

Research Article

Credit risk management: A survey of practices in Indian Private Banks

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Abstract

Purpose: Proposes to look at current credit risk management practices by the Indian private banks. Due to the increasing diversity of types of counterparties and the growing diversity of forms of bonds, credit risk management has emerged as a leading edge in the risk management activities of financial service companies. The purpose of this study is to provide an insight into the current practices of Indian Private Banks

Approach – A brief questionnaire containing eight questions was mailed to 100 bank representatives from 10 randomly selected private banks headquartered in India.

Findings - The identification of counterparty default risk was found to be the most important goal of the credit risk models employed. Nearly half of the participating banks use models that are also able to handle the risk of counterparty migrating. Surprisingly, only a minority of banks currently use a vendor-owned or marketed model for credit risk management.

Interestingly, those who use their own internal model also use a model commercialized by the vendor. It is not surprising that these models are more widely used for the management of non-trading credit loan portfolios than for the management of negotiated loan portfolios.

Value –The results make it possible to understand the common practices of these banks. As such, they allow us to draw conclusions about how important the risks are perceived to be.

The document is of particular value to Treasurers to better understand current trends in CRM, and scholars intend to carry out research in the field.

Keywords- Credit Risk, Risk Management, Banking, Survey,

1. Introduction

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Maximizing shareholder value requires a company to adopt risk management practices only when it improves the value of the company. This increase in value may come from one of the three sources. 1) Minimizing the costs of financial hardship, 2) minimizing taxes and 3) minimizing the likelihood that the company will be forced to forgo positive NPV projects because it does not have the internally generated funds to do so.

As opposed to the shareholder benefit maximization, the managerial risk aversion theory (which is dependent on a company argument) can hold that will supervisors will look for to optimize their very own individual health. What this means is that supervisors might, at times, take part in chance managing methods in the cost of shareholders. Particularly, when the passions of shareholders aren't completely aimed with all those of the managers, Supervisors might engage in chance managing methods made to insulate their own private money on the consequences of modifications within fascination fees, product costs, and overseas currency values. These actions might be had with no regard for the effects of the choices for shareholders' money.

It makes sense, thus, which regardless of shareholder benefit maximization or managerial threat aversion stands out as the generating pressure, engagement contained chance control methods will be noticed. Just about the most vital types of the methods pertains towards the managing of recognition danger, especially for other firms and banks within the financial providers industry

Recognition danger comes up from anxiety at a certain counterparty's potential in order to meet the obligations of its. The growing assortment within the kinds of counterparties (from men and women to sovereign governments) and also the ever-expanding type within the types of obligations (from car loans to complicated derivatives transactions) has intended that recognition risk managing has jumped towards the cutting edge of chance control pursuits completed by companies belonging to the monetary solutions industry

Provided the benefits, it's shocking to look at that here not significant is thought around the degree by which banks participate in the process of recognition chance control. For recent many years, a selection of research has furnished the self-discipline with insights into the process of change control inside the company sphere. (2000) a Glaum and Fatemi a Glaum and Fatemi detailed image on the threat managing methods of German companies, including curiosity fee chance managing, overseas exchange danger management, the usage of derivatives, chance managing methods, and also the behavioral areas of chance control. Glaum and Belk (1990); Zaheer and Lessard (1990); Edelshain (1992); Roth and glaum (1993); Batten et al. (1993) described about the exchange chance management methods of multinational companies. Others, for example, Bodnar et al. (1995); Bodnar et al. (1996; 1998); Berkman et al. (1997); Grant and also Marshall (1997); Howton along with Perfect (1998); Gebhardt and Bodnar (1998) have claimed over the usage of derivative monetary tools by non-financial companies. However others, for example, Nance et al. (1993); Mian (1996); Jalilvand et al. (1997); Geczy et al. (1997) have examined the issue of the determinants of business hedging policies. Nevertheless, not a lot continues to be found on the cutting edge inside the process of recognition chance control.

This study is created to offer some answers in this place. Much more particularly, we

aim to shed light on the issue of the state of the art practices of credit risk management by the Indian private banks.

2. Resources of credit Risk Management

Caused through the Bank for International Settlements, and also in many instances needed by regulatory mandates, banks along with other monetary institutions were about the search for a brand new way of computing as well as controlling their credit risk. Incorporating energy on the flame continues to be a number of events that are related, incorporating an immediate speed of merchandise innovative developments, additional diversification by fiscal institutions to fresh geographical and also item marketplace parts, in addition to a stepped up price of recognition intermediation (both in pace and scope). The total outcome continues to be we've witnessed the improvement of much more advanced techniques to the management and the measurement of recognition chance visibility. Integrated among these continues to be the launch of more and more far more advanced and complicated hedging strategies.

