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Basel II Disclosure by PNB and ICICI bank: A Comparison and Implications

Abstract

The aim of this paper is to access the nature and characteristics of regulatory risk reporting in their disclosure of PNB and ICICI bank. The study explains that total quantity of disclosures as per pillar III of Basel II varies largely across PNB and ICICI bank. Researcher found word count on key risk management area of ICICI bank is much higher than PNB. However, majority of disclosures focused on credit risk, market risk and regulatory capital. Pillar I of Basel II which incorporates credit, market and operational risk, disclosure of the later risk is the least in both these banks. It is therefore expected that operational risk management issue could be the area of concern for the senior management and the board. It is observed that significant relationship existed between PNB and ICICI bank with respect to word count of all the dimensions of enterprise risk management. The author finds positive correlation between quantity of disclosure with total assets, net NPA and net profit and negative correlation with CRAR (%) and ROA in PNB. Further, positive correlation observed between Total asset, net profit, CRAR and ROA with the variations of the disclosure in ICICI bank whereas negatively correlation found with net NPA. This suggests possibly the precautionary attitude of private and more profitable banks toward excessive scrutiny by the regulator and to keep the confidence of share holders.

Keywords: Operational Risk, Basel, Public And Private Sector Banks, Risk Management, Enterprise Risk Management, Regulatory Reporting, Risk Acumen (RA), Risk Governance (RG) and Risk Communication (RC), Punjab National bank (PNB) and ICICI Bank.

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Introduction

Basel II provides three pillar structures which contain regulatory risk capital for credit, market and operational risk, supervisory role and disclosures to regulators and the public. The disclosures have been referred to as the pillar 3/ market discipline to improve the transparency and maintain required capital level and risk management activities thereby allowing other financial institution to find a field for comparison and to compete.

It relates to periodical disclosures to regulators, board of bank and market about various parameters which indicate risk profile of bank (Goyal and Agarwal , 2010). Market discipline can contribute to a safe and sound banking environment, and complement the minimum capital requirements (Pillar 1) and the supervisory review process (Pillar 2). Three pillars of Basel II framework provides a kind of "**triple protection**" by embracing three complementary approaches that work together towards ensuring the capital adequacy of institutional practices (Roldan, 2005).

It is presumed that disclosures of banks should be consistent with the risk management set up of the individual banks to manage the risks of the bank. Under Pillar 1, banks use specified approaches/methodologies for calculating the various risks they face and the resulting capital requirements. The Basel Committee believes that providing disclosures that are based on this common framework is an effective means of informing the market about a bank's exposure to those risks and provides a consistent and understandable disclosure framework that enhances comparability.

To assess the quality of the regulatory risk disclosure of the banks in our sample, we used as a unit of measurement a combination of several risk-based keywords and/or key-phrases that are core to an ERM (Enterprise Risk Management) assessment of a financial institution's risk management practices. This holistic and integrated approach structures the process for risk management assessment along three key dimensions, namely, risk governance (RG), risk communication (RC) and risk acumen (RA).

Strong RG involves linking the risk appetite of an institution to its strategic objectives and performance metrics. The risk appetite process should match with the business strategy and the overall threat to the institution. This in turn requires commitment by the Board and senior management toward developing a solid and robust ERM framework that ensures a clearer identification, measurement, monitoring and disclosure of the threat perceptions and challenges faced by the institutions.

In assessing the quality of risk management disclosure the RC aspect of ERM includes an understanding and evaluation of risks related to technology, the issue of the institution's disaster recovery and business continuity/resilience plans and human resource management processes.

The RA dimension assesses the quality of disclosure around the risk perception adopted by the institutions in reporting its risk exposures. Disclosures in the shape of RA will benefit an institution by providing a consistent and holistic view of its non-financial and financial exposure. The stakeholders and market player could find a better insight in to the aspects of risk identified and assessed by the institution..

