requirements of the Basel III and the incentives that influence the cyclical behavior of banks.

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Key words: monetary policy; central banks; procyclicality; countercyclical measures; Basel III; capital requirements

1. INTRODUCTION

Recent evidence of the vulnerabilities of the financial system in the context of the global crisis offers a realistic perspective of the financial instability that threatens macroeconomy. Therefore, along with the reassessment of the prudential regulation, it becomes an incentive for policy-makers to adopt countercyclical measures, in order to mitigate the procyclicality of the financial system. Optimal macroeconomic policy is countercyclical, aiming at keeping output close to its potential. However it is often argued that emerging market economies are unable to adopt countercyclical fiscal and monetary policies. Policy procyclicality is a result of emerging-country governments cutting taxes and raising government spending and central banks relaxing monetary policy during booms, while being forced to adopt contractionary policies during recessions due to stringent domestic and external credit constraints imposed during recessions. This paper is divided into 2 sections, as it follows: the first section, 'The Procyclical Aspects Regarding Bank Behaviour' depicts the activities that are prone to procyclicality, with an emphasis on the lending activity, the provisioning and risk assessment. The second section, 'Countercyclical Regulation – a Desirable Automatic Stabilizer of the Banking

System' accentuates the role of the countercyclical capital buffer as a new prudential tool, with the main objective of protecting the banking system from the increase in system-wide risk. Needless to say that it is strongly debated to what extent the new macroprudential regulation promoted and implemented by Basel III will raise the financial system's capacity of shock absorption.

2. THE PROCYCLICAL ASPECTS REGARDING BANK BEHAVIOUR

To begin with, the global financial turmoil has revealed the necessity to rigorously adopt a systemic perspective of the financial system, which is prone to instability in lack of a solid prudential regulation. Moreover, the linkages across the financial system and the real economy can lead to procyclical behavior; therefore, there is a wide range of macro and micro factors produce procyclicality, such as regulatory capital requirements and loan-loss provisioning, which should be forward-looking in order to be effective in reducing systemic risk.

On the one hand, banks' lending activities are inherently procyclical. During a cyclical upswing, banks tend to be excessively optimistic about the economy and their customers' position and to advance loans against poorer collateral (possibly overrated due to asset price bubbles created during the cycle), as well as to reduce the applied risk premia and to allocate less loan-loss reserves to cover expected risks. At the same time, there is usually a burst in banks' profitability during a boom.

In other words, banks behave in a procyclical way with respect to the lending activity, the stringency of their credit rating policy and provisioning practices as well as their profitability move in correlation with the economy's short-term business cycles. The ratio of bank assets to GDP has moved closely with the cycle since the late 1970s and this has been accompanied by a rising number of banking crises. Furthermore, banks have become increasingly leveraged (even if this was partially hidden from the regulators) and their financing structure has shifted away from deposits in many countries.(OECD, 2010)

During an economic shortage, banks may incur disproportionately large provisioning burdens, which can undermine profitability and worsen their capital situation. Banks will typically respond by an excessive cut-back in lending, often declining loans even to enterprises which have maintained their credit worthiness despite the cyclical
downturn.(Horváth, Mérõ&Zsámboki, 2000) At such times it can be difficult for banks to raise new capital, they may be required to restrict loans or liquidate investments to continue to meet minimum regulatory capital requirements and, ultimately, avoid insolvency.once again, from the perspective of a single bank, this would appear to be a prudent action. However, when all banks are forced to engage in this deleveraging process at the same time, the widespread reduction in loans and the excessive fall in asset prices will further aggravate the downturn. this, in turn, could place even greater strain on the capital positions of banks and, ultimately, undermine economic and financial stability. In downturns the credit-to-GDP ratio continues to be high due to greater credit demand by households and firms (making use of credit lines, partly to finance inventory accumulation) and a slower, sometimes even negative, GDP growth.

