## Transparency in banking

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## Introduction

Transparency in banking can be defined as "public disclosure of reliable and timely information that enables users of that information to make an accurate assessment of a bank's financial condition and performance, business activities, risk profile and risk management practices" (Basel Committee, 1998).<sup>(1)</sup> In recent years, there has been greater emphasis on bank transparency through new capital regulation (e.g. Pillar 3 of the Basel II framework) and new accounting rules (e.g. the International Financial Reporting Standards). These regulatory initiatives have been motivated by the growing complexity of the financial system, which has led to an increase in banks' opacity.

The theme of transparency in banking is hardly new. Ten years ago, the Asian financial crisis had already prompted calls for greater transparency among banks. More recently, the subprime mortgage crisis has led to renewed interest in this topic. Indeed, some banks were severely criticised for not being transparent enough about their subprimerelated exposures and for the relatively slow speed at which they disclosed write-downs and losses following the outbreak of the crisis. To some extent, this lack of transparency may be due to the difficulty of valuing complex instruments in a volatile environment characterised by low levels of liquidity. However, it may also be due to insufficient disclosure by banks about their valuation techniques or their accounting practices, for instance. As a result, it may be necessary to strengthen bank disclosure requirements.

(1) According to the Basel Committee, there is thus a difference between the disclosure of information ("disclosure") and the disclosure of reliable and timely information ("transparency"). In the remainder of this article, the terms "disclosure" and "transparency" are used interchangeably. This article discusses various issues involved with the concept of bank transparency. It first reviews the benefits and costs associated with transparency before detailing the regulatory approach to it and illustrating its importance in the context of the recent turmoil in credit markets. Section 1 looks at the implications of bank transparency for financial stability and the incentives for banks to be more transparent. Section 2 details two important regulatory initiatives with respect to disclosure in banking: Pillar 3 of the Basel II framework and International Financial Reporting Standards. Section 3 looks at the role of banks' disclosures during the subprime mortgage crisis and the impact that these disclosures have had on the crisis. It outlines some recent suggestions for improvements in regulation and market practices. The last section concludes.

IRANSPARENCT IN BANKING

# 1. Importance of transparency for financial stability and for banks

This section examines the importance of bank transparency from a financial stability viewpoint, as well as banks' incentives to be more transparent. It shows that bank transparency can enhance financial stability, although "imperfections" in transparency can actually have the opposite effect. In addition, banks may not have sufficient incentives to be transparent; therefore regulation may be warranted.

## 1.1 Impact of bank transparency on financial stability

There is an extensive literature supporting the view that bank transparency has a beneficial impact on financial stability. The main effect of transparency seems to be to reduce problems of asymmetry of information between banks on the one hand and depositors, market participants and supervisors on the other hand.<sup>(1)</sup> Lower asymmetry information problems may in turn enhance financial stability, both in normal times (ex ante) and during periods of stress (ex post).

Ex ante:

 Lower information asymmetries may increase market discipline on banks because depositors, market participants and supervisors may be better able to monitor banks and detect "bad" investment strategies or financial problems before they have a chance to do any harm (Basel Committee, 1998). As a result, banks' risk-taking (moral hazard) may decline.

Ex post:

- Lower information asymmetries may reduce the probability of market panics. Indeed, market panics are usually the result of unexpected or unguantifiable bad news. As pointed out by Moody's (1998a), "bad news is never welcomed, but if unexpected or unquantifiable, it is taken more seriously, and reacted to with greater panic, than bad news that an investor can anticipate and quantify as a result of previous disclosure". A similar type of argument is formalised by Gorton and Huang (2006), who assume that banks may be hit by both a systemic shock and a bank-specific shock, with depositors only being able to observe the former. This implies that, in the event of a bad realisation of the common systemic shock, all banks will face a depositor run. If banks are transparent enough to allow depositors to also observe the idiosyncratic shock, only a fraction of the banks will be hit by a bank run.
- Lower information asymmetries may ensure that institutions which are certified to be sound in an accounting sense but which are in fact not healthy in an economic sense do not survive and do not contaminate the entire banking system, which would further aggravate a crisis and the costs of cleaning up the system. For instance, Moody's (1998b) indicates that, during the Asian crisis, many banks booked additional loans to weak borrowers as current and performing. In a strict accounting sense, the loans were performing. Yet, because these loans had been made to borrowers who had already defaulted, and were therefore weak, in an economic sense, they should have been classified as being of doubtful quality.

 Lower information asymmetries may help public authorities to better assess the potential implications of the failure of an individual institution on other banks or the market as a whole (Schinasi, 2005).