Basel norms on pillar III was having an objective that aims to keep shareholders, stakeholders and market players well informed with the information they feel necessary for making decisions. Good corporate governance is the only light to dispel entire darkness in this regard (Dr. Debdas Rakshit and Sujit K. Ghosh 2012)

Table1: Explaining the set of keywords/key-phrases used (across the three dimensions of risk assessment) to assess the quality of the bank's Basel disclosure

Risk governance	Risk acumen	Risk communication
Risk management committee	Regulatory Capital	Legal
Risk appetite	Reserves	Compliance
Board risk committee	Scenarios	Audit
	Interest rate risk	Fraud
	Liquidity risk	Whistle blower
	Concentration risk	Business continuity
	Collaterals	
	ALM	
	Hedging	
	Reinsurance	
	Economic capital	
	Spread risk	
	Settlement risk	
	Underwriting risk	

Review of Literature

Levine, Ross, (2005): It has been stated by the researchers that lack of harmony between capital regulations and bank performance is a common issue with respect to Basel guidelines. The research advocates strongly the third pillar – market discipline which leads to creation of a transparent and a sound banking environment.

Vauhkonen, Jukka,(2009): advocated that each bank's safety and security relied on quality of managing and measuring risk. Banks with higher transparency find it easy to raise capital from external sources – public and sovereign wealth funds. The researcher developed a model deriving a correlation amongst the price of the bank's equity in the market and market discipline (disclosures).

Debdas Rakshit and Sujit K. Ghosh (2009) attempted to gauge constructing a disclosure index under different dimensions the Basel II norms carved for banking industry. They added that based on disclosure index the corporate governance practice of the banks become apparent that reveals even in complying mandatory requirements the banks find inconvenience banishing the relevance of non mandatory and voluntary requirements to discuss.

Dr Bhavik M. Panchasara and Ms. Heena S. Bharadia (2013) examined the corporate governance (CG) disclosure practice of selected Indian banks by using the financial and non financial parameters. Based on these parameters, the research analysed the corporate governance disclosure practices followed by Indian banks.

Prodyot Samanta and Mohinder Dugal (2016) explained that the out of three broad risk categories (market, credit and operational) across the banks, the operational risk disclosure is the least, with minimal to no disclosure on several key aspects of operational risk, suggesting that operational risk issues are likely to emerge as an area of concern among Indian banks.

Objectives of the Study

1. To analyze the category of risks these two banks focus on as evidenced by the quantity of disclosure.
2. To find out inferences from the analysis about the risk management practices in these banks.
3. To find out whether there is an association between the performance of the banks and the quantity/ quality of regulatory risk disclosure.

Research Methodology

We selected one bank from nationalised banks group and another bank from Private sector**.** Punjab National Bank being the highest overall business among all the nationalised banks and ICICI bank is too having highest business figure among all the private sector banks in India were taken for this study. The study was focused on entire Basel II period from year 2009 to year 2014.

The process involved to find out the number of times each keyword/key-phrase appears in ten-reporting segment of the Basel disclosure of PNB and ICICI bank during the entire period of Basel II. While the set of keywords/phrases selected may not be exhaustive, it is fairly comprehensive for this analysis. Both these banks used these keywords in their discussions on risk management are more likely to be an integrated approach to identify, assess and monitor their risk exposures. The word count of disclosures on risk dimensions of both the banks were compared with key financial results during the entire period of Basel II to analyze the impact of disclosures on the financial results of PNB and ICICI bank.

Content analysis method also known as grounded theory was applied with specified software to count the words in different segments of ERM of these banks to assess the quantity and quality of the regulatory (Basel II) disclosure of these two banks.