Much more fascinating, as well as of specific curiosity (at minimum for the purposes of ours within this study), was the improvement of styles that may be utilized to evaluate recognition migration as well as default danger in the profile amount which may additionally be utilized to allot capital. These may be broadly categorized into 2 types; proprietary (internal) versions of recognition danger managing, and also the vendor marketed clothes airers that, despite the general-application nature of theirs, are virtually universally rather intricate. For reasons that are clear, not more than enough info is usually gotten around the abilities of the former group of the designs. Nevertheless, a bit of information is usually offered regarding the second class. This specific group contains designs sold by Algorithmic, Credit Metrics, Credit Risk+, KVM's Portfolio Manager, Loan Pricing Corporation, as well as McKinsey's Credit Portfolio View. For below, we'll briefly explain a number of the designs.

Sold by J.P. Morgan, Credit Metrics was recognized as one of the very first profile designs created for analysing recognition danger. It contains a strategy for evaluating a portfolio 's worth at danger (VAR) arising of modifications in deep counterparty recognition quality. It establishes a visibility profile of every counterparty, represented in the profile, as well as fuses the volatilities on the person tools (taking directly into bank account correlations between recognition events) to model the volatility of aggregate profile. Credit Risk+, sold by Credit Suisse, is an adaptation on the Credit Suisse Group's strategy for establishing mortgage damage provisions. It's able to evaluating danger capital specifications within an atmosphere in which illiquid loans (with very little related data) are kept to maturity. Appropriately, the methodology of its might be much more adequate for companies with institutional and retail mortgage portfolios, instead of individuals with a lot more band oriented compositions.

KVM's Portfolio Manager measures the risk and returns characteristics of a portfolio and allows the user to explore the incremental effect of changing exposure to an individual asset. It also provides for an examination of the effect of a large-scale change to the portfolio mix and, an assessment of potential changes in tactics and strategy. Further, it can be a valuable tool for determining aggregate capital requirements and the allocation of economic capital. Finally, McKinsey's Credit Portfolio View takes into account specific country and industry influences in

order to arrive at better estimates of default and credit migration probabilities. It incorporates the evolution of the global macro-economy into the country- and industry-specific speculative default rates. It then maps these rates into cumulative migration probabilities by country and by industry.

As the short explanation of several of the designs indicates, the growing intricacy on the realm of recognition danger has provided rise to a just as advanced group of styles made to calculate as well as control this particular danger. This particular analysis is created to make a photograph on the usage of this kind of types through the biggest banks

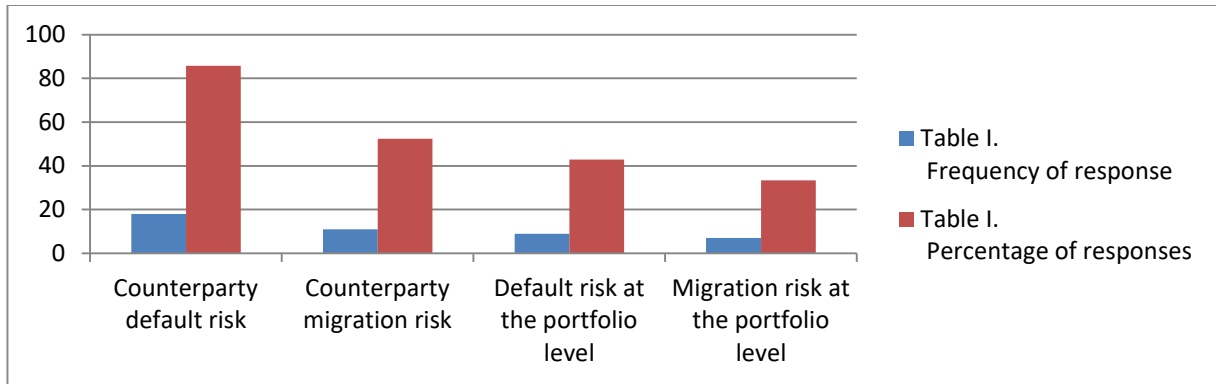
3. The results and the survey

A brief questionnaire, made up of 8 inquiries, was mailed to hundred bank account reps of ten arbitrarily selected personal banking companies headquartered within India. A maximum of twenty five replies have been gotten, of which 4 weren't usable. (Three of the replies had to become excluded since many goods weren't clarified. A quarter bodies were disposed because of obvious inconsistencies in deep answers.) The twenty one functional replies have been as a result of a large spectrum of banks. Thus, at this time there aren't any obvious disparities in between the respondents as well as no respondents. As a result, it could be argued that the respondents symbolize the public of banks surveyed.

