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AN EMPIRICAL INVESTIGATION BETWEEN CULTURE, INVESTOR PROTECTION, INTERNATIONAL BANKING DISCLOSURES AND STOCK RETURNS

This thesis is submitted in fulfilment for the degree of Doctor of Philosophy

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ABSTRACT

There is a renewed interest in further exploring the significance of culture to the accounting disclosure model in view of a highly competitive global business environment. To date, there is no empirical research to investigate this issue with respect to a specific industry, namely banking. There are three main reasons for focusing only on the banking industry (Hooi 2004). First, it is considered to be the most important industry for the country's economic and financial stability. Moreover, the IASB has recognised its significance by issuing unique accounting standards i.e. IAS30, IAS32 and IAS39. Second, Saidenberg and Schuermann (2003) argue that with the scope and complexity of Basel II, it provides opportunities for researching issues through Pillar 3. Third, with national banking systems being non-homogenous, it is important to investigate the effects of national culture because prior research has argued that cultural differences have partly explained international differences in disclosure framework of accounting systems.

The purpose of this study is to apply and extend Gray's (1988) theoretical framework of national culture with respect to four research questions. First, to contribute to Gray's (1988) theory of cultural influence on international banking disclosures. Second, to investigate the possible significance of investor protection to the banking disclosure model. Third, to explore Gray's (1988) theory on the relationship of national culture to capital market research using banking returns. Fourth, to investigate the value relevance of investor protection and banking disclosures to the returns model. Seventeen developed and developing countries with a representative sample of 37 listed domestic commercial banks were examined in 2004.

For the disclosure model, the study finds that national culture is a significant factor in the banking industry. Individualism has been found as the primary cultural dimension for banking disclosures. Moreover, the explanatory power of the model significantly improves with the legal dimensions of common law and anti-director rights. The positive association between common law and banking disclosures is consistent with La Porta et al. (1998) which argue that common law countries with stronger investor protection are more transparent than civil law countries. However, there is a negative association between investor protection variable of anti-director rights with banking disclosures. This may suggest that investor protection does not encourage minority investors to enter the stock market specifically in the global banking industry. This situation may lead to a lack of demand for transparency through a smaller dispersion of ownership across the domestic banks.

For the returns model, the study finds that national culture is value relevant in the banking industry. Collectivism and power distance have been found to be the two primary cultural dimensions for banking returns. Moreover, the explanatory power of the model significantly improves with anti-director rights and banking disclosures. These results are (1) consistent with La Porta et al. (2002) which argue that investor protection increases firm valuation with respect to Tobin's Q and (2) international investors tend to support the Basel Committee's commitment in providing a more transparent framework by implementing Pillar 3 in the near future, starting with the Basel member countries. Finally, an interesting finding from the study is that firm size has a negative association with banking returns.

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STATEMENT OF AUTHORSHIP

I declare that the research described in this thesis is my own original work, and has never previously been submitted for a degree or diploma in any university. To the best of my knowledge, this thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

George Hooi

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CHAPTER 1 INTRODUCTION

In light of a highly competitive global business environment, there is a renewed interest in further exploring the significance of culture to the accounting disclosure model. To date, there is no empirical research to investigate this issue with respect to a specific industry, namely banking. Hence, one of the objectives of this study is to apply Gray's (1988) theoretical framework of national culture to the banking disclosure model. There are three main reasons for focusing only on the banking industry (Hooi 2004). First, it is considered to be the most important industry for the country's economic and financial stability. Moreover, the International Accounting Standards Board[1] (IASB) has recognised its significance by issuing unique accounting standards i.e. 'IAS30 Disclosures in the Financial Statements of Banks and Similar Financial Institutions', 'IAS32 Financial Instruments: Disclosure and Presentation' and 'IAS39 Financial Instruments: Recognition and Measurement'. Second, Saidenberg and Schuermann (2003) argue that with the scope and complexity of Basel II, it provides opportunities for researching issues through Pillar 3[2]. Third, with national banking systems being non-homogenous, it is important to investigate the effects of national culture because prior research has argued that cultural differences have partly explained international differences in disclosure framework of accounting systems.

1.1 Research Questions

The seminal study by Gray and Vint (1995) assesses the significance of the relationship between culture and accounting disclosures in an international context. This is an important issue because prior research has suggested that cultural differences may help to explain international differences in accounting systems and patterns of accounting

[1] Committed to developing, in the public interest, a single set of high quality, global accounting standards that require transparent and comparable information in general purpose financial statements.

development internationally (Chow and Wong-Boren 1987; Cooke and Wallace 1990; Gray 1985, 1988; Harrison 1993; Harrison and McKinnon 1986; Perera 1989). Specifically, Gray and Vint (1995) examine the disclosure element of Gray's theory (1988) which hypothesises a link between national culture and accounting systems. Using a comprehensive database of disclosure practices covering 25 countries, and applying linear regression analysis, the results support the hypothesis proposed by Gray (1988) that secrecy and its impact on disclosure behaviour is a function of the cultural values identified by Hofstede (1980). However, it was found that this relationship was more significant in respect of the values of uncertainty avoidance and individualism as compared to those of power distance and masculinity.

The purpose of this study is to apply and extend Gray's (1988) theoretical framework of national culture with respect to four research questions. First, to contribute to Gray's (1988) theory of cultural influence on international banking disclosures. Second, to explore the possible significance of investor protection to the banking disclosure model. Third, to explore Gray's (1988) theory on the relationship of national culture to capital market research using banking returns. Finally, to explore the value relevance of investor protection and banking disclosures to the returns model.

1.1.1 Culture and Banking Disclosures

The motivation for the first research question originates from the ongoing efforts to harmonise banking disclosure requirements through Pillar 3 and international accounting standards. However, Zarzeski (1996) argues that regulated international harmonisation may not be possible in a business world of cultural, legal, political and

[2] Pillar 3 (market discipline) refers to banking disclosures under the new capital adequacy requirements called Basel II

economic differences. Hence, this study attempts to make significant contributions to the Gray and Vint (1995) study by extending the model with respect to:

- The new inclusion of long-term orientation which is an important cultural dimension (Hofstede and Bond 1988)
- The focus of only one industry i.e. banking which is considered the most important industry for economic and financial stability as opposed to a cross-section of industries
- One possible improvement to the research methodology is the use of disclosure practice ratios as opposed to percentage bands. Prior statistical literature has argued that the use of ratios provide more significant results as compared to percentage bands.
- The time validity of data from the research survey which was conducted over twenty years ago (1982/83)

1.1.2 Investor Protection and Banking Disclosures

Recent studies have shown the significance of the country's legal origin to the accounting disclosure model (Jaggi and Low 2000; Hope 2003). Moreover, La Porta et al. (1998) argue that investor protection can indirectly influence accounting disclosures. Hence, the significant contribution of the second research question is to extend the original banking disclosure model from section 1.1.1 with the inclusion of the legal dimension of investor protection.

1.1.3 Culture and Returns

Seminal studies in capital market research by Ball and Brown (1968) and Beaver (1968) argue that earnings is a significant factor for firm valuation. However, there is no

empirical research on the relationship between culture and firm valuation. This study will argue that national culture has an indirect relationship with firm valuation using stock returns through Gray's (1988) theoretical framework. Hence, the significant contribution of the third research question is to explore the value relevance of national culture to the banking returns model.

1.1.4 Investor Protection, Banking Disclosures and Returns

The seminal study by La Porta et al. (2002) argue that investor protection is a significant factor for firm valuation with respect to Tobin's Q. This study can complement the work by La Porta et al. (2002) by investigating the value relevance of investor protection with respect to banking returns. Moreover, the complexity of banking disclosure requirements of Basel II that would be enforced in the near future to Basel member countries can be verified of its importance to global investors. Hence, the significant contribution of the fourth research question is to extend the original banking returns model from section 1.1.3 by investigating the value relevance of investor protection and banking disclosures.

1.2 Structure of the Study

This research will be a short window study in the year 2004 which involves 17 countries. The study will proceed as follows. Chapter 2 reviews the literature that provides the theoretical framework for culture and banking disclosures. Chapter 3 will address the hypotheses formulation, the research design and methodology and the detailed discussion of the empirical results for the first research question i.e. culture and banking disclosures. Chapter 4 reviews the literature that provides the theoretical framework for investor protection and value relevance. Chapter 5 will address the

hypotheses formulation, the research design and methodology and the detailed discussion of the empirical results for the rest of the three research questions. Chapter 6 concludes the study which will also address the practical contributions of the findings and the potential implications for future research. Finally, the study's 19 hypotheses formulation and their results are summarised in Figure 1 and Table 20 respectively in Chapter 6.

1.3 Summary

Cultural relevance to accounting disclosures continues to provide future research opportunities in a highly competitive global business environment. It is hoped that through this study would lead to a better understanding of the effects of national culture and investor protection to both the banking disclosure model and the banking returns model. The purpose of this study is to apply and extend Gray's (1988) theoretical framework of national culture with respect to four research questions. First, to contribute to Gray's (1988) theory of cultural influence on international banking disclosures. Second, to investigate the possible significance of investor protection to the banking disclosure model. Third, to explore Gray's (1988) theory on the relationship of national culture to capital market research using banking returns. Finally, to investigate the value relevance of investor protection and banking disclosures to the returns model.

CHAPTER 2 THE THEORETICAL FRAMEWORK FOR CULTURE, ACCOUNTING AND BANKING DISCLOSURES

Although, there are a limited number of performance studies that looked at the information content of market risk disclosures (Berkowitz and O'Brien 2002; Estrella et al. 2000; Hirtle 2003; Jorion 2002) and the significance of disclosures on cost of equity capital (Poshakwale and Courtis 2005), it is important to note that there has not been any relevant literature on banking disclosures that relates to the effects of culture.

This chapter will address theoretical issues concerning the classification of accounting systems (section 2.1), the Hofstede-Gray framework (sections 2.2 and 2.3) and the relevant banking disclosures for the study (section 2.4).

2.1 Approaches to Classification of Accounting Reporting Systems

While there is a growing awareness of the varying influences of environmental factors on accounting disclosure development in a global context, current research suggests that systematically different patterns of accounting behaviour may be applicable to various groups of countries (Radebaugh and Gray 2002). Research into the international classification of accounting systems has taken two main forms. In the deductive or judgemental approach, relevant environmental factors are identified and, by linking these to national accounting practices, international groupings or development patterns are proposed (Mueller 1967; Choi and Mueller 1984; Nobes 1983). In the inductive or empirical approach, individual accounting practices are analysed, development patterns or groupings are then identified, and finally explanations keyed to a variety of economic, social, political, and cultural factors are proposed (Nair and Frank 1980).

In regard to the accounting framework, the importance of culture and its historical roots is increasingly being recognised (Chanchani and Macgregor 1999). While there has been a lack of attention on the cultural dimension in the international classification literature, Harrison and McKinnon (1986) propose a methodological framework incorporating culture for analysing changes in corporate financial reporting regulation at the nation specific level. The use of this framework to assess the effects of culture on the form and functioning of accounting was demonstrated through an analysis of Japan's accounting system. Culture is considered an essential element in the framework for understanding how social systems change because cultural influences refers to the norms and values of such systems and the behaviour of groups in their interaction within and across systems (Perera 1989). Complementing this approach is the proposal by Gray (1988) which theorises that the cultural dimension can be used to explain and predict international differences in accounting systems and to identify patterns of international accounting developments. More specifically, Gray's motivation is to establish an association between accounting values and Hofstede's (1980) cultural values.

From Gray's analysis, further research is needed to test the extent to which culture influences the development of international accounting practices and whether the hypothesised country groupings can be empirically supported. The research findings to date do tend to support the significance of culture as an influential factor in the development of accounting. Salter and Niswander (1995:394) concluded from an empirical study of 29 countries that Gray's theory "provided a workable theory to explain cross-national differences in accounting structure and practice which is particularly strong in explaining different financial reporting practices". To explain professional and regulatory structures, they suggested that the inclusion of variables

such as the development of financial markets and levels of taxation enhances the explanatory power of the model. However, Baydoun and Willett (1995) who argue that culture influences the technology of accounting at various levels, lack empirical evidence to test the validity of their theory.

2.2 Structural Elements of Culture that Affect Business

Hofstede's (1980) pioneering research was aimed at detecting the structural elements of culture and particularly those that most strongly affect known behaviour in the work situations of organisations and institutions. Hofstede (2001:9) defined culture as "the collective programming of the mind which distinguishes the members of one human group from another". The word 'culture' is reserved for societies as a whole or nations, whereas 'subculture' is used for the level of an organisation, profession or family. While the degree of cultural integration varies between societies, most subcultures within a society share common characteristics with other subcultures.

Perhaps one of the most extensive cross-cultural surveys ever conducted, psychologists collected data about 'values' from employees of a multinational enterprise (IBM) located in more than 50 countries. Subsequent statistical analysis and reasoning revealed four underlying societal value dimensions i.e. collective values at the national level along which countries could be positioned. These dimensions are individualism, masculinity, power distance and uncertainty avoidance. Further research by Hofstede and Bond (1988) into Chinese values revealed the fifth dimension called long-term orientation. It is important to note that Hofstede (1980) has shown that countries could be grouped into cultural areas, on the basis of their scores on the four value dimensions, using cluster analysis and taking into account geographical and historical factors. The

five cultural dimensions identified by Hofstede (1980) and Hofstede and Bond (1988) are described and discussed individually in the following subsections.

2.2.1 Individualism

Individualism stands for the preference for a loosely knit social framework in society wherein individuals are supposed to take care of themselves and their immediate families only. Its opposite, collectivism, stands for the preference for a tightly knit social framework in which individuals expect relatives, clan or other in-group to look after them in exchange for unquestioning loyalty (the word 'collectivism' is not used here to describe any particular political system). The fundamental issue addressed by this dimension is the degree of interdependence a society maintains among individuals. It relates to people's self-concept of 'I' or 'We'.

2.2.2 Masculinity

Masculinity stands for the preference in society for achievement, heroism, assertiveness and material success. Its opposite, femininity, stands for the preference for relationships, modesty, caring for the weak and the quality of life. The fundamental issue addressed by this dimension is the way in which a society allocates social (as opposed to biological) roles to the sexes.

2.2.3 Power Distance

Power distance is the extent to which the members of a society accept that power in institutions and organisations is distributed unequally. This affects the behaviour of the less powerful as well as the more powerful members of society. People in large power distance societies accept a hierarchical order in which everybody has a place that needs

no further justification. People in small power distance societies strive for power equalisation and demand justification for power inequalities. The fundamental issue addressed by this dimension is how a society handles inequalities among people when they occur. This has obvious consequences for the way people build their institutions and organisations.

2.2.4 Uncertainty Avoidance

Uncertainty avoidance is the degree to which the members of society feel uncomfortable with uncertainty and ambiguity. This feeling leads to them to beliefs promising certainty and to maintain institutions protecting conformity. Strong uncertainty avoidance societies maintain rigid codes of belief and behaviour and are intolerant of deviant persons and ideas. Weak uncertainty avoidance societies maintain a more relaxed atmosphere in which practice counts more than principles and deviance is more easily tolerated. The fundamental issue addressed by this dimension is how a society reacts to the fact that time only runs one way and the future is unknown, and whether it tries to control the future or just lets it happen. Like power distance, uncertainty avoidance has consequences for the way people build their institutions and organisations.

2.2.5 Long-term Orientation

Long-term orientation stands for the fostering of virtues oriented towards future rewards, in particular, perseverance and thrift. In business, the focus is on building relationships and market position. Its opposite, short-term orientation stands for the fostering of virtues related to the past and present, in particular, respect for tradition, preservation of ‘face’ and fulfilling social obligations. In business, the focus is on short-

term results, i.e. the bottom line. The fundamental issue addressed by this dimension is how a society deals with practical ethics.

2.3 The Culture and Accounting Values Model

Gray (1988) is the pioneering paper in the development of the idea that culture might influence accounting practices. It attempted to bring together constructs from culture and accounting, relate them in a meaningful way and proposed four specific hypotheses. The origins of cultural values are found in a variety of factors affecting the ecological or physical environment. These societal values lead to the development and maintenance of institutions within a society including education, social and political systems and legal, financial and corporate structures. Once in place, these systems tend to reflect and reinforce the societal values. This structure tends to remain stable and changes at the national level are mainly due to major external acts of nature or of man. Examples of human intervention are international trade, investment, multi-national firms and colonisation. The external forces affect these societal values primarily via the environmental influences. The societal values in turn influence the institutional settings like the legal or educational system within the country.

Culture or societal values at the national level permeate through to occupational subcultures with varying degrees of integration. Gray incorporates accounting in this framework with accounting systems and practices shown as being influenced by, and in turn reinforcing societal values. Gray suggests that, in this way one may gain novel insights into the process of identifying and explaining the differences between accounting practices internationally. The value systems of accountants are seen to be derived from the societal values with specific reference to work related values (Gray 1988). Consequently, these accounting values in turn influence accounting systems

including the reporting and disclosure of information. Thus, depending on the varying degrees of external and ecological forces shaping societal values in different societies, different accounting systems are deemed to develop, reflect and reinforce these values.

External influences and different ecological factors thus, through varying societal values create different accounting values and systems in different parts of the world. This appears to be the basic argument supporting the contention that each culture should develop its own accounting systems to serve its own unique requirements (Jaggi 1975). Therefore, if societal value orientations are related to the development of accounting systems and such values permeate a nation's social system, then Gray (1988) suggests that there should be a close match between culture areas and patterns of accounting systems internationally. Having laid the foundations for cultural relevance to accounting, Gray links Hofstede (1980)'s dimensions of individualism, masculinity, power distance and uncertainty avoidance to accounting values. Gray identified four competing accounting values of professionalism versus statutory control, uniformity versus flexibility, conservatism versus optimism and secrecy versus transparency which are described and discussed individually in the following subsections.

Finally, Perera and Mathews (1990) argue that these accounting value dimensions identified by Gray (1988) impact on accounting systems in terms of the nature of regulation or authority and measurement and disclosure practices. In fact, the most influential cultural values at the accounting level were likely to be those of individualism and uncertainty avoidance, with power distance being important but less significant and masculinity only weakly associated.

2.3.1 Professionalism versus Statutory Control

Gray identified professionalism as a significant accounting value dimension because accountants adopt independent attitudes and exercise their individual professional judgement to varying degrees. A major controversy in many Western countries surrounds the issue of the extent to which the accounting profession should be subject to public regulation and statutory control or be permitted to retain control over accounting standards as a matter for private self-regulation (Taylor and Turley 1986). For example, professional bodies are firmly established in countries such as the US and the UK, less so in Continental Europe and to an even lesser extent in the less developed countries if at all (Holzer 1984; Nobes and Parker 1995). In the UK, a true and fair view of a company ‘s financial position relies heavily on the accountant’s professional judgement which is entirely different from the situation in France and Germany where the professional accountant’s role is reduced to implement rather prescriptive and detailed legal requirements (Gray and Coenenberg 1984). There is little disagreement about Professionalism being considered a significant construct in the accounting literature.

Gray argues that professionalism is most closely related to the societal values of individualism and uncertainty avoidance. A preference for independent professional judgement is consistent with a preference for a loosely knit social framework where there is more emphasis on individual decisions and respect for individual endeavour. This is consistent with weak uncertainty avoidance. Gray also argues that there is a link between professionalism and power distance in that professionalism is more likely to be accepted in a small power distance society where there is more concern for equal rights, where people at various power levels feel less threatened and more prepared to trust people, and where there is a belief in the need to justify the imposition of laws and codes. However, Gray did not observe any significant link of masculinity with

professionalism. Hence, Gray (1988:9) hypothesises that “the higher a country ranks in terms of individualism and the lower it ranks in terms of uncertainty avoidance and power distance then the more likely it is to rank highly in terms of professionalism”.