Data Analysis and Findings

In applying a content analysis methodology to assess written documents, researchers have used samples at several levels of analysis: word count, phrases, sentences, paragraphs, sections, chapters, etc. The unit of measurement used in this paper for assessing the quantity of disclosure is a word. The word count for different dimensions of risk acumen of ICICI bank and PNB is tabulated in Table 2 and 3 as under:

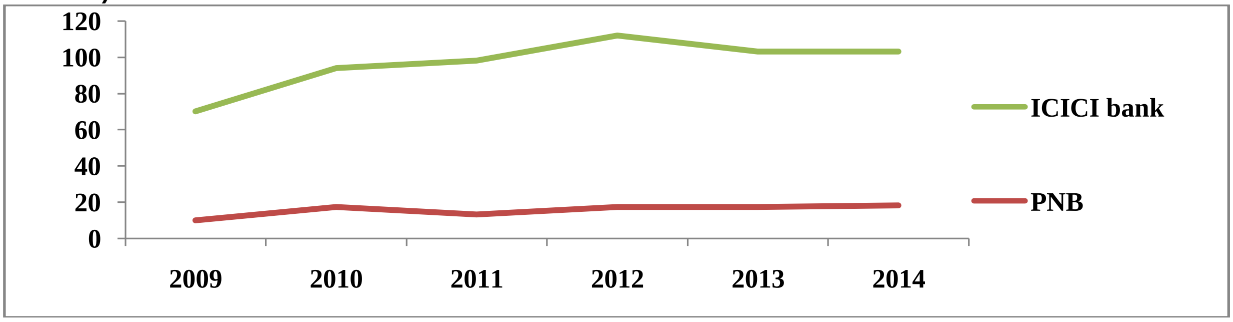
Table 2 Risk Acumen: ICICI Bank (Word Counts)

	2009	**2010**	**2011**	**2012**	**2013**	**2014**
Regulatory Capital	6	10	9	11	9	5
Reserves	6	7	7	7	7	
Scenarios	2	7	8	11	8	7
Interest rate risk	5	4	7	9	5	7
Liquidity risk	2	6	7	10	10	10
Concentration risk	4	2	2	1	2	2
Collaterals	26	26	25	24	25	30
ALM	7	12	12	14	13	14
Hedging	2		2			2
Reinsurance		1	2	3	3	3
Economic capital		1	2	1	1	1
Spread risk			1	1		1
Settlement risk		1	1	1	1	1
Underwriting risk				2	2	2
Total	**60**	**77**	**85**	**95**	**86**	**85**

Table 3: Risk acumen: PNB (Word counts)

	2009	**2010**	**2011**	**2012**	**2013**	**2014**
Regulatory Capital						
Reserves	3	3	2	3	3	3
Scenarios		1	1	1	1	1
Interest rate risk	2	5	2	5	5	4
Liquidity risk		1	2	1	1	2
Concentration risk						
Collaterals	2	2	2	2	3	4
ALM	1	2	2	2	2	2
Hedging	1	1	1	1	1	1
Reinsurance						
Economic capital						
Spread risk						
Settlement risk						
Underwriting risk						
Defaults	1	2	1	2	1	1
Total	**10**	**17**	**13**	**17**	**17**	**18**

Figure1. Showing graph on words count on risk acumen of PNB and ICICI bank during the Basel II period (2009-2014)



The total number of words in risk acumen across ICICI bank during the Basel II is 488 with a mean of 81 and in PNB word count is 92 with a mean of 15 (Table 2 and 3).

We find that the ICICI bank contains the maximum number of disclosure. We continue to observe that the word count on account of risk acumen capabilities of ICICI bank is far more ahead than that of PNB.

ICICI bank emphasises on collaterals, as word count on this score is found high in each year of Basel II implementation period. An explanation could be given as precautionary behaviour of ICICI bank towards excessive scrutiny by the regulator. The attitude of senior management on this dimension resulted in decreasing trend in NPA in subsequent years as collaterals acted as one of the risks mitigates.

The word count on regulatory capital of ICICI bank shows that it emphasises on RA dimension of ERM frame work which resulted in increase in CRAR ratio indicating strong base of the bank.

ICICI bank actively manages capital to meet regulatory norms, current and future business needs considering the risk in business, expectations of rating agencies, shareholders and investors with the available option for raising capital. The capital management framework of ICICI bank is administered by the Finance group and the risk management group under the supervision of Board and the risk committee.