Even though the above-mentioned papers clearly point up the benefits of bank transparency for financial stability, other contributions explain why transparency may affect it adversely. Most of these adverse effects stem from the fact that transparency may not always be "perfect". For instance,

- If transparency is "noisy", e.g. if banks disclose partial information about their losses (or write-downs) instead of comprehensive information, it may be difficult for investors to infer whether single-loss events signal a generally mispriced portfolio or just an extreme realisation in a correctly priced portfolio. Depending on how the event is interpreted, the assessment of the portfolio's value will change and the information noise can cause the market to expect more volatility. As a result, banks may face an unduly high risk premium required by the market on their equity and debt (Lee, 1999).
- If transparency is not uniform, e.g. if some investors receive private signals about the banks' financial condition while others do not, financial stability may be endangered. For instance, Chari and Jagannathan (1988) develop a model where bank runs reflect a signal extraction problem in which some individuals receive a noisy signal about the bank's return, which may lead them to withdraw funds early. Other depositors must then infer from observed withdrawals whether a negative signal was received by informed depositors or whether liquidity needs happen to be high. In this set-up, bank runs occur because uninformed depositors misinterpret informed depositors' liquidity shocks as bad news about the condition of bank assets. Similarly, if banks provide different levels of disclosure in a crisis situation, sound banks with poor disclosure levels may be wrongly perceived as being risky and may be thus adversely affected.
- If transparency is costly, e.g. if banks must support direct or indirect costs to comply with transparency requirements, this may undermine their charter value hence increase their incentives to take risks and worsen the moral hazard problem (Hyytinnen and Takalo, 2002).
- If transparency is established too late, e.g. only after the occurrence of a crisis, market participants may interpret this increased disclosure as a sign that bigger problems are to come, which may lead them to overreact to information about the banks' situation (Moody's, 1998a).

<sup>(1)</sup> Problems of asymmetry of information are particularly important for banks given that they are more opaque than other firms. As explained in Morgan (2002), there are two reasons for this greater opacity. First, banks specialise in lending to borrowers on which they gather private information but whose credit quality is unknown to the public. Second, banks may invest in certain types of financial assets which allow quick and easy trading (e.g. liquid assets), and which are therefore hard for investors to monitor.

Finally, transparency may also reduce financial stability if banks are hit by shocks which are largely independent of their portfolios (e.g. macroeconomic shocks). This comes from the fact that investors will require higher deposit rates to be compensated for the shocks; however, banks may not necessarily be able to offset this increase in deposit rates by choosing a lower level of risk ex ante, which will compound their problems (Cordella and Yeyati, 1998).

There is, however, some empirical evidence suggesting that, on balance, transparency reduces the probability of a banking crisis and thus enhances overall financial stability. For instance, Nier (2005) analyses a sample of 550 listed banks from 32 countries between 1994 and 2000 and finds that banks that disclose more accounting information are less likely to suffer severe problems (as proxied by large jumps in their stock prices). Another study by Tadesse (2005), which uses yearly data for 49 countries with 21 crisis episodes between 1990 and 1997, finds that increased bank disclosure requirements and stronger auditing regulatory regimes reduce the likelihood of a systemic banking crisis.

#### 1.2 Incentives for banks to be transparent

Obviously, some of banks' private incentives to disclose information are intertwined with the above-mentioned public benefits of transparency. One may nevertheless identify some additional private benefits of bank transparency. For instance, banks may choose to disclose information because some market participants (e.g. investors and credit rating agencies) place a greater value on high-disclosure banks, as it gives them more confidence in their investment decisionmaking or in their risk assessment. As a result, banks which choose to disclose information may benefit from a lower risk premium on their debt or equity, or from higher credit ratings. Box 1 provides an illustration of the latter case.

At the same time, banks may also choose not to be transparent for several reasons. First, they may have little incentive to disclose proprietary information since this may reveal competitive strategies or weaknesses. Second, banks may be reluctant to disclose information which imposes additional compliance costs or administrative burdens on them. Third, banks which are suffering from temporary and recoverable weaknesses (e.g. a liquidity shock) may fear that additional disclosure will aggravate market responses, and they may therefore choose not to disclose information.

To sum up, this section shows that while transparency is socially desirable (in the sense that its likely impact on financial stability is positive), the interplay between the private benefits and costs of transparency may lead banks to under provide it. Hence, it may be necessary to impose disclosure requirements either through formal rules or guiding principles. The next section discusses the disclosure requirements brought about by two important regulatory initiatives: Pillar 3 of the Basel II framework and the International Financial Reporting Standards.

# Box 1 – An example of how information disclosure may benefit banks – the case of credit ratings

This box summarises the credit rating agencies' perspectives on bank transparency in the general rating process and also illustrates how transparency can actually have an impact on unsolicited bank credit ratings, which may in turn provide an incentive for banks to disclose information.

### a) The credit rating agencies' perspective on bank transparency

Moody's asserts that transparency is an important consideration when rating a bank. A lack of disclosure is indeed likely to increase credit risk for two reasons. First, it allows the internal discipline of the company to deteriorate. Second, it encourages extreme behaviour, e.g. companies under less public scrutiny may be more aggressive because they can hide behind opaque accounts (Moody's, 1998a and 1999).

Moody's therefore looks at two aspects of disclosure when rating a bank: the extent of disclosure by the bank about its operations and the reliability of that disclosure.<sup>(1)</sup> Moody's has identified a list of 13 quantitative and qualitative disclosure failures which matter both in emerging and developed markets. These are: i) delays in financial reporting, ii) the absence of quarterly financial updates, iii) non-standard loss and impairment definitions for financial assets, iv) non-homogeneous accounting standards, v) non-consolidation of the results of related companies, vi) lack of separate corporate-entity financial statements, vii) misleading treatment of expenses, viii) the recognition as current income of future cash flows that have a great degree of uncertainty, ix) undisclosed derivatives that could "break" the bank, x) asset or liability exposures not reflected in periodic statements, xi) the lack of dissemination of information about material events when they occur, xii) the lack of independence of auditors, and xiii) the lack of freedom of expression for independent third parties.