In summary, the accounting value reflects a preference for the exercise of individual professional judgement and the maintenance of professional self-regulation as opposed to compliance with prescriptive legal requirements and statutory control.

2.3.2 Uniformity versus Flexibility

Gray identified uniformity as a significant accounting value dimension because attitudes about uniformity, consistency or comparability are incorporated as a fundamental feature of accounting principles globally (Choi and Mueller 1984; Arpan and Radebaugh 1985; Nobes and Parker 1995). This accounting value is open to interpretations ranging from a relatively strict inter-company and inter-temporal Uniformity, to consistency within companies over time and, for some, to the flexibility of accounting practices to suit the circumstances of individual companies. In countries like France, a uniform accounting plan has long been in operation, together with the imposition of tax rules for measurement purposes, where there is a concern to facilitate national planning. In the US, on the other hand, there is more concern with inter-temporal consistency with a certain degree of inter-company comparability subject to a perceived need for flexibility (Choi and Mueller 1984; Holzer 1984; Arpan and Radebaugh 1985).

Gray argues that uniformity is linked most closely with the uncertainty avoidance and individualism dimensions. A preference for uniformity is consistent with a preference for strong uncertainty avoidance leading to a concern for law and order and rigid codes

of behaviour, a need for written rules and regulations, a respect for conformity and the search for ultimate, absolute truths and values. This value dimension is also consistent with a preference for collectivism, as opposed to individualism, with its tightly knit social framework, a belief in organisation and order, and the respect for group norms. Gray also argues for a link between uniformity and power distance in that uniformity is more easily facilitated in a large power-distance society where the imposition of laws and codes of a uniform character are more likely to be accepted. However, masculinity did not appear to have any significant link with uniformity. Hence, Gray (1988:10) hypothesises that "the higher a country ranks in terms of uncertainty avoidance and power distance and the lower it ranks in terms of individualism then the more likely it is to rank highly in terms of uniformity".

In summary, this value reflects a preference for the enforcement of uniform accounting practices between companies and for the consistent use of such practices over time, as opposed to flexibility in accordance with the perceived circumstances of individual firms.

2.3.3 Conservatism versus Optimism

Gray identified conservatism as a significant accounting value dimension because it is arguably the most ancient and probably the most pervasive principle of accounting valuation (Sterling 1967). Conservatism or prudence in asset measurement and the reporting of profits is perceived as a fundamental attitude of accountants globally. Moreover, conservatism varies according to country, ranging from a strongly conservative approach in Continental Europe to much less conservative attitudes of accountants in the US and the UK (Beeny 1975; 1976; Nobes 1984; Choi and Mueller 1984; Arpan and Radebaugh 1985). The differential impact of conservatism on

accounting measurement practices internationally has also been demonstrated empirically (Gray 1980; Choi and Mueller 1984). Gray suggests that such differences seem to be reinforced by the relative development of capital markets, the differing pressures of users' interests, and the influence of tax laws on accountants in the countries concerned.

Gray argues that conservatism can be linked most closely with Hofstede's dimension of uncertainty avoidance since a preference for more conservative measure of profits is consistent with strong uncertainty avoidance following from a concern with security and a perceived need to adopt a cautious approach to cope with the uncertainty of future events. Gray also argues that there is a moderate link between high levels of individualism and masculinity on one hand, and weak uncertainty avoidance on the other. An emphasis on individual achievement and performance is likely to foster a less conservative approach to measurement. As regards the power distance dimension, Gray did not theorise any significant link with conservatism. Hence, Gray (1988:10) hypothesises that "the higher a country ranks in terms of uncertainty avoidance and the lower it ranks in terms of individualism and masculinity, the more likely it is to rank highly in terms of conservatism".

In summary, this value reflects a preference for a cautious approach to measurement that enables one to cope with the uncertainty of future events as opposed to a more optimistic, laissez-faire, risk-taking approach.

2.3.4 Secrecy versus Transparency

Gray identified secrecy as a significant accounting value dimension that stems as much from management as it does from the accounting profession because of the influence of

management on the quality and quantity of information disclosed to relevant stakeholders. Moreover, secrecy or confidentiality in business relationships is nevertheless a fundamental accounting attitude (Arpan and Radebaugh 1985). Secrecy seems to be closely related to conservatism in that both values imply a cautious approach to corporate financial reporting in general. However, Gray argues that secrecy relates to the disclosure dimension and conservatism relates to the measurement dimension. Although, the extent of secrecy would seem to vary across countries with lower levels of disclosure, including instances of secret reserves, evident in Continental Europe compared to the US and UK (Barrett 1976; Choi and Mueller 1984; Arpan and Radebaugh 1985). These differences would also seem to be reinforced by the differential development of capital markets and the nature of share ownership which may provide incentives for the voluntary disclosure of information (Watts 1977).

Gray argues that secrecy can be linked most closely with uncertainty avoidance, power distance and individualism. A preference for secrecy is consistent with strong uncertainty avoidance following from a need to restrict information disclosures to avoid conflict and competition and to preserve security. A close relationship with power distance also seems likely in that high power distance societies are likely to be characterised by the restriction of information to preserve power inequalities.

A preference for collectivism rather than individualism is likely to be consistent with secrecy. The reason is because collectivism is more concerned for the interests of the group most closely and directly involved with the management and financing of the firm rather than with a wide range of external parties including potential investors and the public at large. Masculinity could be significant where a more assertive and success orientated society could exhibit a tendency towards more publicity. It is important to

note that Gray (1988) did not address the fifth cultural dimension of long-term orientation to accounting values.

In practice, the degree of secrecy or transparency would tend to vary across countries with resulting differences in the amount of information publicly disclosed. Hence, Gray (1988:11) hypothesises that "the higher a country ranks in terms of uncertainty avoidance and power distance and the lower it ranks in terms of individualism and masculinity then the more likely it is to rank highly in terms of secrecy".

In summary, this value reflects a preference for confidentiality and the disclosure of information about the business only to those who are most closely involved with its management and financing as opposed to a more transparent, open and publicly accountable approach.

2.3.5 The Gray and Vint Model

In order to test the secrecy hypothesis, it is necessary to operationalise the link between secrecy and accounting disclosure practices. The seminal study by Gray and Vint (1995) which test the secrecy hypothesis suggest that the greater (lesser) the number of items of financial and non-financial corporate information publicly disclosed by firms in a society then the higher (lower) the influence of transparency or the lower (higher) the influence of secrecy.

Using linear regression analysis, Gray and Vint (1995) findings tend to support Gray's (1988) hypothesis that secrecy and its impact on disclosure behaviour is a function of the four cultural values defined by Hofstede (1980) of individualism, masculinity,

power distance and uncertainty avoidance. The study of the Gray and Vint (1995) model can be summarised as follows:

- Accounting disclosure practices from a survey conducted in 1982/83 involving a cross-section of industries in 25 developed and developing countries
- The mean disclosure practice scores per country were computed from all firms where the arbitrary disclosure practice score per firm range from 0 – 6, representing seven percentage bands. In regards to the four cultural values, the paper used Hofstede's (1984) index values for the countries involved.
- The signs of the correlation between the four cultural values and the mean disclosure practice (transparency) are consistent with Gray's (1988) hypothesis i.e. positive correlation for individualism and masculinity and negative correlation for uncertainty avoidance and power distance. However, only individualism and uncertainty avoidance were found to be statistically significant.

2.4 Research issues on the Secrecy Hypothesis

Doupnik and Tsakumis (2004) provide a current critical review of the secrecy hypothesis. Besides Gray and Vint (1995), there are four other studies that test the secrecy hypothesis using multiple regression analysis. First, Zarzeski (1996) involves seven developed countries and the main focus is on the effects of three market forces, i.e. foreign sales/total sales, debt ratio and firm size on investor-oriented disclosures using disclosure rate. The findings suggest that all the explanatory variables have the expected sign except for power distance. The unexpected sign of power distance may be a function of its moderately high correlation with individualism. Zarzeski (1996:35) concludes that "international firms from secretive countries are likely to be motivated to disclosure higher levels of public information than they would at home, in order to show the quality of their operations".

Second, Wingate (1997) involves 39 developed and developing countries and found that all the national cultural values are significant except for power distance. Wingate (1997) concludes that culture areas offer greater explanatory power than the four cultural values for the disclosure index. Third, Jaggi and Low (2000) involve six developed countries and the main focus is on legal origin. The findings suggest that national culture has no significant influence on disclosure in common law countries. However, the influence of national culture in civil law countries is significant but not always in the expected sign. Finally, Hope (2003) involves 39 developed and developing countries and the main focus is to further test the findings by Jaggi and Low (2000). Hope (2003:239) concludes that "it is too early to write off culture as an explanatory variable for annual report disclosure levels".

There are two important issues on the research methodology that test the secrecy hypothesis. First, Hofstede (1980) suggests that national culture changes only very slowly over time. However, it is not clear whether the cultural indices accurately reflect accountants' values because they are derived from data provided by non-accountants i.e. IBM employees. Second, Gray (1988) suggests that societal values influence a society's institutions, which in turn influence accounting disclosures. In other words, the institutional consequences variable is a mediating variable. However, Jaggi and Low (2000) and Hope (2003) did not test the legal origin as a mediating variable.

2.5 Banking Disclosures

At present, disclosure requirements for financial institutions are set by the IASB and by the accounting standard-setting bodies of relevant countries. The Basel Committee which is an independent body on banking supervisory matters has decided to implement

additional banking disclosure requirements by 2006 to its member countries. The thirteen member countries include Belgium, Canada, France, Germany, Italy, Japan, Luxemburg, the Netherlands, Spain, Sweden, Switzerland, United Kingdom and the United States. These additional disclosure requirements are represented under Pillar 3 of the new capital adequacy framework called the New Basel Accord or commonly known as Basel II.

The purpose of Pillar 3 (market discipline) is to complement the minimum capital requirements (Pillar 1) and the supervisory review process (Pillar 2) of Basel II. The Committee aims to encourage market discipline by developing a set of disclosure requirements which will allow market participants to assess key elements of information on the scope of application, capital, risk exposures and risk assessment processes (NBCA 2003). Hence, the Committee believes that uniting the three elements of Basel II i.e. Pillars 1, 2 and 3 is essential for the effectiveness of Basel II to replace the current Basel I (1988) which focuses on credit risk.

The Committee has recognised the need for a Pillar 3 disclosure framework that does not conflict with requirements under accounting standards, which are broader in scope (BCBS 2003). The narrower focus of Pillar 3 is specific to the disclosure of bank capital adequacy. It is the Committee's intention to maintain an ongoing relationship with the accounting bodies and to monitor developments in this area to promote consistency between the disclosure frameworks. Accordingly, Pillar 3 disclosures will not be required to be audited by external auditors, unless otherwise required by accounting standard-setters, securities regulators or other authorities. Appendix A details the mandatory and voluntary banking disclosures relevant for this study.

The mandatory disclosures consist of the following International Accounting Standards (IAS 2003):

- IAS30: Disclosures in the Financial Statements of Banks and Similar Financial Institutions
- IAS32 Financial Instruments: Disclosure and Presentation
- IAS39 Financial Instruments: Recognition and Measurement
- equivalent or similar to local accounting standards

The voluntary disclosures will be represented by Pillar 3 - Market Discipline of Basel II which consist of the following categories (NBCA 2003):

- Capital Structure
- Capital Adequacy
- Credit Risk: General Disclosures for All Banks
- Credit Risk: Disclosures for Portfolios subject to the Standardised Approach and Supervisory Risk Weights in the Internal Risk Book (IRB) Approaches
- Credit Risk: Disclosures for Portfolios subject to IRB Approaches
- Equities: Disclosures for Banking Book Positions
- Credit Risk Mitigation: Disclosures for Standardised and IRB Approaches
- Securitisation: Disclosures for Standardised and IRB Approaches
- Market Risk: Disclosures for Banks Using the Standardised Approach
- Market Risk: Disclosures for Banks Using the Internal Models Approach (IMA) for Trading Portfolios
- Operational Risk
- Interest Rate Risk in the Banking Book (IRRBB)

2.6 Summary

The Hofstede-Gray framework provides a significant contribution towards a theory of cultural influence on the development of accounting systems internationally. The description of the five cultural dimensions identified by Hofstede (1980) and Hofstede and Bond (1988) are as follows:

- **Individualism versus Collectivism**. Individualism stands for the preference for a loosely knit social framework in society wherein individuals are supposed to take care of themselves and their immediate families only. Its opposite, collectivism, stands for the preference for a tightly knit social framework in which individuals expect relatives, clan or other in-group to look after them in exchange for unquestioning loyalty (the word 'collectivism' is not used here to describe any particular political system). The fundamental issue addressed by this dimension is the degree of interdependence a society maintains among individuals. It relates to people's self-concept of 'I' or 'We'.
- **Masculinity versus Femininity.** Masculinity stands for the preference in society for achievement, heroism, assertiveness and material success. Its opposite, femininity, stands for the preference for relationships, modesty, caring for the weak and the quality of life. The fundamental issue addressed by this dimension is the way in which a society allocates social (as opposed to biological) roles to the sexes.
- **Large versus Small Power Distance**. Power distance is the extent to which the members of a society accept that power in institutions and organisations is distributed unequally. This affects the behaviour of the less powerful as well as the more powerful members of society. People in large power distance societies accept a hierarchical order in which everybody has a place that needs no further justification. People in small power distance societies strive for power equalisation and demand justification for power inequalities. The fundamental issue addressed by

this dimension is how a society handles inequalities among people when they occur. This has obvious consequences for the way people build their institutions and organisations.

- **Strong versus Weak Uncertainty Avoidance.** Uncertainty avoidance is the degree to which the members of society feel uncomfortable with uncertainty and ambiguity. This feeling leads to them to beliefs promising certainty and to maintain institutions protecting conformity. Strong uncertainty avoidance societies maintain rigid codes of belief and behaviour and are intolerant of deviant persons and ideas. Weak uncertainty avoidance societies maintain a more relaxed atmosphere in which practice counts more than principles and deviance is more easily tolerated. The fundamental issue addressed by this dimension is how a society reacts to the fact that time only runs one way and the future is unknown, and whether it tries to control the future or just lets it happen. Like power distance, uncertainty avoidance has consequences for the way people build their institutions and organisations.
- **Short-term versus Long-term Orientation.** Short-term orientation stands for the fostering of virtues related to the past and present, in particular, respect for tradition, preservation of ‘face’ and fulfilling social obligations. In business, the focus is on short-term results, i.e. the bottom line. Its opposite, long-term orientation stands for the fostering of virtues oriented towards future rewards, in particular, perseverance and thrift. In business, the focus is on building relationships and market position. The fundamental issue addressed by this dimension is how a society deals with practical ethics.

Hofstede’s (1980) four cultural value dimensions i.e. individualism, masculinity, power distance and uncertainty avoidance are linked to four accounting value dimensions identified by Gray (1985, 1988) as:

- **Professionalism versus Statutory Control.** This value reflects a preference for the exercise of individual professional judgement and the maintenance of professional self-regulation as opposed to compliance with prescriptive legal requirements and statutory control.
- **Uniformity versus Flexibility.** This value reflects a preference for the enforcement of uniform accounting practices between companies and for the consistent use of such practices over time, as opposed to flexibility in accordance with the perceived circumstances of individual firms.
- **Conservatism versus Optimism.** This value reflects a preference for a cautious approach to measurement that enables one to cope with the uncertainty of future events as opposed to a more optimistic, laissez-faire, risk-taking approach.
- **Secrecy versus Transparency.** This value reflects a preference for confidentiality and the disclosure of information about the business only to those who are most closely involved with its management and financing as opposed to a more transparent, open and publicly accountable approach.

The findings of the seminal study by Gray and Vint (1995) which tested Gray (1988)'s secrecy hypothesis can be summarised as follows:

- Accounting disclosure practices from a survey conducted in 1982/83 involving a cross-section of industries in 25 developed and developing countries
- The mean disclosure practice scores per country were computed from all firms where the arbitrary disclosure practice score per firm range from 0 – 6, representing seven percentage bands. In regards to the four cultural values, the paper used Hofstede's (1984) index values for the countries involved.
- The signs of the correlation between the four cultural values and the mean disclosure practice (transparency) are consistent with Gray's (1988) hypothesis i.e.

positive correlation for individualism and masculinity and negative correlation for uncertainty avoidance and power distance. However, only individualism and uncertainty avoidance were found to be statistically significant.

Currently, the relevant banking disclosures for the study consist of the following mandatory international accounting standards (IAS):

- IAS30: Disclosures in the Financial Statements of Banks and Similar Financial Institutions
- IAS32 Financial Instruments: Disclosure and Presentation
- IAS39 Financial Instruments: Recognition and Measurement
- equivalent or similar to local accounting standards

Since Pillar 3 of Basel II will only be enforced from 2006, it would be regarded at this stage as voluntary disclosures. Pillar 3 consists of the following categories of qualitative and quantitative disclosures:

- Capital Structure
- Capital Adequacy
- Credit Risk: General Disclosures for All Banks
- Credit Risk: Disclosures for Portfolios subject to the Standardised Approach and Supervisory Risk Weights in the Internal Risk Book (IRB) Approaches
- Credit Risk: Disclosures for Portfolios subject to IRB Approaches
- Equities: Disclosures for Banking Book Positions
- Credit Risk Mitigation: Disclosures for Standardised and IRB Approaches
- Securitisation: Disclosures for Standardised and IRB Approaches
- Market Risk: Disclosures for Banks Using the Standardised Approach

- Market Risk: Disclosures for Banks Using the Internal Models Approach (IMA) for Trading Portfolios
- Operational Risk
- Interest Rate Risk in the Banking Book (IRRBB)

CHAPTER 3 AN EMPIRICAL ANALYSIS OF THE RELATIONS BETWEEN CULTURE AND BANKING DISCLOSURES

This chapter will address issues concerning the formulation of relevant hypotheses for culture and banking disclosures (section 3.1), its research design and methodology (section 3.2) and the detailed discussion of its empirical results (section 3.3).

3.1 Hypotheses Formulation for Culture and Banking Disclosures

One of the objectives of this study is to establish an association between Hofstede's (1980) and Hofstede and Bond's (1988) cultural values and banking disclosures. Gray's (1988) secrecy/transparency dimension links Hofstede's (1980) four cultural values of individualism, masculinity, power distance and uncertainty avoidance to accounting disclosures. Since disclosures is a proxy for transparency, it is reasonable to extend the characteristics of accounting disclosures to banking disclosures because the basic difference between them is that banking disclosures is specific to the banking industry (Hooi 2007).

Gray (1988) argues that individualism is likely to be consistent with transparency. This is because individualism is more concerned for a wide range of external parties including potential investors and the public at large rather than the interests of the group most closely and directly involved with the management and financing of the firm.

> H1: There is a significant positive relationship between individualism and banking disclosures

Gray (1988) argues that masculinity is likely to be consistent with transparency. This is because masculinity suggests an assertive and success orientated society which could exhibit a tendency towards more publicity.

H2: There is a significant positive relationship between masculinity and banking disclosures

Gray (1988) argues that power distance is likely to be consistent with secrecy. This is because power distance is compatible with the restriction of information to preserve power inequalities.