The first step in defining the cyclical nature of lending is to be acquainted with the importance of bank lending for the economy and the role credit plays in the monetary transmission mechanism. There are several transmission channels through which policymakers and monetary authorities 'disseminate' the monetary

policy. The first, considered the traditional channel, operates through both the overall level of interest rates and the exchange rate. Additional channels through which policy rates affect firms that rely on bank financing are the balance-sheet channel and the bank-lending channel.Through the balance-sheet channel, shifts in the policy rate affect the financial position of borrowers, whereas through the bank-lending channel, banks affect the spending and investment decisions of firms by shifting the supply of credit.(Bernanke&Gertler, 1995) The global financial crisis has stirred a debate on whether an additional mechanism in the transmission of monetary policy—the risk-taking channel—affects the supply of credit, given the systemic risk that encompasses the entire financial system and banks' and regulators' struggle to diminish it. What is more important is that this mechanism can be elusive: in prolonged periods of low interest rates, that may induce banks to increase the supply of credit to riskier borrowers, resulting in an overall increase in the riskiness of bank loan portfolios and in a higher tolerance to excessive risk.

Procyclical behaviour in lending activities can arise for several reasons: bank capital requirements, which associate assets to their risk(risk-weighted assets), can induce procyclicality if, for example, banks find it easier to adjust lending than capital to changing assessments of the riskiness of assets. Moreover, provisioning for bad loans can be procyclical, as it often highly increases during downturns, so as to cover unexpected losses. Banks that hold many illiquid assets or rely on short-term funding may be prone to pronounced procyclicality in lending, when they ran out of liquidity and their ability to lend becomes restrained.

Finally, other factors that can influence the procyclicality of lending include risk assessment and remuneration policies that encourage excessive risk taking. To some extent, these outcomes are features of the regulatory set-up, though a number of countries have attempted to address some of these problems. For example, in Spain bank regulators have attempted to reduce the cyclical nature of provisioning by introducing so-called "dynamic provisioning", which induces banks to make more provisions in good times to provide greater buffers to absorb losses in bad times.(OECD, 2010)

According to the point of view stated by the BIS, the main cause of the procyclical behaviour of the financial system is that the 'stakeholders' of the market fail to treat the time-dimension of risks appropriately, making incorrect assessments of the evolution of systemic risk in time. Moreover, even though the regulatory aythorities made an appropriate risk assessment, embedding time-dimension, they acted without taking it into consideration. (BIS, Landau, 2009)

Risk assessment is also procyclical and the most important incentive that influence its co-movement with the economic cycles is the relaxation of credit standards during economic upturns, and their tightening during downturns. The main cause for relaxing standards during upturns can be easily explained by the profit maximization objective of every business; in particular, banks make efforts to defend their competitive positions in the market and they consider an upturn the opportunity to gain clients and expand their portfolio, irrespective of the risks they expose to. It is easy to see that if banks' incentives all work in the same direction, i.e. if cyclical changes in credit standards become characteristic of the banking sector as a whole, then these incentives will strengthen the procyclical nature of lending activity.

To put it differently, procyclicality results from the reactivity of the risk assessment, rather than proactivity of the risk measure. Preventing a risk measure from being procyclical is not an easy task. It requires the regulator to anticipate market crises, using its knowledge of the financial and economic situation. It also requires verifying that financial institutions have a correct monitoring of their extreme exposures. In a market downturn, the risk measure increases, forcing most market

participants to sell out positions in order to meet capital adequacy. Capital adequacy rules are another incentive for overtightening bank lending during downturns in the business cycle.(Horváth, Mérõ&Zsámboki 2000)

According to the revised BIS publication of Basel III regulatory framework, it is not possible to achieve greater risk sensitivity across institutions at a given point in time without introducing a certain degree of cyclicality in minimum capital requirements over time. The Committee was aware of this trade-off during the design of the Basel II framework and introduced a number of safeguards to address excess cyclicality of the minimum requirement. They include the requirement to use long term data horizons to estimate probabilities of default, the introduction of so called downturn loss-given-default (LGD) estimates and the appropriate calibration of the risk functions, which convert loss estimates into regulatory capital requirements (BIS, 2011)

Although the Basel III Accord is the response of policymakers to the world-wide financial crisis in order to strengthen the resilience of the banking systems to downturns, the Basel installments(1 and 2) are known to be procyclical. There are many reasons for this and the most obvious is that judgments tend to underestimate risks in good times and overestimate them in bad times. The IRB approach of the revised framework actually institutionalises this procyclicality by making banks themselves responsible for estimating Probability of Default (PD), Loss Given Default (LGD) and Exposure at Default (EAD), which are all a function of the cycle, and are led by the stock market, asset values and other financial variables. Private bankers don't have access to necessary information in order to make predictions on the evolution of asset prices and volatile events, but the capital buffer introduced by Basel III is the necessary 'add-on' to protect them from excessive risk taking.

