BANK DISCLOSURE PRACTICES: IMPACT OF USERS′ PERSPECTIVE OF FINANCIAL GOVERNANCE

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Abstract

This paper investigates the influence of the legal framework, national income and quality of financial governance on bank disclosure practices at a macro level. 104 developed and developing countries were examined in 2004. The findings indicate that in addition to investor protection and national income, quality of financial governance (accounting and audit) is positively associated with bank disclosure practices globally. Furthermore, this paper has explored and extended La Porta et al.'s (1998) findings on the association between national income and the quality of a country's accounting standards to the banking disclosure model.

Keywords: Investor Protection, National Income, Quality of Financial Governance, Banking Disclosures, Transparency

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1 Introduction

With the climate of uncertainty due to the recent global financial crisis, global investors are concerned that the banking industry is not as transparent compared to non-banks despite the fact that banks are more regulated. Transparency through banking disclosures is important for value relevant information (Bischof and Daske 2013) and critical in determining the risk profile for valuating banks and consequently, will have major implications on the country's economic and financial stability. To date, research into banking disclosures have been limited to performance studies that looked at the information content of market risk disclosures (Berkowitz and O'Brien 2002; Estrella, Park and Peristiani 2000; Hirtle 2003; Jorion 2002) and the significance of disclosures on cost of equity (Poshakwale and Courtis 2005). In other words, the extant literature on banking disclosures have been limited to as a determinant for firm performance and risk models. Our study will be the first to investigate the determinants of banking disclosures with global indices which have never been used for this industry- specific analysis despite the fact that the latest dataset were developed about a decade ago.

Thomas and Brown (2006) argue that transparency is a powerful tool that can be used to monitor progress on the objectives of financial exclusion and to ensure effective targeting of resources but the level disclosure varies among countries based on their level of economic development. Extant literature on information disclosure has concentrated principally on earnings announcements (Beyer et al. 2010). Grossman (1981), using the representation theorem, established the fundamentals of full disclosure in his seminal work on the informational role of warranties and private disclosure about product quality (see also Milgrom 1981). The theorem suggests if the sender's preferences are monotonic in the receiver's action, then the sender reveals its type in every sequential equilibrium with verifiable messages. Seidman and Winter (1997) used the same theorem to provide evidence that the action of sender varies with its type. Their works were mainly at firm level using microeconomic data. The type(s) of sender at firm level obviously implies firms size, industry belonging, its market capitalisation, its age, its growth to mention a few. Using the same line of logic, we argue that at a country level the type(s) of sender would imply the size of a country, the stage of economic development it has achieved, its main economic activities and the national income. This means that whether the country is rich, emerging or poor, rich economies have more resources to disclose more information as opposed to poor countries. We further argue that because the receivers of information in a developing country are less reactive to the disclosure of information, disclosure level by banks may be less. Moreover, a country with a low national income has other priorities over transparency (Nobes 1998). For example, a poor country will give more priority to

poverty alleviation than focusing as how to improve disclosure practices by banks.

Accounting literature has shed more light on disclosure practices by firms including banks by investigating the determinants of both mandatory and voluntary disclosure (Bhattacharya and Ritter 1983; Dye 1985; Healy and Palepu 2001), and has also provided the rationale for mandatory minimum disclosure regulation (Admati and Pfleiderer 2000; Dye 1985). All these works pertain to firm level within an industry or a small sample of countries. As yet there is no work on the determinants of disclosure by banks at country level and in particular at a global dimension as our study.

Recent empirical studies have suggested that national culture and investor protection are significant determinants in the theoretical framework for the transparency of international banking operations (Hooi 2007, 2012). Hooi (2012) argue that bank regulators such as the Basel Committee should consider cultural and legal factors in harmonising complex international banking regulations in a highly competitive global economy. The objectives of this paper are twofold. First, to further contribute to this new area of research by incorporating a more extensive dataset of 104 countries compared to only 17 developed and developing countries used in Hooi's (2012) banking disclosure model. This will be the first study to use the latest global indices to better understand the determinants of banking disclosures at the macro level. Moreover, the research implications can provide valuable insights for policymakers in global banking institutions and regulators such as the Bank for International Settlements (BIS) and the Financial Stability Board (FSB). Second, to explore and extend La Porta et al.'s (1998) findings on the association between with national income and the quality of a country's accounting standards to the banking disclosure model. We believe that the inclusion of national income and quality of financial governance may improve the explanatory power of the global disclosure model.