H3: There is a significant negative relationship between power distance and banking disclosures

Gray (1988) argues that uncertainty avoidance is likely to be consistent with secrecy. This is because a society of uncertainty avoidance needs to restrict information disclosure so as to avoid possible conflicts, restrict the uncertainties of competition and preserve security.

H4: There is a significant negative relationship between uncertainty avoidance and banking disclosures

The fifth cultural value of long-term orientation should be considered as part of Gray's (1988) secrecy/transparency dimension. This is because the characteristics of building relationships and market position in business suggest that long-term orientation is a

significant cultural dimension for corporate governance in a highly competitive global market. Hence, long-term orientation is likely to be consistent with transparency.

H5: There is a significant positive relationship between long-term orientation and banking disclosures

3.2 Variables and Procedures

The selection of countries was determined by the data availability of the five cultural values of individualism, masculinity, power distance, uncertainty avoidance and long-term orientation from Hofstede's (2001) cultural indices. Consequently, a maximum of 19 countries were available. Since the cultural values are at national level, it is only appropriate to correspond with domestic banks i.e. parent banks which are incorporated in the countries of origin. For this study, listed commercial banks were used to represent the banking industry. Basic information such as total assets was sourced from the Compustat database to obtain the current population of listed domestic commercial banks per country. Total assets is important for determining the sample of bank(s) per country as it will be discussed in detail shortly. New Zealand and Nigeria have to be excluded from the 19 countries due to the non-existence of listed domestic commercial banks. Hence, this research will focus on 17 developed and developing countries to represent an international study. Table 1 presents Hofstede's (2001) national cultural indices of individualism, masculinity, power distance, uncertainty avoidance and long-term orientation for the study.

Table 1

Hofstede's (2001) National Cultural Indices for the Study

Country	IDV	MAS	PDI	UAI	LTO
Australia	90	61	36	51	31
Brazil	38	49	69	76	65
Canada	80	52	39	48	23
Germany	67	66	35	65	31
Hong Kong	25	57	68	29	96
India	48	56	77	40	61
Japan	46	95	54	92	80
Netherlands	80	14	38	53	44
Pakistan	14	50	55	70	0
Philippines	32	64	94	44	19
Singapore	20	48	74	8	48
South Korea	18	39	60	85	75
Sweden	71	5	31	29	33
Taiwan	17	45	58	69	87
Thailand	20	34	64	64	56
United Kingdom	89	66	35	35	25
United States	91	62	40	46	29
World average	43	50	55	64	45

IDV = Individualism, MAS = Masculinity
PDI = Power Distance, UAI = Uncertainty Avoidance
LTO = Long-term Orientation
Note: A higher value indicates more of that particular cultural dimension

A sampling technique was required to ensure that the study has a representative sample of banks per country. Obviously, the smallest sample per country is 1. The sampling technique involves the comparison between the country's population ratio (Pop ratio column in Table 2) with the country's sample ratio (Sample ratio in Table 2). The sample ratio must be equivalent or similar to the population ratio in order to achieve the above. From Table 2, the required total sample for the 17 countries is 37 banks and it represents 11% of the total population of 335 banks.

Table 2

Determination of Required Bank Sample for the Study

Country	Pop	Pop ratio	Sample	Sample ratio
Australia	10	3%	1	3%
Brazil	5	1%	1	3%
Canada[#]	8	2%	1	3%
Germany[#]	30	9%	3	8%
Hong Kong	11	3%	1	3%
India	10	3%	1	3%
Japan[#]	92	27%	10	27%
Netherlands[#]	2	1%	1	3%
Pakistan	8	2%	1	3%
Philippines	14	4%	1	3%
Singapore	5	1%	1	3%
South Korea	8	2%	1	3%
Sweden[#]	4	1%	1	3%
Taiwan	15	4%	1	3%
Thailand	12	4%	1	3%
United Kingdom[#]	15	4%	1	3%
United States[#]	86	26%	10	27%
Total banks	335[*]	100%	37	100%

Basel member
*Original total population was 348. Excluded 5 banks for no basic information and 8 banks which became subsidiaries

The selection of banks depends on the country's sample size. If the country's sample requires only one bank as in the case of most countries, the bank was selected when it had the smallest absolute deviation to the population mean of total assets. It is important that the country's population should be sorted by total assets, using the ascending order option before making the selection. If the country's sample requires more than one bank as in the case of Germany, Japan and the United States; the procedure was to use the number of required banks in the country to stratify the country's population. Similarly, the country's population should be sorted by total assets, using the ascending order option before stratifying. For each stratification, the stratification mean of total assets was computed. Each bank per stratum was selected when it had the smallest absolute deviation to the stratification mean of total assets.

To confirm the selection of bank(s) per country depends on the availability of audited annual reports which is the primary source of banking disclosures. 2004 annual reports were used for the following two reasons. First, 2004 was considered the most stable year for the 17 countries in the new millennium. Second, it was less challenging to obtain English version annual reports from bank websites especially for developing countries. However, the most current annual report for Philippines was 2003. It is acceptable to correspond Hofstede's (2001) cultural indices with disclosure years of 2003-04 because national culture is relatively more stable in the long run compared to firm culture. If the annual report was not available for the selected bank, the second preferred bank will be used based on the next smallest absolute deviation of either the population mean or the stratification mean of total assets. If required, this process will be repeated until the total sample of banks have their corresponding annual reports.

From each annual report, specific information relating to banking requirements was extracted to represent total banking disclosures. The total banking disclosures consisted of mandatory, voluntary and other relevant disclosures which were based on the 2001 Basel survey checklist. There are two reasons why this study used the 2001 Basel survey checklist. First, it is a benchmark to compare and contrast banking disclosures among the 17 countries, to reveal differences, if any, in disclosure practices. Second, the Basel Committee has conducted annual surveys since 1999 among its 13 member countries to identify current trends of disclosure practices of internationally active banks and to encourage these to further enhance transparency especially with the implementation of Basel II in the near future. It is important to note that 2001 was the latest year that Basel surveyed its member countries.

In fact, Cheah and Kean (2004) used the same Basel survey checklist to compare the disclosure levels in 2001 between Malaysian commercial banks and the internationally active banks of Basel's member countries. Table 3 shows the 12 categories of the 2001 Basel survey checklist which includes some key aspects of the mandatory disclosures, a summary of the voluntary disclosures and other relevant disclosures to represent a wider perspective of banking requirements. For example, some IAS30 issues are addressed under category 11 and some IAS32 issues are addressed under categories 8 and 9.

Appendix B details the Basel survey checklist of 104 items of quantitative and qualitative disclosures. This study used equal weighting for all the banking disclosure items because Zarzeski (1996) have shown that cross-sectional ordinary least squares (OLS) regression between equal weighting of firm disclosures and national culture have extremely similar results to those with unequal weighting of disclosure items. The disclosure rate per bank is defined by the number of compliance as a percentage of the total 104 disclosure items.

Table 3

2001 Basel Survey Checklist

No	Basel survey categories	Disclosure items
1	Capital Structure	14
2	Capital Adequacy	7
3	Market Risk Internal Modeling	16
4	Internal and External Ratings	4
5	Credit Risk Modeling	5
6	Securitisation Activities	8
7	Asset Quality	13
8	Credit Derivatives and Other Credit Enhancements	6
9	Derivatives (other than Credit Derivatives)	9
10	Geographic and Business Line Diversification	10
11	Accounting and Presentation Policies	7
12	Other Risks	5
	Total	104

Cross-sectional OLS regression analysis will be applied to the total sample of banks. The basic banking disclosure model with respect to Hofstede's (1980) four cultural values of individualism, masculinity, power distance and uncertainty avoidance is given as:

$$DSC_b = a_0 + a_1IDV_c + a_2MAS_c + a_3PDI_c + a_4UAI_c + \varepsilon \quad (1)$$

DSC = disclosure IDV = individualism

MAS = masculinity PDI = power distance

UAI = uncertainty avoidance

$a_1 – a_4$ = coefficients of the explanatory variables

Subscripts: b = bank level, c = country level

A stepwise regression will be applied to determine the significance of the new cultural value of long-term orientation. Hence, the extended banking disclosure model is given as:

$$DSC_b = a_0 + a_1IDV_c + a_2MAS_c + a_3PDI_c + a_4UAI_c + a_5LTO_c + \varepsilon \quad (2)$$

DSC = disclosure IDV = individualism

MAS = masculinity PDI = power distance

UAI = uncertainty avoidance LTO = long-term orientation

$a_1 – a_5$ = coefficients of the explanatory variables

Subscripts: b = bank level, c = country level

Finally, there are two interesting differences in methodology used between Gray and Vint (1995) and Zarzeski (1996). First, Gray and Vint (1995) used countries to regress as opposed to firms. Second, Gray and Vint (1995) used disclosure bands as opposed to disclosure rates. For this study, the second difference is more relevant. Hence, this study will regress with respect to both disclosure types to determine whether there is a significant difference in terms of the model's explanatory power. Table 4 presents the Gray and Vint (1995)'s converted band values ranging from 0 - 6.

Table 4

Conversion from Disclosure Rate to Disclosure Band*

DSC Rate	DSC Band
91 - 100%	6
76 - 90%	5
51 - 75%	4
26 - 50%	3
11 - 25%	2
1 - 10%	1
0	0

*adapted from Gray and Vint (1995)

3.3 Results and Interpretation for Culture and Banking Disclosures

3.3.1 Descriptive Analysis

Table 5 presents the descriptive statistics for the total sample of banks. On average, the banking disclosure level across all countries was moderate of 48%. From Table 6, the Pearson correlation coefficients show very little to moderate multicollinearity across the explanatory variables. However, individualism and power distance show moderately high collinearity at –0.78, which is expected because each of these cultural variables defines a person's relationship in society. Individualism defines a person's relationship with other people in a society, while power distance defines a person's relationship with powerful institutions in a society.

Table 5

Banking Disclosure Model Descriptive Statistics

All banks (n=37)	**Mean**	**Std Dev**	**Min**	**Max**
DSC	0.48	0.05	0.05	0.87
IDV	59.81	4.41	14.00	91.00
MAS	65.08	3.72	5.00	95.00
PDI	49.81	2.32	31.00	94.00
UAI	61.51	3.82	8.00	92.00
LTO	49.89	4.29	0.00	96.00

Table 6

Correlation Matrix of Explanatory Variables for all Banks

	IDV	MAS	PDI	UAI	LTO
IDV	1.0000				
MAS	-0.0827	1.0000			
PDI	-0.7774	0.1146	1.0000		
UAI	-0.3996	0.6540	0.1229	1.0000	
LTO	-0.5934	0.4628	0.4420	0.6244	1.0000

3.3.2 Banking Disclosure Model

From Table 7, equation 1 using disclosure rate is significant at 1% with an adjusted R^2 of 45.4%. By comparison, the explanatory power is similar to the findings in Gray and Vint (1995) of 45% with a cross-section of industries. Even though the estimated coefficients for masculinity and power distance are consistent with the expected relationships but they are found to be non-significant at 5%. However, applying simple regression to individualism and power distance, the study found that they are significant at 1%; a table is not presented. This confirms that the moderately high correlation between individualism and power distance have resulted them in being non-significant as a model. Therefore, uncertainty avoidance is the only cultural value which is found to be significant (at 1%). Equation 2 using disclosure rate with the inclusion of the new cultural value, long-term orientation has a slightly higher adjusted R^2 of 46.2% which is

significant at 1%. Long-term orientation is not found to be significant at 5% despite the fact that its estimated coefficient is consistent with expected relationship. Similarly to equation 1, uncertainty avoidance is the only cultural value which is found to be significant (at 1%) for equation 2.

Table 7

Regression Results using Disclosure Rate

Panel A: **Equation 1**
Total Sample (n=37)

Variable	**Expected Relationship**	**Estimated Coefficient**	**t-Stat**	**p-value**
Intercept	NA	1.3406	3.3234	0.0022
IDV	+ve	-0.0008	-0.2940	0.7706
MAS	+ve	0.0011	0.4660	0.6444
PDI	-ve	-0.0080	-1.7889	0.0831
UAI	-ve	-0.0078	-3.0813	0.0042
F-Stat: 8.49	F-value: 0.0000			
Adjusted R^2:	0.4541			

Panel B: **Equation 2**
Total Sample (n=37)

Variable	**Expected Relationship**	**Estimated Coefficient**	**t-Stat**	**p-value**
Intercept	NA	1.2759	3.1591	0.0035
IDV	+ve	0.0001	0.0440	0.9652
MAS	+ve	0.0005	0.2081	0.8365
PDI	-ve	-0.0083	-1.8747	0.0703
UAI	-ve	-0.0087	-3.3182	0.0023
LTO	+ve	0.0024	1.2192	0.2320
F-Stat: 7.19	F-value: 0.0001			
Adjusted R^2:	0.4623			

From Table 8, equation 1 using disclosure band is significant at 1% with an adjusted R^2 of 46.5% and equation 2 with the inclusion of the new cultural value, long-term orientation has a slightly lower adjusted R^2 of 46.0% which is significant at 1%. By comparison, the use of disclosure bands tend to yield slightly better results in terms of

explanatory power to disclosure rates for equation 1 only as they can be shown from Tables 7 and 8.

Table 8

Regression Results using Disclosure Band

Panel A: **Equation 1**
Total Sample (n=37)

Variable	Expected Relationship	Estimated Coefficient	t-Stat	p-value
Intercept	NA	6.1841	3.3064	0.0023
IDV	+ve	0.0033	0.2709	0.7882
MAS	+ve	0.0078	0.7363	0.4669
PDI	-ve	-0.0328	-1.5833	0.1232
UAI	-ve	-0.0335	-2.8530	0.0075
F-Stat: 8.83	F-value: 0.0000			
Adjusted R^2:	0.4651			

Panel B: **Equation 2**
Total Sample (n=37)

Variable	Expected Relationship	Estimated Coefficient	t-Stat	p-value
Intercept	NA	5.9717	3.1516	0.0036
IDV	+ve	0.0062	0.4899	0.6277
MAS	+ve	0.0059	0.5417	0.5919
PDI	-ve	-0.0339	-1.6265	0.1140
UAI	-ve	-0.0363	-2.9654	0.0058
LTO	+ve	0.0078	0.8524	0.4005
F-Stat: 7.15	F-value: 0.0002			
Adjusted R^2:	0.4605			

After conducting a closer examination of the data values for long-term orientation in Hofstede's (2001), it was discovered that the top 40% of the total 23 countries which have high long-term orientation values are eastern countries. For example, China has the highest value of 118 whereas developed countries such as the United States and the United Kingdom have significantly low values of 29 and 25 respectively. This suggests that the data is likely to be bias towards eastern countries. In other words, the

characteristics of long-term orientation may not correspond to countries that genuinely possess them because successful firms in some developed countries would reasonably be expected to have made strategic decisions to foster strong business relationships and market position. This situation may lead to spurious regression results for long-term orientation. Therefore, this study would like to recommend the exclusion of long-term orientation value from the cultural framework for disclosures due to bias data. Hence, Gray's (1988) hypothesis on the secrecy/transparency dimension should be maintained with respect to the original four cultural values of individualism, masculinity, power distance and uncertainty avoidance.

As far as the hypotheses formulation is concerned, the regression results shown in Tables 7 and 8 suggest that hypotheses H1 to H5 should be rejected except for H4 (Hooi 2007). Hence, there is a significant negative relationship between uncertainty avoidance and banking disclosures. In other words, uncertainty avoidance has been found to be the primary cultural dimension for banking disclosures.

3.4 Summary

This chapter has addressed the issues concerning the formulation of 5 hypotheses for culture and banking disclosures, its research design and methodology and the detailed discussion of its empirical results. The theoretical framework established in chapter 2 provides the foundation for developing the following hypotheses: H1 states that there is a significant positive relationship between individualism and banking disclosures. H2 states that there is a significant positive relationship between masculinity and banking disclosures. H3 states that there is a significant negative relationship between power distance and banking disclosures. H4 states that there is a significant negative relationship between uncertainty avoidance and banking disclosures. H5 states that there

is a significant positive relationship between long-term orientation and banking disclosures.

The findings only support H4 which states there is a significant negative relationship between uncertainty avoidance and banking disclosures. In other words, uncertainty avoidance has been found to be the primary cultural dimension for banking disclosures. Moreover, the explanatory power for banking disclosures is found to be similar to the findings in Gray and Vint (1995) with a cross-section of industries. The study also found that the use of disclosure bands tend to yield slightly better results in terms of explanatory power compared to disclosure rates for model 1 only i.e. with respect to individualism, masculinity, power distance and uncertainty avoidance. Finally, this study recommends that long-term orientation should not be used as part of the cultural framework for disclosures due to bias data. Hence, Gray's (1988) hypothesis on the secrecy/transparency dimension should be maintained with respect to the original four cultural values of individualism, masculinity, power distance and uncertainty avoidance.

CHAPTER 4 THE THEORETICAL FRAMEWORK FOR INVESTOR PROTECTION AND VALUE RELEVANCE

This chapter will address the theoretical issues concerning investor protection (section 4.1) and capital market research for the study (section 4.2).

4.1 Investor Protection

This study will use the seminal work of La Porta et al. (1997, 1998) to better understand the role of investor protection in accounting disclosures and firm valuation. La Porta et al. (1997, 1998) argue that a country's legal system, in particular commercial law is not built from scratch but rather relies on borrowed ideas from the available set of legal traditions. Legal traditions have been broadly categorised as either common law or civil law, with civil law countries further divide into three families of legal systems i.e. German, French and Scandinavian (David and Brierly 1985; Reynolds and Flores 1989). Common law originated in Great Britain and is widely adopted in former English colonies including the United States, Canada, Australia and New Zealand. It is derived from decisions made by judges to resolve specific disputes. These rulings are often incorporated into legislations. In contrast, civil or code law which is a derivative of the Roman law tradition, relies on statutes and comprehensive legal codes. Unlike common law, these rules are developed by legal scholars and enacted into commercial code law.

In a series of studies, La Porta et al. examine whether there are underlying differences across these legal traditions in laws and enforcement of laws that protect investors, and whether these differences can explain the development and structure of financial markets across countries. La Porta et al. (1998) document that legal tradition is an important factor in determining the nature and enforcement of investor protection laws across countries, and that the civil/common law dichotomy is highly correlated with

these laws. La Porta et al. (1998) find that common law countries have the strongest investor protection and French civil law countries the weakest protection, with German and Scandinavian civil law countries located in the middle.

Some of the documented features of stronger investor protection laws include the one-share one-vote rule, the solicitation of proxies by mail (making it easier to mount challenges to directors), cumulative voting or proportional representation of minorities on boards of directors, mechanisms to legally safeguard minority investors, preemptive rights to new share issues (to maintain proportional holdings), and the ability to call an extraordinary shareholders' meeting. Stronger enforcement is evaluated by examining factors including the overall efficiency of the legal system, adherence to the rule of law, risk of asset expropriation, repudiation of contracts by governments, and the corruption of government. It is important to note that this study will focus on both the legislation of investor protection and law enforcement to extend the research by La Porta et al. (2002).