Standard and Poor's (S&P) uses a framework for assessing firms' (i.e. not necessarily just banks') governance, which focuses on four major components, including "transparency and disclosure". As far as the latter component is concerned, S&P examines company annual reports to identify more than 100 disclosure items which are grouped into three categories: i) ownership structure and investor rights, ii) financial and operational disclosure, and iii) board and management structure and process (see S&P, 2004).

S&P states that the link between its corporate governance scores and credit ratings can be extensive, but is often indirect. While there is likely to be a positive correlation between the two measures, this correlation is not equal to one and may be stronger or weaker during certain time periods. It should be noted that S&P stopped assigning governance scores for US companies in 2004 but has continued to assign these scores for some non-US companies.

Although the third player in the credit rating industry, Fitch, does not have any publicly available documentation relating to the role of transparency in the bank rating process, a previous director of Fitch's BankWatch has asserted that information disclosure plays an important role when assigning a rating: "As a matter of practice, less disclosure tends to be associated with higher risk. In the context of risk assessment, disclosure is not only the means by which the assessment is performed, it is also a positive credit consideration in itself" (Golin, 2001, p. 535).

In addition, there is also anecdotal evidence supporting the fact that transparency has an impact on Fitch's bank credit ratings. For instance, Fitch recently claimed that the low rating of a Chinese bank partly reflected its "continued poor public transparency and disclosure" (Fitch, 2006).

### b) The empirical impact of bank transparency on credit ratings

Even though the first part of this box clearly shows that rating agencies pay attention to the amount of information released by banks when assigning their credit ratings, there is no reason to expect information disclosure alone to have a systematic impact on ratings. Indeed, credit ratings are typically based on two types of information : public information (obtained from the issuer's annual report, from its website, etc.) and non-public or "private" information (acquired during meetings with the issuer). Therefore, disclosure of information may only have a significant impact on credit ratings for which rating agencies are constrained to rely exclusively on public information and are unable to gather private information from the issuer, e.g. unsolicited ratings. For those types of credit ratings, lower information disclosure may lead rating agencies to assign lower ratings due to a conservative bias.

(1) The first aspect (extent of disclosure) is similar to what the Basel Committee refers to as "disclosure", while the second aspect (reliability of disclosure) is close to the Basel Committee's definition of "transparency".

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The above reasoning is investigated in Van Roy (2006). This paper looks at the impact of disclosure of accounting information on a sample of solicited and unsolicited bank ratings assigned by Fitch in Asia. Solicited ratings are credit ratings which are requested (and paid for) by issuers and which incorporate both public and private information. Unsolicited ratings are credit ratings which are not requested by issuers and which are mostly based on public information. Over recent years, several market participants have complained that unsolicited ratings seem to be lower than solicited ones, all else being equal.

Van Roy (2006) confirms that disclosure of information has a significant impact on credit ratings for which public information is the main source of information for rating agencies, e.g. the unsolicited ones. Ceteris paribus, the difference between the rating of high and low disclosure banks with unsolicited ratings is equal to 2.5 notches on average (on a 1 to 9 rating scale), while there is no difference between the rating of high and low disclosure banks with solicited ratings.<sup>(1)</sup> The study further highlights the role of disclosure in the bank credit rating process by showing that banks with unsolicited ratings and with high levels of disclosure receive ratings which are not significantly different from those of similar banks with solicited ratings. However, banks with solicited ratings (3.4 notches on average). Thus, there are reasons to believe that disclosure of information may account for the difference between solicited and unsolicited ratings which has been noted by market participants.

Taken as a whole, these findings should provide an incentive for bank managers to disclose information, as they show that disclosure not only appears to have a positive effect on the credit rating of banks with unsolicited ratings, but that it also eliminates the alleged downward bias of unsolicited ratings. This result is particularly interesting in light of the fact that one of the main objectives of Pillar 3 of the Basel II framework is to encourage public disclosure by banks (see Section 2.1).

(1) The figures in this paragraph are taken from a revised version of the paper available from the author. This version provides evidence that the above-mentioned results hold in a more international sample, which contains S&P's credit ratings of banks located in Africa, Asia, Europe and Latin America.

## 2. Bank transparency and regulatory initiatives

Pillar 3 is one of the three pillars of the Basel II framework. Its purpose is to complement the other two pillars of the framework (minimum capital requirements and supervisory review process) by a set of consistent and comparable disclosure requirements which have the potential to increase market discipline on banks. These requirements mostly focus on capital and risk disclosures.

The International Financial Reporting Standards (IFRS) are a set of accounting standards and interpretations established by the International Accounting Standards Board (IASB). Their overall aim is to present a more accurate picture of companies' (i.e. not only financial institutions') financial positions at any given time. The requirements imposed by some of the IFRS go beyond risk

disclosures and include, e.g., the disclosure of measurement methods used to value financial assets and liabilities. Note also that contrary to the Generally Accepted Accounting Principles (GAAP), which are rules-based, IFRS are principles-based.<sup>(1)</sup>

To a certain extent, Pillar 3 and International Financial Reporting Standards have similar goals, as they both aim at enhancing the transparency of financial institutions in order to enable financial market participants and supervisors to acquire information and make decisions more easily. This in turn should enhance financial stability. It is therefore not surprising that Pillar 3 and some of the standards of the IFRS (most notably IFRS 7) share similar disclosure requirements for financial institutions. Sections 2.1 and 2.2 further detail regarding Pillar 3 and IFRS as well as their respective implementation.

