Market Risk Reporting by the World's Top Banks: Evidence on the Diversity of Reporting Practice and the Implications for International Accounting Harmonisation

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Abstract

The increasing adoption of international accounting standards and global convergence of accounting regulations is frequently heralded as serving to reduce diversity in financial reporting practice. In a process said to be driven in large part by the interests of international business and global financial markets, one might expect the greatest degree of convergence to be found amongst the world's largest multinational financial corporations.

This paper challenges such claims and presumptions. Its content analysis of longitudinal data for the period 2000-2006 reveals substantial, on going diversity in the market risk disclosure practices, both numerical and narrative, of the world's top-25 banks. The significance of such findings is reinforced by the sheer scale of the banking sector's risk exposures that have been subsequently revealed in the current global financial crisis. The variations in disclosure practices documented in the paper apply both across and within national boundaries, leading to a firm conclusion that, at least in terms of market risk reporting, progress towards international harmonisation remains rather more apparent than real.

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1. Introduction

> "The rationale for a global standard, rather than the Babel of competing and sometimes contradictory national standards, has been often stated. But it is so important that it bears repeating. Global accounting standards would improve investor confidence in the market, so long as the standards are high-quality, comprehensive and rigorously applied. They'd allow investors to draw better comparisons among investment options. They'd also lower costs for issuers, who would no longer have to incur the cost of preparing financial statements using different sets of accounting standards. And those lower costs would benefit the company's shareholders, who ultimately bear the burden of the entire cost of the financial reporting system."
>
> (Chairman's Address to the SEC Roundtable on International Financial Reporting Standards by Chairman Christopher Cox, U.S. Securities and Exchange Commission, Washington, D.C. March 6, 2007)

> "The 'best and the brightest' at our top investment banks have expended great energy designing ludicrously complex financial products, which you need a Nobel Prize in physics to understand. Whilst financial innovation and securitisation have brought real benefits and allowed for risk dispersion through the system, it has come at a cost. Product complexity has introduced increased opacity into our financial system, making it almost impossible to determine where risk lies and making it much more difficult to achieve financial stability."
>
> (John McFall MP, Chairman of the House of Commons Treasury Committee, commenting on the Committee's report, *Financial Stability and Transparency*, 6th report of Session 2007/08, see http://www.parliament.uk/parliamentary_committees/treasury_committee/tc0708pn30.cfm)

Historic differences in accounting practice around the world have been well documented and analysed by accounting researchers. There is extensive literature on both the classification of accounting systems (e.g., Gray, 1988; Doupnik and Salter, 1993; Nobes 1998) and the analysis of variations in accounting principles and disclosure practices (e.g., Walton, 1992; Meek et al., 1995; Choi and Levich, 1996; Gray et al., 1995). However, in the light of regulatory initiatives encouraging international harmonisation of accounting and a convergence of thinking between national regulatory bodies, there are evident grounds for claiming that such diversities of practice are disappearing.

In May 2000, the acceptance by IOSCO of the IASC's[1] core set of standards as a basis for cross border listings opened the door to global harmonisation. That same year, the European Commission imposed a requirement that from January 2005 exchange-listed companies in all member countries should prepare consolidated accounts according to Commission-endorsed IFRSs. To date, over one hundred countries have either already adopted IFRS, aligned their national standards to IFRS, or have committed themselves to doing so in the foreseeable future. Frits Bolkestein, commissioner in charge of the European Commission's Internal Market, described the European agreement as a move that signalled "a new era of transparency and the end of a Tower of Babel in financial reporting in Europe" (Blanchet, 2002). Such European developments still left fundamental differences between the accounting practices within IFRS and US GAAP. These differences meant that all non-US firms listed on the New York Stock Exchange or NASDAQ were required to file returns with the SEC and provide both income and equity reconciliations to US GAAP. This essentially meant that the global financial reporting environment could effectively be divided into four main groupings, incorporating companies reporting under either: IFRS; IFRS with an accompanying reconciliation to US GAAP; US GAAP; or applying national accounting rules that differed from both IFRS and US GAAP.

Subsequent efforts to eradicate international differences have included a growing number of countries committing, albeit in varying degrees, to the IFRS roadmap (notably, including countries such as China and South Korea). Developments to reduce the difference between IFRS and US GAAP have included: the joint IASB/FASB Memorandum of Understanding arising out of the Norwalk Agreement (2002) and, more recently, the November 2007 decision by the SEC to eliminate the above mentioned US GAAP reconciliation requirement for foreign private issuers of financial statements prepared in accordance with IFRS as issued by the IASB (with one, time-limited exception for issuers using the European Commission's IAS 39 'carve out'). Finally, the publication of a SEC Concepts Release on whether to allow US issuers to prepare their financial statements using IFRS (as published in English by the IASB) rather than US GAAP has made the strongest signals to date that the former is destined to become the world standard in global corporate financial reporting. In a speech (1 February, 2008) to the European-American Business Council, Christopher Cox, the Chairman of the SEC, emphasized that such developments reflected "the great progress that the International Accounting Standards Board has made in developing IFRS as a single, high-quality accounting standard that is implemented consistently in multiple jurisdictions around the world. This year, the Commission will consider how we will map the future for U.S. firms and International Financial Reporting Standards. But one thing is certain: the expanded use of a single, high-quality accounting standard will eventually empower investors to make better informed investment decisions by giving them information that is more easily comparable" (see http://www.iasplus.com/usa/sec/0802coxifrs.pdf).

[1] The International Accounting Standards Committee (IASC) was the predecessor of the International Accounting Standards Board (IASB). For a detailed history of the IASC, see Camfferman and Zeff, 2007).

While the pace of regulatory action is certainly quickening with respect to the pursuit of accounting convergence, research studies, however, continue to show that a truly harmonized framework for useful financial reporting currently remains more of an objective than a current reality (for reviews, see Callao et al., 2007; Ball, 2006). In a recent survey of senior UK finance executives on the impact of the introduction of IFRS in Europe, the conclusion was reached that "there remains significant doubt about the benefits to individual companies and the information available to the capital markets" (PwC, 2007, p.2). Two thirds of PwC survey respondents indicated that they did not believe that the introduction of IFRS had resulted in better information in the marketplace. In contrast, an ICAEW (2007) on-line survey of EU investors, preparers and auditors found that 63% of investor respondents thought that IFRS had improved the quality of consolidated financial statements against 24% who thought that IFRS had made it worse (p. 25).[2] However, 49% of investors thought that the switch to IFRS accounting had made financial statements more difficult to understand, although 32% disagreed – while a number of participants at a series of roundtable events felt that it was too early to judge whether the migration to IFRS had been a success (ICAEW, 2007, p. 26).[3]

What all of this standard setting and regulatory development means for the user of financial statements is a significant and ongoing research agenda. Not withstanding the current regulatory commitments to convergence, are financial reports becoming more comparable across international boundaries? How easy is it for analysts to compare the information provided across different financial reporting regimes? For instance, do companies reporting under US GAAP provide more or different types of information to those reporting under IFRS? The role of financial reporting in serving user needs and aiding decision usefulness is embedded in the conceptual frameworks of all the major accounting regulators, and often used to justify the inclusion of specific regulatory requirements. However, as Young (2006) has argued, the user generally referred to by standard setters is a conceptual construction and the standard setting process tends not to encompass significant direct user involvement, nor reflect the interests of a wide stakeholder base of potential users. Such work presents significant legitimacy challenges to the work of international standard setting bodies, some of which have been very visible in recent years with concerns expressed over the pursuit of fair value accounting and revised standards on segmental reporting. . Indeed, the uncertainties associated with the pursuit of a new global accounting language are well illustrated by the recent joint statement by the largest international accounting firms, through the Global Public Policy Committee (GPPC), providing interpretations as to how auditors should treat certain

[2] The corresponding figures for preparers were 60% and 14% respectively (80% and 8% for auditors). A number of participants at a subsequent roundtable event felt that it was too early to judge whether the migration to IFRS had been a success (ICAEW, 2007, p. 26).

[3] It is worth pointing out that it was certain specific accounting policies (such as those for financial instruments) which caused most confusion (ICAEW, 2007, p. 25).

stipulations of IFRS in the context of today's challenging economic and financial environment (see GPPC, 2007)[4].

