CHAPTER NO. 3. REVIEW OF LITERATURE

1. Prashanth K Reddy, The Indian Institute of Management Ahmedabad, India in A comparative study of Non Performing Assets in India in the Global context - similarities and dissimilarities, remedial measures (2002) has stated the following. Financial sector reform in India has progressed rapidly on aspects like interest rate deregulation, reduction in reserve requirements, barriers to entry, prudential norms and risk-based supervision. But progress on the structural-institutional aspects has been much slower and is a cause for concern. The sheltering of weak institutions while liberalizing operational rules of the game is making implementation of operational changes difficult and ineffective. Changes required to tackle the NPA problem would have to span the entire gamut of judiciary, polity and the bureaucracy to be truly effective.

This paper deals with the experiences of other Asian countries in handling of NPAs. It further looks into the effect of the reforms on the level of NPAs and suggests mechanisms to handle the problem by drawing on experiences from other countries.

2. Improving Operational Risk Management Systems by Formalizing the Basel II Regulation with Goal Models and the ISO/IEC 15504 Approach by André Rifaut and Christophe Feltus has studied in this regard.

The bankruptcy of financial institutions shows the rapid changes in the risks profiles of financial systems and processes. Although financial institutions have always managed the operational risks, the profile of this kind of risks is changing due to the increasing international competitive pressure and the evolution of the financial institutions’ operational systems relying more and more on IT systems. This paper reports the results of the joint research with the CSSF focusing on the formalization of
both the Basel II Accord and compliant operational risk management (ORM) systems implementations. This formalization uses concepts of the ISO/IEC 15504 process assessment standard and the concepts of strategy and policy. This structure of the model ensures the traceability between the Basel II Accord and compliant ORM systems implementations improves the formal validation of those systems and is more adequate to represent all organizational levels of financial institutions.

3. Shyamala Gopinath, Deputy Governor, RBI at the IBA briefing session on "Emerging Paradigms in Risk Management" at Bangalore on May 12, 2006

Basel II aims to encourage the use of modern risk management techniques; and to encourage banks to ensure that their risk management capabilities are commensurate with the risks of their business. Previously, regulators' main focus was on credit risk and market risk. Basel II takes a more sophisticated approach to credit risk, in that it allows banks to make use of internal ratings based Approach - or 'IRB Approach' as they have become known - to calculate their capital requirement for credit risk. It also introduces, in addition to the market risk capital charge, an explicit capital charge for operational risk. Together, these three risks - credit, market, and operational risk - are the so-called 'Pillar 1' risks.

Banks' risk management functions need to look at a much wider range of risks than this - interest rate risk in the banking book, foreign exchange risk, liquidity risk, business cycle risk, reputation risk, strategic risk. The risk management role of helping identify, evaluate, monitor, manage and control or mitigate these risks has become a crucial role in modern-day banking. Indeed, it is probably not exaggerating the importance of this to say that the quality of a bank's risk management has become one of the key determinants of a success of a bank.
The policy approach to Basel II in India is to conform to best international standards and in the process emphasis is on harmonization with the international best practices.

4. Basel II and Indian Bank - By Satarupa Misra, Assistant Professor, Presidency Business School, Bangalore.

Banking operations are complicated and are difficult for supervisor to monitor and control. It is always not only mandatory that bank should have adequate capital to cover their risk but also that they employ better risk management practices.

As risk has become a predominant factor, Basel II norms find some solutions for risk management. Basel committee has given Risk Based Supervision (RBS). The focus of RBS is on the assessment of inherent risks in the business undertaken by a bank and efficacy of the systems to identify measure, monitor and control the risks.

Basel II norms include the wide area of risk measurement and risk management. Many foreign banks have started adopting Basel II as their risk management tool. It helps in pricing of loan in against with their actual risk. It follows advanced techniques and software for calculation of risk. As in today's situations almost all the banks and its branches are computerized. So risk can be better managed by adopting these advanced technologies.