<sup>(1)</sup> The advantage of principles-based over rules-based accounting standards is that they may allow for financial innovation more easily. Their disadvantage, however, is that they may leave room for interpretation and therefore be difficult to enforce.

### 2.1 Pillar 3 of the Basel II framework

As mentioned above, the aim of Pillar 3 is to enhance market discipline through greater disclosure. Table 1 (in the Annex) shows that the disclosure requirements under Pillar 3 consist of quantitative and qualitative information which falls under five areas: general disclosure principle, scope of application, capital structure, capital adequacy and risk exposure. The table also contains some examples of qualitative and quantitative disclosure requirements for each area.

More specifically, the general disclosure principles and the scope of application areas mostly deal with the existence of a formal disclosure policy and the level of the banking group at which it is applied; the capital structure area refers to a discussion of the main features of the capital instruments held by the bank, as well as how much capital is held; while the capital adequacy area corresponds to a discussion of the bank's approach to assessing its capital adequacy and to a quantitative disclosure of its capital requirements for different types of risk.

The last disclosure area (risk exposure) is the most important one. It consists of general disclosure requirements regarding the bank's risk management objective and policies for credit risk, market risk, operational risk, risk from equity positions and interest rate risk, and specific disclosure requirements for each of these five types of risk. It should be noted that for credit risk and market risk, the bank has a choice of method for computing required capital, and the disclosure requirements are specific to the method chosen. It is also important to mention that Pillar 3 does not include disclosure requirements for liquidity risk. This has led some observers to question whether such requirements could have helped restore market confidence earlier on in the subprime mortgage crisis (Box 2 further discusses issues involved with the measurement of liquidity risk). Furthermore, Pillar 3 disclosure requirements with respect to securitisation exposures are quite limited, as they mostly focus on banks' total outstanding exposures that have been securitised, as well as on the corresponding capital charge. The Basel Committee will issue revised guidelines for the management and supervision of liquidity risk in July 2008 and will also promote enhanced disclosures relating to complex securitisation exposures.

As far as regulatory implementation is concerned, Pillar 3 has been implemented in many EU countries since 1 January 2008 via the Capital Requirements Directive (CRD). Although the CRD allows national authorities to use specific means of verification for the disclosures not covered by statutory audits, only a minority of countries apply stricter provisions either via internal or external auditors. Given that Pillar 3 is quite flexible in terms of medium and location of disclosure, it is also expected that a majority of banks will choose to make the disclosures in their annual and interim financial statements, apart from selected information (e.g. capital adequacy), which needs to be reported on a quarterly basis through other media.

Finally, the Committee of European Banking Supervisors (CEBS) recently published a report on the implementation of Pillar 3 (CEBS, 2007), with the overall message that Pillar 3 does not give rise to major concerns in Europe. The report nevertheless points to a small number of areas that need further attention and proposes follow-up work, in particular on the application of the disclosure requirements to (significant) subsidiaries and on investigating the potential for a solution where limited disclosure is being provided with a subsidiary's (individual) financial statements. An additional open issue is the relationship between Pillar 3 and accounting standards (see Section 2.2).

## Box 2 – Banks' disclosure on liquidity risk<sup>(1)</sup>

Discussions about the type and depth of banks' disclosure to markets typically focus on solvency risks. Liquidity risks feature less prominently. Yet, when there is uncertainty and imperfect information that afflict both lenders and borrowers, as during the 2007/2008 structured-finance-related stresses, disclosure on the degree of banks' liquidity risk might help restore market confidence. This box briefly sets out current practices before highlighting some of the contentious issues in this domain.

(1) This box was prepared by Valerie Herzberg.

As hinted in Section 2.1, in terms of international regulation, there are few concrete mandatory disclosure requirements on liquidity. Disclosure on the quantification of liquidity risk is limited to contractual liquidity schedules of assets and liabilities for different maturity buckets and does not explicitly reveal the size of liquidity buffers. However, banks report disaggregated assets, and databases such as Bankscope use this information and the maturity schedules to compute seemingly comparable narrow and broad liquidity measures. Also, many large banks disclose qualitative information about their liquidity practices. In the case of Belgium, while the details vary, banks describe in their annual reports the main pillars of liquidity risk policies: objectives of liquidity management, organisational structure, processes and metrics for managing liquidity risk, stress testing, limits and contingency funding plans. The content covers, e.g., diversification of funding sources, the role of liquidity buffers and stress tests, the allocation of responsibilities, how central and local liquidity processes complement each other, how limits are derived and what they refer to.

One question that arises is whether this level of transparency is enough for the various stakeholders to paint an accurate picture about liquidity risks in the banking sector. Firstly, starting off with quantitative information, there are two general shortcomings. The contractual maturity schedules divulge little about real expected liquidity gaps in normal times and/or under stress and the policies in place to manage these gaps; moreover, contingent claims and sources are excluded. And, in terms of funding risk, while there is information on the maturity of funding sources, this does not reveal much about the ease with which these sources could be renewed and how concentrated they are.