It is important to note that a major trade-off by incorporating 104 countries in this study is to exclude national culture in the model due to its limited data availability of about 50 countries (Hofstede 2001). This means that for this study, the legal dimension will be the main determinant for the banking disclosure model from a global perspective.

Findings from this paper contribute to the literature in a number of ways. We have extended the frontier of knowledge on the predictors of banking disclosure practices by using a larger dataset comprising 104 countries, as opposed to extant literature which have used only 17 countries for Hooi's (2012) banking disclosure model and 41 countries for La Porta et al.'s (1998) accounting quality model. Interestingly, investor protection is found to be significant only for common law countries

and national income only for civil law countries. This finding aligns with that of La Porta et al. (1998) who contended that common law countries have relatively stronger investor protection than civil law countries. More importantly, national income was found to be a significant determinant of banking disclosure practices in which banks in richer countries are more transparent than poorer countries. Moreover, the quality of financial governance is a significant factor for the disclosure practices of banks across the globe. Research implications of this study can provide valuable insights for policymakers in harmonising complex international banking regulations for institutions and regulators such as the BIS and FSB.

This paper is organised as follows. The background section will address issues on investor protection, bank disclosure practices, the conceptual framework and hypotheses formulation followed by sections on design and discussion. Finally, the conclusion section summarises the findings and their implications.

2 Background

2.1 Investor protection

This study will use the seminal work of La Porta et al. (1997, 1998) to better understand the role of legal dimensions in banking disclosures. 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 divided 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.

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.

2.2 Bank disclosure practices

Banks are considered as public interest entities with multiple stakeholder groups interested in the contents of their reports (Day and Woodward 2004). Around the globe banking activities are regulated by 'hard' and 'soft' laws. Hard laws means the Banking Act(s) of each country which monitors banking activities and 'Soft' laws are Pronouncements, Policy Briefs or Code of Best Practices issued by global institutions such as the Organisation for Economic Co-operation and Development (OECD). In addition to the specific banking law(s) of a country, the BIS issues Core

principles called the Basel Core Principles which regulate banking practices. Both the hard and soft laws require banks to increase their accounting disclosures that entices to better transparency and stronger market discipline that could reduce banking crisis.
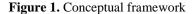
Extant literature identifies the role and impact of financial reporting during financial crises (Barth and Landsman 2010; Autore et al. 2009). Bhattacharya and Purnanandam (2010) investigate risk taking by banks and suggest that the stakeholders are informed after the events have occurred whereas Beltratti and Stulz (2010) argue that some banks perform better during the credit episode due to increased risk reporting requirements and better risk management.
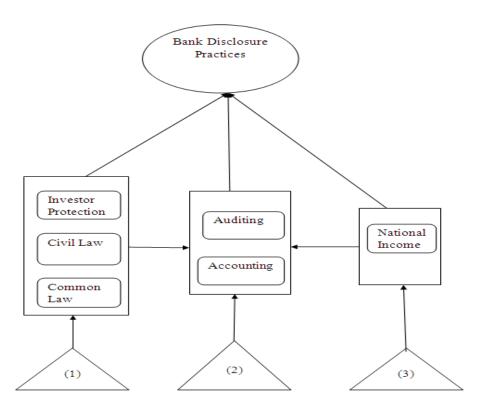
Current research suggests that the subsequent collapse of international banks during the global financial crisis are partly due to the fact that these banks have failed to provide full disclosure of their operations (Abraham et al. 2008; Demyanyk and Hasan 2009; Barth and Landsman 2010; Jin et al. 2011). Due to pressures from clients and the financial community, many countries around the globe have reviewed their banking regulations in order to increase disclosures in their financial reports. For example, in the US the Federal Deposit Insurance Corporation Improvement Act of 1991 imposed new corporate reporting, auditing and governance reforms on depository institutions with assets greater than \$500 million, but increased to \$1 billion in 2005 (Murphy 2004). Moreover, these regulations aim at increasing transparency in the financial reports of banks and related institutions. Basel II and the OECD release on "Corporate Governance of Banks" require for better disclosures by banks so as to better portray the overall risk position of banks. This view is also supported by Nier and Bauman (2006) who also contends that in a high disclosure jurisdiction banks will not venture in excessive risks.