5. Christopher Cadiou & Monika Mars in their study Basel II Pillar 3: Challenges for Banks

The author here has explained the Application of Basel II and its various pillars in the Indian Banking system. The study gives us picture of the various amendments specified in the accord and how it would affect our entire lending pattern.

6. The New Basel Accord – Implementation Perspectives by V Subbalakshmi has made and indepth study of the accord from various perspectives and explained the risks
involved in the lending mechanism and how the regulations mentioned in the accord can be helpful in the banking industry.

7. Implications of Basel II – Risk Management and Capital Structure by Dr. N. Nagarajan explains the relationship between Risk management and the banking capital structure. The various types of risks that hamper the banking activities has been studied and the role of the Basel Accord II to help solve the issues has been understood by various authors who have given in their valuable suggestions on its implementation in our Indian Banking industry.

8. Ranjit Lall – Global Economic Governance Programme

Ranjit Lall presently is a research associate in International Relations at St. John’s College, Oxford University. He studied PPE at Merton College and won the 2009 Gibbs Prize for best politics thesis at Oxford. His main research interest is in global financial regulation.

According to conventional wisdom, the Basel II Accord – a set of capital adequacy standards for international banks drawn up by a committee of G-10 supervisors – is essential if we are to avoid another financial crisis. This paper argues that this conclusion is false: Basel II is not the solution to the crisis, but instead an underlying cause of it. I ask why Basel II’s creators fell so short of their aim of improving the safety of the international banking system – why Basel II failed. Drawing on recent work on global regulatory capture, I present a theoretical framework which emphasises the importance of timing and sequencing in determining the outcome of rule-making in international finance. This framework helps to explain not only why Basel II failed, but also why the latest raft of proposals to regulate the international banking system – from the US Treasury’s recent financial white paper to the latest round of G-20 talks in Pittsburgh – are likely to meet a similar fate.

9. The Basel Committee proposals for a new capital accord: implications for Italian banks
Andrea Sironi, Università Luigi Bocconi, Milan, Italy and Cristiano Zazzara
CAPITALIA Fondo Interbancario di Tutela dei Depositi and Università “LUISS”, Rome, Italy.

Following a few general considerations on the recently proposed revision of the Basel Agreement on capital adequacy, this paper focuses on the first pillar of the Basel Committee proposals, the handling of capital requirements for credit risk in the banking book. The Basel Committee envisages an approach alternatively based on external ratings or on internal rating systems for the determination of the minimum capital requirement related to bank loan portfolios. This approach supports a system of capital requirements that is more sensitive to credit risk. On the basis of specific assumptions, these requirements provide a measure of the value at risk (VaR) produced by models used by major international banks. We first address the impact of the standardised and (internal ratings-based) IRB foundation approach using general data on Italian banks' loans' portfolios default rates. We then simulate the impact of the proposed new rules on the corporate loan portfolios of Italian banks, using the unique data set of mortality rates recently published by the Bank of Italy. Three main conclusions emerge from the analysis: (i) the standardised approach implicitly penalizes Italian banks in their interbank funding as their rating is generally below AA/Aa, (ii) the average default rate experienced by Italian banks is higher than the one implied in the benchmark risk weight (BRW) proposed by the Basel Committee for the IRB foundation approach, thereby potentially leading to an increase in the regulatory risk weights, and (iii) the risk-weight is based on an average asset correlation that is significantly higher than the one historically recorded within the Italian banks' corporate borrowers. These findings support the need for a significant revision of the basic inputs and assumptions of the Basel proposals. Finally, in relation to the conditions that allow the capital market to effectively discipline banks, we comment on the proposals advanced in relation to the third pillar of the new capital adequacy scheme.