Comparability is also hampered by different liquidity management choices of banks. Some banks centralise certain aspects of liquidity management, which of course affects liquidity ratios of the individual entities and of the consolidating group. A measure at group level may be more appropriate if liquidity can easily circulate among all the entities of a group, if there are no legal obstacles to its transfer across national borders and if solidarity among all the group entities is ensured. In practice, liquidity of some subsidiaries would need to be considered standalone, while that of others ought to be integrated into the group. Outside analysts, of course, have insufficient information to gauge what degree of centralisation in measuring liquidity buffers is appropriate.

Turning to qualitative information, which is particularly important in light of the aforementioned data limitations, it seems even harder to reach relevant conclusions across banks. For example, taking public disclosure on stress-testing, it is difficult for external parties to assess whether a bank's stress test assumptions are internally consistent and appropriate and how the severity of assumed shocks compares across banks. The same holds for descriptions of banks' liquidity management principles more generally. These are difficult for an outside investor to interpret: one bank, for example, may say it sets limits on its unsecured funding gap without explaining how these are derived, while another may set limits on the basis of distressed liquidity scenarios without stipulating on what type of gaps.

Given that liquidity is volatile and fast-changing, the question relating to the frequency at which information should be provided is also an important one. Annual reports are of course backward looking and most banks only provide one-point-in-time year-end information on their maturity gaps.

But comprehensive, comparable and timely information is necessary to allow investors and depositors to gauge a bank's liquidity risk tolerance and to exert the relevant market discipline. In many countries, supervisors have access to such information. In Belgium, for example, the scope of regular liquidity reporting to supervisors has recently been enhanced, improving the monitoring of different banks' liquidity risks (Janssens et al., 2007).

However, precisely because of its volatile nature, high-frequency liquidity information can easily be misinterpreted and thus create destabilising "noise" in markets. According to a recent survey conducted by the Banking Supervision Committee among European banks, there is considerable reluctance to provide comprehensive disclosure on stress tests and contingency funding plans. None of the large Belgian banks provide quantitative

details on their stress tests. Besides, there is a risk that solvent institutions – but with a temporarily vulnerable liquidity position – could be subject to runs and predatory liquidity curtailment by cash-rich institutions if they had to disclose their positions.

More generally, the liquidity shortages experienced in 2007 and early 2008 raise the question of whether the market really can play a disciplining role as regards banks' liquidity management. Presumably, Northern Rock's wholesale funding market concentration risks were well known to the market, but it nevertheless failed to punish the bank with higher borrowing costs in earlier years. The usefulness of market discipline and disclosure as regards liquidity management thus remains an open issue.

### 2.2 International Financial Reporting Standards

This section focuses on two international financial reporting standards which are of particular importance for the topic of disclosure in banking: IAS 39 (financial instruments: recognition and measurement) and IFRS 7 (financial instruments: disclosures). It further shows the connection between Pillar 3 and IFRS 7, which share some similar features.

The objective of IAS 39, effective in the EU since 1 January 2005, is to establish principles for recognising and measuring financial assets and liabilities of firms, including derivatives. More specifically, IAS 39 foresees that all financial assets and liabilities must be recognised in the balance sheet and classified into one of six categories : i) financial assets at fair value through profit or loss, ii) held-to-maturity investments, iii) loans and receivables, iv) available-for-sale financial assets, v) financial liabilities at fair value through profit or loss, and vi) financial liabilities at amortised cost.<sup>(1)</sup> This classification thus determines the measurement method of each item (at cost, at amortised cost or at fair value) and where the gain or loss should be recognised (either in profit or loss or in reserves). The disclosure of each measurement method will assist users of financial statements in understanding the extent to which accounting policies affect the amounts at which financial assets and liabilities are recognised.

The objective of IFRS 7, which has been in force in the EU since 1 January 2007, is to require entities to provide disclosures in their financial statements that enable users to evaluate, first, the significance of financial instruments for the entity's financial position and performance, and second, the nature and extent of risks arising from financial instruments to which the entity is exposed during the

period and at the reporting date, and how the entities manage those risks. Table 2 (in the Annex) further details the qualitative and quantitative disclosure requirements for credit risk, liquidity risk and market risk imposed under IFRS 7.

As shown in Table 2, there are several areas of convergence between the disclosure requirements of IFRS 7 and Pillar 3. For instance, most of the qualitative disclosures related to credit risk and market risk can be aligned. Similarly, there is a considerable volume of quantitative disclosures that overlap, such as the analyses of credit risk exposures and value-at-risk measures. However, IFRS 7 does not cover operational risk while Pillar 3 does not address liquidity risk (as mentioned above, the Basel Committee is nevertheless working on strengthening banks' management of liquidity risk and should issue new standards in July 2008).

The above-mentioned similarities between IFRS 7 and Pillar 3 have been noted by the Basel Committee, which states that "in situations where the disclosures are made under accounting requirements or are made to satisfy listing requirements promulgated by securities regulators, banks may rely on them to fulfil the applicable Pillar 3 expectations" (Basel Committee, 2006, p. 227). Likewise, authorities in charge of the implementation of IFRS in their respective countries have published guidelines which are consistent with those published by the Basel Committee for Pillar 3. As a result, banks can prepare a single coordinated set of disclosures dealing with financial risk. It should nevertheless be noted that, contrary to Pillar 3, IFRS 7 will be required to be audited by external auditors.

