

Can the CAMELS rating system Survive the Future?

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Abstract- The banking sector has experienced a change in paradigm, be it from the aspect of legislative, technological or financial changes. However, the curiosity into the causes of bank failure has somewhat lagged behind. One possible consequence of this scenario is that current rating system may no longer accurately assess the banking environment. This paper attempts to look beyond the numbers used in CAMELS rating system and see if there is a need to enhance the model used.

Index Terms- Bank Performance – Preventing Bank failure – Rating system – CAMELS – Failure trend in Banks – Banking Sector.

I. INTRODUCTION

The banking industry, like many others, is changing fundamentally. Interest rates in some regions of the world are approaching 40-year lows, equity markets are far more unpredictable than in the bubble years of the 1990s, and the aging baby-boom generation is increasingly looking to accumulate secure assets.

Against the backdrop of these developments, three major dynamics pose formidable new challenges for financial institutions. Organizations that hope to control their own destiny in the years ahead must come to grips with these dynamics and devise the best ways to manage and profit from them-before their competitors do. The current climate of lower growth and higher uncertainty has put banking revenues and margins under greater pressure.

Consumers have become more demanding and more financially sophisticated. Finding themselves in a buyer's market, they not only are more vocal in expressing dissatisfaction with their financial relationships but also feel empowered by favorable regulatory developments. Moreover, they are increasingly willing to switch institutions if they feel neglected, and they will keep switching until they are fully satisfied that their banking and financial-planning needs are being properly looked after. Holding on to these customers is an increasingly critical driver of revenue and profit for financial institutions-and losing them to competitors is becoming more and more costly

But banks had yet another problem. How to prevent future bank failures?

II. RESEARCH PROBLEM

It has been discussed then, it is being discussed now and perhaps, it will be, for time to come. Everyone is looking for a better solution and looking for the missing link.

From the literature reviews, there is definitely no lacking in examples and views offered by the academics, the professionals as well as the regulators on the issue of bank performance.

So far, the banking sector in India has been on a steady rock. But this should not prevent us from learning from the failures of others and applying the right solution where appropriate. The banking sector comprises licensed institutions namely commercial banks, finance companies, merchant banks, discount houses and money brokers which are licensed under the regulations and supervised by Reserve Bank of India.

The research problems are summarized as follows

- 1) There is no clear trend in the failures seen so far
- 2) CAMELS rating system is not being used widely.

III. OBJECTIVES OF THE RESEARCH

The objectives of the research are:

- 1) To map out any significant trend in the failures or crisis observed so far.
- 2) To see if the CAMELS rating can still be used in the current dynamic environment

IV. SCOPE OF STUDY

The scope of study of this topic is set to limit to review some of the banking crisis seen around the world, from South America to Asia. The discussion as well as the analysis of this paper will be discussed around the failures seen and the views from the regulators as well as the academicians.

V. SURVEY OF LITERATURE

Is there any way to prevent bank failure? Is the current rating system used a good early warning sign? Is there a formula to guide the regulators?

Lets look at the cases and perspectives from different corners of the world as well as the views from the academics and the regulators.

Argentina

Dabos and Mera (1998) study the main consequences that the Mexican crisis of December 1994 had on Argentina's financial system. Several different factors seem to have contributed to the outbreak of the Mexican crisis. Political turmoil during 1994, the bad shape of Mexican macroeconomic fundamentals, and external factors such as the rise in international interest rates, had been affecting the behavior of financial markets during 1994 (Folkerts-Landau and Ito 1995). Citing Garrido (1996), the institutional design of the financial system and its regulatory framework, added to its vulnerability to external pressures and its limited development, were the main determinants of the December 1994 Mexican crisis. The Convertibility Plan was introduced in 1991, with the purpose of putting an end to several decades of inflation, fiscal deficits and mismanagement of the economy. Its main objective was to achieve price stability, fixing full convertibility of the domestic currency into American dollars, and setting limitations to the ability of the Central Bank to employ the dangerous instrument of money printing. The monetary measures established the convertibility of one peso for one dollar, binding the Central Bank to back up the whole monetary base with international reserves. Apart from this, in 1992 the Central Bank Charter and the Law of Financial

Institutions were modified. As a consequence, the Central Bank was banned to conduct active monetary policy. Other reforms introduced at the time increased reserve requirements and minimum required capital to assets ratios which was set at 11.5%, were established according to the risk undertaken by each financial institution. The high reserve requirements had the objective of creating a liquidity mass, which could be released in case of a run. The severe minimum capital regulations, apart from constituting an alternative liquidity source, tried to penalize banks according to the risk undertaken. The reversion of capital inflows had a strong impact on Argentina. The confidence crisis translated into an important deposit and international reserve withdrawal, posing a threat to the convertibility commitment and to the banking system, and having a negative impact over investors' credibility. The fall in deposits started affecting only a group of banks, and reaching only peso deposits, before it was generalized to the whole financial system and to deposits in all denominations. The crisis was also evidenced by an increase in country risk, which translated into a fall in Argentine bonds' and stock prices. Furthermore, liquidity problems were responsible for an abrupt increase in nominal interest rates. The evolution of financial system indicators shows the negative effects of the crisis. The indicators analyzed include the main variables considered by the CAMEL system.