10. IMF Working Paper : The New Basel Accord: The Devil is in the (calibration) details by Paul H. Kupiec

This paper considers characteristics of the capital requirements proposed in the New Basel Capital Accord (2001) Formal analysis identifies calibration features that could
give rise to unintended consequences that may include: concentration of credit risk in institutions that are less well equipped to measure and manage risks; an overabundance of thinly capitalized high quality long maturity credits in foundation Internal Ratings Based (IRB) banks; distortions in the secondary market for discount or premium credits; an increase in difficulty of resolving distressed financial institutions; an incentives to distort the accuracy of loan loss provisions.


The 1988 Basel Accord was a major milestone in the history of bank regulation, setting capital standards for most significant banks worldwide - it has now been adopted by more than 100 countries. After two years of deliberation, the Basel Committee on Banking Supervision has set out far-reaching proposals for revising the original Accord to align the minimum capital requirements more closely with the actual risks faced by banks.

12. International Banking Regulation Where’s the Market Discipline in Basel II? by L. Jacobo Rodríguez

In 1988 the Basel Committee on Banking Supervision completed the Basel Capital Accord, which set risk-weighted minimum capital standards for internationally active banks. The accord, which has been adopted by more than 100 countries, seeks to strengthen the banking system and level the playing field. It is not clear, however, that it achieves either of those goals or that the latter goal is even desirable. Indeed, there is broad agreement among regulators, market participants, and academics that the accord’s risk classification scheme has made the international financial system less stable, not more, while failing to level the playing field. The accord has encouraged banks to assume greater economic risk without a commensurate increase in capital. It has also encouraged banks to make short-term loans to other banks, which contributed to the Asian crisis in 1997–98.

The Basel Committee has attempted to fine tune the accord over the years. Since 1999, the committee has been working on a major revision of the accord in an effort to “align capital regulatory requirements more closely with the underlying risks.” The result, Basel II, is a work in progress that is expected to be finalized by the end of 2003 and fully implemented by the end of 2006.
Basel II is based on three mutually reinforcing pillars: capital requirements, supervisory review, and market discipline. Risk-based capital requirements are the major focus of the accord. The accord will allow some banks to use their internal risk-management models to determine capital costs, but that option could turn into a regulatory nightmare, even in industrialized countries. Worse yet, the accord’s overly prescriptive and complex approach could end up stifling market based innovation in risk management practices.

Consequently, a system that relies more on competition among different national regulatory regimes is preferable to the current approach. At the national level, the trend should be toward regulatory simplicity. If there are to be minimum capital standards, necessitated by government sponsored deposit insurance systems, a simple capital leverage rule with no risk weights would suffice, especially if there is an emphasis on market discipline through a subordinated-debt requirement and disclosure. Countries without a public deposit insurance system should move toward a system of financial laissez-faire.


During the last twelve years, the drawbacks of the simple rules stated in the 1988 Basel Capital Accord on minimum capital requirements have become increasingly apparent. To address such shortcomings, the Basel Committee on Banking Supervision has been engaged for several years in a revision process that will finally lead to a New Basel Capital Accord (NBCA)

The features discussed in detail in the article are asset correlations, expected and unexpected losses, the probability of default (PD) and LGD (Loss Given Default) correlations, Procyclicality, Credit availability for less developed countries (LDC), Implementation Costs, Market Equilibria are some of the terms that have been dealt with in the report.

The report tries to provide a complete, up-to-date critical picture of the new Basel approach to Bank capital, by summarizing its structure and possible changes, and by focusing on some limitations and pitfalls that might deserve further investigation. The basic framework of the reform proposal and the mathematical model underlying the capital requirements on internally rated loans are also discussed at length. Adequacy
and calibration issues and the effects on NBCA on financial markets (macro effects) and on individual banks (micro features) are the highlights of the report.


The Basel Committee on Banking Supervision has proposed linking capital requirements for bank loans to ratings by commercial credit rating agencies. Estimates of 20 emerging market economies show that sovereign ratings react procyclically to crisis indicators. Ratings deteriorate if the real effective exchange rate depreciates, in contrast with the positive effect on overall debt service capacity depreciations are normally supposed to have. Simulations show that linking capital requirements to ratings would have drastically increased these requirements during the crisis periods after decreasing them in the run up to the crises. Simulations suggest modest efficiency gains of using sovereign credit ratings for capital requirements on emerging market lending.