La Porta et al. (1998) demonstrate that investor protection laws are generally stronger in common law countries compared to civil law countries. La Porta et al. (1997, 1999, 2000a, 2000b) also document that legal tradition affects financial markets, with stronger investor protection laws resulting in more developed financial markets. Hence, investor protection is a significant factor in contributing to the development and well being of financial markets, mainly through the enforcement of shareholders' rights. For example, Johnson et al. (2000) show that corporate governance measurement, particularly investor protection explain the extent of exchange rate depreciation and financial market decline during the Asian financial crisis better than standard macroeconomic variables. It follows that more developed financial markets lead to greater external financing opportunities, and to more widespread (less concentrated) ownership structures which

create potential agency problems. However, timely and transparent accounting information can resolve agency problems based on information asymmetry between the firm and outside investors (Ball et al. 2000). Therefore, greater public disclosure of accrual-based accounting is part of the corporate governance system in countries with strong investor protection laws to meet the need for timely and transparent accounting information.

Levine (1999) and La Porta et al. (1997) find a positive relation between investor protection and various measures of financial market development, and La Porta et al. (2000b) find that secure investor rights encourage the growth and development of financial markets. At a micro or firm-specific level, a number of studies also show that higher level of investor protection leads to better firm performance. For example, La Porta et al. (2002) find a positive relation between investor protection and Tobin's Q, suggesting that better investor protection would lead to a higher firm value, thereby encouraging innovation by making it easier to raise capital for value-creating projects. Consistent with the above arguments, La Porta et al. (2002) find higher valuations in common law than in civil law countries. Bhattacharya and Daouk (2002) also document a reduction of cost of equity after enforcement (instead of enactment) of insider trading rules across a broad cross-section of countries.

A recent study by Brockman and Chung (2003) investigated the relationship between investor protection (in terms of Hong Kong and China based shares) and firm liquidity. They argue that firm liquidity is important for the development of financial markets because lower liquidity costs are found to reduce firms' cost of capital and thus increase their market values. This makes it easier for firms to raise funds and implement value-creating projects, which further promote firm performance (La Porta et al. 2002). Using

a sample of Hong Kong and China based firms with different levels of investor protection in the same financial market, they find that firms under a regime with stronger investor protection exhibit narrower bid-ask spreads and thicker depths, leading the authors to conclude that “diminished firm liquidity is one of the economic costs of poor investor protection” (Brockman and Chung 2003:924).

4.2 Capital Market Research

In general, investors are concerned with the relationship between current share prices and future returns because it is important to determine whether their investments offer competitive risk-adjusted future expected returns (Brailsford and Heaney 1998). Accounting information may provide valuable information about individual shares. It is known that new information changes investor expectations about future benefits and risk, which in turn results in price reactions. If change in price i.e. share returns can be used as a proxy for a change in expectations, then it is possible to examine the reaction of prices to announcements of accounting information.

Share price is a function of future cash flows given by the stream of future dividends. This relationship is based on the classical firm valuation model by Miller and Modigliani (1961) which states that a firm’s share price equals to the present value of the expected future benefits accruing to its equity-holders. Hence, it is important to determine the core accounting information item that influence future dividend paying capability. If future dividends are linked to future earnings and current earnings is an indicator of future earnings, then current earnings can be used to predict future dividends (Brailsford and Heaney 1998). Research has shown that earnings changes are correlated with dividend changes (Fama and Babiak 1968; Watts 1973). Furthermore, earnings have a direct link to dividends through the pay-out ratio since by law,

dividends can only be paid from earnings. This suggests that earnings is the core accounting information item in the relationship with share price.

It has been argued that cash flow rather than earnings, is the fundamental accounting information item for the following reasons (Easton 1996). First, it is difficult to compare earnings across firms because of the different methods used to compute accrual items; and second, managers can manipulate reported earnings on an accrual basis. Based on empirical evidence however, investors have historically reacted to earnings, and not cash flows. For example, it has been determined from a sample of more than 27,000 US observations that the explanatory power from a regression of returns on earnings is always substantially higher than the explanatory power from a regression of returns on cash flows for return intervals of between one and four years (Dechow 1994). Also, a much smaller sample of Australian data of 107 firms over a ten-year period found similar results (Cotter 1995). Finally, given that share prices reflect expectations about future earnings before its announcement, it seems reasonable to correlate the share returns with unexpected earnings (new information) rather than reported earnings (Lev 1989).

4.2.1 Seminal Studies of Returns-Earnings Relation

4.2.1.1 Ball and Brown (1968)

The event study by Ball and Brown (1968) has been recognised as the greatest contribution to capital markets research. It was the first study to examine the association between annual earnings and share prices in terms of unexpected changes in earnings per share (EPS) with monthly share returns (in the US over the period 1957 – 1965). The main purpose of the study was to provide empirical evidence to ascertain whether

accounting numbers conveyed information about a firm's financial performance (Brown 1989). Two earnings expectation models were employed in the study (Ball and Brown 1968). First, the change in EPS was expected to be the average change in EPS of all firms for that period. Second, a random walk model was used where earnings this period was assumed to be at the earnings level from last period.

The main results from their study are as follows (Brown 1994). First, the stock market reacts in the same direction as the unexpected earnings indicating that a positive association exists. Second, there is anticipation of the earnings as evidenced by the price run-up before the announcement. Third, almost 90% of annual price movement occurred before the announcement, indicating that earnings explain only part of the annual price change. Finally, the results are robust to variations in the earnings variable and the earnings expectation model.

4.2.1.2 Beaver (1968)

Another event study on the returns-earnings relation was by Beaver (1968). Unlike Ball and Brown (1968), Beaver avoided assessing whether earnings report good or bad news (Brown 1994). This means that with the absence of information about investors' expectations, he made no prediction of either the direction of the price change or by how much change in response to an earnings signal. Instead, he simply predicted that price changes were likely to be greater around the time of an earnings announcement than when no information was released. Thus, whereas Ball and Brown predicted the direction of the price change which is conditional upon whether an earnings report was deemed good or bad news, Beaver predicted that the absolute value of the price change would be greater than at other times.

Beaver's study made three major contributions to the capital markets literature (Brown 1994): firstly, a finer partitioning of time, using more sensitive data i.e. weekly stock market data; secondly, a narrower time window of eight weeks prior and eight weeks after to the earnings announcements; and finally, the introduction of stock price volatility and volume of shares traded as two additional measures of market behaviour in response to an accounting signal. Most importantly, it was observed that trading volume is up to 30% higher in the earnings announcement than any other week in the year. A weakness in Beaver's experimental design can be offset to some extent by ensuring that the experimental window is free of other newsworthy events that would cause share prices to change and thereby distort the results (Brown 1994).

4.2.2 Components of Unexpected Earnings

Unexpected earnings can be viewed as having permanent and transitory components (Miller and Rock 1985). Persistent or permanent earnings are the inherent level of sustainable or maintainable earnings of a firm. On the other hand, transitory earnings arise through specific events in specific time periods and are not expected to influence the future dividend paying capability of the firm. By their very nature, transitory earnings have a temporary and non-recurring effect. An example of transitory earnings is extraordinary items. After controlling for earnings and dividends, a study on the price responsiveness to announcements of extraordinary items in Australia found no evidence of abnormal or excess returns (Easton 1990).

The stock market is only interested in current earnings that reflect future sustainable earnings (Beaver and Morse 1978). This means that permanent earnings is the component that is value relevant and has a positive association with share returns (Kormendi and Lipe 1987; Easton and Zmijewski 1989). Thus, prices should react to

changes in permanent earnings. Furthermore, in an efficient market, what is already known is impounded into the share price. Hence, prices should react only to unexpected changes in permanent earnings.

As mentioned before that a firm's share price equals to the present value of the expected future benefits accruing to its equity-holders (classical firm valuation model by Miller and Modigliani 1961). The value of the expected future benefits is proxied by discounting unexpected earnings. The discounting of the unexpected earnings involves the product of unexpected earnings and an earnings capitalisation factor. The main determinants of this capitalisation factor are the firm's cost of capital[3], leverage[4] and growth opportunities. It has been argued that price reaction in response to an earnings innovation[5] is due to the changed expectations regarding the present value of the firm's unexpected earnings (Kormendi and Lipe 1987).

Investors will value the firm's share price more highly if there is a perception that unexpected earnings will persist into the future compared to an earnings innovation if it is perceived to be transitory (Hodgson and Stevenson-Clarke 2000). It would be reasonable to predict that the presence of transitory earnings will have an impact on the market to an earnings innovation. As a consequence, a typical linear returns-earnings regression model will result in lower explanatory power of earnings and ERC.

A time-series random walk model is used so that the earnings change can be a proxy for unexpected earnings. However, the random walk model assumes that the earnings innovations are permanent and will persist into the future (Hodgson and Stevenson-Clarke 2000). Moreover, the presence of transitory earnings introduces measurement

[3] Discount rate which captures business risk
[4] Financial risk. For example: Debt/Asset ratio

error into the independent variable because when earnings are transitory, the earnings level is a better proxy for unexpected earnings (Easton and Harris 1991). For example, if last year's earnings were purely transitory, then this year's expected earnings level is zero. This means that the current earnings level is always unexpected earnings (Ali and Zarowin 1992).

There is empirical evidence to show that both earnings level and earnings change have explanatory power for share returns (Easton and Harris 1991). It was found that the incremental explanatory power and ERC was only small when the earnings level was included for firms with predominantly permanent earnings in the previous period (Ali and Zarowin 1992). In contrast, the incremental ERC was greater when the earnings level was included for firms with predominantly transitory earnings in the previous period. These results suggest that in a random walk model, measurement error may be partially responsible for the low explanatory power for share returns and ERC in previous studies (Hodgson and Stevenson-Clarke 2000).

4.2.3 Explanatory Power of Earnings (R^2)

While the evidence for an association between returns and earnings is statistically compelling, the explanatory power of earnings (R^2) in a typical study has been weak, i.e. less than 10% (Easton and Harris 1991). There are three main determinants which have a positive influence on R^2, namely quality of earnings, return window and relation stability (Lev 1989).

[5] New information in earnings

4.2.3.1 Quality of Earnings

The information content of currently reported earnings regarding future outcomes of shares is low but the quality can vary considerably across firms (Lev 1989). This poor explanatory power of earnings is due to first, the arbitrariness of many accounting measurement and valuation techniques; second, the lag in reporting earnings; and third, the incidence of earnings manipulation by managers (Lev 1989). Moreover, research on the quality of earnings and other financial information is a clear departure from current research which largely takes earnings numbers at face value. It has been suggested that the quality of earnings can be inferred from its components (Hawkins and Pearlman 1978). For example, a list of characteristics of high quality earnings include prudent accounting policies, stable and predictable earnings, cash convertible sales, timely audit reports and income sourced from recurring items.

4.2.3.2 Return Window

It is reasonable to suggest that a very narrow window i.e. few days will assure that the price change around the announcement is mostly due to the earnings information. Expanding the return window provides an opportunity to examine the sensitivity of the returns-earnings regression results to errors in estimating expected earnings (Lev 1989). The reason is that as the earnings announcement date approaches, there is usually an intensive flow of earnings related information to the market. However, the extent of the returns-earnings association does not increase considerably when the return window is expanded to one year or even two years (Collins and Kothari 1989). Also, the low R^2 value is still valid for a reverse regression. In general, most returns-earnings studies regress returns on unexpected earnings. It can be argued that unexpected earnings understate the usefulness of earnings since expected earnings are also useful to investors

(Lev 1989). Finally, earnings can explain up to 60% of the variation in share prices if the time period of examination is extended to ten years (Easton et al. 1992).

4.2.3.3 Relation Stability

If earnings are to be useful in predicting future returns, the relationship should exhibit a certain degree of stability over time. Unfortunately, the evidence indicates that considerable instability over time exists in the returns-earnings relation (Lev 1989). The possible reasons for this instability include changes in the firms' cost of capital, business cycle stages, changes in macroeconomic indicators such as Gross Domestic Product (GDP) figures and inflation rates, and changes in the firms' production-investment decisions (Lev 1989). Hence, these reasons further contribute to the low R^2 as evidenced in the literature.

4.2.4 Earnings Response Coefficient (ERC)

The literature for capital markets research shows that earnings is the core accounting information item in the relationship with share price. According to Cho and Jung (1991), returns-earnings studies have progressed considerably with the use of the earnings response coefficient (ERC) as a measure of the responsiveness of prices to earnings. The ERC is defined as the effect of a dollar of unexpected earnings in EPS on share returns. The main determinants for ERCs are cost of capital, leverage and growth opportunities where the ERC is lower with a higher cost of capital; lower with higher leverage and higher with higher expected growth (Miller and Modigliani 1961). These determinants are linked to an influential factor of ERC called firm size.

4.2.4.1 Firm Size

There are two implications of the differential information hypothesis (Atiase 1980). First, is the timing hypothesis in which the share returns related to accounting earnings occur earlier for large firms than for small firms. Second, is the magnitude hypothesis in which the magnitude of those share returns is inversely related to firm size (Freeman 1987). The empirical findings for the differential information hypothesis addressed the outcome uncertainty concept where there is an inverse relationship between share returns and firm size (Atiase 1985). In general, small firms have higher credibility in financial disclosure than large firms which is partly due to lower leverage (Hodgson and Stevenson-Clarke 2000). Hence, there is less incentive for small firms to engage in earnings manipulation and ultimately, to avoid debt covenant violation.

However, contrary to the differential information hypothesis, some researchers found that there is a significantly positive relationship between ERC and firm size regardless of the return window (Chaney and Jeter 1991, 1992). One possible reason for this is that it could be incorrect for them to use linear modelling rather than non-linear modelling because “a linear model heavily weights high-magnitude, low-value transitory earnings at the expense of low-magnitude, high-value permanent earnings” (Freeman and Tse 1992:190). Hence, a linear regression model may provide large firms higher ERC values compared to small firms. If however, the unexpected earnings are deemed to be purely permanent, then using a linear model is appropriate to capture the returns-earnings relation. Finally, with respect to the studies by Atiase (1985) and Freeman (1987), they used the magnitude of cumulative average share returns instead of ERCs.

It can be shown that small firms tend to have higher transitory components in earnings than large firms (Freeman et al. 1988; Parkash 1996). Moreover, earnings of small firms

tend to be more volatile and less predictable than earnings of large firms which result in a higher absolute magnitude of unexpected earnings (Collins et al. 1987; Freeman 1987). This means that small firms generally have higher ERC values compared to large firms if the correct modelling is being used i.e. non-linear modelling (Hodgson and Stevenson-Clarke 2000). There are two main reasons for this. First, the higher outcome uncertainty for small firms due to lack of information prior to earnings announcement i.e. timing hypothesis; and second, lower leverage for small firms.

4.2.4.2 Information Content of Cash Flows

The relation between share returns, earnings and cash flows is important because it addresses the value relevance issue. The strength of the relationship is dependent on the existence of transitory items and it is also related to firm size (Hodgson and Stevenson-Clarke 2000). Early empirical evidence was inconclusive regarding the incremental (beyond earnings) information content of cash flows. For example, it was found that US cash flow data contained price relevant information beyond that contained in earnings (Bowen et al. 1987). On the other hand, a study in the UK failed to establish any incremental content in cash flows (Board and Day 1989). Moreover, it has been argued that earnings is a better predictor of future cash flows than current cash flows (Ball and Brown 1968; Beaver and Dukes 1972). An important methodological improvement was suggested whereby using a non-linear returns-cash flows regression model can substantially increase the explanatory power when compared to a linear regression model (Ali and Pope 1995).

It has been demonstrated that the incremental information content of cash flows from operations increases as the transitory nature of earnings increases (Cheng et al. 1996). This implicitly suggests that information content of cash flows should be greater for

small firms than large firms. However, cash flows have been shown to provide comparatively greater incremental information content for large firms than for small firms which may be explained partly by the income smoothing and signalling literature (Hodgson and Stevenson-Clarke 2000). For example, managers may deliberately smooth reported earnings to remove transitory earnings and signal greater earnings persistence in the earnings stream (Ronen and Sadan 1981; Trueman and Titman 1988). Correlations between earnings and cash flows are lower for large firms compared to small firms which is consistent with large firms engaging in more income smoothing. Hence, small firms' earnings, being less smoothed, are more highly correlated with cash flows, so that the incremental value relevance of cash flows (beyond earnings) is lower.

There are three possible reasons why small firms' cash flows may be more highly correlated with earnings (Hodgson and Stevenson-Clarke 2000); first, small firms tend to trade more on a cash basis; second, they have less assets as security; and third, they are more closely monitored by lenders with respect to liquidity. Hence, the amount of new information (not already contained in earnings) is less for small firms. In other words, cash flows act more like a substitute for small firms' earnings rather than an incremental information variable. Finally, the inconsistent results of Cheng et al. (1996) compared to the literature can be attributed to the use of linear modelling.

4.3 Summary

The seminal work by La Porta et al. (1997, 1998) suggest that a country's legal system, in particular commercial law is not built from scratch but rather relies on borrowed ideas from the available set of legal traditions. Legal traditions have been broadly categorised as either common law or civil law, with civil law countries further divide into three families of legal systems i.e. German, French and Scandinavian. La Porta et

al. (1998) find that common law countries have the strongest investor protection and French civil law countries the weakest protection, with German and Scandinavian civil law countries located in the middle. La Porta et al. (1997, 1999, 2000a, 2000b) also document that legal tradition affects financial markets, with stronger investor protection laws resulting in more developed financial markets. Hence, investor protection is a significant factor in contributing to the development and well being of financial markets, mainly through the enforcement of shareholders' rights. Finally, La Porta et al. (2002) find higher firm valuations in common law than in civil law countries suggesting that better investor protection would lead to a higher firm value, thereby encouraging innovation by making it easier to raise capital for value-creating projects.

Share returns can be used as a proxy for a change in investor expectations to investigate the reaction of prices to financial statements. Prior empirical research has determined that reported earnings is the core accounting information item. Since share prices reflect expectations about future earnings, it is reasonable to correlate share returns with unexpected earnings (new information) rather than with expected earnings. Unexpected earnings consist of permanent and transitory components. Persistent earnings are the inherent level of maintainable earnings of a firm. In contrast, transitory earnings are not expected to influence the future dividend paying capability of the firm because permanent earnings is the only component that is value relevant and has a positive association with share returns.The seminal studies by Ball and Brown (1968) and Beaver (1968) were the first studies to examine the association between annual earnings and share prices which suggest that a positive returns-earnings relation should be expected for this study.

The explanatory power in a typical returns-earnings relation study has been weak, i.e. less than 10%. The main determinants which have a positive influence on R^2 are quality of earnings, return window and relation stability. If however, the return window is extended to ten years, the R^2 can increase up to 60%. There are two implications of the differential information hypothesis. First, share returns related to accounting earnings occur earlier for large firms than for small firms and second, the magnitude of those share returns is inversely related to firm size. This means that small firms generally have higher ERCs compared to large firms if the correct modelling is being used i.e. non-linear modelling. Cash flows provide comparatively greater incremental information content for large firms than for small firms which may be explained partly by the income smoothing and signalling literature. Hence, correlations between earnings and cash flows are lower for large firms compared to small firms which is consistent with large firms engaging in more income smoothing. Consequently, cash flows act more like a substitute for small firms' earnings rather than an incremental information variable.

CHAPTER 5 AN EMPIRICAL ANALYSIS OF THE RELATIONS BETWEEN CULTURE, INVESTOR PROTECTION, BANKING DISCLOSURES and VALUE RELEVANCE

This chapter will address issues concerning the formulation of relevant hypotheses for culture, investor protection, banking disclosures and value relevance (sections 5.1, 5.2 and 5.3), the research design and methodology (section 5.4) and the detailed discussion of the empirical results (sections 5.5, 5.6, 5.7 and 5.8).