Asia (Indonesia, South Korea and Thailand)

Rahman, Tan, Hew and Tan (2004) attempt to investigate empirically financial ratios that could better identify the problem banks in Asia and to develop accurate problem bank identification models for each country. Logistic regression technique was used to achieve this with ratios serving as financial distress indicators. These authors study on bank data from Indonesia, South Korea and Thailand. The focus is on five key aspects of a bank's operation to the CAMEL framework, namely capital adequacy, asset quality, management quality, profitability and liquidity. The result for the Indonesian banking

industry shows that both the interest income/ interest expense and operating efficiency ratios are good enough to trigger the alarm for bank failure. As for the Korean banking sector, profit margin ratio can best single out the problematic and non-problematic banks. The interest income/ interest expense ratio once again is the indicator here for the Korean banks. Capital adequacy ratio is one that is critical to the Thai banking industry in order to avoid financial distress in the earlier years. However, for 1995 and 1996, interest income/ interest expense ratio us the most significant variable. As a result, the authors listed three common financial indicators, which are vital in identifying problem banks in all the three countries: capital adequacy, interest income/ interest expense and operating efficiency. In this study, capital adequacy is measured by the variations of the basic capital/ asset ratio. Interest income/ interest expense ratio measures the number of times interest expense is covered by the interest income. Interest rates are positively correlated to the profitability of a bank. Operating efficiency measures the effects of inefficient bank operations on profitability, which is a subsequent reduced stream of earnings. Asset quality per the findings did not appear to indicate financial distress of the banks. One reason cited in this study is the possibility that the banks' credit grading methods are liberal. Bank regulators of those countries studied did not impose strict guidelines in relation to the classification of loans. Perhaps these authors ought to study the unique features of the selected countries where banks were selected for the analysis.

China

Bekier, Huang and Wilson (2005) discuss on the issue of the huge stock of bad loans that is eating up into its banking system. The country's loan classification system has been upgraded to uncover problem loans more quickly and consistently, asset-management companies were established to help banks dispose of their non-performing loans, and billions of dollars from China's vast foreign reserves have been used to sustain insolvent banks until the problems can be resolved. The regulators must introduce better corporate-governance practices to curb the ability of influential organizations and people to meddle in the lending decisions of banks, improve their risk-management practices, and limit fraud. Banks must recognize their new problem loans more rapidly. Banks in China have a disincentive to sell their distressed assets because once they do, they must recognize a loss. Nevertheless, experience elsewhere suggests that the quick disposal of such assets is the right way forward, since the longer a bank waits, the less value it recoups from the sale. Faster recovery of non-performing loans will also remove a drag on bank earnings by reducing charge-off and the need to build up reserves. It will also free capital and therefore improve the ability of banks to supply the credit that China's businesses so desperately need. To increase the amount of bad debt ready for disposal and to have it disposed of more quickly, regulators should give banks and asset-management companies specific targets. Progress—or the lack of it—should be made public, and the senior managers of these institutions should be held accountable. Building the most fundamental components of good corporate governance and credit-risk-management skills are the top to-do things for the bank regulators. The regulators should also take an active role in monitoring compliance and

make their findings public. The authors also suggest that moving to a performance- and risk- based supervisory system is another necessary step. Banks from Southeast Asia require credit processes to be certified and only banks that meet certain requirements can have their license renewed. The authors urge the banking regulators to look seriously into the existing bad loans and to stop the flow of new ones, despite the fact China's banking system is not in immediate danger of failing. Even though the authors recommend that to have a stronger banking system, one has to have better governance and risk management.

Indonesia

McLeod (2004) studies the collapse of Indonesia banking system and the government's policy response to it, under the advice from the IMF. He comments that the Indonesia's crisis recovery program had failed badly in relation to the two key objectives of development economics policy making- efficiency and equity. To ward off bank failures the central bank began operating as lender of last resort—before long on a very large scale—but its failure to sterilise the monetary impact of its actions meant that it was supplying the liquidity needed by all those investors who wanted to purchase foreign currency, either to unwind their exchange rate risk exposure or to speculate against the rupiah. The upheaval in the foreign exchange market came to be so great that the IMF was called upon for assistance and, as a condition of this support, the government had to accept a number of policy reforms that amounted to direct attacks on the president through his family and cronies. The massive collapse of the banking sector has been perhaps the most extraordinary aspect of Indonesia's crisis. The general public has been left burdened by a debt amounting to at least 40% of GDP as a result of the way the impact of the crisis on the banking system was handled. The October 1998 LOI provides the first indication that, despite the previously expressed intention to strengthen prudential standards for the banking system, policy makers were so keen to minimise the number of further bank closures that they decided instead to soften the most fundamentally important of those standards: namely, the minimum acceptable capital adequacy ratio. The near-term target was now set at 4%, rather than 9%—the standard originally to be achieved by September 1997. There was no explicit mention of the fact that the minimum standard had been so drastically lowered, much less any attempt to justify this decision. Dealing with the banking system was being given the highest priority, because this was regarded as an essential precondition for the recovery of the corporate sector. The banks had failed because the corporate sector had failed to repay its loans to them. Even if the banks' capital could now be restored, it is difficult to understand how they could simply have resumed lending to the corporate sector when it remained heavily in default to them. The only way that this could have made any sense would be if the banks were prepared to forgive non-repayment of loans they had previously issued, taking the implied losses onto their own books and, in effect, passing the losses on to the government as guarantor of their liabilities. A superior approach to handling banking crises would be to treat them in much the same way as insolvencies of non-banking sector enterprises, in which losses in excess of shareholders' equity are borne by creditors, not by 'innocent bystanders'—the general public.

Frecaut (2004) looks at the conventional approach, embedded in business accounting, used to manage the banking crisis, with an alternative approach that relies on national accounting concepts. It shows how the latter can provide a new perspective, elucidating the massive transfers of wealth that took place during the crisis. This suggests possible improvements in bank resolution strategies, through the identification and quantification of the main transfers of wealth, followed by their taxation. A number of banks, often among the largest, avoided financial collapse only through massive central bank emergency liquidity support. The government eventually had to provide a blanket guarantee of bank liabilities to avert the threat of a system-wide financial meltdown. This and the rehabilitation of the surviving banks ended up imposing enormous costs on the general public by virtue of a dramatic increase in public debt. The main focus of banking supervisors is on banks' solvency, i.e. their net worth or equity, defined as the surplus of assets over liabilities, and thus their ability to repay their depositors. Bank solvency is measured through business accounting standards and benchmarked against internationally accepted prudential norms, with a prominent role assigned to the capital adequacy ratio (CAR) as defined by the Basel Committee on Banking Supervision. The interest margin is used as a core item for the assessment of bank profitability and viability. Banks that feature a negative net margin are viewed as inefficient, loss-making institutions, slated for closure if they cannot improve their performance. The focus is on measuring the performance of individual banks separately from that of other types of economic entities. The author notes that it is important to focus on the possibility of an accumulation in the economy, over a number of years, of undetected losses on bank loans. The place where these problems develop is the corporate sector. Banks have an important role to play in preventing the silent accumulation of such losses. Prudential reviews of loan portfolios should generally be able to detect them, although this will not always be the case. Too much faith might be put in historical costs and/or in the significance of the borrower's repayment history. Banking supervisors need to pay special attention to this issue. Another action one needed is to be prepared always. Two components are cited here- one at the country level and another, at the multilateral level. The author concludes that in the rapidly globalising economy, where systemic banking crises seem to multiply, perhaps the System of National Accounts (SNA) holds the promising potential to assist in the analysis of a large-scale financial disaster of macroeconomic importance.