2.3 Conceptual framework

This subsection presents a conceptual framework that supports the hypotheses and also the links between the variables. Accounting literature suggests that many factors influence the quality of accounting and auditing among countries which we therefore argue will impact on the disclosure practices in financial reports of banks (Hatfield 1996; La Porta et al. 1998; Nobes 1998; Boolaky 2012). La Porta et al. (1998) reveals the relationship between legal systems and quality of accounting. They also emphasise on the impact of investor protection including minority interests on company-level accounting. Nobes (1998) demonstrates how the level of economic development influences accounting of a country which is further confirmed in extant literature (see also Larson 1993; Boolaky 2012). Soderstrom and Sun (2007) uses a number of factors which impact on accounting

quality. In this paper, we are focusing on three institutions of legal system, economic development and quality of financial governance as determinants of bank disclosure practices. This is conceptualised in Figure 1. The conceptual framework is used to develop hypotheses for testing in this study. The next subsection addresses the hypotheses development.

Figure 1. Conceptual framework

(1): Legal system
(2): Quality of financial governance
(3): Economic development

2.4 Hypotheses formulation

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. 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. We hypothesise:

H1: There is a positive association between common law countries and banking disclosures

Hooi (2007, 2012) argue that investor protection complements Gray's (1988) secrecy/transparency theoretical framework. With the support of La Porta et al. (1998), we hypothesise:

H2: There is a positive association between investor protection and banking disclosures

Larson (1993) suggests that there is a relationship between economic growth and the accounting and reporting practices and infers that countries with high growth rate have more transparent financial reports. La Porta et al. (1998) found that quality of accounting standards have a positive association with national income measured in log of GNP per capita. In other words, richer countries have higher quality of accounting standards. Nobes (1998) extends the argument by suggesting that the more developed the equity market the better should be the financial reporting in this jurisdiction. Boolaky (2012) contends that a country experiences different stages of economic development which therefore requires different level of reporting systems and hence different disclosure level. All these studies have referred to national income as an indicator of development. Our study investigates the disclosure practices by banks in 104 countries with different stages of economic development whose national income level also varies. We argue that it is very likely that disclosure practices by banks in these jurisdictions would also vary. Based on the above, we hypothesise:

H3: There is a positive association between national income and banking disclosures

It is reasonable to argue that quality of financial governance in terms of accounting and auditing standards can influence the disclosure model. La Porta et al. (1998) suggest that for investors to be informed about the company they invest, basic accounting standards are needed to render the company's disclosure interpretable. They further argue that the contracts between managers and investors rest on the verifiability of some measures of assets and incomes.

We adopt the International Financial Reporting Standards and International Standards on Auditing to determine the quality of accounting and auditing respectively. La Porta et al. (1998) on the other hand, only addressed the accounting quality index which was constructed based on what was reported in the companies' reports thus being more of the preparers' view of accounting in the country. In other words, we use a different perspective on the quality of financial governance which was based on the users' perceptions. These perception indices are valid and reliable due to the fact that they have been collected and collated scientifically over 30 years for the purpose of empirical research in social science and for policymaking in many national, regional and international institutions (Boolaky and O'Leary 2011; Boolaky 2012; Boolaky et al. 2013). More importantly, this perspective has not been considered in the context of banking disclosure research.