This paper makes a timely contribution to heightened interests in, and concerns over, the quality of global financial reporting by examining the market risk disclosures of multinational banks over the period 2000-2006 and assessing the extent to which the *de jure* moves towards harmonization and convergence over this period have been accompanied by an equivalent *de facto* harmonization in financial reporting practice. Market risk disclosures by the world's largest banks were chosen as the focus for this study for several reasons. First, despite claims that banks have been at the forefront of developments in risk management, the banking sector is under-researched in terms of risk disclosures in corporate annual reports (for a review of the existing literature and some exploratory empirical work, see Linsley et al., 2006)[5]. Secondly, the complexities of the financial accounting practices of banks appear mainly to have stimulated surveys of the extent to which their annual reports collectively comply with the requirements of (international) accounting standards (see ICAEW, 2007, pp. 141-146; E&Y, 2006; PwC, 2006) or studies focused on singular market risk disclosure items (such as Value at Risk (VaR) measures – see Perignon and Smith, 2007; Perignon et al., 2008). Limitations of the former are that they represent broad-based surveys that struggle to go much beyond the listing of differences between standard and actual reporting practice[6]. The latter type of studies, in contrast, can be restrictively specific. For instance, even though Perignon and Smith found that VaR disclosures varied widely across a sample of US commercial banks over the period 1996-2005, VaR information only represents just one element of a much wider set of market risk disclosures made by banks in their annual reports.

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[4] Similar minded guidance on auditing issues in difficult financial market conditions has also been provided by the UK's Auditing Practices Board (see APB, 2008) and by the US based Centre for Audit Quality (see CAQ, 2007).

[5] Much of the work on risk disclosures in the 1990s centred on debates and discussions regarding desired, rather than actual, forms of disclosure – particularly, regarding the capacity to incorporate risk disclosures within a specific section or separate part of a company's annual report and the extent to which risk information should be forward looking rather than based solely on historical information (see Linsley et al, 2006, pp. 269-270; ICAEW, 1998; 1999; 2002; Schrand and Elliott, 1998; BCBS, 1998). There has also been a tendency for the focus to be on the risk disclosure practices of non-financial companies rather than banks per se – see Abraham and Cox, 2007; Beretta and Bozzolan, 2004; Dobler, 2008; Linsley and Shrives, 2006).

[6] This compliance orientation can engender a rather conservative form of analysis which either lists differences in practices without considering their overall significance or somewhat underplays their potential significance. An interesting case in point is Ernst and Young's (2006) survey which found wide differences in market risk disclosures but concluded in the executive summary of the report that "(a)nother example of the challenge for consistency is the reporting of market risk sensitivities, where the use of different methods and criteria - *no doubt appropriate to the banks concerned* - leave the reader with a range of sensitivities that are difficult to compare (p. 7, emphasis added). The strength of such 'no doubt appropriate' conclusions and assumptions can be weakened significantly by subsequent events – for instance, the E&Y (2006) report chose to highlight the 'helpful' nature of the disclosures in the 2005 annual report of Société Genéralé on the limitations of VaR (p. 57)!

This paper seeks to draw on the strengths (and avoid the weaknesses) of both types of studies by addressing the broad range of market risk[7] disclosures (rather than just one measure of risk) and considering this reporting from an international, comparative perspective (rather than a one country perspective)

In studying patterns and variations in market risk reporting practices across the world's leading banks, it is important to emphasise that such organizations are involved in a wide range of activities that extend beyond the traditional commercial banking activities of deposit and loan provision. While such (additional) activities vary somewhat across institutions, they can broadly be divided into securities trading and the provision of other retail and corporate services. The diversity of income sources is reflected in the banks' financial statements and it is noticeable that, for many banks, a growing proportion of total income is earned through trading activities which potentially give rise to substantial market risk, in addition to that already related to traditional bank lending activities. The need for more research in the area of market risk reporting by banks has also been vividly highlighted by the current 'credit crunch'. Collective bank exposures to market risk is quite breath-taking. In October 2008 the Bank of England estimated that global mark-to-market losses across US dollar, Sterling and Euro currency areas amounted to around US$2.8 trillion or £1.8 trillion (Bank of England, 2008). The financial crisis has certainly served to emphasize the extent of global economic interdependence resulting from the activities of financial institutions and the desire of banking supervisors, creditors, customers and investors to have access to information that facilitates an understanding of the risks being faced by financial institutions[8].

With market risk disclosures being required under both US GAAP and IFRS but with the prescribed content of disclosures differing between jurisdictions, it presents an obvious opportunity to investigate and compare the impact of discretion upon the information available to users across regulatory regimes. Additionally, it is possible to study the potential impact of discretionary interpretation of IFRS upon the comparability of reports within IFRS 'compliant' jurisdictions. There has been, and continues to be, much debate over the extent to which IFRS represents one global standard or, given the scope for discretion over levels of disclosure, a global standard with multiple national variants

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[7] Market risk is commonly defined as the exposure to an adverse change in the market value of portfolios and financial instruments caused by changes in market prices or rates. Such risk typically arises through the buying and selling of financial instruments that are sensitive to market risk.

[8] It is worth noting that the inclusion of specific disclosure requirements under Pillar 3 of the revised capital adequacy framework (Basel Committee, 2004), commonly referred to as Basel II and set to take effect from 2008, illustrate the 'pre-credit crunch' recognition by a global regulator of the importance of ensuring that the market is kept informed about a bank's exposure to risk. Similarly, transcripts of the evidence presented to the House of Commons Treasury Committee by the Chief Executive and other staff from the Financial Services Authority (the UK banking regulator) show the core role played by the regulator in risk monitoring (see http://www.publications.parliament.uk/pa/cm200708/cmselect/cmtreasy/536/536ev.pdf). Some empirical studies of bank reporting disclosures have concluded that disclosures related to risk management practices seem to be most influential in explaining cross-sectional variation in the cost of equity capital (see Poshakwale and Courtis, 2005, p. 441).

(especially given the absence of detailed implementation guidance - e.g., see Schipper, 2005). Our research offers some insights into the extent to which detailed reporting practice might vary even under the same set of regulations, and even within the same country.

The remainder of the paper is divided into four sections. In the next section we review the regulatory context within which the research is conducted. This is followed by a section that details the research methodology, including the data, research instrument deployed and methods used in analyzing the results. Section four reports the main results of the paper, while the final section concludes the analysis and assesses the main implications of the research undertaken. .

2. Regulatory Context

The regulatory framework for financial and non financial reporting by banks is complex because regulations are formulated by a range of different bodies, including the Bank for International Settlements (BIS) or Basel Committee, the International Accounting Standards Board, national banking supervisors and local accounting standards boards. The regulations define the content/style of both reporting to the national supervisory bodies (such as the FSA in the UK) as well as the broader mix of capital market participants. Institutions that operate at a global level have to comply with multiple jurisdictional requirements.

At a global level, the basic reporting rules are laid down by the Basel Committee, whose 1998 publication, "Enhancing Bank Transparency", was aimed at encouraging banks across the world to disclose 'timely' and 'reliable' information on a range of issues, including their risk management practice and risk exposure. Six years later, when the final framework for Pillar 3 of the revised capital adequacy accord (Basel II) was published, the Committee had converted this encouragement of disclosure into very specific reporting requirements that became effective from 2008 onwards. All banks seeking to comply with Basel II must report both qualitative and quantitative details in respect of their capital structure, capital adequacy, and different types of risk exposure including credit, market, operational, equities and interest rate risk (Basel Committee, 2006). The underlying argument for such disclosures is that "transparent risk information is potentially of great use to stakeholders" (Crockett, 2002, p.1). It is also useful to note that the Basel II disclosure requirements encompass both numerical and narrative elements, while certain academic research studies have highlighted the emphasis placed on narrative disclosures by both private investors (Bartlett and Chandler, 1997) and analysts (Breton and Taffler, 2001).