Japan

Hoshi and Kashyap (year unknown) look into Japan's financial system is in the midst of a major transformation. One driving force is deregulation. The other is the financial crisis. The lopsided nature of the Financial deregulation, combined with maturing of the Japanese economy and slow growth starting in the mid-1970s, created a disequilibrium situation that has lasted to date. To eliminate the disequilibrium, further deregulation of the financial system will be inevitable. Once the deregulation is complete, the Japanese allocation of savings and the investment financing patterns will move further towards the patterns seen in the United States. Until the 1920s, the Japanese banking system was characterized by free competition with little regulation. The

Bank Act of 1890, for instance, set no minimum capital level for banks. A series of banking crises in the 1920s, especially the banking panic of 1927, led the Japanese government to change completely its attitude toward regulating banks, and tight regulation of the banking sector began. The financial system was also highly segmented. The regulatory framework that was completed during the occupation period stayed more or less in place until the mid-1970s. During the high-growth era from 1955 through 1973, banks dominated the financial system. Bond markets were repressed, and equity issuance was relatively uncommon. In the 1970s this all began to change. One big change was slower aggregate growth. Up until this time household savings were mostly channeled through banks to finance business investment. With lower growth the corporate funding requirements fell. The success of the Japanese economy in the rapid-economic-growth period also helped the corporations accumulate internal funds. This intensified the decline in the borrowing requirements of the companies. A third feature of the economy in the 1970s was that the government began to run sizable deficits. The deficits arose because of a combination of slower tax revenue growth, a policy decision to engage in deficit spending to try to spur the economy, and an expansion of the Social Security system. To finance the deficits, the government significantly ramped up its bond issuance. The speed of adjustment of the financial sector will primarily depend on three factors: how fast corporations adjust their financing, how fast households shift their funds out of bank deposits, and how fast the banking industry is reorganized. The shrinkage of bank loans will imply a substantial exit in the banking industry unless Japanese banks shift away from traditional banking business very aggressively. The speed of such reorganization obviously depends on the government's policy stance toward bank failures. The authors suggest closures of insolvent banks, and not mergers among the largest banks.

Korea

Yoon and Miller (2004) investigate the major causes of the Korean financial crisis in 1997. Korea's financial system is characterised by the lack of independence from the business conglomerates as well as from the government. Korean banks are not educated and exposed to understand consolidated financial statements. The bankers do not check on the possibility of the misuse of loans by some borrowers to create slush funds to politicians. Besides, these business conglomerates borrow funds from their financial affiliates based on cross-guarantees. Banks, on the other hand, wanted to maintain good relations with the business conglomerates in expanding their business volume and earning large fees. Another weakness in Korea's financial system related to the weak and poorly planned supervision of financial institutions. There were three independent supervisory bodies for banks, insurance and security businesses. This environment is responsible for the skewed distribution of loans to the business conglomerates and resulted in bad debts and non-performing assets by banks. The political and financial scandals, the accumulation of trade deficits and a series of corporate failures were quickly publicised in the international financial community. Confidence eroded and this was compounded by the foreign exchange crisis in the South East Asia. Many foreign investors started to pull their money out and some refused to roll over the

loans to Korean banks and companies. The Korean government believed that the main cause of the financial crisis in 1997 was a lack of market discipline and the malfunctioning of the market system rather than macroeconomics imbalance. It is believed that the government's role in the matured market system should be limited to that of surveillance and ensuring that market discipline is upheld. Structural reforms and the establishment of market driven institutional frameworks must be implemented. In addition, software reforms such as eliminating the anachronistic attitudes and business practices, rewarding innovation and performance should complete the restructuring process.

Mexico

Graf (year unknown) reviews the banking sector in Mexico after the 1994 crisis. Macroeconomic, microeconomic and institutional factors combined to produce increasingly difficult problems for Mexican banks even before the December 1994 devaluation. The sharp contraction of the economy that followed the devaluation made these problems worse. Capital inflows poured into the country in the early 1990s, fed into the banking system. Lending to activities in which the banks had no previous experience, such as housing and consumption grew very rapidly. Credit given to traditional sectors also increased. Investors paid an average price of 3.34 times the book value when privatisation took place in 1991-92. Wanting to quickly recover their investments, there was a natural tendency to undertake risky business. Banks extended large amount of loans without sufficient credit analysis. There were also many cases whereby the value of the mortgage exceeded the price of the house or land purchased. The shares of the NPLs in total loans began to rise well before the 1994 crisis. Discovery of fraud also led the authorities to take over two banks in the late 1994. Just like putting salt to injury, the devaluation of peso and its effect on interest rates aggravated the whole situation. Debtors were finding it hard to service their debts with the increase of inflation and nominal interest rates, and falling of real income. Several programs were put in place to avoid the collapse of the banking system. The policies adopted in bank restructuring succeeded in bank run as successive programmes were put in place to reassure investors' confidence in the stability of the system. However, according to the author, the Mexican banking system remains weak. Banks have yet to contribute to the recovery and leaving firms to finance themselves from suppliers or abroad. Credit has not expanded as banks have tightened credit standards and the supervisory commission now requires banks to establish reserves for 100% of those loans granted to debtors with a bad credit record. There is also a suggestion to further increase the capital of banks from the current level of 12%.