Our argument is that the strength of accounting and reporting of a country therefore influences disclosure practices. This resonates with Boolaky (2012) and Boolaky et al. (2013) that a country with a strong auditing and reporting system will be more transparent than a country with a weak auditing and reporting system.

We hypothesise:

H4: There is a positive association between accounting quality and banking disclosures

H5: There is a positive association between audit quality and banking disclosures

3 Design

3.1 Data

The selection of countries was determined by the data availability from Huang (2006) for the composite bank disclosure indices and World Economic Forum (cited in Cornelius, 2005: 20-21) for the investor protection indices. Consequently, a maximum of 104 countries are available for the study for the financial year 2004 which is the similar period used in Hooi's (2012) firm-level study. The national index of bank disclosure is composed of only traditional commercial banks, savings bank and cooperative banks in about 180 countries in which the index values range between 0 and 100 with higher values indicating better transparency and disclosure practices of the banking systems. "The disclosure indices are first created for individual banks based on their disclosure practices, using a checkbox approach, and then national indices are created by taking the asset-weighted average of the bank-level disclosure indices. A total of more than 20,000 banks are included in calculating these indices." (Huang 2006: 33).

The composite disclosure index is based on six disclosure categories i.e. loans, other earning assets, deposits, other funding, memo-lines and incomes. The loans category mainly includes breakdown of loans by maturity, type, counterparty, credit risk and problem loans. The other earning assets category includes the breakdown of securities by type and hold purpose. The deposits category includes the breakdown of deposits by maturity and type of customer. The other funding category includes the breakdown of money market funding and long-term funding. The memo-lines category includes the disclosures of capital ratio, reserves, contingent liabilities and off-balance sheet. Finally, the incomes category includes the breakdown of non-interest income and disclosure of loan loss provisions.

The investor protection index is adapted from a global competitiveness report (World Economic Forum 2004), labelled as the law protection of minority shareholders in Cornelius (2005). The legal dimension of common law which is a dichotomous variable is partly adapted from La Porta et al. (1998).

For this study, it is reasonable to correspond La Porta et al.'s (1998) common law index with the 2004 disclosure model since they are relatively stable in the long run. Finally, the national income index is adapted from the World Bank's country classification report (cited in Kasteng et al., 2004: 55-57) where low, low-medium, medium, high income countries are represented by indices of 1, 2, 3 and 4 respectively.

3.2 Model

Cross-sectional OLS regression analysis will be applied to the total sample of 104 countries. The global disclosure model shall regress with the legal dimension which is the main determinant in terms of common law and investor protection i.e. to test H1 and H2.

$$DSC_c = a_0 + a_1 COM_c + a_2 IVP_c + \varepsilon \tag{1a}$$

DSC = disclosure
COM = common law
IVP = investor protection

$a_1 - a_2$ = coefficients of the explanatory variables
Subscript: c = country level

A subsample analysis shall be applied to test H3:

$$DSC_c = a_0 + a_1 COM_c + a_2 IVP_c + a_3 INC_c + \varepsilon \tag{1b}$$

DSC = disclosure
COM = common law
IVP = investor protection
INC = income
$a_1 - a_3$ = coefficients of the explanatory variables
Subscript: c = country level

To better understand the influence of investor protection and national income among countries based on legal origin, this study shall regress by splitting the sample between common and civil law countries. Consequently, the samples for regressing common

and civil law countries are 35 and 69 respectively. There are predominantly three categories of civil law namely French, German and Scandinavian (La Porta et al. 1998). However, due to insufficient data of all those categories, the study is not able to test the significance of legal origins of civil law.