The New Basel Accord for bank capital regulation is designed to better align regulatory capital to the underlying risks by encouraging better and more systematic risk management practices, especially in the area of credit risk. We provide an overview of the objectives, analytical foundations and main features of the Accord and then open the door to some research questions provoked by the Accord. We see these questions falling into three groups: What is the impact of the proposal on the global banking system through possible changes in bank behavior; a set of issues around risk analytics such as model validation, correlations and portfolio aggregation, operational risk metrics and relevant summary statistics of a bank's risk profile; issues brought about by Pillar 2 (supervisory review) and Pillar 3 (public disclosure).

After the Asian crisis of 1997-98, policy-makers invested much energy in designing a new international financial architecture. However, many of the policy proposals that have emerged from think tanks and the multilateral agencies have proven unworkable or politically unpalatable. The debate focuses on state-led initiatives. But the assumption that public policy is by definition an output of public institutions is difficult to sustain in an era of global change. This article considers specialized forms of intelligence gathering and judgment determination which seem increasingly important as sources of governance in this era of financial market volatility: Moody's Investors Service and Standard & Poor's, the major bond rating agencies. More specifically, we examine a proposal of the Basel Committee on Banking Supervision to reform the existing capital adequacy framework by incorporating banks' own internal ratings and external bond ratings from the rating agencies, in order to calculate bank risk-weighted capital requirements. The article identifies a series of negative implications from the use of private rating agencies as a substitute for state-based regulation, premised on the organizational incentives that shape the ratings industry. Cementing these organizational incentives into the emerging financial architecture will, we argue, lead to negative social and economic consequences.

17. The Nature of Capital Adequacy Constraints Under the Basel Accord by Ralph Chami International Monetary Fund (IMF) Thomas F. Cosimano University of Notre Dame Department of Finance September 2003

The 1988 Basel Accord defined what constituted bank capital, and put in place minimum capital adequacy ratios for each type of capital as well as for total bank capital. Regulators as well as market participants, however, have come to rely on Tier 1 capital or equity capital as the main constraint for controlling bank behavior. In this paper, we show that despite the various constraints placed on the bank's optimization program by the Basel Accord, only one constraint binds. That is, only the minimum total capital ratio - which includes equity and debt - of no less than eight percent, is the constraint that matters for analyzing bank behavior. Thus, the overemphasis on equity capital by regulators and market participants is likely to raise the cost of lending for banks, which would affect bank profitability, credit extension, and the overall economic activity.

This paper discusses some potential implications - both intended and unintended - of The New Basel Accord, which is to be finalized by the end of 2001. Our focus is on the reforms of the rules for determining minimum capital requirements for credit risk. The discussion is divided into effects at the level of an individual bank, effects on the structure of the financial markets, and macroeconomic implications. We present a survey of potential effects rather than a profound analysis of any of them. Therefore conclusions are inevitably preliminary, and in many cases they are likely to be controversial. Although the new capital accord as a whole is a major improvement on many properties of the current framework, our aim is to find potential problems that might need to be considered in the implementation and application of the new rules. Overall, the new accord will be largely an experiment, of which many of the consequences remain to be seen.


The 1988 Basel accord and the proposed revisions to the accord represent some of the most significant international regulations impacting the financial decisions of firms, in this case, financial services firms, in recent years. The revisions to the accord incorporate operational risk into the capital, supervisory and market requirements. In our review of the issues in this area, they provide insight into the workings of an important international regulation. They also present suggestions for further research in this area that will become feasible when data on the impact of the new regulations become available after the proposed implementation in 2006.