The first question of ours was created to elicit from the respondents the kinds of danger the credit risk model of theirs is created to recognize. Much more particularly, we wished to find out if the model type used by the bank is created to just calculate portfolio loss arising from default, or maybe it's meant to additionally cope with migration danger. **Table I** reports the effects. Based on these results, 86 % of the respondents suggest that identifying counterparty default danger will be the single most important objective served by the credit risk models of theirs. Nearly one half of the respondents indicate that the models of theirs can also be effective at dealing with counterparty migration danger. The use of credit risk models to cope with default as well as migration risks in the portfolio amount is significantly less frequent, with 43 % as well as 33 % indicating these kinds of uses, respectively.

Table I.				
The types of risk the bank's credit model designed identify	risk is to		Frequency of response	Percentage of responses
		Counterparty default risk	18	85.71428571
		Counterparty migration risk	11	52.38095238
		Default risk at the portfolio level	9	42.85714286
		Migration risk at the portfolio level	7	33.33333333

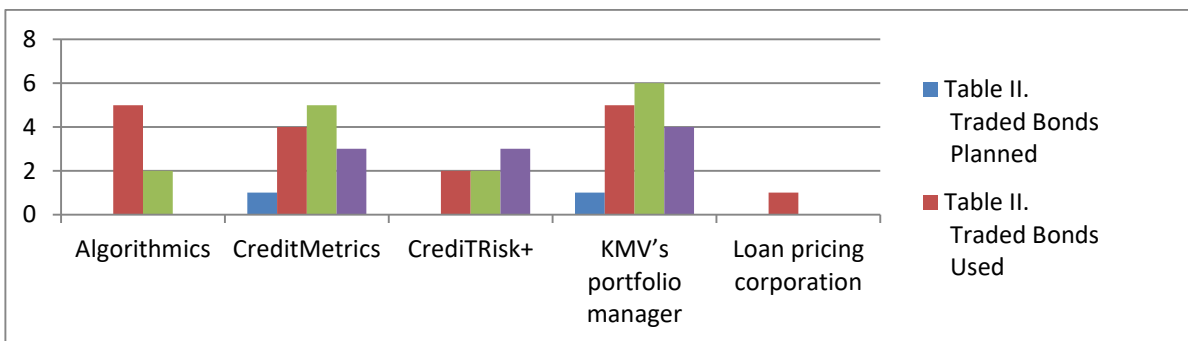
Source: Author Survey Result



Source: Author Survey Result

We upcoming requested the respondents of ours to show no matter whether they normally use, or maybe intend to utilize, any one of the 5 vendors marketed versions for possibly their traded connect portfolios or maybe the non-trade credit loans of theirs. The end result is summarized in **Table II**. Based on the outcomes, merely a minority of banks presently use the styles for whichever job. Fairly talking, nonetheless, they're a lot more commonly used of the control of non-traded credit mortgage portfolios. Insofar as distant relative personal references for these vendor marketed versions are worried, KVM's Portfolio Manager design edges away Credit Metrics by way of a tiny margin.

Table II.					
Usage of Third Party Models		Traded Bonds		Non Traded Bonds	
		Planned	Used	Planned	Used
	Algorithmic	0	5	2	0
Credit Metrics	1	4	5	3	
Credit Risk +	0	2	2	3	
KMV's portfolio manager	1	5	6	4	
Loan pricing corporation	0	1	0	0	