The quality of financial governance variables of accounting and audit are based on IASB and IFAC databases on international financial reporting standards and international standards on auditing respectively. Table 1 summarises the characteristics of all variables. Consequently, disclosure model 2 will be used to test H4 and H5 with 80 countries:

$$DSC_c = a_0 + a_1 COM_c + a_2 IVP_c + a_3 INC_c + a_4 ACC_c + a_5 AUD_c + \varepsilon \tag{2}$$

DSC = disclosure
COM = common law
IVP = investor protection
INC = income
ACC = accounting quality
AUD = audit quality

$a_1 - a_5$ = coefficients of the explanatory variables
Subscript: c = country level

Table 1. Variable summary

Variable	Description	Source	Year	Sample	Model	Status	Expected Relationship
DSC	Bank disclosure	Huang (2006)	2004	104	1 and 2	Dependent	
COM	Common law	La Porta et al. (1998)	1998	104	1 and 2	Regressor	positive
IVP	Investor protection	Cornelius (2005)	2004	104	1 and 2	Regressor	positive
INC	National income	World Bank	2004	104	1 and 2	Regressor	positive
ACC	Accounting quality	IASB (2004)	2004	80	2	Regressor	positive
AUD	Audit quality	IFAC (2004)	2004	80	2	Regressor	positive

4 Discussion

4.1 Descriptive analysis

Table 2 presents data on bank disclosure indices for 80 countries categorised by legal origins. The table suggests that countries of Scandinavian origin are the most transparent in the sample with the highest average disclosure score followed by German, English, French and Civil-other. Further analysis (not shown in a table) confirms that the disclosure averages compared between English and Scandinavian and English and German are significant at 1% and 5% respectively. Moreover, Table 2 shows that the average investor protection between Scandinavian and all other legal origins are significant at 1%. This may suggest that Scandinavian countries with the strongest investor protection have demanded the highest level of banking disclosure practices.

Table 3 compares the significance of legal origins for investor protection between La Porta et al.

(1998) and this study using the equality of means tests. La Porta et al. (1998) constructed its own investor protection index called anti-director rights which measures how strongly the legal system favours minority shareholders against managers or dominant shareholders in managerial decisions including the voting process. 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.

Table 2. Global Banking Indices for 80 Countries

Country	DSC	IVP	Country	DSC	IVP
Australia	73	6.1	Bahrain	84	5.1
Botswana	62	4.7	Bolivia	55	3.3
Canada	75	5.9	Bosnia	47	3.1
Cyprus	68	4.5	Bulgaria	63	2.9
Ghana	56	5.6	Chad	15	3.7
Hong Kong	91	4.9	Costa Rica	53	4.2
India	74	4.4	Croatia	56	3.2
Ireland	70	5.3	Czech Rep	65	4.1
Israel	79	5.9	El Salvador	58	4
Kenya	52	4.4	Estonia	68	4.6
Malaysia	72	5.4	Guatemala	46	3.4
Malta	72	4.9	Honduras	59	3.3
Mauritius	52	4.2	Hungary	73	4.6
New Zealand	79	6.1	Iceland	77	5.7
Nigeria	42	4.1	Latvia	70	3.9
Pakistan	59	5	Lithuania	73	3.8
Singapore	71	5.5	Macedonia	53	3.5
South Africa	78	5.5	Nicaragua	61	3.1
Sri Lanka	73	4.4	Panama	56	4.2
Thailand	75	4.7	Poland	71	3.7
Trinidad and Tobago	62	4.1	Romania	62	3.7
UK	71	6.3	Russia	62	2.8
USA	76	6.1	Slovakia	79	3.7
Zimbabwe	47	4.9	Slovenia	77	4.3
English-origin average	67.88	5.12	*Civil other-origin average*	61.79	3.83

DSC=disclosure, IVP=investor protection

Table 2. Global Banking Indices for 80 Countries (cont'd)

Country	DSC	IVP	Country	DSC	IVP
Austria	78	5.1	Algeria	53	4.7
Germany	74	6.1	Argentina	66	3.7
Japan	80	5	Belgium	70	5.6
Korea Rep	68	4.1	Brazil	74	4.5
Switzerland	82	4.9	Chile	62	5.2
Taiwan	72	4.8	Colombia	63	4.1
German-origin average	75.67	5.00	Egypt	55	4.8
			France	66	5
Denmark	79	6.3	Greece	67	5.1
Finland	85	6.4	Italy	89	3.5
Norway	84	6.2	Jordan	74	4.9
Sweden	90	5.9	Luxemburg	61	4
Scandinavian-origin average	84.50	6.20	Mali	46	4.6
			Mexico	75	4.5
			Morocco	62	4.5
			Netherlands	86	5.2
			Peru	57	4.2
			Philippines	70	4.3
			Portugal	73	5.1
			Spain	81	4.5
			Uruguay	41	4.1
			Venezuela	56	3.6
			French-origin average	65.77	4.53