5.1 Hypotheses Formulation for Investor Protection and Banking Disclosures

It has been argued that the country's legal origin is an important factor in accounting disclosures (Gray 1988). More importantly, the country's legal system can either directly or indirectly influence accounting disclosures. Obviously, accounting disclosures represent the formalisation of the direct legal influence of the Corporations Act. La Porta et al. (1998) argue that investor protection can indirectly influence accounting disclosures. This is because strong legal protection for investors would encourage minority investors to enter the stock market and consequently, there will be a greater dispersion of ownership. It is from the dispersion of ownership that demands transparency.

Prior research has found that common law countries are associated with higher accounting disclosures than civil law countries (Jaggi and Low 2000; Hope 2003). This is partly due to the fact that common law countries have stronger investor protection laws and more developed financial markets than civil law countries (La Porta et al. 1997, 1998). Moreover, Ball et al. (2000) argue that firms in civil law countries tend to operate by small number of agents and there is close relationship between agents and principals, which does not encourage transparency. Extending the characteristics of

accounting disclosures to banking disclosures from section 3.1, this study will hypothesise:

H6: There is a significant positive relationship between common law countries and banking disclosures

Hooi (2007) suggests that investor protection may complement Gray's (1988) secrecy/transparency dimension. With the two components of investor protection i.e. investor protection laws represented by anti-director rights and law enforcement (La Porta et al. 1998), this study will hypothesise:

H7: There is a significant positive relationship between anti-director rights and banking disclosures

H8: There is a significant positive relationship between law enforcement and banking disclosures

The market forces of firm size and leverage are important for the disclosure model (Zarzeski 1996; Jaggi and Low 2000; Hope 2003). Prior research suggests that firm size has a positive relationship to accounting disclosures. There are two reasons for this. First, larger firms are likely to have a wider dispersion of ownership which would demand greater transparency. Second, larger firms are generally more established and they can afford to provide greater transparency which is important for investors. Hence, this study will hypothesise:

H9: There is a significant positive relationship between firm size and banking disclosures

Finally, some prior research suggests that leverage has a positive relationship to accounting disclosures (Chow and Wong-Boren 1987). It has been argued that firms that engage in public debt as opposed to private debt are required by creditors to disclosure more public information to ensure that firms are not violating debt convenants. In the absence of reliable information on the nature of banks' debts, this study will hypothesise:

H10: There is a significant positive relationship between leverage and banking disclosures

5.2 Hypotheses Formulation for Culture and Returns

Prior research in capital markets suggests that earnings has a positive relationship to stock returns due to the fact that earnings is the core accounting information item for firm valuation (Ball and Brown 1968; Beaver 1968). In other words, earnings is a significant factor for firm performance. Hence, this study will hypothesise:

H11: There is a significant positive relationship between earnings and banking returns

To date, there is no empirical research on the relationship between national culture and firm valuation. This study will argue that national culture has an indirect relationship with firm performance using stock returns through Gray's (1988) secrecy/transparency dimension. Since earnings announcement in annual reports form part of accounting

disclosures and transparency is part of corporate governance, it is reasonable to suggest that investors demand good governance. Therefore, it is likely that national culture which is a significant factor for accounting disclosures will be value relevant.

For consistency, this study will use Gray's (1988) secrecy/transparency arguments to support the hypotheses formulation that link national culture with banking returns. Moreover, this chapter will exclude the long-term orientation cultural dimension due to bias data as reported in section 3.3.2. Hence, one of the objectives of this study is to establish an association between Hofstede's (1980) four cultural values of individualism, masculinity, power distance and uncertainty avoidance with stock returns in a banking environment. Hooi (2007) suggests that capital market may complement Gray's (1988) secrecy/transparency dimension.

This study proposes that individualism is likely to be consistent with higher returns. This is because individualism is more concerned for a wide range of external parties including potential investors and the public at large rather than the interests of the group most closely and directly involved with the management and financing of the firm. Hence, individualism will likely lead to higher investor expectation on investment returns.

> H12: There is a significant positive relationship between individualism and banking returns

This study proposes that that masculinity is likely to be consistent with higher returns. This is because masculinity suggests an assertive and success orientated society which

could exhibit a tendency towards more publicity. Hence, masculinity will likely lead to higher investor expectation on investment returns.

H13: There is a significant positive relationship between masculinity and banking returns

This study proposes that power distance is likely to be consistent with lower returns. This is because power distance is compatible with the restriction of information to preserve power inequalities. Hence, power distance will likely lead to lower investor expectation on investment returns.

H14: There is a significant negative relationship between power distance and banking returns

This study proposes that uncertainty avoidance is likely to be consistent with lower returns. This is because a society of uncertainty avoidance needs to restrict information disclosure so as to avoid possible conflicts, restrict the uncertainties of competition and preserve security. Hence, uncertainty avoidance will likely lead to lower investor expectation on investment returns.

H15: There is a significant negative relationship between uncertainty avoidance and banking returns

5.3 Hypotheses Formulation for Investor Protection, Banking Disclosures and Returns

La Porta et al. (2002) argue that investor protection has a positive relationship to firm valuation using Tobin's Q. In other words, investors demand good governance through

investor protection. Moreover, La Porta et al. (1997, 1998) found that common law countries have stronger investor protection laws and more developed financial markets than civil law countries. Hence, it is reasonable to suggest that common law countries will generate higher returns on investment compared to civil law countries.

H16: There is a significant positive relationship between common law countries and banking returns

With the two components of investor protection i.e. investor protection laws represented by anti-director rights and law enforcement (La Porta et al. 1998), this study will hypothesise:

H17: There is a significant positive relationship between anti-director rights and banking returns

H18: There is a significant positive relationship between law enforcement and banking returns

Since accounting disclosures is consistent to earnings as favourable disclosure items in Gray's (1988) secrecy/transparency dimension, it is likely that banking disclosures will be value relevant. Hence, this study will hypothesise:

H19: There is a significant positive relationship between banking disclosures and banking returns

5.4 Variables and Procedures

The research design issues in this chapter represent an extension to section 3.2. It is important to note that from herewith, the disclosure variable will be proxied by disclosure band. The results in section 3.3 provide two reasons for this. First, disclosure band has been found to yield slightly better explanatory power compared to disclosure rate with respect to equation 1 (p.49). Second, equation 1 is more significant than equation 2 (p.49) since the data for long-term orientation cultural dimension has been found to be bias. The relevant issues to be addressed are the declaration of the remaining variables and the modelling procedures for this chapter's hypotheses. The remaining variables include common law which is a dichotomous variable to represent legal origin, investor protection variables of anti-director rights and law enforcement, earnings, stock returns and the control variables of firm size and leverage.

The legal variables of common law and anti-director rights are adapted from La Porta et al. (1998) whereas law enforcement is adapted from Leuz et al. (2003). The anti-director rights index per country can range from zero to six and is computed by adding 1 when (1) the country allows shareholders to mail their proxy vote to the firm; (2) shareholders are not required to deposit their shares prior to the general shareholders' meeting; (3) cumulative voting or proportional representation of minorities in the board of directors is allowed; (4) an oppressed minorities mechanism is in place; (5) the minimum percentage of share capital that entitles a shareholder to call for an extraordinary shareholders' meeting is less than or equal to 10% (the sample median); or (6) shareholders have pre-emptive rights that can be waived only by a shareholders' vote.

The law enforcement index is computed as the mean score of three law enforcement indices used in La Porta et al. (1998) i.e. the efficiency of the judicial system, an

assessment of rule of law and the corruption index. For this study, it is acceptable to correspond La Porta et al.'s (1998) legal indices with both disclosure and valuation models for the years 2003-04 since they are relatively stable in the long run. Table 9 presents the legal indices of common law, anti-director rights and law enforcement for the study.

Table 9

Legal Indices for the Study

Country	COM[#]	ADR[#]	LWE[*]
Australia	1	4	9.5
Brazil	0	3	6.1
Canada	1	5	9.8
Germany	0	1	9.1
Hong Kong	1	5	8.9
India	1	5	5.6
Japan	0	4	9.2
Netherlands	0	2	10.0
Pakistan	1	5	3.7
Philippines	0	3	3.5
Singapore	1	4	8.9
South Korea	0	2	5.6
Sweden	0	3	10.0
Taiwan	0	3	7.4
Thailand	1	2	4.9
United Kingdom	1	5	9.2
United States	1	5	9.5

COM = Common Law, ADR = Anti-Director Rights
LWE = Law Enforcement
COM: A dichotomous variable where
1 = common law and 0 = civil law
ADR, LWE: A higher value indicates more of that particular legal dimension

adapted from La Porta et al. (1998)
* adapted from Leuz et al. (2003) which is the mean score of La Porta et al.'s (1998) three law enforcement variables

A set of financial data was collected for the study sample of 37 banks from the Datastream database in order to compute the required financial variables such as earnings, stock returns, firm size and leverage. The financial data include share prices,

earnings per share (EPS) to represent earnings, dividends per share (DPS), total assets and total debt. Opening and closing share prices are to be determined with a three-month lag. For example, if the bank's financial year is 1 July 2003 to 30 June 2004, then the opening price is at 1 October 2003 and the closing price is at 30 September 2004. The lag principle is well documented in current capital markets research to address three issues: first, the delay in preparing the annual report at balance date for the market to react; second, thin trading; and third, post-earnings announcement drift (Ball and Brown 1968; Easton et al. 1992).

For consistency in cross-country study, the stock return is given as:

$$RTN_b = (P_t - P_{t-1} + DPS_b) / P_{t-1} \quad (3)$$

RTN = stock return P_t = closing share price

P_{t-1} = opening share price DPS = dividends per share

Subscripts: b = bank level, t = 3 months after balance date, t-1 = 9 months before balance date

EPS will be deflated by opening share price to be consistent with returns. This study will use firm size and leverage as control variables (Zarzeski 1996; Jaggi and Low 2000; Hope 2003; Miller and Modigliani 1961; Atiase 1985). Firm size is measured as the natural logarithm of the firm's total assets in US currency whereas leverage is given as total debt divided by total assets i.e. the debt ratio.

5.4.1 Procedures for Investor Protection and Banking Disclosures

Cross-sectional OLS regression analysis will be applied to the total sample of banks. The more representative banking disclosure model by extending equation (1) from

section 3.2 to include the legal variables of common law and anti-director rights and the control variables of firm size and leverage is given as:

$$DSC_b = a_0 + a_1IDV_c + a_2MAS_c + a_3PDI_c + a_4UAI_c + a_5COM_c + a_6ADR_c + a_7FSZ_b + a_8LVG_b + \varepsilon \quad (4)$$

DSC = disclosure IDV = individualism

MAS = masculinity PDI = power distance

UAI = uncertainty avoidance COM = common law

ADR = anti-director rights FSZ = firm size

LVG = leverage

$a_1 – a_8$ = coefficients of the explanatory variables

Subscripts: b = bank level, c = country level

A stepwise regression will be applied to determine the significance of law enforcement to banking disclosures. Hence, the extended banking disclosure model is given as:

$$DSC_b = a_0 + a_1IDV_c + a_2MAS_c + a_3PDI_c + a_4UAI_c + a_5COM_c + a_6ADR_c + a_7LWE_c + a_8FSZ_b + a_9LVG_b + \varepsilon \quad (5)$$

DSC = disclosure IDV = individualism

MAS = masculinity PDI = power distance

UAI = uncertainty avoidance COM = common law

ADR = anti-director rights LWE = law enforcement

FSZ = firm size LVG = leverage

$a_1 – a_9$ = coefficients of the explanatory variables

Subscripts: b = bank level, c = country level

5.4.2 Procedures for Culture and Returns

From prior research, cross-sectional OLS regression analysis will be applied to the total sample of banks. Hence, the basic banking returns model with respect to reported earnings is given as:

$$RTN_b = a_0 + a_1 EPS_b/P_{t-1} + \varepsilon \quad (6)$$

RTN = stock return

EPS/P_{t-1} = earnings per share deflated by opening share price

a_1 = coefficient of the explanatory variable

Subscript: b = bank level, t-1 = 9 months before balance date

A stepwise regression will be applied to determine the significance of Hofstede's (1980) four cultural values of individualism, masculinity, power distance and uncertainty avoidance to returns. Hence, the extended banking returns model is given as:

$$RTN_b = a_0 + a_1 EPS_b/P_{t-1} + a_2 IDV_c + a_3 MAS_c + a_4 PDI_c + a_5 UAI_c + \varepsilon \quad (7)$$

RTN = stock return

EPS/P_{t-1}= earnings per share deflated by opening share price

IDV = individualism MAS = masculinity

PDI = power distance UAI = uncertainty avoidance

$a_1 – a_5$ = coefficients of the explanatory variables

Subscripts: b = bank level, c = country level, t-1 = 9 months before balance date

5.4.3 Procedures for Investor Protection, Banking Disclosures and Returns

Cross-sectional OLS regression analysis will be applied to the total sample of banks. The more representative banking returns model by extending equation (7) from section 5.4.2 to include the legal variables of common law and anti-director rights, banking disclosures and the control variables of firm size and leverage is given as:

$$RTN_b = a_0 + a_1EPS_b/P_{t-1} + a_2IDV_c + a_3MAS_c + a_4PDI_c + a_5UAI_c + a_6COM_c + a_7ADR_c + a_8DSC_b + a_9FSZ_b + a_{10}LVG_b + \varepsilon \quad (8)$$

RTN = stock return

EPS/P_{t-1}= earnings per share deflated by opening share price

IDV = individualism MAS = masculinity

PDI = power distance UAI = uncertainty avoidance

COM = common law ADR = anti-director rights

DSC = disclosure FSZ = firm size

LVG = leverage

$a_1 – a_{10}$ = coefficients of the explanatory variables

Subscripts: b = bank level, c = country level, t-1 = 9 months before balance date

A stepwise regression will be applied to determine the significance of law enforcement to returns. Hence, the extended banking returns model is given as:

$$RTN_b = a_0 + a_1EPS_b/P_{t-1} + a_2IDV_c + a_3MAS_c + a_4PDI_c + a_5UAI_c + a_6COM_c + a_7ADR_c + a_8LWE_c + a_9DSC_b + a_{10}FSZ_b + a_{11}LVG_b + \varepsilon \quad (9)$$

RTN = stock return

EPS/P_{t-1}= earnings per share deflated by opening share price

IDV = individualism MAS = masculinity

PDI = power distance UAI = uncertainty avoidance

COM = common law ADR = anti-director rights

LWE = law enforcement DSC = disclosure

FSZ = firm size LVG = leverage

$a_1 – a_{11}$ = coefficients of the explanatory variables

Subscripts: b = bank level, c = country level, t-1 = 9 months before balance date

5.5 Descriptive Analysis

5.5.1 Disclosure Model

Table 10 presents the descriptive statistics for the banking disclosure model with respect to the total sample of 37 banks. The average disclosure band value is at 3.19 (disclosure rate of 48% from section 3.3). The dispersion values for leverage suggest that domestic banks are highly geared. From Table 11, the correlation coefficients show very little to moderate multicollinearity across the explanatory variables. With a correlation of 0.65, suggests that common law countries have relatively higher investor protection through anti-director rights compared to civil law countries. This result is consistent with the findings in La Porta et al. (1998). However, there is a weak correlation of 0.05 between common law and law enforcement. Finally, there are some evidence of support for Gray' (1988) legal institutional consequences of culture. For example, common law and

uncertainty avoidance have a correlation of -0.71 and law enforcement have a correlation of -0.71 with power distance.

Table 10

Banking Disclosure Model Descriptive Statistics

All banks (n=37)	**Mean**	**Std Dev**	**Min**	**Max**
DSC	3.19	1.29	1.00	5.00
IDV	59.81	4.41	14.00	91.00
MAS	65.08	3.72	5.00	95.00
PDI	49.81	2.32	31.00	94.00
UAI	61.51	3.82	8.00	92.00
ADR	3.89	1.26	1.00	5.00
LWE	8.57	1.75	3.47	10.00
FSZ	17.26	1.40	14.08	20.83
LVG	0.93	0.03	0.88	0.98

Table 11

Correlation Matrix of Explanatory Variables for 37 Banks

	IDV	MAS	PDI	UAI	COM	ADR	LWE	FSZ	LVG
IDV	1.0000								
MAS	-0.0827	1.0000							
PDI	-0.7774	0.1146	1.0000						
UAI	-0.3996	0.6540	0.1229	1.0000					
COM	0.4480	-0.3088	-0.1885	-0.7128	1.0000				
ADR	0.3341	0.2236	-0.0276	-0.2636	0.6479	1.0000			
LWE	0.6519	0.2293	-0.7067	-0.0743	0.0491	0.2206	1.0000		
FSZ	0.0841	-0.0832	-0.2018	-0.0963	-0.0696	-0.1511	0.2951	1.0000	
LVG	-0.2838	0.2273	-0.1295	0.5174	-0.5701	-0.5273	0.0000	0.0604	1.0000

5.5.2 Returns Model

The bank representing Brazil has to be excluded from the returns model due to its outlier characteristics with respect to the returns-earnings relation. Hence, the banking returns model involves 16 countries as opposed to 17 countries for the banking disclosure model with a total sample of 36 banks. Table 12 presents the descriptive statistics for the banking returns model. The average banking returns for this study is

Table 12

Banking Returns Model Descriptive Statistics

All banks (n=36)	**Mean**	**Std Dev**	**Min**	**Max**
RTN	0.21	0.34	-0.17	1.81
EPS/P_{t-1}	0.08	0.05	0.03	0.27
IDV	60.42	26.97	14.00	91.00
MAS	65.53	22.78	5.00	95.00
PDI	49.28	13.95	31.00	94.00
UAI	61.11	23.44	8.00	92.00
ADR	3.92	1.27	1.00	5.00
LWE	8.64	1.72	3.47	10.00
DSC	3.25	1.25	1.00	5.00
FSZ	17.25	1.42	14.08	20.83
LVG	0.94	0.02	0.89	0.98

Table 13

Correlation Matrix of Explanatory Variables for 36 Banks

	EPS/P_{t-1}	IDV	MAS	PDI	UAI	COM	ADR	LWE	DSC	FSZ	LVG
EPS/P_{t-1}	1.0000										
IDV	-0.3880	1.0000									
MAS	-0.3475	-0.1009	1.0000								
PDI	0.4852	-0.7736	0.1471	1.0000							
UAI	-0.1147	-0.3910	0.6752	0.1020	1.0000						
COM	0.1281	0.4356	-0.3351	-0.1575	-0.7090	1.0000					
ADR	0.0084	0.3230	0.2123	-0.0003	-0.2543	0.6416	1.0000				
LWE	-0.8304	0.6436	0.2083	-0.6899	-0.0511	0.0112	0.1994	1.0000			
DSC	-0.1417	0.5694	-0.3587	-0.4363	-0.5857	0.4280	-0.0045	0.3522	1.0000		
FSZ	-0.2678	0.0926	-0.0773	-0.2205	-0.1028	-0.0617	-0.1458	0.3174	0.6061	1.0000	
LVG	-0.0003	-0.3557	0.1996	-0.0555	0.5927	-0.6753	-0.6094	-0.0890	-0.2688	0.0844	1.0000

21%. From Table 13, the correlation coefficients show very little to moderate multicollinearity across the explanatory variables except for earnings and law enforcement with a value of -0.83.

5.6 Results and Interpretation for Investor Protection and Banking Disclosures

From Table 14, the disclosure model with respect to equation 4 is significant at 1% with an adjusted R^2 of 76.4%. The legal variables of common law and anti-director rights have been found to be significant, both at 5%. La Porta et al. (1998) argue that common law countries have relatively stronger investor protection than civil law countries. The positive correlation of 0.65 between common law and investor protection through anti-director rights which was discussed in section 5.5.1 supports this argument. Consequently, La Porta et al. (1998) argue that common law countries with stronger investor protection are more transparent than civil law countries. This study supports this argument and finds that there is a positive relationship between common law and banking disclosures. Hence, the study will not reject H6.