New Zealand

Turner (2000) investigates on the Hayekian approach to banking supervision in New Zealand. New Zealand became the only developed country not to have some form of deposit insurance and, to abandon the practice of conducting on-site examinations. Instead, depositors must carry out the bank monitoring through the disclosure statement produced by the banks every quarterly. This is done with a hope to reduce the moral hazard issue pertaining to the deposit insurance. The 1989/90 crisis caused the Reserve Bank of New Zealand (RBNZ)

to implement a review of its banking regulatory arrangements. From 1987 until 1995, the RBNZ had a conventional practice to bank supervision. Banks faced minimum capital requirements, limits to foreign exchange exposure and off-site monitoring by the RBNZ. However, the new regulatory regime introduced in 1996 had some changes made namely the removal of the deposit insurance and 'too-big-to-fail' policy, introduction of a public disclosure regime and reduction in RBNZ monitoring of banks. In addition, a structured early intervention and resolution program was introduced, and the removal of limits on single borrower and foreign exchange exposure. There was a big debate arose on the fact that banking instability was due to the moral hazard problem associated with deposit insurance. It is argued that deposit insurance removes the incentives for depositors to monitor banks and provides incentives for banks to increase their risk-taking. RBNZ decided to adopt the Hayekian approach to deposit insurance and replacing it with public disclosure regime and caveat depositors. There are two types of statements issued quarterly, one for the ordinary depositor and another is for the professional analyst. This, they say, will enhance the market role in ensuring a stable and efficient banking system. Deposit insurance simply shifts the inherent instability problem from depositors to the government. The banking problems in New Zealand were not due to the existence of deposit insurance per se but rather the removal of the comprehensive bank regulation. There is also an argument that not many depositors will read or even understand the disclosure statements. Furthermore, it does not provide depositors with information to value the loan portfolio of a bank. Despite these weaknesses, there are still depositors in the New Zealand banks. Why? One possible reason is that depositors do not believe that the RBNZ promises not to bail out ailing banks are credible and another possible reason is that RBNZ is free-riding on foreign regulatory systems since six out of the eight locally incorporated banks are totally foreign-owned. The author concluded that moral hazard problem still exists in the absence of deposit insurance and that depositors have inadequate information to monitor banks and prevent them engaging in opportunism. The only way to prevent this is for governments to regulate them. The New Zealand model is not one, which should be copied.

Norway

Knutsen and Lie (2002) looks into the main causes of the major banks in Norway during the banking crisis in 1987-92 and the reasons as to why some banks failed while others did not. Quoting Schwartz, a genuine banking crisis is characterised by panic and depositor-runs on banks. However, according to the authors such a reason is not an appropriate answer to the banking crisis, which hit the Norwegian banking sector. The authors have applied the financial fragility approach to better understand the mechanisms that caused a general financial crisis and increased systemic risk for both of the largest banks in Norway- DnC and Christiania Banks. During 1987-92, there was a huge credit expansion as well as deregulation of the financial markets. These led to the huge loan losses suffered by both banks. The lax monetary policy and an expansive fiscal policy by the government stimulated the boom condition. As a result, debt levels risen especially from the corporate sector, as well as the household sector. The abrupt downswing of the business cycle

and the contractionary economic policy increased the number of bankruptcies. Many firms were unable to service their loans and both the banks incurred huge loan losses. From the analysis done by these authors, both the banks dropped what they had practiced before the shadow of failures slowly crept in.

DnC practised rigid rules determining how credits were to be evaluated and how documentation was to be handled and collected. However, during the period of the expansion, profits became the key factor each branch has to achieve. Credit approval limits were increased and new types of leaders were needed- the ones who knew sales and management. The traditional informal system of control and diffusion of competence were undermined. The same scenario can be observed at the Christiania Bank. It had a tight and functioning system of credit decisions and credit control, and a working system for internal governance. The merger with the Andersens Bank in 1980 and the reorganisation later on- along with the huge credit expansion activity- caused a complete dissolution of these systems. The internal auditors and the external consultants pointed out the weakness in the internal control systems and the bank's deteriorating risk profile. When the stock of defaulted loan increased, the bank was in a weak position to absorb the bad debt. The authors concluded that the expansionist strategies contributed to the breakdown in the steering and control systems and it is the internal organisational effects are of great importance in explaining the banks' failure.

From the perspective of the regulators and academicians...

Barr and Siems (1996) develop two bank failure models for assessing a bank's management quality. Assessing a bank's management quality requires professional judgement of a bank's compliance to policies and procedures, aptitude for risk taking, development of strategic plans and the degree of involvement by the bank's officers and directors in making decisions. The quality of management has often being cited as the main reason for bank failure. Using data envelopment analysis (DEA), a management quality metric is established that is designed as a proxy for the "M" in the CAMEL rating. For failure prediction, the management quality metric is combined with the other four factors in the CAMEL rating, as well as a proxy for local economic condition. The authors model the bank as a decision making model that is concerned with transforming a set of different inputs into another set of outputs; using a series of simple ratios of individual outputs to individual inputs. The research reveals that significant statistical differences in average management quality existed up to three years prior to failure. The empirical results of the study confirm that the quality of management is crucial to a bank's survival. Scores of surviving institutions are statistically higher than the scores for failed banks. In addition, banks that are nearer failure are found to have low efficiency scores. Hence, to the authors, the use of these scores as a variable in a bank-failure prediction model seems promising. A more accurate bank-failure prediction model has four key implications to policy makers. One, banking regulators can deploy their examination resources more efficiently. An effective early warning model will detect and classify the weakest institution. Regulators can focus on those with greatest threat to the deposit insurance fund. A potential saving to the taxpayers is also one gain from the early identification of weak

banks. Second, the regulators can use the model to further understand the reasons of bank failure. With this armed, the regulators will be able to offer bankers on how to become more stable. Managers will also be alerted before more serious problems arise. A better bank-failure prediction model strengthens the entire examination process by identifying banks more objectively. Finally, this model can be used to develop a variable-rate deposit-insurance-premium structure.

