The Procyclical Effects of Basel II

Jitender Singh

Research Scholar, IMSAR M. D. University Rohtak

Abstract: Basel II is an international business standard that requires financial institutions to maintain enough cash reserves to cover risks incurred by operations. The Basel accords are a series of recommendations on banking laws and regulations issued by the Basel Committee on Banking Supervision (BSBS). The name for the accords is derived from Basel, Switzerland, where the committee that maintains the accords meets.

Basel II improved on Basel I, first enacted in the 1980s, by offering more complex models for calculating regulatory capital. Essentially, the accord mandates that banks holding riskier assets should be required to have more capital on hand than those maintaining safer portfolios. Basel II also requires companies to publish both the details of risky investments and risk management practices.

Keywords: Basel II, Procyclical Effects.

I. INTRODUCTION

Basel II is the second of the Basel Accords, (now extended and partially superseded by Basel III), which are recommendations on banking laws and regulations issued by the Basel Committee on Banking Supervision.

Basel II, initially published in June 2004, was intended to amend international standards that controlled how much capital banks need to hold to guard against the financial and operational risks banks face. These rules sought to ensure that the greater the risk to which a bank is exposed, the greater the amount of capital the bank needs to hold to safeguard its solvency and economic stability. Basel II attempted to accomplish this by establishing risk and capital management requirements to ensure that a bank has adequate capital for the risk the bank exposes itself to through its lending, investment and trading activities. One focus was to maintain sufficient consistency of regulations so to limit competitive inequality amongst internationally active banks.

Basel II was implemented in the years prior to 2008, and was only to be implemented in early 2008 in most major economies; that year’s Financial crisis intervened before Basel II could become fully effective. As Basel III was negotiated, the crisis was top of mind and accordingly more stringent standards were contemplated and quickly adopted in some key countries including in Europe and the USA.

II. IMPLEMENTATION PROGRESS

Regulators in most jurisdictions around the world plan to implement the new accord, but with widely varying timelines and use of the varying methodologies being restricted. The United States’ various regulators have agreed on a final approach. They have required the Internal Ratings-Based approach for the largest banks, and the standardized approach will be available for smaller banks.

In India, Reserve Bank of India has implemented the Basel II standardized norms on 31 March 2009 and is moving to internal ratings in credit and AMA (Advanced Measurement Approach) norms for operational risks in banks.

Existing RBI norms for banks in India (as of September 2010): Common equity (incl of buffer): 3.6% (Buffer Basel 2 requirement requirements are zero); Tier 1 requirement: 6%. Total Capital: 9% of risk weighted assets.

According to the draft guidelines published by RBI the capital ratios are set to become: Common Equity as 5% + 2.5% (Capital Conservation Buffer) + 0–2.5% (Counter Cyclical Buffer), 7% of Tier 1 capital and minimum capital adequacy ratio (excluding Capital Conservation Buffer) of 9% of Risk Weighted Assets. Thus the actual capital requirement is between 11 and 13.5% (including Capital Conservation Buffer and Counter Cyclical Buffer).

In response to a questionnaire released by the Financial Stability Institute (FSI), 95 national regulators indicated they were to implement Basel II, in some form or another, by 2015.

The European Union has already implemented the Accord via the EU Capital Requirements Directives and many European banks already report their capital adequacy ratios according to the new system. All the credit institutions adopted it by 2008-09.

Australia, through its Australian Prudential Regulation Authority, implemented the Basel II Framework on 1 January 2008.

In terms of risks the danger is that banks react to external developments in the same way at the same time - even if this behaviour is rational or prudential from a microeconomic perspective - thereby creating or reinforcing destabilizing trends. This problem has come only more to the fore since the Basel Committee on Banking Supervision has announced plans to revise the existing accord. The existing accord has been widely criticized because it did not properly reflect the inherent risks of the banks’ assets. It is said that this has lead to distortions in capital markets, because banks have since moved to riskier business.

The objective of Basel II is to reduce the incentive for capital arbitrage by increasing the risk sensitivity of regulatory capital charges. However, increased risk sensitivity of capital charges may lead to an unwarranted pro-cyclical effect, if the...
quality of the banks’ assets is closely in line with the business cycle. This could then counteract capital regulation’s original goal to enhance financial stability not only of individual banks but of the entire financial system. The procyclical effects of capital regulation can manifest itself in two ways.

First, as regards the financial sector, capital charges will be possibly subject to large swings if asset risk or the perception of asset risk moves in sync with business fluctuations. This can eventually lead to an increased volatility of asset prices or loan interest rates with the potential of creating dangerous boom-and-bust cycles in credit markets. Second, increased volatility of the financial sector may spill over to the real sector. As banks are required to hold more capital against increased credit risk in an economic downturn, they will partly pass on their increased costs of capital to their borrowers. Faced with higher interest rates and lacking alternative sources of finance, firms will cut back on investment spending thereby aggravating the downturn. It is especially this latter scenario which may be more damaging to the economy than the purely financial scenario.

While the volatility of regulatory capital may be partly offset by banks holding an extra buffer of own capital, economic losses of the second scenario are difficult to avoid as we shall show in this analysis. Though there exists some empirical which analysis fluctuations in ratings over time, only few papers discuss the issue of procyclicality on a deeper level. By invoking the concept of macroeconomic multiplier Blum and Hellwig (1995) argue in a theoretical paper that (flat) capital ratios have a significant pro-cyclical effect on the real economy. Estrella (2001) shows that if regulatory capital is based on the value of risk, the implied shortsightedness will lead to increased volatility of the financial sector. In this paper we try to estimate the impact of capital adequacy rules on the volatility of the financial and the real sector. The empirical problem which we have to solve is, that we do not have the data to compare two different regulatory regimes in a direct way. Even with regard to the current Basel accord, time series are not long enough to obtain stable results. We therefore propose a different methodology. In the first part of the paper we present a theoretical model for the banking industry, which is based on the concept of economic capital under regulatory constraints. In doing so, we derive the sensitivity of 2 loan supply with respect to interest rates and regulatory capital ratios. To some extent this model can be tested against regulatory and balance sheet data of German banks. In a second step we estimate the impact of business fluctuations on the probability of default of German firms again by using German banks’ balance sheet data. By combining both results we are able to assess the impact of risk sensitive capital ratios as those envisaged by Basel II both on actual capital and on the real economy.

REFERENCES
[1]. whatis.techtarget.com/definition/Basel-II. Chandra 1989, p. 521
[3]. "OCC: OCC Approves Basel II Capital Rule". occ.gov. This final rule is effective April 1, 2008.
[4]. "Basel II - questions and answers". cml.org.uk.
[9]. Revisions to the Basel II market risk framework
[10]. "Basel II: Revised international capital framework". bis.org.
[12]. OCC Notice of Proposed Rulemaking
[19]. Beyond the Crisis: the Basel Committee's strategic response
[25]. Frankfurter Allgemeine Zeitung GmbH (22 September 2007). "Alan Greenspan: "Die Ratingagenturen wissen nicht was sie tun"". FAZ.NET.
[28]. www.bis.org/bcbs/events/wkshop0303/p05heid.pdf