Fiscal 2012 was a challenging year for the global economy. Prolonged uncertainty around the resolution of the Eurozone sovereign debt crisis, rating downgrades of sovereigns and slow recovery of the US economy increased risks to global growth.

In 2012, disclosures depict that despite the tight systemic liquidity, high interest rates and the changing competitive landscape, ICICI bank could keep its momentum of growth. It disclosed maximum number of words for regulatory capital and scenarios in 2012.

We do not find such robust disclosures in PNB during the Basel II period. It showed nil reporting on regulatory capital, concentration risk, reinsurance, economic capital, spread risk, settlement risk and underwriting risk whereas ICICI bank emphasised on all the crucial issues under RA like reserves, scenarios, reserves, IR risks, liquidity risk, concentration risk and ALM. All these items play strong role in strengthening the bank.

It is possible that ICICI bank may be relatively better positioned and consistent in monitoring and managing risks than PNB.

Table 4: Risk communication ICICI bank (Word counts)

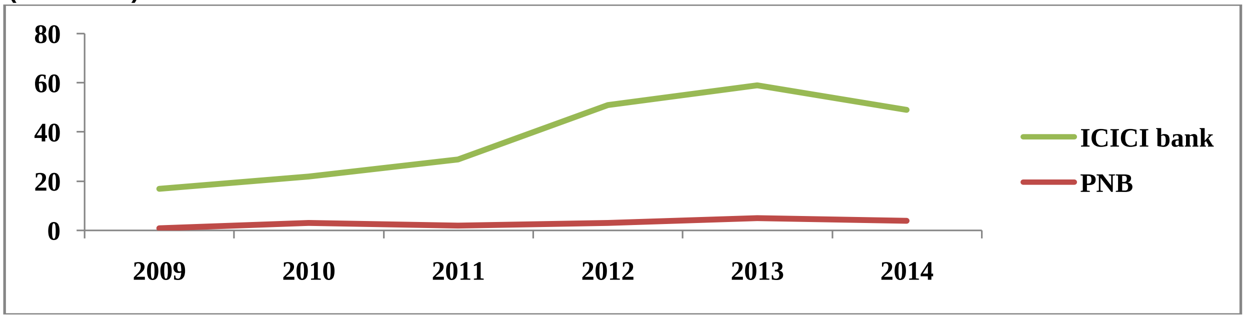
	2009	2010	2011	2012	2013	2014
Legal	3	6	7	10	10	8
Compliance	5	5	10	13	14	11
Audit	4	4	7	16	19	18
Fraud	4	4	2	8	8	7
Whistle blower			1		1	1
Business continuity				1	2	
Total	**16**	**19**	**27**	**48**	**54**	**45**

Table 5: Risk communication: PNB (Word counts)

	2009	2010	2011	2012	2013	2014
Legal						
Compliance		1	1	1	1	1
Audit	1	2	1	2	4	3
Fraud						
Whistle blower						
Business continuity						
Total	**1**	**3**	**2**	**3**	**5**	**4**

ICICI bank disclosed its concern on RC aspect of ERM which included legal, compliance, audit and fraud and business continuity plan aimed to keep shareholders, stake holders and market players about the preparedness of the bank on risk related to technology. On the other hand PNB has shown least emphasis on these crucial factors of RC. This could be disastrous in case of any failure on the part of technology.

Figure2. Showing words count on Risk Communication of PNB and ICICI bank during the Basel II period (2009-2014)



ICICI bank has given equal importance to all categories of risks in risk communication. The bank has provided more emphasis on audit and compliance in order to check the fault at an early stage.

At the aggregate level, we find very little emphasis placed on operational risk issues. Reporting on operational risk issues is captured along the RC dimension of analysis. The majority of the Basel reporting for this category of ERM across both banks is focused on audit, legal and compliance issues. PNB neglected reporting on business continuity planning, fraud, whistle blower and legal. It is evident that both these banks tend to focus on audit and compliance related disclosures rather than on key operational risk areas, again suggesting the control nature of the risk management function.