However, anti-director rights as an investor protection variable was found to have a negative relationship with banking disclosures. This may suggest that investor protection through anti-director rights does not encourage minority investors to enter the stock market specifically in the global banking industry. This situation may lead to a lack of demand for transparency through a smaller dispersion of ownership across the domestic banks. Hence, the study will reject H7.

Table 14

Regression Results for Equation 4

Total Sample (n=37)

Variable	Expected Relationship	Estimated Coefficient	t-Stat	p-value
Intercept	NA	-13.5179	-1.8871	0.0696
IDV	+ve	0.0236	2.5115	0.0181
MAS	+ve	0.0095	1.1607	0.2556
PDI	-ve	0.0116	0.6861	0.4983
UAI	-ve	-0.0193	-1.9340	**0.0633**
COM	+ve	1.1057	2.6315	0.0137
ADR	+ve	**-0.3814**	-2.6466	0.0132
FSZ	+ve	0.4528	5.6314	0.0000
LVG	+ve	9.0077	1.4155	0.1680

F-Stat: 15.53 F-value: 0.0000
Adjusted R^2: 0.7635

Table 15

Regression Results for Equation 5

Total Sample (n=37)

Variable	Expected Relationship	Estimated Coefficient	t-Stat	p-value
Intercept	NA	-14.7082	-1.8997	0.0682
IDV	+ve	0.0240	2.5059	0.0185
MAS	+ve	0.0072	0.7369	0.4675
PDI	-ve	0.0179	0.8058	0.4274
UAI	-ve	-0.0166	-1.4057	0.1712
COM	+ve	1.2291	2.4183	0.0226
ADR	+ve	**-0.4053**	-2.6027	0.0148
LWE	+ve	0.0580	0.4460	0.6592
FSZ	+ve	0.4440	5.2912	0.0000
LVG	+ve	9.5694	1.4547	0.1573

F-Stat: 13.43 F-value: 0.0000
Adjusted R^2: 0.7566

From Table 15, the disclosure model with respect to equation 5 is significant at 1% with an adjusted R^2 of 75.7%. The purpose of this model is to test the significance of law enforcement as an investor protection variable to the disclosure model as addressed in H8. It can clearly be shown that law enforcement is not a significant legal dimension for the banking disclosure model. In fact, its adjusted R^2 has decreased by 0.7% compared to equation 4. Hence, the study will reject H8.

There is a significant development for national culture in the disclosure model. Individualism is found to have the expected positive relationship with banking disclosures and the only significant cultural dimension at 5%. Uncertainty avoidance is found to be significant at 10% with the expected negative relationship with banking disclosures in equation 4. However, uncertainty avoidance is found to be non-significant in equation 5. In contrast to section 3.3, uncertainty avoidance was the only significant cultural dimension with respect to equations 1 and 2 at 1%. This means that H1 and H4 in section 3.2 should be re-examined since equation 4 is the most representative banking disclosure model compared to equations 1, 2 and 5. Hence, the study will not reject H1 and will reject H4. In other words, individualism not uncertainty avoidance is the primary cultural dimension for banking disclosures.

In regards to the control variables of firm size and leverage, only firm size is found to be significant (at 1%). Consistent to prior research, firm size has a positive relationship with banking disclosures. This suggests that the public demands greater transparency from larger banks. The non-significance of leverage could be partly due to the fact that domestic banks are highly geared which was discussed in section 5.5. Hence, the study will not reject H9 and will reject H10.

5.7 Results and Interpretation for Culture and Returns

From Table 16, the returns model with respect to equation 6 is significant at 1% with an adjusted R^2 of 47.8%. Earnings is found to be positively associated with banking returns. The explanatory power for the returns-earnings relation specific to banking suggest that the relationship is highly linear compared to prior non-banking cross-industry studies in capital markets research which is less than 10%. Lev (1989) argues that the low explanatory power for prior returns-earnings studies is partly due to poor earnings quality. Moreover, using non-linear modelling techniques such as arctan model based on equation 6 provides an adjusted R^2 of between 16% to 23% (Hodgson and Stevenson-Clarke 2000). The result may suggest that the explanatory power for the returns-earnings relation can significantly be improved by investigating at an industry level with respect to a cross-country study. Hence, the study will not reject H11.

Table 16

Regression Results for Equation 6

Total Sample (n=36)

Variable	Expected Relationship	Estimated Coefficient	t-Stat	p-value
Intercept	NA	-0.1657	-2.1503	0.0387
EPS/P_{t-1}	+ve	4.4293	5.7531	0.0000

F-Stat: 33.10 F-value: 0.0000
Adjusted R^2: 0.4784

From Table 17, the returns model with respect to equation 7 is significant at 1% with an adjusted R^2 of 66%. The purpose of this model is to test the value relevance of Hofstede's (1980) four cultural dimension of individualism, masculinity, power distance and uncertainty avoidance. It is evident that equation 7 has improved the explanatory power of the returns-earnings relation by 18.2% from equation 6. All the cultural

dimensions were found to be significant (at 1%) except for uncertainty avoidance. However, only individualism was found not to have the expected relationship with banking returns. This is an interesting finding for national culture where collectivism provides higher banking returns compared to individualism across the 16 developed and developing countries. Consistent with the hypotheses, masculine countries provide higher banking returns whereas countries with high power distance provide lower banking returns. Hence, the study will reject H12 and H15 and will not reject H13 and H14.

Table 17

Regression Results for Equation 7

Total Sample (n=36)

Variable	Expected Relationship	Estimated Coefficient	t-Stat	p-value
Intercept	NA	0.9170	2.2086	0.0350
EPS/P_{t-1}	+ve	6.3416	7.5057	0.0000
IDV	+ve	**-0.0088**	-3.2337	0.0030
MAS	+ve	0.0085	3.0642	0.0046
PDI	-ve	-0.0206	-3.8627	0.0006
UAI	-ve	-0.0041	-1.4985	0.1445

F-Stat: 14.60 F-value: 0.0000
Adjusted R^2: 0.6602

5.8 Results and Interpretation for Investor Protection, Banking Disclosures and Returns

From Table 18, the returns model with respect to equation 8 is significant at 1% with an adjusted R^2 of 69.8%. Anti-director rights is the only legal variable found to be significant at 5%. The positive relationship between anti-director rights and banking returns is consistent with La Porta et al. (2002) which argue that investor protection increases firm valuation with respect to Tobin's Q. It is expected that common law countries which have relatively stronger investor protection than civil law countries

would result in a positive relationship between common law and banking returns. However, common law was found to be non-significant. Hence, the study will reject H16 and will not reject H17.

Table 18

Regression Results for Equation 8

Total Sample (n=36)

Variable	Expected Relationship	Estimated Coefficient	t-Stat	p-value
Intercept	NA	-0.2570	-0.1053	0.9170
EPS/P_{t-1}	+ve	5.1837	5.4303	0.0000
IDV	+ve	**-0.0123**	-3.8256	0.0008
MAS	+ve	0.0046	1.4545	0.1583
PDI	-ve	-0.0203	-3.4370	0.0021
UAI	-ve	-0.0024	-0.6769	0.5047
COM	+ve	-0.2097	-1.4868	0.1496
ADR	+ve	0.1338	2.5226	0.0184
DSC	+ve	0.1492	2.3098	0.0294
FSZ	NA	-0.0975	-2.4253	0.0229
LVG	NA	2.5576	1.1095	0.2778

F-Stat: 9.07 F-value: 0.0000
Adjusted R^2: 0.6976

From Table 19, the returns model with respect to equation 9 is significant at 1% with an adjusted R^2 of 68.6%. The purpose of this model is to test the significance of law enforcement as an investor protection variable to the returns model as addressed in H18. It can clearly be shown that law enforcement is not value relevant. Hence, the study will reject H18. In fact, its adjusted R^2 has decreased by 1.2% compared to equation 8 and the anti-director rights is found to be significant at 10%. This suggests that the most representative banking returns model is equation 8 in terms of explanatory power.

The banking disclosure variable is found to have a positive association with firm performance and significant at 5% in both equations 8 and 9. This result confirms that international investors tend to support the Basel Committee's commitment in providing a more transparent framework by implementing Pillar 3 in the near future, starting with the Basel member countries. Hence, the study will not reject H19.

There is a significant development for national culture in the returns model. It is found that masculinity is not significant in equations 8 and 9 compared to equation 7 in section 5.7. This means that H13 in section 5.7 should be re-examined since equation 8 is the most representative banking returns model. Hence, the study will reject H13.

Table 19

Regression Results for Equation 9

Total Sample (n=36)

Variable	Expected Relationship	Estimated Coefficient	t-Stat	p-value
Intercept	NA	-0.0498	-0.0194	0.9847
EPS/P_{t-1}	+ve	4.7638	2.8863	0.0081
IDV	+ve	**-0.0124**	-3.7690	0.0009
MAS	+ve	0.0046	1.3985	0.1748
PDI	-ve	-0.0213	-3.1470	0.0044
UAI	-ve	-0.0026	-0.7173	0.4801
COM	+ve	-0.2498	-1.3007	0.2057
ADR	+ve	0.1499	2.0144	**0.0553**
LWE	+ve	-0.0209	-0.3148	0.7556
DSC	+ve	0.1594	2.1760	0.0396
FSZ	NA	-0.1004	-2.3915	0.0250
LVG	NA	2.6203	1.1120	0.2772

F-Stat: 7.96 F-value: 0.0000
Adjusted R^2: 0.6863

In regards to the control variables of firm size and leverage, only firm size was found to be significant (at 5%) with a negative relationship with banking returns. This is an

interesting finding where smaller domestic banks provide higher returns across the 16 developed and developing countries.

5.9 Summary

This chapter has addressed the issues concerning the formulation of 14 hypotheses for the banking disclosure and returns models, their research design and methodology and the detailed discussion of their empirical results. The theoretical framework established in chapters 2 and 4 provide the foundation for developing the hypotheses for both the disclosure and returns models. For the disclosure model, there are 5 hypotheses. H6 states that there is a significant positive relationship between common law and banking disclosures. H7 states that there is a significant positive relationship between anti-director rights and banking disclosures. H8 states that there is a significant positive relationship between law enforcement and banking disclosures. H9 states that there is a significant positive relationship between firm size and banking disclosures. H10 states that there is a significant positive relationship between leverage and banking disclosures.

For the returns model, there are 9 hypotheses. H11 states that there is a significant positive relationship between earnings and returns. H12 states that there is a significant positive relationship between individualism and returns. H13 states that there is a significant positive relationship between masculinity and returns. H14 states that there is a significant negative relationship between power distance and returns. H15 states that there is a significant negative relationship between uncertainty avoidance and returns. H16 states that there is a significant positive relationship between common law and returns. H17 states that there is a significant positive relationship between anti-director rights and returns. H18 states that there is a significant positive relationship

between law enforcement and returns. H19 states that there is a significant positive relationship between banking disclosures and returns.

This chapter also re-examined the discussion on two disclosure hypotheses addressed in chapter 3 i.e. H1 and H4. H1 states that there is a significant positive relationship between individualism and banking disclosures and H4 states that there is a significant negative relationship between uncertainty avoidance and banking disclosures. It is found that H1 should be not rejected and H4 should be rejected due to the fact that equation 4 in chapter 5 is the most representative banking disclosure model compared to equations 1 and 2 in chapter 3. Hence, individualism not uncertainty avoidance is the primary cultural dimension for banking disclosures. For the balance of the disclosure hypotheses i.e. H6 to H10, all should be rejected except for H6 and H9. Hence, there is a significant positive relationship between common law and banking disclosures and there is a significant positive relationship between firm size and banking disclosures. A significant finding for the disclosure model is that there is a negative association between anti-director rights and banking disclosures.

The findings for the returns model suggest that all hypotheses i.e. H11 to H19 should be rejected except for H11, H14, H17 and H19. Hence, there is a significant positive relationship between earnings and returns; there is a significant negative relationship between power distance and returns; there is a significant positive relationship between anti-director rights and returns and there is a significant positive relationship between banking disclosures and returns. Finally, there are two significant findings for the banking returns model. First, there is a negative association between individualism and returns and second, there is a negative association between firm size and returns.

CHAPTER 6 CONCLUSION

This chapter will summarise the important issues addressed in the previous five chapters. It begins by revisiting the study's objectives (section 6.1), followed by the discussion of results (sections 6.2.1, 6.2.2, 6.2.3 and 6.2.4) and finally, section 6.3 will suggests possible directions for future research. Figure I displays the formulation of the study's 19 hypotheses and Table 20 summarises the results of the hypotheses formulation.

Figure I

19 Hypotheses Formulation for the Study

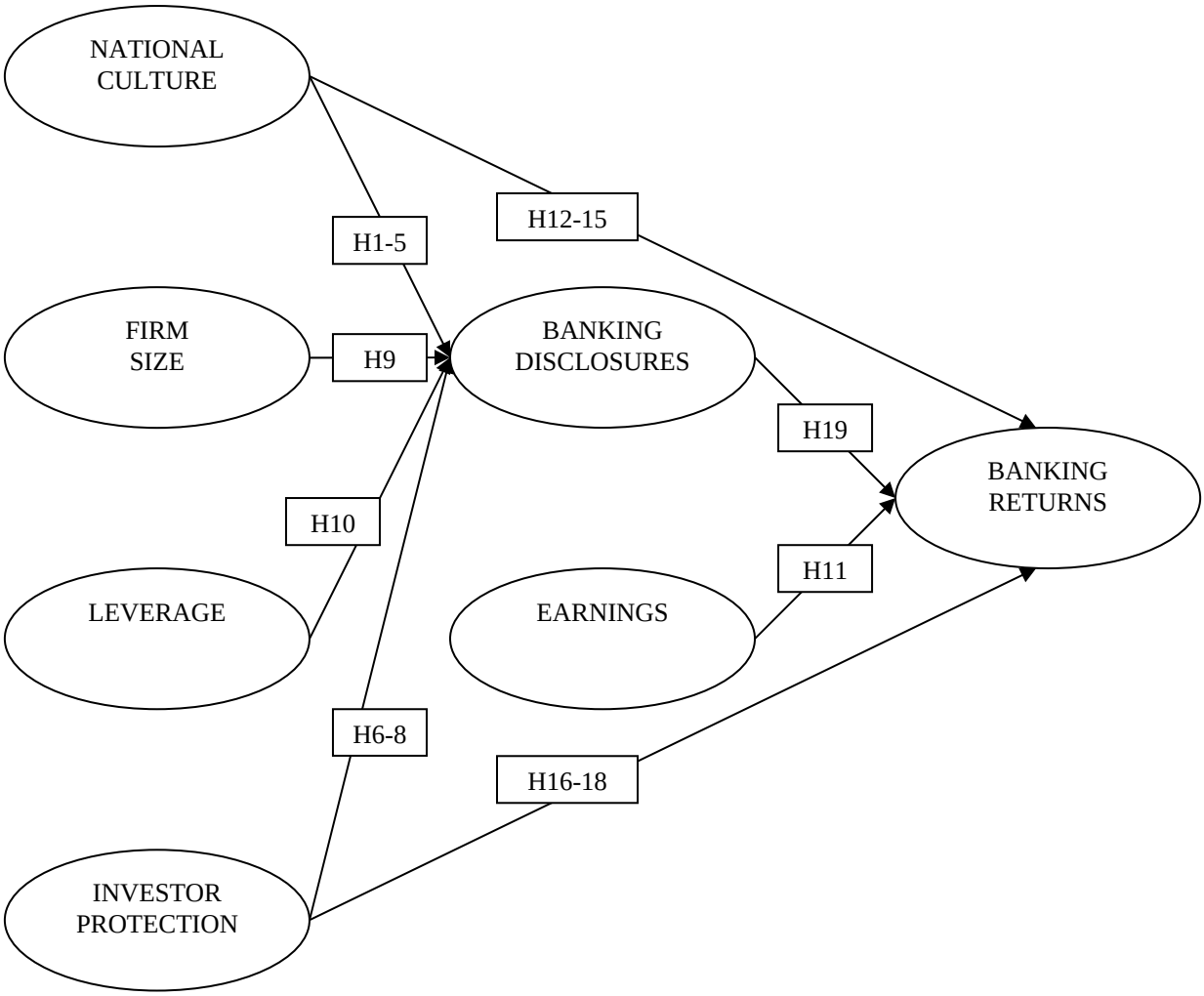

Table 20

Results of the Hypotheses Formulation

	Relationship	Status
H1	Positive between individualism and banking disclosures	**Not Reject**
H2	Positive between masculinity and banking disclosures	Reject
H3	Negative between power distance and banking disclosures	Reject
H4	Negative between uncertainty avoidance and banking disclosures	Reject
H5	Positive between long-term orientation and banking disclosures	Reject
H6	Positive between common law countries and banking disclosures	**Not Reject**
H7	Positive between anti-director rights and banking disclosures	**Reject. -ve at 5%**
H8	Positive between law enforcement and banking disclosures	Reject
H9	Positive between firm size and banking disclosures	**Not Reject**
H10	Positive between leverage and banking disclosures	Reject
H11	Positive between earnings and banking returns	**Not Reject**
H12	Positive between individualism and banking returns	**Reject. -ve at 1%**
H13	Positive between masculinity and banking returns	Reject
H14	Negative between power distance and banking returns	**Not Reject**
H15	Negative between uncertainty avoidance and banking returns	Reject
H16	Positive between common law countries and banking returns	Reject
H17	Positive between anti-director rights and banking returns	**Not Reject**
H18	Positive between law enforcement and banking returns	Reject
H19	Positive between banking disclosures and banking returns	**Not Reject**

6.1 Revisiting the Study's Objectives

The purpose of this study is to apply and extend Gray's (1988) theoretical framework of national culture with respect to four research questions. First, to contribute to Gray's (1988) theory of cultural influence on international banking disclosures. Second, to investigate the possible significance of investor protection to the banking disclosure model. Third, to explore Gray's (1988) theory on the relationship of national culture to capital market research using banking returns. Finally, to investigate the value relevance of investor protection and banking disclosures to the returns model.

6.2 Discussion of Results

6.2.1 Culture and Banking Disclosures

The first research question involves five hypotheses. H1 states that there is a significant positive relationship between individualism and banking disclosures. H2 states that there is a significant positive relationship between masculinity and banking disclosures. H3 states that there is a significant negative relationship between power distance and banking disclosures. H4 states that there is a significant negative relationship between uncertainty avoidance and banking disclosures. H5 states that there is a significant positive relationship between long-term orientation and banking disclosures.

The findings only support H4 which states there is a significant negative relationship between uncertainty avoidance and banking disclosures. In other words, uncertainty avoidance has been found to be the primary cultural dimension for banking disclosures. Moreover, the explanatory power for banking disclosures is found to be similar to the findings in Gray and Vint (1995) with a cross-section of industries. The study also found that the use of disclosure bands tend to yield slightly better results in terms of explanatory power compared to disclosure rates for model 1 only i.e. with respect to individualism, masculinity, power distance and uncertainty avoidance. Finally, this study recommends that long-term orientation should not be used as part of the cultural framework for disclosures due to bias data. Hence, Gray's (1988) hypothesis on the secrecy/transparency dimension should be maintained with respect to the original four cultural values of individualism, masculinity, power distance and uncertainty avoidance.