DSC=disclosure, IVP=investor protection

It is clear from Table 3 that legal origins matter for the strength of investor protection in which Scandinavian countries is ranked first followed by English, German, French and Civil other but collectively, common law countries have stronger investor protection compared to civil law countries. Despite the fact that this paper uses a different perspective of investor protection, most of the results are consistent with La Porta et al. (1998) except for English compared to German origin which was found to be insignificant. However, we have made a significant contribution by including a new dimension for other Civil countries not considered in La Porta et al. (1998). Moreover, we found more statistically significant results for the following comparisons i.e. English versus Scandinavian origin, French versus Scandinavian origin and German versus Scandinavian origin.

Table 4 presents the descriptive statistics for disclosure model 2 which is the complete model. On average, the banking disclosure level across all countries was moderate of 67%. From Table 5, the correlation coefficients show very little to moderate multicollinearity across the explanatory variables. With a correlation of 0.37 (significant at 1%), suggests that common law countries have relatively moderate investor protection compared to civil law countries. This result is consistent with the findings in La Porta et al. (1998).

Table 3. Tests of Means (t-statistics) for Investor Protection

	La Porta et al. 1998	Hooi and Boolaky 2015
Common vs. civil law	5.00[a]	3.86[a]
English vs. French origin	4.73[a]	3.14[a]
English vs. German origin	3.59[a]	0.40
English vs. Scandinavian origin	1.91[c]	-5.99[a]
English vs. Civil other origin	na	6.37[a]
French vs. German origin	0.00	-1.62
French vs. Scandinavian origin	-1.06	-10.36[a]
French vs. Civil other origin	na	3.78[a]
German vs. Scandinavian origin	-1.08	-4.22[a]
German vs. Civil other origin	na	3.91[a]
Scandinavian vs. Civil other origin	na	13.26[a]

a: significant at 1%, b: significant at 5%, c: significant at 10%, (2-tailed)

Table 4. Descriptive statistics

(n=80)	Mean	Std Dev
DSC	66.888	12.993
COM	0.300	0.461
IVP	4.616	0.897
INC	2.925	1.053
ACC	2.890	1.169
AUD	2.150	1.057

DSC=disclosure,
COM=common law,
IVP=investor protection,
INC=income,
ACC=accounting quality,
AUD=audit quality

Table 5. Pearson correlation of explanatory variables

	COM	IVP	INC	ACC	AUD
COM	1				
IVP	0.371[a]	1			
INC	-0.057	0.495[a]	1		
ACC	-0.101	0.011	0.168	1	
AUD	0.114	-0.176	-0.138	0.444[a]	1

a: significant at 1%, b: significant at 5% (2-tailed)
Note: Collinearity Statistics (VIF)

	COM	IVP	INC	ACC	AUD
VIF	1.360	1.754	1.504	1.377	1.421

COM=common law,
IVP=investor protection,
INC=income,
ACC=accounting quality,
AUD=audit quality

4.2 Global disclosure model

From Table 6, the legal determinants are found to be significant with an adjusted R^2 of 26.7% with civil law being significant at 5%. The insignificance of common law may suggest that for the banking industry, civil law countries are found to be more transparent. This is contrary to prior research in which banking disclosures are found to be higher in common law countries as opposed to civil law countries (Hooi 2012). Moreover, studies in accounting disclosures were found to be similar (Jaggi and Low 2000; Hope 2003). A possible reason could be partly due to the fact that the original sample of 104 are predominantly civil i.e. 67.3%. Investor protection has a direct influence on banking disclosures (significant at 1%). Our finding extends the literature by reporting that although the legal system could affect disclosure, the law related to investor protection has more influence on the disclosure of information by banks around the globe. We identify that there are civil law countries which have a high score of investor protection and high disclosure index as well. Moreover, national income has improved Model 1 with an adjusted R^2 of 41% and has a direct influence on banking disclosures (significant at 1%). However, the common law variable is found to be insignificant in the extended Model 1.