The move towards the global regulation of risk disclosures by banks needs to be seen in the context of more than a decade of efforts by both national and international accounting and/or government regulators to improve reporting practice in this area. For example, in the USA the Financial Accounting Standard Board's publication of Financial Accounting Standard (FAS) No. 119, "Disclosure about Derivative Financial Instruments and Fair

Value of Financial Instruments", in 1994 was a direct response to calls for improved disclosure of information on institutional exposure to market risk sensitive financial instruments. FAS 119 was subject to criticism however because the disclosures continued to fail to provide users of the financial statements with the information required to identify a company's net market risk exposures. As a result, the SEC took its first steps towards further improvements in disclosure practice (Linsmeier and Pearson, 1997) via the introduction of new qualitative and quantitative reporting requirements in Financial Reporting Release No. 48 (SEC, 1997). Nonetheless, initial evidence on the impact of FRR 48, suggested that whilst market risk disclosures were improved, there remained scope for further improvement (Roulstone, 1999). At this point, US hopes were pinned upon FAS 133 (FASB, 1998) on accounting for derivatives and financial instruments, which came into delayed effect in June 2000. Between 2000 and 2006 there were no further refinements to the US risk reporting regulations.

The IASC, published its first rules on qualitative and quantitative disclosures in relation to the risks associated with the use of financial instruments in International Accounting Standard (IAS) 32 (IASC, 1995). The risks identified by IAS 32 included market, credit, liquidity and interest rate risks. IAS 32 was applicable to all types of businesses that used financial instruments but a complementary standard, IAS 30, established more detailed disclosure requirements for banks and financial institutions. The period 1995-2000 was a very active one for the IASC as they sought to generate a core set of standards in time for compliance with the 2000 deadline set by the agreement with IOSCO. IAS 30 was amended by IAS 39 (*Financial Instruments: Recognition and Measurement)* with effect from January 2001. Subsequently, with effect from January 2005, the December 2003 version of IAS 39 shifted the risk disclosure requirements across to IAS 32, but this change ran simultaneously with the IASB's pursuit of a programme of updating the content of IAS 30. In 2004 the board published an exposure draft – ED 7 – on financial instruments disclosures which evolved into IFRS 7 in 2005. Interestingly, and in line with US regulations, IFRS 7 does not set separate rules for disclosures by banks or financial institutions; furthermore, its implementation, for accounting periods commencing after 1st January 2007, also saw the disappearance of disclosure requirements from IAS 32.

The above review of regulatory activity in relation to risk reporting indicates that the period 2000-06, the focal point for this study, is one of international variation but also evolution. While the year 2000 marked a starting point for stability in US reporting requirements, within the broader international arena the IASB spent the years 2000-2006 working simultaneously on changes to disclosure, recognition and measurement issues in respect of financial instruments. The net result is an environment in which there is considerable research scope in terms of considering international developments (and variations) in the market risk reporting practices of the world's leading banks.

In this paper, we address this developing reporting environment by focusing on three specific questions. First, are market risk disclosure levels linked to bank size? Secondly, have such disclosures by banks increased over the period 2000-06? Lastly, within this context, has international diversity of risk reporting practice reduced over this time? Collectively, these questions enable consideration to be given to the status and impact of

market risk reporting initiatives and related accounting standards. For instance, an assessment can be made of any linkage between sector leadership and levels of disclosure and whether banks with the largest market capitalisations disclose more. Similarly, it is possible to consider whether disclosure levels are generally rising over time and the form of differences in reporting practices both within and across countries. Or, in more technical terms, to assess whether the rate of *de facto* harmonisation is lagging behind the rate of *de jure* harmonization.

Higher levels of market risk disclosure can be expected to be linked to the overall length of the annual report but this also raises questions about the potential for information overload on the part of the user/reader. While many standard setting and regulatory initiatives both pre- and post-credit crunch have been premised on the pursuit of (and residing belief in) transparency, there are some clear indications that increasing levels of disclosure and explicit commitments to transparency in themselves are not necessarily sufficient. As Jon Moulton, a leading private equity chief, recently emphasized (in giving evidence to the UK's House of Commons Treasury Committee), there is much to question about the current state of bank annual financial reports:

> "All I am trying to do here is demonstrate to you the incredible complexity of what is going on here. You would not believe that this stuff is out there but it is out there, it is in the fine print and the mountains of paper that these industries produce. Here is what we have got, we have got an interconnected, mind-blowingly complicated market where losses are not just limited to actual economic losses, there are economic losses arising because of the amplifying effects of the inter-connectedness, the loss of confidence and fear. It is very hard indeed to estimate what a $5 billion loss in sub-prime really means to the financial markets. It might be $50 billion of losses, the complexity has no limit. However, there is no doubt that both the regulators' and directors' skills in these entities are limited. You have interviewed people who did not know what a CDO was and you have interviewed people who do not understand how this lot fits together at all. I do not think you are ever going to get to a situation where boards of directors and regulators can handle this level of complexity in an effective way. Transparency does not do it. If you look at an HSBC set of accounts, famously 400 and something pages last month and the Royal Mail would not carry it for health and safety reasons, they are unreadable. Northern Rock was a master of disclosure. Everything about Northern Rock is available on its website still. You can find all the details, their off-balance sheets, their guarantees, but how you are supposed to interpret a 400 page document on one of the guarantees, with 11 layers of debt, interest rate swaps, currency swaps done in three currencies, I do not know. Transparency will not do it. Disclosure does not get you to the answer because nobody understands it or follows it."
> (Jon Moulton, Managing Director, Alchemy Partners, giving oral evidence before the House of Commons Treasury Committee, 13th May, 2008; see http://www.publications.parliament.uk/pa/cm200708/cmselect/cmtreasy/uc536-ii/uc53602.htm)

While being very sensitive to the relationship between levels/forms of disclosure and the understandability of bank annual reports, the research task and results documented in this paper focus primarily on the extent of market risk disclosures and the nature and scale of differences across the banking sector. Such empirical positioning was seen to be an important first step in moving debate beyond both the anecdotal and any polemical tendencies encouraged by today's global financial crisis. That said, the results obtained and the process by which the data used for the study was collected provide some pertinent insights and reflections on the general informativeness of market risk disclosures in the banking sector.

3. Research Approach

We began our empirical study with the lists of banks identified by *The Banker* as the "Top 25" in the world. *The Banker* produces a number of different lists of the "Top 25", based upon a range of alternative ranking criteria, including total assets, Tier 1 capital, and market capitalization. The "Top 25" varies according to the ranking criteria selected so that, for example, only 19 of the "Top 25" defined in terms of total assets also appear in the "Top 25" ranked by market capitalization. This study utilizes the "Top 25" ranked by market capitalization as we believe that market capitalization is a more natural measure of bank size than any of the alternatives.[9]

As might be expected, the banks appearing in the "Top 25" by market capitalization, and their individual rankings, both change over time. Comparing the "Top 25" at the start (2000), mid (2003) and end (2006) points of our study reveals a number of clear trends in the composition of the list. Firstly, the table is dominated by US and UK banks. Additionally, there is consistency in relation to the top three banks, namely Citigroup, HSBC and Bank of America. Individual rankings in the remainder of the table are, however, more volatile over time. Table 1 summarises the geographic composition of the "Top 25" over the same time frame, revealing a number of changes in the geographic mix.

INSERT TABLE 1 HERE

Most noticeably, between 2000 and 2003 a total of five Japanese banks are demoted from the list and replaced by banks from Australia, Canada, and mainland Europe. Between 2003 and 2006 three US banks fall out of the table, and three Japanese banks reappear. 2006 also marks the entry of a Chinese bank in the tables, following privatization of some of the country's largest institutions. Explanation and discussion of the causes of these shifts in both the banks and their respective rankings in the tables is beyond the scope of

[9] In earlier research on market risk disclosure practice by international commercial banks, Perignon and Smith (2007) use total assets as the criteria for size ranking. We consider this approach to be flawed because it uses the "raw" accounting figures, which are subject to potential bias as a result of variations in accounting practice across institutions and the differential effects of the use of fair versus historic values for particular asset classes. In addition, there is no intuitive reason why a bank that owns more assets will necessarily be motivated to disclose more information about market risk, particularly if those assets are not market related.

this paper, but it is worth noting that these changes may have implications for international comparison of financial reporting practice in the sector.

Table 2 identifies the "Top 25" as at July 2003, mid-way through our period of study, and is used as the initial framework for analysis.