By using the other four factors in the CAMEL rating in the management quality metric, this can be viewed as “double counting” for the CA_EL factors. In addition, the authors did not mention the basis for using six input variables. Understanding the immediate need to quantify the M factor in CAMEL rating, we cannot ignore the very fact that there is also a need to understand the qualitative side of the management of a bank. What kind of investors are they? Are they the risk takers, risk avoiders or risk neutrals?

Estrella, Park and Peristiani (2000) investigate on the use of capital ratios as predictors of bank failure. Capital ratios have long been a valuable tool for assessing the safety and soundness of banks. In the United States, minimum capital ratios have been required in the banking institutions since 1981. The authors examine the roles that capital ratios play in bank regulation and to be successful in any of these roles, capital ratios should bear a significant negative relationship to the risk of subsequent bank failure. The focus here is on three types of ratios namely risk weighted, leverage and gross revenue ratios. The denominator of the leverage ratio is the total asset of the bank. This measure assumes implicitly that the capital needs of the bank are directly proportional to its level of asset. Despite some flaws in this ratio, a clear advantage of the leverage ratio is simplicity and virtually costless to administer. Risk weighting effectively requires financial institutions to charge more capital for riskier assets, discouraging them holding risky assets. The authors argue that banking is exposed to more than just credit risk, such as interest rate risk, operational risk and reputational risk. It is also costly to administer risk-based capital requirements, especially both monitoring and reporting burdens may be heavy. Gross revenue includes off-balance sheet activities. Moreover, it contains crude “risk adjustment” in that riskier projects are likely to be undertaken only if they provide larger revenues. Thus, gross revenue may reflect the riskiness of bank assets better than total assets. From the analysis, the most complex ratio- the risk-weighted ratio- is the most effective predictor of failure over long time horizon. However, it does not consistently outperform the other two simpler ratios for the short-term period of less than two years. Therefore, the leverage and gross revenue ratios can play a crucial role as timely backstop thresholds that would trigger regulators. These ratios have the advantages of being less costly to calculate and report.

Cole and Gunther (2001) comment on the Financial Institutional Monitoring System (FIMS), which is significantly more accurate than previous off-site bank monitoring systems in identifying financially troubled banking institutions. There are two bank monitoring types here, on-site and off-site systems. The on-site system uses the CAMEL rating system and between on-site examinations, regulators monitor financial institutions using computer-based system. Before FMIS was introduced, the Federal Reserve System used the Uniform Bank Surveillance

Screen and CAEL System, which used the quarterly bank Call Report data. FIMS addresses the limitations of the previous off-sites bank-monitoring systems by providing two complementary surveillance scores based upon FIMS rating and FIMS risk rank. The FIMS rating represents an estimate, based upon the most recent Call Report data, of what a bank’s CAMEL rating would be if it were assigned during the current quarter. The FIMS risk rank represents an estimate, based upon the bank’s financial condition as measured by the most recent Call Report data, of the probability that a bank will fail during the subsequent two years. The accuracy of the FIMS in estimating the financial condition of banks as indicated both by subsequent on-site examination ratings and by subsequent failures is superior than of the Federal Reserve’s previous models. It provides objective and consistent measures of a bank’s financial conditions. In addition, it provides timely measure of the financial condition as well as it is more flexible. Explanatory variables can be added to or deleted from FIMS with minimal revision to the softwares or procedures. Lastly, it identifies deterioration or improvement in the banking industry within peer groups and systemwide.

In his award winning paper, Couto (2002) provides a very detail analysis on how to go about assessing the earning power of a bank using accounting and managerial information on past performances as an indicator of what may be expected in the future. According to the authors, three essential questions must be asked: What are the bank’s expected results considering the available information and a given set of business conditions? , How does it generate its income? and lastly , What is the sensitivity of its earnings to changes in interest rates, spreads, loan volumes , delinquency and other banking factors ? Earnings are an important indicator of financial health as well as an early indicator of weakness. The author warns that by simple assessment on the earnings records of the bank is insufficient for the bank supervisor to form a sound opinion about its earnings position. More often than not, earnings are influenced by extraordinary events and conditions, which distort results. It is also essential to know where the bank’s income comes from. There is a need to review from two aspects here, the sustainable and non-recurring sources of income to its earnings. The more income of a bank comes from sustainable core business sources, the more reliable and stable are its earnings and these should cover operating expenses, provisions and taxes, and to provide an adequate return on capital. The sensitivity of bank earnings to changes in relevant business conditions is an important part of risk assessment. In the author’s framework analysis, the income and expense items are classified into two categories: structural determinants of profitability and secondary determinants of profitability. Analyzing separately these items particularly subject to misrepresentation gives the analyst some insight into these manipulative maneuvers. Access to comprehensive, detailed and accurate managerial information on profitability enables the analyst to implement the framework to the fullest extent. The managerial information systems used by the bank to measure business unit, product and client profitability usually contain a wealth of relevant information. The earning of a bank may be categorized as strong, substandard and weak. This is perhaps an alternative to the conventional method of measuring the E factor in CAMELS rating system, which is more comprehensive.