6.2.2 Investor Protection and Banking Disclosures

The second research question involves five hypotheses. H6 states that there is a significant positive relationship between common law and banking disclosures. H7 states that there is a significant positive relationship between anti-director rights and banking disclosures. H8 states that there is a significant positive relationship between law enforcement and banking disclosures. H9 states that there is a significant positive relationship between firm size and banking disclosures. H10 states that there is a significant positive relationship between leverage and banking disclosures. This section also re-examined the discussion on two disclosure hypotheses under the first research question i.e. H1 and H4.

It is found that H1 should be not rejected and H4 should be rejected due to the fact that equation 4 in chapter 5 is the most representative banking disclosure model compared to equations 1 and 2 in chapter 3. Hence, individualism not uncertainty avoidance is the primary cultural dimension for banking disclosures. For the balance of the disclosure hypotheses i.e. H6 to H10, all should be rejected except for H6 and H9. Hence, there is a significant positive relationship between common law and banking disclosures and there is a significant positive relationship between firm size and banking disclosures. The results are consistent with (1) La Porta et al. (1998) which argue that common law countries with stronger investor protection are more transparent than civil law countries and (2) prior research on firm size and disclosures. This suggests that the public demands greater transparency from larger banks.

An interesting finding for the disclosure model is that there is a negative association between anti-director rights and banking disclosures. This may suggest that investor protection through anti-director rights does not encourage minority investors to enter the

stock market specifically in the global banking industry. This situation may lead to a lack of demand for transparency through a smaller dispersion of ownership across the domestic banks.

6.2.3 Culture and Returns

The third research question involves five hypotheses. H11 states that there is a significant positive relationship between earnings and returns. H12 states that there is a significant positive relationship between individualism and returns. H13 states that there is a significant positive relationship between masculinity and returns. H14 states that there is a significant negative relationship between power distance and returns. H15 states that there is a significant negative relationship between uncertainty avoidance and returns.

The findings support H11, H13 and H14. Hence, there is a significant positive relationship between earnings and returns; there is a significant positive relationship between masculinity and returns and there is a significant negative relationship between power distance and returns.

6.2.4 Investor Protection, Banking Disclosures and Returns

The fourth research question involves four hypotheses. H16 states that there is a significant positive relationship between common law and returns. H17 states that there is a significant positive relationship between anti-director rights and returns. H18 states that there is a significant positive relationship between law enforcement and returns. H19 states that there is a significant positive relationship between banking disclosures

and returns. This section also re-examined the discussion on one returns hypothesis under the third research question i.e. H13.

It is found that H13 should be rejected due to the fact that equations 8 and 9 are more representative banking returns models compared to equation 7 in section 5.7. For the balance of the returns hypotheses i.e. H16 to H19, all should be rejected except for H17 and H19. Hence, there is a significant positive relationship between anti-director rights and returns and there is a significant positive relationship between banking disclosures and returns. These results are (1) consistent with La Porta et al. (2002) which argue that investor protection increases firm valuation with respect to Tobin's Q and (2) international investors tend to support the Basel Committee's commitment in providing a more transparent framework by implementing Pillar 3 in the near future, starting with the Basel member countries. There are two interesting findings for the banking returns model. First, there is a negative association between individualism and returns and second, there is a negative association between firm size and returns.

6.3 Directions for Future Research

This study has provided significant contributions to the understanding of the global banking system in terms of disclosures and returns. The influence of national culture and investor protection may assist the Basel Committee in addressing complex issues of harmonising international banking regulations. The limitations of this study are represented by three future research opportunities within the banking industry. First, to empirically investigate the influence of national culture on the legal system with respect to investor protection. In fact, the descriptive analysis in section 5.5.1 has found moderate correlation between uncertainty avoidance with common law and power distance with law enforcement. Second, the possibility of involving a longer window

study to address the limited observations that may improve the significance of the modelling. Finally, the significance of long-term orientation as a cultural dimension for Gray's (1988) framework warrants future research in developing a more representative data set globally.

6.4 Summary

There is a renewed interest in further exploring the significance of culture to the accounting disclosure model in view of a highly competitive global business environment. To date, there is no empirical research to investigate this issue with respect to a specific industry, namely banking. There are three main reasons for focusing only on the banking industry (Hooi 2004). First, it is considered to be the most important industry for the country's economic and financial stability. Moreover, the IASB has recognised its significance by issuing unique accounting standards i.e. IAS30, IAS32 and IAS39. Second, Saidenberg and Schuermann (2003) argue that with the scope and complexity of Basel II, it provides opportunities for researching issues through Pillar 3. Third, with national banking systems being non-homogenous, it is important to investigate the effects of national culture because prior research has argued that cultural differences have partly explained international differences in disclosure framework of accounting systems.

The purpose of this study is to apply and extend Gray's (1988) theoretical framework of national culture with respect to four research questions. First, to contribute to Gray's (1988) theory of cultural influence on international banking disclosures. Second, to investigate the possible significance of investor protection to the banking disclosure model. Third, to explore Gray's (1988) theory on the relationship of national culture to capital market research using banking returns. Fourth, to investigate the value relevance

of investor protection and banking disclosures to the returns model. Seventeen developed and developing countries with a representative sample of 37 listed domestic commercial banks were examined in 2004.

For the disclosure model, the study finds that national culture is a significant factor in the banking industry. Individualism has been found as the primary cultural dimension for banking disclosures. Moreover, the explanatory power of the model significantly improves with the legal dimensions of common law and anti-director rights. The positive association between common law and banking disclosures is consistent with La Porta et al. (1998) which argue that common law countries with stronger investor protection are more transparent than civil law countries. However, there is a negative association between investor protection variable of anti-director rights with banking disclosures. This may suggest that investor protection does not encourage minority investors to enter the stock market specifically in the global banking industry. This situation may lead to a lack of demand for transparency through a smaller dispersion of ownership across the domestic banks.

For the returns model, the study finds that national culture is value relevant in the banking industry. Collectivism and power distance have been found to be the two primary cultural dimensions for banking returns. Moreover, the explanatory power of the model significantly improves with anti-director rights and banking disclosures. These results are (1) consistent with La Porta et al. (2002) which argue that investor protection increases firm valuation with respect to Tobin's Q and (2) international investors tend to support the Basel Committee's commitment in providing a more transparent framework by implementing Pillar 3 in the near future, starting with the

Basel member countries. Finally, an interesting finding from the study is that firm size has a negative association with banking returns.

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APPENDICES

Appendix A: Banking Disclosures

Mandatory Disclosures

IAS30: Disclosures in the Financial Statements of Banks and Similar Financial Institutions

Scope

This standard should be applied in the financial statements of banks and similar financial institutions (subsequently referred to as banks). The term 'bank' includes all financial institutions, one of whose principal activities is to take deposits and borrow with the objective of lending and investing and which are within the scope of banking or similar legislation. The standard is relevant to such enterprises whether or not they have the word 'bank' in their name. This standard supplements other IAS which also apply to banks unless they are specifically exempted in a standard. This standard applies to the separate financial statements and the consolidated financial statements of a bank. Where a group undertakes banking operations, this standard is applicable in respect of those operations on a consolidated basis.

Background

The users of the financial statements of a bank need relevant, reliable and comparable information which assists them in evaluating the financial position and performance of the bank and which is useful to them in making economic decisions. They also need information which gives them a better understanding of the special characteristics of the operations of a bank. Users need such information even though a bank is subject to supervision and provides the regulatory authorities with information that is not always available to the public. Therefore, disclosures in the financial statements of a bank need

to be sufficiently comprehensive to meet the needs of users, within the constraint of what it is reasonable to require of management.

The users of the financial statements of a bank are interested in its liquidity and solvency and the risks related to the assets and liabilities recognised on its balance sheet and to its off balance sheet items. Liquidity refers to the availability of sufficient funds to meet deposit withdrawals and other financial commitments as they fall due. Solvency refers to the excess of assets over liabilities and hence, to the adequacy of the bank's capital. A bank is exposed to liquidity risk and to risks arising from currency fluctuations, interest rate movements, changes in market prices and from counterparty failure. These risks may be reflected in the financial statements but users obtain a better understanding if management provides a commentary on the financial statements which describes the way it manages and controls the risks associated with the operations of the bank.

Income Statement

A bank should present an income statement which groups income and expenses by nature and discloses the amounts of the principal types of income and expenses. In addition to the requirements of other IAS, the disclosures in the income statement or the notes to the financial statements should include, but are not limited to, the following items of income and expenses:

- Interest and similar income
- Interest expense and similar charges
- Dividend income
- Fee and commission income
- Fee and commission expense

- Gains less losses arising from dealing securities
- Gains less losses arising from investment securities
- Gains less losses arising from dealing in foreign currencies
- Other operating income
- Losses on loans and advances
- General administrative expenses; and
- Other operating expenses

Balance Sheet

A bank should present a balance sheet that groups assets and liabilities by nature and lists them in an order that reflects their relative liquidity. In addition to the requirements of other IAS, the disclosures in the balance sheet or the notes to the financial statements should include, but are not limited to, the following assets and liabilities:

Assets

- Cash and balances with the central bank
- Treasury bills and other bills eligible for rediscounting with the central bank
- Government and other securities held for dealing purposes
- Placements with, and loans and advances to, other banks
- Other money market placements
- Loans and advances to customers; and
- Investment securities

Liabilities

- Deposits from other banks
- Other money market deposits

- Amounts owed to other depositors
- Certificates of deposits
- Promissory notes and other liabilities evidenced by paper; and
- Other borrowed funds

A bank should disclose the fair values of each class of its financial assets and liabilities as required by IAS32 and IAS39.

Contingencies and Commitments including Off Balance Sheet

A bank should disclose the following contingent liabilities and commitments:

- The nature and amount of commitments to extend credit that are irrevocable because they cannot be withdrawn at the discretion of the bank without the risk of incurring significant penalty or expense; and
- The nature and amount of contingent liabilities and commitments arising from off balance sheet items including those relating to:
    - Direct credit substitutes including general guarantees of indebtedness, bank acceptance guarantees and standby letters of credit serving as financial guarantees for loans and securities
    - Certain transaction related contingent liabilities including performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions
    - Short-term self liquidating trade related contingent liabilities arising from the movement of goods, such as documentary credits where the underlying shipment is used as security
    - Those sale and repurchase agreements not recognised in the balance sheet

- Interest and foreign exchange rate related items including swaps, options and futures; and
- Other commitments, note issuance facilities and revolving underwriting facilities

Maturities of Assets and Liabilities

A bank should disclose an analysis of assets and liabilities into relevant maturity groupings based on the remaining period at the balance sheet date to the contractual maturity date.

Concentrations of Assets, Liabilities and Off Balance Sheet Items

A bank should disclose any significant concentrations of its assets, liabilities and off balance sheet items. Such disclosures should be made in terms of geographical areas, customer or industry groups or other concentrations of risk. A bank should also disclose the amount of significant net foreign currency exposures.

Losses on Loans and Advances

A bank should disclose the following:

- The accounting policy which describes the basis on which uncollectable loans and advances are recognised as an expense and written off
- Details of the movements in the provision for losses on loans and advances during the period. It should disclose separately the amount recognised as an expense in the period of losses on uncollectable loans and advances, the amount charged in the period for loans and advances written off and the amount credited in the period for loans and advances previously written off that have been recovered

- The aggregate amount of the provision for losses on loans and advances at the balance sheet date; and
- The aggregate amount included in the balance sheet for loans and advances on which interest is not been accrued and the basis used to determine the carrying amount of such loans and advances

Assets Pledged as Security

A bank should disclose the aggregate amount of secured liabilities and the nature and carrying amount of the assets pledged as security.

IAS32 Financial Instruments: Disclosure and Presentation

Scope

This standard should be applied in presenting and disclosing information about all types of financial instruments, both recognised and unrecognised, other than:

- Interests in subsidiaries
- Interests in associates
- Interests in joint ventures
- Employers' and plans' obligations for post-employment benefits of all types, including employee benefit plans
- Employers' obligations under employee stock option and stock purchase plans; and
- Obligations arising under insurance contracts

Definitions

A financial instrument is any contract that gives rise to both a financial asset of one enterprise and a financial liability or equity instrument of another enterprise. An equity instrument is any contract that evidences a residual interest in the assets of an enterprise

after deducting all of its liabilities. Financial instruments consist of both primary instruments and derivative instruments. Examples of primary instruments include receivables, payables and equity securities. Examples of derivative instruments include financial options, futures and forwards, interest rate swaps and currency swaps.

A derivative is a financial instrument:

- Whose value changes in response to the change in a specified interest rate, security price, commodity price, foreign exchange rate, index of prices or rates, a credit rating or credit index, or similar variable (sometimes called the ‘underlying’)
- That requires no initial net investment or little initial net investment relative to other types of contracts that have a similar response to changes in market conditions; and
- That is settled at a future date

A financial asset is any asset that is:

- Cash
- A contractual right to receive cash or another financial asset from another enterprise
- A contractual right to exchange financial instruments with another enterprise under conditions that are potentially favourable; or
- An equity instrument of another enterprise

A financial liability is any liability that is a contractual obligation:

- To deliver cash or another financial asset to another enterprise; or
- To exchange financial instruments with another enterprise under conditions that are potentially unfavourable

Presentation: Liabilities and Equity

The issuer of a financial instrument should classify the instrument, or its component parts, as a liability or as equity in accordance with the substance of the contractual arrangement on initial recognition and the definitions of a financial liability and an equity instrument.

Presentation: Classification of Compound Instruments by the Issuer

The issuer of a financial instrument that contains both a liability and an equity element should classify the instrument's component parts separately in accordance with the substance of the contractual arrangement on initial recognition and the definitions of a financial liability and an equity instrument.

Presentation: Interest, Dividends, Losses and Gains

Interest, dividends, losses and gains relating to a financial instrument, or a component part, classified as a financial liability should be reported in the income statement as expense or income.

Presentation: Offsetting of a Financial Asset and a Financial Liability

A financial asset and a financial liability should be offset and the net amount reported in the balance sheet when an enterprise:

- Has a legally enforceable right to set off the recognised amounts; and
- Intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously

Disclosure: Risk Management Policies

An enterprise should describe its financial risk management objectives and policies, including its policy for hedging each major type of forecasted transaction for which hedge accounting is used.

Disclosure: Terms, Conditions and Accounting Policies

For each class of financial assets, financial liability and equity instrument, both recognised and unrecognised, an enterprise should disclose:

- Information about the extent and nature of the financial instruments, including significant terms and conditions that may affect the amount, timing and certainty of future cash flows; and
- The accounting policies and methods adopted, including the criteria for recognition and the basis of measurement applied

Disclosure: Interest Rate Risk

For each class of financial asset and financial liability, both recognised and unrecognised, an enterprise should disclose information about its exposure to interest rate risk, including:

- Contractual repricing or maturity dates, whichever dates are earlier; and
- Effective interest rates, when applicable

Disclosure: Credit Risk

For each class of financial asset, both recognised and unrecognised, an enterprise should disclose information about its exposure to credit risk, including:

- The amount that best represents its maximum credit risk exposure at the balance sheet date, without taking account of the fair value of any collateral, in the event other parties fail to perform their obligations under financial instruments; and
- Significant concentrations of credit risk

Disclosure: Fair Value

For each class of financial asset and financial liability, both recognised and unrecognised, an enterprise should disclose information about fair value. When it is not practicable within constraints of timeliness or cost to determine the fair value of a financial asset or financial liability with sufficient reliability, that fact should be disclosed together with information about the principal characteristics of the underlying financial instrument that are pertinent to its fair value.

Disclosure: Financial Assets Carried at an Amount in Excess of Fair Value

When an enterprise carries one or more financial assets at an amount in excess of their fair value, the enterprise should disclose:

- The carrying amount and the fair value of either the individual assets or appropriate groupings of those individual assets; and
- The reasons for not reducing the carrying amount, including the nature of the evidence that provides the basis for management's belief that the carrying amount will be recovered.

<u>IAS39 Financial Instruments: Recognition and Measurement</u>

Additional Disclosures: Hedging

- Describe the enterprise's financial risk management objectives and policies, including its policy for hedging each major type of forecasted transaction

- Disclose the following separately for designated fair value hedges, cash flow hedges, and hedges of a net investment in a foreign entity:
    - A description of the hedge
    - A description of the financial instruments designated as hedging instruments for the hedge and their fair values at the balance sheet date
    - The nature of the risks being hedged
    - For hedges of forecasted transactions, the periods in which the forecasted transactions are expected to occur, when they are expected to enter into the determination of net profit or loss, and a description of any forecasted transaction for which hedge accounting had previously been used but that is no longer expected to occur; and
- If a gain or loss on derivative and non-derivative financial assets and liabilities designated as hedging instruments in cash flow hedges has been recognised directly in equity, through the statement of changes in equity, disclose:
    - The amount that was recognised in equity during the current period
    - The amount that was removed from equity and reported in net profit or loss for the period; and
    - The amount that was removed from equity and added to the initial measurement of the acquisition cost or other carrying amount of the asset or liability in a hedged forecasted transaction during the current period

Additional Disclosures: Financial Instruments

- If a gain or loss from remeasuring available-for-sale financial assets to fair value (other than assets relating to hedges) has been recognised directly in equity, through the statement of changes in equity, disclose:
    - The amount that was recognised in equity during the current period; and

- The amount that was removed from equity and reported in net profit or loss for the period

- If a financial asset cannot be reliably measured at fair value, disclose its measurement at amortised cost with a description of the financial asset, its carrying amount and an explanation of why fair value cannot be reliably measured. If possible, disclose the range of estimates within which fair value is highly likely to lie. Further, if a financial asset whose fair value previously could not be measured reliably is sold; the carrying amount of such a financial asset at the time of sale, and the amount of gain or loss recognised should be disclosed
- Disclose significant items of income, expense and gains and losses resulting from financial assets and financial liabilities, whether included in net profit or loss or as a separate component of equity. For this purpose:
    - Total interest income and total interest expense (both on a historical cost basis) should be disclosed separately
    - With respect to available-for-sale financial assets that are adjusted to fair value after initial acquisition, total gains and losses from derecognition of such financial assets included in net profit or loss for the period should be reported separately from total gains and losses from fair value adjustments of recognised assets and liabilities included in net profit or loss for the period (a similar split of realised versus unrealised gains and losses with respect to financial assets and liabilities held for trading is not required)
    - The enterprise should disclose the amount of interest income that has been accrued on impaired loans
- If the enterprise has entered into a securitisation or repurchase agreement, disclose separately for such transactions occurring in the current financial reporting period

and for remaining retained interests from transactions occurring in prior financial reporting periods:

  - The nature and extent of such transactions, including a description of any collateral and quantitative information about the key assumptions used in calculating the fair values of new and retained interests
  - Whether the financial assets have been derecognised

- If the enterprise has reclassified a financial asset as one required to be reported at amortised cost rather than at fair value, disclose the reason for that reclassification
- Disclose the nature and amount of any impairment loss or reversal of an impairment loss recognised for a financial asset, separately for each significant class of financial asset
- A borrower should disclose the carrying amount of financial assets pledged as collateral for liabilities and any significant terms and conditions relating to pledged assets; and
- A lender should disclose:
  - The fair value of collateral (both financial and non-financial assets) that it has accepted and that it is permitted to sell or repledge in the absence of default
  - The fair value of collateral that it has sold or repledged; and
  - Any significant terms and conditions associated with its use of collateral

Voluntary Disclosures (Pillar 3 of Basel II)

Capital Structure

Qualitative Disclosures

- Summary information on the terms and conditions of the main features of all capital instruments, especially in the case of innovative, complex or hybrid capital instruments

Quantitative Disclosures

- The amount of Tier 1 capital, with separate disclosure of:
    - Paid-up share capital/common stock
    - Reserves
    - Minority interests in the equity of subsidiaries
    - Innovative instruments
    - Other capital instruments
    - Surplus capital from insurance companies; and
    - Goodwill and other amounts deducted from Tier 1
- The total amount of Tier 2 and Tier 3 capital
- Deductions from Tier 1 and Tier 2 capital
- Total eligible capital

Capital Adequacy

Qualitative Disclosures

- A summary discussion of the bank's approach to assessing the adequacy of its capital to support current and future activities

Quantitative Disclosures

- Capital requirements for credit risk:
    - Portfolios subject to standardised or simplified standardised approach
    - Portfolios subject to the IRB approaches:
        - Corporate, sovereign and bank
        - Residential mortgage
        - Qualifying revolving retail; and
        - Other retail
    - Securitisation exposures
- Capital requirements for equity risk in the IRB approach:
    - Equity portfolios subject to the market-based approaches:
        - Equity portfolios subject to simple risk weight method; and
        - Equities in the banking book under the internal models approach (for banks using IMA for banking book equity exposures)
- Capital requirements for market risk:
    - Standardised approach; and
    - IMA – Trading book
- Capital requirements for operational risk:
    - Basic indicator approach
    - Standardised approach; and
    - Advanced measurement approach (AMA)
- Total and Tier 1 capital ratio:
    - For the top consolidated group; and
    - For significant bank subsidiaries (stand alone or sub-consolidated depending on how the Capital Accord is applied)

The risks to which banks are exposed and the techniques that banks use to identify, measure, monitor and control those risks are important factors market participants consider in their assessment of an institution. In the following disclosure categories, several key banking risks are considered: credit risk, market risk, interest rate risk and equities in the banking book and operational risk. Also included are discloses relating to credit risk mitigation and asset securitisation, both of which alter the risk profile of the institution. Where applicable, separate disclosures are set out for banks using different approaches to the assessment of regulatory capital.