INSERT TABLE 2 HERE

In order to meet our requirement to analyse only those market risk disclosures relating to trading activities two US banks, Wells Fargo and Fifth Third Bancorp, were eliminated from our sample of twenty five: neither bank engages in any significant level of trading activity, so both are irrelevant to our study. Of the twenty three used in the analysis, eighteen are listed on the NYSE, one on NASDAQ, and the remainder on at least one other international stock exchange (e.g., such as Paris, Tokyo or London) as well as on their own domestic stock market. Thus, the sample banks are all major multinational entities characterized by multiple listings, and hence might be expected to display more homogenized and perhaps more advanced reporting practices than smaller institutions.

In deciding where to look for market risk disclosures, we recognize that there are a range of tools and routes used by companies to disclose information to the markets. That said, academic researchers continue to identify the annual report as the primary communications device (Botosan, 1997; Knutson, 1992). On this basis, therefore, all of the data used in the following analysis is drawn from the sample companies' annual reports. The only exception to this procedure is the case of Union Bank of Switzerland, which is unique in disclosing almost all of the risk related information in a handbook which is published separately from the annual report. The handbook was therefore also utilized in the disclosure analysis for UBS.

In order to understand how disclosures may be evolving over time, reports were analysed for each of the years 2000, 2003 and 2006. Leaving three year gaps allows greater scope for the identification of step changes in reporting practice. In particular, it enables us to consider the impact of staged, but significant, developments in IFRS accounting regulations within the chosen topic area[10] against a backdrop of unchanging US regulation.

Documenting the Disclosure of Market Risks

Content analysis was used as the framework to identify and analyse the disclosure practices of each bank. Critical to such a research method is the definition of the unit of

[10] In 2000 and 2003 the Europe-wide agreement on IFRS implementation had not come into effect, and so the majority, but not all, large banks reported in accordance with national GAAP. For those choosing to adopt IFRS, the disclosure rules relevant to this paper are found within IAS 30. For financial reports for the year 2000, the 1994 version of the standard was applicable. A revised version was applicable from 1st January 2001 but this remained irrelevant to those using national GAAP. The first broad application of the revised standard would have been in 2005 with European harmonisation. In order to retain equal blocks of time across our analysis period, we opted to look at 2006 annual reports rather than those from 2005. Interestingly, IAS 30 has now been replaced by IFRS7 with effect from 2007 – offering the scope for further study of the relative impact of changes in IFRS.

analysis. Milne and Adler (1999) suggest that sentences are the most reliable unit, but this approach is only valid in cases where purely narrative text is being studied. Unerman (2000) described narrative analysis as being only partial content analysis because information may also be provided in the form of graphs, tables etc. His view was re-iterated by Beattie and Thompson (2007) who called for future studies to consider a range of communication methods that extend beyond pure narrative.

The regulations on risk reporting prescribe minimal requirements in both qualitative and quantitative terms, and so risk disclosures commonly take the form of a mix of narrative, tabular, numerical and graphical data. Consequently, the use of sentences as the unit of analysis in this context would have been incomplete and we, therefore, defined the unit of analysis as being information provided in narrative, tabular, graphical or numerical format. An illustration of the different categories of disclosure is helpful and these are provided below from the 2003 annual report of Citigroup, which is ranked as the world's largest bank.

NARRATIVE
Price risk in trading portfolios is measured through a complementary set of tools, including factor sensitivities, value-at-risk, and stress testing. Each trading portfolio has its own market risk limit framework, encompassing these measures and other controls, including permitted product lists and a new product approval process for complex products, established by the business and approved by independent market risk management.
Factor sensitivities are defined as the change in the value of a position for a defined change in a market risk factor (e.g., the change in the value of a Treasury bill for a 1 basis point change in interest rates). It is the responsibility of independent market risk management to ensure that factor sensitivities are calculated, monitored and, in most cases, limited, for all relevant risks taken in a trading portfolio.

Source: Citigroup Annual Report 2003, p. 83

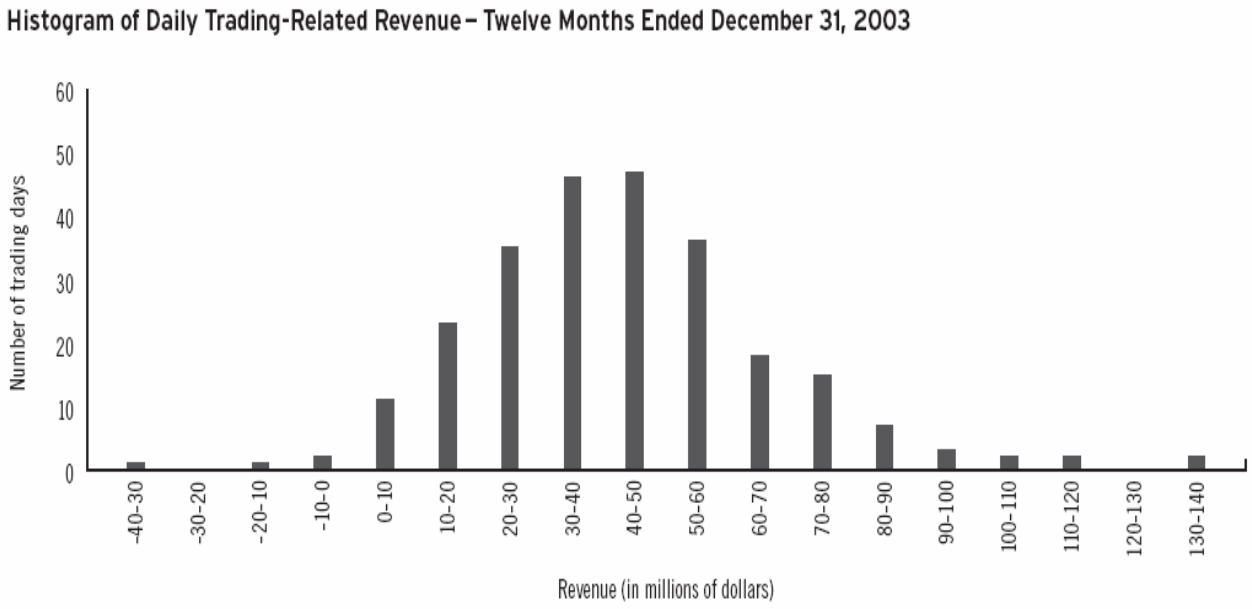
TABULAR/NUMERICAL

The following table summarizes Value-at-Risk in the trading portfolios as of December 31, 2003 and 2002, along with the averages:

In millions of dollars	**Dec. 31, 2003**	**2003 Average**	Dec. 31, 2002	2002 Average
Interest rate	**$ 83**	**$ 79**	$ 75	$ 54
Foreign exchange	**14**	**21**	25	16
Equity	**17**	**15**	12	18
Commodity	**13**	**8**	5	13
Covariance adjustment	**(44)**	**(43)**	(34)	(35)
Total	**$ 83**	**$ 80**	$ 83	$ 66

Source: Citigroup Annual Report 2003, p.84

GRAPHICAL



Source: Citigroup Annual Report 2003, p.83

Having chosen to consider market risk disclosures of narrative, tabular/numerical and/or graphical forms, the next task was to decide on an appropriate classification system so as to gain an overall appreciation of the scale and patterns of disclosure. We opted for the construction of a score sheet. This was done by manual extraction of information on market risk for trading activities drawn from the annual reports of all the sample banks for the years 2000, 2003 and 2006. The score sheet was designed by reviewing the

categories of information on market risk disclosed by the sampled banks The identified information categories covered all aspects of market risk management including trading instruments, levels of trading activity, sizes of trading positions, scenario modeling, VaR analysis and validation procedures.

In all, a total of 41 potential disclosures were identified, and these are listed in Table 3, which provides an illustrative example of a completed score sheet for HSBC (2003). HSBC had one of the highest levels of disclosures in all of the three years considered, obtaining a score of 36 (out of 41) in each of 2000 and 2003 and 34 in 2006. This level of score indicates a bank with a high and quite consistent level of disclosure.

INSERT TABLE 3 HERE

The ex-ante list of potential disclosures was then used to apply a binary coding system to the reports for each of the sample 23 banks for the years 2000, 2003 and 2006[11]. A bank was given a score of 1 if the information was reported and a score of 0 if it was not. This simple weighting system is in line with the approach adopted by other researchers in the field (Robins and Austin, 1986; Wallace et al., 1994). It was also felt to be consistent with our principal research aims in this paper – namely, to provide some much needed indication of trends and variations in the scale of market risk disclosures in the banking sector. In this respect, its usage reflects Marston and Shrives' (1991) observation that a disclosure score provides a measure of the extent, but not of the quality, of disclosures.