Tripe (year unknown) makes a comparison between the New Zealand banks and other banks in the area of liquidity management. The author asks if liquidity is of no importance when discussing about a bank's risk management. As quoted by the author in his other works, liquidity risk for a bank is a risk that it will not have funds available, when requested, to meet a demand for repayment by a depositor, or to satisfy a demand for funding by a borrower who has a commitment by the bank to lend. There are two bases for approaching liquidity risk in a New Zealand banking environment. One is from the perspective of banks themselves and the other is from the disclosure regime that is the basis for banking supervision. It is noted that on a general note, New Zealand banks' stated liquidity policies lack details. The disclosure regime for New Zealand banks is supposed to provide a basis for public and expert assessment of banks' riskiness, including their liquidity risk. Taking the cue from textbook discussions on bank liquidity management, the author lists four approaches to measure and manage the bank liquidity risk in New Zealand, namely to measure the source of liquidity, peer group comparison, using liquidity index and looking at the financing gap where it is defined as average loans less average deposits, while a financing requirement is considered to be the same as borrowed funds, and is equivalent to the financing gap plus liquid assets. The only one constructive approach to measure the New Zealand banks' liquidity risk exposure is by peer group comparison. Where information needed is not publicly available or no realistic market is available for most New Zealand banks, the other approaches are not feasible. The specific ratios used for the peer group analysis are loans to total assets, wholesale deposits to total assets, retail deposits to total assets, loan commitments to total assets, liquid assets to total assets and loan commitments to liquid assets. From the analysis the author concludes that New Zealand banks appear to be less liquid than other countries' banks. This could possibly due to the fact that most New Zealand banks are part of large international banks and this leads the author to comment that liquidity in other countries is an adequate substitute for liquidity in New Zealand. Another reason the author says is the quarterly disclosure makes it harder for banks to hide problems and thus reducing the likelihood of shocks to the New Zealand banking system. Because of this, banks need to hold less liquidity. However, the author considers this unlikely and hopes to study further on this area.

Basu (2003) asks why do banks fail? A rather simple question but yet it is not an easy question to answer.

Bank failures are not uncommon and they are everywhere. The cost of bank failure can be high, and if this causes instability in the financial system, it can affect the nation's growth rate. The author argues here that the possibility of bank failure mainly arises from the fact that the bank is either cannot or does not pay adequate attention to the credit standard requirements. The financial sector operates on the presence of uncertainty. Here, the lender always need to introduce the credit standard in order to ensure that should the borrower default on a loan there remains an alternative to recoup the loan capital. However in reality there is no way there is a standard and uniform credit standard to protect the overall portfolio. There will be some with high credit risk and some zero. According to the author, liberalisation of the

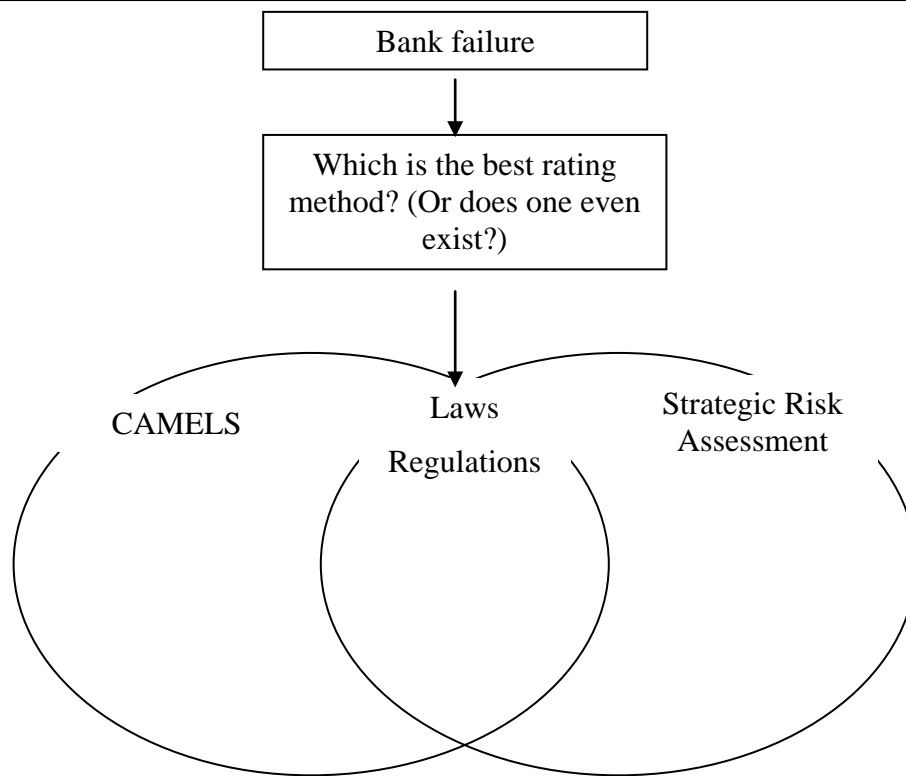
financial system will set the sector more fragile. The competition brought forward by the system will likely to focus on the large borrowers. This end of the market normally carries substantial credit risk. High exposure to credit risk may cause bank to collapse when the loans are defaulted. Here the author stresses the point that contagion effect is not the primary reason a bank fails, but rather contagion effect arises after the bad news is spreaded around, for example, some banks which are exposed to high credit risk found out that its big borrowers default on loans. Therefore there is a need to reach an international agreement in relation to the minimum level of credit standard that a borrower has to meet in order to obtain a loan. In the presence of ever changing risky level, it is not possible to calculate such risk in advance without any information about the future. As such, deposit insurance does not provide the appropriate shield to the bank. In addition, private deposit insurance does not have sufficient resources to meet the losses that occur in the face of a large scale run on banks. Maintenance of a minimum credit standard is therefore essential to protect the economy from the possibility of financial crisis. Having a minimum credit is just a number to guide the bank but there is more than what meets the eye here. One has to assess the risks the borrower faces. By being sensitive to the external forces and trends, there is always ways to mitigate one's losses.