Hence, operational risk issues may emerge as an area of concern for these banks and should be addressed by senior management and the board.

Table 6: Risk governance: ICICI bank (Word counts)

	2009	2010	2011	2012	2013	2014
Risk management committee	1	4	**3**	**9**	**10**	**10**
Risk appetite		**1**	**1**	**1**	**1**	**2**
Board risk committee		**1**	**1**			
Total	**1**	**6**	**5**	**10**	**11**	**12**

Table 7: Risk governance: PNB (Word counts)

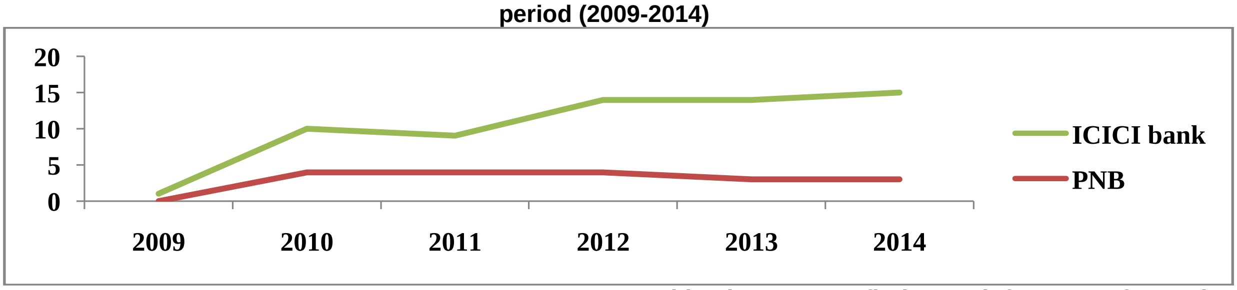
	2009	2010	2011	2012	2013	2014
Risk management committee		4	4	4	**3**	**3**
Risk appetite						
Board risk committee						
Total	**0**	**4**	**4**	**4**	**3**	**3**

Word count of risk management committee of ICICI bank for the Basel II period shows that the senior management has developed solid and robust ERM framework on this dimension.

Institutions that embody an ERM approach for identifying and assessing risks tend to focus on unfolding their risk appetite and how that integrates with the strategic planning processes of the bank. The amount of regulatory disclosure along the RG dimension tends to be higher for ICICI bank on three dimensions when compared to PNB.

For PNB, we find the disclosure around risk appetite and Board risk committee to be nil. Specifically, the regulatory disclosure around governance tends to pay more attention to the bank's risk management committees and policy structures. This further suggests that the risk management function in PNB on risk governance is of a controlling one rather than a strategic process to foresee the risks.

Figure 3: Showing word count for Risk governance in disclosures of PNB and ICICI bank for the Basel II period (2009-2014)



From the above table we find that word count for risk governance has been more in ICICI bank than PNB during the entire period of Basel II.

Objective 2: To find out inferences from the analysis about the risk management practices in PNB and ICICI bank

To gain further perspective of the nature of the banks' quality of Basel disclosure as categorized by the three dimensions (RA, RG and RC) of ERM we will apply "t" test to find out relationship between disclosures of ICICI bank and PNB during Basel II.

Following stipulations were taken for the analysis.

1. All tests done at 95% level of significance.
2. We frame three hypothesis on the issue as under;

H01: No significant relationship between PNB and ICICI bank on risk acumen dimension.

H02: No significant relationship between PNB and ICICI bank on risk communication dimension.

H03: No significant relationship between PNB and ICICI bank on risk governance dimension.