The score sheet was completed by a coder reading the full contents of the annual reports. Scoring validity was then tested using coder reliability checks which involved the blind repetition of the coding process by another of the researchers. The full content of the banks' annual reports was examined because an earlier study (Woods and Marginson, 2004) has shown that risk disclosures are widely scattered across the annual report, with qualitative information commonly reported in the financial review, but supplemented by quantitative data in the relevant notes to the accounts. Additionally, important market risk related information, such as dealing revenue/profits/assets/liabilities are included in the core financial statements. The need to look at the full report in order to locate all relevant risk disclosures is very time consuming for the researcher, but also indicates the difficulties faced by any stakeholder who wishes to identify a bank's overall risk exposure. As a random example of the level of effort required for such an analysis, the 2006 annual report of the Dutch bank ABN Amro contained market risk disclosures on each of the following pages: 77, 78, 100, 152, 200, 211 and 212.

Having calculated our disclosure scores for each bank, we focused on three different aspects of disclosure practice:

- The relationship between disclosure and bank size.
- Changes in disclosure practices over time.

[11] For the sake of consistency, we analyse the disclosures for a common set of 23 banks based upon the 2003 market capitalisation rankings. As a result the sample size reduces to 21 in 2006 because Bank One is absorbed into JPMorgan Chase in the intervening period, and similarly Fleet Boston is merged with Bank of America.

- Institutional and international variations in disclosure practice.

4. Results

Disclosure and Size

Table 2 shows that the sample institutions vary considerably in their size. The smallest of the twenty five banks, the Royal Bank of Canada, has a market capitalization (as at 2003) of just below US$30bn, whilst the largest, Citigroup, is worth in excess of $234bn. On this basis, it is appropriate to assess and evaluate the strength, if any, of any relationship between the bank size and disclosure scores.

Roberts et al. (1998) observe that "there is general support for the proposition that disclosure levels increase as companies get larger." This suggests that we might expect to see a positive relationship between disclosure scores and bank size. To examine this issue further, we estimated the Spearman rank correlation coefficient for disclosure scores and bank size rankings for each of the three years, and results are reported in Table 4. None of the correlations were statistically significant at a conventional significance level of 5%, leaving us to conclude that there is no significant or stable correlation between disclosure levels and institution size.[12]

INSERT TABLE 4 HERE

These findings are supported by a more casual examination of the relative rankings of each bank, as shown in Table 4 for year 2003. For example, the world's largest bank, Citigroup, was ranked only fourteenth in terms of its disclosure practices in 2000 and eleventh in 2003. Only in 2006 does its disclosure score more closely correlate with its size. Conversely, ABN Amro, which is placed twenty-first in terms of size, was ranked much higher - fifth (2000), seventh (2003) and then sixteenth (2006) - by the level of its risk disclosures. Similarly, the Royal Bank of Canada ranks bottom by size, but ranks as high as tenth (2000), eighth (2003) and fourth (2006) for its disclosure practice.

Changes in Disclosure Practice over Time

We turn now to the issue of how levels of disclosure might be changing over time. We alluded already to the fact that the bulk of disclosures in market risk reporting are voluntary in nature, and in recent years there has been increasing support for voluntary rather than mandatory reporting in a number of areas of accounting. For example, an FASB (2001) report suggested that companies can achieve benefits in the capital markets from increased levels of voluntary disclosure, implying that voluntary disclosures might be in firms' own interests. Schrand and Elliott (1998), however, argued that there is little

[12] The lack of any statistically significant relationship between disclosure and bank size may be due to the fact that, even though there are large differences in the size of the institutions within the sample, the *absolute* size of even the smallest of the banks is still very large. The results obtained may indicate that there is a threshold level of market capitalisation that can usefully be used to define a "large" company, and that for banks above that level (such as those in our sample), there is no particular correlation between size and disclosure. Further research is required, however, to test the validity of this hypothesis.

empirical evidence of the link between the cost of capital and risk disclosures and consequently there is little incentive for voluntary disclosures. Furthermore, it can also be argued that where disclosure is voluntary, then managers may be tempted to delay or manipulate the reporting of bad news – although see Schleicher et al. (2007, p. 169-170) for a discussion of the difficulties in identifying cause-effect relationships in voluntary disclosures.

Table 5 shows the disclosure scores for each bank over each of the three years of analysis. The mean disclosure score is 22.4 in 2000, 26.4 for 2003 and 27.9 for 2006. Thus, average disclosure levels show a mildly increasing trend over both the period 2000-2003 and 2003-2006. The ratio of the mean to the standard deviation indicates that the improvement is more marked over the earlier years, but, possibly of more significance, is the fact that the mean disguises a number of very clear and dramatic shifts in disclosure practice amongst a number of individual banks.

INSERT TABLE 5 HERE

There are, for example, clear exceptions to the general rule of rising scores, as six banks reduce the extent of their disclosure levels between 2003 and 2006. The most notable reductions are those of SCH and BNP Paribas, at minus 26 and minus 23 points respectively, but UBS and ABN Amro also exhibit the same trend. Most interestingly, the one common feature across all four of these banks is that they switched from reporting under local GAAP to using IFRS during the relevant period.

At one level this might be interpreted as an indication that IFRS reduces the market risk information available to shareholders but this is probably over-simplistic. An alternative and perhaps more credible explanation is that the banks have taken risk information out of their annual report and are now providing it elsewhere. We sought to investigate further what was happening by checking the position in relation to the most extreme case of BNP Paribas which, as Table 6 shows, scores zero for its market risk disclosures in 2006. We checked the French statutory filings for BNP Paribas, together with all of the 2006 reports posted on the bank's website, but were still unable to find any market risk disclosures reported there. Even questions to a senior "Big Four" auditor in France failed to provide us with an explanation for the omission of even the most basic required disclosures. The reason for BNP Paribas' "zero disclosure" therefore remains a mystery which also raises significant questions about the enforcement of IFRS rules.

There is one other result in Table 5 which warrants individual comment, and that is the case of Société Genéralé, which achieved a 'perfect' score of 41 in 2006. This score is especially revealing in the light of the recent events at the bank, where the activities of a 'rogue trader' generated direct losses of around €5 billion and left its reputation for risk management reportedly "in tatters" (Lex Column, FT, 2008). This result, in itself, emphasizes just how important it is for research to study further what is being provided in the name of market risk disclosures. It certainly emphasizes the dangers of assuming that high levels of disclosure go hand-in-hand with the existence of effective risk management systems.

Table 5 also reports the standard deviations of disclosure levels in each year (respectively, 7.0, 6.7 and 10.7 for each of 2000, 2003 and 2006). These confirm that there is a fair amount of disparity in disclosure practices across different banks but that the degree of disparity is showing no clear tendency to diminish. We also see from Table 5 that banks can be classified into the following groups:

- Banks that have consistently high levels of disclosure (e.g., HSBC, Deutsche, ABN Amro).
- Banks whose disclosure levels are consistently average (e.g., HBOS, Lloyds TSB, NAB)
- Banks that have consistently low levels of disclosure (e.g., US BankCorp, BankOne).
- Banks that have improved strongly in their disclosure levels (e.g., Wachovia, Unicredito, Royal Bank of Canada, Société Genéralé).

In order to try and explain why a bank may fall into one or other of the above categories, we compared the disclosure scores against the regulatory regime governing their financial reporting and also the length of the annual report. Within any single regulatory context, a degree of consistency might be expected in the extent of disclosure across institutions – such that they tend to remain one specific disclosure category. However, as shown below, our findings indicate that this is not the case. Additionally, the overall length of the annual report could be used as a simple proxy for disclosure policy, with a longer report being indicative of a greater willingness to include voluntary as well as statutory disclosures.