20. Has the Basel II Accord Encouraged Risk Management During the 2008-09 Financial Crisis?: Michael McAleer, Juan-Angel Jiménez-Martin, Teodosio Perez Amaral

The Basel II Accord requires that banks and other Authorized Deposit-taking Institutions (ADIs) communicate their daily risk forecasts to the appropriate monetary authorities at the beginning of each trading day, using one or more risk models to measure Value-at-Risk (VaR). The risk estimates of these models are used to determine capital requirements and associated capital costs of ADIs, depending in part
on the number of previous violations, whereby realised losses exceed the estimated VaR. In this paper we define risk management in terms of choosing sensibly from a variety of risk models, and discuss the selection of optimal risk models. A new approach to model selection for predicting VaR is proposed, consisting of combining alternative risk models, and comparing conservative and aggressive strategies for choosing between VaR models. We then examine how different risk management strategies performed during the 2008-09 financial crisis. These issues are illustrated using Standard and Poor’s 500 Index, with an emphasis on how market risk management practices were encouraged by the Basel II Accord regulations during the financial crisis.


A balanced focus between the three pillars of the new capital adequacy framework is needed. Since the beginning of the revision process to the New Basel Capital Accord a tremendous effort has been devoted to the First Pillar, since it contains precise quantitative rules for computing the new minimum capital requirements but less focus was dedicated to the second and third pillars. Clarity of rules under the First Pillar may, however, be undermined by the discretionary behavior of regulators under the second pillar and the ineffectiveness of the third pillar. The report strongly supports principles to define the relationship between banks and supervisors and a stronger and more credible form of market discipline. This will be the major implementation challenge.

The report highlights a consistent cross border application of the New Accord and it also lays stress on the presence of an adequate calibration of the new capital adequacy framework.


The Basel Committee has proposed a new capital framework to respond to the deficiencies of the 1988 Capital Accord (Basel I). The 1988 Accord has been criticised for its crude assessment of risk and for creating opportunities for regulatory
arbitrage. In principle, the new approach, often referred to as Basel II, is not intended to raise or lower the overall level of regulatory capital currently held by banks, but to make it more risk sensitive. The spirit of the new Accord is to encourage the use of internal systems for measuring risks and allocating capital (the Accord extends the use of internal models from market risk to credit risk). A number of issues have been raised, however, with regard to its complexity, its cost, its impact on procyclicality, the possibility that it can lead to competitive distortions if some countries do not apply it (some big emerging economies) or apply it differently to small and big institutions (the USA) and others. Banks in Europe will also be obliged to comply with the new Capital Directive, often referred to as CAD III, which is the means by which the EU will implement the new Basel Capital Accord. CAD III will apply to all credit institutions and investment firms and not only to internationally active banks, as Basel does. This paper presents a critical approach to these developments and examines their impact upon the banking industry.

23. Cyclical Implications of the Basel II Capital Standards by Anil K Kashyap, Jeremy C. Stein

One of the central changes proposed as part of the new Basel II regulatory framework is the concept of internal-rating-based (IRB) capital requirements. (1) Under the IRB approach, the amount of capital that a bank will have to hold against a given exposure will be a function of the estimated credit risk of that exposure. Estimated credit risk in turn is taken to be a predetermined function of four parameters: probability of default (PD), loss given default (LGD), exposure at default (EAD), and maturity (M). Banks operating under the "Advanced" variant of the IRB approach will be responsible for providing all four of these parameters themselves, based on their own internal models. Banks operating under the "Foundation" variant of the IRB approach will be responsible only for providing the PD parameter, with the other three parameters to be set externally by the Basel committee. (2)

It is clear that there are many potential benefits to further refining the existing risk-based capital requirements. As compared with the "one-size-fits-all" approach embodied in the original Basel I framework, IRB capital requirements should reduce pricing distortions across loan categories, as well as the accompanying incentives for
banks to engage in various forms of regulatory capital arbitrage. At the same time, this new approach to capital regulation raises some concerns. One concern that has been voiced repeatedly--but has been subject to relatively little formal analysis is that the new capital standards will exacerbate business cycle fluctuations. In brief, the idea is that in a downturn, when a bank's capital base is likely being eroded by loan losses, its existing (non-defaulted) borrowers will be downgraded by the relevant credit-risk models, forcing the bank to hold more capital against its current loan portfolio. To the extent that it is difficult or costly for the bank to raise fresh external capital in bad times, it will be forced to cut back on its lending activity, thereby contributing to a worsening of the initial downturn.