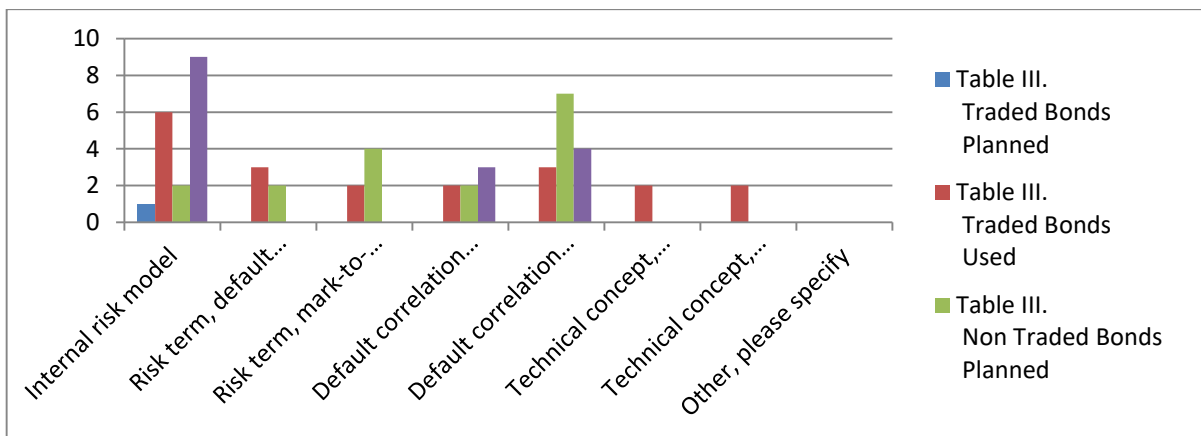
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Table III offers a tally of the replies to our issue about the planned or current utilization of in-house proprietary versions. As outlined by the outcomes, once again, merely a minority of banks make use of, or maybe intend to use in-house versions of recognition chance control. Oddly enough, with just one different, banks that employ the own proprietary models of theirs of recognition danger managing are similar versions that use a vendor marketed design. Thus, the ones that do use a style of recognition chance managing, do extremely equally through an in-house style as well as an outsourced one too.

The use of designs based upon correlation modelling via default fee volatility dominates each other. Mark-to-market framework will be the 2nd many extensively used form among the proprietary versions. Others aren't which popular. Additionally, it seems that the designs tend to be more commonly used for non-traded credits as compared to what they're for industry bonds.

Table III.					
		Traded Bonds		Non Traded Bonds	
		Planned	Used	Planned	Used
Planned or current usage of proprietary models	Internal risk model	1	6	2	9
	Risk term, default mode model	0	3	2	0
	Risk term, mark-to-market model	0	2	4	0
	Default correlation modelling, via asset correlation	0	2	2	3
	Default correlation modelling, via default rate volatility	0	3	7	4
	Technical concept, analytical model	0	2	0	0
	Technical concept, simulation model	0	2	0	0
	Other, please specify	0	0	0	0

Source: Author Survey Result



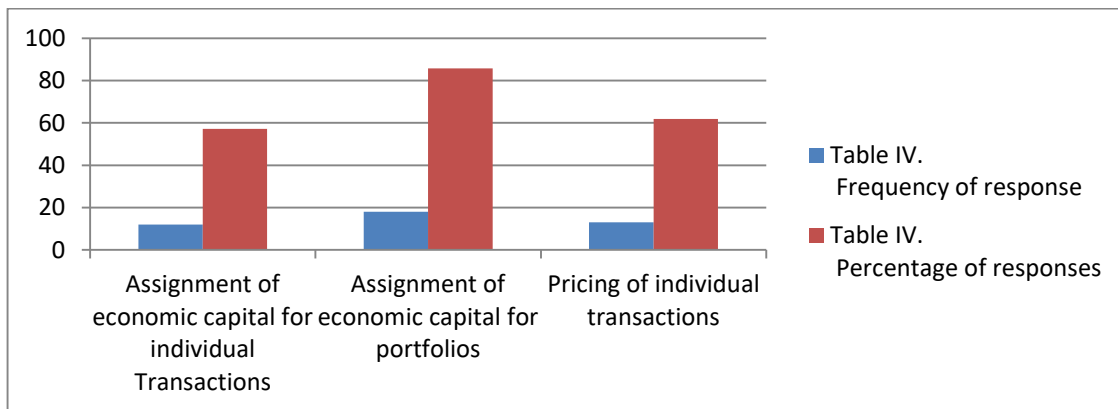
Source: Author Survey Result

We upcoming requested the respondents of ours to show what greatest details the objective that they presently make use of their recognition danger profile system: project of financial capital for specific transactions, project of economic capital for portfolios, or maybe the rates of specific transactions. The end results are claimed around **Table IV**. Based on the outcomes, the project of financial capital for portfolios stands out as the top use of this kind of versions. The rates of the assignment and individual transactions of financial capital for specific transactions ranking next as well as 3rd, respectively

We additionally requested the respondents of ours to show no matter whether they presently make use of a Markowitz type method of enhancing their credit portfolios. The consistent effect was negative

Table IV.			
The purpose served by the credit risk portfolio modelling system		Frequency of response	Percentage of responses
	Assignment of economic capital for individual Transactions	12	57.14285714
	Assignment of economic capital for portfolios	18	85.71428571
	Pricing of individual transactions	13	61.9047619