INSERT TABLE 6 HERE

Table 6 shows that neither of the main reporting regimes (US GAAP or IFRS) appear to encourage consistency of disclosure levels. For example, banks that report according to US GAAP are classified as either having "consistently low", "consistently high" or "improving strongly" levels of disclosure. Similarly, banks using reporting practices based upon IFRS (or the equivalent) appear in the "consistently high", "consistently average" and "improving strongly" categories. These findings suggest that institutional level attitudes to voluntary reporting appear to outweigh the role played by regulations in shaping patterns of disclosure (and resultant scores). Consequently, it is not possible to generalize and argue that any single set of accounting regulations results in more extensive levels of market risk reporting. This does place some questions over the current global convergence processes in accounting standards – particularly when the achievement of greater comparability of disclosure is held out as one of the cornerstones of both the IASB's and the FASB's conceptual frameworks.[13]

[13] For example, in July 2006 the IASB and FASB issued for comment a joint document on the proposed content of a new, and common, conceptual framework. The document defines comparability as "the quality of information that enables users to identify similarities in and differences between two sets of economic phenomena" and declares it to be an important qualitative characteristic of financial reports on the grounds

Table 6 also shows that the average length of the annual report of the sample banks is increasing over time, from 166 pages in 2000 to 271 pages in 2006. The increased length is driven by a mix of both more detailed regulatory reporting requirements, but also the increased scope and encouragement of voluntary disclosures. However, a longer report does not necessarily imply more market risk disclosures. To test the relationship between disclosure categories and the length of bank annual reports, a two stage calculation was undertaken. The first stage compared the length of each bank's annual report for a given year against the average length of reports for that year. A value above one thus implies that the bank's report is longer than the average, and a fractional value implies a shorter than average report. For example, Bank One's report for 2003 scores just 0.4 indicating that it is relatively short compared to the average, and perhaps not surprisingly the bank falls into the "consistently low" category of disclosure. In the second stage, the ratio of the actual report length to the average was calculated for each of the four categories (of disclosure level). The results obtained indicate that longer reports are associated with more extensive levels of market risk disclosures.

Banks with a consistently high level of market risk disclosures have a report length that is on average 1.38 times the average for all of the banks. Conversely, the banks with a consistently low level of disclosures have a report length just below half (0.49) the average length. Reflecting this relationship between length and disclosure levels, banks with strongly rising disclosure scores have an annual report length that is above-average. That said, it is important to ask questions of the capacity of investors to make sense of and cope with annual reports the length of, say, Unicredito Italiano – which stood at 552 pages in 2006. This even exceeds the length of HSBC, whose reporting value (as noted earlier in the presentation by Jon Moulton to the Treasury Select Committee) was questioned on the grounds of weight by the English postal service!

Overall, therefore, our sample data provides some evidence of institutionally specific biases in reporting practice. However, while individual banks may choose to make brief, average, or extensive disclosures, the data does not allow us to identify the underlying reasons for such choices. Emm (2007) et al. suggest that the nature and extent of an institution's market risk exposures, its need to protect proprietary information, and its demand for capital market access are all relevant determinants of disclosure choices, but these are not things that can be tested directly on the basis of the information made available in published annual reports[14].

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that it "enhances the usefulness of financial reporting information in making investment, credit, and similar resource allocation decisions" (FASB,2006, p.30).

[14] For example, we are unable to analyse robustly the relationship between market risk disclosures and market risk exposure because VaR statistics are not comparable across institutions due to variations in modelling methods. They also provide an incomplete picture of overall exposure. Additionally, annual reports give no firm indication of each bank's need to access the capital markets nor reveal the extent of the risk information that it has chosen to regard as proprietary.

International differences in disclosure practice

If we consider the banks by home country, we find that the banks in our sample fall naturally into four different geographical groups. Figure 1 shows, for each country grouping, the range of disclosure scores for each year. Superimposed on these ranges is an 'x' mark which gives the mean disclosure score for the country grouping and year concerned. The figure gives a sense of the disparities in scores and the mean scores for each geographical grouping.

INSERT FIGURE 1 HERE

French, Italian and Spanish banks are characterised by generally low levels of disclosure and high disparities between different banks' disclosure practices. Although the mean disclosure score for this geographical grouping in 2006 is virtually identical to that of 2003, the disclosure scores for 2006 span the full range from 0 to 41. This is a consequence of the two outliers BNP Paribas (0) and Société Genéralé (41) upon which we have already offered comment. It is very interesting to reflect, however, on the idea that despite calls for harmonisation of international reporting practice, we can still find two banks, falling under the same regulatory regimes both nationally and internationally, which are still able to be so divergent in their disclosure practices. The case of BNP Paribas also indicates that despite the fact that Pillar 3 of Basel had not taken effect in 2006, the bank was very far from complying with its spirit of making disclosures that are consistent with how senior management and the board of directors assess and manage the risks of the bank.

By contrast, North American banks are characterised by a clearly rising trend in the mean disclosure score, but a persistent and considerable degree of disparity in disclosure practices. This confirms the findings of a 2002 transparency and disclosure survey of US companies by Standard and Poor (Patel and Dallas, 2002). This survey focused on annual report disclosures and found that companies exercised a high level of discretion in relation to disclosures, with the result that there were notable differences in the standards across different companies. Variations in transparency can be partially explained by the fact that US companies can choose whether to disclose information in the annual report or to use their regulatory filings as their main disclosure documents: some opt for one, and some opt for the other. This makes life difficult for individual investors and analysts seeking to compare risks across different banks, particularly given that the SEC filings (though electronically accessible) are not presented in a style that is as "user friendly".[15]

For their part, UK banks are characterised by high levels of disclosure, which are slightly higher than the average disclosure level for North American banks but with a much lower level of disparity. This is confirmed by Table 5 which shows that, with the exception of Lloyds TSB, all of the other UK banks in the "Top 25" have disclosure scores in excess of 30 in 2006.

[15] It is also noticeable that some of the US banks appear to be less willing to disclose the more sensitive information relating to market risk exposure and management. Such sensitive information might include items such as histograms of trading revenue or profits, and back-testing information and results. This finding is also in line with that of Perignon and Smith (2007).

Finally, German, Dutch and Swiss banks are similar to the UK banks. Disclosure levels are high, except for the 2006 mean score which dips a little below its 2003 level. One possible explanation for this is that, with the exception of Credit Suisse, all of the banks in this group were from 2000 preparing accounts that included SEC 20K filings (and hence reconciliations to US GAAP). Credit Suisse began doing the same thing in 2003. Detailed US qualitative and quantitative reporting requirements on market risk were introduced in Financial Reporting Release No. 48 in 1997 and so foreign banks reporting in the USA have had time to determine and refine practice in this area.[16]

Overall, the above data does point strongly to the conclusion that despite the promotion of harmonisation post-2000, accounting practice in terms of market risk reporting still exhibits significant diversity across geographic boundaries, and in some cases, within geographic boundaries.

5. Conclusions

The research analysis discussed above leads to four principal conclusions regarding the level of market risk disclosures amongst the world's largest banks. First, we find no strong evidence of any relationship between levels of disclosure and company size, and we cannot dismiss the hypothesis that these two variables are uncorrelated. Secondly, we find only weak evidence of increasing disclosure over our sample period of 2000-2006. Third, there is evidence that higher levels of disclosure are linked to longer annual reports. And, fourthly, we demonstrate that despite the *de jure* shift towards harmonisation of accounting practice, the *de facto* result is that international differences in disclosure practices remain considerable. This latter point warrants detailed consideration.

Evidence from other surveys of financial reporting in banks both confirm the presence of variations in risk disclosure practice and suggest that they remain ongoing, even after the implementation of IFRS 7 in 2007. PwC's survey of the 2007 financial reports of 22 global banks, encompassing both IFRS and US GAAP preparers, found that risk information was not positioned in consistent locations in annual reports, nor presented in an easily accessible or usable way (PwC, 2008). Another report by KPMG on the 2007 annual reports of 17 European banks concluded that "despite detailed and extensive disclosures, the market risk disclosures are not directly comparable between the banks" (KPMG, 2008, p.33).

We would suggest that the ongoing lack of comparability in risk disclosure practice is a result of the relative dominance of institutional-specific rather than regulatory influences upon disclosure practice. In part, this may be a consequence of the form of international

[16] The fact that the disparity between the reporting of German, Dutch and Spanish banks is lower than that for US banks does lend a sense of caution to such an explanation and is suggestive of other influential factors.

regulatory disclosure requirements. As the Deputy Director of the Bank of Italy observed, the abstract and general principles of Basel 2 and IAS are hard to apply to concrete cases (Ciocca, 2004). Our research very much suggests that the practical reality of accounting disclosures is one where regulations are subordinate to the specifics of 'concrete cases'.