T-Test for RISK Acumen

Group Statistics

	bank	N	Mean	Std. Deviation	Std. Error Mean
Risk accumen	1	6	81.3333	11.91078	4.86256
	2	6	15.3333	3.14113	1.28236

Independent sample test for Risk acumen

RISK Acumen		Levene's Test for Equality of Variances		-test for Equality of Means	t-test for Equality of Means			t-test for Equality of Means		
		f	sig	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
	Equal variances assumed	3.853	.078	13.124	10	.000	66.00000	5.02881	54.79512	77.20488
	Equal variances not assumed			13.124	5.692	.000	66.00000	5.02881	53.53182	78.46818

T-Test for Risk Communication

Group Statistics

	bank	N	Mean	Std. Deviation	Std. Error Mean
RISKCOMMUNICATION	1	6	34.8333	16.19156	6.61018
	2	6	3.0000	1.41421	.57735

Independent Sample Test for Risk communication

Risk Communication	Levene's Test for Equality of Variances		-test for Equality of Means	t-test for Equality of Means			t-test for Equality of Means		
	f	sig	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	46.995	.000	4.798	10	.001	31.83333	6.63534	17.04887	46.61780
Equal variances not assumed			4.798	5.076	.005	31.83333	6.63534	14.85345	48.81322

T-Test for Risk Governance

Group Statistics

	bank	N	Mean	Std. Deviation	Std. Error Mean
Riskgovernance	1	6	7.5000	4.23084	1.72723
	2	6	3.0000	1.54919	.63246

Independent Samples Test

Risk Governance	Levene's Test for Equality of Variances		-test for Equality of Means	t-test for Equality of Means			t-test for Equality of Means		
	f	sig	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal Variances Assumed	8.523	.015	2.446	10	.034	4.50000	1.83938	.40160	8.59840
Equal Variances Not Assumed			2.446	6.317	.048	4.50000	1.83938	.05339	8.94661

We find null hypothesis H01, H02 and H03 rejected and alternative hypothesis is accepted ie there is significant relationship between PNB and ICICI bank with respect to risk acumen, risk governance and risk communication dimensions of enterprise risk management.

Objective 3

To find out whether there is an association between the performance of the banks and the quantity/ quality of regulatory risk disclosure.

To gain further insight into banks' quality of Basel disclosure and their performance as categorized by the three dimensions of ERM, we analyze the correlations of selected performance financial variables (total assets, net NPA, net profit, CRAR (%) and ROA) with the quantity of disclosure on each ERM category for these two banks. The five indicators provide a comprehensive measure of a bank's financial health and are widely used in banking sector studies.

Table 8 : Total assets, Net NPA, Net income, CRAR (%) and ROA of ICICI bank.

Year	Total assets (Rs in Crore)	Net NPA (Rs in crore)	Net profit (Rs in crore)	CRAR (%)	ROA (%)
2009	379301	4619	3758.13	15.53	1.0
2010	363400	3901	4024.98	19.41	1.1
2011	406234	2407	5151.38	19.50	1.35
2012	473647	1861	6465.26	18.50	1.5
2013	536795	2231	8325.47	18.74	1.66
2014	594642	3298	9810.48	19.08	1.76

Source: Annual reports, ICICI bank

Table 9 : Total assets, Net NPA, Net income, CRAR (%) and ROA of PNB.

Year	Total assets (Rs in Crore	Net NPA (Rs in crore)	Net profit (Rs in crore)	CRAR (%)	ROA (%)
2009	245405	264	3090.90	14.03	1.39
2010	295141	982	3905.35	14.16	1.44
2011	376854	2039	4433.50	12.42	1.31
2012	456744	4454	4884.20	12.63	1.17
2013	477448	7237	4747.67	12.72	1.01
2014	549012	9917	3342.58	12.29	0.65

Source: Annual reports PNB

These results of correlation are displayed in Table 10 below.