For further analysis, Table 7 reports the split sample of common and civil law countries. Interestingly, investor protection is found to be significant (1%) only for common law countries and national income is found to be significant (1%) only for civil law countries with adjusted R^2 of 39.8% and 44.9% respectively. This suggests that investor protection is more important for common law countries similar to La Porta et al. (1998) who found that common law countries have relatively stronger investor protection than civil law countries. The positive correlation of 0.37 between common law and investor protection supports this argument.

Table 6. Results for Model 1

(n=104)

Panel A

Variable	Expected Relationship	Estimated Coefficient	t-Stat	p-value
Intercept	NA	28.448	4.739	0.000
COM	+ve	**-6.017**	-2.344	0.021
IVP	+ve	8.536	6.271	0.000

F-Stat: 19.745   F-value: 0.000

Adjusted R-Square: 0.267

Panel B

Variable	Expected Relationship	Estimated Coefficient	t-Stat	p-value
Intercept	NA	31.297	5.781	0.000
COM	+ve	-1.884	-0.771	0.443
IVP	+ve	4.361	2.958	0.004
INC	+ve	5.547	5.053	0.000

F-Stat: 24.873   F-value: 0.000

Adjusted R-Square: 0.410

COM=common law,   INC=income
IVP=investor protection,

Table 7. Results for legal origins

(n=34)

Panel A: Common

Variable	Expected Relationship	Estimated Coefficient	t-Stat	p-value
Intercept	NA	18.139	1.507	0.142
IVP	+ve	8.115	2.889	0.007
INC	+ve	2.632	1.604	0.119

F-Stat: 11.917   F-value: 0.000

Adjusted R-Square: 0.398

(n=70)

Panel B: Civil

Variable	Expected Relationship	Estimated Coefficient	t-Stat	p-value
Intercept	NA	33.079	5.363	0.000
IVP	+ve	2.643	1.543	0.128
INC	+ve	7.606	5.265	0.000

F-Stat: 29.143   F-value: 0.000

Adjusted R-Square: 0.449

IVP=investor protection, INC=income

To address possible issues on the robustness of Model 1, the following two tests were performed (not shown in tables). First, it has been argued that OECD countries demand higher level of disclosures due to the fact that most are early adopters of Basel banking rules. The dummy variable OECD was tested to determine whether it is a better proxy for economic development. The univariate analysis confirms that national income is actually a better proxy than OECD with the corresponding adjusted R^2 of 36.9% (F-Stat 61.3) and 26.6 % (F-Stat 38.4) respectively. Interestingly, only national income is significant (at 1%) whereas OECD and its interaction with national income are insignificant which further confirms the univariate analysis. We believe that the national income is a better predictor for the global disclosure model especially the fact that it is more representative in terms of economic development compared to OECD. Moreover, the split regression of 30 OECD countries in the original sample of 104 with investor protection and national income find that (1) model is insignificant for OECD and (2) model is weaker for 74 non-OECD compared to the legal split with 70 civil countries (shown as panel B in table 6) have the corresponding adjusted R^2 of 27.1% (F-Stat 14.6) and 44.9 % (F-Stat 29.1) respectively.