Furthermore, when the buffers are run down banks would be required to build them again by reducing discretionary dividend distributions, buybacks and staff bonus payments. The Committee is proposing that the buffer system might be used in a macroprudential framework to help restrain credit growth when it is perceived as excessive – the buffer would rise and fall in a countercyclical manner. (Blundell-Wignall&Atkinson, 2010)

Thus, procyclicality in banking can have a threatening contribution to the volatility of economic trends, increasing the amplitude of economic cycles. As this is a harmful trend from the point of view of financial stability, central bankers, responsible for financial stability, have the task of exploring the causes of procyclical behavior and try to mitigate it by regulatory means.

3. COUNTERCYCLICAL REGULATION – A DESIRABLE AUTOMATIC STABILIZER OF THE BANKING SYSTEM

The previous section of this paper clearly states the inherent procyclicality of the financial system, of its prudential regulation and outlines the importance of countercyclical measures aiming at tempering the business cycle co-movements of the banks.

Therefore, these measures include raising the financial system's shock absorption capacity by fixing capital buffers and implementing a system of provisioning for bad loans that provides sufficient buffers during a downturn.

The stringency of the prudential regulation it's higher for banks during an economic depression.

Both Basel I and Basel II established an overall requirement in terms of the sum of Tier 1 and Tier 2 capital (where the latter included substitutes of common equity with lower loss-absorbing capacity, such as convertible and subordinated debt), and

the additional requirement that at least half of the required capital had to take the (presumably more expensive) form of Tier 1 capital. However, the regulatory response to the financial crisis that started in 2007, known as Basel III, has upgraded the role of the second requirement after assessing that only (the core of) Tier 1 capital is truly capable of protecting banks against insolvency.(Repullo&Suarez, 2012)

Capital requirements under previous Basel did nothing to mitigate procyclicality and private banks had discretionary control of their risk-weighted assets(RWA),making use of regulatory arbitrage.

Subsequently, Basel II proved to be more procyclical than Basel I; fair-value accounting methods more than historic cost; point-in-time ratings more than those averaged through the cycle; and advanced IRB assessments more than foundation IRB (especially so since loss given default (LGD) is to be treated as constant over time in the foundation method, whereas almost all empirical studies have found LGD to be strongly cyclical, perhaps as much, or more so, than the procyclicality of default (PD) (Altman, 2002).

The presence of a direct relationship between capital requirements and credit supply represents the need for a noncyclical MCR regulation. Following this assumption, an increase in capital requirements would translate into a decrease in credit supply. First, the CRD includes some requirements to reduce the cyclicality in the estimation of the IRB parameters. In the Foundation IRB (FIRB) Approach, banks are encouraged to base their Pillar1 calculation of MCR on a so called 'long run PD(probability of default)'. In the Advanced IRB (AIRB) Approach, banks also calculate a 'downturn/long run LGD'(loss given default) and a 'downturn/long run EAD'(exposure at default). (European Banking Authority, 2013)

Ideally, the regulatory framework should be devised so that capital reserves can be built up during the profitable years in order to ensure that banks' capital position remains adequate when there is a recession and the unexpected losses are written off against capital. Therefore, banks' capital reserves should change in line with the economic cycle and an improvement could be the dynamic provisioning, also called forward looking loss provisioning , since during a slump, when profitability is low, banks will run into significant difficulties in their search for new injections of capital. The question is whether the current approaches ensure that capital reserves are built up before they are needed and how will be able the Basel regulation to diminish cyclical effects.