Table 10: Correlations of selected financial variables with quantity of disclosures of each ERM category

Banks	Total assets	Net NPA	Net profit	CRAR (%)	ROA
PNB					
Risk acumen	0.73	0.69	0.40	**- 0.40**	**- 0.58**
Risk Governance	0.44	0.23	0.69	**- 0.45**	**- 0.11**
Risk communication	0.78	0.81	0.42	**- 0.47**	**- 0.68**
ICICI bank					
Risk acumen	0.54	**- 0.92**	0.59	0.75	0.75
Risk Governance	0.87	**- 0.64**	0.90	0.60	0.93
Risk communication	0.87	**- 0.77**	0.86	0.37	0.92

Negative correlation for each ERM category for CRAR and ROA of PNB and Net NPA of ICICI bank denotes that disclosures have inverse relationship.

Risk Acumen

The relationship displays significantly positive correlation (0.73), (0.69) and (.40) for total assets, net NPA and net profit respectively with the quantity of disclosure for Risk Acumen category in PNB. The negative correlation of -0.40 and -0.58 with CRAR and ROA respectively with risk acumen is due to decreasing trend in CRAR and ROA and an increase in disclosure count as an effort to provide greater clarity . The bank is seriously trying to improve upon these ratios with proper risk management practices and therefore we would expect to see more regulatory disclosure on these scores in future.

The correlation results are mixed at the sector level. What stands out from Table 7 is the relatively strong negative correlation (_0.92) of risk acumen with Net NPA for ICICI bank. The word count for this has increased in subsequent years representing proper control over the risk management affairs of the bank which resulted in decrease in NPA in subsequent years. Positive correlation witnessed between RA and total assets (0.54), net profit (0.59), CRAR (0.75) and ROA (0.75) in ICICI bank. This could be the reason that with the increase in total assets, net profit, CRAR and ROA, the bank has increased disclosures in a balanced manner.

Risk Governance

ICICI bank focused their Basel disclosure for RG category on areas of risk appetite and risk management committees and observed negative correlation with NPA (-0.64) is not unusual, as private institutions tend to focus more on these areas as they grow and develop their risk management practices. Positive correlation of 0.87, 0.90, 0.60 and 0.93 with total assets, net profit, CRAR and ROA of ICICI bank since it has emphasised risk governance i.e. risk management committee, risk appetite and board risk committee with increasing disclosure.

RG of ERM tends to have a positive correlation with financial variables like total assets, net NPA and net profit in PNB and negative correlation with CRAR and ROA. The bank needs to identify and assess risks tend to focus on explicating their risk appetite and how that integrates with the strategic planning processes of the bank.

Risk Communication

At the aggregate level, we find very little emphasis placed on operational risk issues. Reporting on operational risk issues is captured along the RC dimension of analysis. The majority of the Basel reporting for this category of ERM across these banks is focused on audit, legal and compliance issues.

RC segment of ERM function in ICICI bank has high word count in different dimensions having positive correlation of 0.87 for total asset, 0.86 for net profit, 0.37 for CRAR and 0.92 for ROA.. It is evident from the word count that the bank is emphasising on control aspects. This also resulted in decrease in absolute figure of NPA by increasing the asset quality and thus we have negative correlation (-0.77).

PNB neglected reporting on business continuity planning, disaster recovery, internet/cyber security, human capital and training.

Positive relationship (0.78, 0.81, and 0.42) observed with total assets, net NPA and net profit in PNB with the quantity of disclosure for the RC category of ERM.CRAR and ROA have negative correlation of -0.47 and -0.68 respectively with dimensions of RC. The emphasis as per disclosure of PNB was on compliance and audit leaving the crucial segments of RC i.e. business continuity plan and fraud.

Conclusion

This article discussed the characteristics of disclosures (pillar III) in Punjab National Bank and ICICI bank during Basel II, however the findings of present work is limited to specific approach and methodology applied and the results of this study will be informative for those involved in the area of banking regulation and compliance. Some questions not addressed here are includes what should be the quality and quantity of regulatory disclosures? Whether some kind of change in behavioural traits of people that can be seen by changing the nature and characteristics of these disclosures. Further research may be carried out on specific banks in India and abroad and an insight could be found on the gaps in financial integrity of the banking system

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