Source: Author Survey Result

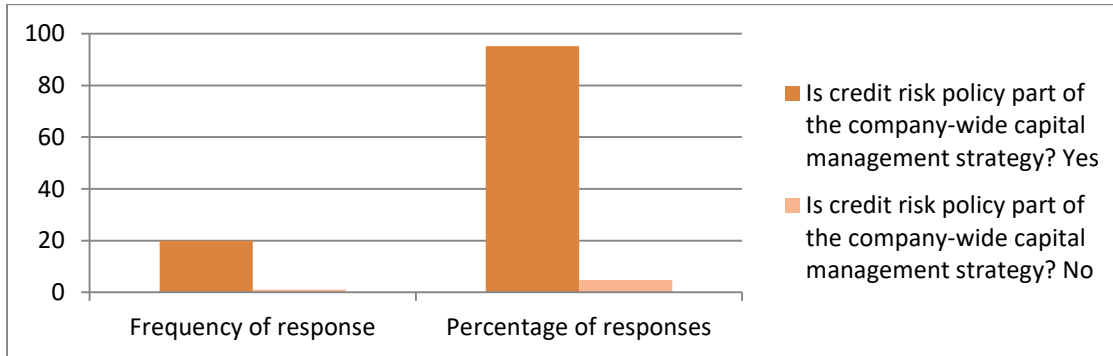


Source: Author Survey Result

Last but not least, we requested the respondents of ours to show whether recognition danger policy is an element of the company-wide capital managing policy. The end result is claimed with **Table V**. The vast bulk suggests which their credit risk policy theirs is an element of the company-wide strategy of theirs for capital control.

Table V.			
Is credit risk policy part of the company-wide capital management strategy?		Frequency of response	Percentage of responses
	Yes	20	95.23809524
	No	1	4.761904762

Source: Author Survey Result



Source: Author Survey Result

4. Concluding Remarks

Inside a survey of personal banks dependent within India, we discover that determining counterparty default danger is definitely the single-most-important objective serviced through the recognition danger designs used. Around half of responding institutions use designs that happen to be additionally effective at combating counterparty migration danger. Amazingly, merely a minority of banks presently use possibly proprietary or perhaps a vendor marketed style for the managing of their credit risk. Oddly enough, the ones that use their own in-house model theirs additionally use a vendor marketed design. Not amazingly, these frameworks tend to be more commonly used of the control of non-traded recognition mortgage portfolios as compared to what they're because of the management of traded bonds.

Recommendations

1. Credit risk review systems will differ depending on an institution's size, complexity, loan kinds, risk profile, and risk management methods, with a specific credit review function in place in larger or more complicated institutions. Through the following concepts, the interagency advice increases the credit review function's status:
 - a) **Should be separate from internal audit:** The credit review function is a separate entity that is in charge of confirming and, if required, altering credit risk ratings. It is not intended to be conducted by an institution's internal audit function. The capacity to independently audit the credit review function and end-to-end credit procedures is maintained by a competent internal audit function.

- b) **Mandate is different from monitoring, managing, and reporting by other credit risk functions:** The credit review function's goal is to discover credit vulnerabilities in a timely and accurate manner, which then tells management on how to best risk-manage their credit portfolio.
 - c) **Prevails where a risk rating discrepancy exists:** Risk-rating choices made by the credit risk function should prevail over those made by the company, unless the business can offer relevant information to support their position, which must still be assessed and contested by the credit risk review function.
 - d) **Should be empowered to evaluate workout plans specific to the assessment of the reasonableness of strategies:** For credit with major flaws, the credit assessment function should determine the suitability or reasonableness of loss estimating assumptions.
2. BIS, for instance, keeps that'... the main reason for extreme banking issues carries on to generally be exclusively associated to lax recognition requirements for borrowers as well as counterparties, poor profile danger managing, or maybe an absence of focus on modifications in other or economic conditions which could result in a degeneration within the recognition upright of a bank's counterparties.' See Principles for the Management of Credit Risk, Consultative paper ready by the Basel Committee on Banking Supervision, July 1999.
 3. Think about, for instance, forwards or even swaps. These derivatives ordinarily have sector importance of zero when they're initially moved into. Since mark-to-market visibility doesn't record the possibility for promoting values to raise more than period, real evaluation of the chances required needs that a bit of probabilistic measurement of prospective recognition visibility is utilized.
 4. Migration danger ideals together with the chance which, eventually down the road, the recognition score of an obligor might decline, resulting in a diminution found worth.

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