As far as regulatory implementation is concerned, the move towards IFRS in the EU has been made in two parallel and interlocking ways: the Fair Value Directive and an IAS Regulation approach. However, there are still

Fair value is defined as "the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's-length transaction (IASB, 2008).

a number of practical challenges regarding, for example, the implementation of IFRS 7. Most of these are due to differences in concepts, measurements, and methods between Pillar 3 and IFRS 7. For instance, although Basel II and IFRS are both to be applied at the consolidated level, consolidation criteria differ between the two regulatory arrangements.<sup>(1)</sup> The banking industry is therefore working to align, as far as possible, the concepts used in the disclosures (CEBS, 2007).

Interestingly, an analysis of the IFRS financial statements of 200 EU publicly-traded companies was recently carried out at the request of the European Commission (see Financial Reporting Faculty, 2007). The results for the 29 banks included in the study revealed that, while all of them disclosed their principal accounting policy, some did not disclose policies for all relevant instrument issues. It was also noted that all sample banks provided disclosures of their risk management policies and various types of risk, as required by IFRS 7.

## 3. Bank transparency and the subprime mortgage crisis

This section focuses on the recent turbulence in the credit markets following the outbreak of the subprime mortgage crisis. This episode is interesting because it provides an illustration of the importance of bank transparency for financial stability and because it highlights which additional disclosure requirements might be desirable relative to those already specified under Pillar 3 and IFRS.

As mentioned in the introduction, some banks were severely criticised during the 2007/2008 crisis for not being transparent enough about their subprime-related exposures and not publishing rapidly enough their writedowns and losses. Informal evidence gathered from major European and US banks' quarterly reports confirms that banks generally did not disclose information about their subprime-related exposures in their second quarterly report and only became more transparent in their third and fourth quarterly reports. In addition, information about subprime-related exposures was often incomplete and differed widely across institutions. For example, only a minority of banks disclosed the distribution of their subprime-related exposures by type of instrument (e.g. RMBS, ABS CDO) in addition to reporting their total exposure. Also, there were notable differences between banks regarding the disclosure of their unconsolidated exposures through SIVs and ABCP conduits. More generally, comprehensive explanations on the origin of exposures (e.g. whether they were originated, retained or purchased) were often lacking.

As far as write-downs and losses on subprime-related securities are concerned, the following observations can be made. First, the write-downs initially released by banks were relatively low. Second, significant differences could be observed in the write-down policy adopted by some banks with comparable exposures to the US subprime market. Third, it was not always easy to infer with certainty whether the figures released by banks represented write-downs or actual losses.

Consistent with the theoretical literature reviewed in Section 1, this lack of transparency about exposures, write-downs and losses exacerbated problems of asymmetry of information between banks on the one hand and depositors, investors and supervisors on the other hand, and also between banks themselves. As a result, liquidity dried up in the interbank market and the shares of some banks were severely affected, which further led to an amplification of systemic risk.

The above-mentioned transparency shortcomings are not, however, necessarily intentional and could have different explanations. First, the absence of active and liquid markets for subprime-related exposures and the complexity of the relationship between the payoffs of these instruments and their underlying value drivers made it difficult for banks to value them. Second, different assumptions underlined banks' valuations and resulted in significant differences between their writedowns.<sup>(2)</sup> Third, some banks managed to decrease their overall write-downs as some of the hedging positions which they took to protect their risky exposures turned out to be profitable. These different elements undoubtedly contributed to fuelling market and regulatory uncertainty about the exact magnitude of losses sustained by individual institutions.

Some observers have nevertheless argued that banks could have acted more decisively to alleviate this uncertainty. For instance, banks could have been more forthcoming with information regarding their valuations and the sensitivity of these valuations to changes in key assumptions. Similarly, banks could have disclosed more information about the use of mark to market value for some of their positions. Finally, some banks could have been quicker to report estimates for their exposures and losses and should not have waited for market pressure to materialise.

From the perspective of banking supervision, consolidation embraces only those companies of a group that conduct banking and other financial operations. This is only a fraction of the entities included in consolidation according to the accounting standards.

<sup>(2)</sup> Differences in write-downs across banks can be further explained by differences in vintages held by these banks but also by differences in hedging strategies (e.g. purchase of CDS protection), portfolio correlations, etc.

Against this background, several regulatory initiatives have been launched to investigate whether the disclosure requirements imposed by Pillar 3 and IFRS may need to be strengthened. For instance, the Financial Stability Forum (a group established by G7 finance ministers and central bank governors and which consists of a number of authorities responsible for financial stability) released a report on "market and institutional resilience" in April 2008.

This report sets out recommendations to improve, among other things, risk disclosures by market participants, accounting and disclosure standards for off-balancesheet entities, valuation techniques, and transparency in securitisation processes and markets. Most of these recommendations involve the participation of regulators and market participants and should be implemented in the period 2008-2009. For instance, the report foresees that the Basel Committee will issue further guidance to strengthen disclosure requirements under Pillar 3.