General disclosures of credit risk provide market participants with a range of information about overall credit exposure. Disclosures on the capital assessment techniques give information on the specific nature of the exposures, the means of capital assessment and data to assess the reliability of the information disclosed.

Credit Risk: General Disclosures for All Banks

Qualitative Disclosures

- The general qualitative disclosure requirement with respect to credit risk, including:
    - Definitions of past due and impaired (for accounting purposes)
    - Description of approaches followed for specific and general allowances and statistical methods; and
    - Discussion of the bank's credit risk management policy

Quantitative Disclosures

- Total gross credit risk exposures, plus average gross exposure over the period broken down by major types of credit exposure

- Geographic distribution of exposures, broken down in significant areas by major types of credit exposure
- Industry or counterparty type distribution of exposures, broken down by major types of credit exposure
- Residual contractual maturity breakdown of the whole portfolio, broken down by major types of credit exposure
- By major industry or counterparty type:
    - Amount of past due/impaired loans
    - Specific and general allowances; and
    - Charges for specific allowances and charge-offs during the period
- Amount of impaired loans and past due loans broken down by significant geographic areas including, if practical, the related amounts of specific and general allowances
- Reconciliation of changes in the allowances for loan impairment

Credit Risk: Disclosures for Portfolios subject to the Standardised Approach and Supervisory Risk Weights in the Internal Risk Book (IRB) Approaches

Qualitative Disclosures

- For portfolios under the standardised approach:
    - Types of exposure for which each agency is used
    - A description of the process used to transfer public issue ratings onto comparable assets in the banking book; and
    - The alignment of the alphanumerical scale of each agency used with risk buckets

Quantitative Disclosures

- For exposures subject to the standardised approach, amount of a bank's outstandings (rated and unrated) in each risk bucket as well as those that are deducted; and
- For exposures subject to the supervisory risk weights in IRB amount of a bank's outstandings in each risk bucket

Credit Risk: Disclosures for Portfolios subject to IRB Approaches

An important part of the New Accord is the introduction of an IRB approach for the assessment of regulatory capital for credit risk. To varying degrees, banks will have discretion to use internal inputs in their regulatory capital calculations. In this disclosure category, the IRB approach is used as the basis for a set of disclosures intended to provide market participants with information about asset quality. In addition, these disclosures are important to allow market participants to assess the resulting capital in light of the exposures. There are two categories of quantitative disclosures: those focussing on an analysis of risk exposure and assessment (i.e. the inputs) and those focussing on the actual outcomes (as the basis for providing an indication of the likely reliability of the disclosed information). These are supplemented by a qualitative disclosure regime which provides background information on the assumptions underlying the IRB framework, the use of the IRB system as part of the risk management framework and the means for validating the results of the IRB system. The disclose regime is intended to enable market participants to assess the credit risk exposure of IRB banks and the overall application and suitability of the IRB framework, without revealing proprietary information or duplicating the role of the supervisor in validating the detail of the IRB framework in place.

Qualitative Disclosures

- Supervisor's acceptance of approach/supervisory approved transition
- Explanation and review of the:
    - Structure of internal rating systems and relation between internal and external ratings
    - Use of internal estimates other than for IRB capital purposes
    - Process for managing and recognising credit risk mitigation; and
    - Control mechanisms for the rating system including discussion of independence, accountability, and rating systems review

- Description of the internal ratings process, provided separately for five distinct portfolios:
    - Corporate (specialised lending and purchased corporate receivables), sovereign and bank
    - Equities
    - Residential mortgage
    - Qualifying revolving retail; and
    - Other retail

    The description should include, for each portfolio:
    - The types of exposure included in the portfolio
    - Description of deviations as permitted from the reference definition of default where determined to be material, including the broad segments of the portfolio(s) affected by such deviations

Quantitative Disclosures: Risk Assessment

- Percentage of total credit exposures to which IRB approach disclosures relate

Quantitative Disclosures: Historical Results

- Actual losses (e.g. charge-offs and specific provisions) in the preceding period for each portfolio (as defined above) and how this differs from past experience. A discussion of the factors that impacted on the loss experience in the preceding period. For example, has the bank experienced higher than average default rates
- Banks' estimates against actual outcomes over a longer period. At a minimum, this should include information on estimates of losses against actual losses in each portfolio (as defined above) over a period sufficient to allow for a meaningful assessment of the performance of the internal rating processes for each portfolio.

<u>Equities: Disclosures for Banking Book Positions</u>

Qualitative Disclosures

- The general qualitative disclosure requirement with respect to equity risk, including:
    - Differentiation between holdings on which capital gains are expected and those taken under other objectives including for relationship and strategic reasons; and
    - Discussion of important policies covering the valuation and accounting of equity holdings in the banking book. For example, the accounting techniques and valuation methodologies used, including key assumptions and practices affecting valuation as well as significant changes in these practices

Quantitative Disclosures

- Value disclosed in the balance sheet of investments, as well as the fair value of those investments; for quoted securities, a comparison to publicly quoted share values where the share price is materially different from fair value
- The types and nature of investments, including the amount that can be classified as:
    - Publicly traded; and
    - Privately held
- The cumulative realised gains or losses arising from sales and liquidations in the reporting period
- Total unrealised or latent revaluation gains or losses and any amounts included in Tier 1 and/or Tier 2 capital
- Capital requirements broken down by appropriate equity groupings, consistent with the bank's methodology, as well as the aggregate amounts and the type of equity investments subject to any supervisory transition or grandfathering provisions regarding regulatory capital requirements

Credit Risk Mitigation: Disclosures for Standardised and IRB Approaches

Qualitative Disclosures

- The general qualitative disclosure requirement with respect to credit risk mitigation, including:
    - Policies and processes for, and an indication of the extent to which the bank makes use of, on and off balance sheet netting
    - Policies and processes for collateral valuation and management
    - A description of the main types of collateral taken by the bank
    - The main types of guarantor/credit derivative counterparty and their creditworthiness; and

- Information about (market or credit) risk concentrations within the mitigation taken

Quantitative Disclosures

- For each separately disclosed credit risk portfolio under the standardised and/or foundation IRB approach, the total exposure (after netting) that is covered by:
  - Eligible financial collateral; and
  - Other eligible IRB collateral
- For each separately disclosed portfolio under the standardised and/or IRB approach, the total exposure (after netting) that is covered by guarantees/credit derivatives

Securitisation: Disclosures for Standardised and IRB Approaches

Qualitative Disclosures

- The general qualitative disclosure requirement with respect to securitisation (e.g. synthetics), including a discussion of:
  - The bank's objectives in relation to securitisation activity; and
  - The roles played by the bank in the securitisation process and an indication of the extent of the bank's involvement in each of them
- Summarise the bank's accounting policies for securitisation activities, including:
  - Whether the transactions are treated as sales or financings
  - Recognition of gain on sale
  - Key assumptions for valuing retained interests; and
  - Treatment of synthetic securitisations if this is not covered by other accounting policies (e.g. on derivatives)

Quantitative Disclosures

- The total outstanding exposures securitised by the bank and subject to the securitisation framework (broken down into traditional/synthetic), by exposure type
- For exposures securitised by the bank and subject to the securitisation framework:
    - Amount of impaired/past due assets securitised; and
    - Losses recognised by the bank during the current period
- Aggregate amount of securitisation exposures retained or purchased broken down by exposure type
- Aggregate amount of securitisation exposures retained or purchased broken down into a meaningful number of risk weight bands. Exposures that have been deducted should be disclosed separately
- Aggregate outstanding amount of securitised revolving exposures segregated by originator's interest and investors' interest
- Summary of current year's securitisation activity, including the amount of exposures securitised (by exposure type), and recognised gain or loss on sale by asset type

Market Risk: Disclosures for Banks Using the Standardised Approach

Qualitative Disclosures

- The general qualitative disclosure requirement for market risk including the portfolios covered by the standardised approach

Quantitative Disclosures

- The capital requirements for:
    - Interest rate risk
    - Equity position risk
    - Foreign exchange risk; and

- Commodity risk

Market Risk: Disclosures for Banks Using the Internal Models Approach (IMA) for Trading Portfolios

Qualitative Disclosures

- The general qualitative disclosure requirement for market risk including the portfolios covered by the IMA
- For each portfolio covered by the IMA:
  - The characteristics of the models used
  - A description of stress testing applied to the portfolio; and
  - A description of the approach used for backtesting/validating the accuracy and consistency of the internal models and modelling processes
- The scope of acceptance by the supervisor

Quantitative Disclosures

- For trading portfolios under the IMA:
  - The aggregate value-at-risk (VaR)
  - The high, mean and low VaR values over the reporting period and period-end; and
  - A comparison of VaR estimates with actual outcomes, with analysis of important 'outliers' in backtest results

Operational Risk

Qualitative Disclosures

- In addition to the general qualitative disclosure requirement, the approaches for operational risk capital assessment for which the bank qualifies

- Description of the AMA, if used by the bank, including a discussion of relevant internal and external factors considered in the bank's measurement approach. In the case of partial use, the scope and coverage of the different approaches used

Quantitative Disclosures

- For banks using the AMA, the operational risk charge before and after any reduction in capital resulting from the use of insurance

Interest Rate Risk in the Banking Book (IRRBB)

Qualitative Disclosures

- The general qualitative disclosure requirement, including the nature of IRRBB and key assumptions, assumptions regarding loan prepayments and behaviour of non-maturity deposits, and frequency of IRRBB measurement

Quantitative Disclosures

- The increase (decline) in earnings or economic value (or relevant measure used by management) for upward or downward rate shocks according to management's method for measuring IRRBB, broken down by currency (as relevant)

Appendix B: 2001 Basel Survey Checklist (12 categories of 104 disclosure items)

Disclosure item	DSC
Capital Structure Issuance of capital through special purpose vehicles (SPVs)	
Key "trigger" events	
Amount of common shareholders' equity	
Total capital base	
Amount of Tier1 capital	
Amount of perpetual non-cumulative preference shares	
Amount of minority interests in the equity of subsidiaries	
Amount of innovative or complex capital instruments, including the % of total Tier1 capital	
Amount of Tier3 capital, where applicable	
Deductions from Tier1 and Tier2 capital	
Amount of Tier2 capital (split between Upper and Lower level Tier2) with separate disclosure of material components	
Maturity, including call features of complex or hybrid capital instruments	
Provisions of capital instruments permitting interest of dividend deferrals or any other cumulative characteristics, where applicable	
Step-up provisions for capital instruments, where applicable	
Capital Adequacy Whether the bank has an internal process for assessing capital adequacy and for setting appropriate levels of capital	
Risk-based capital ratio calculated in accordance with the methodology prescribed in the Basel Capital Accord	
Risk exposure of each off-balance sheet instrument (specifying nominal amount, credit equivalent amount and risk weighted amount for each risk bucket)	
Risk exposure of balance sheet assets (specifying book value and risk weighted amount for each bucket)	
Analysis of changes in the bank's capital structure and the impact on key ratios and overall capital position	
All information relevant to understanding how Basel Capital Accord requirements for market risk under the internal models approach have been calculated	
All information relevant to understanding how Basel Capital Accord requirements for market risk under the standardised approach have been calculated, including disclosure of capital charges for component risk elements, as appropriate	
Market Risk Internal Modeling Type of internal modeling used (e.g. historical simulation, VaR)	
Described the portfolios covered by the bank's internal model	
An overview of policies and procedures for stress testing internal models	
An overview of policies and procedures for back-testing internal models	

Summary quantitative information on market risk exposure based on internal methods used for measurement, with information on performance in managing those risks	
For those disclosing VaR data, provided high/low VaR	
For those disclosing VaR data, provided average VaR	
Summary VaR results on a weekly or monthly basis	
Discussed the number of times (days) actual portfolio loss exceeded VaR	
For non-traded portfolios, provided summary VaR or impact on earnings	
Daily information on profits and losses on trading activities, combined with VaR numbers (i.e. graphics)	
Discussed the results of scenario analysis or impact of shocks for traded portfolios	
For non-traded portfolios, provided summary results of scenario analysis of the impact of shocks	
Confidence level used for internal modeling	
Holding period used for internal modeling	
Observation period used for internal modeling	
Internal and External Ratings Discussed the process and methods used to assess credit exposures on both an individual counterparty and portfolio basis, including a description of the internal classification system (e.g. what each rating means in terms of default probability, degrees of risk being distinguished, performance over time and ex-post evaluation)	
Summary information about the internal ratings process	
Described how internal ratings are used in the bank's internal capital allocation process	
Summary information on the quality of on- and off- balance sheet credit exposures, based on the internal ratings process or external ratings	
Credit Risk Modeling Whether credit risk measurement models are used, and if so, provided descriptive information about the types of models, portfolio(s) covered and size of portfolios	
How the bank has incorporated historical default experience for different asset categories, current conditions, changes in portfolio composition and trends in delinquencies and recoveries	
Whether credit scoring is used when granted credit, and if so, provided descriptive information about the credit scoring model and how it is used	
If an institution stress tests its counterparty credit exposures, it should disclose its process for stress testing, and how testing is incorporated into its risk management system	
Quantitative and qualitative information about the credit risk measurement models used, including model parameters (e.g. holding period, observation period, confidence interval), performance over time, and model validation and stress testing	
Securitisation Activities Accounting treatment of securisation transactions and other credit risk mitigation techniques	
Described the bank's strategy and objectives for securitisations	
Described general recourse provisions on securitisations	
Amount and types of assets securitised	
Income effect of securitisation	
Amount of servicing retained on securitised assets	
Amount of risk on assets retained when assets are securitised	

Described details on subordinated interests retained (first loss protection) when assets are securitised	
Asset Quality How the allocated and (any) of the unallocated portions of the allowances are determined	
Described policies and practices for sovereign risk provisioning	
Types of credit exposures that are evaluated individually for impairment and the types of exposures that are evaluated as a group	
Discussed practices and procedures used for evaluating the adequacy of credit loss provisions and credit loss allowances	
Discussed the techniques used to monitor and manage past due or impaired assets/credit relationships	
Described how the level of allowances compares with historical net loss experience	
A reconciliation of activity for any allowances established for credit impairment ("continuity schedule")	
Information on the impact of non-accrual and impaired assets on the financial performance of the bank including information on charge-offs and provisions	
Amount of any charge-offs and recoveries that have been recorded directly in the income statement	
Information on total credit exposures, including exposures arising from lending, trading, investment, liquidity/funding management and off-balance sheet activities	
If the institutions uses collateral, covenants, guarantees or credit insurance to reduce risk exposure, the impact on credit exposure should be disclosed	
Information on the amount and nature of derivatives credit risk loss allowances	
Replacement cost of non-performing derivatives	
Credit Derivatives and Other Credit Enhancements Discussed how credit derivatives are used, including strategy and objectives	
Notional amounts and fair value of credit derivatives	
Quantitative information about the effect of credit enhancement on counterparty credit exposures	
Amount of credit risk bought or sold using credit derivatives	
Listed a breakdown of credit derivatives by type of instrument (e.g. total return swap, credit default swap or other credit derivatives)	
Information on the effect of credit enhancement on the bank's counterparty exposure from OTC contracts	
Derivatives (other than Credit Derivatives) Discussed the objectives for use of non-trading derivatives	
Described how derivatives are used to hedge risks (strategies)	
Discussed the overall business objectives of trading activities and strategies for achieving those objectives	
Gross positive market value of derivatives	
Gross negative market value of derivatives	
Summary information about the effect of non-trading derivatives on earnings of off-balance sheet (hedging) positions held by the organisation (e.g. to manage interest rate risk, currency risk and other risks)	
Quantitative effect of legally enforceable bilateral and multilateral netting agreements	
End-of-period and average notional and market values for trading portfolios and non-trading portfolios	
Future potential exposures for derivatives, where appropriate	
Geographic and Business Line Diversification Information on market activity by broad instrument category (e.g. futures, forwards, swaps and options)	
Information on market activity by broad risk category (e.g. interest rate, exchange rate, precious metals, other commodities and equities)	

Summary information about the geographic distribution of credit exposures, including domestic and international credit exposures	
Information on trading revenues by major risk category (foreign exchange, interest rate, commodity, equity) or by major product (bonds, swaps, foreign exchange, equities)	
Information about the composition of on- and off-balance sheet credit exposures by major types of counterparty	
Credit exposure information by business line	
Sovereign exposures	
A breakdown of impaired assets by geographic area	
A breakdown of past due assets by counterparty type	
A breakdown of past due assets by asset category	
Accounting and Presentation Policies Basis of measurement for assets at initial recognition and subsequent periods (e.g. fair value or historical cost)	
Described the accounting policies and method of income recognition used for trading activities (using both cash instruments and derivatives) and non-trading activities	
Described the treatment of hedging relationships affecting the measurement of assets	
Basis for determining when assets are considered past-due and/or impaired for accounting and disclosure purposes (number of days where appropriate)	
Income and expense information grouped by nature or function within the bank	
Summary information about how trading activities affect earnings, based on internal measurement and accounting systems	
Distinguished between trading assets and trading liabilities	
Other Risks Qualitative disclosures of interest rate risk in the banking book	
Information about the main types of operational risk and identified and discussed any specific issues considered to be significant	
Legal contingencies (including pending legal actions) and discussed possible liabilities	
Quantitative disclosures of interest rate risk in the banking book	
Quantitative and qualitative information and strategies for managing liquidity risk	