Our aim in this article is to take a closer look at this "cyclicality" aspect of the Basel II capital regulations. There are two primary components to our analysis. First, we start by developing a conceptual framework, which can be used to ask questions about the optimality of the proposed regulations. Our main conclusion here is that the Basel II approach of having a single time-invariant "risk curve"--that maps credit-risk measures (such as the PD) into capital charges--is, in general, suboptimal. From the perspective of a social planner who cares not just about bank defaults per se, but also about the efficiency of bank lending, it is more desirable to have a family of risk curves, with the capital charge for any given degree of credit-risk exposure being reduced when economy-wide bank capital is scarce relative to lending opportunities (as in, for example, a recession).

Of course, this is only a theoretical argument, and it leaves unanswered one key empirical question: How big might the costs associated with the imperfect Basel II approach plausibly be? Although this question is hard to answer fully, we attempt to make some progress on it in the second part of our analysis. We do so by simulating the degree of capital-charge cyclicality that would have taken place over the four-year interval 1998-2002 had the Basel II regulations been in force during this period.

Although several other recent papers have undertaken similar exercises, we make an effort to be relatively comprehensive, along several dimensions. (4) First, recognizing that banks may use different types of credit-risk models to arrive at parameters such as the PD, we do all of our simulations with two distinct categories of models: 1) a
model based on Standard and Poor’s (S&P) credit ratings; and 2) a model developed by the consulting firm KMV, which is based on a Merton (1974) option-pricing approach to estimating default probabilities.

Second, in light of the fact that different banks have very different loan portfolios, we check to see how our conclusions vary by region (for example, North America versus Europe) and by borrower risk type (for example, investment-grade versus non-investment-grade). Finally, across all of these simulations, we try to pay careful attention to a host of subtle methodological issues. The results can be quite sensitive to survivorship bias, as well as to how one treats firms that disappear from the datasets.

24. An Academic Response to Basel II By Jűn Danëlsson, Paul Embrechts, Charles Goodhart, Con Keating, Felix Muennich, Olivier Renault and Hyun Song Shin SPECIAL PAPER NO 130

It is the view that the Basel Committee for Banking Supervision, in its Basel II proposals, has failed to address many of the key deficiencies of the global financial regulatory system and even created the potential for new sources of instability.

In this document are presented the following arguments:

- The proposed regulations fail to consider the fact that risk is endogenous. Value-at-Risk can destabilise an economy and induce crashes when they would not otherwise occur.
- Statistical models used for forecasting risk have been proven to give inconsistent and biased forecasts, notably under-estimating the joint downside risk of different assets. The Basel Committee has chosen poor quality measures of risk when better risk measures are available.
- Heavy reliance on credit rating agencies for the standard approach to credit risk is misguided as they have been shown to provide conflicting and inconsistent forecasts of individual clients' creditworthiness. They are unregulated and the quality of their risk estimates is largely unobservable.
- Operational risk modelling is not possible given current databases and technology even if a meaningful definition of this risk were to be provided by Basel. No convincing argument for the need of regulation in this area has yet been made.
• Financial regulation is inherently procyclical. Our view is that this set of proposals will, overall, exacerbate this tendency significantly. In so far as the purpose of financial regulation is to reduce the likelihood of systemic crisis, these proposals will actually tend to negate, not promote this useful purpose.

The document highlights our concerns that the failure of the proposals to address the above issues can have destabilising effects and thus harm the global financial system. In particular, there is considerable scope for under-estimation of financial risk, which may lead to complacency on the part of policy makers and insufficient understanding of the likelihood of a systemic crisis. Furthermore, it is unfortunate that the Basel Committee has not considered how financial institutions will react to the new regulations. Of special concern is how the proposed regulations would induce the harmonisation of investment decisions during crises with the consequence of destabilising rather than stabilising the global financial system.