The IASB's declared support for principles rather than rules based accounting standards further reinforces the scope for institutional diversity in reporting practice. Schipper (2005) recognises that the application of professional judgement implicit in the application of principles-based standards does have implications for the comparability of IFRS reporting. Principles-based standards mean that disclosures which extend beyond the minimal level will be much more dependent on the reporting traditions of, and the particular circumstances facing, individual banks when they prepare to issue their latest annual report. Furthermore, direct reference to those traditions is encapsulated in the IASB's encouragement of reporting 'through the eyes of management.' This stance is in direct contrast to the view that investment analysis is based on comparative attributes. For instance, the US-based Centre for Financial Market Integrity, in commenting to the IASB on its discussion paper on *Reducing Complexity in Reporting Financial Instruments*, directly attributed the poor comparability between firms to the IFRS 7 requirement of disclosure 'through the eyes of management' and observed that "our experience is that voluntary disclosure requirements result in boiler plate, meaningless information" (CFMI, 2008, p.9).

The lack of comparability and apparently limited usefulness of risk disclosures needs to be seen against a background in which regulators continue to reiterate the importance of a mutually understood commercial language and the value, among other things of the world-wide adoption of IFRS:

> "Ultimately, our capacity to live peaceably with each other depends upon our ability to communicate intelligibly and reason coherently. In every case, to succeed, we need to first construct a language of mutual understanding. Throughout the world, there is no better opportunity to do this than through commerce. The fact that today over 100 nations are working on the introduction of IFRS and XBRL offers great hope that, in markets at least, most of the world's people may soon speak the same language. That is progress we very badly need."
>
> (International Business — An SEC Perspective", Address to the American Institute of Certified Public Accountants' International Issues Conference, by Christopher Cox, SEC Chairman, January 10th, 2008)

However, even people who speak the same language can say and do very different things! The strong implication of our results is that we need to be spending much more time looking at the detail of what people are doing (and saying about what they are doing) in using existing and/or newly adopted (market risk reporting) languages. This may seem a cautious conclusion, particularly given the hopes that have been expressed for IFRS 7 in terms of its anticipated capacity to improve the transparency of financial risk disclosures and enable the market to assess more accurately the strength of an

entity's risk management processes (for a typical example of such claims see http://www.fenews-digital.com/fenews/20061112/?pg=34). However, there are three particularly strong grounds for maintaining a degree of scepticism over the future development of risk reporting in the banking sector. First, as our results have shown, the general adoption of IFRS to date has not brought with it a substantial alignment in the risk reporting practices of the world's leading banks. Indeed, there is an argument that the desire under IFRS not to have specific risk reporting standards for banks has meant a real opportunity has been missed for a significant strengthening in their market risk disclosures. Secondly, the PwC (2008) and KPMG (2008) survey results suggest that it is ambitious to expect a new standard such as IFRS 7 to diminish reporting diversity when it emphasises the importance of allowing corporate management the discretion to report on risk in ways that they deem appropriate. Thirdly, with potentially competing demands for 'additional', 'simpler', 'better' and more 'verifiable/auditable' disclosures, there has to be doubt as to whether bank risk reporting practices are likely to develop with any clear sense of direction – which in turn places considerable questions marks over their likely use and value to the readers of bank annual reports? Indeed, from a research perspective, there remains much to know in terms of what has driven and continues to drive bank risk reporting practices and who makes use of such information.

Such doubts and uncertainties over the value of risk disclosures, however, have not quelled the calls from regulators, politicians and financial commentators around the world for greater transparency in bank reporting. The European Central Bank (2006) in laying down a range of criteria for assessing accounting standards from a financial stability perspective stressed the role that enhanced financial disclosures could play in strengthening market discipline and providing early warning signals on risk exposures. Likewise, the Institute of International Finance (IIF, 2008) in its interim report of its Committee on Market Best Practices has emphasised the critical importance, given current banking business models, of high standards of risk management and reporting (para. 9) and the need for more "useful disclosure" (para. 17). The Basel Committee on Banking Supervision (2008), in summarising the work and recommendations of its Accounting Task Force (ATF) and Risk Management and Modelling Group (RMMG), has likewise emphasised the regulatory preference for more rigorous disclosure by banks. Similarly, leading politicians at the recent G20 summit agreed the need for fundamental reform of the way the financial system is supervised, with new regulations to ensure greater transparency and accountability.

If the called for transparency – and comparability- of market risk disclosures is to be achieved, however, then our research findings suggest that regulatory frameworks need to be redrafted. Disclosures based upon the 'eyes of management' may not align with, and inform the eyes of the market, and to the extent that they do not, then we have opacity not transparency. Likewise, it is important to be aware of signs, especially in IFRS implementation surveys, of a tick-box/check-list mentality that puts process ahead of the assessment of purpose and compliance over consideration of meaning and impact. If references to the importance of 'principles' needing to win out over 'rules' (and rules-based systems) are to have substantive meaning, space has to be reserved for the questioning of commitments to IFRS and knowing more specifically about what has been

achieved in terms of 'enhanced' reporting practice. We would see this as an essential element of the 'enlightened leadership' called for in this arena by Zeff (2007).

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TABLES

Table 1: Geographic Composition (by number) of the Top 25 Banks by Market Capitalisation, 2000 -2006

Country	2000	2003	2006
USA	8	9	6
UK	3	5	5
Switzerland	2	2	2
France	1	2	3
Germany	3	1	1
Spain	2	2	2
Netherlands	1	1	0
Italy	0	1	1
Australia	0	1	0
Canada	0	1	1
Japan	5	0	3
China	0	0	1

Source: The Banker, July 2000, 2003 and 2006

Table 2: The Top 25 Banks by Market Capitalisation, 2003

Position	Bank	Country	Market cap ($m)
1	Citigroup	USA	233,939
2	HSBC Holdings	UK	133,205
3	Bank of America	USA	119,678
4	Wells Fargo & Co	USA	86,770
5	Royal Bank of Scotland	UK	86,472
6	JP Morgan Chase & Co	USA	73,023
7	UBS	Switzerland	72,760
8	Wachovia Corp	USA	58,055
9	Barclays Bank	UK	51,503
10	HBOS	UK	51,041
11	BNP Paribas	France	48,711
12	US Bancorp	USA	47,801
13	Bank One Corp	USA	45,385
14	SCH	Spain	44,946
15	Deutsche Bank	Germany	43,242
16	Lloyds TSB Group	UK	42,838
17	BBVA	Spain	35,731
18	Credit Suisse Group	Switzerland	35,376
19	Fifth Third Bancorp	USA	34,449
20	National Australia Bank	Australia	34,116
21	ABN Amro Bank	Netherlands	32,810
22	FleetBoston Financial Corp	USA	32,397
23	Unicredito Italiano	Italy	30,351
24	Societe Generale	France	29,734
25	Royal Bank of Canada	Canada	29,597

Source: The Banker and Thomson Datastream
All figures to June 16, 2003. *not in 2002's list of Top 25

Table 3: Risk Disclosure Score Sheet for HSBC Bank: 2000, 2003 and 2006

Type of Disclosure	2000	2003	2006
Market risk definition	1	1	1
Types of instruments traded	1	1	1
Risk control structure	1	1	1
VaR definition	1	1	1
* Model type	1	1	1
* Confidence limit	1	1	1
* Holding period	1	1	1
* Time frame of data	1	1	1
* Assumptions re independence of risk types	1	1	1
Limitations of VaR	1	1	1
Limitations of alternative risk measurement systems	1	1	1
Stress testing	1	1	1
Stress results	0	0	0
Trading VaR – overall position	1	1	1
* Minimum VaR	1	1	1
* Maximum VaR	1	1	1
* Average VaR	1	1	1
VaR by instrument or risk type	1	1	1
* Minimum VaR	1	1	1
* Maximum VaR	1	1	1
* Average VaR	1	1	1
Average daily trading revenues/profit – overall position	1	1	1
Standard deviation of trading revenues/profit	1	1	1
Number of loss making trading days	1	1	1
Most frequent daily trading result	1	1	1
Lowest daily revenue/profit	0	0	1
Highest daily revenue/profit	1	1	1
FX trades average daily revenue/profit	1	1	0
Interest rate trades average daily revenue/profit	1	1	0
Equity trades average daily revenue/profit	1	1	0
Trading profit – overall position	1	1	0
* by instrument type	1	1	0
Histogram of trading revenues/profit	1	1	1
Tail losses shown clearly and completely	1	1	1
Balance sheet value of market traded assets	1	1	1
Balance sheet value or market traded liabilities	1	1	1
* by instrument type	1	1	1
Net cash inflow from trading	1	1	1
Back-testing systems: general description	0	0	1
Back-testing systems: details of models used	0	0	0
Histogram/plot of VaR levels for trading activity	0	0	1
Total Disclosure Score (Max. 41)	**36**	**36**	**34**