On the topic of valuation, the report recommends that the IASB strengthen its standards to achieve better disclosures about valuations, methodologies and the uncertainty associated with valuations. The IASB should also enhance its guidance on valuing financial instruments when markets are no longer active. Indeed, fair value accounting requires banks to mark to market their exposures. However, this may prove to be an issue when there are no market prices available, as it has been the case for subprime-related securities in recent months. Several institutions (see e.g. IMF, 2008) have also suggested finding better ways to apply fair value through the cycle so as to mitigate its pro-cyclical character.

It is important to point out that most of the abovementioned recommendations aim at a greater disclosure of banks' valuation methods and accounting standards, and not necessarily at wider harmonisation. This focus on greater transparency (rather than on greater uniformity) seems sensible for at least two reasons. First, it is unclear whether a uniform approach to those issues is feasible, given that, for some types of instruments, there is little if any past history to decide on what the "best" valuation or accounting standard might be. Second, even if valuations and accounting policies were identical across instruments and institutions, variations in the disclosure of exposures and write-downs, for instance, would still generate uncertainty among market participants and authorities. In this respect, transparency is already a desirable objective in itself. As a result, it may be appropriate for regulators working on those issues to be cautious and to accord some latitude to banks, e.g. in the strict application of fair value accounting during stressful events (provided that appropriate disclosures are made).

## Conclusion

This article focuses on the role of transparency in banking. After surveying arguments relating to bank transparency and financial stability, it summarises two recent regulatory standards which have had an impact on disclosure among banks: Pillar 3 of the Basel II framework and the International Financial Reporting Standards. The article also examines the recent credit turmoil in light of the arguments relating to transparency. More specifically, it discusses how heterogeneous levels of disclosure across banks have likely impacted the turmoil.

A question that naturally arises is whether Pillar 3 could have helped to avoid some of the problems caused by heterogeneous disclosure had it been implemented earlier. Given that Pillar 3 disclosure requirements for securitisation exposures are quite limited, the answer is likely to be negative. As a result, several regulatory initiatives have been launched to strengthen Pillar 3 as well as to improve valuations and accounting standards.

Finally, it is worth stressing that, to some extent, bank transparency is a moving target, since it is very hard for regulators to predict which types of disclosures may be warranted in advance of a crisis. In a similar way, requiring the disclosure of a pre-defined list of bank items may not necessarily be optimal, as the order of priority of these items may change over time. One potential way to address this concern would therefore be, for any new regulatory arrangement, to adopt a more forward-looking approach, e.g. by requiring banks to systematically disclose information about their fast-growing business lines or sources of revenues. Although global CDO issuance more than tripled between 2004 and 2006, few banks actually disclosed detailed information about their holdings of CDOs or the risks involved. Disclosures of this type may help regulators and market participants to better assess any new developments that could have an adverse effect on banks. In addition, any future regulation aiming at addressing existing transparency shortcomings should also ensure that disclosure requirements cover the entire on-balance- and off-balance-sheet activities of banks and that they are not limited to capital but also address liquidity risk. Of course, these various suggestions may not entirely eliminate financial crises in the future but they may, at least, help to improve the existing transparency framework and contribute to financial stability.

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## Annex

Disclosure area	Qualitative requirements	Quantitative requirements
1. General disclosure principles	Formal disclosure policy approved by the board of directors	None
2. Scope of application	Name of the corporate entity to which the requirements apply, outline of differences in the basis of consolidation for accounting and regulatory purposes	Aggregate amount of surplus capital of insurance subsidiaries included in the capital of the consolidated group, etc.
3. Capital structure	Terms and conditions of the main features of all capital instruments	Amount of tier 1 capital (with separate disclosures), tier 2 and tier 3 capital, other deductions from capital, and total eligible capita
4. Capital adequacy	Discussion of the bank's approach to assessing the adequacy of its capital to support current and future activities	Capital requirements for:
		i) credit risk
		ii) equity exposures in the IRB approach
		iii) market risk
		iv) operational risk
		Total and tier 1 capital ratio
. Risk exposure		
a) General requirements	For each type of risk listed below, description of:	None
	i) strategies and processes	
	ii) structure and organisation of the relevant risk management function	
	<li>iii) scope and nature of risk reporting and/or measurement systems</li>	
	<ul> <li>iv) hedging/risk mitigating policies and strategies/processes for monitoring their effectiveness</li> </ul>	
b) Credit risk		
General principles	The general disclosure requirements with respect to credit risk (see 5.a), including definitions of past due and impaired, description of approaches followed for specific and general allowances and statistical methods, discussion of the bank's credit risk management policy, etc.	Total gross credit risk exposures, geographic and industry/counterparty type distribution of exposures, residual contractual maturity breakdown of the whole portfolio, etc.
SA and supervisory risk-weights in the IRB	For portfolios under the standardised approach, information related to the ECAIs and ECAs used for risk-weighting purposes (names, types of exposures risk-weighted, etc.)	Amount of the bank's outstandings in each risk bucket
IRB (foundation and advanced)	Supervisor's acceptance of approach, structure of internal rating systems and description of the internal rating process for five portfolios (corporate, equities, residential mortgages, qualifying revolving retail and other retail)	For each of the five portfolios except retail, information such as total exposures across a sufficient number of PD grades, actual losses, etc.