25. Procyclicality and the new Basel Accord - banks’ choice of loan rating system: Eva Catarineu-Rabell, Patricia Jackson and Dimitrios P. Tsomocos

The Basel Committee on Banking Supervision is proposing to introduce, in 2006, new risk-based requirements for internationally active (and other significant) banks. These will replace the relatively risk-invariant requirements in the current Accord. The new requirements for the largest bank will be based on bank ratings of the probability of default of the borrowers. There is evidence that the choice of loan ratings which are conditional on the point in the economic cycle could lead to sharp increases in capital requirements in recessions. This makes the question of which rating schemes banks will use very important. The paper uses a general equilibrium model of the financial system to explore whether banks would choose to use a countercyclical, procyclical or neutral rating scheme. The results indicate that banks would not choose a stable rating approach, which has important policy implications for the design of the Accord. It makes it important that banks are given incentives to adopt more stable rating schemes. This consideration has been reflected in the Committee’s latest proposals, in October 2002.

The Basel Committee plans to differentiate risk-adjusted capital requirements between banks regulated under the internal ratings based (IRB) approach and banks under the standard approach. We investigate the consequences for the lending capacity and the failure risk of banks in a model with endogenous interest rates. The optimal regulatory response depends on the banks’ inclination to increase their portfolio risk. If IRB-banks are well-capitalized or gain little from taking risks, then they will increase their market share and hold safe portfolios. As risk-taking incentives become more important, the optimal portfolio size of banks adopting internal rating systems will be increasingly constrained, and ultimately they may lose market share relative to banks using the standard approach. The regulator has only limited options to avoid the excessive adoption of internal rating systems.

27. Credit Risk Factor Modeling and the Basel II IRB Approach: Alfred Hamerle (University of Regensburg), Thilo Liebig (Deutsche Bundesbank), Daniel Rosch (University of Regensburg)

Default probabilities (PDs) and correlations play a crucial role in the New Basel Capital Accord. In commercial credit risk models they are an important constituent. Yet, modeling and estimation of PDs and correlations is still under active discussion. We show how the Basel II one factor model which is used to calibrate risk weights can be extended to a model for estimating PDs and correlations. The important advantage of this model is that it uses actual information about the point in time of the credit cycle. Thus, uncertainties about the parameters which are needed for Value-at-Risk calculations in portfolio models may be substantially reduced. First empirical evidence for the appropriateness of the models and underlying risk factors is given with S&P data.


OECD Development Centre

On January 16, 2001, the Basel Committee on Banking Supervision (Committee, 2001) released the second consultative package on the New Basel Capital Accord
(Basel II). The proposal modifies and expands a proposal issued for comment in June 1999 (Committee, 1999 and Reisen, 2000) and describes the methods by which banks can determine their minimum capital requirements. Comments are due on the proposal by May 31, 2001.

Such comments are, above all, solicited from a supervisory perspective, in particular on whether the proposal will result in capital charges that are better aligned with underlying credit risk. This paper, however, is focussed on a different concern. It investigates the potential consequences of Basel II on international bank credit flows, namely the impact (a) on capital cost and (b) the volatility of credit supply across the risk spectrum of borrowers. Alas, the findings suggest that Basel II, if implemented in its current form, would lead to more divergence, rather than convergence, in the cost and cyclicality of bank credit flows between investment-grade borrowers, mostly at home in industrial countries, and sub-investment-grade borrowers, mostly placed in emerging and developing countries.