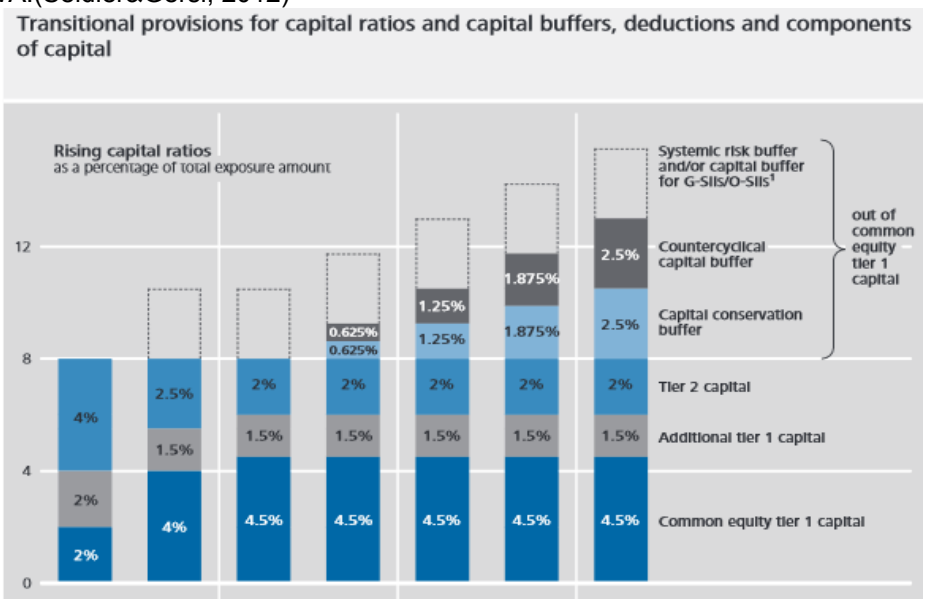
Basel III introduces countercyclical capital buffers as a new prudential tool, with the main objective of protecting the banking system from the increase in system-wide risk. However, it is also acknowledged that the buffer may have the side-benefit of constraining the build-up of excess credit in the first place (Basel Committee on Banking Supervision (BCBS), 2010). The CCB is expected to have a direct effect on resilience: when risks crystallise, the additional capital will help the banking system to absorb losses while continuing to provide credit to the real economy. In doing so, it aims to counter the procyclical amplification of financial shocks through the banking system and financial markets to the real economy that has been one of the most destabilising elements of the crisis. As a potential favourable side-effect, the CCB may help to counter the expansionary phase of the credit cycle by reducing the supply of credit and/or increasing its cost.

The countercyclical buffer should be viewed as an important instrument in toolkit of national authorities. It should be deployed when excess aggregate credit growth is judged to be associated with a build-up of system-wide risk to ensure the banking system has a buffer of capital to protect it against future potential losses. This focus on excess aggregate credit growth means that jurisdictions are likely to

only need to deploy the buffer on an infrequent basis, perhaps as infrequently as once every 10 to 20 years; although internationally-active banks will likely find themselves carrying a small buffer on a more frequent basis, since credit cycles are not always highly correlated across the jurisdictions to which they have credit exposures. (BIS, 2010)

At times when national authorities judge a period of excess credit growth to be leading to the build up of system-wide risk, they will consider, together with any other macroprudential tools at their disposal, putting in place a countercyclical buffer requirement. This will vary between zero and 2.5% of risk weighted assets, depending on their judgement as to the extent of the build up of system-wide risk. The countercyclical buffer regime will be phased-in in parallel with the capital conservation buffer between 1 January 2016 and year end 2018 becoming fully effective on 1 January 2019. This means that the maximum countercyclical buffer requirement will begin at 0.625% of RWAs on 1 January 2016 and increase each subsequent year by an additional 0.625 percentage points, to reach its final maximum of 2.5% of RWAs on 1 January 2019.(Lekatis, 2011)

As a guide for the setting of the buffer, the Basel Committee is proposing to use and regularly publish the difference between the current private credit ratio as a percentage of GDP and its trend value estimated using the HP (Hodrick-Prescott) filter (the credit-to-GDP gap). Figure 1 clearly presents the capital ratios and capital buffers, that would start to be created when the credit-to-GDP gap exceeded two percentage points. If the gap reached 10 percentage points or more, the buffer would reach the aforementioned maximum of 2.5% of RWA. For gaps of between 2 and 10 percentage points, the buffer would vary linearly between 0% and 2.5%. For example, for a gap of six percentage points the buffer would be 1.25% of risk RWA.(Seidler&Gersl, 2012)



Source: www.bundesbank.de ; Implementing Basel III in European and national law

Figure no.1 Capital requirements in Basel III standards

The new prudential regulation also introduces a leverage ratio. The proposal seeks to reduce excessive leverage. The financial crisis highlighted that credit institutions and investment firms were highly leveraged, i.e. they had taken on more and

more assets on the basis of an increasingly thin capital base. Since the leverage ratio is a new regulatory tool in the EU, there will be a transitional period for its inclusion and the final decision on the leverage ratio as a binding measure is scheduled for 2018. For this reason, the impact of this measure, if any(given that the ratio may not be binding), cannot be assessed in the short term.