David A. Nadler (2004) explores on the factors needed to build better boards. Recent scandals have exposed boards as too passive, too indulgent or flat-out oblivious to what goes on around them. Companies facing new governance requirements are scrambling to buttress financial reporting, overhaul board structure- whatever it takes to become compliant. Board building is a continuous improvement process through annual assessment process. By making routine the practice of rigorous introspection, boards ensure that they are fit to cope with existing situation and adapt to new ones. Boards must decide how they want to influence the management. They need to move beyond the letter of reform and begin to focus on its spirit. The deepest level of ongoing board involvement is the operating board. Here, they make key decisions that management implement. The board needs to identify the work they need to focus on. Next, there is a need to have the right mix of people. Sarbanes-Oxley prescribes a heavy dose of independent directors but according to the author, this is not the real issue. It is competencies relating to the company, its environment and its industry. Under growing pressure to perform, more boards are adopting formal assessment of individual directors, including peer review. The board needs to play a more active role during the board meeting where they need to collectively set the agenda with the management and decide how much time is needed by both sides. Board should also find ways to stay engaged with the company's issues outside the regular meetings as well. Having too much or too little information may put the board in a dark side of communication. It is the management's responsibility to ensure that boards get the right information at the right time and in the right format to perform their duties. Boards should also be allowed to collect information on their own, informally and without management supervision. Culture is an informal yet powerful norm that influence behaviour. Board cannot easily change their cultures. But as members start to act as a team, the culture will eventually change. The closer directors get to an engaged culture, the closer

they are to being the best boards possible. Board building contributes not only to performance but also to member satisfaction. The author is basically talking about the directors rolling up their sleeves and get dirty with the management. However, there is no mention in this article about how board

building process can eliminate the issues faced today. Is the key to better corporate governance really lying in the working relationships between the boards and the management?

VI. RESEARCH METHODOLOGY



The method used for researching this topic is to look at and to further understand some of the selected banking failures around the world today. Views from all perspectives are studied and analysed. There is definitely no one reason or even two to be pinned as the reason for banking crisis. From huge loan losses and influences from the economy, there are many reasons documented.

VII. DISCUSSION, ANALYSIS AND FINDINGS

From the literature review, while some failures are laced with political influences, huge loan losses are seen as the main theme for bank failures .

What are CAMELS ratings?

During an on-site bank exam, supervisors gather private information, such as details on problem loans, with which to evaluate a bank's financial condition and to monitor its compliance with laws and regulatory policies. A key product of such an exam is a supervisory rating of the bank's overall condition, commonly referred to as a CAMELS rating. The three federal banking supervisors (the Federal Reserve, the FDIC, and the OCC) use this rating system and other financial supervisory agencies to provide a convenient summary of bank conditions at the time of an exam.

The acronym "CAMEL" refers to the five components of a bank's condition that are assessed: Capital adequacy, Asset quality, Management, Earnings, and Liquidity. A sixth

component, a bank's Sensitivity to market risk, was added in 1997; hence the acronym was changed to CAMELS. Ratings are assigned for each component in addition to the overall rating of a bank's financial condition. The ratings are assigned on a scale from 1 to 5. Banks with ratings of 1 or 2 are considered to present few, if any, supervisory concerns, while banks with ratings of 3, 4, or 5 present moderate to extreme degrees of supervisory concern.

All exam materials are highly confidential, including the CAMELS. A bank's CAMELS rating is directly known only by the bank's senior management and the appropriate supervisory staff. CAMELS ratings are never released by supervisory agencies even on a lagged basis. While exam results are confidential, the public may infer such supervisory information on bank conditions based on subsequent bank actions or specific disclosures. Overall, the private supervisory information gathered during a bank exam is not disclosed to the public by supervisors, although studies show that it does filter into the financial markets

FDIC economists studied about 2,000 banks that appeared on the problem-bank list between 1990 and 2002. Each bank failed, recovered, merged, or remained a problem between six and 24 months from its first appearance on the list. The study found that the banks' asset quality provided the best clue to their fate, rather than capital levels, as many assume. (Bergman, 2005)

Bank examiners need to take more seriously the increased threat of failure posed by a single executive who wields too much power, the Federal Deposit Insurance Corp. Inspector General's Office wrote in a report. A common element observed in many of the failed bank material loss reviews is that a dominant bank official had a direct impact on the failure of the bank. The FDIC specifies two key dangers of "one-man" banks: the incapacitation of a preeminent manager could leave a major leadership void, and a corrupt executive who amasses too much power could commit misdeeds unchecked. (Bergman, 2004)

One, two many reasons of banking failures...

Could there be other reasons to bank failure other than contagion and inherent fragility?

According to Walter (2005), there is one possible other answer to the widespread failures before 1934 in the US. One possible explanation is that the banking industry was experiencing a shakeout, not unusual in industries those have previously enjoyed significant growth. The number of banks had grown briskly from the mid-1880s until 1921. Beginning in 1921, bank failures increased significantly, such that the number of banks began a precipitous decline that continued until 1934. There are reasons to think that the industry had become overbuilt and that macroeconomic shocks, in conjunction with overbuilding, produced a retrenchment in the industry that lasted for the next 12 years. Indeed, many authors point to the relationship between bank failures and weakening economic conditions. This author suggests that overbuilding could have made the banking industry all the more sensitive to macroeconomic shocks. A number of other industries provide examples of growth followed by shakeouts, the most recent of which is the telecom industry. As for the solution to contagion,

there is deposit insurance provided by the federal government, which put a stop to failures.

Lets look at the downfall of Barings, Britain's oldest merchant bank. Barings' collapse shocked the financial world not because of its size—with £5.9 billion of assets at the end of 1993 – but because of the strong position it had built in emerging markets even before they became fashionable, and because of the bank's illustrious 233-year-old history. How did a single trader, Nick Leeson, a 28-year old derivative trader, bring down such a giant ? Nobody was watching him. Nobody questioned the growth of Barings position at that time. The bank had allowed a dual capacity to Leeson, he was both the head of settlement and head of trading. Allowing a trader to settle his own deal makes it easier and simpler for him to hide the risks he is taking. In addition, there was a lack of risk-management unit to check on him. Leeson was trading at the Osaka Securities Exchange and the Singapore Monetary Exchange. It is sad to note that both exchanges failed to detect such abnormality.

It is clear in this case that lack of supervision and control is the fault here.

Where do we go from here?

A bank's traditional role is to be a depositor and a lender. However, as time passes, banks are looking into another source of income , which is more interesting and of course, risky. Capital markets have lured banks away from its tradition.