The next section presents the major elements of Basel II in its 2001 version for the first pillar of the new Accord, the minimum regulatory capital charge. The focus is on Pillar 1 as the risk weights applied to bank assets and other risk positions are of primary importance for bank credit and, indirectly, bond pricing. Section 3 investigates the potential impact of changing the risk weighting on particular categories of debt by comparing the risk-adjusted return on bank capital under the current Accord against the spread impact under Basel II. Section 4 explores the potential impact of the last proposal on the cyclicality of debt flow supply to emerging and developing countries. Section 5 concludes. While this paper does neither question the need for bank capital regulation (for a review of the literature, see Santos, 2000) nor provide alternative suggestions for modifying the sophisticated framework elaborated by the Committee, it intends to stress some of its, possibly unintended, negative implications on speculative-grade borrowers from the developing world. The concern is that the New Basel Accord would deepen the regulatory divide in global finance.
29. Effects of the New Basel Capital Accord on Bank Capital Requirements for SMEs
Edward I. Altman and Gabriele Sabato

Using data from three countries (US, Italy and Australia) and surveying related studies from several other countries in Europe, we investigate the effects of the New Basel Capital Accord on bank capital requirements for small and medium sized enterprises (SMEs). We find that, for all the countries, banks will have significant benefits, in terms of lower capital requirements, when considering small and medium sized firms as retail customers. But they will be obliged to use the Advanced IRB approach and to manage them on a pooled basis. For SMEs as corporate, however, capital requirements will be slightly greater than under the existing Basel I Capital Accord. We believe that most eligible banks will use a blended approach (considering some SMEs as retail and some as corporate). Through a breakeven analysis, we find that for all of our countries, banking organizations will be obliged to classify as retail at least 20% of their SME portfolio in order to maintain the current capital requirement (8%).

30. Credit Risk Versus Capital Requirements under Basel II: Are SME Loans and Retail Credit Really Different? Tor Jacobson, Jesper Lindé and Kasper Roszbach

Under Basel II, retail and SME credit (R&SME) receive special treatment because of a supposedly smaller exposure to systemic risk. Most research on this issue has been based on parameterized credit risk models. We present new evidence by applying Carey's (Carey, Mark. “Credit Risk in Private Debt Portfolios.” Journal of Finance 53, no. 4 (1998), 1363–1387.) nonparametric Monte-Carlo resampling method to two banks' complete loan portfolios. By exploiting that a sub-sample of all borrowers has been assigned an internal rating by both banks, we can compare the credit loss distributions for the three credit types, and compute both economic and regulatory capital under Basel II. We also test if our conclusions are sensitive to the definitions of R&SME credit. Our findings show that R&SME portfolios are usually riskier than corporate credit. Special treatment under Basel II is thus not justified.

31. The three pillars of Basel II: optimizing the mix Jean-Paul Decamps, Jean-Charles Rochet and Benoît Roger
The on-going reform of the Basel Accord relies on three “pillars”: a new capital adequacy requirement, supervisory review and market discipline. This article develops a simple continuous-time model of commercial banks' behavior where interaction between these three instruments can be analyzed. We study the conditions under which market discipline can reduce the minimum capital requirements needed to prevent moral hazard. We also discuss regulatory forbearance issues.

Lea Zicchino Prometeia SpA; Dipartimento di Analisi e Ricerca Economica, Prometeia

The revised framework for capital regulation of internationally active banks (known as Basel II) introduces risk-based capital requirements. This paper analyses the relationship between bank capital, lending and macroeconomic activity under the new capital adequacy regime. It extends a model of the bank capital channel of monetary policy - developed by Chami and Cosimano - by introducing capital constraints a la Basel II. The results suggest that bank capital is likely to be less variable under the new capital adequacy regime than under the current one, which is characterized by invariant asset risk-weights. However, bank lending is likely to be more responsive to macroeconomic shocks.

33. Analysis Of Profitability And Non-Performing Assets-A Study Of Urban Co-Operative Banks In Surat City.” Submitted By Amina Y. Amla (M.Com)

The study understands the NPAs of urban co-operative banks in Surat. It explains the relationship between profitability and NPAs. The bank lending process, classification of assets, NPA norms and its impact on profits of the co-operative bank is explained.