To put it in a nutshell, we can summarize the steps to be considered in order to counteract the procyclicality of the financial system and banks' behaviour one, in particular :

- basing PD on longer-run data to determine inputs for minimum capital implies the fact that the risk weighting of the Basel framework system is the best approach, which remains an open question;
- forward-looking provisioning based on expected losses is a useful approach and consists of the adjustment of banks provisions for defaults on loans, so that provisions will be increased during booms and lower during a recession. This aims to ensure that in bad times regulatory minimum for capital is not breached. Reducing provisions during a downturn also prevents confidence in the stability of banks being undermined by weak, and sometimes rapidly weakening, balance sheets and safeguards banks from the need of capital injections.
- the macroprudential recommendation on credit growth is an admirable objective but likely to perform poorly in practice. The reason for this is 'leads and lags' in modelling credit, and the problem of structural change caused by financial innovation – often in response to the very sort of regulatory changes proposed by the Basel Committee. Credit lags the cycle, and the identification of a 'bubble', leading to provisioning to offset it, could easily occur at a time when the economy is beginning to turn down – exacerbating the cycle.Similarly, just as securitization dampened balance sheet credit growth in the past leading to a false signal that there was no leverage problem – so too might future developments in the shadow banking system lead to similar distortions that would be difficult for supervisors and other policymakers to identify.(Blundell-Wignall&Atkinson, 2010)

Capital requirements may not be binding when they are needed most. If assets market are booming and perceived returns are high, banks will always find the necessary capital, whatever the regulatory requirement. They will be able to both meet those requirements and distribute profits. Conversely, capital dries up during downturns, when it is most necessary. There is clearly an asymmetry with strong equity outflows in boom times and no inflows in bad times. It is not clear that Introducing counter cyclical capital requirements will suffice to counteract this very powerful dynamic, especially in bad times. (BIS)

In particular, I consider that the adequate assessment of risk, for both management and regulatory purposes, should be done based on the state of the economy, not in an unconditional manner. Doing the latter, which is the essence of through-the-cycle approaches, may contradict the Basel Committee requirement of using "all relevant and material information in assigning ratings" (BCBS, 2006).

4. CONCLUSIONS

To conclude, there are some overheated notions that derive from the current economic situation, such as 'rmacroprudential regulation', 'countercyclical versus procyclical', 'financial stability' and so on. Analysing the cyclical behaviour of bank lending reveals that, in addition to micro and macroeconomic factors, prudential regulation also significantly affects banks' operations, and this may well have serious real economic consequences. Lending expansions or contractions

should not be examined in isolation – the accompanying risks, developments in credit standards and possible changes in risk awareness should also be taken into account.

Taking into account that the extent of loans and their structure both have a strong impact on economic participants' behaviour, it is of utmost importance from the perspectives of macroeconomic and financial stability to understand the reasons for the cyclicality of bank behaviour. The revised CRR and CRD IV also proposes higher levels and better quality of capital. In the short term, raising the quality of capital could be equivalent to raising the level of capital. However, in the longer run, banks with large capital positions will tend to be less procyclical, less sensitive to cyclical shocks and, thus, more likely to pursue lending growth strategies even in more difficult markets. In contrast, banks with lower capital levels are more sensitive to cyclical shocks and more likely to have problems in accessing funding and maintaining lending levels in a downturn.

The Basel Committee should strengthen the regulatory capital framework so that the quality and level of capital in the banking system increase during strong economic conditions that can be drawn down during periods of economic and financial stress. The Basel III capital proposals have some very useful elements – notably the support for a leverage ratio, a capital buffer and the proposal to deal with procyclicality through dynamic provisioning based on expected losses. As in many matters of public policy, there is a choice between rules and discretion in dealing with procyclicality.

The rule based approach refers to several "automatic stabilizers" which would constrain institutions in their behaviour, regardless of their own individual situations. Examples would include contra cyclical capital requirement, for instance, as well as dynamic provisioning. Alternatively, discretionary action could consist in "top down" interventions from macroprudential authorities, that allow banks to step in and impose (or relax) constraints whenever they come to the conclusion that dangerous imbalances are building up (or unwinding). (Landau, 2009)

Furthermore, I will enhance my research on this subject, with an emphasis on the countercyclical policy effects on the real economy and the necessity of strong correlations between them in order to generate macroeconomic stability.

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