Second, Huang (2006) argue that bank opacity is highly correlated with government opacity and La Porta et al. (1998) argue that law enforcement is an important factor for disclosures. The corruption perception index (CPI) developed by Transparency International and La Porta et al. (1998)'s law enforcement (LWE) variables were tested to determine their relevance to the global disclosure model. The correlation analysis confirms that both CPI and LWE are highly correlated and OECD is moderately correlated with national income with their respective values of 0.83, 0.83 and 0.64 (significant at 1%). Moreover, LWE cannot be used for the study with a limited dataset of 47 countries and CPI is highly correlated (0.74 at 1%) with investor protection which is supported by the extant literature for banking disclosures and not CPI. Hence, the above robustness tests suggest that OECD, CPI and LWE variables warrants exclusion from the global disclosure model and the conclusions from the study are subject to these limitations.

Table 8 reports on Model 2. Common law is found to be insignificant and consistent with Model 1. Investor protection is marginally significant at 10% and national income is significant at 1%. These results may suggest that investor protection does encourage minority investors to enter the stock market specifically in the global banking industry. This

situation may lead to a greater demand for transparency through a larger dispersion of ownership

across the domestic banks.

Table 8. Results for Model 2

(n=80)

Panel A

Variable	Expected Relationship	Estimated Coefficient	t-Stat	p-value
Intercept	NA	31.887	5.415	0.000
COM	+ve	-0.163	-0.061	0.951
IVP	+ve	3.388	2.157	0.034
INC	+ve	6.636	5.329	0.000

F-Stat: 22.248   F-value: 0.000

Adjusted R-Square: 0.447

Panel B

Variable	Expected Relationship	Estimated Coefficient	t-Stat	p-value
Intercept	NA	32.500	4.841	0.000
COM	+ve	1.451	0.547	0.586
IVP	+ve	2.894	1.868	**0.066**
INC	+ve	6.036	4.938	0.000
ACC	+ve	2.787	2.647	0.010
AUD	+ve	2.377	2.008	0.048

F-Stat: 19.951   F-value: 0.000

Adjusted R-Square: 0.485

COM=common law,
IVP=investor protection,
INC=income,
ACC=accounting quality,
AUD=audit quality

However, this finding is contrary to Hooi's (2012) negative association between anti-director rights and banking disclosures which may be due to a significantly smaller dataset of 37 firm-level banks for 17 countries. The subsample analysis found that the accounting and audit quality variables to be significant at 1% and 5% respectively with an adjusted R^2 of 48.5% (F-Stat 19.951). This confirms the crucial role that accounting and audit play in enhancing disclosures of banks. Hence, the results are consistent to all hypotheses except with H1.

5 Conclusion

In addition to testing the influence of the legal framework and national income, this paper has investigated the impact of the quality of financial governance on bank disclosure practices at a macro level. The findings indicate that investor protection is relevant which is consistent with Hooi's (2012) banking disclosure model. More importantly, this study has extended Hooi's (2012) results by incorporating a significantly larger sample of countries and suggests that national income and quality of financial governance do influence bank disclosure practices. Furthermore, this paper has explored and extended La Porta et al.'s (1998) findings on the association between national income and the quality of a country's accounting standards to the banking disclosure model.

We have used a more extensive dataset of 104 countries compared to only 17 developed and developing countries used in Hooi's (2012) banking

disclosure model for the similar financial year of 2004 and 41 countries used by La Porta et al.'s (1998) accounting quality model. It is important to note that the conclusions of this paper are subject to this limitation. Interestingly, investor protection is found to be significant only for common law countries and national income is found to be significant only for civil law countries. This suggest that investor protection is more important for common law countries because La Porta et al. (1998) has argued that common law countries have relatively stronger investor protection than civil law countries. The positive association between investor protection with banking disclosures may suggest that investor protection does encourage minority investors to enter the stock market specifically in the global banking industry. This situation may lead to a greater demand for transparency through a larger dispersion of ownership across the domestic banks. In conclusion, investor protection, national income and quality of financial governance are significant determinants in the theoretical framework for the transparency of international banking operations. Research implications of this study can provide valuable insights for policymakers in harmonising complex international banking regulations for institutions and regulators such as the BIS and FSB. Future research could involve a longitudinal study of pre and post analysis of the implementation of international financial reporting standards (IFRS) and Basel regulations to banks globally.

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