Table 4: Market Capitalization versus Disclosure Rankings for 2000, 2003 and 2006

Bank	2003 Market cap ranking	2000 Disclosure ranking	2003 Disclosure ranking	2006 Disclosure ranking
Citigroup	1	14	11	3
HSBC	2	1	1	8
Bank of America	3	2	1	4
Royal Bank of Scotland	5	7	8	4
JP Morgan Chase	6	=3	1	2
UBS	7	=7	4	18
Wachovia	8	13	16	11
Barclays	9	9	11	8
HBOS	10	=17	17	17
BNP Paribas	11	=14	17	21
US Bancorp	12	22	23	19
Bank One Corp	13	=20	20	n/a
SCH	14	=5	5	20
Deutsche Bank	15	=3	5	4
Lloyds TSB	16	19	15	15
BBVA	17	=17	17	14
Credit Suisse Group	18	16	8	8
National Australia Bank	20	=20	20	13
ABN Amro	21	=5	7	16
FleetBoston Financial Corp.	22	=11	13	n/a
Unicredito Italiano	23	23	22	12
Societe Generale	24	=11	13	1
Royal Bank of Canada	25	10	8	4
Spearman's rank correlation		0.196	0.288	-0.120
t-test statistic		0.691	1.378	-0.482
P-value of hypothesis of zero correlation		25.1%	9.13%	31.8%

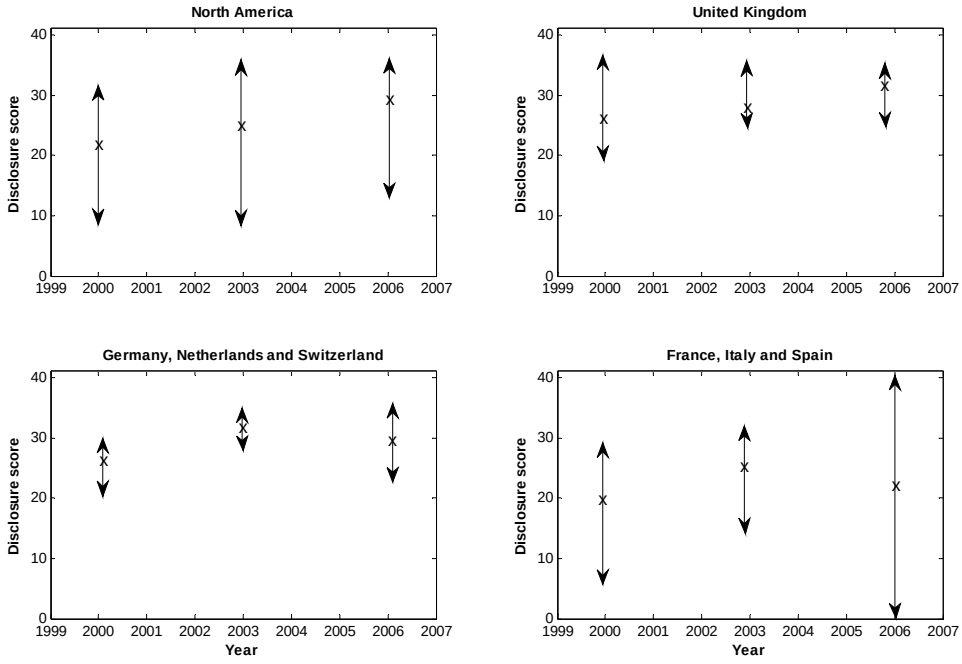
Table 5: Bank Disclosure Scores, 2000-2006

	Disclosure score in:			Change in disclosure score over:	
Bank	**2000**	**2003**	**2006**	**2000/3**	**2003/6**
Citigroup	21	27	36	6	9
HSBC	36	36	34	0	-2
Bank of America	31	36	35	5	-1
Royal Bank of Scotland	27	28	35	1	7
JP Morgan Chase	29	36	37	7	1
UBS	27	34	22	7	-12
Wachovia	22	24	31	2	7
Barclays	25	27	34	2	7
HBOS	19	23	23	4	0
BNP Paribas	21	23	0	2	-23
US Bankcorp	8	8	12	0	4
Bank One Corp	16	22		6	
SCH	28	31	5	3	-26
Deutsche Bank	29	31	35	2	4
Lloyds TSB	18	25	26	7	1
BBVA	19	23	28	4	5
Credit Suisse Group	20	28	34	8	6
National Australia Bank	16	22	29	6	7
ABN Amro	28	30	24	2	-6
FleetBoston Financial Corp.	23	26		3	
Unicredito Italiano	6	13	30	7	17
Societe Generale	23	26	41	3	15
Royal Bank of Canada	24	28	35	4	7
Mean	22.4	26.4	27.9	4.0	1.3
Std	7.0	6.7	10.7	2.4	10.7
Min	6	8	0	0	-26
Max	36	36	41	8	17
Range	30	28	41	8	43
n	23	23	21	23	21

Table 6: Disclosure Categories and Annual Report Length

Bank	Category	Applicable Accounting Standard(s)	Length of Annual Report(pages)	Length of Annual Report / average length for each year	Average of column E across category	Average length of annual report for all banks	Year
HSBC	Consistent high performer	2000 UK GAAP*	2000 251	1.51		166	2000
		2003 UK GAAP*	2003 384	1.70		226	2003
		2006 IFRS*	2006 458	1.69		271	2006
Deutsche Bank	Consistent high performer	2000 US GAAP	2000 373	2.25			
		2003 US GAAP	2003 337	1.49	1.38		
		2006 US GAAP	2006 308	1.14			
ABN Amro	Consistent high performer	2000 Dutch GAAP*	2000 132	0.80			
		2003 Dutch GAAP*	2003 180	0.80			
		2006 IFRS*	2006 270	1.00			
HBOS	Consistently average	2000 UK GAAP	2000 104	0.63			
		2003 UK GAAP	2003 124	0.55			
		2006 IFRS	2006 196	0.72			
Lloyds TSB	Consistently average	2000 UK GAAP	2000 79	0.48			
		2003 UK GAAP	2003 188	0.83	0.76		
		2006 IFRS	2006 133	0.49			
National Australia Bank	Consistently average	2000 Aust. GAAP*	2000 180	1.09			
		2003 Aust.GAAP*	2003 220	0.97			
		2006 AIFRS	2006 292	1.08			
US BankCorp	Consistently bad	2000 US GAAP	2000 64	0.39			
		2003 US GAAP	2003 127	0.56			
		2006 US GAAP	2006 130	0.48			
BankOne	Consistently bad	2000 US GAAP	2000 106	0.64	0.49		
		2003 US GAAP	2003 90	0.40			
		2006 Merged with JP Morgan Chase	2006 n/a				
Wachovia	Improving strongly	2000 US GAAP	2000 116	0.70			
		2003 US GAAP	2003 128	0.57			
		2006 US GAAP	2006 136	0.50			
Unicredito Italiano	Improving strongly	2000 Italian GAAP	2000 339	2.05			
		2003 Italian GAAP	2003 472	2.09			
		2006 IFRS	2006 552	2.04	1.11		
Royal Bank of Canada	Improving strongly	2000 Canadian*	2000 152	0.92			
		2003 Canadian*	2003 204	0.90			
		2006 Canadian*	2006 170	0.63			
Societe Generale	Improving strongly	2000 French GAAP	2000 93	0.56			
		2003 French GAAP	2003 258	1.14			
		2006 IFRS	2006 332	1.23			

Figure 1: Disclosure Scores by Geographical Grouping



Each arrow gives the range of disclosure values for the geographical group of banks and year concerned.