Risk. Risk. Risk.

Banking is all about seeking profits but without taking excessive risk. Managing risk is becoming the single most important issue for the regulators and financial institution. What are the risks a bank usually faces ?

Credit risk, interest rate risk, foreign rate risk, market risk, legal risk, operational risk and liquidity risk are among the common risks a bank would face. With the competition and deregulation activities going at a faster rate today, there is an increasing complexity of risks faced by banks.

With the operations going beyond the borders, we are now having talks cross-border mergers. There was an earlier discussion between the boss of Dexia, a Franco-Belgian bank and the boss of an Italian bank, Sanpaolo IMI as reported in November 2004 on a merger. However, both the banks' shareholders were upset with the news. Nevertheless, this is happening. And there will be more to come.

Is the banking industry equipped to face the surprises posed by an array of external events and trends?

A watchmaker today has to face stiff competition from a mobile telephone maker today. Why? There is a recent trend today seen by the top watchmakers of the world where sales are dropping as the task of time telling today has been slowly and quietly taken over by mobile telephones.

Strategic risk is being labeled as the biggest risk of all, regardless of one's industry. The key to surviving strategic risk is knowing how to assess and respond to them. What are the components of this new risk?

Industry margin squeeze, technology shift, brand erosion, one-of-a-kind competitor, customer priority shift, new project failure and market stagnation are identified.

The countermeasure proposed for the squeeze on margins is shifting the compete/collaborate ratio.

One very near cousin of collaborating is the merger activity. Around the world, we are seeing such a trend.

This indicates that the people in the banking industry acknowledge that profit margins are gradually diminishing and something must be quickly done to stop another crisis. Technology shift is one whereby a process which will become outdated. Today, 24-hour banking is no longer a unique feature a bank can offer but rather, it has become a standard. With e-banking, one is able to access from any corner of the world.

Funds will be transferred through the Internet and this will add to the risk a bank already poses.

Services and product quality are the two-prong issues related to brand erosion. A pioneer in the charge card industry, Amex almost lost its foothold in the game to Visa and several major banks, which began to steal the market share from Amex globally by challenging the consumer perceptions of the Amex brand. Amex bounced back with the reallocation of investments by reducing the transaction fees, speeding up payment, and increasing support for their advertising. On the flip side of the coin, the banks must be always prepared to continuously upgrade their services and product quality as the opposite may happen, too.

It is very important to scan the horizon constantly to identify and track one's competitor where the threat may come from new product or the ability to do business with lower cost structures. For the banking industry, while it pays to watch what your rivals are doing, it is also equally important to check and balance what the fiscal and monetary policies can affect one's capital structure.

A new product or service venture faces the chance that it will not work technically will fail to attract profitable customers and competitors may be quick to copy it. The best protection against this risk begins with a clear-eye assessment of a project's chance of success before it is launched. There are three approaches in achieving this task. These are smart sequencing which means undertaking the better understood, more controllable project first; developing access options where the best one is eventually picked and employing the stepping-stone method.

Will banks face market stagnation problem? If a bank is unable to find new sources of growth, it will definitely face this risk. Demand innovation is the answer to this issue.

It is evident that strategic risk can be overcome if one has the talent in adapting to changes in financial conditions. And unfortunately today it is not about having the latest gadgets or the latest hardwares.

It is all about having the right knowledge to be able to sense what is coming, it is about having the ability to look into the crystal ball...it is about having the right knowledge.

According to the management guru, Peter F. Drucker, the next society will be a knowledge society.

Knowledge will be its key resource, and knowledge workers will be the dominant group in its workforce. Its three main characteristics will be:

- Borderlessness, because knowledge travels even more effortlessly than money.
- Upward mobility, available to everyone through easily acquired formal education.
- The potential for failure as well as success. Anyone can acquire the "means of production", that is, the knowledge required for the job, but not everyone can win.

It is perhaps also a good idea to have besides the regulatory agencies to monitor the banks, the private companies to keep an eye on the banks as well. In the United States, there are six of such companies who analyze quarterly call report data to provide safety and soundness ratings to every bank in the country.(Milligan 2002). These firms are also listed in the Federal Reserve website. While their classification systems vary, most of them use analytical formulas that draw heavily on the same rating methodology used by the federal and state regulators. CAMELS rating are shared with individual banks only. Therefore, these firms have stepped in to fill the void. The firms' customers include individual consumers, insurance companies and agents. However, if these firms start to sell the ratings in form of wall certificates and window decal as noted in the article, this could be the start of a bad business. The good intention created earlier will be diminished. With firms trying to earn from such trade, there is a tendency to go easy on the ratings and eventually it will look like as if the banks are buying certificates to plaster on the walls to impress customers.

VIII. LIMITATIONS

There is always a great deal of pressure to find the perfect solution.

The role the regulators play in the 21st century is naturally more demanding as the capital markets expand globally. To say that we no longer need the bank regulators is not true. We need them even more now. And the ones who carry with them the values of which will protect the interest of innocent, small investors will be in demand. They are the diamonds in the rough.

Basel II, international banking policy relating to bank capital reserve requirements, requires banks measure credit risk more precisely and hold sufficient capital to protect the bank's stockholders from the credit risk in the portfolio. Basel II is based on the "three pillars": minimum capital requirement, supervisory review and market discipline. It imposes a discipline on banks according to the riskiness of the loan. By the start of 2007, Basel II is scheduled to replace the original Basel I adopted in 1998.

While the laws exist and regulations tighten, there is also a greater to enforce them. Another law passed or another rule introduced will not prevent another failure.

IX. CONCLUSION

Just as the sand dunes in the desert change patterns at every blow of the wind, perhaps there is a need to revise the CAMELS rating.

Is a good rating system good enough to predict bank failures? Maybe for now.

There is definitely a greater need today to look beyond the numbers published on the financial statements.

And, maybe, just maybe, prudent banking is what the industry needs right now.

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