

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

**An empirical analysis of the usefulness of the
Basel II Pillar 3 disclosures on bank risk
management to monitor bank performance and
forecast bank profitability during periods of
economic instability.**

**A thesis presented in partial fulfilment of the
requirements for the degree of
Master of Management
in
Banking**

**at Massey University, Manawatu,
New Zealand.**

Rachel Ainsworth

2012

Abstract:

The third pillar of the Basel II capital adequacy framework requires banks to disclose risk information to the market to supplement regulators' monitoring. It is expected that this "allows market discipline to work earlier and more effectively" (BCBS, 1998, pp. 6). The expectation that the pillar 3 disclosures will lead to market discipline is supported in the theoretical literature but not demonstrated in the empirical literature. The purpose of this thesis is to determine if the information contained in banks' disclosures is useful to monitor bank performance and to explain bank profitability as this is a precondition for effective market disclosure. The usefulness of information in the pillar 3 disclosures was examined for twenty of the largest global banks from 2008 and 2009. It was found that pillar 3 disclosures are useful to analyse and monitor the performance of banks as the disclosures can be used to identify banks for which key risk metrics are inconsistent with other metrics. The pillar 3 variables did not however significantly improve the explanatory ability of earnings models over models containing only financial information, although this may be due to the small sample size. These results show that there is valuable information contained within pillar 3 disclosures which could be used by the market to provide market discipline as expected in the Basel II framework.

Table of Contents

1. Introduction.....	1
2. Literature Review	7
2.1 The Purpose of Disclosures.....	8
2.2 The Process of Market Discipline.....	10
2.3 Earnings as a Measure of Market Discipline.....	15
2.4 Bank Earnings	18
2.5 Summary of the Literature Review.....	22
3. Research Methodology.....	24
3.1 Qualitative Analysis – Comparisons of the Performance of Banks	24
3.2 Quantitative Analysis – A Model for Future Earnings.....	27
3.2.1 Model Specification	27
3.2.2 Statistical Methodology	30
3.3 Variables to be included in the data.....	35
3.4 Data Collection and Sample Selection.....	39
3.5 Key Statistics in the Raw Data.....	45
4. Results.....	48
4.1 Qualitative Analysis – Comparisons of the Performance of Banks	48
4.2 Quantitative Analysis – A Model for Earnings	55
5. Discussion	58
Appendix: The residuals from the earnings models	67
References.....	70

List of Diagrams

Diagram 1: The process by which market discipline occurs.....	4
---------------------------------------------------------------	---

List of Tables

Table 1: Banks included and excluded from the data.....	3
Table 2: Banks included and excluded from the data.....	43
Table 3: Summary Statistics	45
Table 4: Pearson Correlation Coefficients.....	47
Table 5: Regression model results for earnings.....	56

List of Graphs

Graph 1: Risk weighted assets versus earnings	48
Graph 2: Net interest income against credit risk weighted assets	49
Graph 3: Collective provisions against net interest margin	50
Graph 4: Collective provisions versus credit risk weighted assets	51
Graph 5: Collective provisions versus next year's individual provisions	52
Graph 5: Individual provisions against impaired assets	53
Graph 7: The Texas ratio version 1 versus the Texas Ratio version 2.....	54
Graph 8: Residuals from Model 1a.....	67
Graph 9: Residuals from Model 2a.....	68
Graph 10: Residuals from Model 3d.....	69