### TABLE 1 DISCLOSURE REQUIREMENTS UNDER PILLAR 3

Note: ECAIs: external credit assessment institutions; ECAs: export credit agencies; SA: standardised approach; IRB: internal ratings-based approaches; CCR: counterparty credit risk; IMA: internal models approach; IRRBB: interest rate in risk the banking book. Source: Basel Committee (2006).

Disclosure area	Qualitative requirements	Quantitative requirements
Credit risk mitigation, SA and IRB	The general disclosure requirements with respect to credit risk mitigation (see 5.a), including policies and processes for on- and off-balance sheet netting and for collateral valuation and management, main types of collateral taken by the bank, main types of guarantor/credit derivative counterparty and their creditworthiness, information about risk concentrations within the mitigation taken	For each separately disclosed credit risk portfolio under the standardised and/or foundation IRB approach, the total exposure covered by eligible collateral; for each separately disclosed portfolio under the standardised and/or IRB approach, the total exposure covered by guarantees/credit derivatives
Counterparty credit risk	The general disclosure requirements with respect to derivatives and CCR (see among others 5.a), including a discussion of the methodology used to assign economic capital and credit limits, policies for securing collateral and establishing credit reserves, policies with respect to wrong- way risk exposures, etc.	Gross positive fair value of contracts, netting benefits, netted current credit exposure, collater- held and net derivatives credit exposure; measures for exposure at default or exposure amount; notional value of credit derivative hedges, etc.
Securitisation, SA and IRB	The general disclosure requirements with respect to securitisation (see 5.a), including a discussion of the bank's objectives in relation to its securitisation activity and the roles played by the bank in the securitisation process; a summary of the bank's accounting policies for securitisation activities, names of ECAIs used for securitisations and types of securitisation exposure for which each agency is used	Total outstanding exposures securitised by the bank and subject to the securitisation framewor (including amount of impaired/past due assets securitised and losses recognised), aggregate amount of securitisation exposures (retained or purchased) and associated IRB capital charges, etc.
c) Market risk		
SA	The general disclosure requirements with respect to market risk (see 5.a), including the portfolios covered by the SA	Capital requirements for:
		i) interest rate risk
		ii) equity position risk
		iii) foreign exchange risk
		iv) commodity risk
IMA (trading portfolio)	The general disclosure requirements with respect to market risk (see 5.a), including the portfolios covered by the IMA; other specific disclosure requirements	High, mean and low VaR values over the reporting period and period-end, comparison of VaR estimates with actual gains/losses experienced by the bank
d) Operational risk	The general disclosure requirements with respect to operational risk (see 5.a) and the approach(es) for operational risk for which the bank qualifies; other specific disclosure requirements	None
e) Equities risk (banking portfolio)	The general disclosure requirements with respect to equities risk (see 5.a) including differentiation between holdings, discussion of important policies covering the valuation and accounting of equity holdings	Value disclosed in the balance sheet of investments, types and nature of investments (publicly traded vs. privately held), cumulative (un)realised gains (or losses), total latent revaluation gains (or losses), etc.
f) Interest rate risk (banking portfolio)	The general disclosure requirements with respect to interest rate risk (see 5.a), including the nature of IRRBB and key assumptions	Change in earnings or economic value for upward and downward rate shocks according to management's method for measuring IRRBB

 TABLE 1
 DISCLOSURE REQUIREMENTS UNDER PILLAR 3 (continued)

Note: ECAIs: external credit assessment institutions; ECAs: export credit agencies; SA: standardised approach; IRB: internal ratings-based approaches; CCR: counterparty credit risk; IMA: internal models approach; IRRBB: interest rate in risk the banking book. Source: Basel Committee (2006).

#### TABLE 2 DISCLOSURE REQUIREMENTS UNDER IFRS 7

#### Qualitative requirements

Disclosures related to the nature and extent of risks arising from financial instruments are required for each type of risk (e.g. credit risk, liquidity risk) and include:

- the exposures to risks and how they arise;
- the entity's objectives, policies, processes and methods used for managing and measuring the risks.

#### Quantitative requirements

The level of detail of quantitative disclosure should be based on the information provided internally to key management of the entity (e.g., board of directors, CEO). Quantitative disclosures are required at a minimum in respect of credit risk, liquidity risk and market risk.

Required credit risk disclosures include:

- the reporting entity's maximum exposure without taking account of collateral or credit enhancements and a description of any collateral and credit enhancements;
- the credit quality of financial assets that are neither past due nor impaired;
- the carrying amount of financial assets with renegotiated terms that otherwise would be past due.

Required liquidity risk disclosures include a contractual maturity analysis for financial liabilities.

Required market risk disclosures include:

- a sensitivity analysis for each type of market risk (e.g., currency risk, interest rate risk and other price risk) showing how profit
  or loss and equity would have been affected by changes in he relevant risk variables, and methods and assumptions used
  in preparing such sensitivity analyses;
- for entities that prepare sensitivity analyses reflecting interdependencies between risk variables, such as value-at-risk, and use such sensitivity analyses to provide the disclosures required by IFRS 7, the standard requires the entity to provide an explanation of the method used in preparing the analysis, its objectives and limitations, and the main parameters and assumptions used.

If the quantitative disclosures do not result in providing the information representative of an entity's exposure to risk, then an entity has to provide further information that is representative.

Source: IASB (2007).